MITSUBISHI ELECTRIC

MELSOFT

Integrated FA Software

GT Designer2

Version 2

Basic Operation/Data Transfer Manual

(For GOT1000 Series)



● SAFETY PRECAUTIONS ●

(Always read these precautions before using this equipment.)

Before using this product, please read this manual and the relevant manuals introduced in this manual carefully and pay full attention to safety to handle the product correctly.
The precautions given in this manual are concerned with this product.
In this manual, the safety precautions are ranked as "WARNING" and "CAUTION".

⚠ **WARNING**	Indicates that incorrect handling may cause hazardous conditions, resulting in death or severe injury.
⚠ **CAUTION**	Indicates that incorrect handling may cause hazardous conditions, resulting in medium or slight personal injury or physical damage.

Note that the ⚠ caution level may lead to a serious accident according to the circumstances.
Always follow the instructions of both levels because they are important to personal safety.

Please save this manual to make it accessible when required and always forward it to the end user.

[DESIGN PRECAUTIONS]

⚠ WARNING

- Some failures of the GOT, communication unit or cable may keep the outputs on or off.
  Some failures of a touch panel may cause malfunction of the input objects such as a touch switch.
  An external monitoring circuit should be provided to check for output signals which may lead to a serious accident.
  Not doing so can cause an accident due to false output or malfunction.

- If a communication fault (including cable disconnection) occurs during monitoring on the GOT, communication between the GOT and PLC CPU is suspended and the GOT becomes inoperative.
  For bus connection : The CPU becomes faulty and the GOT becomes inoperative.
  For other than bus connection : The GOT becomes inoperative.
  A system where the GOT is used should be configured to perform any significant operation to the system by using the switches of a device other than the GOT on the assumption that a GOT communication fault will occur.
  Not doing so can cause an accident due to false output or malfunction.

- Do not use the GOT as the warning device that may cause a serious accident.
  An independent and redundant hardware or mechanical interlock is required to configure the device that displays and outputs serious warning.
  Failure to observe this instruction may result in an accident due to incorrect output or malfunction.

[DESIGN PRECAUTIONS]

⚠WARNING

- Incorrect operation of the touch switch(s) may lead to a serious accident if the GOT backlight is gone out.
  When the GOT backlight goes out, the POWER LED flickers (green/orange) and the display section turns black and causes the monitor screen to appear blank, while the input of the touch switch(s) remains active.
  This may confuse an operator in thinking that the GOT is in "screensaver" mode, who then tries to release the GOT from this mode by touching the display section, which may cause a touch switch to operate.
  Note that the following occurs on the GOT when the backlight goes out.
  The POWER LED flickers (green/orange) and the monitor screen appears blank.

- The display section of the GT16 is an analog-resistive type touch panel.
  If you touch the display section simultaneously in 2 points or more, the switch that is located around the center of the touched point, if any, may operate.
  Do not touch the display section in 2 points or more simultaneously.
  Doing so may cause an accident due to incorrect output or malfunction.

- When programs or parameters of the controller (such as a PLC) that is monitored by the GOT are changed, be sure to reset the GOT or shut off the power of the GOT at the same time.
  Not doing so can cause an accident due to false output or malfunction.

⚠CAUTION

- Do not bundle the control and communication cables with main-circuit, power or other wiring.
  Run the above cables separately from such wiring and keep them a minimum of 100mm apart.
  Not doing so noise can cause a malfunction.

- Do not press the GOT display section with a pointed material as a pen or driver.
  Doing so can result in a damage or failure of the display section.

- When the GOT is connected to the Ethernet network, the available IP address is restricted according to the system configuration.
  • When multiple GOTs are connected to the Ethernet network:
  Do not set the IP address (192.168.0.18) for the GOTs and the controllers in the network.
  • When a single GOT is connected to the Ethernet network:
  Do not set the IP address (192.168.0.18) for the controllers except the GOT in the network.
  Doing so can cause the IP address duplication. The duplication can negatively affect the communication of the device with the IP address (192.168.0.18).
  The operation at the IP address duplication depends on the devices and the system.

- Turn on the controllers and the network devices to be ready for communication before they communicate with the GOT.
  Failure to do so can cause a communication error on the GOT.

[MOUNTING PRECAUTIONS][MOUNTING PRECAUTIONS]

⚠WARNING

- Be sure to shut off all phases of the external power supply used by the system before mounting or removing the GOT to/from the panel.
  Not doing so can cause the GOT to fail or malfunction.
- Be sure to shut off all phases of the external power supply used by the system before mounting or removing the communication unit, option unit, option function board or multi-color display board onto/from the GOT.
  Not doing so can cause the unit to fail or malfunction.
- Before mounting an optional function board or Multi-color display board, wear a static discharge wrist strap to prevent the board from being damaged by static electricity.

⚠CAUTION

- Use the GOT in the environment that satisfies the general specifications described in the User's Manual.
  Not doing so can cause an electric shock, fire, malfunction or product damage or deterioration.
- When mounting the GOT to the control panel, tighten the mounting screws in the specified torque range.
  Undertightening can cause the GOT to drop, short circuit or malfunction.
  Overtightening can cause a drop, short circuit or malfunction due to the damage of the screws or the GOT.
- When loading the communication unit or option unit to the GOT (GT16, GT15), fit it to the extension interface of the GOT and tighten the mounting screws in the specified torque range.
  Undertightening can cause the GOT to drop, short circuit or malfunction.
  Overtightening can cause a drop, failure or malfunction due to the damage of the screws or unit.
- When mounting the multi-color display board onto the GOT (GT15), connect it to the corresponding connector securely and tighten the mounting screws within the specified torque range.
  Loose tightening may cause the unit and/or GOT to malfunction due to poor contact.
  Overtightening may damage the screws, unit and/or GOT; they might malfunction.
- When mounting the option function board onto the GOT (GT16), connect it to the corresponding connector securely and tighten the mounting screws within the specified torque range(0.25 to 0.35 N•m) with a Phillips-head screwdriver No.1.
  Undertightening can cause malfunction due to poor contact.
  Overtightening can cause malfunction due to screw or unit damage.
- When mounting an optional function board onto the GOT(GT15), fully connect it to the connector until you hear a click.
- When mounting an optional function board onto the GOT(GT11), fully connect it to the connector.
- When inserting a CF card into the GOT(GT16, GT15, GT11), push it into the CF card interface of GOT until the CF card eject button will pop out.
  Failure to do so may cause a malfunction due to poor contact.
- When inserting/removing a CF card into/from the GOT(GT16, GT15, GT11), turn the CF card access switch off in advance.
  Failure to do so may corrupt data within the CF card.
- When removing a CF card from the GOT, make sure to support the CF card by hand, as it may pop out. Failure to do so may cause the CF card to drop from the GOT and break.
- When installing a USB memory to the GOT(GT16), make sure to install the USB memory to the USB interface firmly.
  Failure to do so may cause a malfunction due to poor contact.
- Before removing the USB memory from the GOT(GT16), operate the utility screen for removal.
  After the successful completion dialog box is displayed, remove the memory by hand carefully.
  Failure to do so may cause the USB memory to drop, resulting in a damage or failure of the memory.
- For closing the USB environmental protection cover, fix the cover by pushing the △ mark on the latch firmly to comply with the protective structure.

[MOUNTING PRECAUTIONS]

⚠CAUTION

- Remove the protective film of the GOT.
  When the user continues using the GOT with the protective film, the film may not be removed.
- Operate and store the GOT in environments without direct sunlight, high temperature, dust, humidity, and vibrations.
- Use the protective cover for oil when the GOTs (GT16, GT15, GT11 and GT10) are used in the environment with oil or chemicals.
  Not doing so can cause failures or malfunction due to the infiltration of oil or chemicals.

[WIRING PRECAUTIONS]

⚠WARNING

- Be sure to shut off all phases of the external power supply used by the system before wiring.
  Failure to do so may result in an electric shock, product damage or malfunctions.

⚠CAUTION

- Please make sure to ground FG terminal and LG terminal and protective ground terminal of the GOT power supply section by applying Class D Grounding (Class 3 Grounding Method) or higher which is used exclusively for the GOT.
  Not doing so may cause an electric shock or malfunction.
- Be sure to tighten any unused terminal screws with a torque of 0.5 to 0.8N•m.
  Failure to do so may cause a short circuit due to contact with a solderless terminal.
- Use applicable solderless terminals and tighten them with the specified torque.
  If any solderless spade terminal is used, it may be disconnected when the terminal screw comes loose, resulting in failure.
- Correctly wire the GOT power supply section after confirming the rated voltage and terminal arrangement of the product.
  Not doing so can cause a fire or failure.
- Tighten the terminal screws of the GOT power supply section in the specified torque range.
  Undertightening can cause a short circuit or malfunction.
  Overtightening can cause a short circuit or malfunction due to the damage of the screws or the GOT.
- Exercise care to avoid foreign matter such as chips and wire offcuts entering the GOT. Not doing so can cause a fire, failure or malfunction.
- The module has an ingress prevention label on its top to prevent foreign matter, such as wire offcuts, from entering the module during wiring.
  Do not peel this label during wiring.
  Before starting system operation, be sure to peel this label because of heat dissipation.

[WIRING PRECAUTIONS]

⚠CAUTION

- Plug the bus connection cable by inserting it into the connector of the connected unit until it "clicks". After plugging, check that it has been inserted snugly. Not doing so can cause a malfunction due to a contact fault.
- Plug the communication cable into the connector of the connected unit and tighten the mounting and terminal screws in the specified torque range. Undertightening can cause a short circuit or malfunction. Overtightening can cause a short circuit or malfunction due to the damage of the screws or unit.
- Plug the QnA/ACPU/Motion controller (A series) bus connection cable by inserting it into the connector of the connected unit until it "clicks". After plugging, check that it has been inserted snugly. Not doing so can cause a malfunction due to a contact fault.

[TEST OPERATION PRECAUTIONS]

⚠WARNING

- Before performing the test operations of the user creation monitor screen (such as turning ON or OFF bit device, changing the word device current value, changing the settings or current values of the timer or counter, and changing the buffer memory current value), read through the manual carefully and make yourself familiar with the operation method. During test operation, never change the data of the devices which are used to perform significant operation for the system. False output or malfunction can cause an accident.

[STARTUP/MAINTENANCE PRECAUTIONS]

⚠WARNING

- When power is on, do not touch the terminals. Doing so can cause an electric shock or malfunction.
- Correctly connect the battery connector. Do not charge, disassemble, heat, short-circuit, solder, or throw the battery into the fire. Doing so will cause the battery to produce heat, explode, or ignite, resulting in injury and fire.
- Before starting cleaning or terminal screw retightening, always switch off the power externally in all phases. Not switching the power off in all phases can cause a unit failure or malfunction. Undertightening can cause a short circuit or malfunction. Overtightening can cause a short circuit or malfunction due to the damage of the screws or unit.

[STARTUP/MAINTENANCE PRECAUTIONS]

⚠CAUTION

- Do not disassemble or modify the unit.
  Doing so can cause a failure, malfunction, injury or fire.
- Do not touch the conductive and electronic parts of the unit directly.
  Doing so can cause a unit malfunction or failure.
- The cables connected to the unit must be run in ducts or clamped.
  Not doing so can cause the unit or cable to be damaged due to the dangling, motion or accidental pulling of the cables or can cause a malfunction due to a cable connection fault.
- When unplugging the cable connected to the unit, do not hold and pull the cable portion.
  Doing so can cause the unit or cable to be damaged or can cause a malfunction due to a cable connection fault.
- Do not drop or apply strong impact to the unit.
  Doing so may damage the unit.
- Do not drop or give an impact to the battery mounted to the unit.
  Doing so may damage the battery, causing the battery fluid to leak inside the battery.
  If the battery is dropped or given an impact, dispose of it without using.
- Before touching the unit, always touch grounded metal, etc. to discharge static electricity from human body, etc.
  Not doing so can cause the unit to fail or malfunction.
- Replace battery with GT15-BAT(GT16, GT15) or GT11-50BAT(GT11, GT10) by Mitsubishi electric Co. only.
  Use of another battery may present a risk of fire or explosion.
- Dispose of used battery promptly.
  Keep away from children. Do not disassemble and do not dispose of in fire.

[TOUCH PANEL PRECAUTIONS]

⚠CAUTION

- For the analog-resistive film type touch panels, normally the adjustment is not required.
  However, the difference between a touched position and the object position may occur as the period of use elapses.
  When any difference between a touched position and the object position occurs, execute the touch panel calibration.
- When any difference between a touched position and the object position occurs, other object may be activated.
  This may cause an unexpected operation due to incorrect output or malfunction.

[BACKLIGHT REPLACEMENT PRECAUTIONS]

⚠WARNING

- Be sure to shut off all phases of the external power supply of the GOT (and the PLC CPU in the case of a bus topology) and remove the GOT from the control panel before replacing the backlight (when using the GOT with the backlight replaceable by the user).
  Not doing so can cause an electric shock.
  Replacing a backlight without removing the GOT from the control panel can cause the backlight or control panel to drop, resulting in an injury.

⚠CAUTION

- Wear gloves for the backlight replacement when using the GOT with the backlight replaceable by the user.
  Not doing so can cause an injury.
- Before replacing a backlight, allow 5 minutes or more after turning off the GOT when using the GOT with the backlight replaceable by the user.
  Not doing so can cause a burn from heat of the backlight.

[DISPOSAL PRECAUTIONS]

⚠CAUTION

- When disposing of the product, handle it as industrial waste.
- When disposing of this product, treat it as industrial waste.
  When disposing of batteries, separate them from other wastes according to the local regulations.
  (For details of the battery directive in EU member states, refer to the User's Manual of the GOT to be used.)

[TRANSPORTATION PRECAUTIONS]

⚠CAUTION

- When transporting lithium batteries, make sure to treat them based on the transport regulations.
  (For details on models subject to restrictions, refer to the User's Manual for the GOT you are using.)
- Make sure to transport the GOT main unit and/or relevant unit(s) in the manner they will not be exposed to the impact exceeding the impact resistance described in the general specifications of the User's Manual, as they are precision devices.
  Failure to do so may cause the unit to fail.
  Check if the unit operates correctly after transportation.

Cautions for using this software

1. Required PC memory

The processing may be terminated by Windows® on a personal computer of which main memory capacity is less than 64M bytes.
Make sure to secure the capacity of 64 M bytes or more.

2. Free capacity of hard disk (virtual memory)

At least 100M bytes of free capacity of virtual memory should be secured within hard disk to run this software.

The processing may be terminated by Windows® , if 100M bytes or more of free space cannot be secured within hard disk while running GT Designer2.
Secure enough free capacity of virtual memory within hard disk space in order to run the software.
When enough free capacity cannot be secured, make sure to save projects frequently.

3. Error messages displayed while starting and editing

"Operation will be terminated because of insufficient memory. Would you like to stop?"

If the above message appears, close other running application software or reboot Windows® in order to secure at least 100M bytes of free hard disk space.

4. GT Designer2 and GOT display

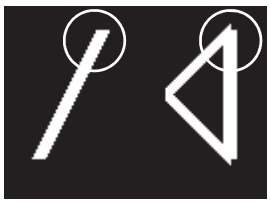
(a) Cautions for displaying straight line other than full line (dotted line, for example) in Bold
When straight line other than full line is drawn in bold, the line may not be displayed with its actual line width on a personal computer.
However, it will be displayed correctly on GOT. This phenomenon does not mean data problem.

(b) Display of end points of straight line/line freeform/polygon
As shown below, the end points of straight line/line freeform/polygon are displayed differently between GT Designer2 and GOT.

On GT Designer2



On GOT



(c) Start position for filling patterns
Some filling patterns may be differently displayed.
For example, the start position may be different between GT Desginer2 and GOT.

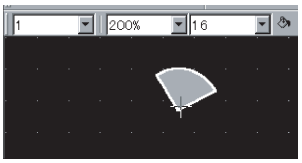
(d) Drawing of different type lines
The length of the dots varies in different dotted lines (for example: the chain lines).

(e) Display of object
- The display position of the memory data display in graph function is different between GT Designer2 and GOT.
- Even if the display-start-line of a comment has been set, the comment will be displayed from the first line on GT Designer2.

(f) Display magnification
When display magnification is changed, the connected lines or figures may be separated or the filled-paint may be out of outline of the figure.
However, if they are displayed correctly on the preview screen, they will appear correctly on GOT as well.

(Example): When filled-paint is out of the outline.

Display magnification: 200%



Display magnification: 100%



Position of Paint mark may be shifted and the filled-paint may exceed the outline of the figure.

5. Restrictions when the color setting is changed to the setting of less colors in the system environment (256 colors → 2 colors)

- The color palette for setting color will be changed according to the new settings.
- The color on the drawing screen will be kept the same as prior to the change.
  If the color setting for a [red] rectangle-figure is changed to the 2 colors (B/W), the [red] color will remain.
- The colors of the image data (BMP format file) will be reduced when the project is stored, the screen is closed and that image data is double-clicked.

6. Object function and device type

The object (bit lamp or word lamp), for which bit device setting and word device setting are separated, cannot be converted between bit device and word device.

7. When device type is changed

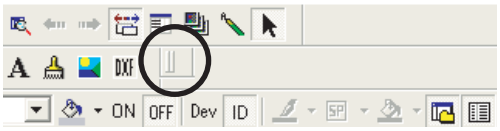
Confirm the device type when the set bit device is changed from bit device into word device.
The device flag may be represented as "??" , depending on the settings .
(Example) D0. b0 → D0 D0.b5 → ??

8. OS setting

Set the font size as "Small Font" when setting OS (Windows®) screen.
The GT designer2 dialog box cannot be displayed correctly if the font size is set as "Large font".

9. When the toolbar icon appears in smaller size after startup of GT Desinger2

The toolbar icon may appear in smaller size right after GT Deseiger2 is started up.
To correctly display the icon, initialize it as instructed below.
(Click on [Project] → [References] from the menu, and select the toolbar tab.
Click on Reset All button in that tab.)



10. When using GT Desinger2 in the PC in which the OS other than applicable language version

The text may not be displayed correctly depending on the OS versions; some version include the fonts incompatible with GT Desinger2 or GOT.

11. When using Microsoft® Narrator

GT Designer2 cannot be used with Microsoft® Narrator.
When using GT Designer2, do not use Microsoft® Narrator.

REVISIONS

* The manual number is given on the bottom left of the back cover.

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Oct., 2004	SH (NA) -080529ENG-A	First Printing
Mar., 2005	SH (NA) -080529ENG-B	Partial corrections Function Quick Reference, About Manuals, Abbreviations and generic terms in this manual, How to read this manual, Sections 1.1, 1.2, 1.3, 1.5, 1.6, 2.1, 2.2, 2.4, 4.1, 4.2, 4.3, 5.1, 5.2, 5.4, 7.2, 7.7, 7.14, 7.15, 9.2, 11.1, 12.1, 12.6, App. 3-2, App. 5 Partial additions Chapters 8 and 10
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Janu., 2006	SH(NA)-080529ENG-E	Partial corrections Function Quick Reference, About Manuals, Abbreriations and generic terms in this manual, How to read this manual, sections 1.2, 1.3, 2.1, 2.2, 3.1, 3.2, 4.2, 4.3, 5.1, 5.2, 5.4, 6.1, 6.2, 7.2, 7.3, 7.4, 7.5, 7.6, 7.7, 7.8, 7.9, 7.12, 7.13, 7.14, 7.15, 8.1, 8.2, 8.9, 8.10, 9.1, 10.1, 11.1, 11.2, 12.1, 12.3, APP.2, APP.3 Partial additions Sections 8.2, APP.3
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INTRODUCTION

Thank you for choosing Mitsubishi Graphic Operation Terminal (Mitsubishi GOT).
Read this manual and make sure you understand the functions and performance of the GOT thoroughly in advance to ensure correct use.

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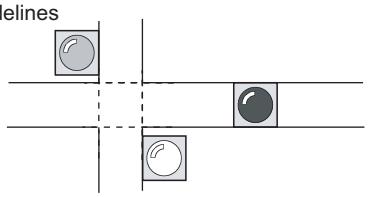
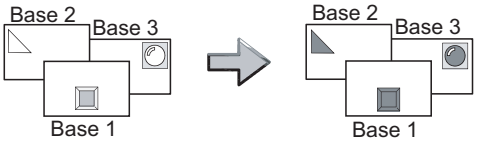
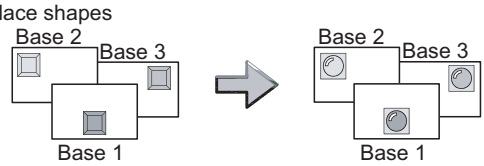
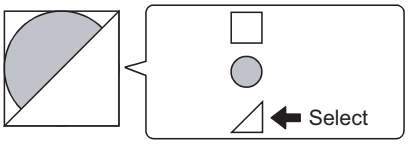
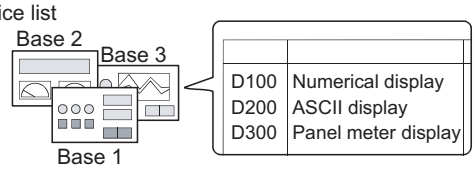
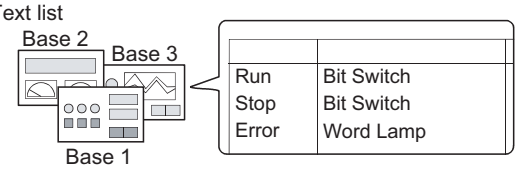
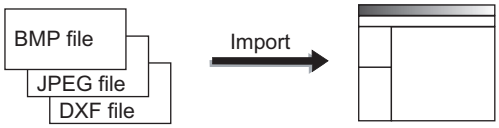
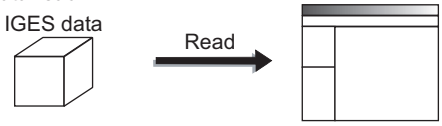
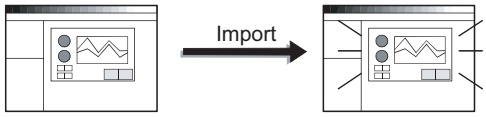
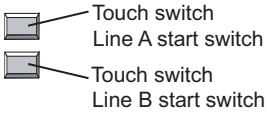
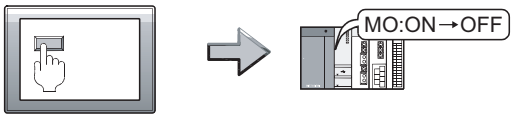
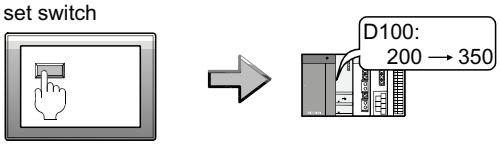
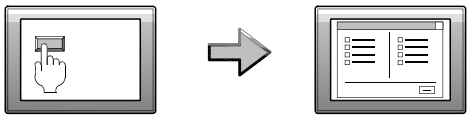
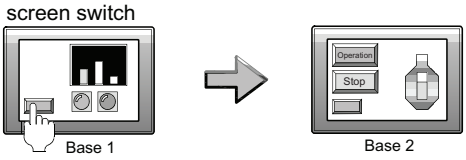
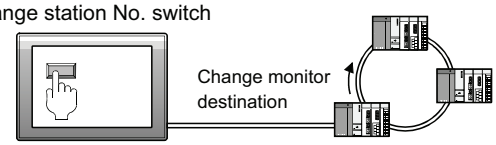
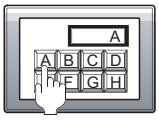
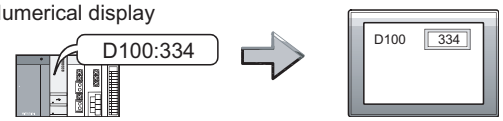
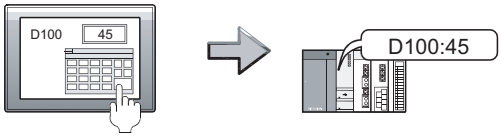
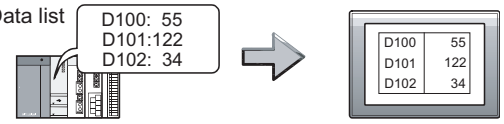
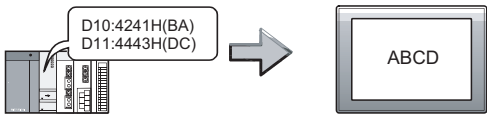
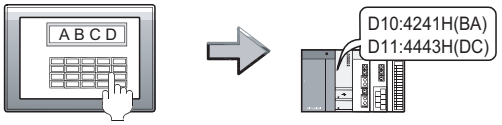
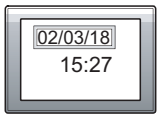
Image	Function	Page
Preview 	Checks the GOT screen image.	Page7-51
Align 	Aligns objects or images	Page11-42
Property sheet 	Sets same attributes to objects or images in the same screen	Page12-1
Guidelines 	Displays lines to align figures and objects when arranging a placed figure or object.	Page11-45
Replace colors 	Changes the color (s) of the objects and figures arranged on plural screens at the same time	Page12-12
Replace shapes 	Changes the switch/lamp figures at the same time	Page12-12
Replace devices 	Changes the preset devices at the same time	Page12-12
Replace CH No. 	Batch changes the channel numbers.	Page12-12
Data View 	Overlapping images or objects	Page12-16

Image	Function	Page
Device list 	Display the set device in list	Page12-17
Text list 	Displays the direct input texts in a list.	Page12-19
Multiple language input 	Input characters or comments in other language.	Page12-26
Import BMP/JPEG/DXF file 	Imports BMP/JPEG/DXF files	Page11-24
IGES data read 	Reads IGES data.	Page11-34
Import Project 	Utilizes other project data	Page12-36
Change object name 	Changes an object name.	Page7-38

1 Lamp/Switch

Image	Function	Page
Lamp display 	Displays device value via lamp color changing	Page6-1
Bit switch 	Touch it to switch device ON/OFF	Page6-32
Data set switch 	Touch it to change bit device value	Page6-61
Special function switch 	Touch it to switch the screen to such as the Utility screen.	Page6-65
Go to screen switch 	Touch it to switch between the base and window screen	Page6-75
Change station No. switch 	Touch it to switch the monitored controller station No.	Page6-87
Key code switch 	Used as the key for inputting numerical value/ASCII	Page6-97
Data change switch 	Displays the specified key window at the specified position and displays the cursor on the corresponding object.	Page6-93

2 Digit/font display

Image	Function	Page
Numerical display 	Displays device value in numerical value	Page7-1
Numerical input 	Write value on device	Page7-1
Data list 	Display multipledevice value in list	Page7-46
ASCII display 	Displays device value in text	Page7-62
ASCII input 	Inputs text code device	Page7-62
Clock display 	Displays hour/minutes, year/month/date	Page7-86
Comment display 	Displays command	Page7-96

3 Alarm

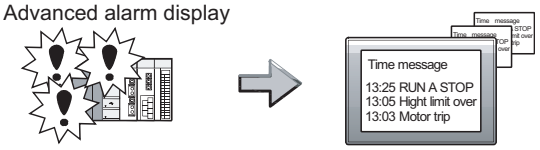
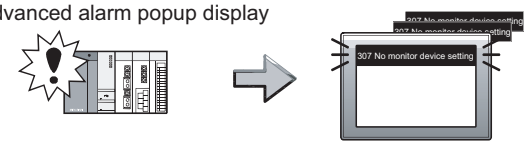
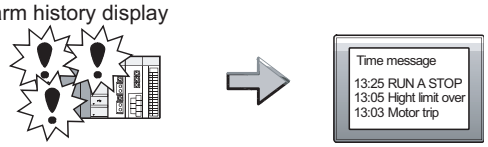
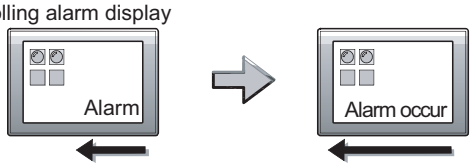
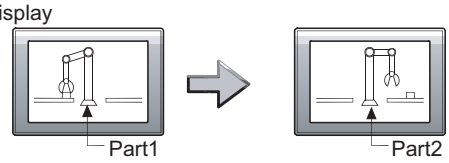
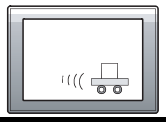
Image	Function	Page
Advanced alarm display 	Displays a history of GOT errors, communication errors or user-created messages at alarm occurrence. Also displays alarms hierarchically.	Page8-98
Advanced alarm popup display 	Pops up a GOT error, communication error or user-created message at alarm occurrence. Also displays alarms hierarchically.	Page8-147
User alarm display 	Displays a user-created message at alarm occurrence.	Page8-183

Image	Function	Page
System alarm display 	Displays a GOT error or communication error at alarm occurrence.	Page8-207
Alarm history display 	Displays a history of user-created messages at alarm occurrence.	Page8-215
Scrolling alarm display 	Displays alarm in floating.	Page 8-253

4 Parts

Image	Function	Page
Parts display 	Display entered device	Page9-1
Parts movement display 	Displays moving parts	Page9-39

5 Graph/Meter

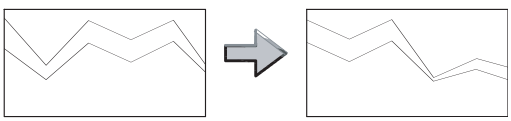
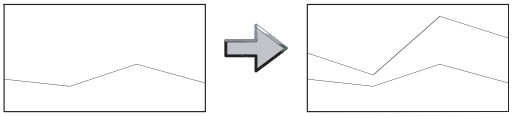
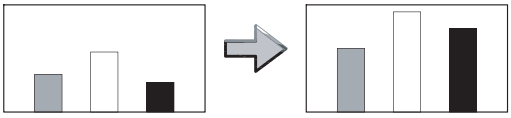
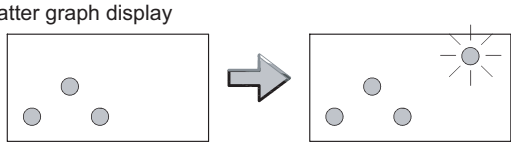
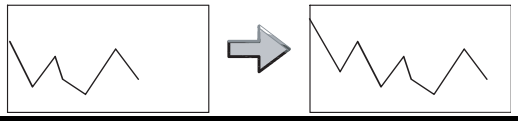
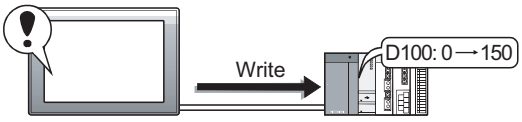
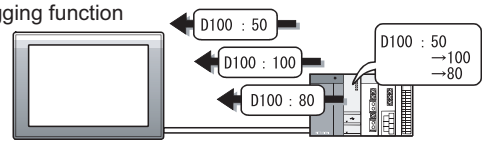
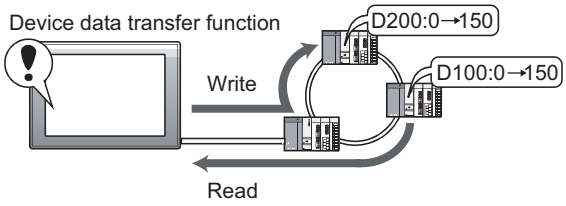
Image	Function	Page
Panel meter display 	Displays device data on panel meter	Page10-1
Level display 	Displays device data in proportional level	Page10-16
Trend graph display 	Displays device data in trend graph	Page10-33
Line graph display 	Displays device data in line graph	Page10-51

Image	Function	Page
Bar graph display 	Displays device data in bar graph	Page10-71
Statistics graph display Circle graph Bar graph 	Displays device data in statistics graph	Page10-86
Scatter graph display 	Displays device data in scatter graph	Page10-100
Historical trend graph display 	Displays the past data having been collected by the logging function in trend graph, starting from the present.	Page10-126

6 Trigger → actions

Image	Function	Page
Status observation function 	Monitors status of device and write value to device or operates GOT when condition meets	Page11-1
Time action function 	Outputs the device writing and sound at specified time.	Page11-11
Logging function 	Collects and stores the device values.	Page11-20
Device data transfer function 	Reads the device values and writes to the other device when the trigger condition is satisfied.	Page 11-61

7 Recipe

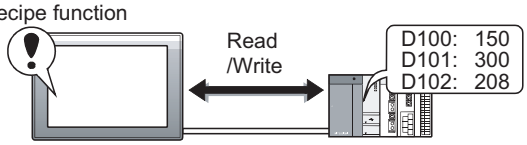
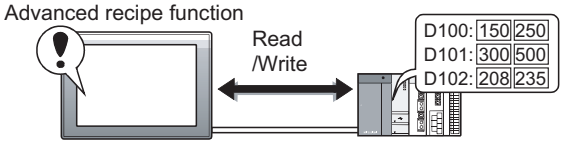
Image	Function	Page
Recipe function 	Monitors status of device and read/write device data when condition meets. One value can be set to a device.	Page12-12

Image	Function	Page
Advanced recipe function 	Monitors status of device and read/write device data when condition meets. Multiple values can be set to a device. The device value can be read/written by the utility.	Page12-25

8 External input/output

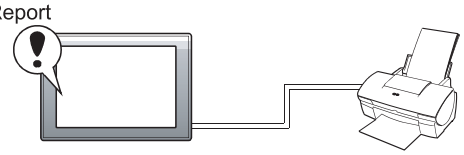
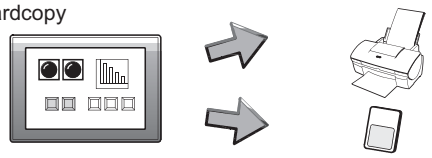
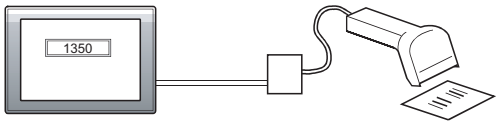
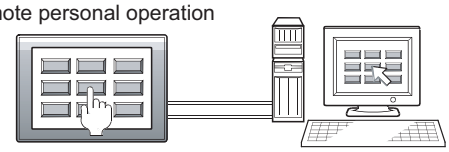
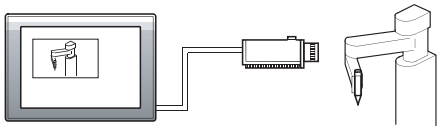
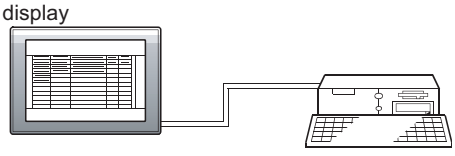
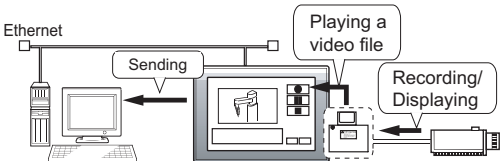
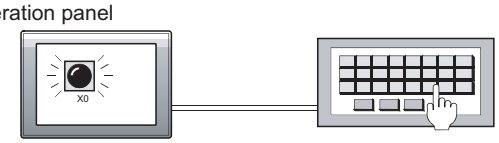
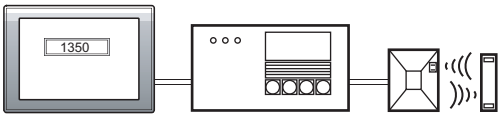
Image	Function	Page
Report 	Collects data such as production management and production status and prints the collected data.	Page13-1
Hardcopy 	Outputs the GOT monitor screen to printer or memory card	Page13-1
Bar code 	Writes data read by bar code reader to device	Page13-35
Remote personal operation 	Operates the mouse pointer on the personal computer by touching the personal computer screen displayed on the GOT using the RGB display.	Page13-74
Video 	Displays video	Page 13-44
RGB display 	Displays PC screens	Page 13-64
Multimedia function 	Displays or records a video image. Plays a video file. Sends a video file to a personal computer.	Page13-118
Operation panel 	Writes data to a device with the operation panel.	Page 13-82

Image	Function	Page
Sound output 	Outputs sounds	Page 13-94
RFID 	Reads and writes IC tag data with RFID readers/ writers.	Page 13-99

9 Others

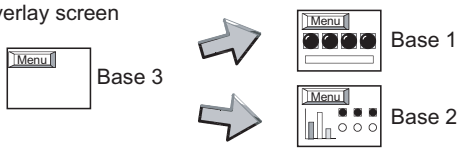
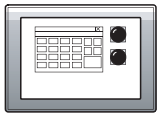
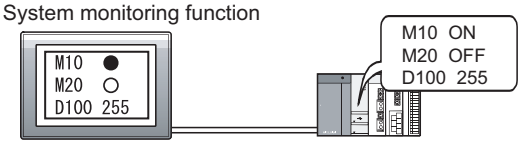
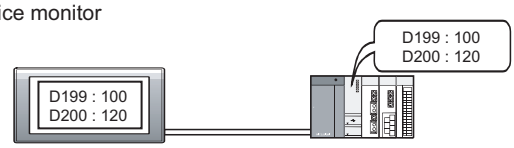
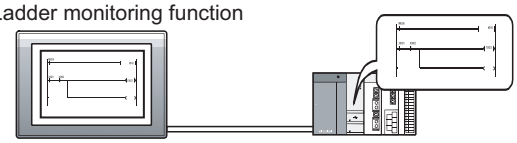
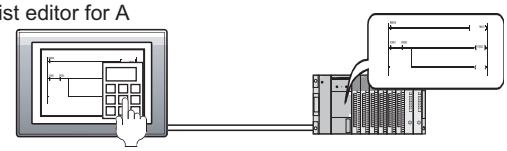
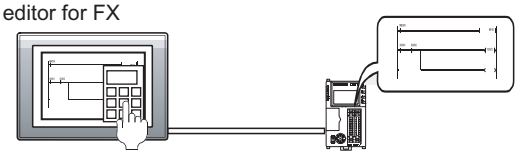
Image	Function	Page
Set overlay screen 	Set overlay screen from other screens	Page15-1
Test function 	Changes device values on a test window while displaying a monitor screen.	Page15-59
System monitoring function 	Displays the operation status of a sequence program.	Page14-2
Device monitor 	Monitors the device states of the PLC.	Page14-3
Ladder monitoring function 	Monitors the status of ACPU devices.	Page14-4
List editor for A 	Reads a sequence program from ACPU and display in list to change instructions.	Page14-6
List editor for FX 	Reads a sequence program from FXCPU and displays in list to change instructions.	Page14-7

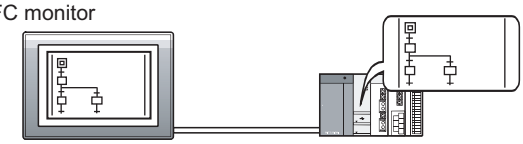
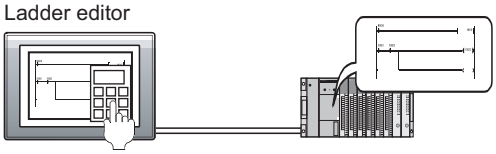
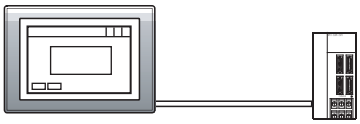
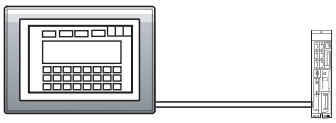
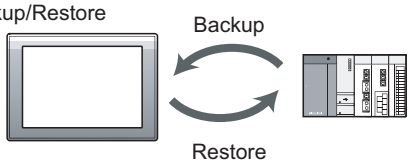
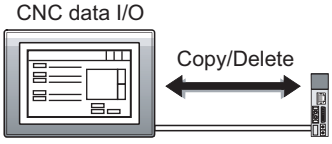
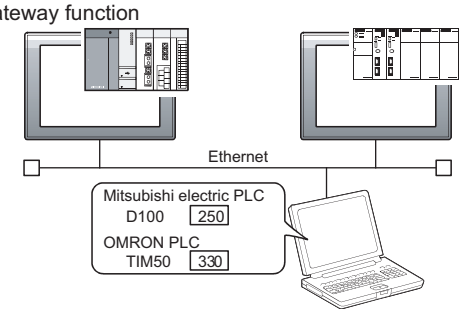
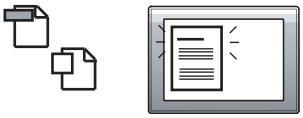
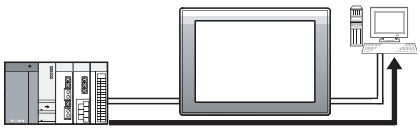
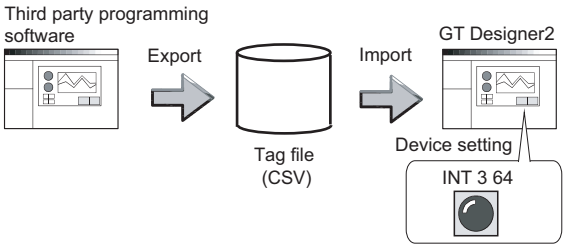
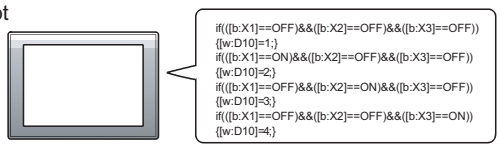
Image	Function	Page
SFC monitor 	Displays the operation status of a SFC program.	Page14-16
Ladder editor 	Monitors and edits a sequence program, or changes current device values in the controller by using the GOT without the dedicated software.	Page 14-18
Intelligent module monitor 	Monitors the buffer memory of the intelligent function module on the dedicated screen to change the data.	Page14-8
Network monitor 	Monitors the network status of MELSECNET/H, MELSECNET/10, MELSECNET(II) and MELSECNET/B.	Page14-9
Motion monitor 	Performs servo monitoring and parameter setting for motion controller CPU (Q series).	Page14-10
Servo amplifier monitor 	Performs various monitoring functions, parameter changes and test run for the servo amplifier where a GOT is connected.	Page14-11
CNC monitor 	Performs position display monitor for the MELDAS connected to a GOT at the equivalent level of monitoring that uses a MELDAS dedicated display.	Page14-12
Backup/Restore 	Backs up and restores data for controllers with the GOT.	Page 14-13
CNC data I/O 	Copies or deletes machining programs, parameters, and others of the CNC that is connected to the GOT.	Page 14-15

Image	Function	Page
Gateway function 	Performs remote monitoring and remote maintenance of production site from the office.	Page15-62
Document display 	Displays document data on the GOT.	Page 15-39
MES interface 	Enables data communications between the controllers and databases in the information system (manufacturing execution system) without a communication gateway.	Page 15-63
Tag import function 	Import a CSV tag file created by the third party programming software to GT Designer2, and set a tag as a device.	Page 15-64

10 Script function

Image	Function	Page
Script 	Controls GOT display by scripts	Page16-1

11 Object setting

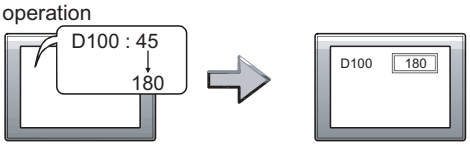
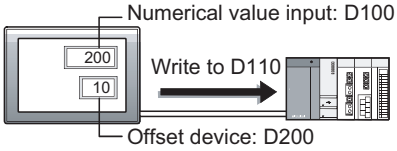
Image	Function	Page
Data operation 	Operates device values by expression and enables objects using the operated value	Page5-74
Offset 	Accumulates the offset device value in monitor device address and monitor.	Page5-80

Image	Function	Page
Security 	Restricts the password users	Page5-84

Other Functions (GT Designer2 Version□ Screen Design Manual)

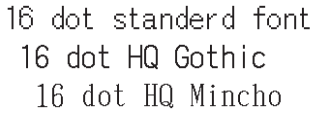
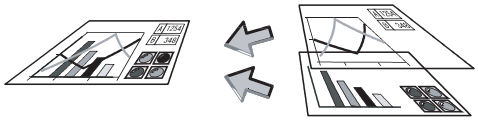
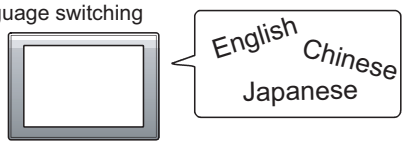
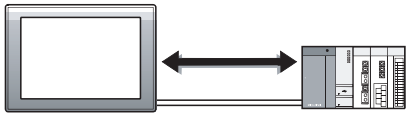
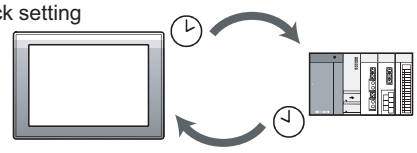
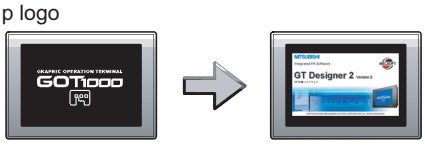
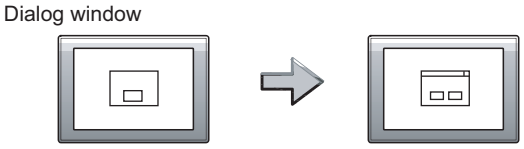
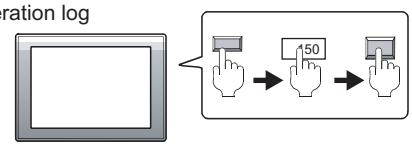
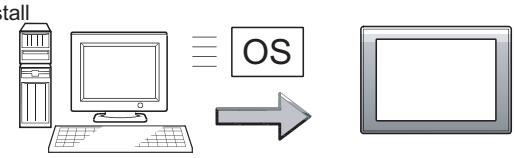
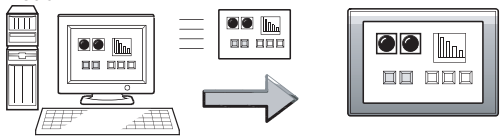
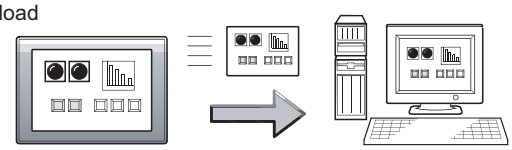
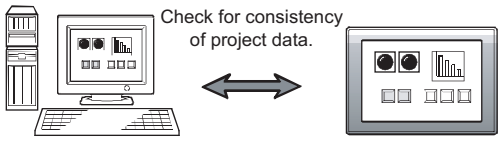
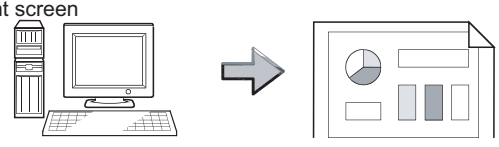
Image	Function	Page
Font 	Displays a text in various fonts.	Page2-20
Superimposition 	Superimposes figures and objects.	Page2-80
Multi-channel function 	Monitors multiple controllers.	Page2-194
Language switching 	Switches between multiple languages.	Page3-26
Communication settings 	Makes the communication settings of the controller.	Page3-98
GOT Setup 	Makes the settings relevant to GOT display and operation.	Page3-157
Clock setting 	Sets the clock used by the GOT.	Page3-166
Startup logo 	Sets the screen (BMP file) to be displayed at GOT startup.	Page3-167

Image	Function	Page
Dialog window 	Customizes the GOT system messages.	Page 3-173
Operation log 	Saves the user's operation performed at the GOT as an operation history.	Page 15-13

Data Transmission (GT Designer2 Version□ Basic Operation/Data Transfer Manual)

Image	Function	Page
Install 	Transfers the OS from the PC to the GOT.	Page8-73
Download 	Transfers project data from the PC to the GOT.	Page8-80
Upload 	Transfers project data from the GOT to the PC.	Page8-93
Verify 	Verify the project data stored in GOT against that opened by GT Designer 2.	Page8-87

Print (GT Designer2 Version□ Basic Operation/Data Transfer Manual)

Image	Function	Page
Print screen 	Print base/window/report screen	Page9-1

About Manuals

The following manuals are also related to this product.
In necessary, order them by quoting the details in the tables below.

Related Manuals

Manual Name	Manual Number (Model Code)
GT16 User's Manual (Hardware) - Describes the GT16 hardware-relevant contents, including the specifications, part names, mounting, power supply wiring, external dimensions, and option devices. (Sold separately)	SH-080928ENG (1D7MD3)
GT16 User's Manual (Basic Utility) - Describes the GT16 utility-relevant contents, including the screen settings, operation method settings, program/ data management, and self check function. (Sold separately)	SH-080929ENG (1D7MD4)
GT15 User's Manual - Describes the GT15 hardware-relevant contents, including the specifications, part names, mounting, power supply wiring, external dimensions, and option devices. - Describes the GT15 functions, including the utility. (Sold separately)	SH-080528ENG (1D7M23)
GT11 User's Manual - Describes the GT11 hardware-relevant contents, including the specifications, part names, mounting, power supply wiring, external dimensions, and option devices. - Describes the GT11 functions, including the utility. (Sold separately)	JY997D17501 (09R815)
GT11 Handy GOT User's Manual - Describes the Handy GOT hardware-relevant contents, including the system configurations, specifications, part names, mounting, power supply wiring, external dimensions, and option devices. - Describes the Handy GOT functions, including the utility, and how to make cables. (Sold separately)	JY997D20101 JY997D20102 (09R817)
GT10 User's Manual - Describes the GT10 hardware-relevant contents, including the specifications, part names, mounting, power supply wiring, external dimensions, and option devices. - Describes the GT10 functions, including the utility. (Sold separately)	JY997D24701B (09R819)
GT SoftGOT1000 Version2 Operating Manual Describes the screen configuration, functions and using method of GT SoftGOT1000. (Sold separately)	SH-080602ENG (1D7M48)
GT Designer2 Version2 Basic Operation/Data Transfer Manual (For GOT1000 Series) Describes methods of the GT Designer2 installation operation, basic operation for drawing and transmitting data to GOT1000 series (Sold separately) *1	SH-080529ENG (1D7M24)

(Continued to next page)

Manual Name	Manual Number (Model Code)
GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) 1/3 GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) 2/3 GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) 3/3 Describes specifications and settings of each object function applicable to GOT1000 series. (Sold separately)*1	SH-080530ENG (1D7M25)
GOT1000 Series Connection Manual (1/3, 2/3, 3/3) Describes system configurations of the connection method applicable to GOT1000 series and cable creation (Sold separately)	SH-080532ENG (1D7M26)
GOT1000 Series Gateway Functions Manual Describes specifications, system comfigurations and setting method of the gateway function. (Sold separately) *1	SH-080545ENG (1D7M33)
GOT1000 Series MES Interface Function Manual Describes specifications, system comfigurations and setting method of the MES inteface function. (Sold separately) *1	SH-080***ENG (1D7M**)
Project Data Conversion Summary Describes the method of utilizing the project data of F900 series as that of GT11 series.	JY997D17601A

*1 The manual in PDF-format is included in the GT Works2 and GT Designer2 products.

ABBREVIATIONS AND GENERIC TERMS

Abbreviations and generic terms used in this manual are as follows:

■ GOT

Abbreviations and generic terms			Description
GOT1000 Series	GT SoftGOT1000		Abbreviation of GT SoftGOT1000
	GT1695	GT1695M-X	Abbreviation of GT1695M-XTBA, GT1695M-XTBD
	GT1685	GT1685M-S	Abbreviation of GT1685M-STBA, GT1685M-STBD
	GT1675	GT1675M-S	Abbreviation of GT1675M-STBA, GT1675M-STBD
		GT1675M-V	Abbreviation of GT1675M-VTBA, GT1675M-VTBD
	GT1665	GT1665M-S	Abbreviation of GT1665M-STBA, GT1665M-STBD
		GT1665M-V	Abbreviation of GT1665M-VTBA, GT1665M-VTBD
	GT16□□, GT16		Abbreviation of GT1695,GT1685, GT1675, GT1665
	GT1595	GT1595-X	Abbreviation of GT1595-XTBA, GT1595-XTBD
	GT1585	GT1585V-S	Abbreviation of GT1585V-STBA, GT1585V-STBD
		GT1585-S	Abbreviation of GT1585-STBA, GT1585-STBD
	GT157□	GT1575V-S	Abbreviation of GT1575V-STBA, GT1575V-STBD
		GT1575-S	Abbreviation of GT1575-STBA, GT1575-STBD
		GT1575-V	Abbreviation of GT1575-VTBA, GT1575-VTBD
		GT1575-VN	Abbreviation of GT1575-VNBA, GT1575-VNBD
		GT1572-VN	Abbreviation of GT1572-VNBA, GT1572-VNBD
	GT156□	GT1565-V	Abbreviation of GT1565-VTBA, GT1565-VTBD
		GT1562-VN	Abbreviation of GT1562-VNBA, GT1562-VNBD
	GT155□	GT1555-V	Abbreviation of GT1555-VTBD
		GT1555-Q	Abbreviation of GT1555-QTBD, GT1555-QSBD
		GT1550-Q	Abbreviation of GT1550-QLBD
	GT15□□, GT15		Abbreviation of GT1595, GT1585, GT157□, GT156□, GT155□
	GT115□	GT1155-Q	Abbreviation of GT1155-QTBDQ, GT1155-QSBDQ, GT1155-QTBDA, GT1155-QSBDA, GT1155-QTBD, GT1155-QSBD
		GT1150-Q	Abbreviation of GT1150-QLBDQ, GT1150-QLBDA, GT1150-QLBD
	GT11 Handy GOT	GT1155HS-Q	Abbreviation of GT1155HS-QSBD
		GT1150HS-Q	Abbreviation of GT1150HS-QLBD
	GT11□□, GT11		Abbreviation of GT1155-Q, GT1150-Q, GT11 Handy GOT
	GT105□	GT1055-Q	Abbreviation of GT1055-QSBD
		GT1050-Q	Abbreviation of GT1050-QBBD
	GT104□	GT1045-Q	Abbreviation of GT1045-QSBD
		GT1040-Q	Abbreviation of GT1040-QBBD
	GT1030		Abbreviation of GT1030-LBD, GT1030-LBD2, GT1030-LBDW, GT1030-LBDW2
	GT1020		Abbreviation of GT1020-LBD, GT1020-LBD2, GT1020-LBL, GT1020-LBDW, GT1020-LBDW2, GT1020-LBLW
	GT10□□, GT10		Abbreviation of GT105□, GT104□, GT1030, GT1020
GOT900 Series			Abbreviation of GOT-A900 series, GOT-F900 series
GOT800 Series			Abbreviation of GOT-800 series

■ Communication unit

Abbreviations and generic terms	Description
Bus connection unit	GT15-QBUS, GT15-QBUS2, GT15-ABUS, GT15-ABUS2, GT15-75QBUSL, GT15-75QBUS2L, GT15-75ABUSL, GT15-75ABUS2L
Serial communication unit	GT15-RS2-9P, GT15-RS4-9S, GT15-RS4-TE
RS-422 conversion unit	GT15-RS2T4-9P, GT15-RS2T4-25P
Ethernet communication unit	GT15-J71E71-100
MELSECNET/H communication unit	GT15-J71LP23-25, GT15-J71BR13
MELSECNET/10 communication unit	GT15-75J71LP23-Z*1, GT15-75J71BR13-Z*2
CC-Link IE controller network communication unit	GT15-J71GP23-SX
CC-Link communication unit	GT15-J61BT13, GT15-75J61BT13-Z*3
Interface converter unit	GT15-75IF900
Serial multi-drop connection unit	GT01-RS4-M
Connection Conversion Adapter	GT10-9PT5S

*1 A9GT-QJ71LP23 + GT15-75IF900 set
*2 A9GT-QJ71BR13 + GT15-75IF900 set
*3 A8GT-J61BT13 + GT15-75IF900 set

■ Option unit

Abbreviations and generic terms		Description
Printer unit		GT15-PRN
Video/RGB unit	Video input unit	GT16M-V4, GT15V-75V4
	RGB input unit	GT16M-R2, GT15V-75R1
	Video/RGB input unit	GT16M-V4R1, GT15V-75V4R1
	RGB output unit	GT16M-ROUT, GT15V-75ROUT
Multimedia unit		GT16M-MMR
CF card unit		GT15-CFCD
CF card extension unit*1		GT15-CFEX-C08SET
External I/O unit		GT15-DIO, GT15-DIOR
Sound output unit		GT15-SOUT
Fingerprint unit		GT15-80FPA

*1 GT15-CFEX + GT15-CFEXIF + GT15-C08CF set.

■ Option

Abbreviations and generic terms		Description			
Memory card	CF card	GT05-MEM-16MC, GT05-MEM-256MC	GT05-MEM-32MC, GT05-MEM-512MC,	GT05-MEM-64MC, GT05-MEM-1GC,	GT05-MEM-128MC, GT05-MEM-2GC
Memory card adaptor		GT05-MEM-ADPC			
Option function board		GT16-MESB, GT15-QFNB32M,	GT15-FNB, GT15-QFNB48M,	GT15-QFNB, GT15-MESB48M,	GT15-QFNB16M, GT11-50FNB
Battery		GT15-BAT,	GT11-50BAT		
Protective Sheet	For GT16	GT16-90PSCB, GT16-80PSCB, GT16-70PSCB, GT16-60PSCB,	GT16-90PSGB, GT16-80PSGB, GT16-70PSGB, GT16-60PSGB,	GT16-90PSCW, GT16-80PSCW, GT16-70PSCW, GT16-60PSCW,	GT16-90PSGW, GT16-80PSGW, GT16-70PSGW, GT16-60PSGW
	For GT15	GT15-90PSCB, GT15-80PSCB, GT15-70PSCB, GT15-60PSCB, GT15-50PSCB,	GT15-90PSGB, GT15-80PSGB, GT15-70PSGB, GT15-60PSGB, GT15-50PSGB,	GT15-90PSCW, GT15-80PSCW, GT15-70PSCW, GT15-60PSCW, GT15-50PSCW,	GT15-90PSGW, GT15-80PSGW, GT15-70PSGW, GT15-60PSGW, GT15-50PSGW
	For GT11	GT11-50PSCB, GT11H-50PSC	GT11-50PSGB,	GT11-50PSCW,	GT11-50PSGW,
	For GT10	GT10-50PSCB, GT10-40PSCB, GT10-30PSCB, GT10-20PSCB,	GT10-50PSGB, GT10-40PSGB, GT10-30PSGB, GT10-20PSGB,	GT10-50PSCW, GT10-40PSCW, GT10-30PSCW, GT10-20PSCW,	GT10-50PSGW, GT10-40PSGW, GT10-30PSGW, GT10-20PSGW
Protective cover for oil		GT05-90PCO, GT05-50PCO	GT05-80PCO,	GT05-70PCO,	GT05-60PCO,
USB environmental protection cover		GT16-UCOV,	GT15-UCOV,	GT11-50UCOV	
Stand		GT15-90STAND, GT05-50STAND	GT15-80STAND,	GT15-70STAND,	A9GT-50STAND,
Attachment		GT15-70ATT-98, GT15-60ATT-87,	GT15-70ATT-87, GT15-60ATT-77,	GT15-60ATT-97, GT15-50ATT-95W,	GT15-60ATT-96, GT15-50ATT-85
Backlight		GT16-90XLTT, GT16-70SLTT, GT15-70SLTT, GT15-60VLTN	GT16-80SLTT, GT16-70VLTT, GT15-70VLTT,	GT15-90XLTT, GT16-60SLTT, GT15-70VLTN,	GT15-80SLTT, GT16-60VLTT, GT15-60VLTT,
Multi-color display board		GT15-XHNB,	GT15-VHNB		
Connector conversion box		GT11H-CNB-37S			
Emergency stop sw guard cover		GT11H-50ESCOV			
Memory loader		GT10-LDR			
Memory board		GT10-50FMB			

■ Software

Abbreviations and generic terms	Description
GT Works2 Version□	SW□D5C-GTWK2-E, SW□D5C-GTWK2-EV
GT Designer2 Version□	SW□D5C-GTD2-E, SW□D5C-GTD2-EV
GT Designer2	Abbreviation of screen drawing software GT Designer2 for GOT1000/GOT900 series
GT Converter2	Abbreviation of data conversion software GT Converter2 for GOT1000/GOT900 series
GT Simulator2	Abbreviation of screen simulator GT Simulator 2 for GOT1000 / GOT900 series
GT SoftGOT1000	Abbreviation of monitoring software GT SoftGOT1000
GT SoftGOT2	Abbreviation of monitoring software GT SoftGOT2
GX Developer	Abbreviation of SW□D5C-GPPW-E(-EV)/SW□D5F-GPPW-E type software package
GX Simulator	Abbreviation of SW□D5C-LLT-E(-EV) type ladder logic test tool function software packages (SW5D5C-LLT (-EV) or later versions)
Document Converter	Abbreviation of document data conversion software Document Converter for GOT1000 series
PX Developer	Abbreviation of SW□D5C-FBDQ-E type FBD software package for process control

License key (for GT SoftGOT1000)

Abbreviations and generic terms	Description
License	GT15-SGTKEY-U, GT15-SGTKEY-P

License key (for GT SoftGOT2)

Abbreviations and generic terms	Description
License key	A9GTSOFT-LKEY-P (For DOS/V PC)
License key FD	SW5D5F-SGLKEY-J (For PC CPU module)

Others

Abbreviations and generic terms		Description
OMRON PLC		Abbreviation of PLC manufactured by OMRON Corporation
KEYENCE PLC		Abbreviation of PLC manufactured by KEYENCE CORPORATION
KOYO EI PLC		Abbreviation of PLC manufactured by KOYO ELECTRONICS INDUSTRIES CO., LTD.
SHARP PLC		Abbreviation of PLC manufactured by Sharp Manufacturing Systems Corporation
JTEKT PLC		Abbreviation of PLC manufactured by JTEKT Corporation
TOSHIBA PLC		Abbreviation of PLC manufactured by TOSHIBA CORPORATION
TOSHIBA MACHINE PLC		Abbreviation of PLC manufactured by TOSHIBA MACHINE CO., LTD.
HITACHI IES PLC		Abbreviation of PLC manufactured by Hitachi Industrial Equipment Systems Co., Ltd.
HITACHI PLC		Abbreviation of PLC manufactured by Hitachi, Ltd.
FUJI FA PLC		Abbreviation of PLC manufactured by Fuji Electric FA Components & Systems Co., Ltd.
PANASONIC PLC		Abbreviation of PLC manufactured by Panasonic Electric Works Co., Ltd.
YASKAWA PLC		Abbreviation of PLC manufactured by YASKAWA Electric Corporation
YOKOGAWA PLC		Abbreviation of PLC manufactured by Yokogawa Electric Corporation
ALLEN-BRADLEY PLC		Abbreviation of Allen-Bradley PLC manufactured by Rockwell Automation, Inc.
GE FANUC PLC		Abbreviation of PLC manufactured by GE Fanuc Automation Corporation
LS IS PLC		Abbreviation of PLC manufactured by LS Industrial Systems Co., Ltd.
SCHNEIDER PLC		Abbreviation of PLC manufactured by Schneider Electric SA
SIEMENS PLC		Abbreviation of PLC manufactured by Siemens AG
Temperature controller	OMRON temperature controller	Abbreviation of temperature controller manufactured by OMRON Corporation
	SHINKO indicating controller	Abbreviation of temperature controller manufactured by Shinko Technos Co., Ltd.
	CHINO controller	Abbreviation of temperature controller manufactured by CHINO CORPORATION
	FUJI SYS temperature controller	Abbreviation of temperature controller manufactured by Fuji Electric Systems Co., Ltd.
	YAMATAKE temperature controller	Abbreviation of temperature controller manufactured by Yamatake Corporation
	YOKOGAWA temperature controller	Abbreviation of temperature controller manufactured by Yokogawa Electric Corporation
	RKC temperature controller	Abbreviation of temperature controller manufactured by RKC INSTRUMENT INC.
PC CPU module		Abbreviation of PC CPU Unit manufactured by CONTEC CO., LTD
GOT (server)		Abbreviation of GOTs that use the server function
GOT (client)		Abbreviation of GOTs that use the client function
Windows® font		Abbreviation of TrueType font and OpenType font available for Windows® (Differs from the True Type fonts settable with GT Designer2)
Intelligent function module		Indicates the modules other than the PLC CPU, power supply module and I/O module that are mounted to the base unit.
MODBUS® /TCP		Generic term for the protocol designed to use MODBUS® protocol messages on a TCP/IP network.

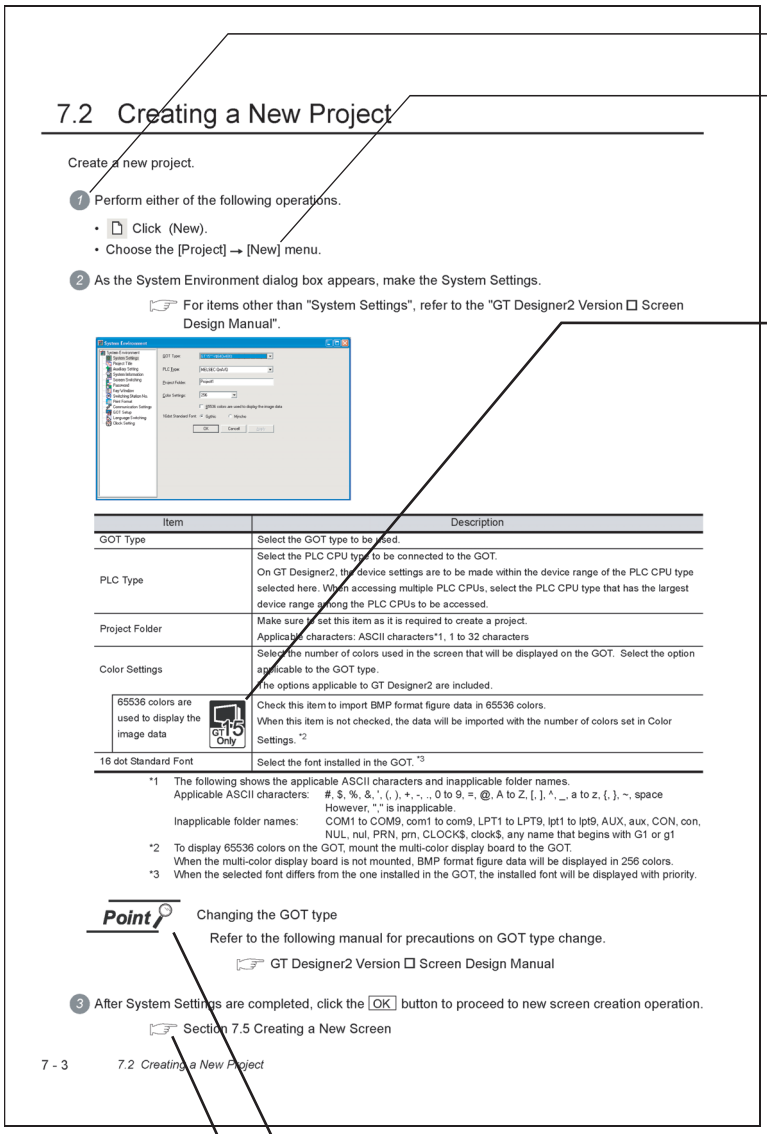
How to read this manual

1 Functions

This manual describes functions available for the GT Designer2 Version 2.96A.
For the added functions by the product version upgrade, refer to the list of functions added by GT Designer2 version upgrade in Appendices. In addition, GT Designer2 Version2.98C supports the multimedia function of recording and playing video files with sound, and GT Works3 Version1.14Q supports the multidrop connection on GT16 and GT15.

2 Symbols

Specification of symbols used in this manual



7.2 Creating a New Project

Create a new project.

1 Perform either of the following operations.

- Click (New).
- Choose the [Project] → [New] menu.

2 As the System Environment dialog box appears, make the System Settings.

For items other than "System Settings", refer to the "GT Designer2 Version ☐ Screen Design Manual".

Item	Description
GOT Type	Select the GOT type to be used.
PLC Type	Select the PLC CPU type to be connected to the GOT. On GT Designer2, the device settings are to be made within the device range of the PLC CPU type selected here. When accessing multiple PLC CPUs, select the PLC CPU type that has the largest device range among the PLC CPUs to be accessed.
Project Folder	Make sure to set this item as it is required to create a project. Applicable characters: ASCII characters*1, 1 to 32 characters
Color Settings	Select the number of colors used in the screen that will be displayed on the GOT. Select the option applicable to the GOT type. The options applicable to GT Designer2 are included.
65536 colors are used to display the image data (GT15 Only)	Check this item to import BMP format figure data in 65536 colors. When this item is not checked, the data will be imported with the number of colors set in Color Settings. *2
16 dot Standard Font	Select the font installed in the GOT. *3

*1 The following shows the applicable ASCII characters and inapplicable folder names.
Applicable ASCII characters: #, $, %, &, ', (,), +, -, ., 0 to 9, =, @, A to Z, [,], ^, _, a to z, {, }, ~, space
However, "." is inapplicable.
Inapplicable folder names: COM1 to COM9, com1 to com9, LPT1 to LPT9, lpt1 to lpt9, AUX, aux, CON, con, NUL, nul, PRN, prn, CLOCK$, clock$, any name that begins with G1 or g1
*2 To display 65536 colors on the GOT, mount the multi-color display board to the GOT.
When the multi-color display board is not mounted, BMP format figure data will be displayed in 256 colors.
*3 When the selected font differs from the one installed in the GOT, the installed font will be displayed with priority.

Point Changing the GOT type

Refer to the following manual for precautions on GOT type change.

GT Designer2 Version ☐ Screen Design Manual

3 After System Settings are completed, click the OK button to proceed to new screen creation operation.

Section 7.5 Creating a New Screen

7 - 3 7.2 Creating a New Project

1 → 2 → 3 · · · ·
Indicates the operation steps.

Menu and items are differentiated with parentheses.
[ ] : Refers to menu in menu barrefers, dialog box item or GOT utility menu.
☐ : Refers to dialog box buttons or PC keyboard.

GT16 Only — Indicates the setting items or functions specific to GT16☐☐.

GT15 Only — Indicates the setting items or functions specific to GT15☐☐.

GT11 Only — Indicates the setting items or functions specific to GT11☐☐.

GT10 Only — Indicates the setting items or functions specific to GT10☐☐.

GT Soft GOT1000 — Specific to GT SoftGOT1000.

GT16 — Specific to GT16.

GT15 — Specific to GT15.

GT11 — Specific to GT11.

GT10 — Specific to GT10.

*If no icons are shown, the explanation all the models.

Point — Refers to the information required.

Hint! — Refers to information useful for operation.

Remark — Refers to the supplementary explanations for reference.

Indicates the items in which the detailed explanation is described (manual, chapter, section, item of the manual).

* The above is different from the actual page, as it is provided for explanation only.

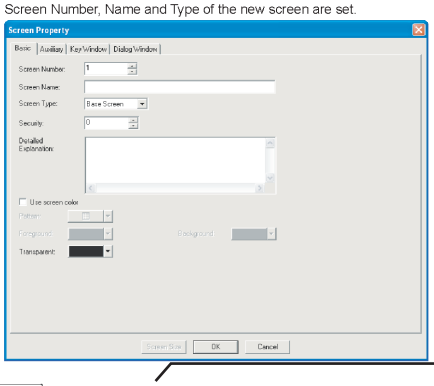
7.5 Creating a New Screen

Create a new Base Screen, Window Screen or Report Screen.
For creating the Report Screen, refer to the following manual.
GT Designer2 Version Screen Design Manual

7.5.1 Screen creation procedure

1. Perform either of the following operations.
   - Click (New Base Screen).
   - Select [Screen] → [New Screen] → [Base Screen]/[Window Screen] menu.
2. The Screen Property dialog box is displayed.
   After setting the items below, click the OK button. The screen is created.

■ Basic tab
Screen Number, Name and Type of the new screen are set.



Basic | Auxiliary | Key Window | Dialog Window

Indicates the tab included in the dialog box.
The basic tab of screen property dialog box is taken as an example here.

Item	Description
Screen Number	Screen number is selected.
Screen Name	Screen name is input. Set the text within 32 characters.
Screen Type	Screen type is selected. Base Screen: Base screen is created. Window Screen: Window screen is created.
Security	Security level (0 to 15) of each screen is set. When the security function is not used, set to "0." Refer to the manual below for details of the security function. GT Designer2 Version Screen Design Manual

Product List

The following shows the product list of GT Designer2.



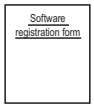
SW2D5C-GTWK2-E
or
SW2D5C-GTD2-E



About installation method of GT Works2/GT Designer2



End-user software license agreement



Software registration form



Licenseagreement

NOTICES

- We don't guarantee the commercially-available Microsoft® Windows® Operating System-based software products that have been introduced in this manual.
- We hold the copyrights of this software package.
- No part of this manual may be transcribed or duplicated in any form without prior permission by Mitsubishi Electric Corporation.
- We have attempted to cover all the revisions of software and hardware, but this manual may not contain the latest revisions.
- The software of this product requires one license to be purchased per computer.
- We permit the user to use this software package (including this manual) based on the Software License Agreement.
- We are not liable for consequences or influences due to this software package (including this manual).
- The specifications of this software package and the descriptions in this manual may be altered in future without prior notice.

MEMO

1. OVERVIEW

1.1 Overview

1.1.1 Overview

This manual describes the common settings, specifications of the object function, setting method, arranging method and other particulars of GT Designer 2.
To divert a program example specified in this manual to the actual system, thoroughly make sure that there is no problem in the control of the target system.

1 About manuals

The following manuals are prepared for the GOT 1000 Series.
Refer to the corresponding manual according to the purpose.

(1) Installation of software, drawing and data transfer
For operations from creation of project data up to transfer to GOT, refer to the following manuals.

Purpose	 GT Designer2 Version □ Basic Operation/Data Transfer Manual*1	 GT Designer2 Version □ Screen Design Manual*1
Installation of product to PC	Details	
Creation of a project	Details	
Creation of a screen	Details	
Drawing of a figure	Details	
Entry of common settings	Overview	Details
Arrangement and/or data setting of object	Overview	Details

		
Purpose	GT Designer2 Version □ Basic Operation/Data Transfer Manual*1	GT Designer2 Version □ Screen Design Manual*1
Data transfer to GOT		

*1: Contained in GT Works 2 and GT Designer 2 in a PDF file.

(2) Installation of main body of GOT and connection with PLC
For operations from installation of the GOT up to communication with the PLC CPU, refer to the following manuals.

Purpose	(Included) GT16 General Description GT15 General Description GT11 General Description GT10 General Description	 GT16 User's Manual (Hardware)*1 GT15 User's Manual*1 GT11 User's Manual*1 GT10 User's Manual*1	 GT16 User's Manual (Basic Utility)*1 GT15 User's Manual*1 GT11 User's Manual*1 GT10 User's Manual*1	 GOT1000 Series Connection Manual*1
Confirmation of name and specifications of each part of main body of GOT	Overview	Details		
Confirmation of installation method of GOT	Overview	Details		
Confirmation of installation method of communication module and optional equipment		Details		Overview
Confirmation of connection method with PLC				Details
Confirmation of utilities operation method			Details	
Confirmation of error code (system alarm) displayed on GOT		Details		

*1: Contained in GT Works 2 and GT Designer 2 in a PDF file.

(3) Other manuals
The following manuals are provided in addition to those described in Paragraphs (1) and (2).
The following manuals are contained in GT Works 2 and GT Designer 2 in PDF files.

(a) GOT1000 Series Extended/Option Functions Manual
The ladder monitor function, system monitor function, and MELSEC-A list editor function operation methods are described.

(b) GOT 1000 Series Gateway Functions Manual
The gateway function operation method is described.

(c) GT Simulator 2 Version □ Operating Manual
The method for simulating the created project data with GT Simulator 2 is described.

(d) GT Converter 2 Version □ Operating Manual
The GT Converter 2 operation method is described.

1.2 Software Package Configuration

This section explains the software and data included in the CD-ROM of GT Designer2 Version 2.

1.2.1 Software

GT Works2 Version2, GT Designer2 Version 2 include the following software.
Note that the their package configurations are different.

○: Available -: N/A

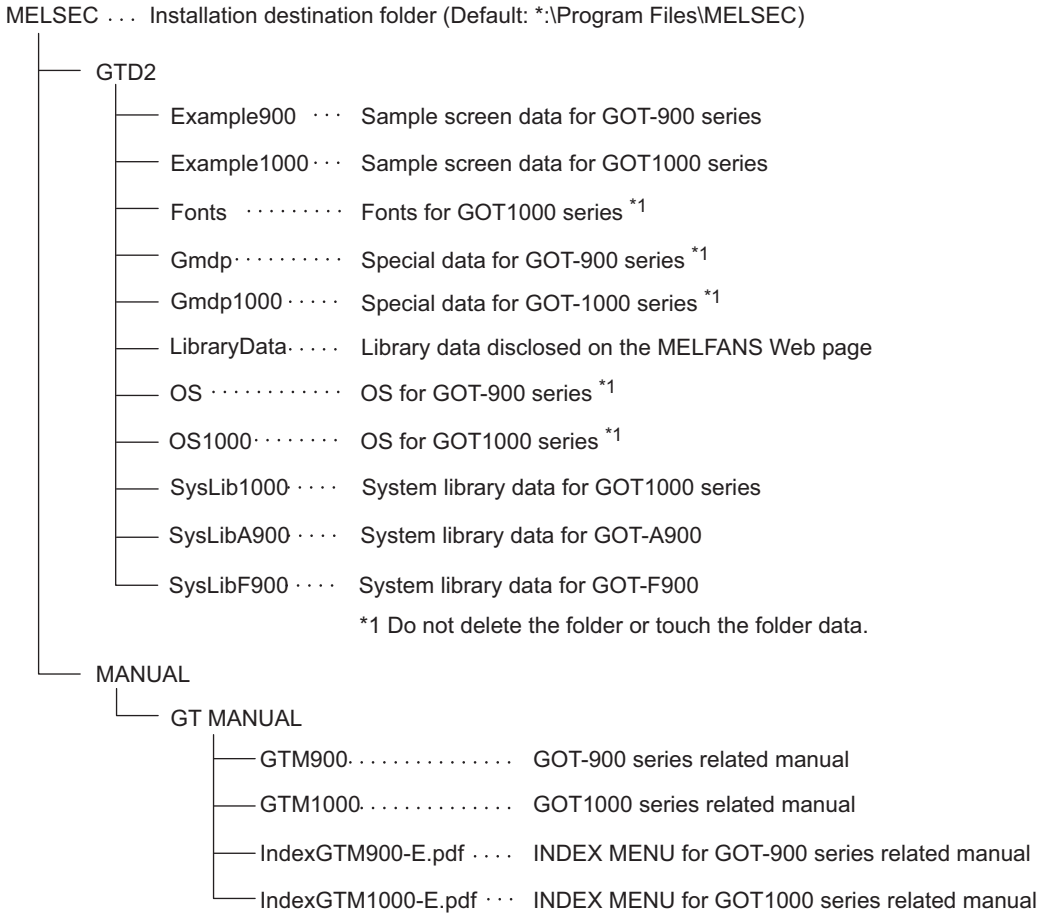
Software		Description	GT Works2	GT Designer2
GOT-1000 series, GOT-900 series software	 GT Designer2	Creates screens for the GOT-1000 series and GOT-900 series.	○	○
	 GT SoftGOT1000	Enables a PC to operate as the GOT-1000 series. The license key or license key FD is required to use this software.	○	○
	 GT SoftGOT2	Enables a PC to operate as the GOT-A900 series. The license key or license key FD is required to use this software. (Operates for about 10 minutes without license key/license key FD.) For the license key or license key FD, please contact your local Mitsubishi service center or representative.	○	○
	 GT Simulator2	Connects to the GX Simulator or PLC CPU and enables the operation of GOT-A900 series or GOT1000 series to simulate in PC.	○	–
	 GT Converter2	Converts the project data for GOT-800 series or Digital's package data into a GT Designer2 format file. GT Converter2 is not required to convert the project data for GOT-900 series to those for GOT-1000 series.	○	○
	 MES DB Connection Service	Software for the GOT1000 series. MES interface function on GOT can be used by installing this software on a PC for server.	○	○
	 Document Converter	Creates the data for the GT Designer2 document display function for the GOT-1000 series.	○	○
	 Data Transfer Tool	Software for the GOT1000, GOT900, and GOT800 series. Enables downloading data from a PC and uploading data to a GOT with the PC that GT Designer2 or GOT800 series software is not installed.	○	○
GOT-1000 series software	 GT MMData Connector	Automatically transfers the recorded files via Ethernet from the GOT with a multimedia unit installed to a personal computer, and displays them as a list.	○	○

1.2.2 Other included data

In addition to the software in Section 1.2.1, GT Works2 Version2, GT Designer2 Version 2 include the following data.
The following data are installed into the PC together with GT Designer2, GT Manual 1000 and GT Manual 900.

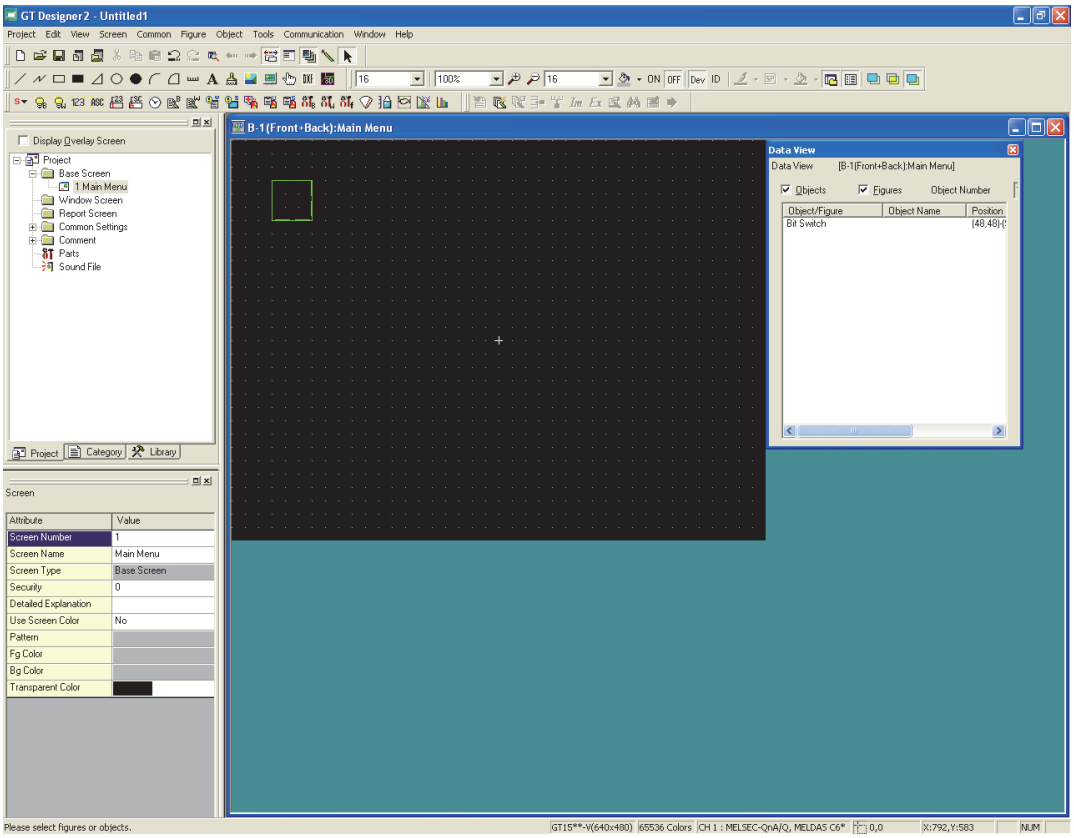
GOT series	Data	Description
GOT-1000 series	GT15 □□ specific function sample data	Sample screen data for specific function of GT15 □□.
	Microcomputer connection sample data	Sample screen data and sample program (C language) for microcomputer connection.
	Introduction data	Screen data used for explanation in Chapter 4 of this manual. To operate the screen data actually, write the sequence program stored in the "Ladder" folder to the PLC CPU with GX Developer.
	Online manual	Online manual related to the GOT-1000 series. It is stored in PDF data format.
GOT-900 series	Function-specific sample data for A975GOT	Sample screen data for specific function of A975GOT. To operate the screen data actually, write the sequence program stored in the "Ladder" folder to the PLC CPU with GX Developer.
	Sample data for F940GOT/F940WGOT	Sample screen data for F940GOT/F940WGOT.
	Sample data for microcomputer connection	Sample screen data and sample program (C language) for microcomputer connection.
	Introduction data	Screen data used for explanation in Chapter 7 and later of the GT Designer2 Version d Operating Manual [Startup-Introductory Manual]. To operate the screen data actually, write the sequence program stored in the "Ladder" folder to the PLC CPU with GX Developer.
	256-color test data	Data for checking the color display of the screen data with 256-color pattern settings.
	Online manual	Online manual related to the GOT-900 series. It is stored in PDF data format.

After GT Designer2, GT Manual 1000 and GT Manual 900 have been installed, the data are stored into the following folders.



1.3 Features

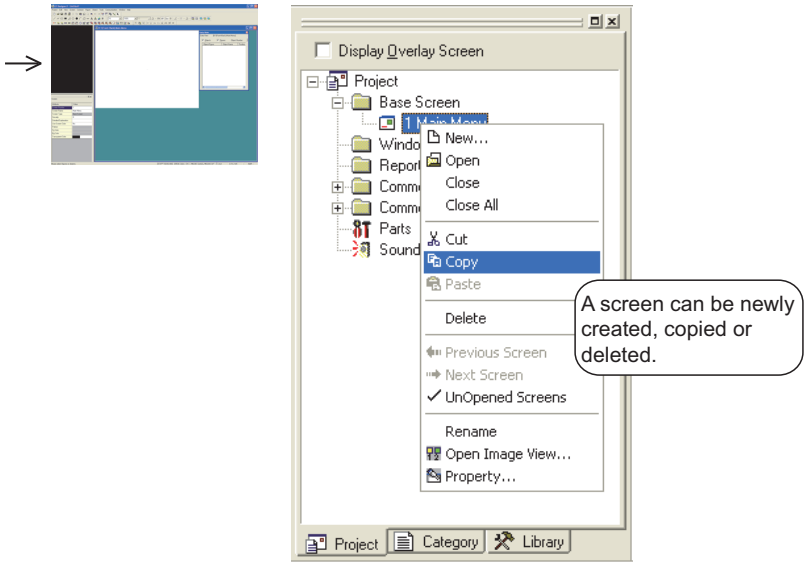
The GT Designer2 has various functions to improve the drawing efficiency.
Main functions of the GT Designer2 are described below:



1.3.1 Easy operations

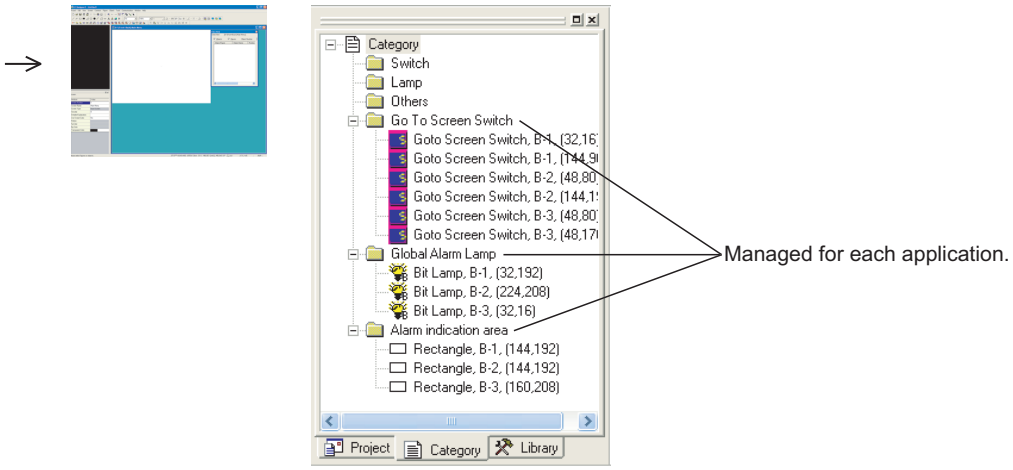
Easy to know the overall project.....☞Section 7.7.7 Workspace operations

Settings of the overall project such as created screens or common settings are displayed on the tree.
It is convenient to know the current settings, to check progress of work and to copy the screen.



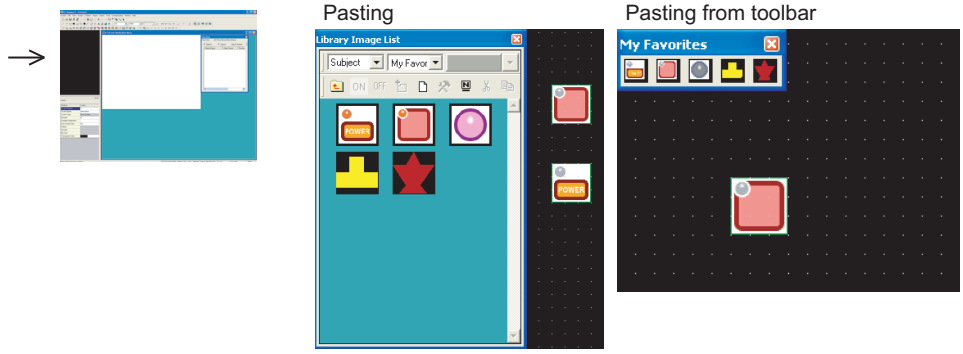
2 Easy to manage objects for each application.....☞Section 12.1.2 Batch setting and managing objects/figures for each purpose (Category workspace)

The overall project settings are displayed on the tree by category (type).
Classification for each application allows simple management of objects.



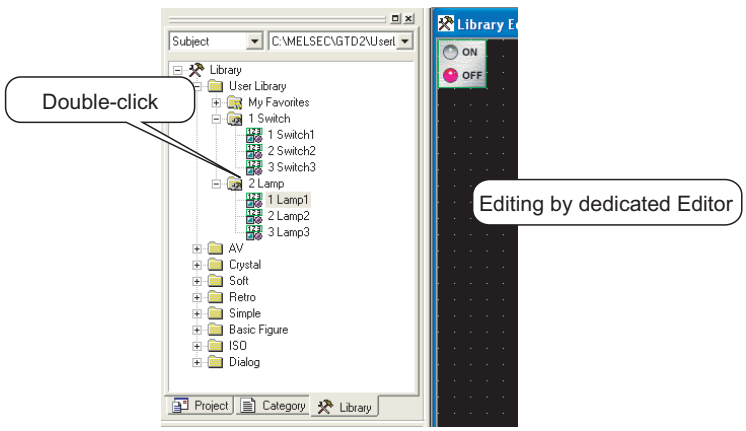
3 Easy to select parts frequently used.....☞Chapter 10. USING LIBRARY

Objects or figures can be registered and pasted on the screen.
Objects or figures frequently used may be registered as buttons on the toolbar.



Easy parts editing

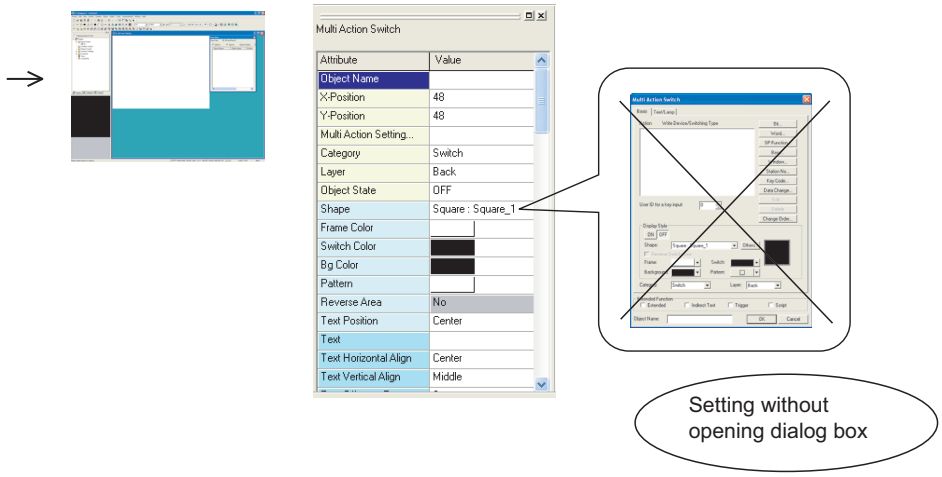
The registered parts (objects and figures) can be edited by the dedicated editor (Library Editor).



1.3.2 Useful functions

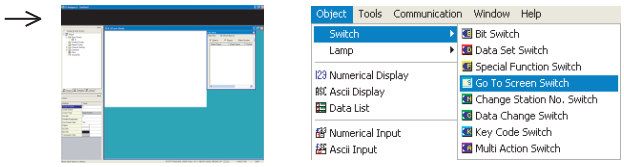
1 Shortest setting without opening dialog box.....☞Section 12.1.1 Batch setting of multiple objects/figures on the same screen (Propertysheet)

All setting items and setting details being currently selected are displayed in a list.
Objects and figures can be set without opening the dialog box and the setting details can be checked.



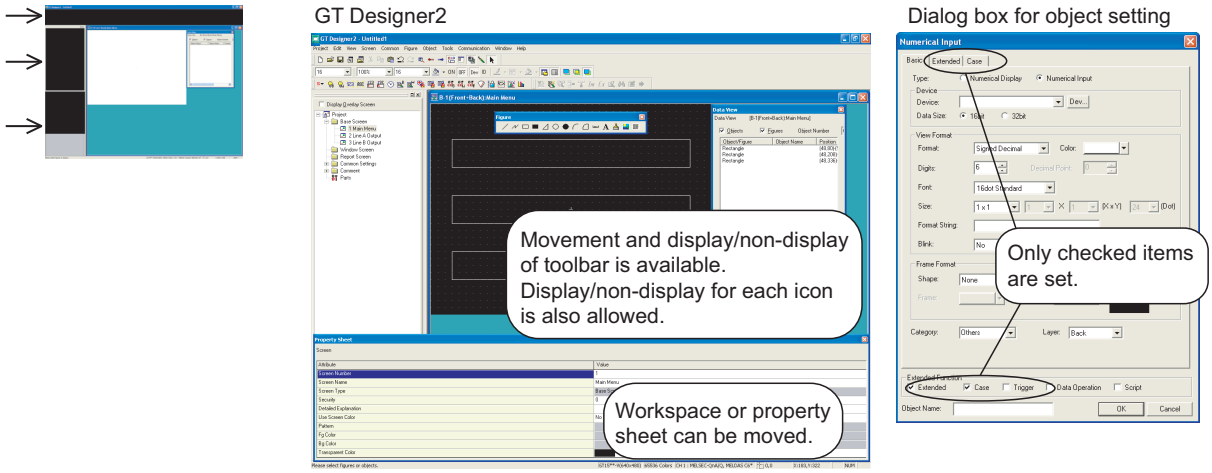
2 Classifying objects for each application

Since the touch switches are classified for each application, the desired touch switch for setting can be simply selected. The lamp display function and the part display function are classified into the bit device and the word device. In this way, the number of setting items is reduced.



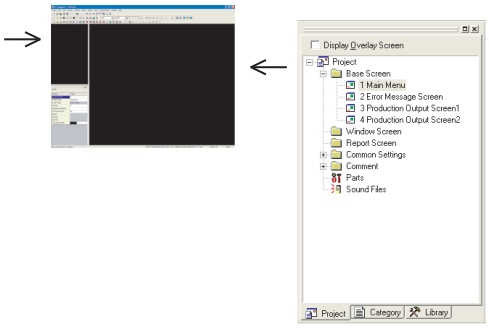
3 Customizing screen.....☞Section 5.4.1 Customizing screen configuration

The screen can be customized for the workspace, movement of property sheet or toolbars display/non-display. You may create figures in the preferred environment.
The dialog box for setting objects may also be customized.

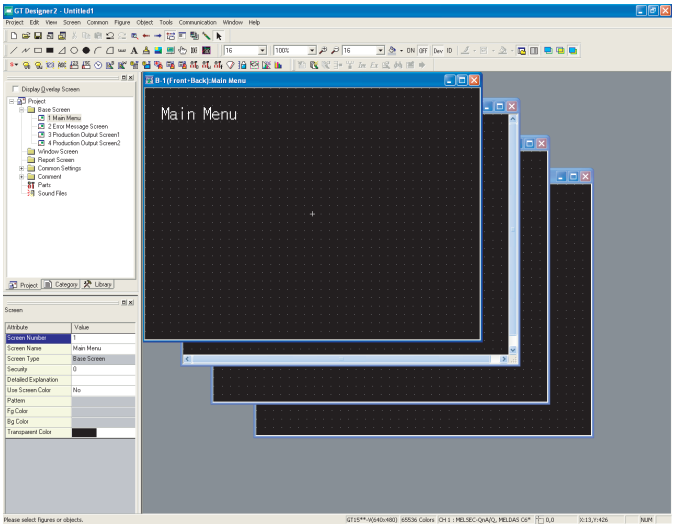


4 Quick selection of desired screen for editing.....☞Section 7.6.1 Opening screen

Double click the screen in the project workspace to display the desired screen for editing.

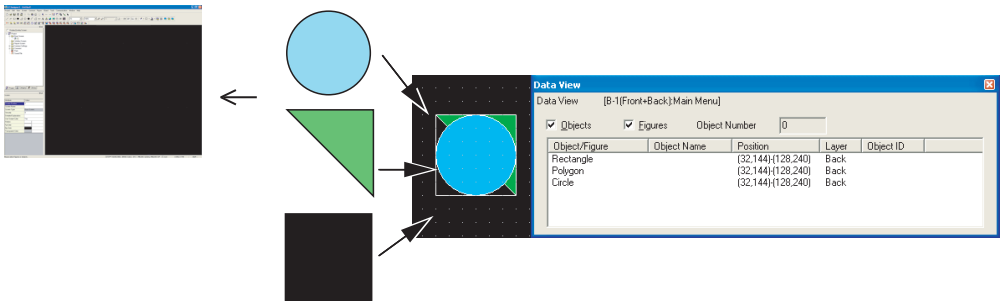


The screen can be displayed by double clicking the screen in the workspace.



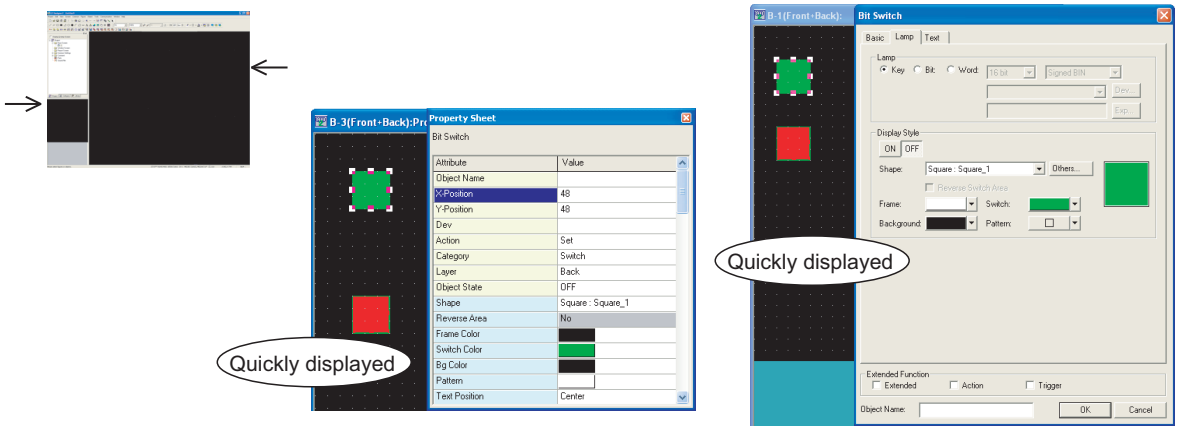
5 Quick selection of desired part for editing.....☞Section 12.1.4 Simple selection of overlapped figure (Data view)

Objects or figures set on the screen can be displayed in a list.
If multiple objects or figures are overlapped, it can be simply selected from the Data View.
Currently selected objects or figures can also be checked.



6 Confirming the settings in real time (View Direct)

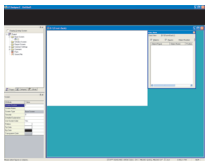
The settings made in the property sheet or dialog box are reflected immediately on the corresponding figures or objects on the screen.
As settings can be made while checking them on the screen, the screen can be created smoothly as desired.



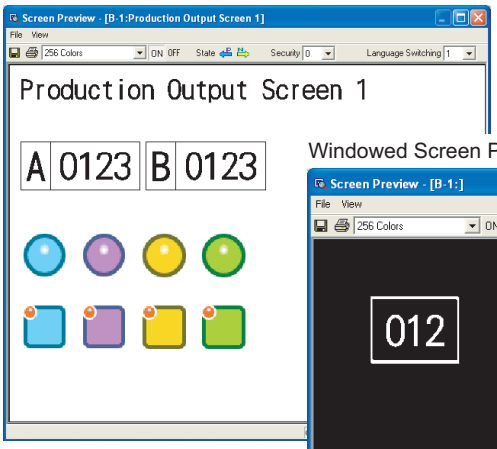
7 Confirming the screen display on the GOT (Preview)

☞Section 7.12 Viewing Created Screen Image

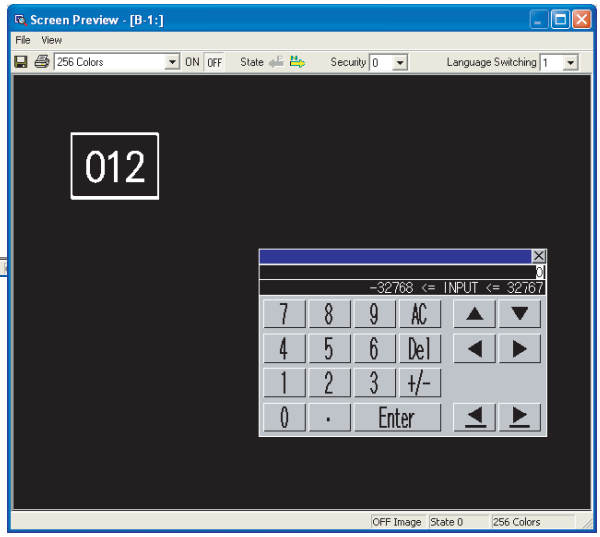
The screen display on the GOT can be confirmed on GT Designer2.
Also, the windowed screen can be confirmed.



Base Screen Preview



Windowed Screen Preview



1.4 Operating Environment

The following shows the GT Designer2 operating environment.

1.4.1 Operating environment

Item		Description
Personal computer		PC/AT compatible personal computer that Windows® runs on
Operating system		Microsoft® Windows® 98 (English, Simplified Chinese, Traditional Chinese, Korean, German versions) Microsoft® Windows® Millennium Edition (English, Simplified Chinese, Traditional Chinese, Korean, German versions) Microsoft® Windows NT® Workstation 4.0 Service Pack 3 or later (English, Simplified Chinese, Traditional Chinese, Korean, German versions)*1 Microsoft® Windows® 2000 Professional Service Pack 4 or later (English, Simplified Chinese, Traditional Chinese, Korean, German versions)*1 Microsoft® Windows® XP Professional Service Pack 2 or later (English, Simplified Chinese, Traditional Chinese, Korean, German versions)*2 *4 *5 Microsoft® Windows® XP Home Edition Service Pack 2 or later (English, Simplified Chinese, Traditional Chinese, Korean, German versions)*2 *4 *5 Microsoft® Windows Vista® Ultimate (English, Simplified Chinese, Traditional Chinese, Korean, German versions)*3 *4 *5 Microsoft® Windows Vista® Enterprise (English, Simplified Chinese, Traditional Chinese, Korean, German versions)*3 *4 *5 Microsoft® Windows Vista® Business (English, Simplified Chinese, Traditional Chinese, Korean, German versions)*3 *4 *5 Microsoft® Windows Vista® Home Premium (English, Simplified Chinese, Traditional Chinese, Korean, German versions)*3 *4 *5 Microsoft® Windows Vista® Home Basic (English, Simplified Chinese, Traditional Chinese, Korean, German versions)*3 *4 *5 Microsoft® Windows® 7 Ultimate (English, Simplified Chinese, Traditional Chinese, Korean, German versions)*3 *4 *5 *8 *9 Microsoft® Windows® 7 Enterprise (English, Simplified Chinese, Traditional Chinese, Korean, German versions)*3 *4 *5 *8 *9 Microsoft® Windows® 7 Professional (English, Simplified Chinese, Traditional Chinese, Korean, German versions)*3 *4 *5 *8 *9 Microsoft® Windows® 7 Home Premium (English, Simplified Chinese, Traditional Chinese, Korean, German versions)*3 *4 *5 *9 Microsoft® Windows® 7 Starter (English, Simplified Chinese, Traditional Chinese, Korean, German versions)*3 *4 *5
Computer		Refer to "Applicable operating system and performance required for personal computer" on the next page.
	CPU	
	Memory	
Hard disk space		For installation: 1.1GB or more*7 For execution: 100MB or more
Disk drive		CD-ROM drive
Display color		High Color (16 bits) or more
Display*3		Resolution 800 × 600 dots or more
Others		Internet Explorer 5.0 or later must be installed.
		The mouse, keyboard, printer, and CD-ROM drive must be compatible with the above OS.

*1: Administrator authority is required for installing GT Designer2.

*2: Administrator authority is required for installing and using GT Designer2.

*3: Administrator authority is required for installing GT Designer2.
A standard user or Administrator account is required for using GT Designer2.
For interactions between GT Designer2 and the other MELSOFT applications, use GT Designer2 under Administrator authority when the other applications are used under Administrator authority.

*4: The following functions are not supported.
- "Compatibility mode"
- "Change your desktop themes (fonts)"
- "DPI setting other than the normal size"
- "Fast user switching"
- "Remote desktop"

*5: Only the 32-bit OS is available.

*6: For using the MES interface function, a display resolution of 1024 × 768 dots or more is required.

*7: 800MB or more when using Windows® 98 ,Windows® Millennium Edition or WindowsNT®

*8: Windows XP Mode is not supported.

*9: Windows Touch is not supported.

Applicable operating system and performance required for personal computer

Operating system	Performance required for personal computer	
	CPU	Memory
Microsoft® Windows® 98 (English, Simplified Chinese, Traditional Chinese, Korean, German versions)	Pentium® 200MHz or more	64MB or more
Microsoft® Windows® Millennium Edition (English, Simplified Chinese, Traditional Chinese, Korean, German versions)	Pentium® 200MHz or more	64MB or more
Microsoft® Windows NT® Workstation 4.0 Service Pack 3 or later (English, Simplified Chinese, Traditional Chinese, Korean, German versions)	Pentium® 200MHz or more	64MB or more
Microsoft® Windows® 2000 Professional Service Pack 4 or later (English, Simplified Chinese, Traditional Chinese, Korean, German versions)	Pentium® 200MHz or more	64MB or more
Microsoft® Windows® XP Professional Service Pack 2 or later (English, Simplified Chinese, Traditional Chinese, Korean, German versions) Microsoft® Windows® XP Home Edition Service Pack 2 or later (English, Simplified Chinese, Traditional Chinese, Korean, German versions)	Pentium II® 300MHz or more	128MB or more
Microsoft® Windows Vista® Ultimate (English, Simplified Chinese, Traditional Chinese, Korean, German versions) Microsoft® Windows Vista® Enterprise (English, Simplified Chinese, Traditional Chinese, Korean, German versions) Microsoft® Windows Vista® Business (English, Simplified Chinese, Traditional Chinese, Korean, German versions) Microsoft® Windows Vista® Home Premium (English, Simplified Chinese, Traditional Chinese, Korean, German versions) Microsoft® Windows Vista® Home Basic (English, Simplified Chinese, Traditional Chinese, Korean, German versions) Microsoft® Windows® 7 Ultimate (English, Simplified Chinese, Traditional Chinese, Korean, German versions) Microsoft® Windows® 7 Enterprise (English, Simplified Chinese, Traditional Chinese, Korean, German versions) Microsoft® Windows® 7 Professional (English, Simplified Chinese, Traditional Chinese, Korean, German versions) Microsoft® Windows® 7 Home Premium (English, Simplified Chinese, Traditional Chinese, Korean, German versions) Microsoft® Windows® 7 Starter (English, Simplified Chinese, Traditional Chinese, Korean, German versions)	800MHz or more (Recommended: 1GHz or more)	512MB or more (Recommended: 1GB or more)

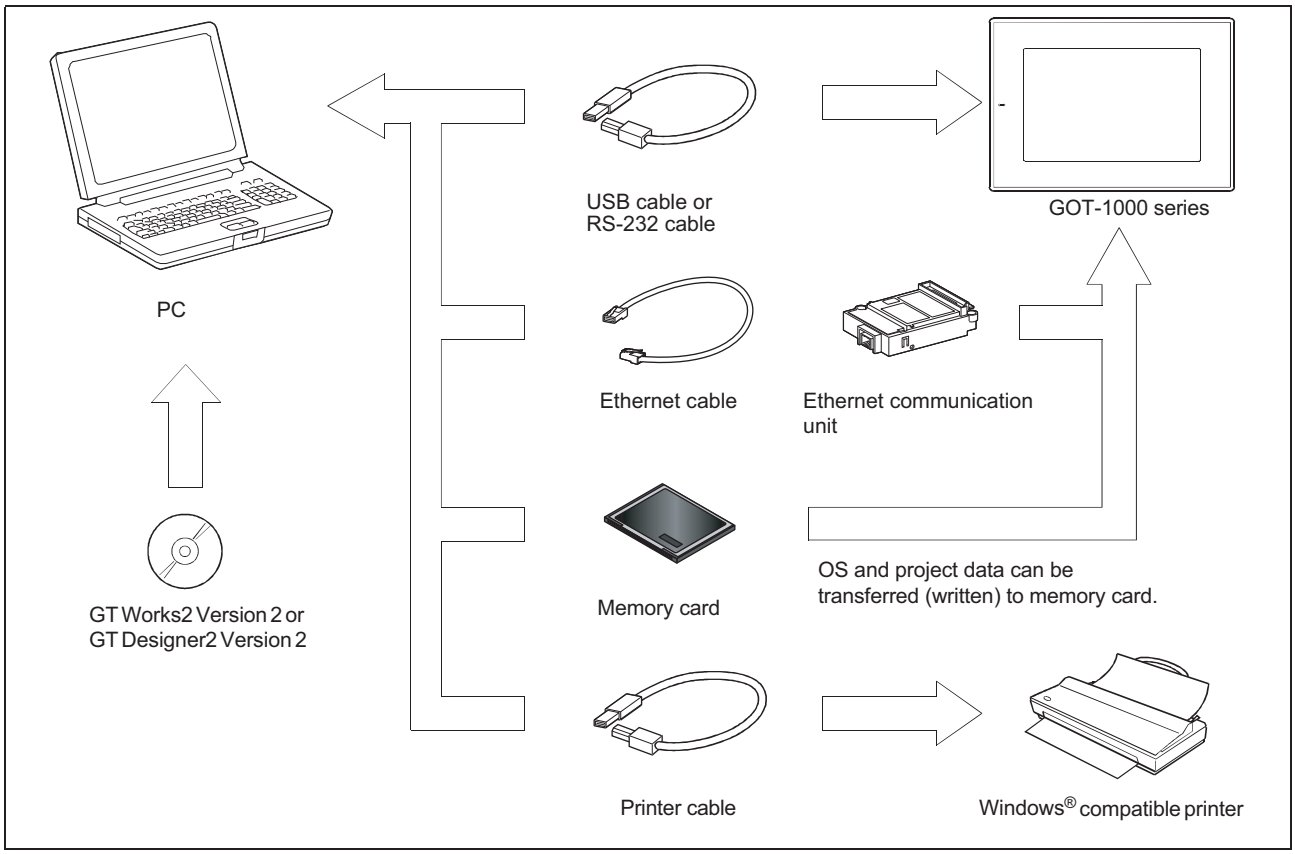
1.5 System Configuration

1.5.1 System configuration

The following shows a system configuration that includes GOT-1000 series.

☞ Section 1.5.2 Applicable USB cable

☞ Section 1.5.3 Applicable RS-232 cable



- Use the dedicated cable made by dedicated cable, for the USB or RS-232 cable.

  ☞ On USB cable: See Section 1.5.2.

  ☞ On RS-232 cable: See Section 1.5.3.

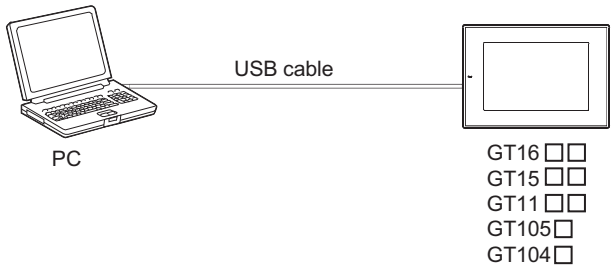
- Use a marketed conforming cable for the Ethernet cable.

  ☞ On Ethernet communication unit and cable: See Section 1.5.4.

1.5.2 Applicable USB cable

The cable of the following model is necessary.

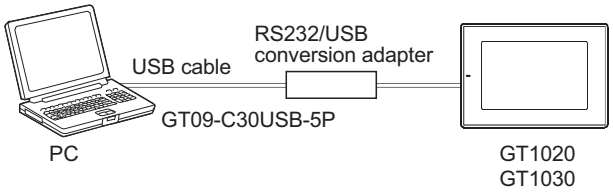
1 (1) System configuration



(2) Applicable USB cable

GOT	Model	Manufacturer
GT16☐☐, GT15☐☐, GT11☐☐, GT105☐, GT104☐	GT09-C20USB-5P (A⟷mini B type)	Mitsubishi Electric System Service
	GT09-C30USB-5P (A⟷mini B type)	Mitsubishi Electric System Service

2 (1) System configuration



* Use GT09-C30USB-5P and RS232/USB conversion adapter in combination.

(2) Applicable USB cable

GOT	Model	Manufacturer
GT1020, GT1030	GT09-C30USB-5P (A⟷mini B type)	Mitsubishi Electric System Service

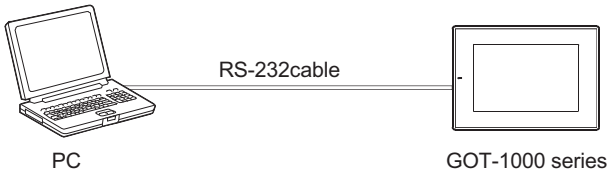
(3) Applicable RS232/USB conversion adapter

GOT	Model	Manufacturer
GT1020, GT1030	GT10-RS2TUSB-5S	Mitsubishi Electric

1.5.3 Applicable RS-232 cable

The cable of the following model is necessary.

(1) System configuration



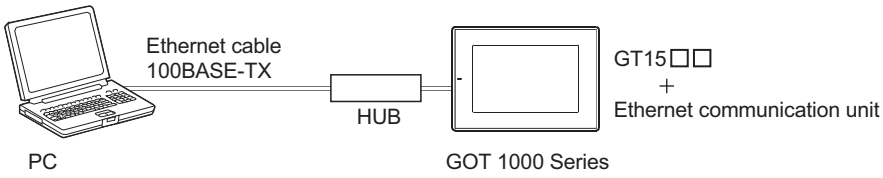
(2) Applicable cable

GOT	Model	Manufacturer
GT16□□, GT15□□, GT11□□, GT105□, GT104□	GT01-C30R2-9S (9-pin female⟷9-pin female)	Mitsubishi Electric
GT11□□HS-Q, GT1020, GT1030	GT01-C30R2-6P(9pin female⟷6pin male)	Mitsubishi Electric

1.5.4 Ethernet communication unit and cable to be used

The Ethernet interface is built into the GT16□□.
For the GT15□□, the following model of the Ethernet communication unit is necessary.

(1) System configuration



(2) Ethernet communication unit that can be used

Model	Manufacturer
GT15-J71E71-100	Mitsubishi Electric

(3) Cable that can be used

Model	Manufacturer
100BASE-TX	-

1.5.5 Memory cards

CF cards or USB memories (for only GT16☐☐) is usable as memory cards.
Use the CF card or USB memory to transfer OS and project data or to store alarm history and recipe data.
For details, refer to the "GT Designer2 Version ☐ Screen Design Manual".

(1) Applicable CF cards
The following CF cards are applicable.

Model	Specifications
GT05-MEM-16MC	16M byte CF card
GT05-MEM-32MC	32M byte CF card
GT05-MEM-64MC	64M byte CF card
GT05-MEM-128MC	128M byte CF card
GT05-MEM-256MC	256M byte CF card
GT05-MEM-512MC	512M byte CF card
GT05-MEM-1GC	1G byte CF card
GT05-MEM-2GC	2G byte CF card

(2) Applicable USB memories

Model	Description
-	Commercially available USB memory*1

*1 : Some models with the operations checked by our company are usable.
For the operation-checked models, refer to "List of valid devices applicable for GOT1000 series" (T10-0039) separately available.
The Technical News above is available as a reference at the information site for Mitsubishi industrial automation products MELFANSweb home page.
(MELFANSweb website: http://wwwf2.mitsubishielectric.co.jp/english/index.html)

1.5.6 Memory boards

Memory boards are usable on the GT105☐, GT104☐.
Install the memory board to the GT105☐, GT104☐ and use it to perform writing or reading the standard monitor OS, communication driver, or project data between the GT105☐, GT104☐ and memory board.

For details, refer to the "GT10 User's Manual".

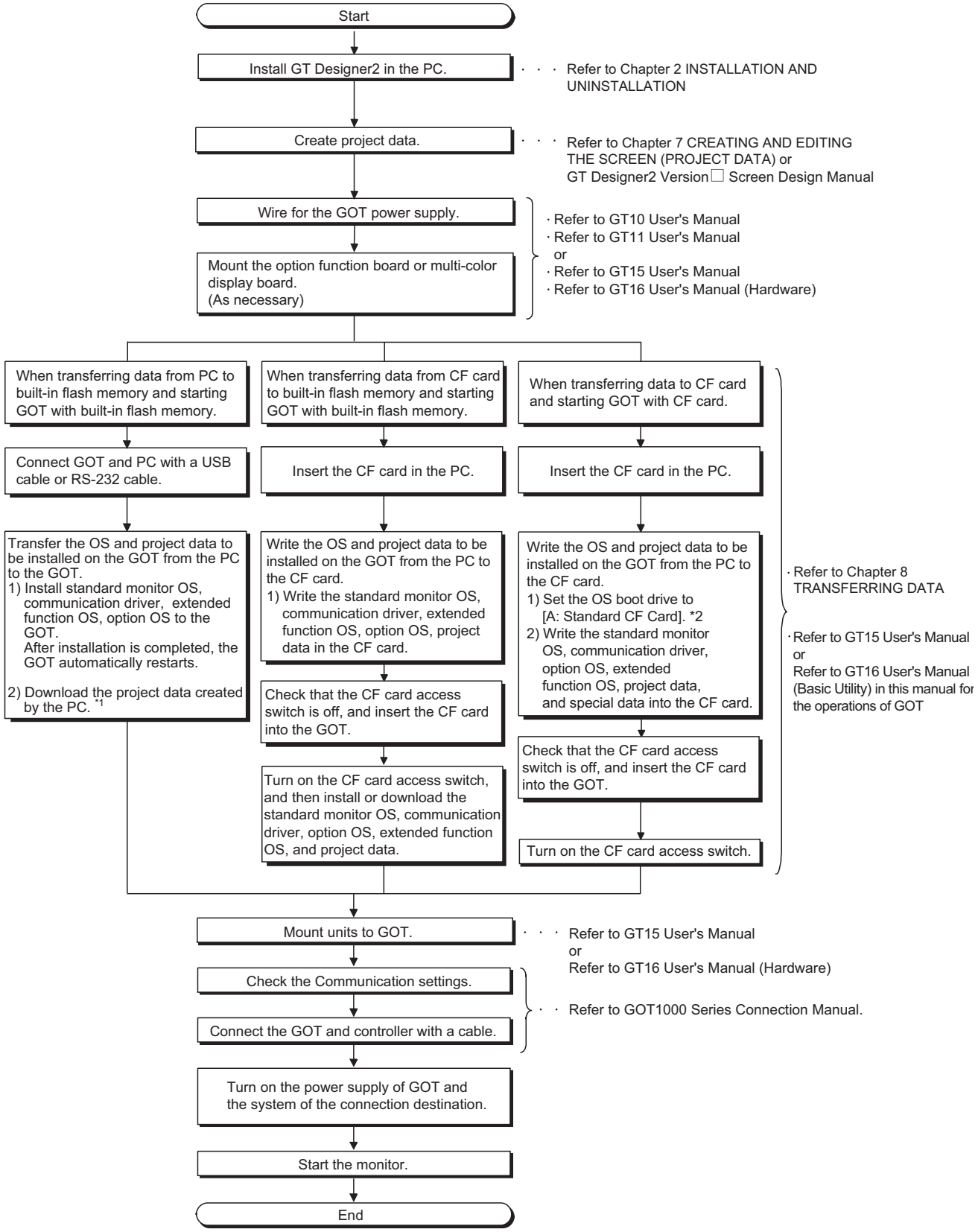
(1) Applicable memory boards

GOT	Model	Manufacturer
GT105☐, GT104☐	GT10-50FMB	Mitsubishi Electric

1.6 General Pre-operation Procedure

The following shows a general pre-operation procedure of the GOT.

1.6.1 Outline procedure



*1 Project data can be also downloaded/uploaded via Ethernet.
For download/upload of project data via Ethernet, BootOS and standard monitor OS should be installed in the GOT in advance so that the GOT and PC can communicate with each other via Ethernet by setting Communication Settings.
Refer to the following manual for details.
☞ GT Designer2 Version □ Basic Operation/Data Transfer Manual (Chapter 8 TRANSFERRING DATA)

* 2 The B drive cannot be set as the OS boot drive.

Point

Precautions for setting OS boot drive to [A: Standard CF Card]

(1) GOT startup time
When the OS boot drive is set to [A: Standard CF Card], the GOT startup time with the A drive takes longer than that with the C drive.
The GOT startup time with the A drive differs depending on the CF card type, the numbers of extended function OSs and option OSs, and project data size.

(2) Handling CF card during booting OS
Do not remove the CF card and do not turn off the CF card access switch during booting the OS.
Doing so causes the boot to fail. As a result, the GOT does not start correctly.

(3) Corrective actions when OS cannot be booted
The OS cannot be booted in the following conditions.
Take the following corrective actions, and then boot the OS again.

Condition	Corrective action
The type of the GOT to be used differs from the GOT type data set with GT Designer2 stored in the CF card.	Select the same GOT type as the GOT to be used in the Communicate with Memory Card screen. Select OSs and project data to be downloaded, and then download the selected data to the CF card.
The GOT has insufficient memory.	Mount an option function board with add-on memory on the GOT or delete unnecessary data. For details, refer to the following manual. ☞ GT Designer2 Version □ Basic Operation/ Data Transfer Manual
The CF card access switch is off.	Turn on the CF card access switch.

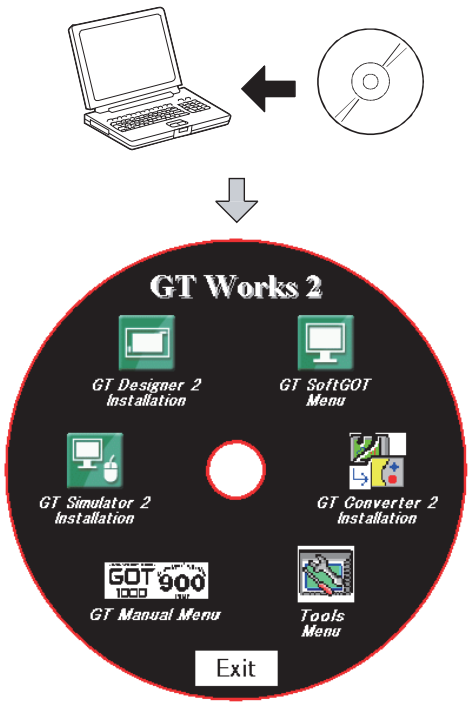
MEMO

2. INSTALLATION AND UNINSTALLATION

This chapter explains the installation and uninstallation of the software programs stored in GT Works2/GT Designer2.

2.1 Starting the Menu Screen

2.1.1 Starting the menu screen



1 Insert the CD-ROM into the CD drive of the PC where Windows® has started.
The menu screen will soon start.

2 As the menu screen of GT Works2/GT Designer2 starts, install the corresponding software or view the PDF manual.

As this menu screen is displayed after completion of one process, another process can be executed without a break.
When it is desired to end the menu screen, click the Exit button.

Point

If the menu screen does not start

Start the menu screen in the following procedure if it does not start automatically when the CD-ROM of GT Works2/GT Designer2 is inserted into the CD drive.

(1) Using Device Manager of Windows®, make setting to start the CD drive automatically.

(2) Start Explorer and double-click the following files of the CD drive.
- Disc1:GTWK2-E1.exe, or GTD2-E1.exe
- Disc2:GTWK2-E2.exe, or GTD2-E2.exe

2.2 Installing the Software Programs

Point

Installation precautions

(1) Before installation, close all other applications running on Windows®.

(2) Before installing GT Designer2, do not connect the GOT to the PC.

(3) The administrator authority is required to install GT Designer2 into Windows® NT Workstation 4.0, Windows® 2000 Professional, Windows® XP, or Windows Vista®.

(4) During installation, do not install any other software programs.

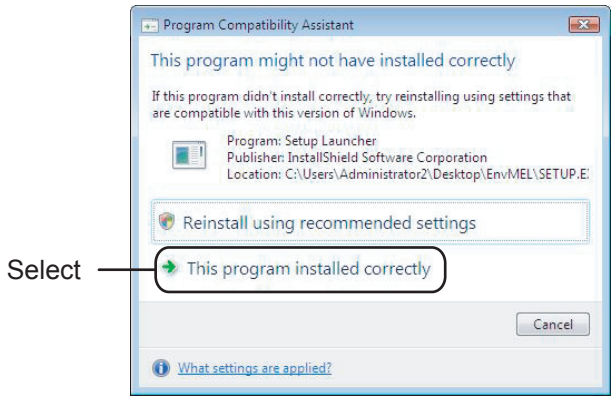
(5) During installation, do not remove the CD-ROM from the CD drive.

(6) During installation of GT Designer2, do not connect the GOT with a USB cable.

(7) To install MELSOFT applications on a personal computer with Windows Vista® , read the technical bulletin FA-A-0008.

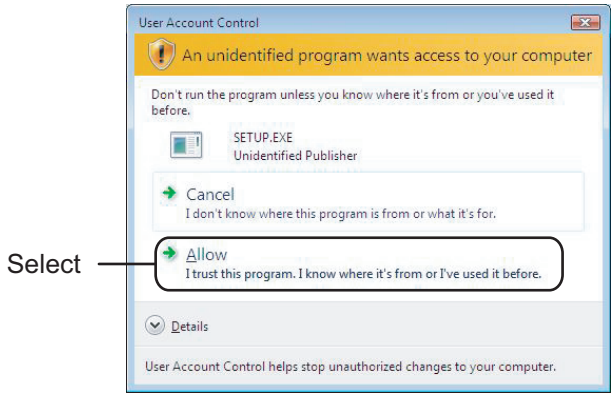
(8) During installation with the use of Windows Vista®, the following screens may be displayed.

When the screen on the right is displayed, select "This program installed correctly".
Do not select [Reinstall using recommended settings], because an incorrect module is installed.



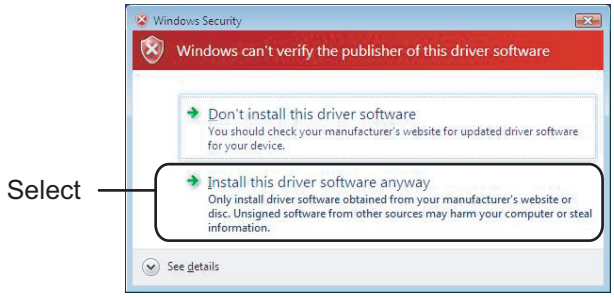
Select

When the screen on the right is displayed, select "Allow".



Select

When the screen on the right is displayed, select "Install this driver software anyway".



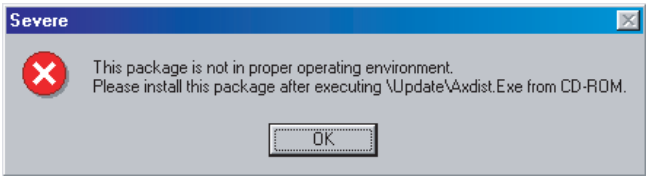
Select

Point

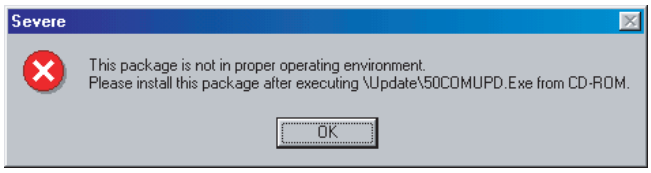
Screens displayed midway during installation

To prepare for installation, any of the following screens may be displayed midway during installation. (The display changes depending on the Windows®.)
If any of the following screens is displayed, reinstall the product after execution of the specified exe file according to the instruction of the screen.
When the product has not been installed correctly, restart the computer once.

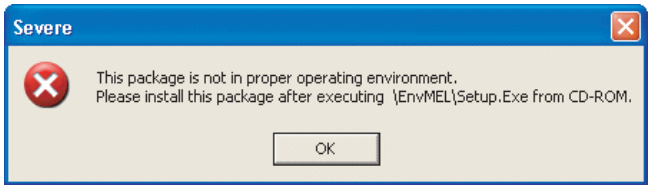
If the screen on the right is displayed, execute \Update\AXDIST.EXE of the CD-ROM.



If the screen on the right is displayed, execute \Update\50COMUPD.EXE of the CD-ROM.



If the screen on the right is displayed, execute \EnvMEL\SETUP.EXE of the CD-ROM.



Point

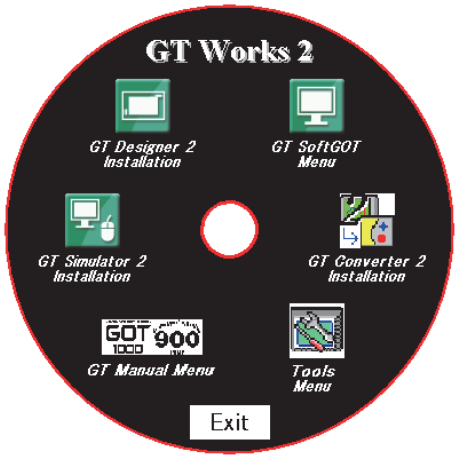
When installing/viewing the data of Disc 2 from Disc 1 or that of Disc 1 from Disc 2

The same menu screen is displayed even if either Disc 1 or Disc 2 is inserted into the CD drive of the PC.
When the data to be installed/viewed is not stored in the CD-ROM in the CD driver, the following message is displayed. In the case, incert the CD-ROM displayed in the message window. (When the appropriate CD-ROM is incerted, the menu screen is displayed again.)
Example: When inserting Disc 1 into the CD drive to view manuals.



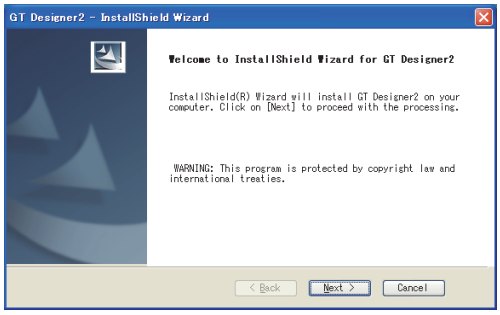
2.2.1 Software installing procedure

1 How to install GT Designer2

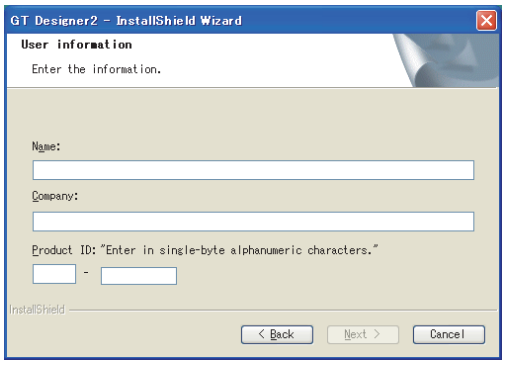


1 Insert Disc 1 into the CD drive of the PC.

2 Click the GT Designer 2 Installation to be installed.



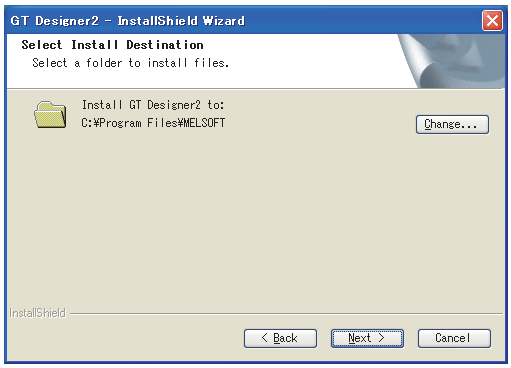
3 The screen on the left is displayed. Click the Next> button.



4 Input you name, your company name, the product ID of the product and click the Next> button.
The product ID is indicated in the software registration form packed with the product.

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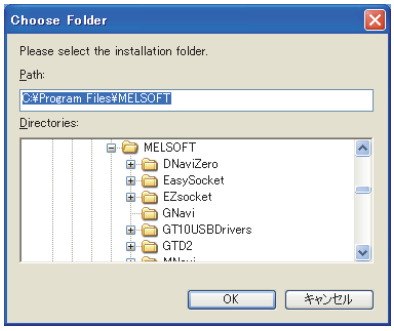


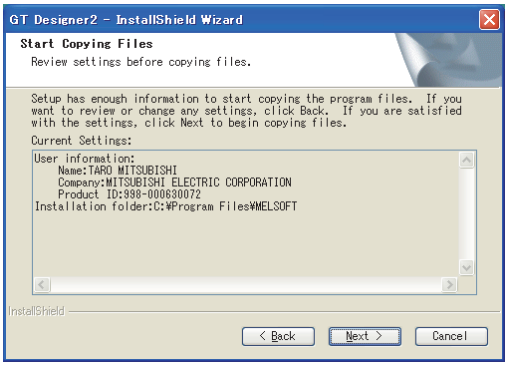
5 Specify the installation destination folder.

The installation destination folder defaults to "C:\MELSEC".

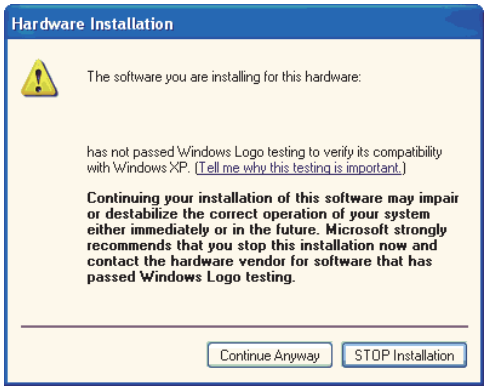
When the default is acceptable, click the Next> button.

To change the default, click the Browse... button and specify a new drive and folder.

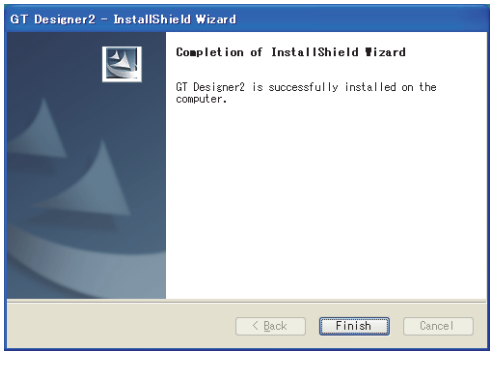




6 The screen on the left is displayed. Click the Next> button to start the installation.



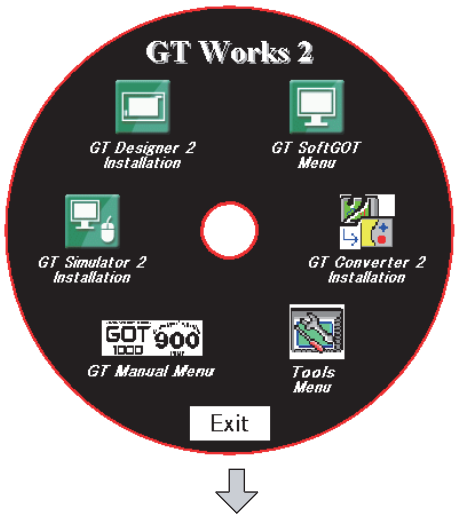
7 When the screen on the left is displayed, click the Continue Anyway button.



8 When the installation is completed, the screen on the left is displayed. Click the Finish button.

When the restart screen is displayed, restart Windows®.

2 How to install GT SoftGOT2, GT SoftGOT1000, GT Simulator2, GT Converter2, MES DB Connection Service, Document Converter, Data Transfer Tool and GT MMDataConnector



1 Insert Disc into the CD drive of the PC.

2 Click the software to be installed.

Only when GT SoftGOT is installed



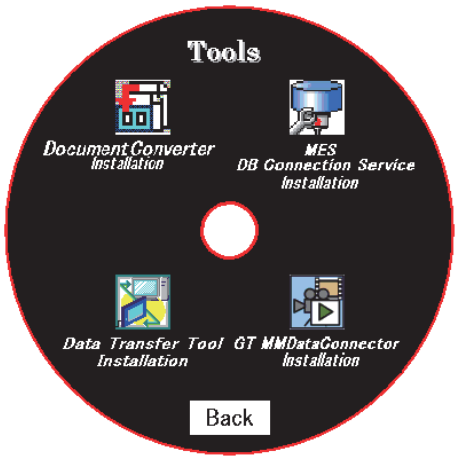
(To next page)

3 When "GT SoftGOT Menu" has been selected, the screen on the left is displayed.

"GT SoftGOT1000 Installation"
GT SoftGOT1000 will be installed.
"GT SoftGOT2 Installation"
GT SoftGOT2 will be installed.
"System Driver Installation"
System Driver driver will be installed.
When the PC CPU module is used,
System Driver does not need to be installed.
Observe the following points when installing System Driver.
Before installing System Driver, do not mount the license key (USB port) to the PC.
During System Driver installation, do not mount the license key (USB port) to the PC.

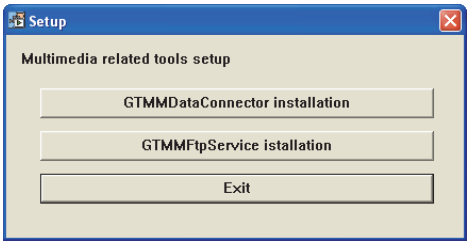
* Unless System Driver is installed, GT SoftGOT2 will not recognize the license key even if the license key is mounted to PC.

(From previous page)



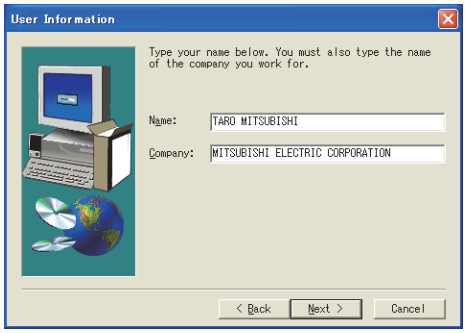
4 When "Tools" has been selected, the screen on the left is displayed.

"MES DB Connection Service Installation"
MES DB Connection Service will be installed.
"Document Converter Installation"
Document Converter will be installed.
"Data Transfer Tool Installation"
Data Transfer Tool will be installed.
"GT MMDataConnector Installation"
GT MMDataConnector Interaction Tool will be installed.



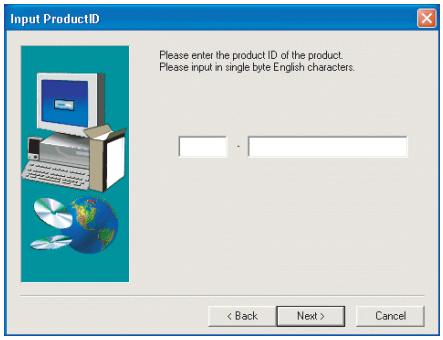
5 When "GT MMDataConnector" has been selected, the screen on the left is displayed.

"GT MMDataConnector installation"
GT MMDataConnector will be installed.
"GT MMFtpService installation"
GT MMFtpService will be installed.



6 Input you name and your company name, and click the Next> button.

As the confirmation dialog box is displayed, perform operation according to the message.

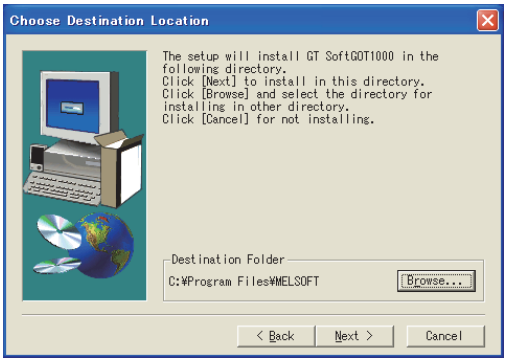


7 When "MES DB Connection Service installation" has been selected, the screen on the left is displayed.

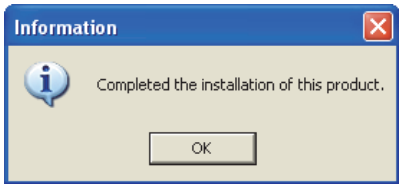
Input the product ID of the product and click the Next> button.
The product ID is indicated in the software registration form packed with the product.

(To next page)

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(For GT SoftGOT2)



8 Specify the installation destination folder.

The installation destination folder defaults to "C:\MELSEC".

When the default is acceptable, click the Next> button.

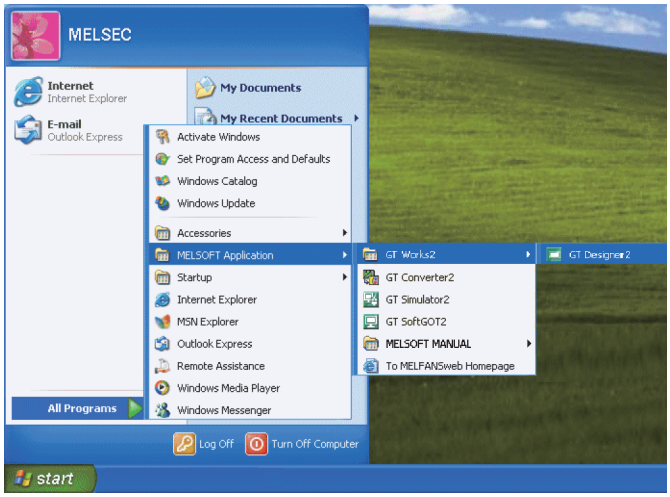
To change the default, click the Browse... button and specify a new drive and folder.

9 The installation starts.

When the installation is completed, the screen shown on the left is displayed. Click the OK button.

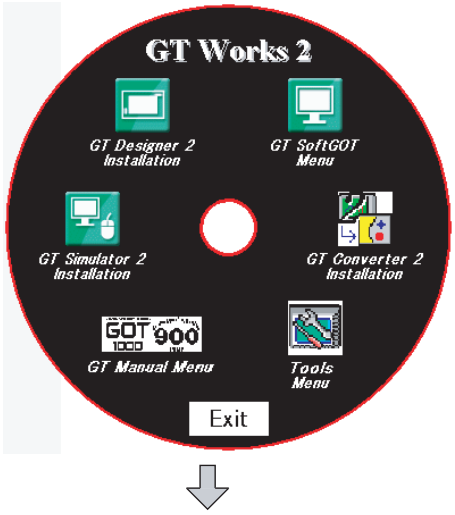
If the Restart screen is displayed, restart Windows®.

When GT Designer2, GT Simulator2 and GT SoftGOT2 are installed, icons are registered as shown below.



2.2.2 Installing the manual data

Install the online manual data that is viewed from Help of GT Designer2.

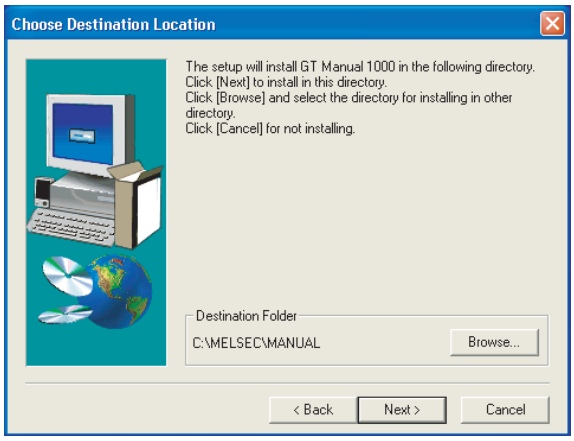


1 Insert Disc 2 into the CD drive of the PC.

2 Click the "GT Manual menu".



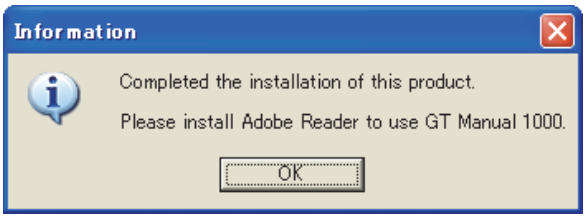
3 Click "GT Manual 1000 Installation (GT Manual 900 Installation)".



4 Specify the installation destination folder.
The installation destination folder defaults to "C:\Program Files\MELSOFT".
When the default is acceptable, click the Next> button.
When changing the installation destination, click the Browse... button and specify a new destination drive and folder.

(To next page)

(From previous page)



6 The installation starts.
When the installation is completed, the screen shown on the left is displayed. Click the OK button.

Point Adobe® Reader® must be installed separately to view the online manual.

2.3 Uninstalling the Software Programs

Point

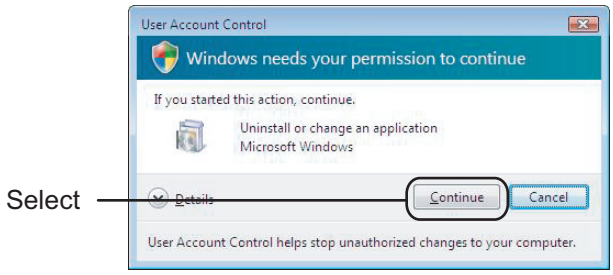
Uninstallation precautions

(1) Before uninstallation, make sure to close all software packages.

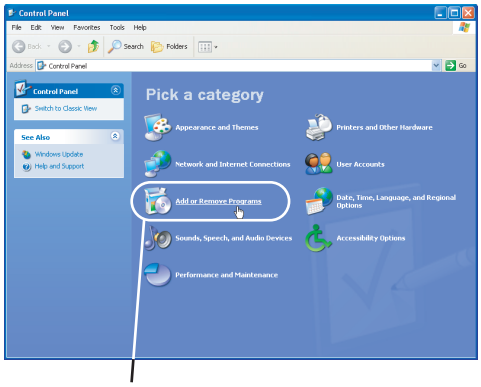
(2) When using Windows NT® Workstation 4.0, Windows® 2000 Professional, or Windows®, or Windows Vista®, log on as a user with administrative privileges (for computer management).

(3) During uninstallation with the use of Windows Vista®, the following screens may be displayed.

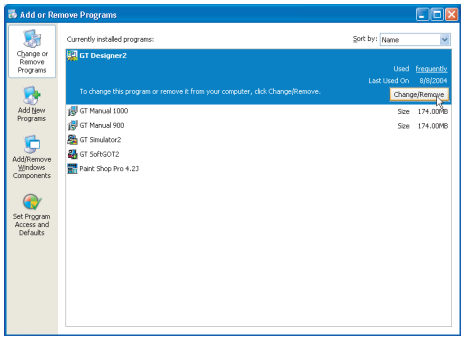
When the screen on the right is displayed, select "Continue".



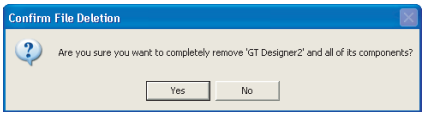
2.3.1 Software uninstalling procedure



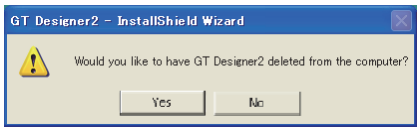
Click "Add or Remove Programs".



(For GT SoftGOT2, GT SoftGOT1000, GT Simulator2, GT Converter2, MES DB Connection Service, Document Converter, Data Transfer Tool)



(For GT Designer2)



(To next page)

1 Click "Add or Remove Programs" in the Control Panel.

2 Select the software to be uninstalled.

After selection, click the Add/Delete button.

3 Confirm the software to be deleted.

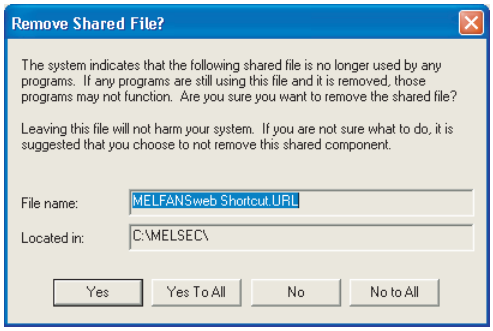
Click the Yes button to start uninstallation.

Click the No button to return to the previous screen without executing uninstallation.

* Components indicate the installed icon and files.

(From previous page)

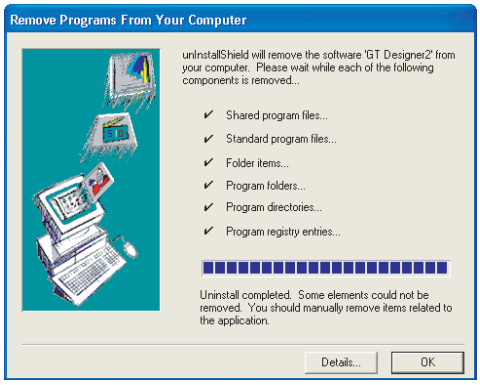
(For GT SoftGOT2, GT SoftGOT1000, GT Simulator2, GT Converter2, MES DB Connection Service, Document Converter, Data Transfer Tool)



4 When the screen as on the left (the file name and location display may be different) is displayed, click the No to All button.

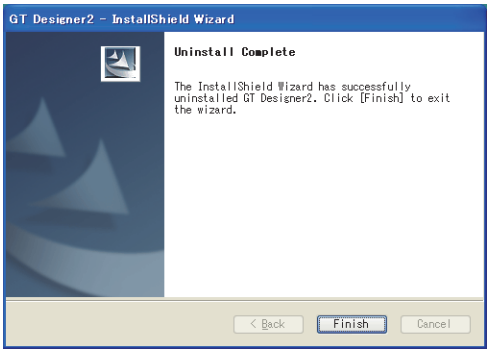
* When the Yes or Yes to All button is clicked, the shared file of MELSOFT may be deleted and the other software packages may not operate.

(For GT SoftGOT2, GT SoftGOT1000, GT Simulator2, GT Converter2, MES DB Connection Service, Document Converter, Data Transfer Tool)



5 When uninstallation is completed, the screen on the left is displayed. Click the OK button.

(For GT Designer2)



2.4 Starting the Software

Point

When GT SoftGOT2 has been installed in the PC CPU module

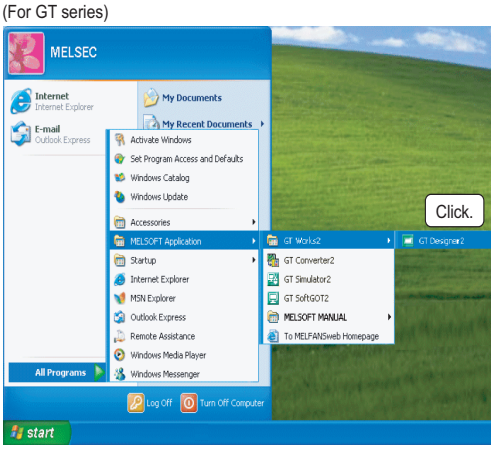
When GT SoftGOT2 installed in the PC CPU module is used, a license must be registered to the PC CPU module using the license key FD.
Refer to the following manual for the license key FD registration method.

☞ GT SoftGOT2 Version1 Operating Manual

2.4.1 Software launching procedure

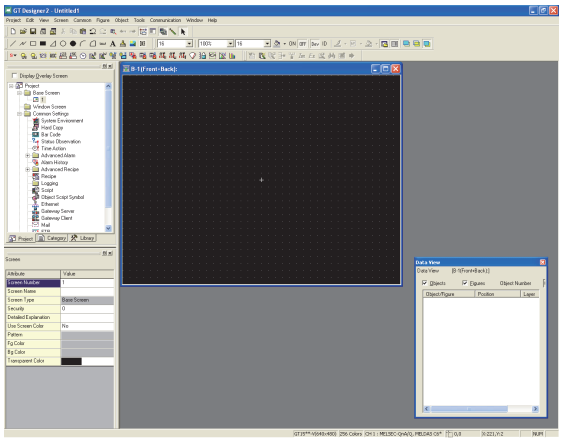
How to start the software

(For GT series)



1 Click the menu of the software package to be started.

- In the case of GT Designer2, GT SoftGOT2, GT Simulator2 or GT Converter2
  Make selection from [Start] → [All Programs] [MELSOFT Application] [GT Works2].



2 The corresponding software package starts.

MEMO

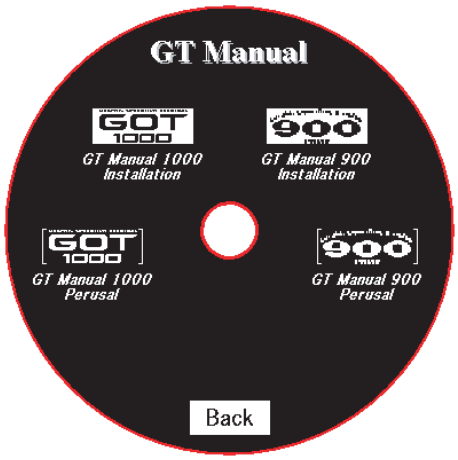
3. HOW TO USE THE ONLINE MANUAL AND HELP

3.1 How to Use the Online Manual

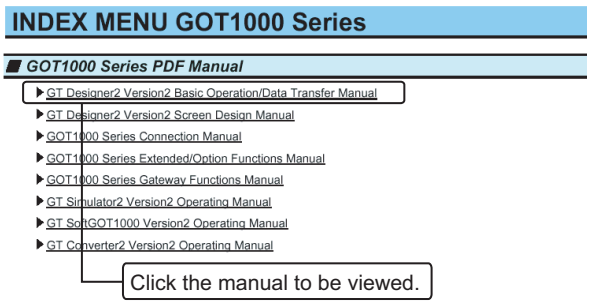
3.1.1 How to use the online manual

The online manual is contained in the CD-ROM of the product in the form of PDF data.
To view the PDF data, Adobe® Reader® must have been installed in the PC.
When Adobe® Reader® has not been installed in the PC, refer to the following and install Adobe® Reader®.

The online manual can be viewed in the following procedure.



1 Click GT Manual 1000 Perusal in the GT Manual Menu.



2 As the INDEX MENU screen is displayed, click the manual to be viewed.

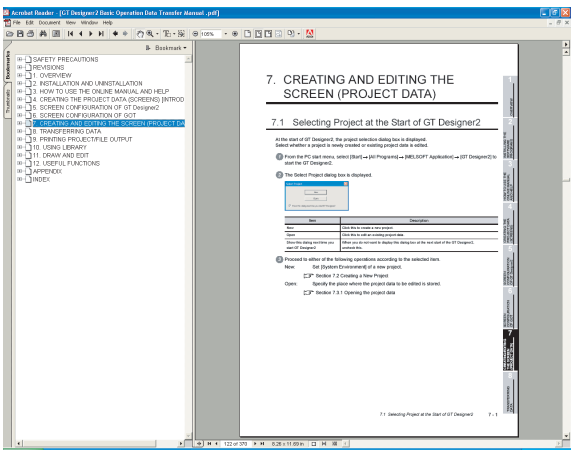


Click here when viewing from CD-ROM.

Click here when viewing the manual installed.

(To next page)

(From previous page)

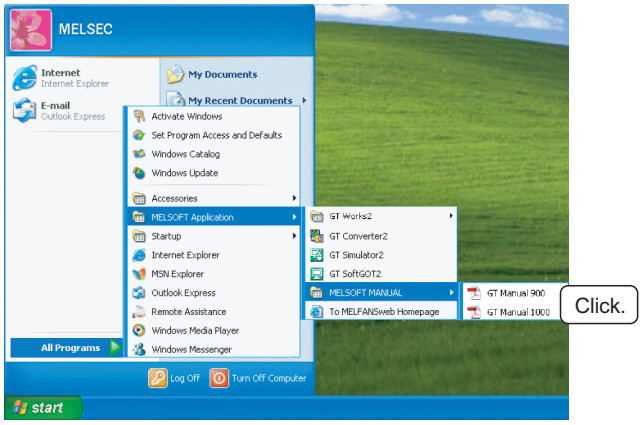


3 The selected manual is displayed.

Remark

The online manual can be viewed from the Start menu or GT Designer2 Help after installation of GT Manual.
Refer to the next page for how to view it from Help.

(GT series)



3.2 How to Use Help

3.2.1 How to use help

Help displays the GT Designer2 relevant PDF manuals and the software version.

Point

Before viewing the PDF manual

To view the PDF manual, GT Manual and Adobe® Reader® must be installed.

1 Operation method

1 Click the corresponding menu within [Help].

Item	Description	GOT1000 series	GOT900 series
[Operating Manual]	Displays the GT Designer2 Version☐ Operating Manual.	-	○
[Reference Manual]	Displays the GT Designer2 Version☐ Reference Manual.	-	○
[Basic Operation/Data Transfer Manual]	Displays the GT Designer2 Version☐ Basic Operation/ Data Transfer Manual.	○	-
[Screen Design Manual]	Displays the first/second volume of the GT Designer2 Version☐ Screen Design Manual.	○	-
[Index]	Displays the PDF manual list.	○	○
[About GTD2...]	The GT Designer2 version can be confirmed.	○	○
[Connect to MEL FANweb...]	Connects to the Mitsubishi Electric FA Equipment Technology Information Service MELFANSweb home page.	○	○

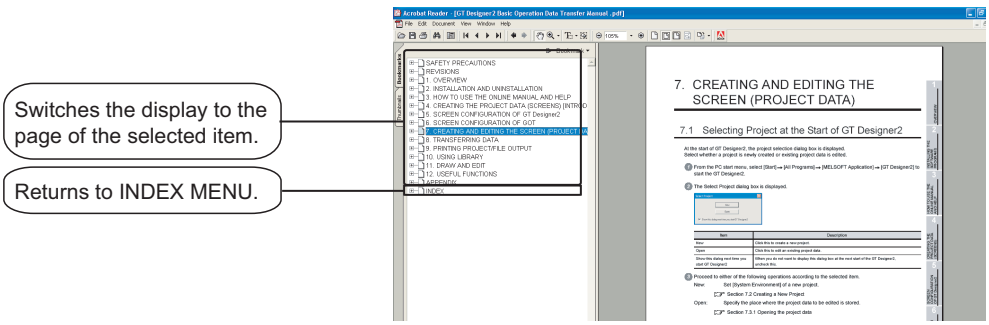
2 PDF manual viewing procedure

When the Basic Operation/Data Transfer Manual/Screen Design Manual is selected

1 The selected manual is displayed.

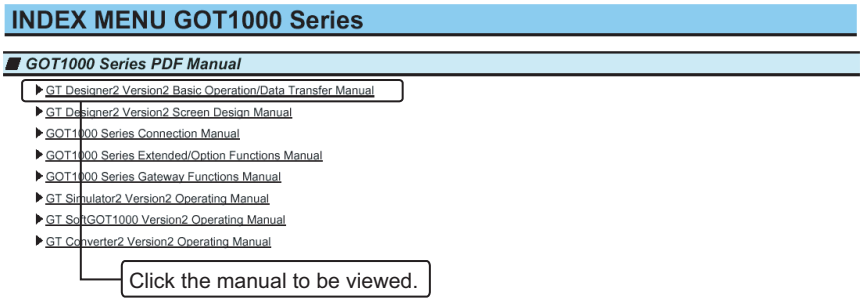
(For details of the Adobe® Reader® operation method, refer to Help of Adobe® Reader®.)

Clicking INDEX MENU displays the manual list (This section 3 1).



3 PDF manual viewing procedure (When [Index] is selected)

1 After performing operation in 1, the following screen appears. Click the manual to be viewed.



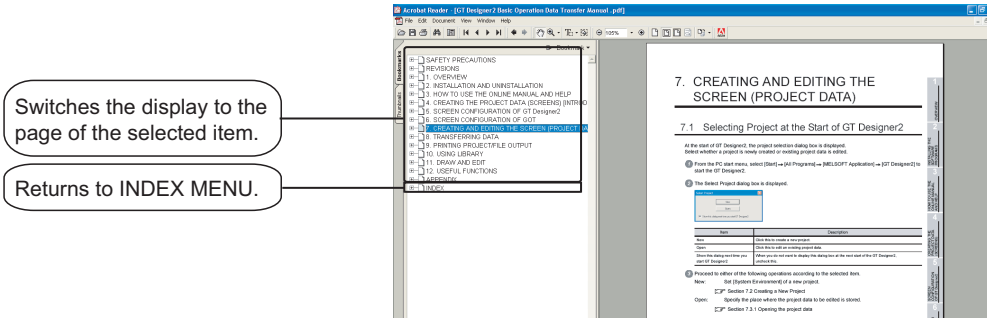


Click here when viewing from CD-ROM.

Click here when viewing the manual installed.

2 The selected manual is displayed.

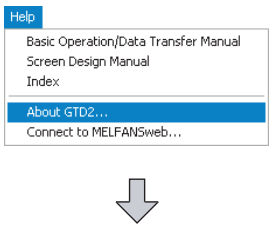
(For details of the Adobe® Reader® operation method, refer to Help of Adobe® Reader®.)



3.3 How to View the Product Information

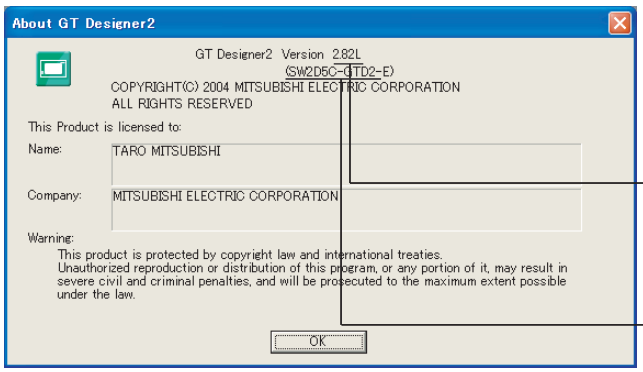
3.3.1 How to view the product information

The product information can be viewed in the following procedure.



1 Choose the [Help] - [About GTD2] menu.

2 The screen (About GTD2) shown on the left appears.



Version
2.82L
Minor version of GT Designer2
Major version of GT Designer2

Product model name
SW□D5C-GTD2-E
Major version of GT Designer2

MEMO

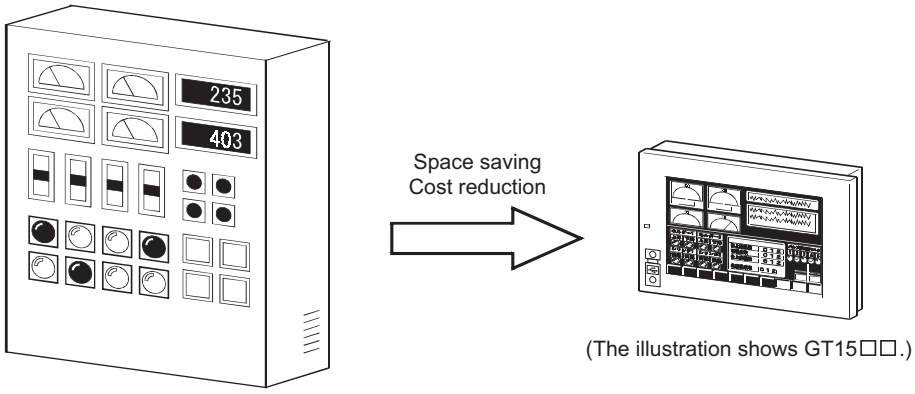
4. CREATING THE PROJECT DATA (SCREENS) [INTRODUCTION]

4.1 About the GOT

4.1.1 About the GOT

1 What is the GOT?

The GOT (Graphic Operation Terminal) can be used as an electronic operation panel on which functions such as switch operation, lamp display, data display, message display can be operated on the monitor screen, which had been conventionally implemented with a control box.



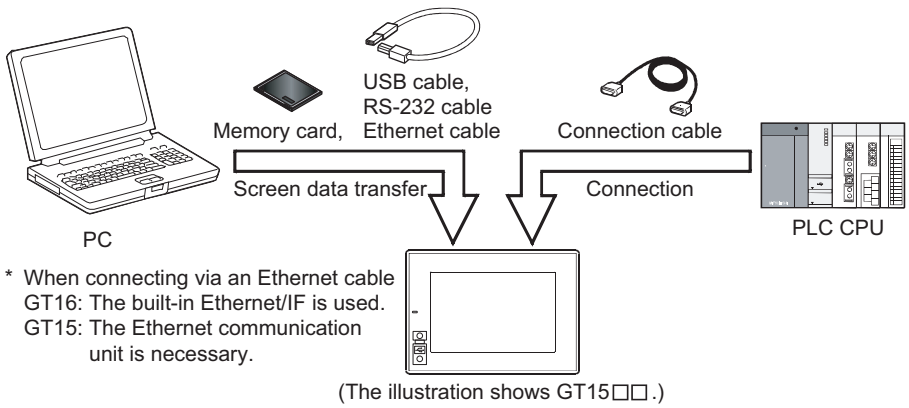
(The illustration shows GT15□□.)

2 About project data to be displayed on GOT

The screen (project data) displayed on the GOT is created on the PC using the dedicated software (GT Designer2).

On GT Designer2, paste display frame figures called objects, such as switch figures, lamp figures and numerical display, to create a screen, and set operation functions to the pasted objects with the device memory (bit, word) of the PLC CPU to execute the functions of the GOT.

Transfer the created project data to the GOT using the USB cable, RS-232 cable, Ethernet or memory card.

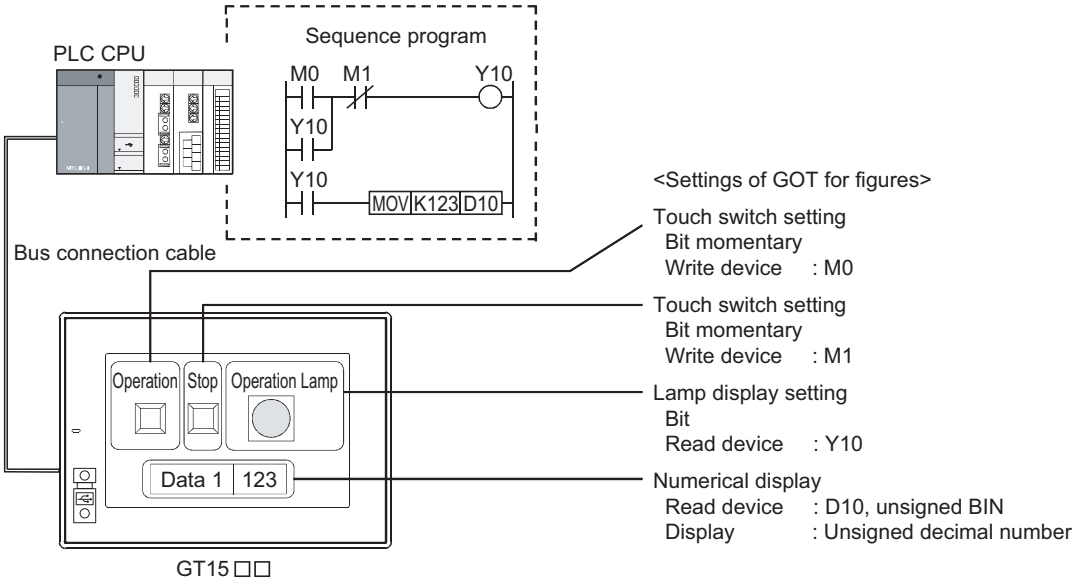


(The illustration shows GT15□□.)

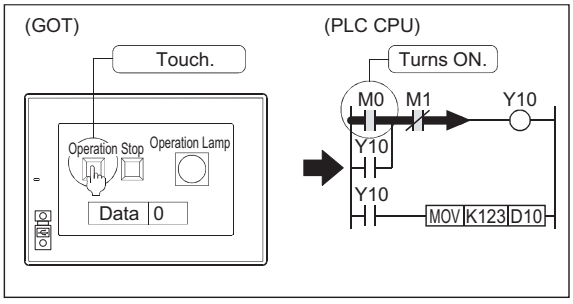
4.1.2 About GOT Operation

This section explains briefly what operation the GOT will perform when it is connected with the PLC CPU.

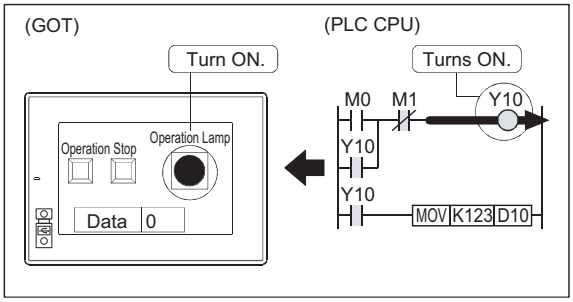
1 System example



2 Operation explanation



1 While the touch switch "Operation" of the GOT is being touched, the bit device "M0" is ON.

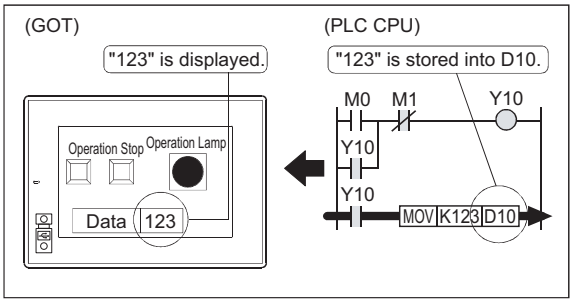


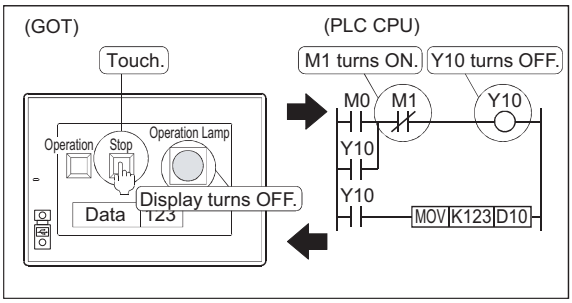
2 When the bit device "M0" turns ON, the bit device "Y10" turns ON.

At this time, the ON figure is displayed on the lamp display "Operation lamp" on the GOT to which the bit device "Y10" has been assigned.

(To next page)

(From previous page)





3 As the bit device "Y10" is ON, "123" is stored into the word device "D10".

At this time, "123" is displayed in the numerical display on the GOT to which the word device "D10" has been assigned.

5 While the touch switch "Stop" on the GOT is being touched, the bit device "M1", which has been assigned to that touch switch, is ON.

As the bit device "M1" is the condition in which the bit device "Y10" turns the OFF, the lamp display "Operation lamp" on the GOT turns OFF.

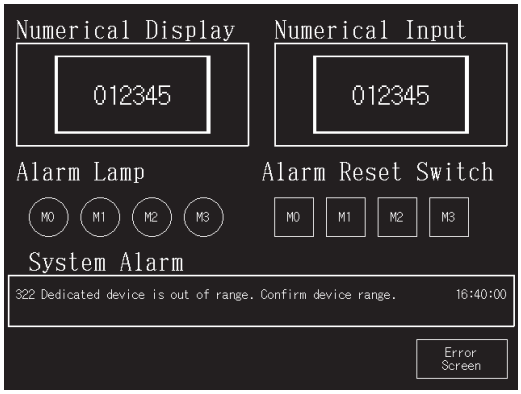
4.2 Creating the Project Data

This and latter chapters explain how to create screens on GT Designer2 and operate them on the GOT. For those who will use the GOT for the first time or who want to know the specific operation examples of GT Designer2, it is recommended to refer to this and latter chapters and use the GOT and GT Designer2.

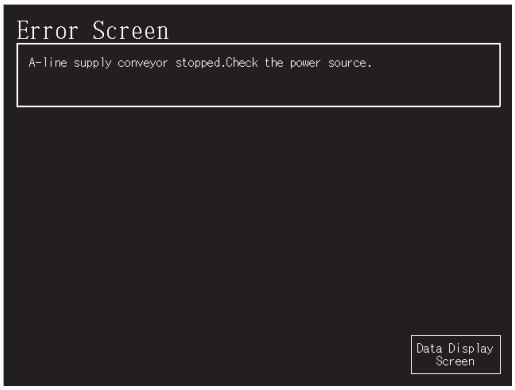
4.2.1 Creating Screens

After making preparations for screen creation, create screens actually.
In this manual, the following two screens will be created.

Base Screen 1

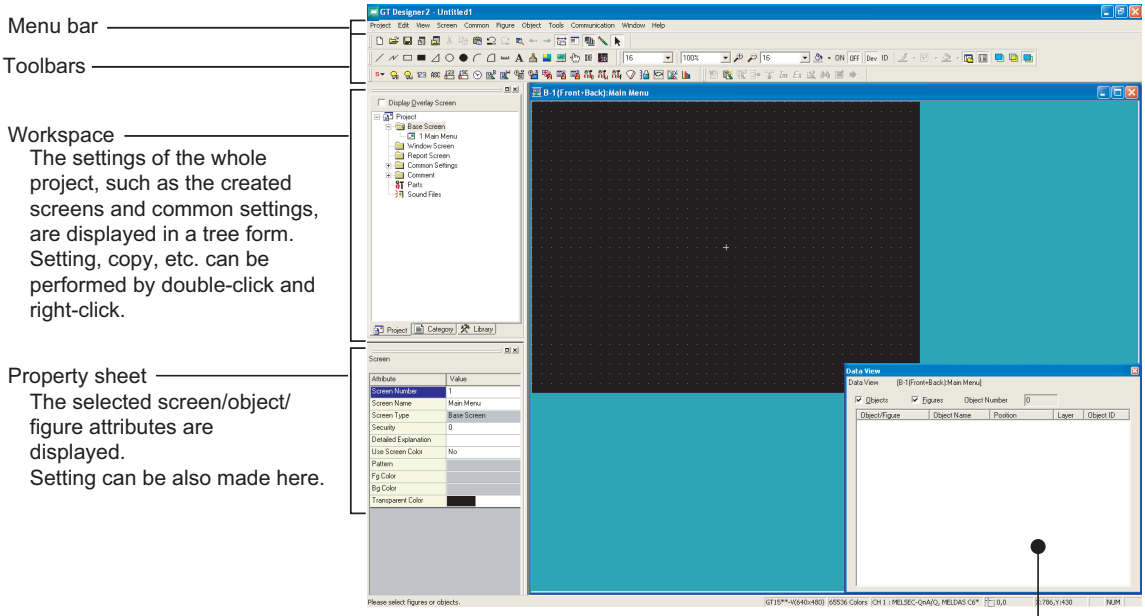


Base Screen 2



1 Screen configuration of GT Designer2

Before creating screens, the basic screen configuration of GT Designer2 will be explained.



4.2.2 Settings before Screen Creation

Before creating the screen, specify the GOT to be used, the PLC type to be connected, and the screen name in the wizard.

1 Create a Project

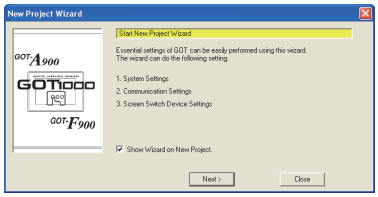
First, create a new project.

(Ex.)

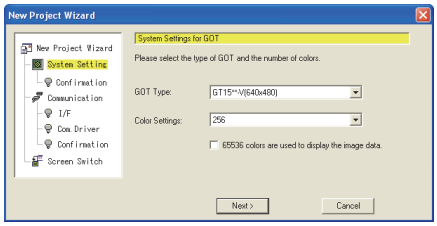
Select Project



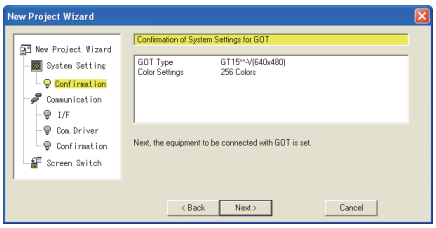
New Project Wizard



New Project Wizard



New Project Wizard



New Project Wizard



(To next page)

1 The screen on the left is displayed when GT Designer2 is started.

Click the [New] button to create a new screen.

2 The screen on the left (Start New Project Wizard) is displayed, so click the [Next>] button.

*If the "Show Wizard on New Project" box is unchecked, the wizard will not appear the next time a new project is created.

3 The screen on the left (System Settings for GOT) is displayed, so select the GOT type to be used and color setting. After the selection is made, click the [Next>] button.

Settings

GOT Type: GT15**-V (640 x 480)

Color Settings: 256 color

4 The screen on the left (Confirmation of System Settings for GOT) is displayed, so click the [Next>] button after confirming the settings.

5 The screen on the left (Communication Settings (1st)) is displayed, so select the equipment to be connected to GOT.

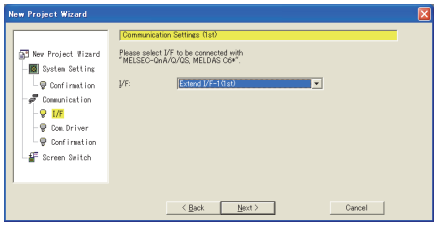
After the selection is made, click the [Next>] button.

Settings

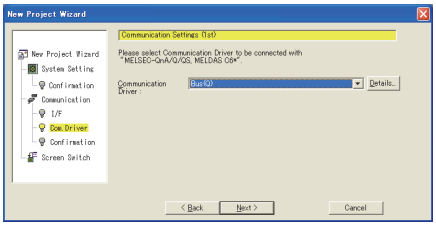
Controller: MELSEC-QnA/Q/QS, MELDAS C6*

(From previous page)

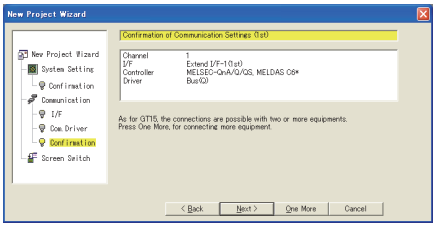
New Project Wizard



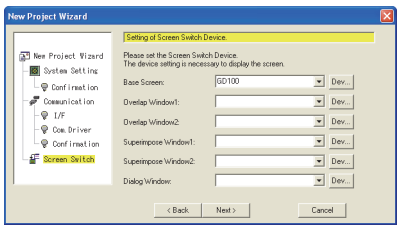
New Project Wizard



New Project Wizard



New Project Wizard



(To next page)

6 The screen on the left (Communication Settings (1st)) is displayed, so select the I/F to be connected with MELSEC-QnA/Q/QS, MELDAS C6*.
After the selection is made, click the Next> button.

Settings
I/F: Extend I/F-1(1st)

7 The screen on the left (Communication Settings (1st)) is displayed, so select the communication driver to be conected with MELSEC-Qn-A/Q, MELDAS C6*. After the selection is made, click the Details... button and select the Stage No. and Slot No.
After the selection is made, click the Next> button.

Settings
Communication Driver: Bus (Q)
Details
Stage No.: 1
Slot No.: 0
Monitor Speed: Normal

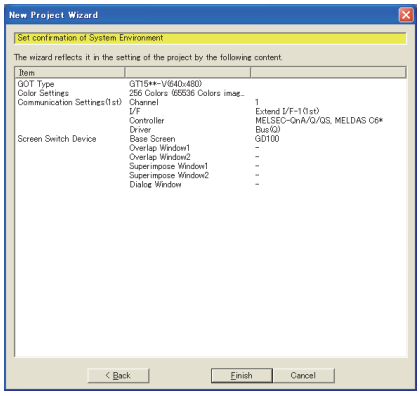
8 The screen on the left (Confirmation of Communication Settings (1st)) is displayed, click the Next> button after confirming the settings.

9 The screen on the left (Setting of Screen Switch Device) is displayed, set the Switch Device for the Base Screen.
After the specification is made, click the Next> button.

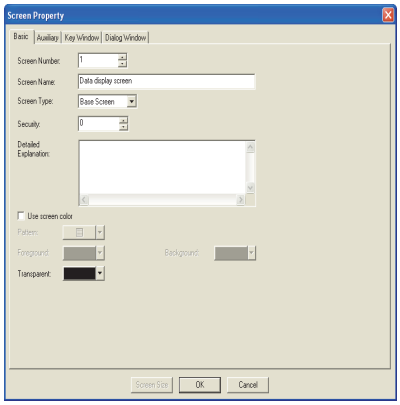
Settings
Base Screen
Screen Switch Device: GD100

(From previous page)

New Project Wizard



Screen Property



10 The screen on the left (Set Confirmation of System Environment) is displayed, so click the Finish button after confirming the settings.

11 The Screen Property dialog box is displayed, so enter the screen name.

12 When the OK button is clicked, Base Screen 1 is created.

Settings

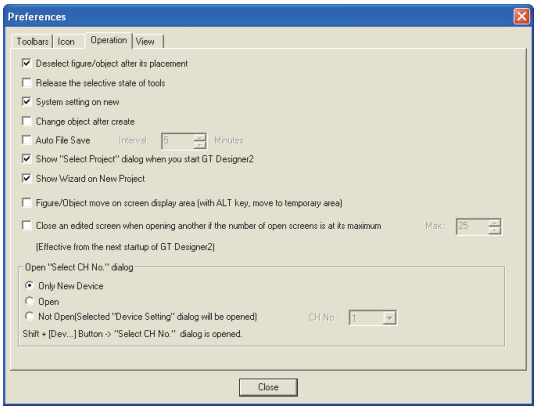
Screen Name: Data display screen

Point

(1) Creating a new project without starting the wizard
Perform the following settings.

1 Select the [Project] → [Preferences...] operation tab.

2 Uncheck "Show Wizard on New Project" box on the Operation tab in the Preferences dialog box.



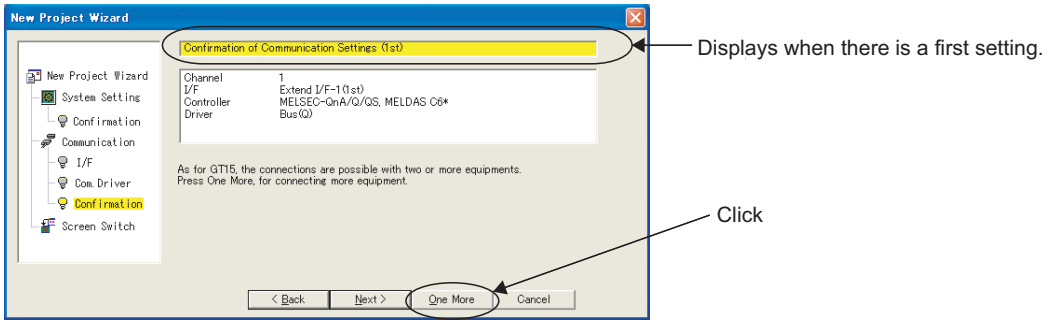
3 Click the Close button.

To restart the wizard, display the Operation tab in the Preferences dialog box again and check ”Show Wizard on New Project" box.

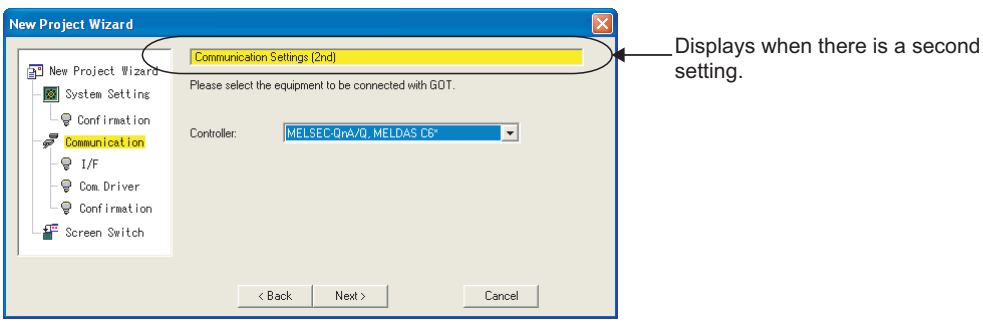
GT16 GT15

(2) Making Communication Settings (2nd and later)
When multi-channels are in use, the 2nd and later communication settings can be performed from the "Confirmation of Communication Settings" screen.

Click the One More button on the screen to continue to display Communication Settings (2nd) (Controller, I/F, and Communication Driver) screen.

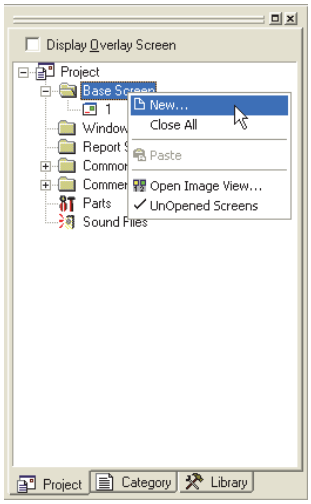


Click the One More button.

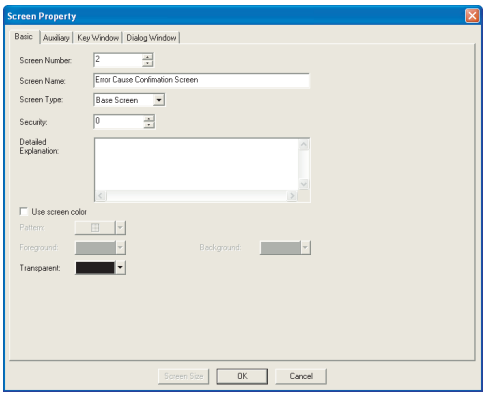


2 Creating the second screen

One screen has already been created in the previous section (Section 4.2.2 Settings before Screen Creation).
Since two screens will be created in this manual, create the second screen first.



1 Right-click on the Base Screen on the tree in the project workspace and select [New].



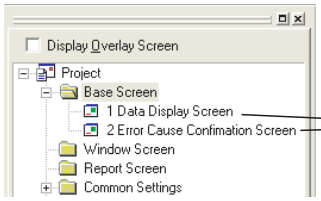
2 As the Screen Property dialog box is displayed, input the Screen Name.

3 Click the OK button to create the second screen.

Set data
Screen Name: Error Screen

3 How to switch between the created screens

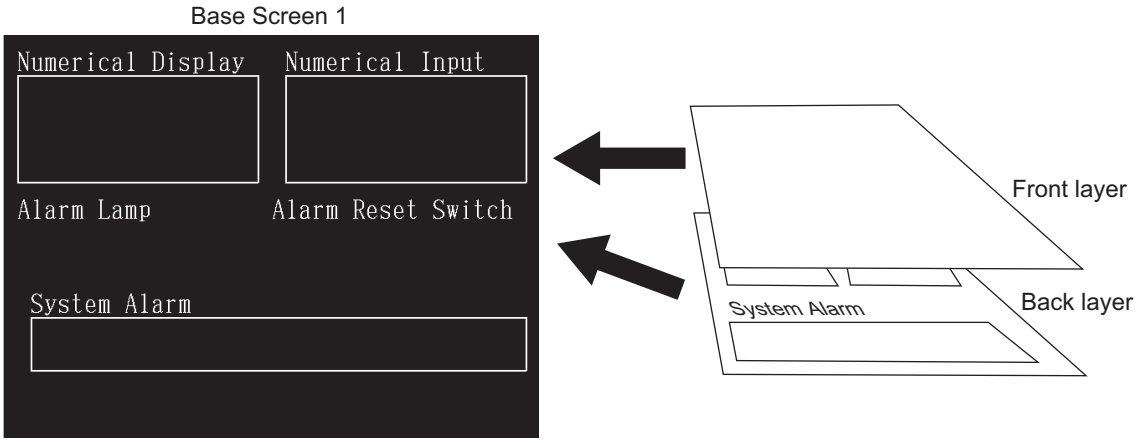
One created screen can be switched to the other by double-clicking either of the base screens on the tree in the project workspace.

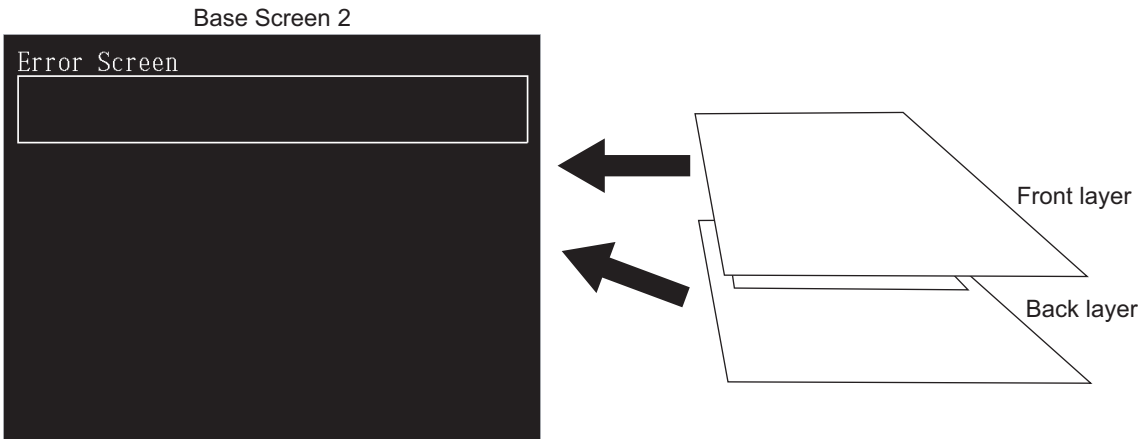


Double-click the screen to be displayed.

4.2.3 Figure drawing and text input

In the GOT-1000 series, a single screen can consist of two layers, i.e., front layer and back layer.
Therefore, objects can be placed on the front or back layer.
First draw frame lines and texts on the back layer as shown below.

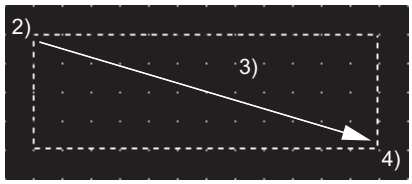




1 Frame line drawing method



1 Click ▭ on the Figure toolbar.



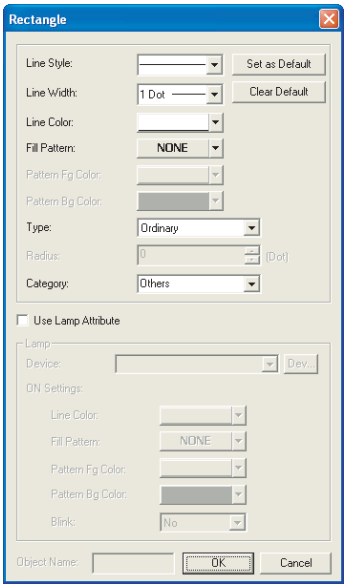
2 As the mouse cursor turns into +, press the left mouse button at the starting point for drawing a rectangular.

3 Drag and move the cursor to the end point.

4 Release the left mouse button to draw a rectangular. (After arrangement, right-click the mouse to cancel the arrangement mode.)

(To next page)

(From previous page)



5 As double-clicking the created rectangle displays the Setting dialog box, the color and thickness of the line can be changed.

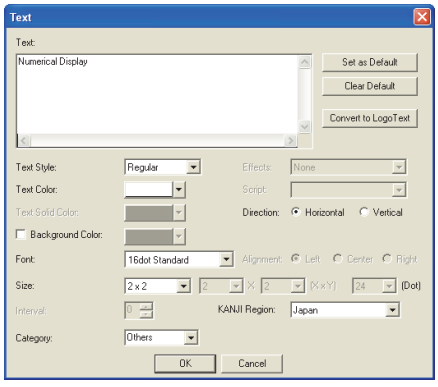
6 Click the OK button to close the dialog box.

7 Repeat steps 1 to 6 to draw frame lines.
After selecting the drawn figure, holding down the Ctrl key and dragging the figure allows it to be copied easily.

2 Text input method



1 Click A on the Figure toolbar.



2 As the mouse cursor turns into +, click the mouse in the position where a text will be entered.

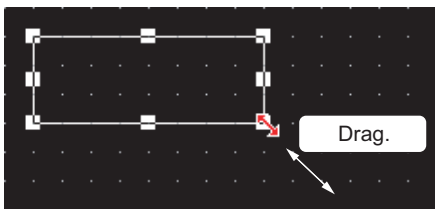
3 Clicking the mouse displays the Text dialog box.
Input text.
The font can also be set. The default settings are as follows: 16-dot HQ Mincho.
The input is immediately reflected on the screen.

4 Click the OK button to close the dialog box.

Hint!

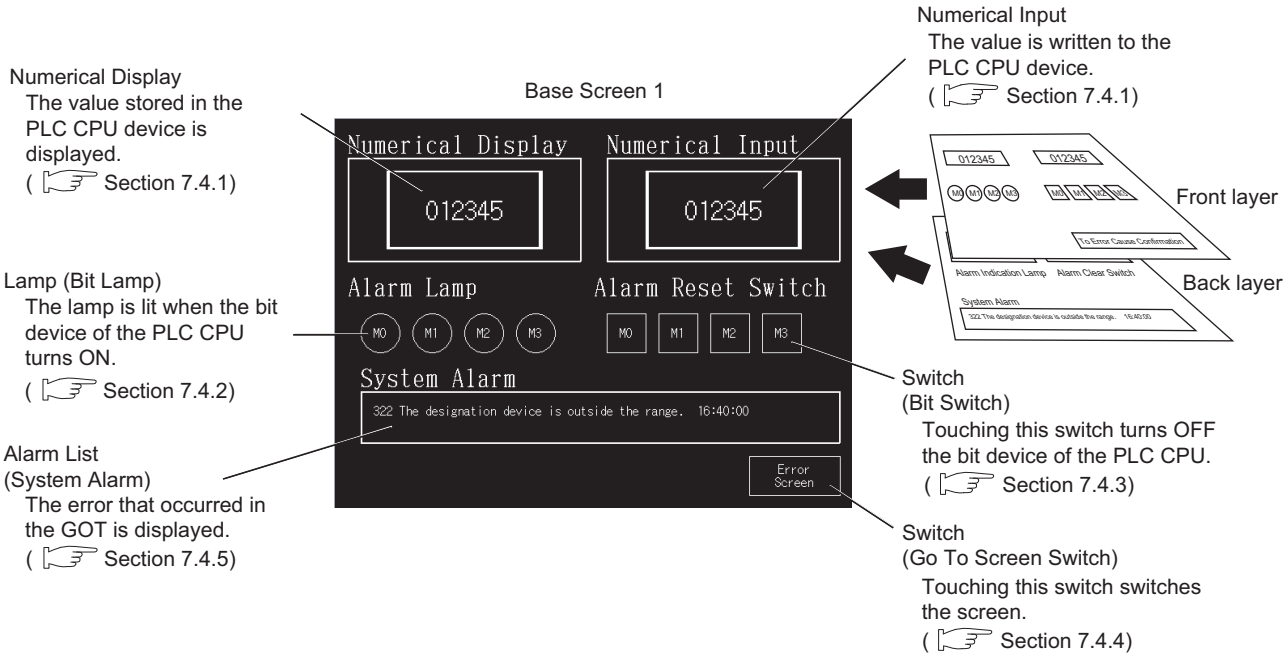
Figure and text size changing method

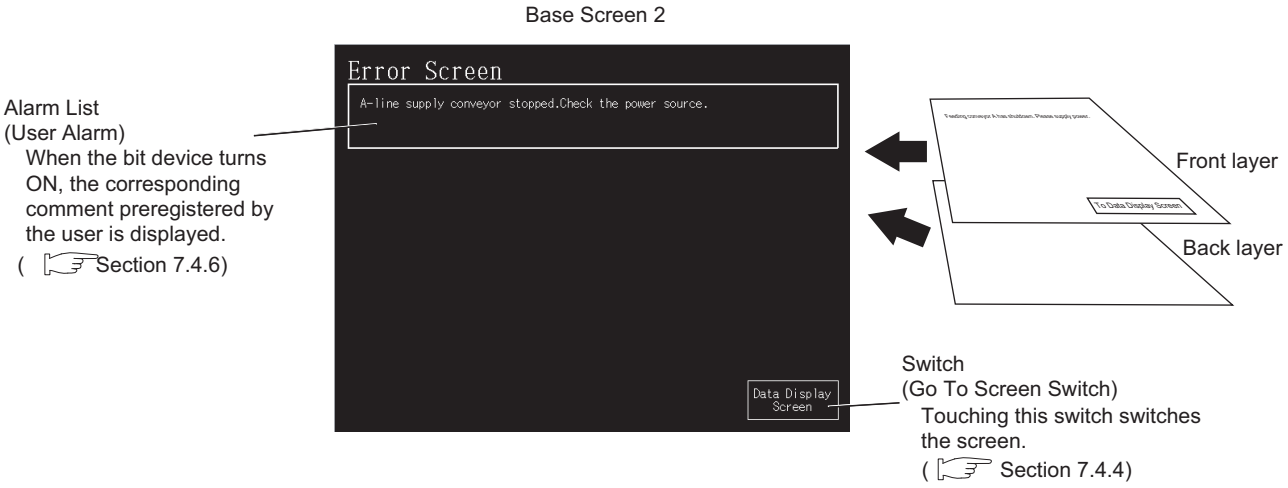
After selecting the figure or text to be resized, drag the handle (■) to change the size.
Example: When resizing a rectangular



4.2.4 Setting the Object Function

After drawing figures and texts, set each object function.
This section explains the object functions to be set.



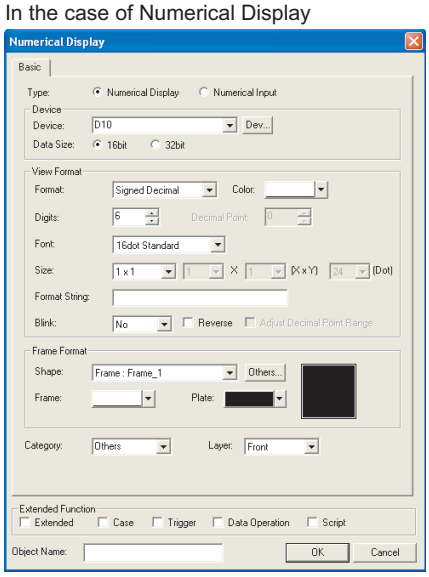


1 Numerical Display/Numerical Input setting method

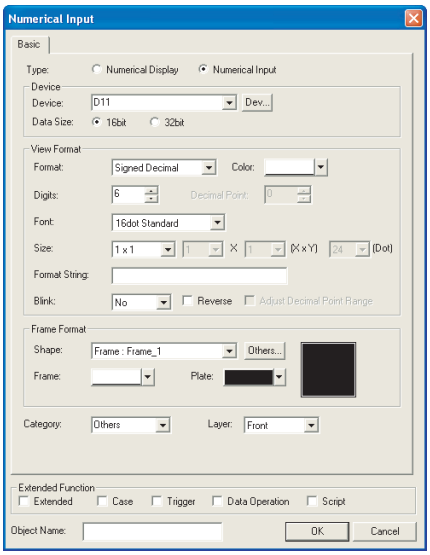




In the case of Numerical Display



In the case of Numerical Input



(To next page)

1 Click 123 (Numerical Display) or 123 (Numerical Input) on the Object toolbar.

2 As the mouse cursor turns into +, click the mouse in the desired position to arrange the display or input. (After arrangement, right-click the mouse to cancel the arrangement mode.)

3 As double-clicking the arranged Numerical Display or Numerical Input displays the dialog box, make settings. (See below.)

Settings (for Numerical Display)

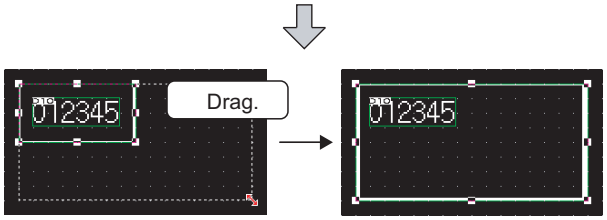
Type : Numerical Display
Device : D10
Shape : Frame: Frame_1
Font : 16 dot Standard
Layer : Front

Settings (for Numerical Input)

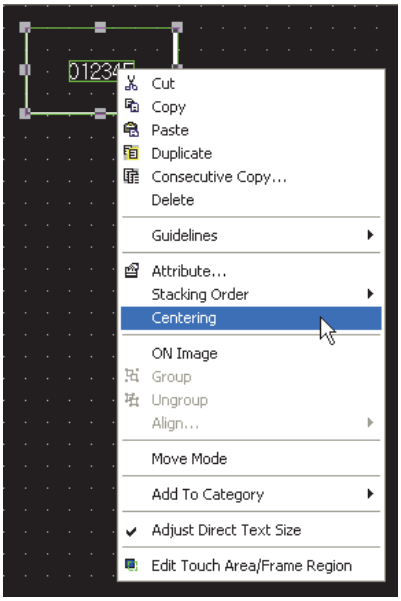
Type : Numerical Input
Device : D11
Shape : Frame: Frame_1
Font : 16 dot Standard
Layer : Front

4 After the setting is complete, click the OK button.

(From previous page)



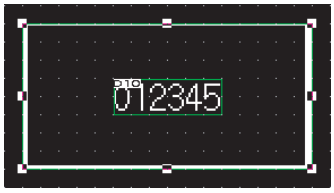
5 Change the size.



6 When the object is resized, the figure frame and object may be displaced.

If the figure frame and object are displaced, select the object, then right-click the mouse, and select [Centering].
The displacement is automatically corrected.

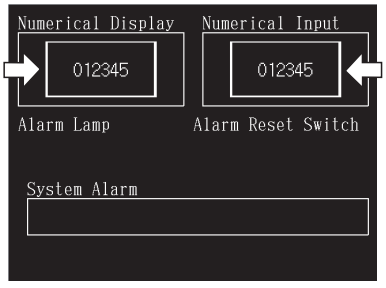
When [Edit Touch Area/Frame Region] is selected, the figure frame and object can be moved individually by the user.



7 This completes the Numerical Display/Numerical Input setting.

Objects set in this section 1

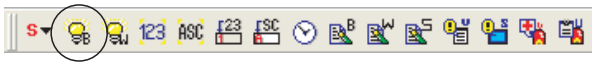
Base Screen 1

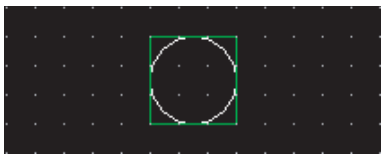


Base Screen 2

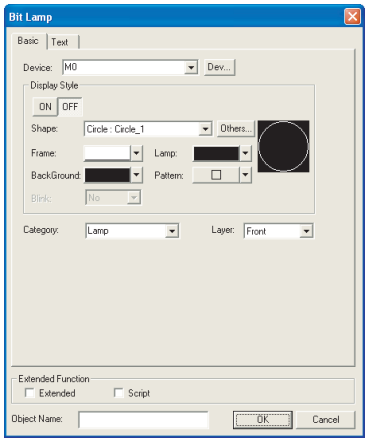


2 Lamp setting method

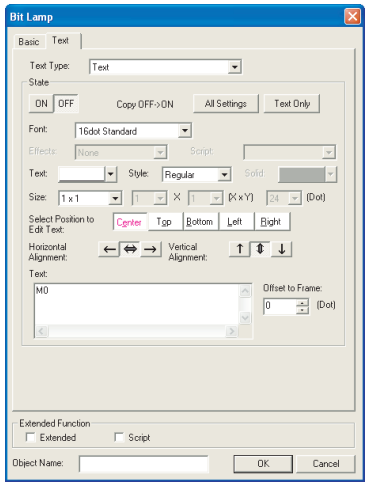




<Basic> tab



<Text> tab





(To next page)

1 Click  on the Object toolbar.

2 When the mouse cursor turns to +, click the mouse in the desired position to place the Lamp.

(After placing it, right-click the mouse to release the placement mode.)

3 Double-clicking the placed Lamp displays the dialog box. Make settings. (See below.)

Settings Basic tab

Device : M0

Layer : Front

Settings Text tab

Text : M0

Font : 16 dot Standard

4 After setting the character tab, click the All Settings button at [Copy OFF → ON].

(The Text tab settings made for OFF time are reflected when the Lamp is turned ON.)

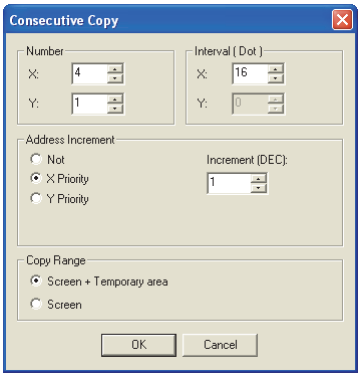
Click the ON button to check the attributes of ON time.

A text can be registered in each display position (Center, Top, Bottom, Left, Right). The text-registered display position button is displayed in purple characters.

5 When the settings are completed, click the OK button.

6 This completes the setting of the first Lamp.

(From previous page)



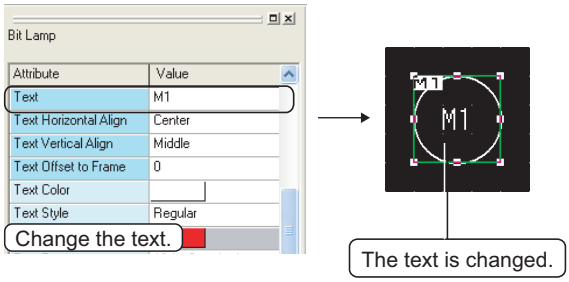
7 When creating the second Lamp or later, select the set Lamp and then select the [Edit] → [Consecutive Copy...]/[Context menu] → [Consecutive Copy...] menu to display the Consecutive Copy dialog box.

Set data
Number X: 4
Interval X: 16



8 Click the OK button to copy the Lamp.

Property sheet

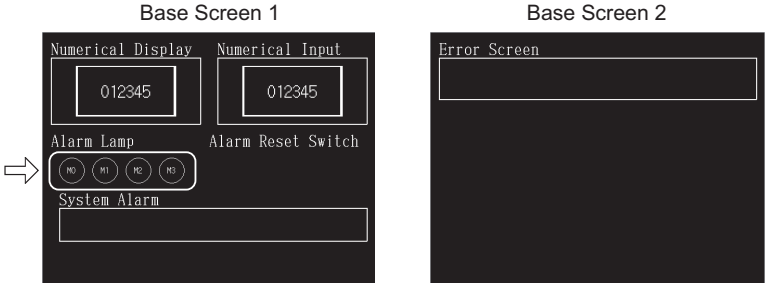


9 Change the text of each Lamp in the Property sheet. In this case, change the texts of ON and OFF times to the same one.

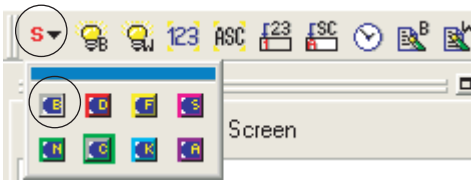


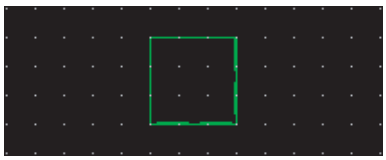
10 This completes the Lamp setting.

Objects set in this section 2



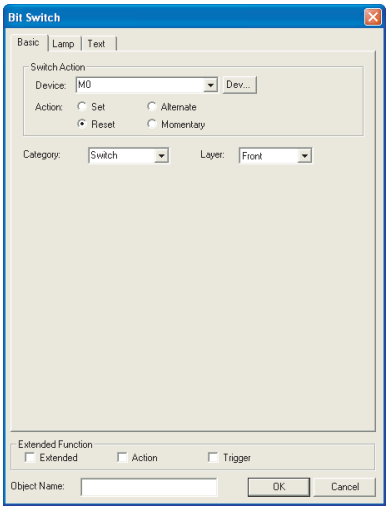
3 Switch (Bit Switch) setting method



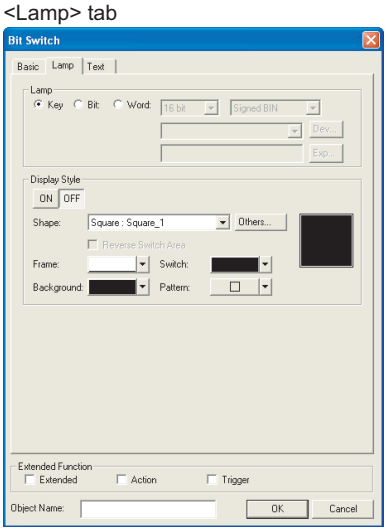




<Basic> tab



<Lamp> tab





(To next page)

1 Click  on the Object toolbar, and select  (Bit Switch) in the displayed submenu.

2 When the mouse cursor turns to +, click the mouse in the desired position to place the Switch.

(After placing it, right-click the mouse to release the placement mode.)

3 Double-clicking the placed Switch displays the dialog box. Make settings. (See below.)

Settings Basic tab

Device : M0
Action : Reset
Layer : Front

Settings Lamp tab

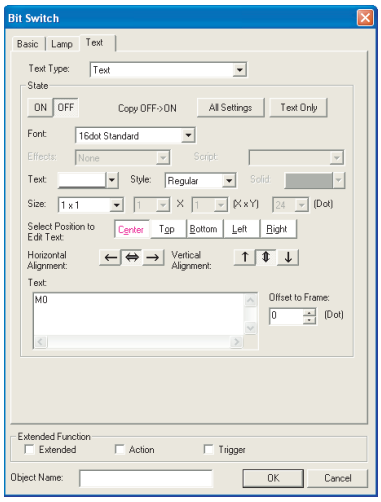
Shape : Square: Square_1

Settings Text tab

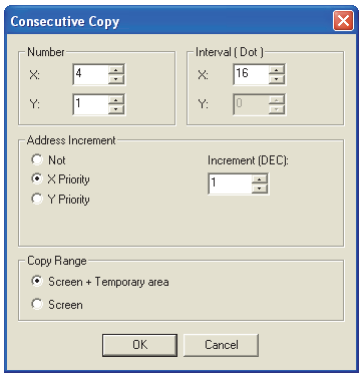
Text : M0
Font : 16dot Standard

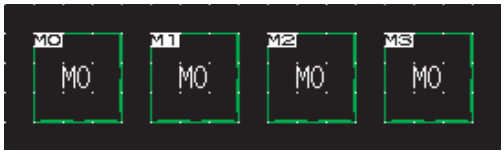
(From previous page)

<Text> tab









(To next page)

4 After setting the Text tab, click the All Settings button at [Copy OFF → ON].
(The Text tab settings made for OFF time are reflected when the Switch is turned ON.)
Click the ON button to check the attributes of ON time.
A text can be registered in each display position (Center, Top, Bottom, Left, Right). The text-registered display position button is displayed in purple characters.

5 When the settings are completed, click the OK button.

6 This completes the setting of the first Switch.

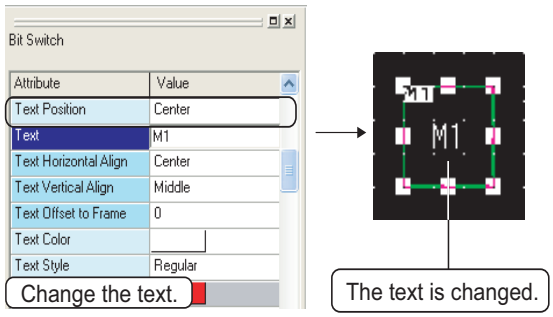
7 When creating the second Switch or later, select the Switch and then select the [Edit] → [Consecutive Copy...]/[Context menu] → [Consecutive Copy...] menu to display the Consecutive Copy dialog box.

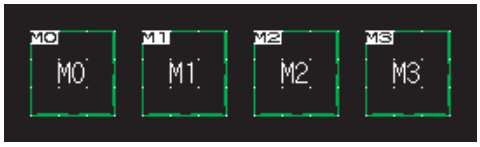
Set data
Number X: 4
Interval X: 16

8 Click the OK button to copy the Switch.

(From previous page)

Property sheet

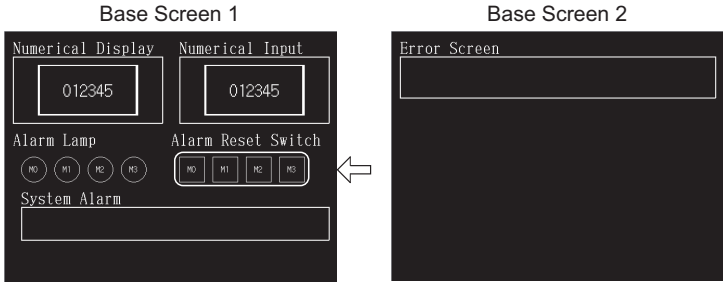




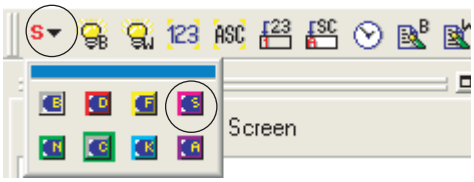
9 Change the text of each touch switch in the Property sheet.
In this case, change the texts of ON and OFF times to the same one.

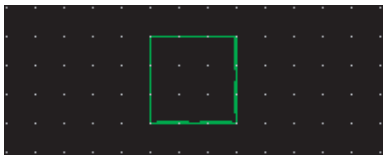
10 This completes the Switch setting.

Objects set in this section 3

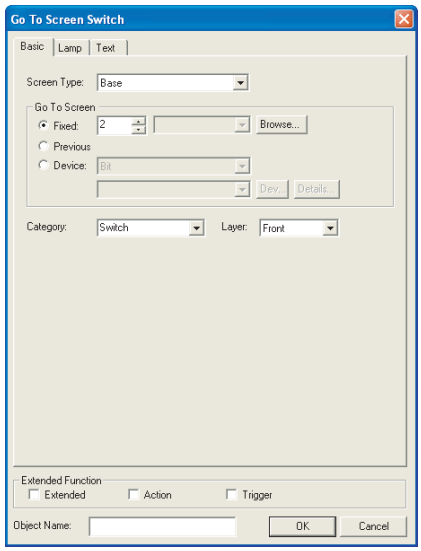


4 Switch (Go To Screen Switch) setting method

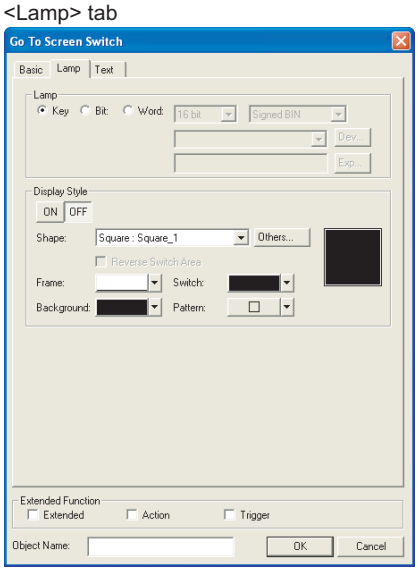




<Basic> tab



<Lamp> tab



(To next page)

1 Click on the Object toolbar, and select (Go To Screen Switch) in the displayed submenu.

2 When the mouse cursor turns to +, click the mouse in the desired position to place the Switch.
(After placing it, right-click the mouse to release the placement mode.)

3 Double-clicking the placed Switch displays the dialog box. Make settings. (See below.)

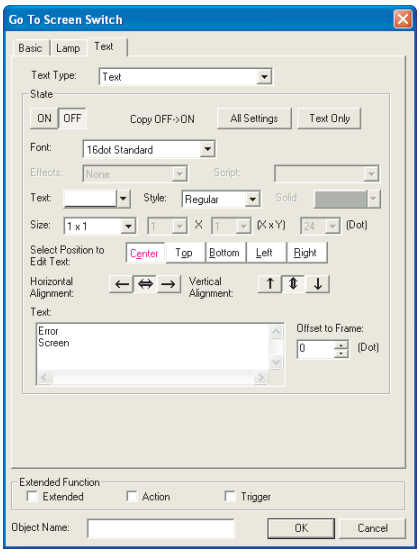
Settings Basic tab
Go To Screen : Fixed (2)
Layer : Front

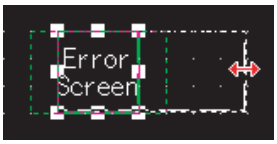
Settings Lamp tab
Shape : Square: Square_1

Settings Text tab
Text : Error Screen
Font : 16dot Standard

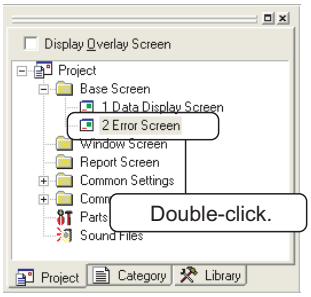
(From previous page)

<Text> tab









(To next page)

4 After setting the text tab, click the Copy OFF -> ON , All Settings button.
(The Text tab settings for OFF time are reflected to the settings for ON time.)
Click the ON button to check the attributes of ON time.
A text can be registered in each display position (Center, Top, Bottom, Left, Right). The text-registered display position button is displayed in purple characters.

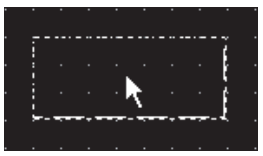
5 When the settings are completed, click the OK button.

6 Adjust the size.

7 This completes the setting of the Switch on Base Screen 1.
After setting, press the Ctrl key + C key with the Switch selected.
(Shortcut: Copy)

8 Double-click Base Screen 2 (Error screen) on the tree in the Project workspace to display Base Screen 2.

(From previous page)

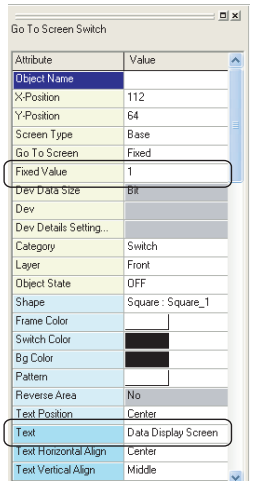


Press the Ctrl key + V key to prepare for pasting.



Click the mouse to paste the switch.

Property sheet





9 Press the Ctrl key + V key on Base Screen 2 to paste the copied Switch.

(Shortcut: Paste)

Click the mouse to paste the Switch.

10 Select the pasted switch, and change the set data in the Property sheet.

Set data

Fixed value : 2 → 1

Text : Error ↵ Screen → Data Display ↵ screen

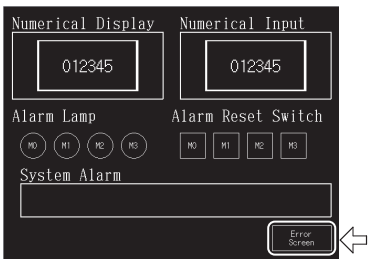
Caution

If a character string of multiple lines is input in the property sheet text, only the text on the first line is displayed.

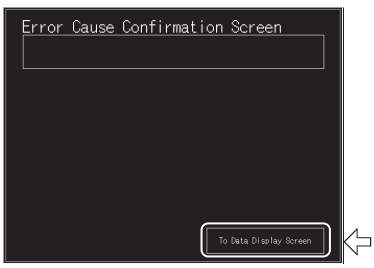
11 This completes the Go To Screen Switch setting.

Objects set in this section 4

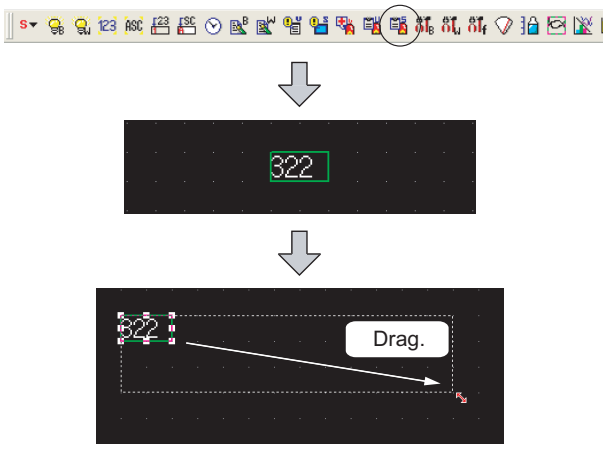
Base Screen 1



Base Screen 2



5 Alarm List (System Alarm) setting method



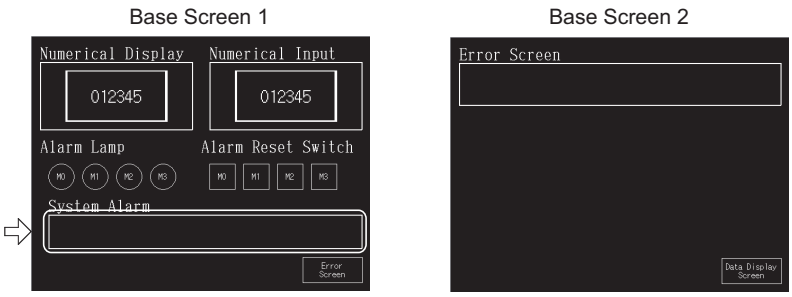
1 Click on the Object toolbar.

2 As the mouse cursor turns into +, click the mouse in the desired position to arrange the Alarm List. (After arrangement, right-click the mouse to cancel the arrangement mode.)

3 Adjust the size.

4 This completes the setting of the Alarm List (System Alarm).

Object set in this section 5



Hint!

GT15 GT Soft GOT1000

The GT15☐☐ includes the advanced alarm function, i.e., the advanced monitor function for alarm status, in addition to the Alarm List display and Alarm History display.
The advanced alarm is classified to "Advanced User Alarm" that watches the user-set device value, and "Advanced System Alarm" that checks for an error issued by the advanced system.

☞ GT Designer2 Version☐ Screen Design Manual

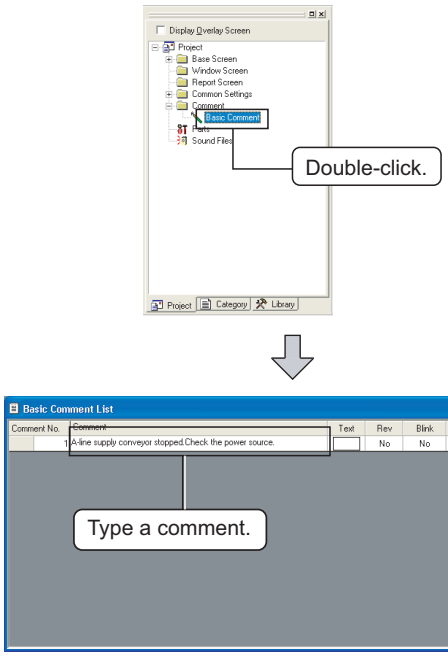
6 Alarm List (User Alarm) setting method

When using the Alarm List (User Alarm), it is necessary to register the comments to be displayed as alarms in advance.

(1) Basic Comment registration method

The following explains how to register the Basic Comments with an example.

Comment No.	Comment
1	A-Line supply conveyor stopped. Check the power source.
2	Emergency stop limit switch operated. Check the product.
3	Product limit switch dose not operate. Check for presence/absence of the product.
4	Hydraulic pressure of finishing machine 1 is low. Supply hydraulic oil.



(To next page)

1 Double-click "Basic Comment" on the tree in the Project workspace.

2 When the dialog box appears, register a comment.

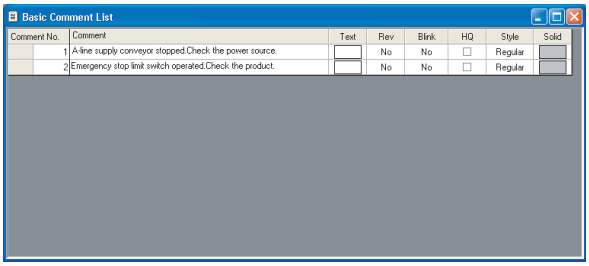
3 After registering the comment, click (New Comment) on the Comment toolbar.

Point

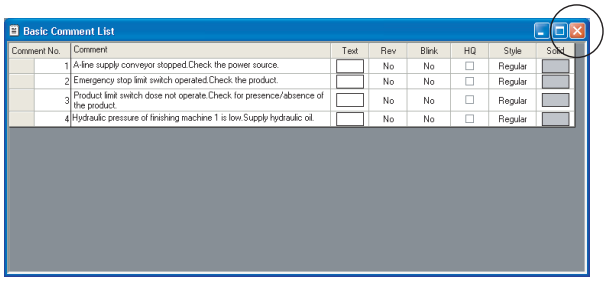
Comment toolbar displaying method

Choose [View] → [Toolbars] → [Comment] to display the toolbar.

(From previous page)



4 Register the second comment.
After that, register the third and fourth comments in the same procedure.



5 When comment creation is completed, click the [×] button.

(2) Alarm List (User Alarm) setting method



6 Click on the Object toolbar.

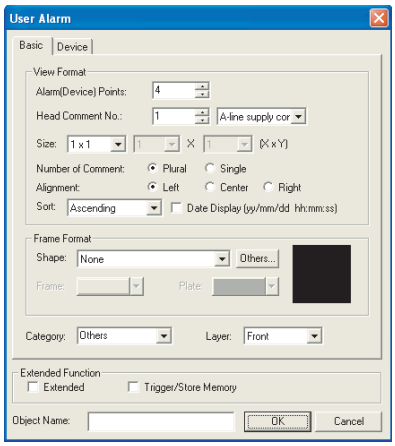


7 As the mouse cursor turns into +, click the mouse in the desired position to arrange the Alarm List.
(After arrangement, right-click the mouse to cancel the arrangement mode.)

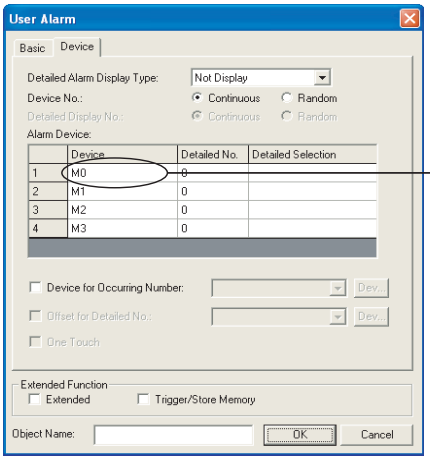
(To next page)

(From previous page)

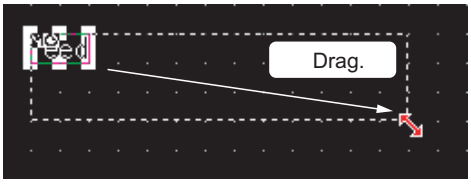
<Basic> tab



<Device> tab



Set devices



8 As double-clicking the arranged Alarm List the dialog box, make settings. (See below.)

Set data Basic tab

Alarm (Device) Points : 4

Layer : Front

Set data Device tab

Device No. : Continuous

Alarm Device : M0

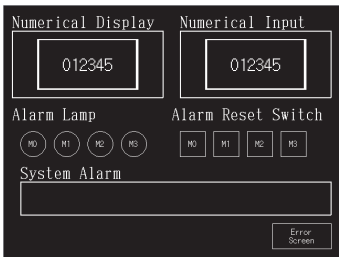
9 After setting is complete, click the OK button.

10 Adjust the size.

11 This completes the setting of the Alarm List (User Alarm).

Object set in this section 6

Base Screen 1

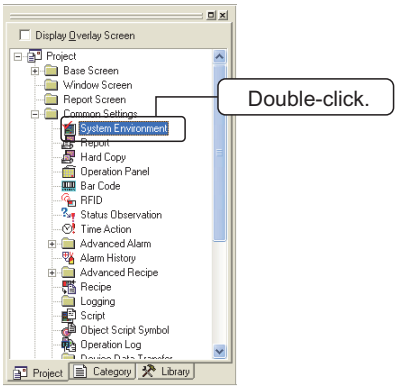


Base Screen 2

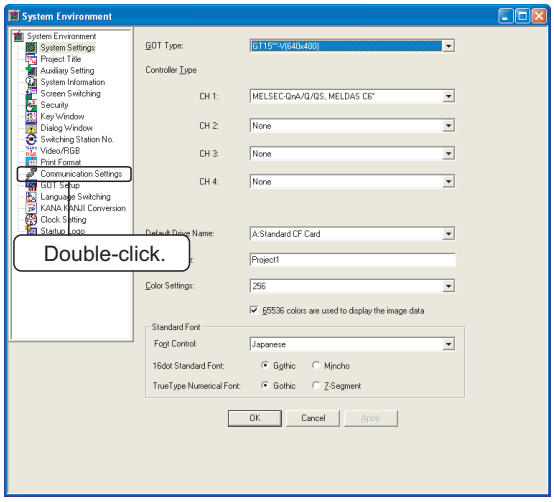


4.2.5 Setting the connection target

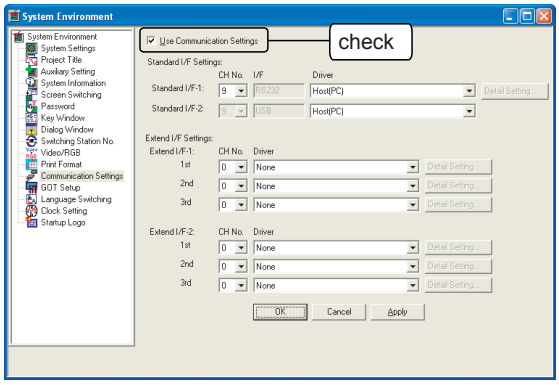
When making bus connection, it is necessary to set the standard I/F (CH No./IF/Driver), extended I/F (CH No./IF/Driver/Stage No./Slot No.) of the GOT.
Make settings as described below.



1 Double-click [Common Settings] → [System Environment] menu in the workspace.



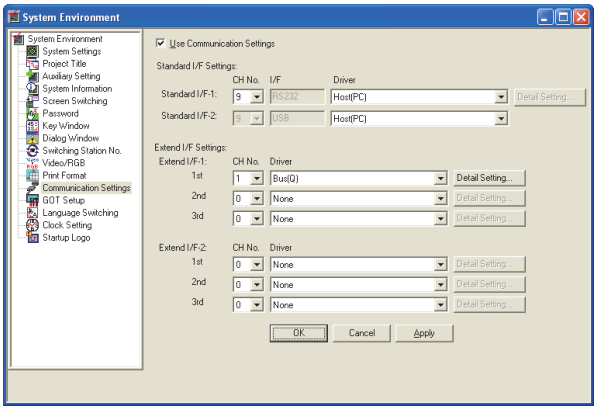
2 When the left screen (System Environment screen) appears, double-click [Communication Settings].



3 When the left screen appears, check [Use Communication Settings].

(To next page)

(From previous page)

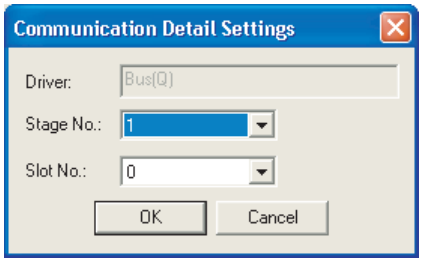


4 Extended I/F Settings:

Set the 1st I/F1-1 as described below.

CH No. : 1

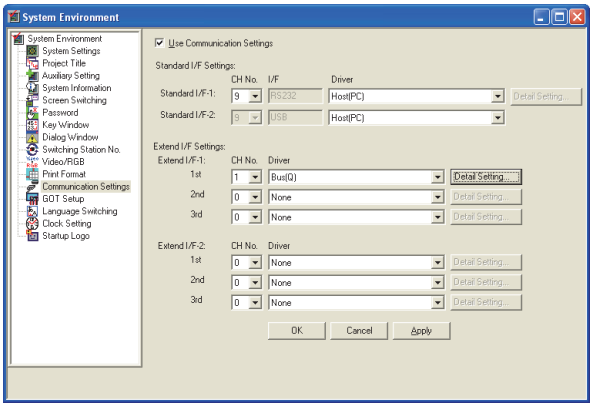
Driver : Bus (Q)



5 Clicking the Detail Setting button displays the left screen. Select the Stage No. and Slot No., and click the OK button.

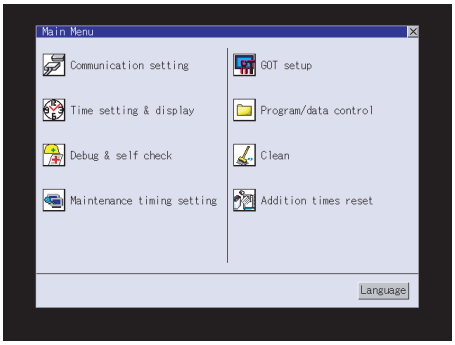
Stage No. : 1

Slot No. : 0



6 Click the OK button.

Remark After the project data are downloaded, the settings made on the previous page can be confirmed on the GOT.



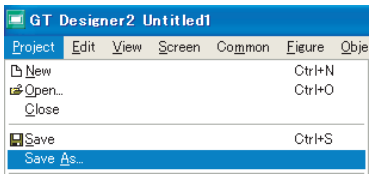
Select [Main menu] → [Communication Settings] icon or text.

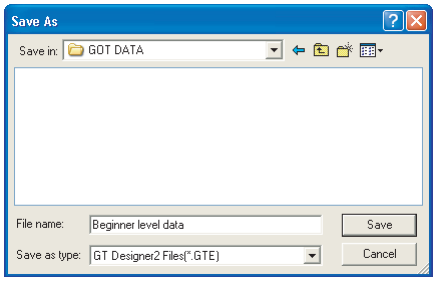
☞ GT15 User's Manual

☞ GT16 User's Manual (Basic Utility)

4.2.6 Saving the created project data

This section explains how to save the created project data.





1 Choose the [Project] → [Save As...] menu.

2 When the dialog box appears, select the storage place and set the file name.

3 Click the Save button to save the project data.

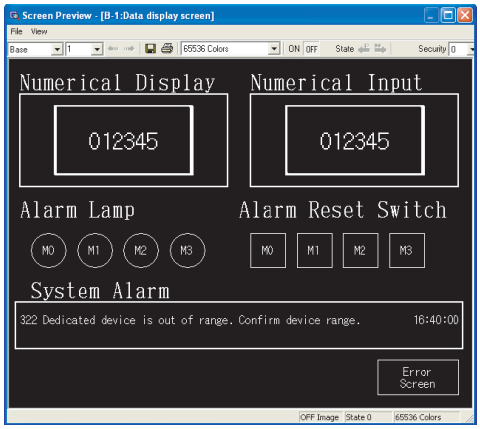
4.2.7 Previewing the created project data

This section explains how to confirm the screen to be displayed on the GOT.
Refer to the following for details.

☞ Section 7.12 Viewing Created Screen Image



1 Choose the [View] → [Preview] menu.



2 The screen to be displayed on the GOT appears in the Screen Preview window.

4.3 Executing Monitor on the GOT

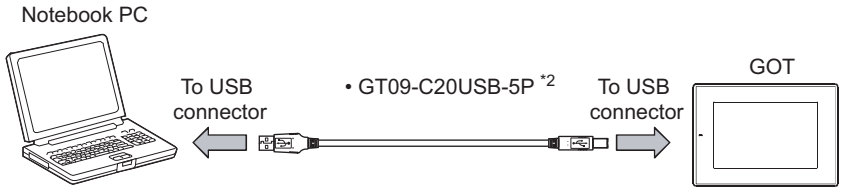
This section provides a series of operations from transferring the project data created on GT Designer 2 to displaying that data on the GOT.
The GT15□□ is used as an example in the explanation.

4.3.1 Transferring project data from PC to GOT

This section explains how to transfer the project data from the PC to the GOT.

1 Connecting the PC and GOT

Connect the PC and GOT.



Hint!

(1) To reduce the data transfer time
Use of the USB cable enables the data to be transferred at higher speed and reduces the operation time as compared with RS-232 communication. *1
For data transfer with a memory card, refer to the following.

☞ Section 8.9 Transferring Data Using a Memory Card [PC to memory card and memory card to GOT]

*1 Reference downloading value: GT15□□

Connection method / Project data size	Ethernet (100Mbps)	USB (12Mbps)	RS232 (115Kbps)
1MB	20 sec.	20 sec.	2 min. 30 sec.

*2 To use an RS-232 cable, use GT01-C30R2-9S.

(2) Transmitting data efficiently from a single PC to multiple GOTs
Use an Ethernet cable to transfer project data from a single PC to multiple GOTs.
Refer to the following section for details.

☞ Section 8.2 Preparation for Project Data Transfer [USB/RS-232/Ethernet]

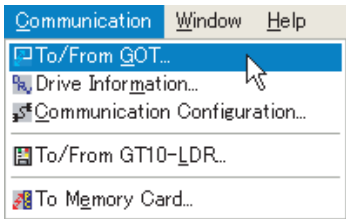
2 Installing the Standard monitor OS and Communication driver

The GOT does not include the Standard monitor OS for monitoring and the Communication driver for communication with the PLC CPU.
Therefore, it is necessary to perform this operation only once before monitoring.
This operation is required again when the OS is updated or the communication method with the PLC is changed.

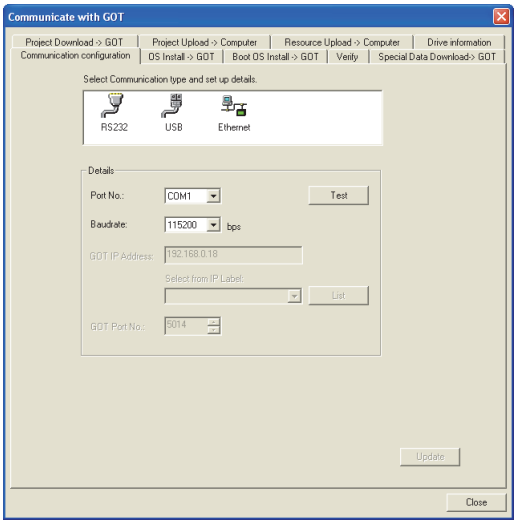
Point

Precautions for OS installation

When only the Boot OS is factory-installed on the GOT, only the Standard monitor OS can be installed on the GOT.
Installing the OS into the GOT clears the project data within the GOT.
Upload the data within the GOT as necessary.
(☞ Section 4.3.3 Uploading)



1 Choose the [Communication] → [To/From GOT...] menu.



2 When the dialog box appears, select the Communication configuration tab.

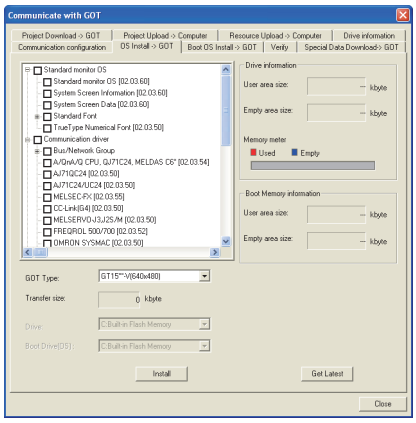
3 On the Communication configuration tab, confirm and set the communication settings of the PC to be used.

4 Select RS232 or USB.

5 When any setting has been changed, click the Update button.
After then, choose the OS Install → GOT tab.

(To next page)

(From previous page)



6 On the OS Install → GOT tab, select the Standard monitor OS (standard monitor OS, font), Communication driver, Extended function OS and Option OS to be installed into the GOT.

Make the selection as shown below.

- GOT Type : GT15**-V (640 × 480)
- Standard monitor OS : All 16 dot Standard Font Japanese but Mincho

After making the selection, click the Install button.
This starts the installation of the OS.

7 After OS installation is completed, the GOT restarts.

8 Select Communication driver, Extended function OS, and Option OS to be installed on the GOT.

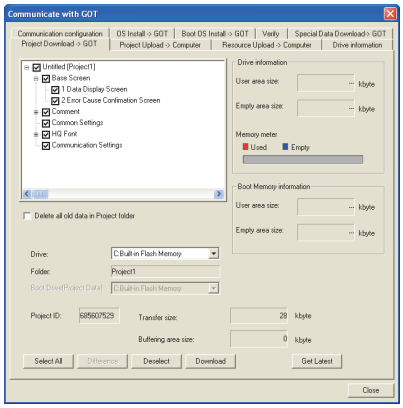
- Communication driver : Bus (Q)
- Extended function OS : Not to be installed.
- Option OS : Not to be installed.

After making the selection, click the Install button.
This starts the installation of the Communication driver.

9 After communication driver installation is completed, the GOT restarts.

3 Downloading the project data

After OS installation, download the created project data to the GOT.



1 Select Project Download → GOT tab.

2 On the Project Download → GOT tab, select the data (Base Screen, Window Screen, Common Settings) to be downloaded to the GOT.

- Project configuration tree: Check all.

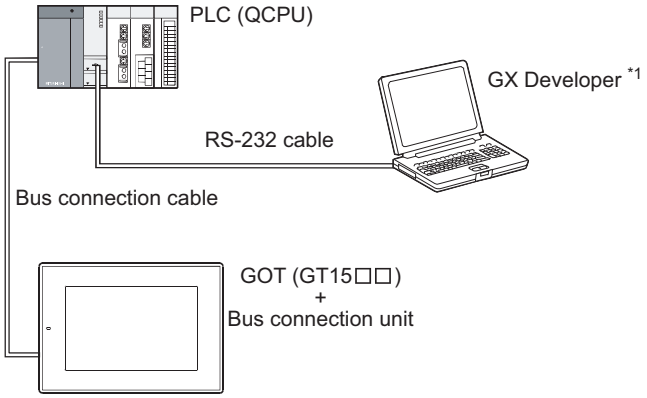
  (Click the Select all button.)

After making the selection, click the Download button.
This starts project data downloading.

4.3.2 Connecting with the PLC CPU

After transferring the Standard monitor OS, Communication driver and project data to the GOT, connect the GOT and PLC CPU.
The bus connection between the GT15☐☐ and QCPU is taken as a connection example in this section.

System configuration example



*1 For details of GX Developer including the system configuration and operation, refer to the GX Developer Operating Manual.

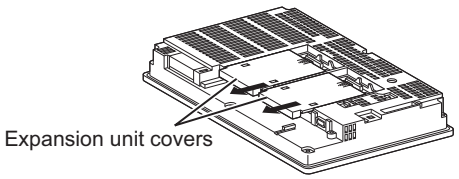
Point

Precautions for mounting the communication unit and connecting the cable

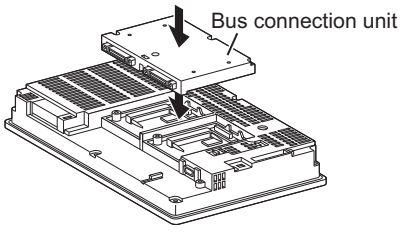
Before mounting the communication unit or connecting the cable, completely power OFF the GOT.
Refer to the following manual for details.

☞ GT15 User's Manual

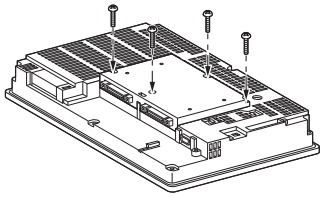
1 Mounting the communication unit to the GOT



1. Power OFF the GOT.
2. Remove the two expansion unit covers of the GOT.



3. Push in the bus connection unit along the GOT case groove.

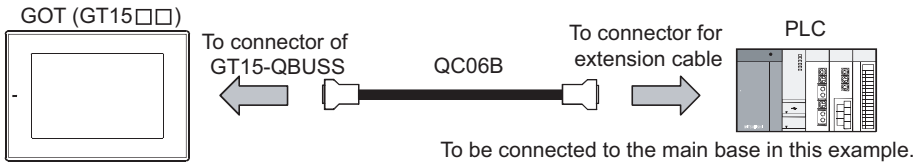


4. Secure the bus connection unit by tightening its fixing screws (4 places) with 0.43 to 0.57•m torque.

2 Connecting to the PLC CPU

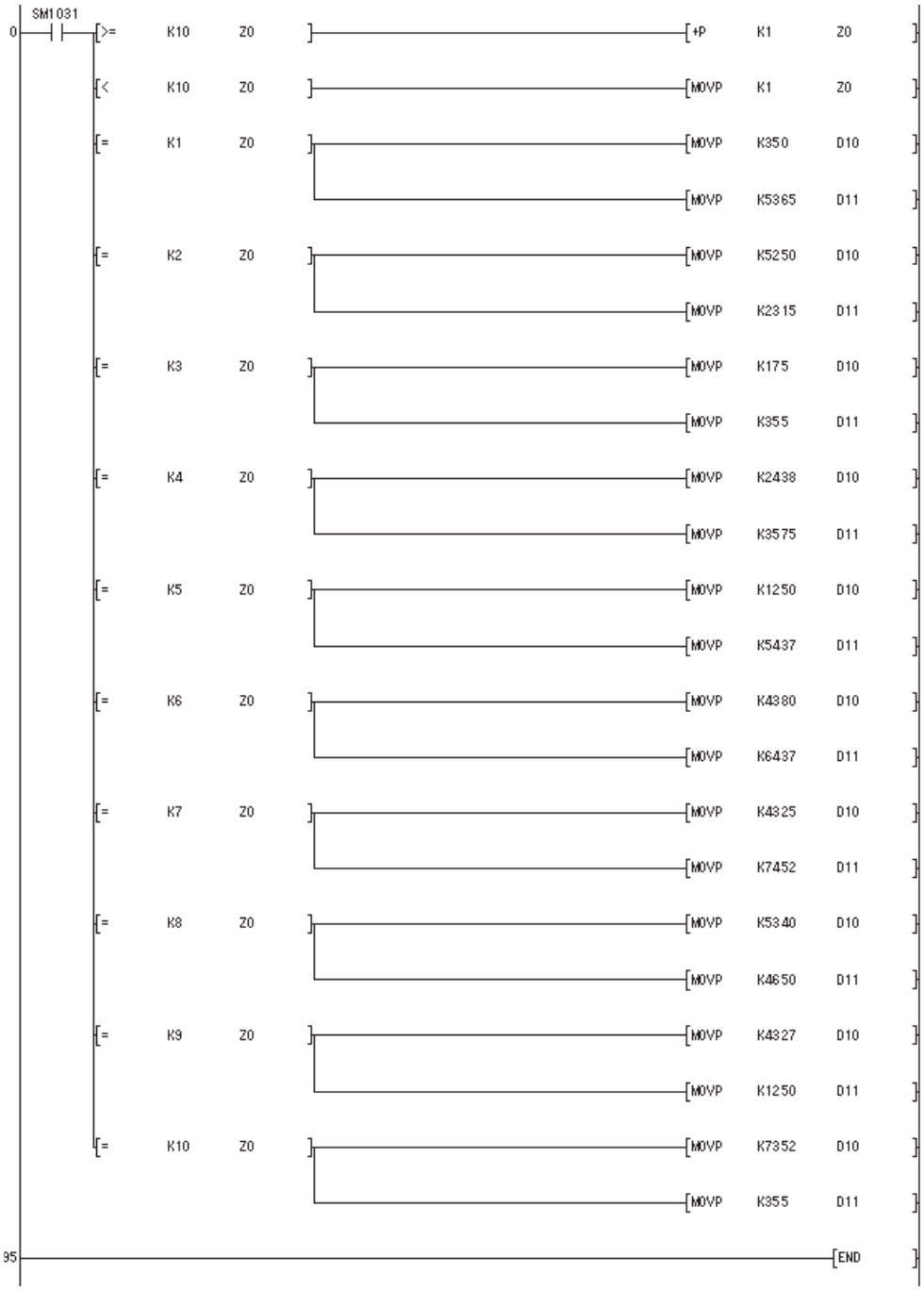
Connect the GOT and PLC CPU with the bus connection cable.
Before connecting the GOT to the PLC CPU, always power off the whole system.
Refer to the following manual for details of the system configuration for connection.

GOT1000 Series Connection Manual



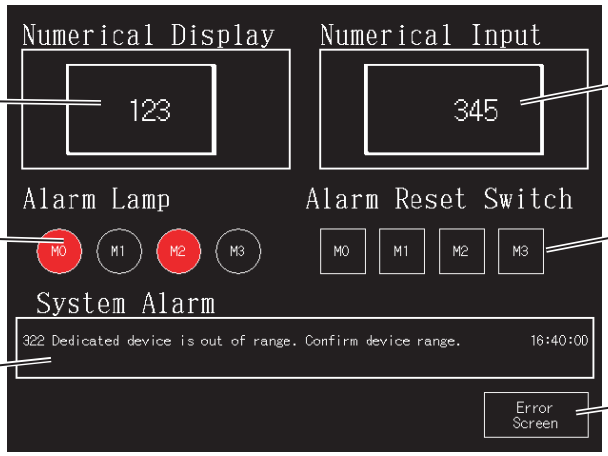
To be connected to the main base in this example.

3 Sequence program used in this manual



4 Operation image on GOT

Base Screen 1



The D10 value is displayed.

Touching here displays the key window and inputs the value to D11.

When any of M0 to M3 is turned ON with GX Developer, etc., the corresponding lamp is lit.

Touching the switch turns OFF the corresponding one of M0 to M3 that is ON (extinguishes the lamp).

If an error occurs in the GOT or CPU, the error code and error message are displayed.

Touching here switches the display to Base Screen 2.

Base Screen 2

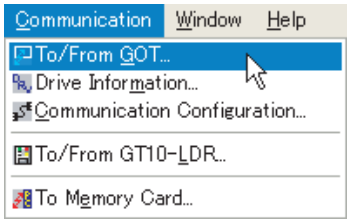


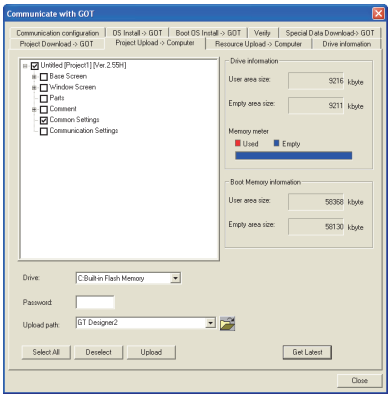
Comments of M0 to M3 that are ON on Base Screen 1 are displayed.

Touching here switches the display to Base Screen 1.

4.3.3 Uploading

To back up or correct the project data downloaded to the GOT, upload the project data to the PC.





1 Select the [Communication] → [To/From GOT].

2 When the dialog box appears, select the Project Upload → Computer tab.

- Upload path: GT Designer2

Point

When the project data are not displayed in a tree structure, click the Get Latest button.

3 Click the Upload button to execute uploading.

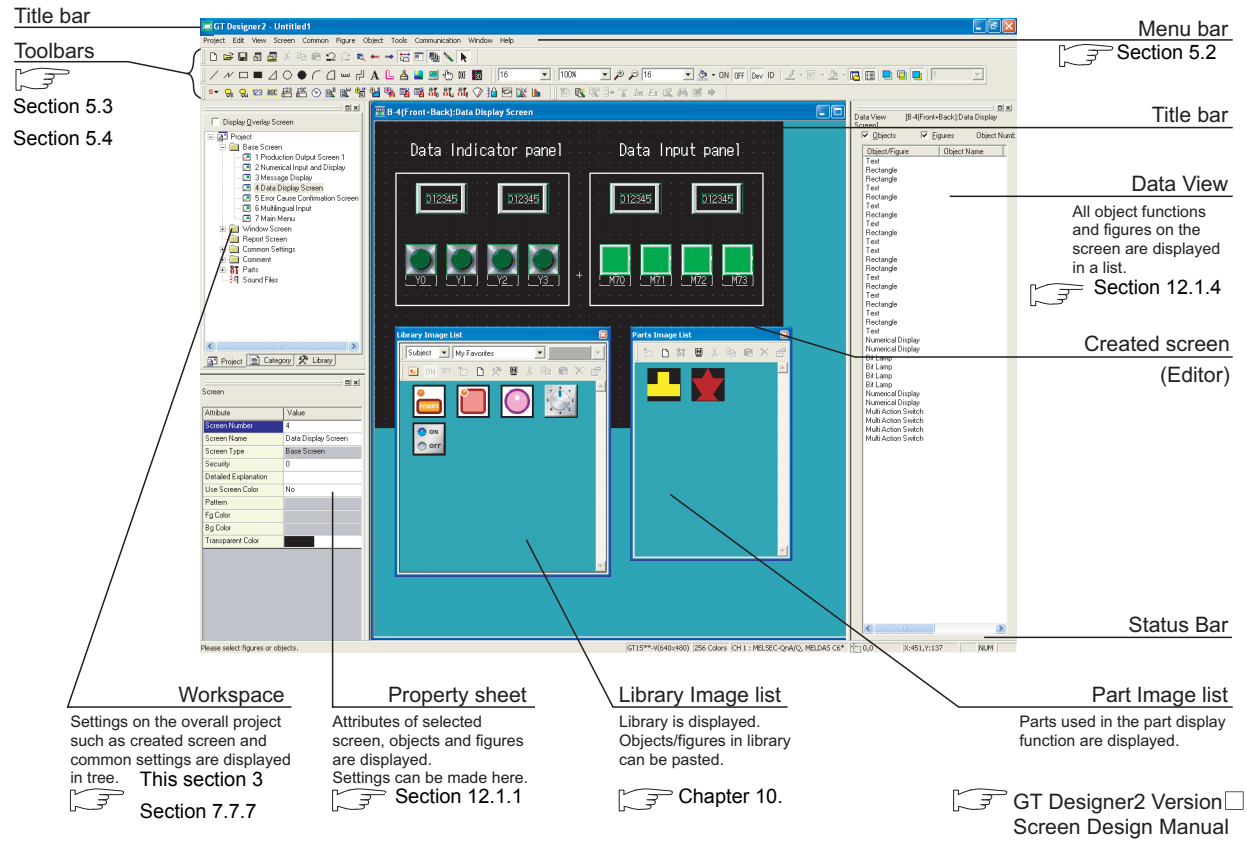
5. SCREEN CONFIGURATION OF GT Designer2

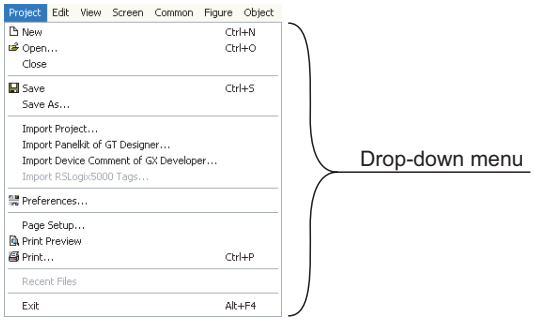
5.1 Screen Configuration and Various Tools

5.1.1 Screen configuration and various tools

The screen configuration and various tools are described.

1 Screen configuration and various tools

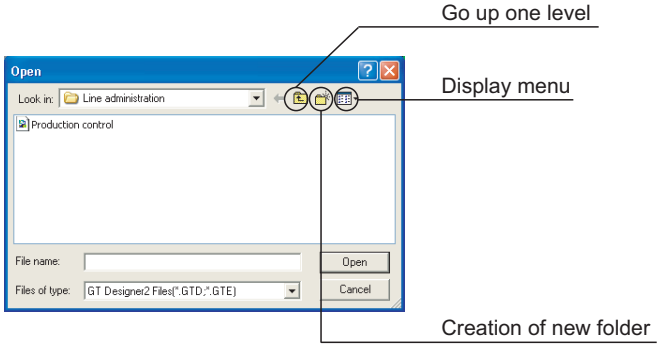


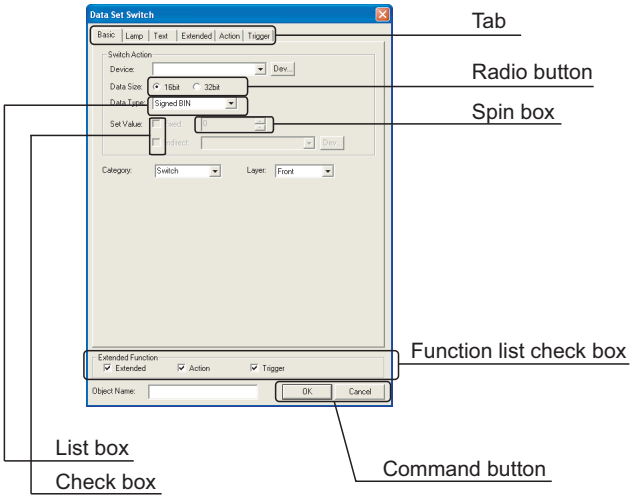


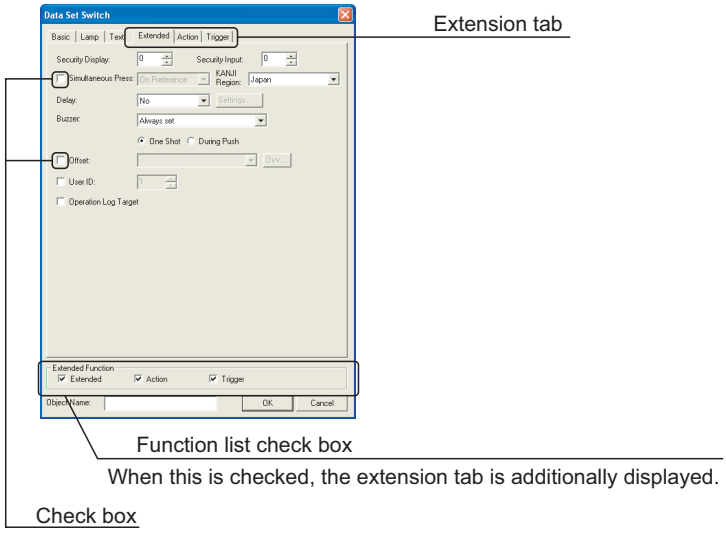
2 Dialog box

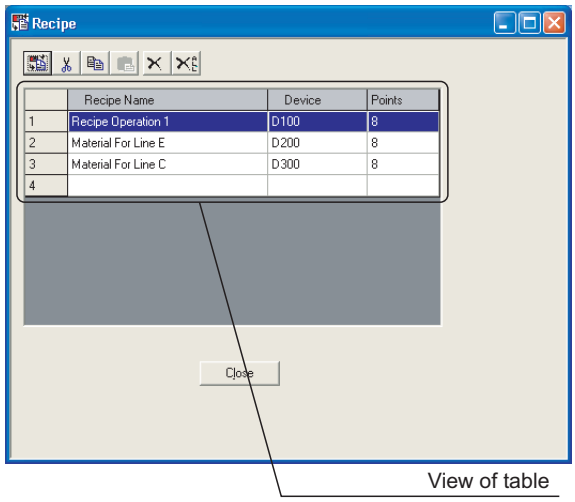
Refer to the following section for the operation method.

☞ Section 7.7.6 Basic operations of dialog box







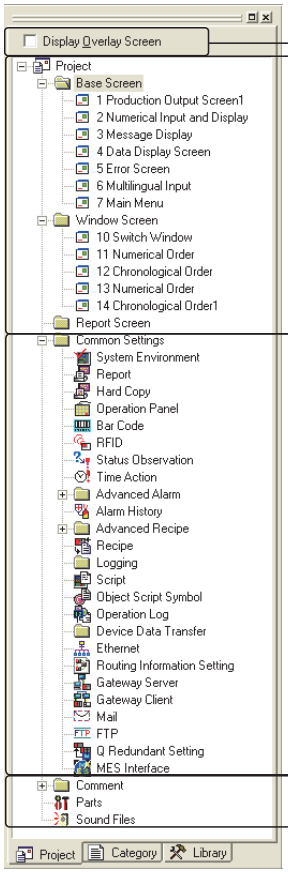

Recipe
Recipe Name
Device
Points
1
Recipe Operation 1
D100
8
2
Material For Line E
D200
8
3
Material For Line C
D300
8
4
Close
View of table

3 Workspace type

Types of the workspace are described here.

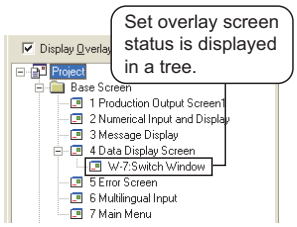
■ Project workspace

Overall project settings such as created screens and common settings are displayed in a tree.
It is convenient to see the project details, to check the work progress and to copy a screen.



Display Overlay Screen

When this is checked, the set overlay screen status is displayed in a tree.



Screen

Displays the created screens in a tree structure by type (base screen, window screen).

Common Settings

The object function settings used in common for the project are displayed in a tree.
When an item is double clicked, the setting dialog box for each function is displayed.

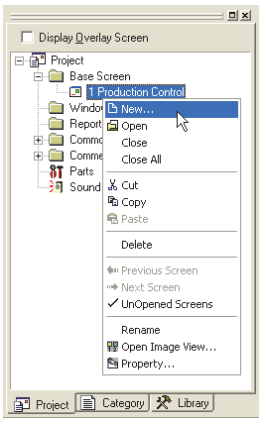
Common file

Displays the files (parts, comments, Sound Files) common to multiple object functions in a tree structure.

Available functions

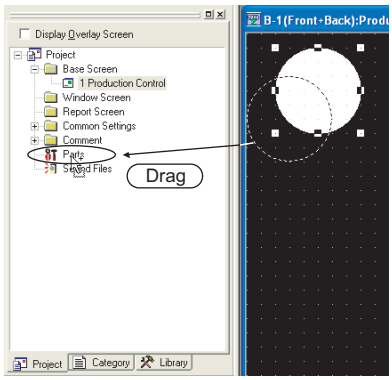
- Right click the mouse to select basic commands such as New Screen, Open or Copy.

  Ex.) Right click the window screen.



- Dragging a figure to the Project workspace allows registration of Parts.

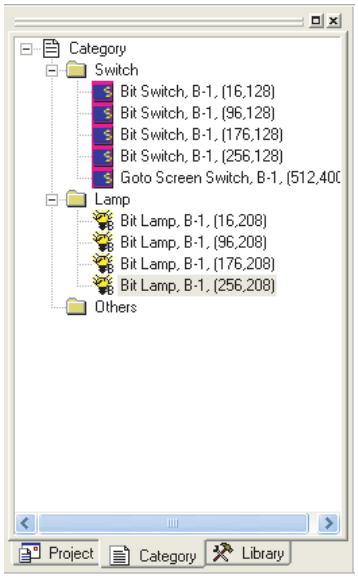
  Ex.) Drag a figure.



■ Category workspace

The overall project setting is displayed in a tree by Category (type).
Classification for each application simplifies management and editing of objects.

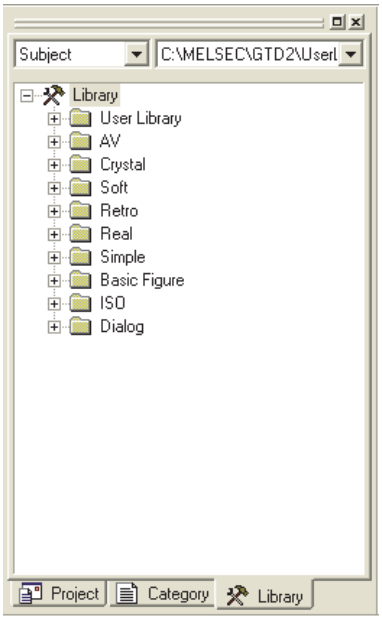
☞ Section 12.1.2 Batch setting and managing objects/figures for each purpose (Category workspace)



■ Library workspace

Objects or figures can be registered and pasted to the screen.

☞ Chapter 10. USING LIBRARY



5.2 Menu Configuration

5.2.1 Menu configuration

Commands assigned to the menu bar are described.

Project



The Project menu contains functions of file management, preference settings and printing.

New creation of project, reading existing files, preference settings and printing of data being edited are available.
The recent file record can also be displayed.

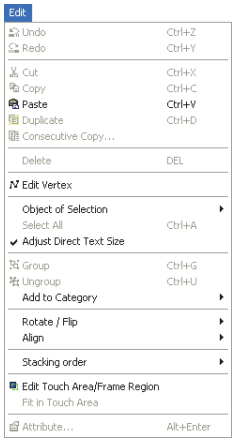
About New and Open...

☞ Chapter 7. CREATING AND EDITING THE SCREEN (PROJECT DATA)

About Print...

☞ Chapter 9. PRINTING PROJECT/FILE OUTPUT

Edit



The Edit menu contains edit functions for created figures/objects.

If incorrect operation is done during edit, the screen can be returned to the previous status. Copy, paste and grouping of objects and figures are also allowed.

☞ Chapter 11. DRAW AND EDIT

View



The View menu contains functions of display on the GT Designer2.

Toolbars, status bar, workspace or property sheet can be displayed or not displayed.

- About screen configuration customization

  ☞ Section 5.4.1 Customizing screen configuration

- About switching the Layer Display

  ☞ Section 7.7.2 Layer display switching operation

- About screen preview

  ☞ Section 7.12 Viewing Created Screen Image

Screen

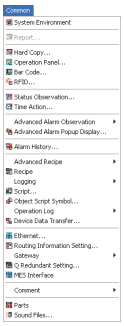


The Screen menu contains functions of screen management and settings in a project.

New screen creation, opening/closing screen and change of window size are available.

☞ Chapter 7. CREATING AND EDITING THE SCREEN (PROJECT DATA)

Common



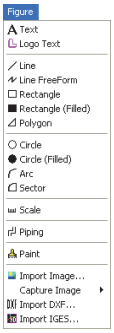
The Common menu contains functions of common settings.

The object functions used for the overall project can be set.
Also, comments, parts, etc. can be registered.

Refer to the manual below for details of common settings.

☞ GT Designer2 Version□ Screen Design Manual

Figure

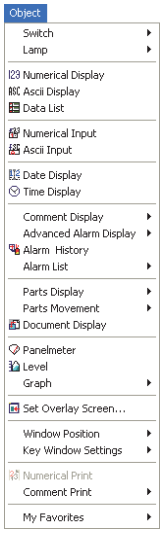


The Figure menu contains functions of drawing figures.

Various figures can be drawn or figures can be filled.
Image data can also be imported.

☞ Chapter 11. DRAW AND EDIT

Object

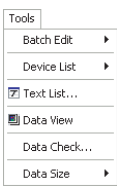


The Object menu contains functions of objects such as lamps or switches witch are arranged on the screen.

Refer to the manual below for details of each object functions.

☞ GT Designer2 Version□ Screen Design Manual

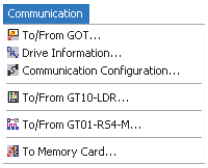
Tools



The Tools menu contains functions of list display of set devices and error check of setting items.
The data view can be displayed or not displayed.

☞ Chapter 12. USEFUL FUNCTIONS

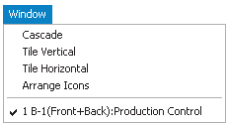
Communication



The Communication menu includes the functions that download and upload data, display GOT drive information and make the communication settings.

☞ Chapter 8. TRANSFERRING DATA

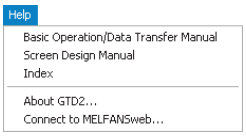
Window



The Window menu contains functions of tiling multiple screens.

☞ Section 7.8 Operating multiple screens

Help



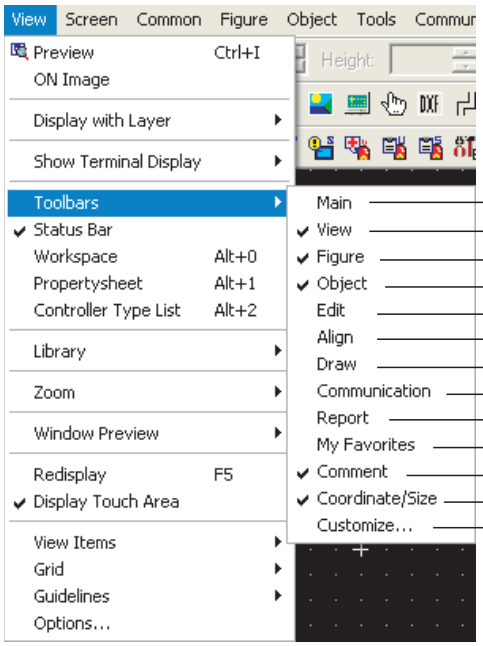
The Help menu contains functions of viewing the PDF manual related to the GT Designer2 and checking the software version.

☞ Chapter 3. HOW TO USE THE ONLINE MANUAL AND HELP

5.3 Types of toolbars

5.3.1 Types of toolbars

The following types of toolbars are available.
When desired toolbars are checked for display/non-display, the toolbars can be displayed/non-displayed accordingly.



Displays the Main toolbar.
Displays the View toolbar.
Displays the Figure toolbar.
Displays the Object toolbar.
Displays the Edit toolbar.
Displays the Align toolbar.
Displays the Draw toolbar.
Displays the Communication toolbar.
Displays the Report toolbar.
Displays the My Favorites toolbar.
Displays the Comment toolbar.
Displays the Coordinate/Size toolbar.
Displays the Toolbars tab of the Preferences dialog box.

If you drag a displayed toolbar, it may be arranged as a window on the screen.
The following pages also describe details of each toolbar.

1 Main



Name	Description
New	New project file is created. (☞ Section 7.2)
Open	Existing project file is opened. (☞ Section 7.3.1)
Save Project	Editing project is overwritten and saved on the existing file. (☞ Section 7.16.1)
New Base Screen	New screen is created. (☞ Section 7.5)
Open Screen	Specified screen is opened. (☞ Section 7.6.1)
Cut	Figures and objects are cut. (☞ Section 11.2.2)
Copy	Figures and objects are copied. (☞ Section 11.2.2)
Paste	Figures and objects are pasted. (☞ Section 11.2.2)
Undo	The last operation is cancelled to recover the status before change. (☞ Section 11.2.4)
Redo	The last operation is repeated. (☞ Section 11.2.4)
Screen Preview	Settings are displayed with the display image on the GOT. (☞ Section 7.12)
Previous Screen	Screen with the number before the current screen number is opened. (☞ Section 7.6.1)
Next Screen	Screen with the number next to the current screen number is opened. (☞ Section 7.6.1)
UnOpened Screens	Unopened screen is opened with "Previous/Next Screen" in the ascending/descending order. (☞ Section 7.6.1)
Screen Device List	List of devices used is displayed. (☞ Section 12.1.5)
Data View	All figures and objects arranged on the screen are displayed in a list. (☞ Section 12.1.4)
Comment	Comment to be displayed with the object function is registered. (☞ GT Designer2 Version☐ Screen Design Manual)
Figure And Object	Objection of selection is switched to "Figure and Object." (☞ Section 11.2.1)
Character String List	List of character strings used is displayed. (☞ Section 12.1.6)

2 View



Name	Description
Snap	Snap movement of the cursor is set. (☞ Section 5.4.3)
Zoom	Screen display magnification rate/shrinkage rate is set. (☞ Section 5.4.3)
Zoom In	Screen display can be zoomed in up to 400% in 10% increments.
Zoom Out	Screen display can be zoomed out up to 50% in 10% increments.
Grid Spacing	Grid Spacing is set. (☞ Section 5.4.3)
Grid Color	Grid color is set. (☞ Section 5.4.3)
ON Image/OFF Image	Screen is switched to the display of device ON Image/device OFF Image.
Device, Object ID	Device (Dev.) and object ID (ID) are displayed for each object. (☞ Section 5.4.3)
Screen Color	Screen background color is set. (☞ Section 7.5)
Screen Pattern	Screen background pattern is set. (☞ Section 7.5)
Screen Background Color	Screen background color is set. (☞ Section 7.5)
Workspace	Workspace is displayed. (☞ Section 7.7.7)
Property Sheet	Property Sheet is displayed. (☞ Section 12.1.1)
Layer: Front	Displays the front layer only. (☞ Section 7.7.2)
Layer: Back	Displays the back layer only. (☞ Section 7.7.2)
Layer: Front and Back	Displays the overlaid front and back layers. (☞ Section 7.7.2)
Language Switching Preview Column No.	The column of comment group screen display is switched. (☞ GT Designer2 Version☐ Screen Design Manual)

3 Figure



Name	Description
Line	Line is drawn. (☞ Section 11.1.1)
Line FreeForm	Continuous line is drawn. (☞ Section 11.1.1)
Rectangle	Rectangle is drawn. (☞ Section 11.1.1)
Rectangle (Filled)	Filled rectangle is drawn. (☞ Section 11.1.1)
Polygon	Polygon is drawn. (☞ Section 11.1.1)
Circle	Circle is drawn. (☞ Section 11.1.1)
Circle (Filled)	Filled circle is drawn. (☞ Section 11.1.1)
Arc	Arc is drawn. (☞ Section 11.1.1)
Sector	Sector is drawn. (☞ Section 11.1.1)
Scale	Scale is drawn. (☞ Section 11.1.1)
Piping	Piping figure is drawn. (☞ Section 11.1.1)
Text	Text is input. (☞ Section 11.1.2)
Logo Text	Logo Text is input. (☞ Section 11.1.3)
Paint	Polygon and closed area are painted with the selected pattern. (☞ Section 11.1.4)
Import Image	BMP, JPEG format file is imported on the editing screen. (☞ Section 11.1.6)
Rectangular Range Area	Rectangular range area is captured. (☞ Section 11.1.5)
Window Area	Window area is captured. (☞ Section 11.1.5)
Import DXF	DXF format file is imported on the editing screen. (☞ Section 11.1.6)
Import IGES	IGES format file is imported on the editing screen. (☞ Section 11.1.7)

4 Object



☞ GT Designer2 Version□ Screen Design Manual

Name	Description
Switch toolbar	Switch function is set.
Bit Lamp	Bit Lamp function is set.
Word Lamp	Word Lamp function is set.
Numerical Display	Numerical Display function is set.
ASCII Display	ASCII Display function is set.
Numerical Input	Numerical Input function is set.
ASCII Input	ASCII Input function is set.
Time Display	Time Display function is set.
Bit Comment	Bit Comment function is set.
Word Comment	Word Comment function is set.
Simple Comment	Simple Comment function is set.
Advanced User Alarm Display	Advanced User Alarm Display function is set.
Advanced System Alarm Display	Advanced System Alarm Display function is set.
Alarm History	Alarm History function is set.
User Alarm	Alarm List function (User Alarm) is set.
System Alarm	Alarm List function (System Alarm) is set.
Bit Parts Display	Bit Parts Display function is set.
Word Parts Display	Word Parts Display function is set.
Fixed Parts Display	Fixed Parts Display function is set.
Panel meter	Panel meter function is set.
Level	Level function is set.
Trend Graph	Trend Graph function is set.
Line Graph	Line Graph function is set.
Bar Graph	Bar Graph function is set.

5 Edit



Name	Description
Bring to Front	Places the selected object on the front of the front layer. (☞ Section 11.2.2)
Send to Back	Places the selected figure or object on the back of the back layer. (☞ Section 11.2.2)
Group	Selected figures and objects are grouped. (☞ Section 11.2.3)
Ungroup	Grouping is canceled. (☞ Section 11.2.3)
Flip Horizontal	Selected figure is flipped horizontally. (☞ Section 11.2.2)
Flip Vertical	Selected figure is flipped vertically. (☞ Section 11.2.2)
Rotate Left	Selected figure is rotated 90 degrees to the left. (☞ Section 11.2.2)
Rotate Right	Selected figure is rotated 90 degrees to the right. (☞ Section 11.2.2)
Edit Vertex	Length of freeform line or polygon line is changed. (☞ Section 11.2.8)
Align	Selected figures and objects are aligned. (☞ Section 11.2.5)
Selection: Figure	Only figures are selected. (☞ Section 11.2.1)
Selection: Object	Only objects are selected. (☞ Section 11.2.1)
Selection: Figure and Object	Figures and objects are selected. (☞ Section 11.2.1)
Adjust Direct Text Size	Text size of the target object is automatically adjusted with the size of object area. (☞ Section 11.2.8)

6 Align



Name	Description
Align Left	Aligned with the selected leftmost figure or object. (☞ Section 11.2.5)
Align Center (Horizontally)	Aligned at the center horizontally. (☞ Section 11.2.5)
Align Right	Aligned with the selected rightmost figure or object. (☞ Section 11.2.5)
Align Top	Aligned with the selected uppermost figure or object. (☞ Section 11.2.5)
Align Center (Vertically)	Aligned at the center vertically. (☞ Section 11.2.5)
Align Bottom	Aligned with the selected lowermost figure or object. (☞ Section 11.2.5)
Align Across	Selected figures and objects are evenly aligned in the horizontal direction. (☞ Section 11.2.5)
Align Down	Selected figures and objects are evenly aligned in the vertical direction. (☞ Section 11.2.5)

7 Draw



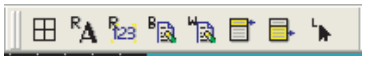
Name	Description
Line Style	Line style is set or changed. (☞ Section 11.1.1)
Line Width	Line width is set or changed. (☞ Section 11.1.1)
Line Color	Line color is set or changed. (☞ Section 11.1.1)
Fill Pattern	Fill pattern is set or changed. (☞ Section 11.1.1)
Pattern Fg Color	Fill color is set or changed. (☞ Section 11.1.1)
Pattern Bg Color	Fill background color is set or changed. (☞ Section 11.1.1)
Text Color	Text color is set or changed. (☞ Section 11.1.2)
Text Style	Text style is set or changed. (☞ Section 11.1.2)
Text Solid Color	Text solid color is set or changed. (☞ Section 11.1.2)

8 Communication



Name	Description
To/From GOT	Data is transferred to GOT. (☞ Chapter 8.)
To Memory Card	Transfers data to the memory card. (☞ Section 8.9)
Communication Configuration	Communication setting is made. (☞ Section 8.2.4)

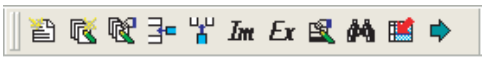
9 Report



☞ GT Designer2 Version□ Screen Design Manual

Name	Description
Report Line	Report line (Rectangle) is drawn.
Report Text	Report text is input.
Numerical Print	Numerical value for report printing is set.
Bit Comment Print	Comment (Bit) for report printing is set.
Word Comment Print	Comment (Word) for report printing is set.
Report Repeat Header	Header line is set.
Repot Repeat Line	Repeat line is set.
Selection: Report Line	Only report lines are selected.

10 Comment



☞ GT Designer2 Version□ Screen Design Manual

	Name	Description
	New Comment	Adds a new comment line.
	New Comment Group	Creates a new comment group.
	Comment Group Property	Selects the selected comment group property.
	Insert Row	Inserts a row in the specified position.
	Insert Column	Inserts a column in the specified position.
	Import	Imports the existing CSV, text or Unicode text file.
	Export	Exports a comment list to a CSV, text or Unicode text file.
	Attribute	Opens the comment attribute setting dialog.
	Search	Opens the character string search dialog.
	Jump	Opens the jump dialog.
	Attribute Display/Non-Display	Displays/Hides the attribute information.

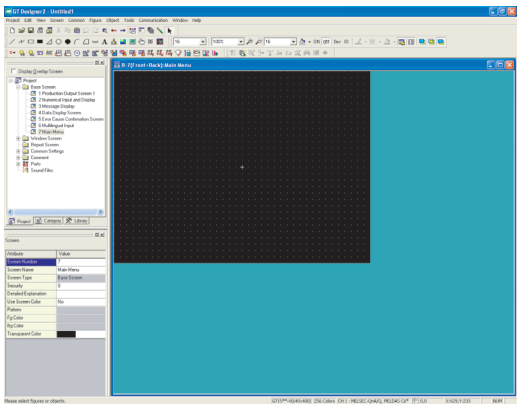
11 Coordinate/Size

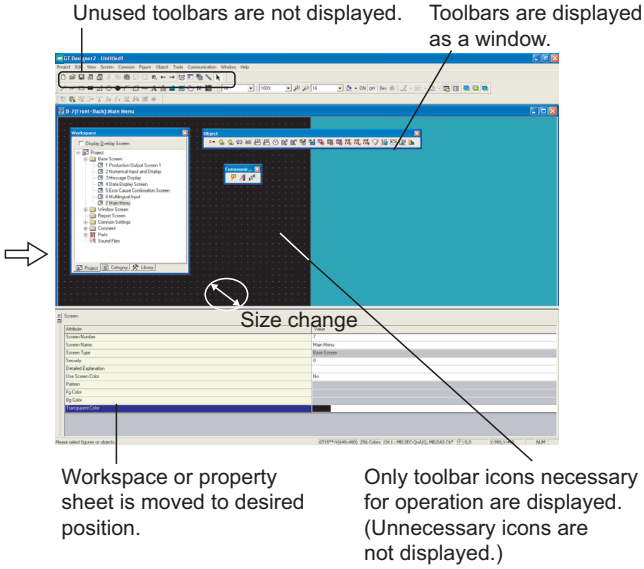


Name	Description
X coordinate	X coordinate that is on the top-left of the selected figure or object is specified.
Y coordinate	Y coordinate that is on the top-left of the selected figure or object is specified.
Width	Width of the selected figure or object is specified.
Height	Height of the selected figure or object is specified.

5.4 Customizing Screen Configuration and Toolbars

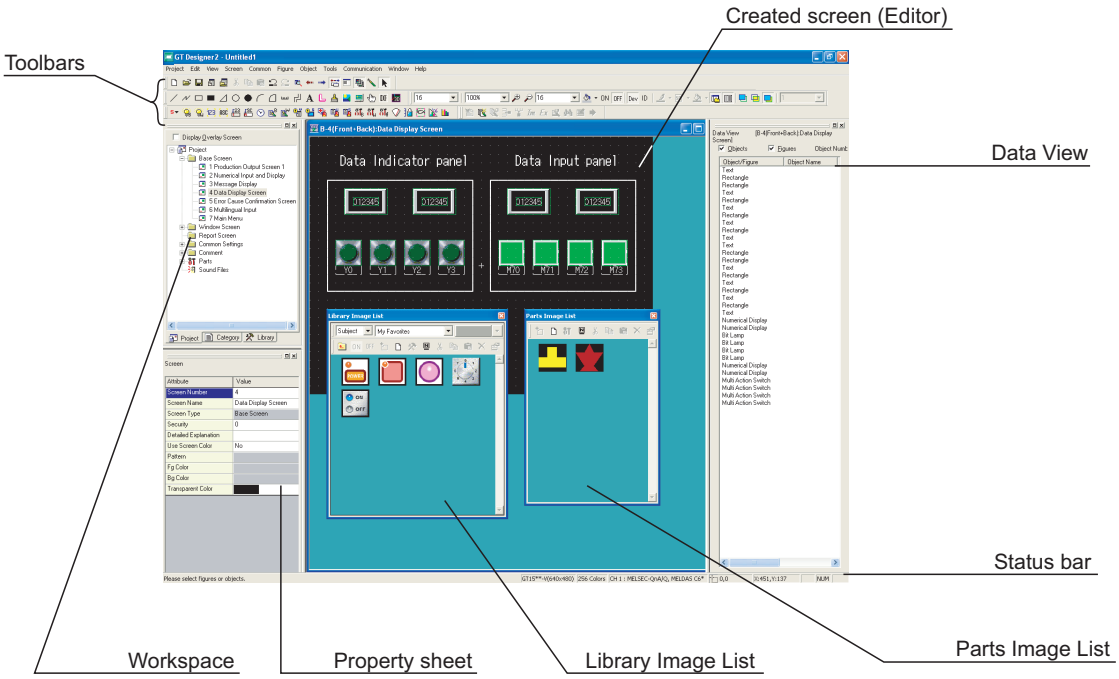
Screen configuration and toolbars can be customized on the GT Designer2 to facilitate operation by users. Screen configuration and toolbars customizing methods are described in this section.





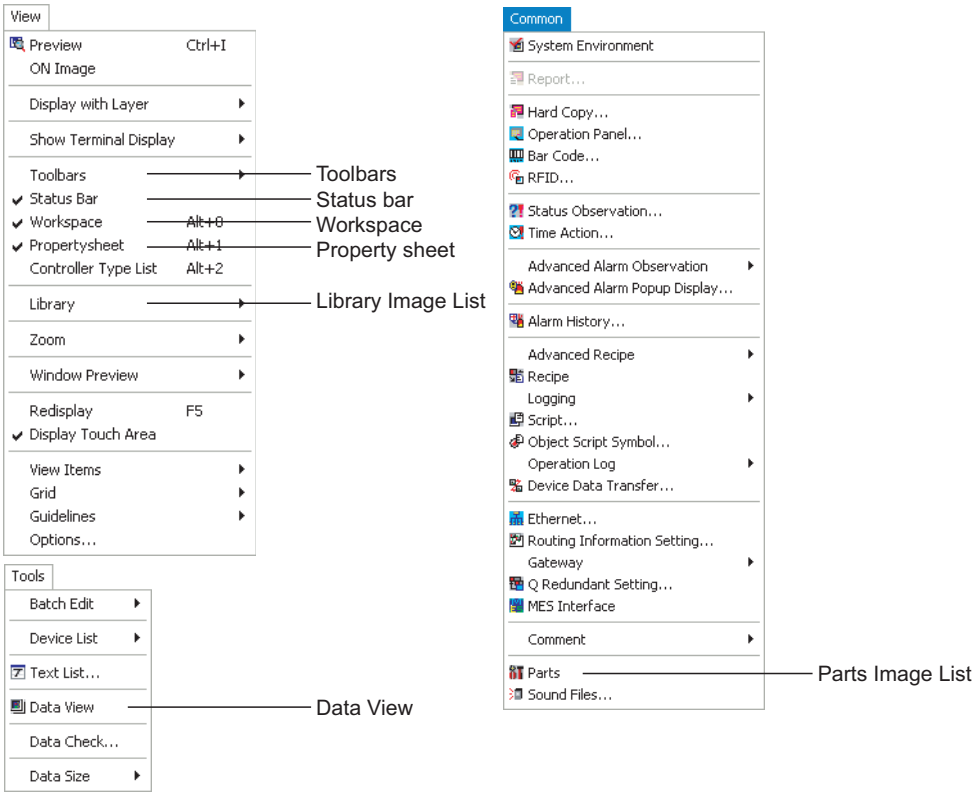
5.4.1 Customizing screen configuration

Display/non-display of tools, size change and display position change are available.
The areas shown below can be customized.



1 Display/non-display

Click the options in the menu below to display/non-display various tools.



2 Size change

Click the buttons below to change the screen size:

: The selected screen is minimized.

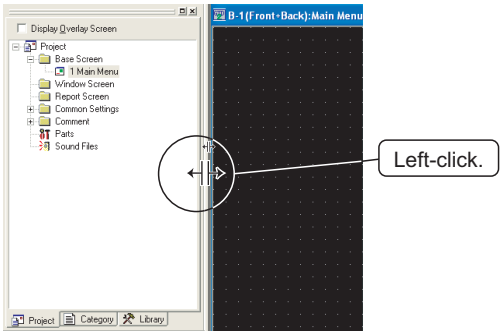
: The selected screen is returned to the original size.

: The selected screen is maximized.

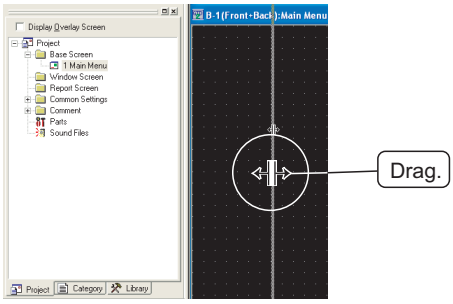
: The selected screen is closed.

(Example) Changing the workspace size

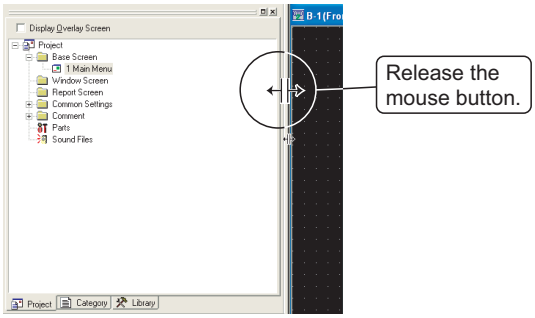
1 Left-click and hold.



2 Drag to the right.



3 Release the mouse button.
(The size changes.)

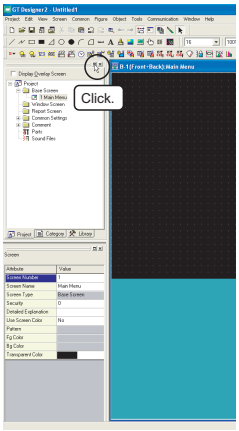


Remark Customized screen

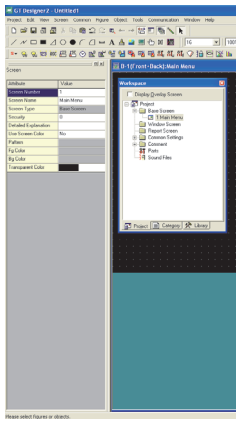
The GT Designer2 memorizes the customized settings of the screen configuration. At the next start-up, the previously customized status screen is displayed.

(Example) Popping up the workspace

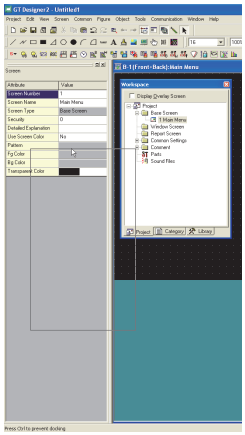
1  Click .



2 The workspace pops up as a window.

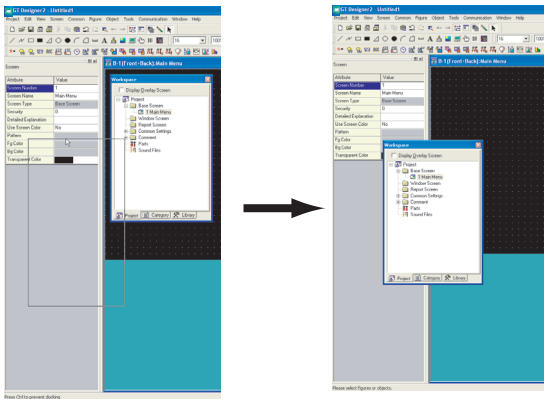


3 Drag and drop the workspace in the previous position to enlarge it to full screen.



Hint! Movement of workspace

Drag the popped-up workspace while holding the Ctrl key down. This enables the workspace to be moved without being fully displayed.



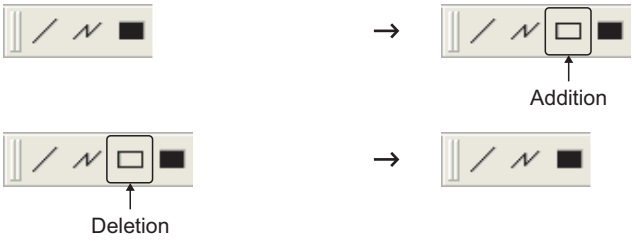
5.4.2 Customizing the toolbars

An icon/toolbar can be added or deleted, and the icon display can be changed.
Refer to the following pages for operation.

(Ex. 1) Deletion of toolbars



(Ex. 2) Addition/deletion of icon



(Ex. 3) Movement of icon



(Ex. 4) Icon grouping with partition



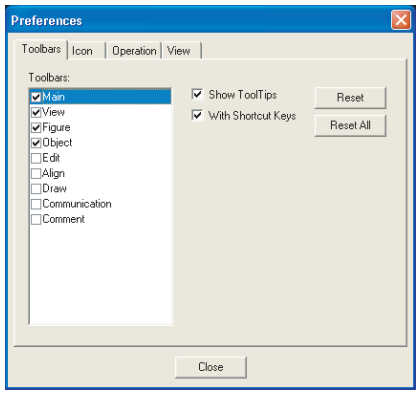
1 Adding or deleting toolbars/icons

Methods of adding or deleting toolbars/icons are shown below:

1. Select [Project] → [Preferences…].
2. The preferences dialog box appears.
   Add or delete toolbars/icons with the toolbar tab or the command tab.

■ Toolbars tab

Toolbars are added or deleted.

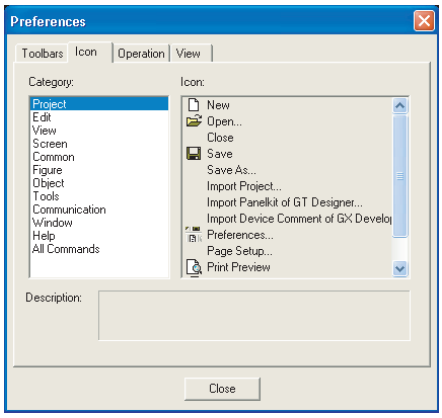


Toolbars | Icon | Operation | View

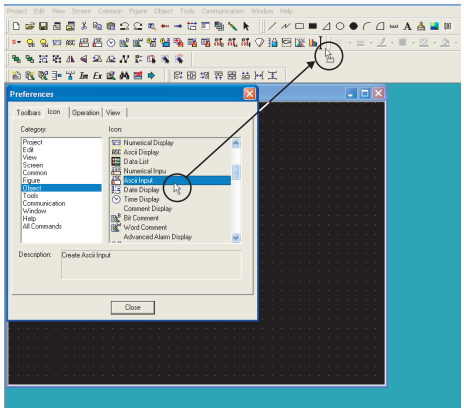
Item	Description
Toolbars	Check the desired toolbars for addition. To delete it, remove the check.
Show Tool Tips	When the cursor is placed on the icon, check this to display the icon name.
With Shortcut Keys	When the cursor is placed on the icon, check this to display the shortcut key. (It is effective only when the "Show Tool Tips" is displayed.)
Reset	Only the selected toolbars are set to default status.
Reset All	All toolbars are set to default status.

■ Icon tab

Icons are added, deleted or moved with the procedures below:

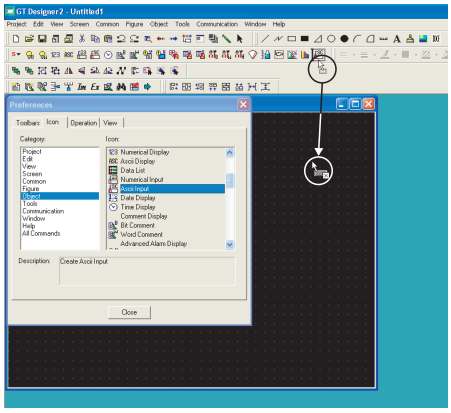


(Ex. 1) Adding icon



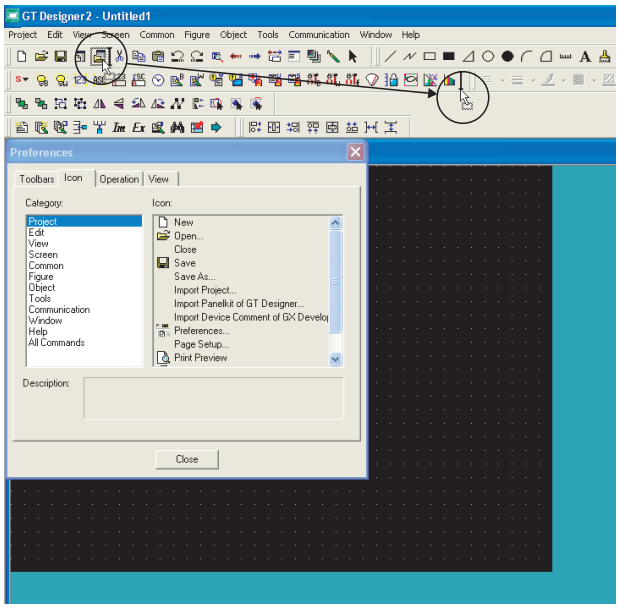
Click the desired function for addition and drag it to the desired toolbar.

(Ex. 2) Deleting icon



Click the desired icon for deletion and drag it outside the toolbar.

(Ex. 3) Moving icon

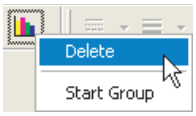


Select the desired icon for movement and drag it to the desired position.

3 When the toolbars are changed, click the Close button.

Hint! Deleting icon and inserting partition

While the preferences dialog box is open, select the icon and right click the mouse to delete icon or to insert partition.



Item	Description
Delete	Delete the selected icon.
Start Group	Insert a partition at the left of the icon. It is convenient to group with icons. When all icons at the right of the partition are deleted, the partition is deleted as well.

5.4.3 Customizing the drawing environment of GT Designer2

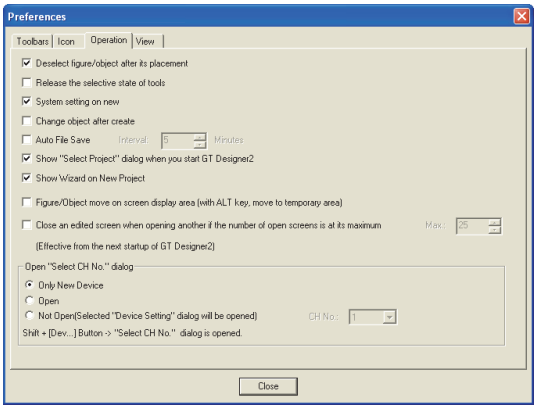
Environment for the drawing screen is set.

1 Select [Project] → [Preferences…] menu.

2 The preferences dialog box appears.
The drawing screen environment is set with operation tab/display tab items.

1 Operation tab

Operation setting for drawing screen is made.



Toolbars | Icon | **Operation** | View

Item	Description
Deselect figure/object after its placement	Checked : After arranging objects, the selected status (status with handle) is reset. Not checked : With the selected status (status with handle), figures/objects are arranged on the drawing screen.
Release the selective state of tools	Checked : After setting figures/objects, the tool selected status is reset. It is convenient to arrange different figures/objects. Not checked : After setting figures/objects, the selected status remains active. It is convenient to arrange the same figures/objects continuously.
System setting on new	Checked : The system settings dialog box (GOT type, PLC type, etc.) appears in creation of a new project. Not checked : The system settings dialog box (GOT type, PLC type, etc.) does not appear in creation of a new project.
Change object after create	Checked : After arranging objects on the drawing screen, the settings dialog box automatically appears. Not checked : After arranging objects on the drawing screen, the settings dialog box does not automatically appear.
Auto File Save	Checked : File is automatically saved. Saving interval (5 to 720) is set. Not checked : File is not automatically saved.
Show "Select Project" dialog when you start GT Designer2	Checked : When the GT Designer2 is started, the project selection dialog box (New, Open, etc.) appears. Not checked : When the GT Designer2 is started, the project selection dialog box (New, Open, etc.) does not appear.
Show Wizard on New Project	Checked : The wizard is displayed when a new project is created. Not checked : The wizard is not displayed when a new project is created.

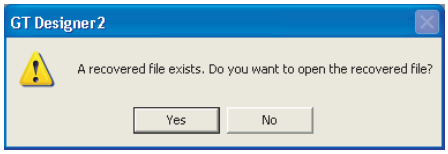
Toolbars | Icon | **Operation** | View

Item	Description
Figure/Object move on screen display area (with ALT key, move to temporary area)	Checked : A figure or object can be moved on the screen display area by dragging. When dragged pressing the ALT key, it can be moved to the temporary area. Not checked : A figure or object can be moved to the temporary area by dragging. When dragged pressing the ALT key, it can be moved on the screen display area.
Close an edited screen when opening another if the number of open screens is at its maximum (Effective from the next startup of GT Designer2)	Set the maximum number of screens (1-25 screens). Setting values will be enabled at the next startup.
Open "Select CH No." dialog  	Select from the following three items. Only New Device: When setting devices, such as switching screen device, system information, or each object, display the "Select CH No."dialog only the first time. Open: When setting devices, such as switching screen device, system information, or each object, always display the "Select CH No."dialog. Not Open (Selected "Device Setting" dialog will be opened): When setting the screen change device, system information, or each object , display the selected “Device setting” dialog. (The "Select CH No." dialog will not display.) Irregardless of the above settings, if the Dev... button is clicked while the [Shift] key is held down, the "Select CH No." dialog can display. The "Select CH No." dialog only displays when multiple controllers are distributed to multiple CH at [Common] → [System Environment].

Point

(1) Operation when autosave is enabled

If GT Designer2 stops or a power failure occurs when autosave is enabled, the following dialog box will appear when GT Desginer2 is started next time or the project data that was previously opened is opened.



- If a project file is available (a project is saved in the past), this dialog box appears when the project file is opened.
- If a project file is not available (no saving after new creation), this dialog box appears when the GT Designer2 is started.

When Yes is selected on the dialog box above, the automatically saved file is recovered.

When either Yes or No is selected, the automatically saved recovery file is erased.

It is advisable to select Yes, and store the restored project data as necessary. If the data is unnecessary, do not save them and then close the project.

(2) Precautions for multiple start of GT Designer2 with automatic save setting

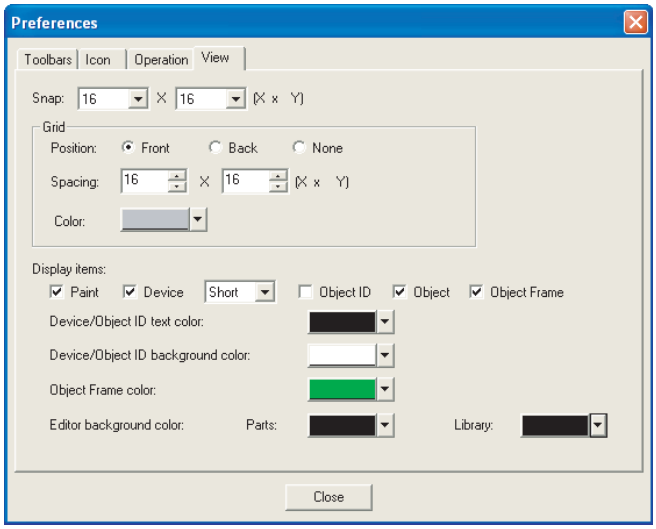
When autosave is enabled, do not perform the following operations (a), (b). The message in (1) above appears at the start-up of the 2nd or subsequent GT Desinger2 and the automatically saved file is then erased.
When performing the following operation (a) or (b), make sure to disable the autosave.

(a) After new creation, start the 2nd or subsequent GT Designer2 while editing a project which has not been saved at all.

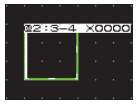
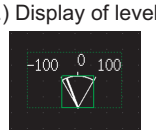
(b) Open the project which has been opened on the GT Designer2 with the 2nd or subsequent GT Designer2.

2 View tab

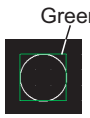
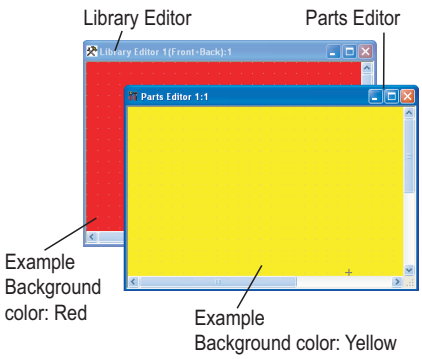
Display for the drawing screen is set.



Toolbars | Icon | Operation | View

Item		Description
Snap*1		Dot value (1, 2, 4, 8 or 16) is selected for automatic arrangement of figures or objects on the screen.
Grid	Position	Position of grid display is selected. Front: Grid is displayed at the front of the screen. Back: Grid is displayed at the back of the screen. None: Grid is not displayed. (Ex.)  Front Back
	Spacing	Grid spacing (2 to 64 dots) is set.
	Color	Grid display color is selected.
Display items		Items displayed on the GT Designer2 are checked.
Display items	Paint	When a closed figure is filled with "Paint," this item is selected to display the filled status. (Ex.) Filling in white 
	Device	This item is selected to display the device name set in the object. (Ex.) X 1000 
		This item is selected to display CH.NO,NW.NO,PC station number,and the device name set in the object. (Ex.) @2:3-4_X0000 
	Object ID	This item is selected to display the object ID of each object. The object ID is automatically put on each object. It is convenient to display the object ID in setting the system information. Refer to the manual below for details of system information. GT Designer2 Version 2 Screen Design Manual (Ex.) 10000 
	Object	This item is selected to display the set object. (Ex.) Display of level 

Toolbars | Icon | Operation | View

Item			Description
Display items	Object Frame		Select this item to display the boundary of the object. 
	Device/Object ID text color		Specify the text color of the object or object ID. Text color: Black 
	Device/Object ID background color		Specify the text background color of the object or object ID. Background color: White 
	Object Frame color		Specify the color of the object boundary. If the same transparent color as one used previously is specified for the front layer, it will appear transparent, so specify the layer's transparent color and another color. 
	Editor background color	Parts	The background color for the Parts Editor is selected. (The background color is selectable from 256 colors.) 
		Library	The background color for the Library Editor is selected. (The background color is selectable from 256 colors.)

*1 Snap

Figures and objects are arranged with the dot value set in "Snap."
(Ex.)
Drawing a rectangle ([Snap] is set to 16 dots.)

1 Determine the start point by clicking. → 2 Actual start position



Cursor position
(X=10, Y=12)



It is arranged at the closest position to the coordinates of multiples of 16.
(X=16, Y=16)

(a) When the end point is determined, the cursor can only moved to the coordinates of multiples of 16.

(b) When an object display position is determined or a figure is moved, the cursor moves based on the dot value set in [Snap] as shown above.

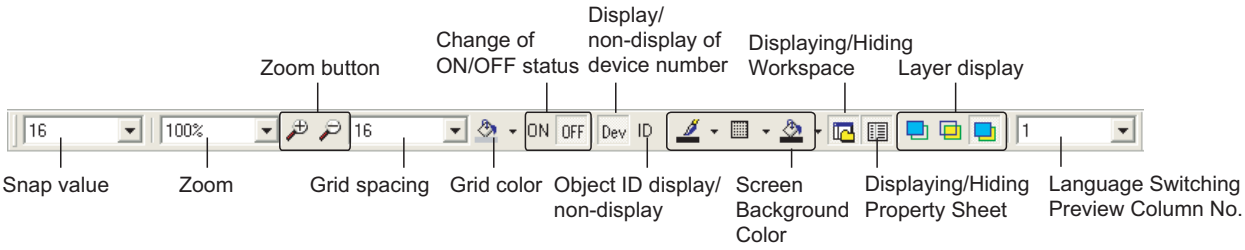
(c) One stroke of the ← key, ↑ key, ↓ key and → key on the keyboard moves the cursor in the units of the set dot value.

Set the [Snap] to one dot each and hit ← key, ↑ key, ↓ key and → key each time on the keyboard to move the cursor 1 dot each. This facilitates drawing a fine figure or position setting.

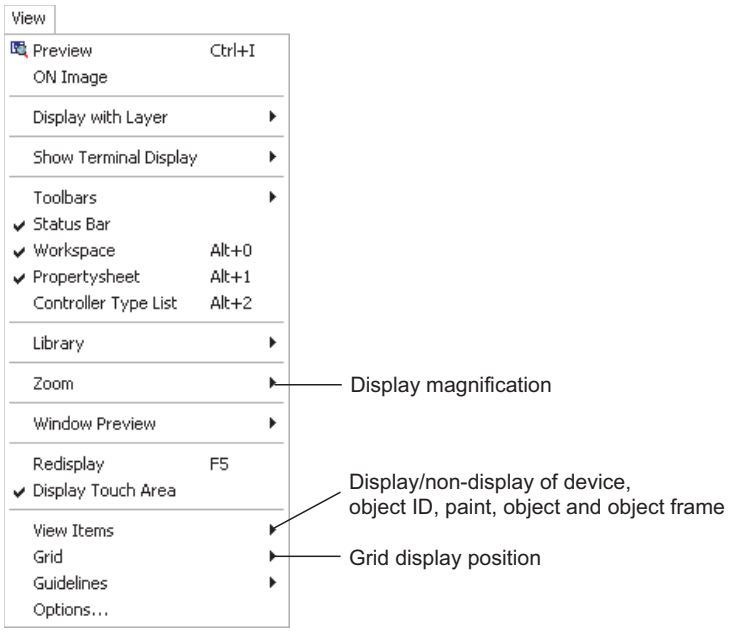
Hint! Display change from toolbars and menu

Items set on the display tab can be changed from toolbars and menu.

(1) Changing drawing screen display from toolbars (display setting)



(2) Changing drawing screen display from menu



6. SCREEN CONFIGURATION OF GOT

This chapter provides a brief explanation of the user-created GOT screens.
Refer to the following manual for details of screen drawing (design).

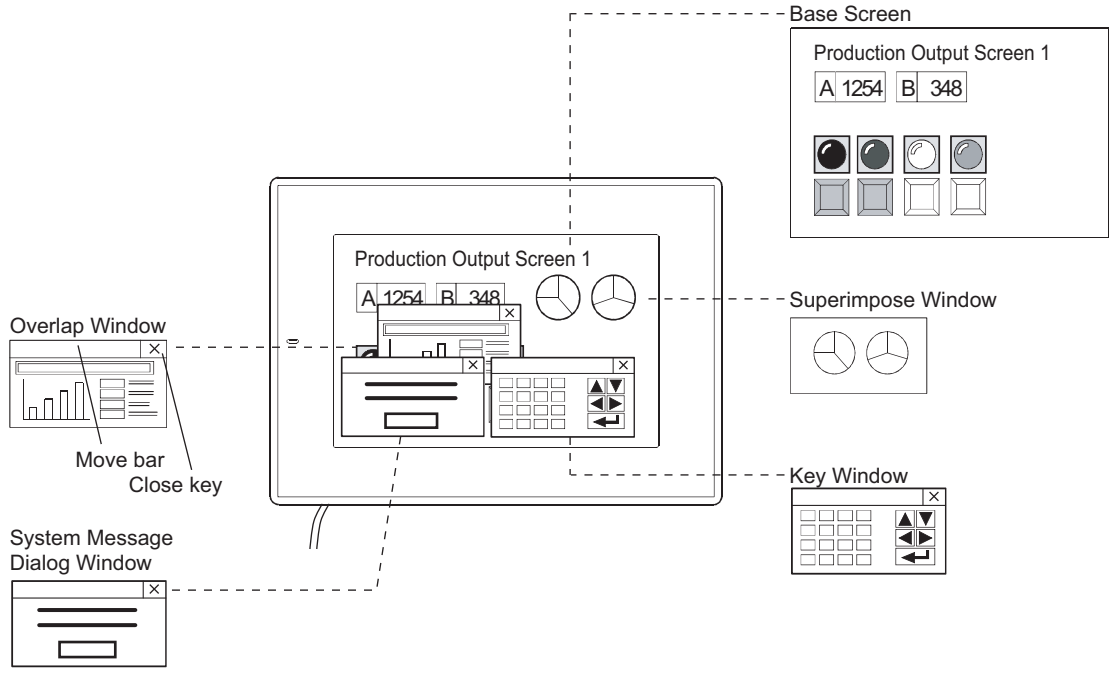
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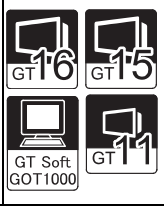
6.1 Base Screen, Window Screen and Report Screen Types

The user-created screen displayed on the GOT consists of the base screens, window screens and report screens that are drawn by GT Designer2. These screens can be overlapped or switched on the GOT. Objects, such as "Switch", "Lamp", "Comment Display" and "Numerical Display", can be placed on the screens.

6.1.1 Screen and window types

The following shows screens that can be created by the GT Designer2.
These screens can be overlapped or switched.



Screen		Description
Base Screen		The basic screen for user-created screen display on GOT. At GT11□□ and GT10□□, a horizontal or vertical (rotate clock-wise 90 degrees) display can be selected at the project level.
Window Screen	Overlap Window	A pop-up window that appears over the base screen. (Up to five windows for the GT16□□ and GT SoftGOT1000) Up to two windows can be displayed simultaneously. The Overlap Window can be moved or closed manually.
	Superimpose Window	A composite window placed on the base Screen. Up to two windows can be displayed simultaneously. (Superimpose 1, Superimpose 2) If super impose window is switched, the corresponding parts of the base screen will be changed.
	Key Window	A pop-up window for inputting numerical values and ASCII codes to be displayed on the base Screen. There are two types of key window: default key window and user created key window.
	Dialog Window 	A window that displays the user-created dialog by replacing with the system dialog or by controlling the value of the dialog window switching device.
Report Screen 		A Screen for creating the format output by the report function.

6.1.2 Base Screen

The base screen is the basic screen for screen display on GOT.
Up to 4096 base screens can be created, and switched by using the touch switches or PLC.
(GT10□□: 1024(screens))
The base screen consists of front layer and back layer. The objects can be placed on either of the layers.
Refer to the following manual for details of the layer function.

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GOT	Screen size (width × height, dots)	Max. number of registered screens	Applicable screen No. range
GT SoftGOT1000 (Resolution Specification) (X × Y)*1	1920 × 1200 - 640 × 480	4096 (screens)	1 - 32767
GT SoftGOT1000 (1600 × 1200)	1600 × 1200		
GT SoftGOT1000 (1280 × 1024)	1280 × 1024		
GT16**-X (1024 × 768)/ GT15**-X (1024 × 768)/ GT SoftGOT1000 (1024 × 768)	1024 × 768		
GT16**-S (800 × 600)/ GT15**-S (800 × 600)/ GT SoftGOT1000 (800 × 600)	800 × 600		
GT16**M-V (640 × 480)/ GT15**-V (640 × 480)/ GT SoftGOT1000 (640 × 480)	640 × 480		
GT155*-V (640 × 480)	640 × 480		
GT15**-Q (320 × 240)	320 × 240		
GT11**-Q (320 × 240)	Horizontal display: 320 × 240 Vertical display : 240 × 320		
GT11**-Q*BDQ (Built-in Q Bus) (320 × 240)	Horizontal display: 320 × 240 Vertical display : 240 × 320		
GT11**-Q*BDA (Built-in A Bus) (320 × 240)	Horizontal display: 320 × 240 Vertical display : 240 × 320		
GT10**-Q (320 × 240)	Horizontal display: 320 × 240 Vertical display : 240 × 320	1024 (screens)	
GT1030 (288 × 96)	Horizontal display: 288 × 96 Vertical display : 96 × 288		
GT1020 (160 × 64)	Horizontal display: 160 × 64 Vertical display : 64 × 160		

*1 X and Y indicate the screen size of SoftGOT 1000, which are set by the users.

6.1.3 Window Screen

The window screen is displayed over the base screen.
There are three types of overlap window: overlap window, superimpose window and key window. Up to 1024 screens can be registered. (GT10□□: 512(screens))

GOT	Screen size (width × height, dots)	Max. number of registered screens	Applicable screen No. range
GT SoftGOT1000 (Resolution Specification) (X × Y)*2	16 × 2 - 1920 × 1200 "16 × 2 - 1918 × 1193"	1024 (screens)	1 - 32767
GT SoftGOT1000 (1600 × 1200)	16 × 2 - 1600 × 1200 "16 × 2 - 1578 × 1193"		
GT SoftGOT1000 (1280 × 1024)	16 × 2 - 1280 × 1024 "16 × 2 - 1278 × 1017"		
GT16**-X (1024 × 768)/ GT15**-X (1024 × 768)/ GT SoftGOT1000 (1024 × 768)	16 × 2 - 1024 × 768 "16 × 2 - 1022 × 751"		
GT16**-S (800 × 600)/ GT15**-S (800 × 600)/ GT SoftGOT1000 (800 × 600)	16 × 2 - 800 × 600 "16 × 2 - 798 × 583"		
GT16**M-V (640 × 480)/ GT15**-V (640 × 480)/ GT SoftGOT1000 (640 × 480)	16 × 2 - 640 × 480 "16 × 2 - 638 × 463"		
GT155**-V (640 × 480)	16 × 2 - 320 × 240 "16 × 2 - 638 × 463"		
GT15**-Q (320 × 240)	16 × 2 - 320 × 240 "16 × 2 - 318 × 223"		
GT11**-Q (320 × 240)	Horizontal display: 16 × 2 - 320 × 240 "16 × 2 - 318 × 223" Vertical display : 16 × 2 - 240 × 320 "16 × 2 - 238 × 303"		
GT11**-Q*BDQ (Built-in Q Bus) (320 × 240)	Horizontal display: 16 × 2 - 320 × 240 "16 × 2 - 318 × 223" Vertical display : 16 × 2 - 240 × 320 "16 × 2 - 238 × 303"		
GT11**-Q*BDA (Built-in A Bus) (320 × 240)	Horizontal display: 16 × 2 - 320 × 240 "16 × 2 - 318 × 223" Vertical display : 16 × 2 - 240 × 320 "16 × 2 - 238 × 303"		
GT10**-Q (320 × 240)	Horizontal display: 16 × 16 - 320 × 240 "16 x 16 - 320 x 224" Vertical display : 16 x 16 - 240 x 320 "16 x 16 - 240 x 304"	512 (screens)	
GT1030 (288 × 96)	Horizontal display: 16 × 16 - 288 × 96 Vertical display : 16 × 16 - 96 × 288		
GT1020 (160 × 64)	Horizontal display: 16 × 16 - 160 × 64 Vertical display : 16 × 16 - 64 × 160		

*1 The screen size enclosed by " " in the above table applies to the case where the close key and move key are displayed on the Overlap Window.

*2 X and Y indicate the screen size of SoftGOT 1000, which are set by the users.

1 Overlap Window

Up to two overlap windows can be overlapped on the base screen.
It is possible to display or hide the close key and move bar on the overlap window 1 and 2.
(The screen No. and layer of the base screen cannot be selected.)

GOT	Screen size (width × height, dots)		Max. No. of set screens
GT SoftGOT1000 (Resolution Specification) (X × Y)*1	Close key and Move key are displayed.	16 × 2 - 1918 × 1193	Two (screens)/one Base Screen (Five (screens) for only GT16)
	Close key and Move key are hidden.	16 × 2 - 1920 × 1200	
GT SoftGOT1000 (1600 × 1200)	Close key and Move key are displayed.	16 × 2 - 1598 × 1983	
	Close key and Move key are hidden.	16 × 2 - 1600 × 1200	
GT SoftGOT1000 (1280 × 1024)	Close key and Move key are displayed.	16 × 2 - 1278 × 1007	
	Close key and Move key are hidden.	16 × 2 - 1280 × 1024	
GT16**-X (1024 × 768)/ GT15**-X (1024 × 768)/ GT SoftGOT1000 (1024 × 768)	Close key and Move key are displayed.	16 × 2 - 1022 × 751	
	Close key and Move key are hidden.	16 × 2 - 1024 × 768	
GT16**-S (800 × 600)/ GT15**-S (800 × 600)/ GT SoftGOT1000 (800 × 600)	Close key and Move key are displayed.	16 × 2 - 798 × 583	
	Close key and Move key are hidden.	16 × 2 - 800 × 600	
GT16**M-V (640 × 480)/ GT15**-V (640 × 480)/ GT SoftGOT1000 (640 × 480)	Close key and Move key are displayed.	16 × 2 - 638 × 463	
	Close key and Move key are hidden.	16 × 2 - 640 × 480	
GT155**-V (640 × 480)	Close key and Move key are displayed.	16 × 2 - 638 × 463	
	Close key and Move key are hidden.	16 × 2 - 640 × 480	
GT15**-Q (320 × 240)	Close key and Move key are displayed.	16 × 2 - 318 × 223	
	Close key and Move key are hidden.	16 × 2 - 320 × 240	
GT11**-Q (320 × 240)	Close key and Move key are displayed.	Horizontal display: 16 × 2 - 318 × 223 Vertical display: 16 × 2 - 238× 303	
	Close key and Move key are hidden.	Horizontal display: 16 × 2 - 320 × 240 Vertical display: 16 × 2 - 238× 303	
GT11**-Q*BDQ (Built-in Q Bus) (320 × 240)	Close key and Move key are displayed.	16 × 2 - 318 × 223	
	Close key and Move key are hidden.	16 × 2 - 320 × 240	
GT11**-Q*BDA (Built-in A Bus) (320 × 240)	Close key and Move key are displayed.	16 × 2 - 318 × 223	
	Close key and Move key are hidden.	16 × 2 - 320 × 240	

GOT	Screen size (width × height, dots)		Max. No. of set screens
GT10**-Q (320 × 240)	Close key and Move key are displayed.	Horizontal display: 16 × 16 - 320 × 224 Vertical display: 16 × 16 - 240 × 304	Two (screens)/one Base Screen (Five (screens) for only GT16)
	Close key and Move key are hidden.	Horizontal display: 16 × 16 - 320 × 240 Vertical display: 16 × 16 - 240 × 320	
GT1030 (288 × 96)	Close key and Move key are displayed.	Horizontal display: 16 × 16 - 286 × 78 Vertical display: 16 × 16 - 94 × 271	Two (screens)/one Base Screen
	Close key and Move key are hidden.	Horizontal display: 16 × 16 - 288 × 96 Vertical display: 16 × 16 - 96 × 288	
GT1020 (160 × 64)	Close key and Move key are displayed.	Horizontal display: 16 × 16 - 158 × 47 Vertical display: 16 × 16 - 62 × 143	
	Close key and Move key are hidden.	Horizontal display: 16 × 16 - 160 × 64 Vertical display: 16 × 16 - 64 × 160	

*1 X and Y indicate the screen size of SoftGOT 1000, which are set by the users.

2 Superimpose Window

Up to two superimpose windows can be overlapped on the base screen.
(Superimpose Window 1, Superimpose Window 2)
Specify the superimpose windows to be placed over the base screen from the PLC.
Refer to the following manual for placing superimpose windows and how to specify a superimpose window.

☞ GT Designer2 Version□ Screen Design Manual

GOT	Screen size (width × height, dots)	Max. number of set screens
GT SoftGOT1000 (Resolution Specification) (X × Y)*1	16 × 2 - 1920 × 1200	Two (screens)/one Base Screen
GT SoftGOT1000 (1600 × 1200)	16 × 2 - 1600 × 1200	
GT SoftGOT1000 (1280 × 1024)	16 × 2 - 1280 × 1024	
GT16**-X (1024 × 768)/ GT15**-X (1024 × 768)/ GT SoftGOT1000 (1024 × 768)	16 × 2 - 1024 × 768	
GT16**-S (800 × 600)/ GT15**-S (800 × 600)/ GT SoftGOT1000 (800 × 600)	16 × 2 - 800 × 600	
GT16**M-V (640 × 480)/ GT15**-V (640 × 480)/ GT SoftGOT1000 (640 × 480)	16 × 2 - 640 × 480	
GT155*-V (640 × 480)	16 × 2 - 640 × 480	
GT15**-Q (320 × 240)	16 × 2 - 640 × 480	
GT11**-Q (320 × 240)	Horizontal display: 16 × 2 - 320 × 240 Vertical display: 16 × 2 - 240× 320	
GT11**-Q*BDQ (Built-in Q Bus) (320 × 240)	Horizontal display: 16 × 2 - 320 × 240 Vertical display: 16 × 2 - 240× 320	Two (screens)/one Base Screen
GT11**-Q*BDA (Built-in A Bus) (320 × 240)	Horizontal display: 16 × 2 - 320 × 240 Vertical display: 16 × 2 - 240× 320	
GT10**-Q (320 × 240)	Horizontal display: 16 × 16 - 320 × 240 Vertical display: 16 × 16 - 240 × 320	
GT1030 (288 × 96)	Horizontal display: 16 × 16 - 288 × 96 Vertical display: 16 × 16 - 96 × 288	
GT1020 (160 × 64)	Horizontal display: 16 × 16 - 160 × 64 Vertical display: 16 × 16 - 64 × 160	

*1 X and Y indicate the screen size of SoftGOT 1000, which are set by the users.

3 Key Window

The Key Window is a window for a numerical or ASCII (character) input.
When a numerical input or ASCII input object is touched, the corresponding key window is displayed.
There are two types of key window: default Key window and user-created window.
The key window type can be selected for each project (common to all base screens) or screen.
In addition, the key windows are classified according to the application, i.e., input formats: decimal input, hexadecimal input and ASCII (character) input.
The default key windows are applicable for decimal input and hexadecimal input.
For ASCII input, create and set a key window (user-created key window).

GOT	Key Window		Screen size (width × height, dots)
GT SoftGOT1000 (Resolution Specification) (X × Y)*2	Default Key Window	Input value/input range is displayed.	318 × 191
		Input value/input range is hidden.	318 × 159
	User-created Key Window		16 × 2 - 1918 × 1183
GT SoftGOT1000 (1600 × 1200)	Default Key Window	Input value/input range is displayed.	318 × 191
		Input value/input range is hidden.	318 × 159
	User-created Key Window		16 × 2 - 1598 × 1183
GT SoftGOT1000 (1280 × 1024)	Default Key Window	Input value/input range is displayed.	318 × 191
		Input value/input range is hidden.	318 × 159
	User-created Key Window		16 × 2 - 1278 × 1007
GT16**-X (1024 × 768)/ GT15**-X (1024 × 768)/ GT SoftGOT1000 (1024 × 768)	Default Key Window	Input value/input range is displayed.	318 × 191
		Input value/input range is hidden.	318 × 159
	User-created Key Window		16 × 2 - 1022 × 751
GT16**-S (800 × 600)/ GT15**-S (800 × 600)/ GT SoftGOT1000 (800 × 600)	Default Key Window	Input value/input range is displayed.	318 × 191
		Input value/input range is hidden.	318 × 159
	User-created Key Window		16 × 2 - 798 × 583
GT16**M-V (640 × 480)/ GT15**-V (640 × 480)/ GT SoftGOT1000 (640 × 480)	Default Key Window	Input value/input range is displayed.	318 × 191
		Input value/input range is hidden.	318 × 159
	User-created Key Window		16 × 2 - 638 × 383
GT155**-V (640 × 480)	Default Key Window	Input value/input range is displayed.	318 × 382
		Input value/input range is hidden.	318 × 334
	User-created Key Window		16 × 2 - 638 × 383
GT15**-Q (320 × 240)	Default Key Window	Input value/input range is displayed.	318 × 191
		Input value/input range is hidden.	318 × 159
	User-created Key Window		16 × 2 - 318 × 223

GOT	Key Window		Screen size (width × height, dots)
GT11**-Q (320 × 240)	Default Key Window	Input value/input range is displayed.	Horizontal display: 318 × 191 Vertical display : 190 × 159 (For decimal input) 222 × 159 (For hexadecimal input)
		Input value/input range is hidden.	Horizontal display: 318 × 159 Vertical display: 190 × 127 (For decimal input) 222 × 127 (For hexadecimal input)
	User-created Key Window		Horizontal display: 16 × 2 - 318 × 223 Vertical display: 16 × 2 - 238 × 303
GT11**-Q*BDQ (Built-in Q Bus) (320 × 240)	Default Key Window	Input value/input range is displayed.	Horizontal display: 318 × 91 Vertical display: 190 × 159 (For decimal input) 227 × 159 (For hexadecimal input)
		Input value/input range is hidden.	Horizontal display: 318 × 159 Vertical display: 190 × 127 (For decimal input) 222 × 127 (For hexadecimal input)
	User-created Key Window		Horizontal display: 16 × 2 - 318 × 223 Vertical display: 16 × 2 - 238 × 303
GT11**-Q*BDA (Built-in A Bus) (320 × 240)	Default Key Window	Input value/input range is displayed.	Horizontal display: 318 × 91 Vertical display: 190 × 159 (For decimal input) 227 × 159 (For hexadecimal input)
		Input value/input range is hidden.	Horizontal display: 318 × 159 Vertical display: 190 × 127 (For decimal input) 222 × 127 (For hexadecimal input)
	User-created Key Window		Horizontal display: 16 × 2 - 318 × 223 Vertical display: 16 × 2 - 238 × 303
GT10**-Q (320 × 240)	Default Key Window		128 × 160 (For decimal input) 160 × 160 (For hexadecimal input)
	User-created Key Window		Horizontal display: 16 × 16 - 320 × 224 Vertical display: 16 × 16 - 240 × 304
GT1030 (288 × 96)	Default Key Window		288 × 96
	User-created Key Window		16 × 16 - 288 × 96
GT1020 (160 × 64)	Default Key Window		160 × 64
	User-created Key Window		16 × 16 - 160 × 64

*1 The key window can be set for each project or screen.
When the settings are made for a project (Common), the same key window is usable on all screens of the project.
When the settings are made for a screen (Screen Property), the key window can be used in preference to that for each project.

*2 X and Y indicate the screen size of SoftGOT 1000, which are set by the users.

4 Dialog Window

The dialog window is a window for displaying the user-created dialog instead of the system dialog.
The dialog window can be displayed by controlling the dialog window Switching device.
For specifying display format of the dialog window screen, refer to the following manual.

☞GT Designer2 Version□Screen Design Manual

GOT	Screen size (width × height, dots)	Max. No. of set screens	
		Project unit	Screen unit
GT SoftGOT1000 (Resolution Specification) (X × Y)*1	16 × 2 - 320 × 240	8 screen	6 screen
GT16**-X (1024 × 768)/ GT15**-X (1024 × 768)/ GT SoftGOT1000 (1024 × 768)	16 × 2 - 320 × 240		
GT16**-S (800 × 600)/ GT15**-S (800 × 600)/ GT SoftGOT1000 (800 × 600)	16 × 2 - 320 × 240		
GT16**M-V (640 × 480)/ GT15**-V (640 × 480)/ GT SoftGOT1000 (640 × 480)	16 × 2 - 320 × 240		
GT155*-V (640 × 480)	16 × 2 - 320 × 240		
GT15**-Q (320 × 240)	16 × 2 - 320 × 240		
GT11**-Q (320 × 240)	Horizontal display: 16 × 2 - 320 × 240 Vertical display: 16 × 2 - 240 × 320		
GT11**-Q*BDQ (Built-in Q Bus) (320 × 240)	Horizontal display: 16 × 2 - 320 × 240 Vertical display: 16 × 2 - 240 × 320		
GT11**-Q*BDA (Built-in A Bus) (320 × 240)	Horizontal display: 16 × 2 - 320 × 240 Vertical display: 16 × 2 - 240 × 320		

*1 X and Y indicate the screen size of SoftGOT 1000, which are set by the users.

6.1.4 Report Screen

The report screen is a screen for creating the format output by the report function.
Up to eight screens can be created in a project.
For creating and specifying the report screen, refer to the following manual.

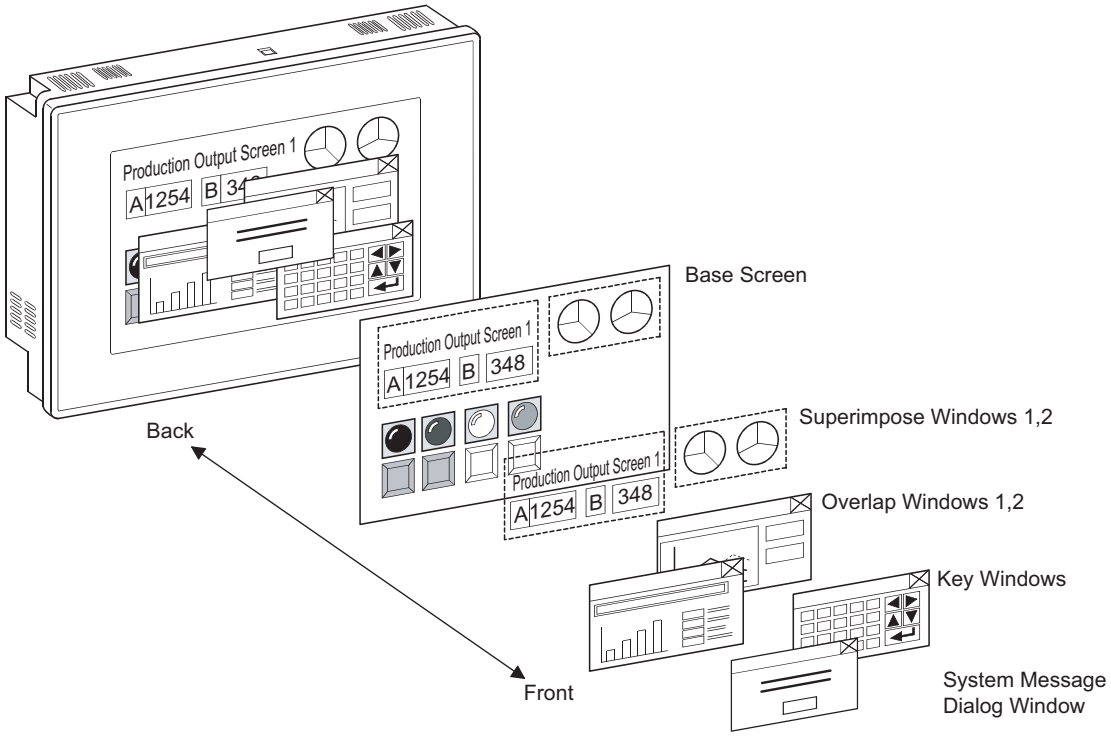
☞GT Designer2 Version □Screen Design Manual

6.2 Screen laying

The base screens and various windows are layered by type and displayed as shown below.
Refer to the following manual for details.

☞ GT Designer2 Version□ Screen Design Manual

6.2.1 Screen laying



Point

Screen creation points

(1) To display the screens
Draw objects (text, graphics, etc.) on each screen.

(2) To switch the screen
When switching the screen on the GOT, be sure to make the settings for screen switching.
The GOT switches the base screen according to the touch switch operation or the current value of the screen switching device.
(Specify the screen switching device for each project using GT Desginer2.)
Refer to the following manual for details of the touch switches for screen switching and the screen switching device setting (☞ Section 7.14 Setting Screen Switching Device).

☞ GT Designer2 Version□ Screen Design Manual

(3) Screen No. setting
The base screens and window screens need not be numbered in serial order from No. 1, 2, 3.....
Some screen No. can be skipped for the future use, if there is a possibility that screens may be increased.
At power-on, the GOT displays the lowest No. of the registered base screens.

MEMO

7. CREATING AND EDITING THE SCREEN (PROJECT DATA)

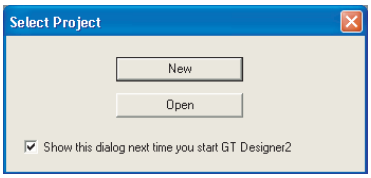
7.1 Selecting Project at the Start of GT Designer2

7.1.1 Selecting project at the start of GT Designer2

At the start of GT Designer2, the project selection dialog box is displayed.
Select whether a project is newly created or existing project data is edited.

1 From the PC start menu, select [Start] → [All Programs] → [MELSOFT Application] → [GT Works2] → [GT Designer2] to start the GT Designer2.

2 The Select Project dialog box is displayed.



Item	Description
New	Click this to create a new project.
Open	Click this to edit an existing project data.
Show this dialog next time you start GT Designer2	When you do not want to display this dialog box at the next start of the GT Designer2, uncheck this.

3 Proceed to either of the following operations according to the selected item.

New: Set [System Environment] of a new project.

☞ Section 7.2 Creating a New Project

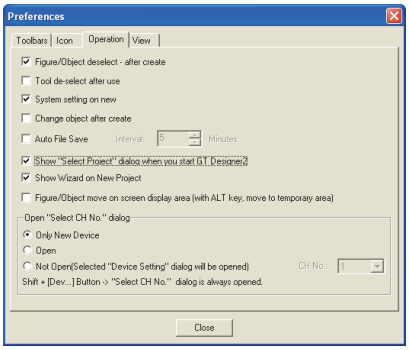
Open: Specify the place where the project data to be edited is stored.

☞ Section 7.3.1 Opening the project data

Point

If Select Project dialog box is not displayed at the time of GT Designer2 start up. Set the following.

1. Choose the [Project] → [Preference...] Operation tab.
2. Put a check mark in "Show Select Project dialog when you start GT Designer2" On the Operation tab within the Preference dialog box.



3. Click the Close button.

7.2 Creating a New Project

7.2.1 Creating a new project

When a new project is created, the settings can be done using a wizard, or not using a wizard.

1 Using a wizard

On the Operation tab in the Preferences dialog box, if the "Show Wizard on New Project" box is unchecked, the New Project Wizard does not start.

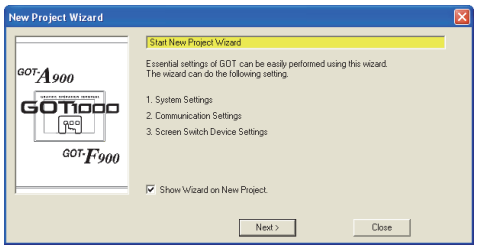
When the wizard is used, select the Operation tab at "Project" → "Preferences..." and check the "Show Wizard on New Project" box.

Select Project



New

New Project Wizard



Next>

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1 The screen on the left is displayed when GT Designer2 is started.

Click the New button to create a new project.

2 The initial screen of the Start New Project Wizard is displayed.

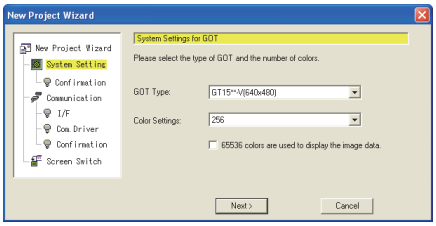
Next> button:The wizard advances through each setting screen.

Close button:Click this to cancel the wizard.

* If "Show Wizard on New Project" box is unchecked, the wizard will not appear the next time a new project is created.

(From previous page)

New Project Wizard



Next>

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3 The screen on the left (System Settings for GOT) is displayed, so select the GOT type to be used and color setting.

Item	Contents
GOT Type	Select the appropriate GOT type to be used. *1
Color Settings	Select a display color that matches the selected GOT type. On the GT Designer2, usable colors are specified.
65536 colors are used to display the image data. GT16 GT15 GT Soft GOT1000	Check this when importing BMP or JPEG format data at 65536 colors. If this is unchecked, the number of colors corresponding to the selected color setting will be imported . *2
Format GT10 GT11	Selects the format.

*1 When using GT15□□VN, select GT15**-V at the GOT type. When using GT11□□-HSQ, select GT11**-Q at the GOT type.

*2 For GOTs that can display 65536 colors, refer to the following.

☞ GT15 User's Manual

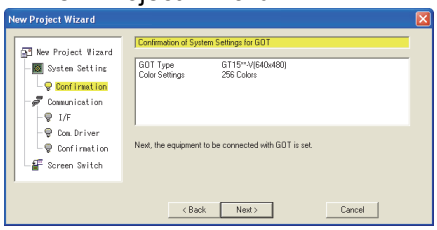
☞ GT16 User's Manual (Hardware)

Next> button : Advance to the next screen.

Cancel button : Cancel the settings and quit the wizard.

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New Project Wizard



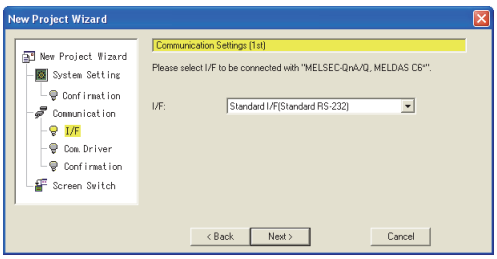
Next>

New Project Wizard



Next>

New Project Wizard



Next>

(To next page)

4 The screen on the left (Confirmation of System Settings for GOT) is displayed. Confirm the settings.

Back button:Go back to the previous screen.

Next> button:Advance to the next screen.

Cancel button:Cancel the settings and quit the wizard.

5 The screen on the left (Communication Settings (1st)) is displayed.

Select the device to be connected to GOT

Item	Contents
Controller	Select GOT and the connecting controller. On GT Designer2, devices must be set within the device range selected here. If multiple controllers are connected to a single interface (RS-485, network connection), select the controller that has the widest device range among the controllers to be connected.

Back button:Go back to the previous screen.

Next> button:Advance to the next screen.

Cancel button:Cancel the settings and quit the wizard.

6 The screen on the left (Communication Settings (1st)) is displayed.

Select the I/F to connect the controller.

Item	Contents
I/F	Select the GOT interface to connect the controller.

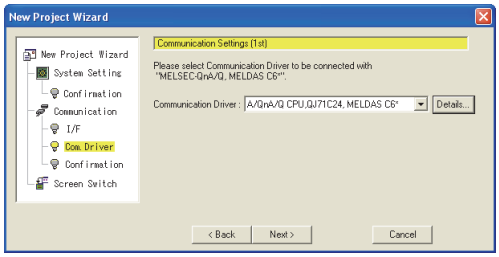
Back button:Go back to the previous screen.

Next> button:Advance to the next screen.

Cancel button:Cancel the settings and quit the wizard.

(From previous page)

New Project Wizard



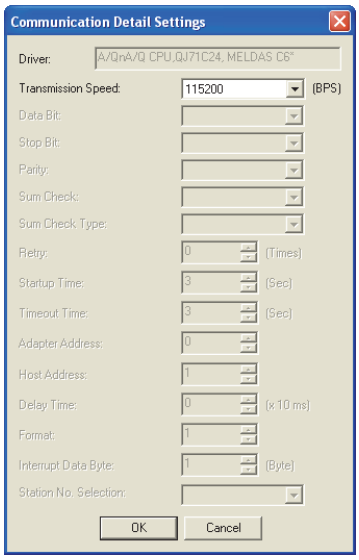
Next>

7 The screen on the left (Communication Settings (1st)) is displayed.

Select the communication driver to be used.

Details... button:The dialog for the selected communication driver's Communication Detail Settings will be displayed.
Each communication-related setting can be set on the Communication Detail Settings.

Communication Detail Settings Dialog Display Example



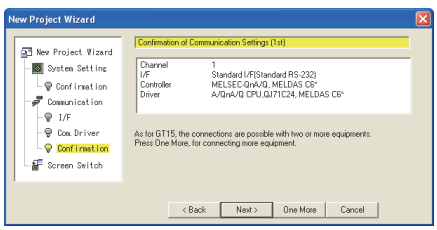
• Depending on the selected communication driver, settings that cannot be set will be displayed in gray.

Back button:Go back to the previous screen.

Next> button:Advance to the next screen.

Cancel button:Cancel the settings and quit the wizard.

New Project Wizard



Next>

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8 The screen on the left (Confirmation of Communication Settings (1st)) is displayed.
Confirm the settings.

Back button:Go back to the previous screen.

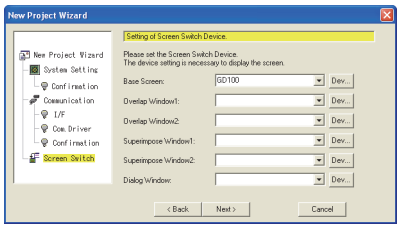
Next> button:Advance to the next screen.

One More button:When multi-channels are in use, for the 2nd and later controller, Communication Settings (2nd) (Controller, I/F, and Communication Driver) screen will be displayed.

Cancel button:Cancel the settings and quit the wizard.

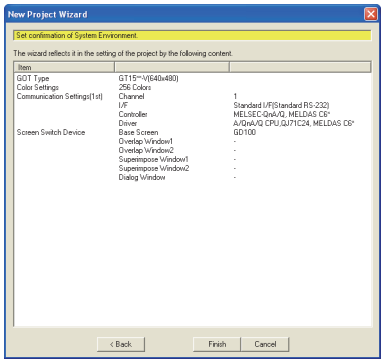
(From previous page)

New Project Wizard



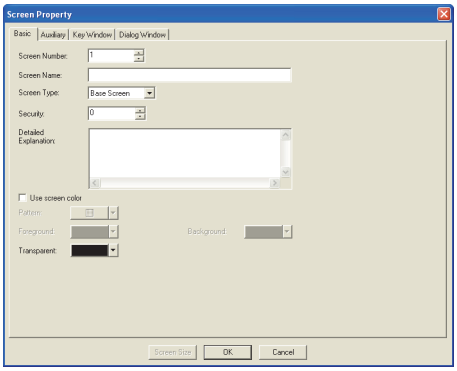
Next>

New Project Wizard



Finish

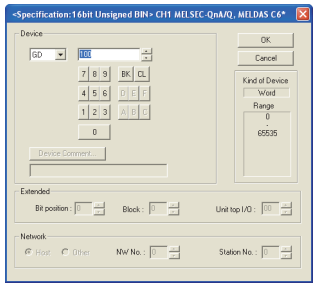
Screen Property



9 The screen on the left (Setting of Screen Switch Device) is displayed.

Click the Dev... button and set the switching device displayed at the GOT.
Set the Overlap Window and Superimpose Window screen switching device if necessary.

Device Setting dialog box display example



Back button:Go back to the previous screen.

Next> button:Advance to the next screen.

Cancel button:Cancel the settings and quit the wizard.

10 The screen on the left (Set Confirmation of System Environment) is displayed.
Confirm the settings.

Back button:Go back to the previous screen.

Finish button:Complete making settings using the wizard, and the screen property dialog box is displayed.

Cancel button:Cancel the settings and quit the wizard.

11 The screen property dialog box is displayed.
Input the screen home.

12 Click the OK button to create base screen 1.

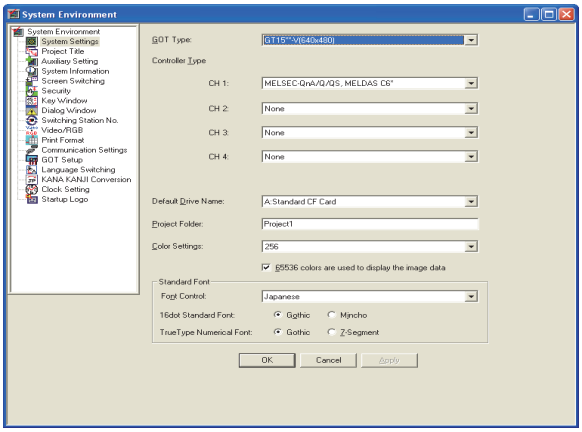
2 Without using a wizard

1 Perform either of the following operations.

- Click (New).
- Choose the [Project] → [New] menu.

2 As the System Environment dialog box appears, make the System Settings.

☞ For items other than "System Settings", refer to the "GT Designer2 Version ☐ Screen Design Manual".



Item	Description
GOT Type	Select the GOT type to be used.
Format 	Select the display format. Select "Vertical" to rotate the screen 90 degrees clockwise.
Controller Type	Select the controller type to be connected to the GOT. On GT Designer2, the device settings are to be made within the device range of the controller type selected here. When accessing multiple controllers, select the controller type that has the largest device range among the controllers to be accessed.
Default Drive Name	Set the default drive name of the each function.
Project Folder	Specify the name of the folder where the project data is stored. Always set this item. Applicable characters: ASCII characters*1, 1 to 32 characters
Color Settings	Select the number of colors used in the screen that will be displayed on the GOT. Select the option applicable to the GOT type. The options applicable to GT Designer2 are included.
65536 colors are used to display the image data 	Check this item to import BMP, JPEG format figure data in 65536 colors. When this item is not checked, the data will be imported with the number of colors set in Color Settings. *3
Standard Font	Font control : Select among Japanese/Japanese (supporting Europe)/Chinese (Simplified)/Chinese (Simplified)(supporting Europe)/Chinese (Traditional)(supporting Europe). For details, refer to Section 8.1.1 Data types and storage destinations. 16 dot Standard Font: Select the font installed in the GOT. *4

*1 When using GT15☐☐-VN, select GT15**-V at the GOT type. When using GT11☐☐HS-Q, select GT11**-Q at the GOT type.
*2 The following shows the applicable ASCII characters and inapplicable folder names.
Applicable ASCII characters: #, $, %, &, ', (,), +, -, ., 0 to 9, =, @, A to Z, [,], ^, _, a to z, {, }, ~, space
However, "," is inapplicable.
Inapplicable folder names: COM1 to COM9, com1 to com9, LPT1 to LPT9, lpt1 to lpt9, AUX, aux, CON, con, NUL, nul, PRN, prn, CLOCK$, clock$, any name that begins with G1 or g1, Name including "." at the beginning or end.
*3 For the GOT on which 65536 colors can be displayed, refer to the following.
☞ GT15 User's Manual, GT16 User's Manual (Hardware)
*4 If a font that is not installed in GOT is selected, an installed font will be displayed.

Point

Changing the GOT type

Refer to the following manual for precautions on GOT type change.

☞ GT Designer2 Version □ Screen Design Manual

3 After System Settings are completed, click the OK button .

4 A "Communication Settings" message will be displayed.

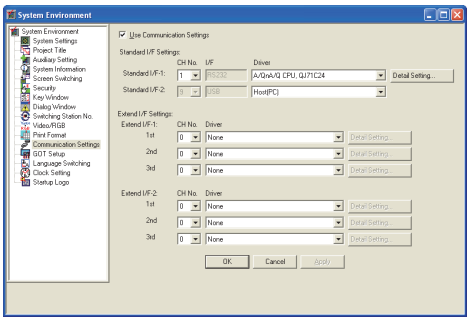


Clicking the Yes button will allow the user to configure "Communication Settings".

Clicking the No button will display screen properties.

5 Click the Yes button to configure the "Communication Settings".

☞ GT Designer2 Screen Design Manual



Clicking the OK button will display screen properties.

☞ Section 7.5 Creating a New Screen

To cancel "Communication Settings" and close the "System Environment" dialog box, click the Cancel button.

3 Setting the screen switching device

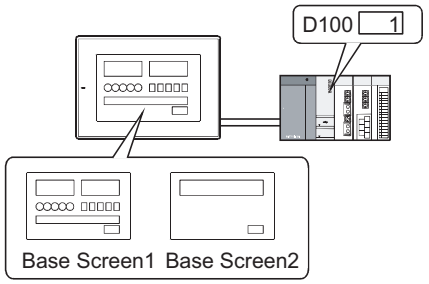
(1) What is screen switching device?

A screen switching device is a word device used to switch the screen on the GOT.

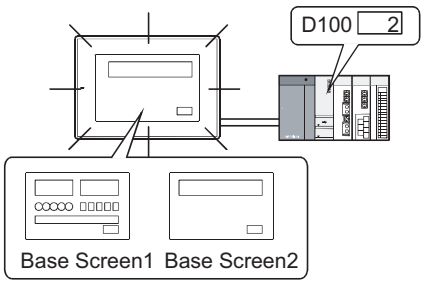
The GOT switches to the screen of the numeric value stored in the screen switching device.

Use the screen switching device for screen switching only.

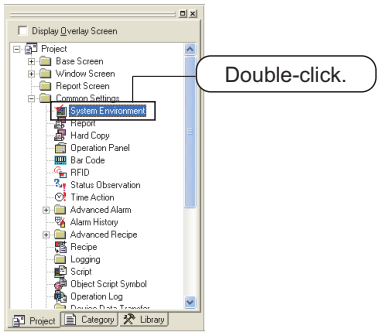
When the value of the screen switching device is 1, the GOT displays Base Screen 1.



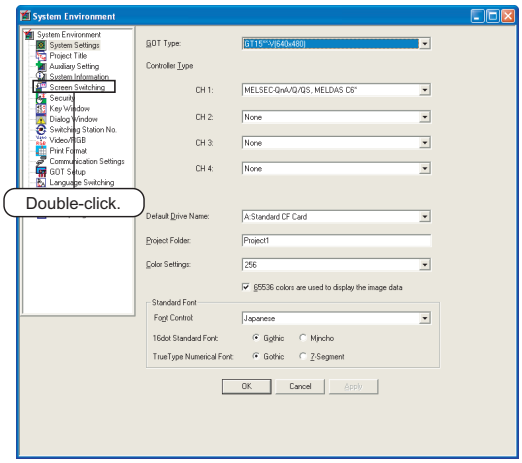
When the value of the screen switching device turns from 1 to 2, the GOT displays Base Screen 2.



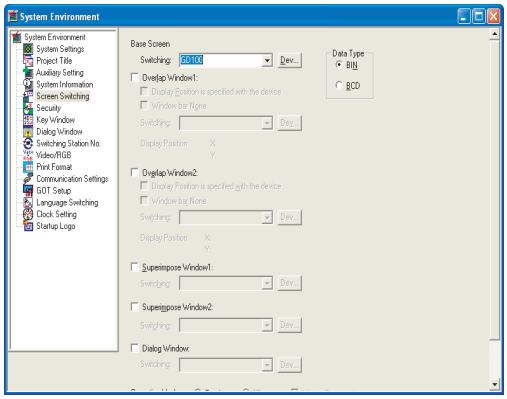
(2) Screen switching device setting method



1 Double-click [Common Settings] - [System Environment] in the project workspace.



2 As the System Environment dialog box is displayed, double-click [Screen Switching].



3 As the screen switching device setting dialog box appears, set the switching device for the base screen.

Settings

Base Screen

Switching : D100

4 Clicking the OK button completes the setting of the screen switching device.

7.3 Opening/Closing the Project Data

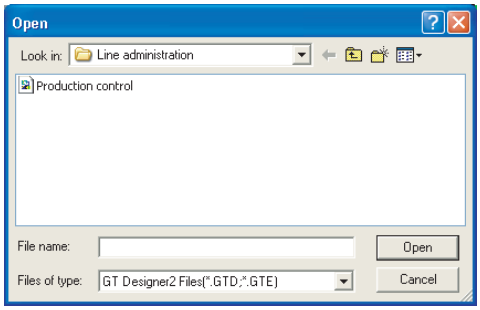
7.3.1 Opening the project data

Read the saved project data.

Perform either of the following operations.

- Click (Open).
- Choose the [Project] → [Open] menu.

2 The Open dialog box appears.



Item	Description
Look in	Select the place where the project is stored.
File name	Set the project name to be opened.
File of type	Select the project type to be opened. • GT Designer2 Files(*.GTD,*.GTE); The GT Designer2 project data will be opened. - *.GTD : GOT-900 series - *.GTE : GOT1000 series • GT Designer Files(A9GOTP.GOT); The GT Designer project data for GOT-900 series will be opened. • DU-Win Files(*.DUP); The DU/Win project data for GOT-F900 series will be opened.*1 ☞ Appendix 3 Utilizing the Existing Data • GOT1000 Binary Files(*.G1); The project data for GOT1000 series saved in binary format will be opened. This binary format file is the project data equivalent to the *.GTE file of GT Designer2. Select this file format mainly when opening the project data copied in the CF card using the utility function of the GOT.

1 For details of the project data conversion from GOT-F900 (.DUP) to GT11, refer to Project Data Conversion Summary.

Point Data within a memory card

Do not directory edit the project data within a memory card, i.e., project data transferred from GT Desinger2 to a memory card or uploaded from the GOT to a memory card, as these operations may cause the following problems:

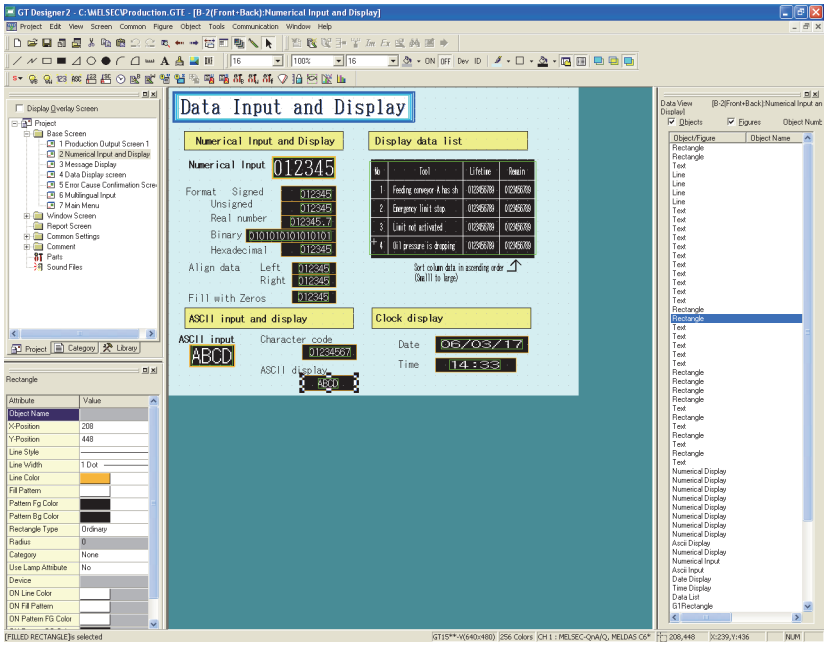
- The data cannot be transferred to the GOT.
- The GOT cannot monitor correctly.

When editing the project data within a memory card, copy the data from the memory card to a PC, and then edit them.

Remark Directly opening the project

Double-click the project data (*.GTE) to start GT Designer2 with the project data open.

3 Click the Open button to open the specified project.



7.3.2 Closing the project

Closing the project

1 Choose the [Project] → [Close] menu.

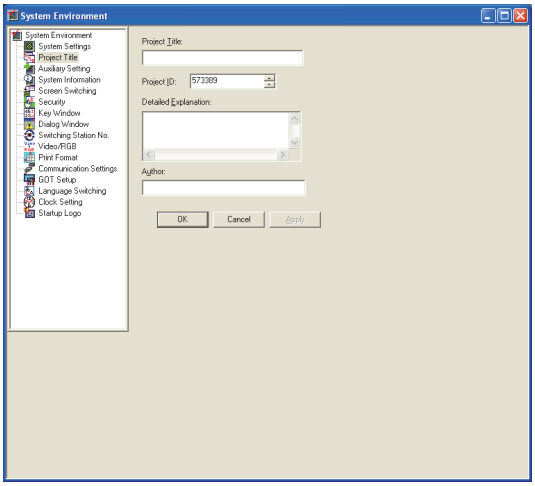
2 The open project data is closed.

7.4 Setting the project title

Set the details of the project (Project ID, Detailed Explanation, Author, etc.).

7.4.1 Project title setting procedure

1. Choose the [Common] → [System Environment] menu.
2. Double-click "Project Title" under System Environment.
3. As the Project Title dialog box appears, set the following items and click the OK button.



Item	Description
Project Title	Set the project title as necessary. Up to 32 characters can be entered.
Project ID*1	The project ID can be set within the range of 1 to 4294967295 by the user, although it is automatically assigned when the project data is created.
Detailed Explanation	Enter the explanation for the project as necessary. Up to 512 characters can be entered. (A line feed is counted as two characters.)
Author	Set the author name as necessary. Up to 8 characters can be entered.

*1 Project ID
When a part of the screen in the project data is downloaded, the Project ID is verified with the one registered in the GOT. If it results in the ID mismatch, a message appears to urge the user to take caution.
It is recommended to register different Project IDs for different machines, as this allows the caution message to appear when a part of the project data with an incorrect ID is downloaded by mistake. However, the project data can be downloaded even if the Project ID is incorrect.

7.5 Creating a New Screen

Create a new Base Screen, Window Screen or Report Screen.
For creating the Report Screen, refer to the following manual.

☞ GT Designer2 Version□Screen Design Manual

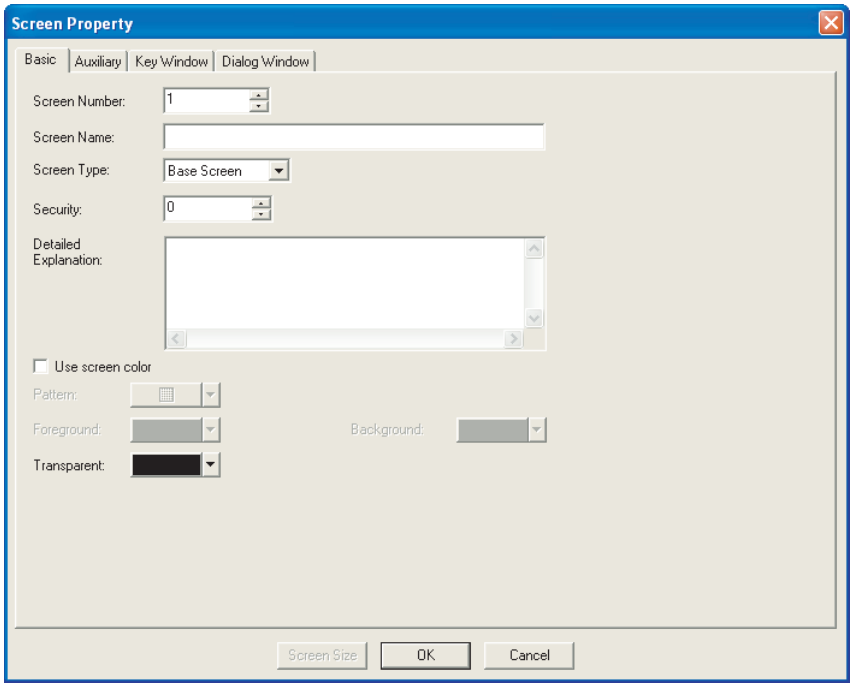
7.5.1 Screen creation procedure

1. Perform either of the following operations.
   - Click (New Base Screen).
   - Select [Screen] → [New Screen] → [Base Screen]/[Window Screen] menu.
2. The Screen Property dialog box is displayed.

   After setting the items below, click the OK button. The screen is created.

■ Basic tab

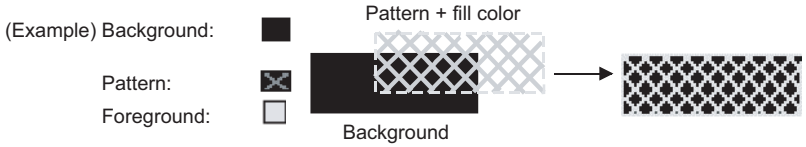
Screen Number, Name and Type of the new screen are set.



Basic | Auxiliary | Key Window | Dialog Window

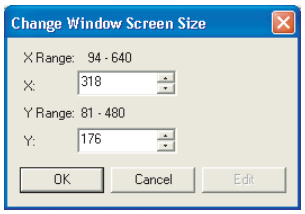
Item	Description
Screen Number	Screen number is selected.
Screen Name	Screen name is input. Set the text within 32 characters.
Screen Type	Screen type is selected. Base Screen: Base screen is created. Window Screen: Window screen is created.
Security	Security level (0 to 15) of each screen is set. When the security function is not used, set to "0." Refer to the manual below for details of the security function. ☞ GT Designer2 Version ☐ Screen Design Manual

Basic | Auxiliary | Key Window | Dialog Window

Item	Description
Detailed Explanation	Enter the explanation for the new screen as necessary. Up to 512 characters can be entered. (A line feed is counted as two characters.)
Use screen color Pattern Foreground Background	Set the colors of the whole screen. The pattern will be displayed in the fill color on the background. 
Transparent	Specify the color to be transparent among all colors assigned to the objects or figures placed on the front layer. The back layer can be seen through the parts specified as transparent. Refer to the following manual for the transparent color and layer display. GT Designer2 Version ☐ Screen Design Manual
Screen Size*1	This item is selectable only when creating a window screen. Set the window screen size.

*1 Screen Size

Set the following items to determine the window screen size.

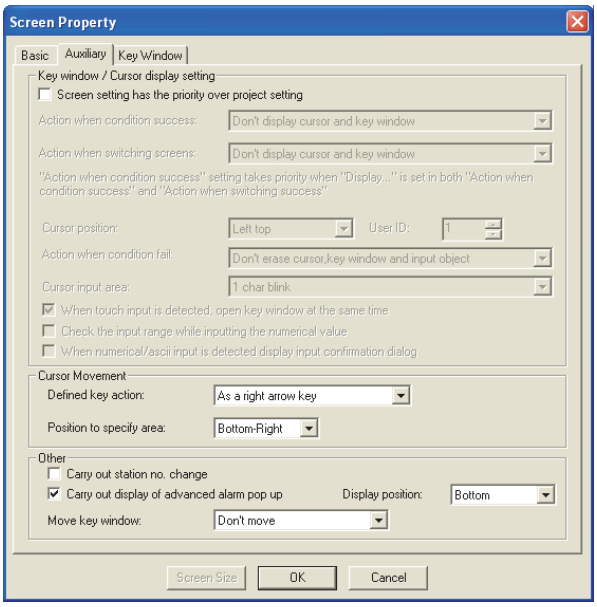


Item	Description
X	Horizontal window screen size is set.
Y	Vertical window screen size is set.
Edit	A handle for size change is displayed on the screen. Move the cursor to the handle position and drag it to change the size. When the screen becomes the desired size, click it to determine the window screen size. This cannot be set when the screen is newly created. (This can be selected for editing after creation of the screen.)

■ Auxiliary tab

Settings of the cursor, key window or data input for the screen which is newly created, and use/non-use of some object functions are specified.
Settings here can be changed after creation of the screen.
Refer to the manual below for details of the settings.

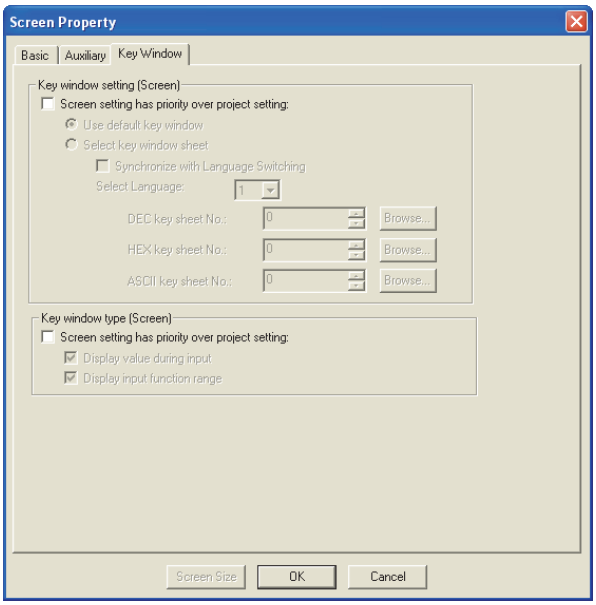
☞ GT Designer2 Version □ Screen Design Manual



■ Key Window tab

The key window which is used on the new screen is set.
Settings here can be changed after creation of the screen.
Refer to the manual below for details of the settings.

☞ GT Designer2 Version □ Screen Design Manual



7.6 Opening/Closing Screen

7.6.1 Opening screen

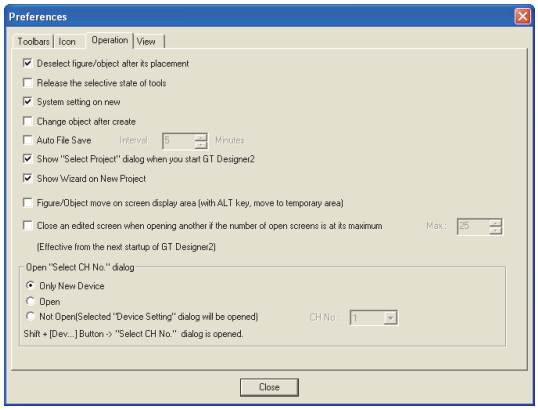
Open a screen registered in the project being edited.

Point

Number of screens that can be opened at a time

Maximum 25 screens can be opened.
When changing the maximum number of screens that can be opened at a time, set as follows.
Changed number of screens will be enabled at the next startup.

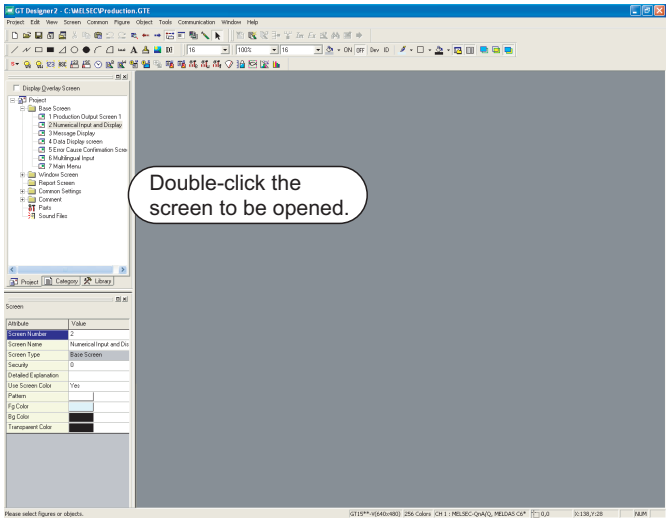
1. Select the [Project] → [Preferences...] operation tab.
2. Check the "Close an edited screen when opening another if the number of open screens is at its maximum (Effective from the next startup of GT Designer2)" box on the operation tab in the Preferences dialog box.



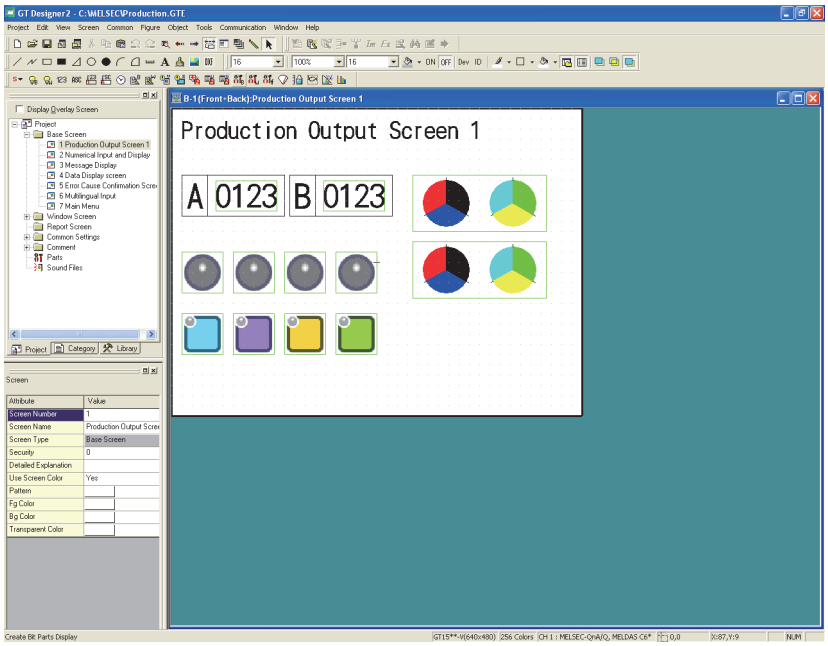
3. Click the Close button.

1 Opening screen from the workspace

1 Double click the desired screen for opening in the project workspace.



2 The screen opens.



2 Opening screen from menu

1 Perform either of the following operations.

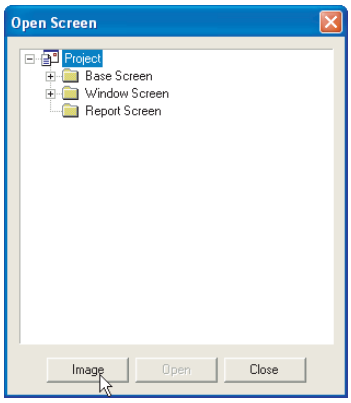
•Click (Open Screen) of toolbars (Main).

•Select [Screen] → [Open...] from the menu.

2 The dialog box to open the screen is displayed.

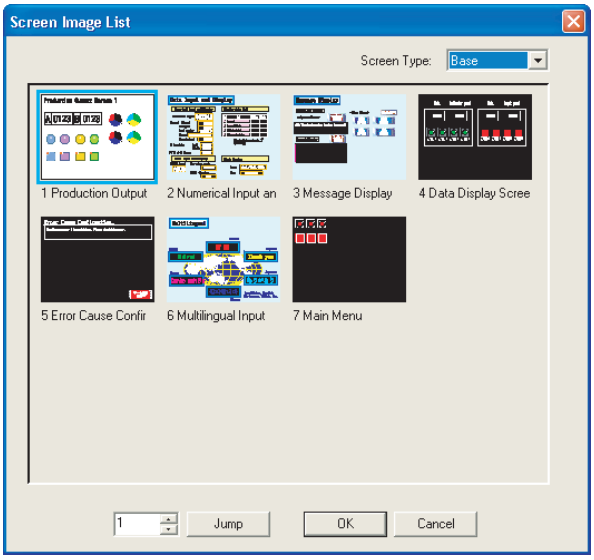
Click the Image... button.

(Double click the desired screen directly for opening.)



3 The Screen Image List dialog box is displayed.

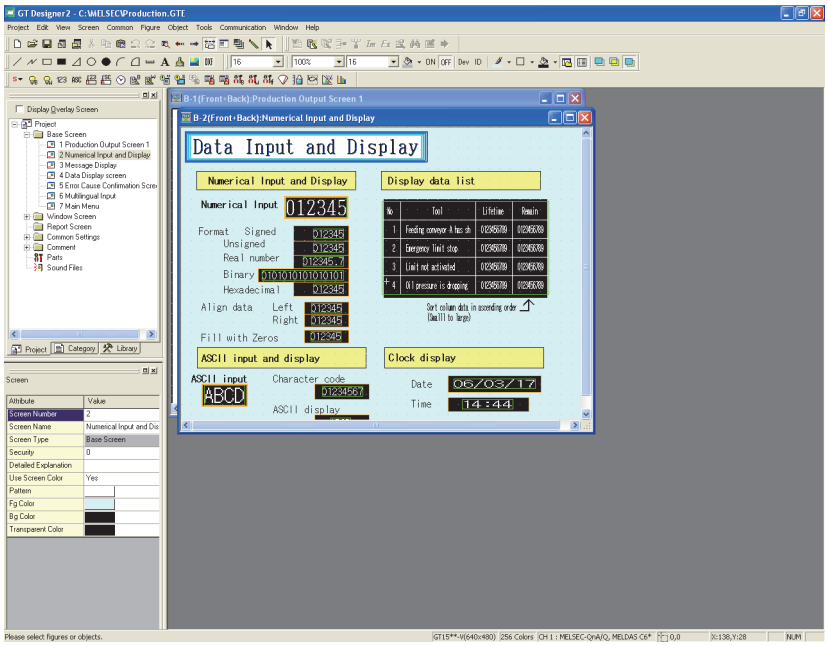
Double click the desired screen.



Item	Description
Screen Type	Screen type for opening is selected. • Base Screen: Base Screen is displayed. • Window Screen: Window Screen is displayed. • Report Screen: Report Screen is displayed.
Screen Image List	Screen image is displayed in a list. Double click each screen to open the screen.
Jump	The screen number is selected to open the screen.

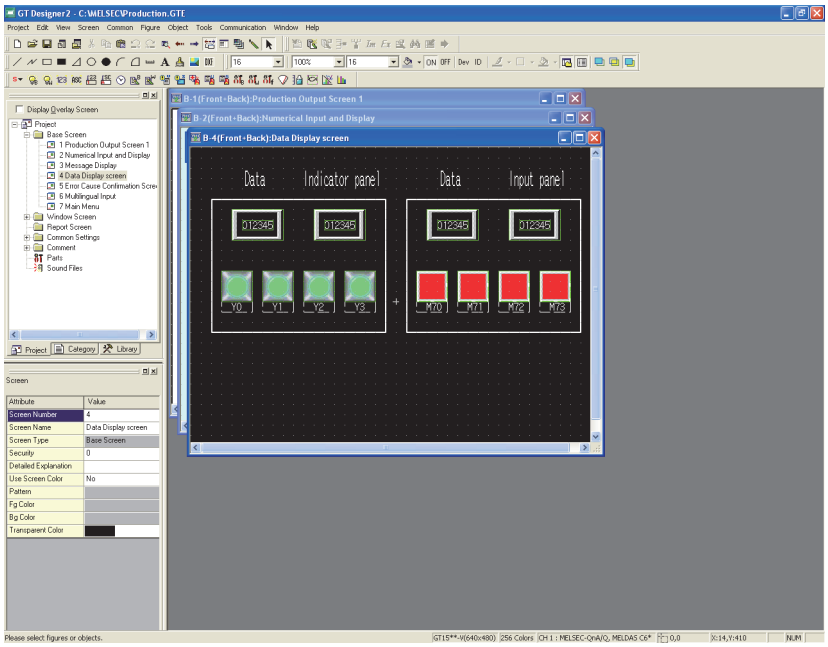
3 Opening screen continuously

1 Select the drawing screen of the desired type (Base Screen/Window Screen) for continuous opening and make the screen active.



2 Click (UnOpened Screens) on the toolbar to make it "pressed" .

3 Click the (Previous Screen) or (Next Screen) button to open the same type screen of the active screen.



7.6.2 Closing screen

The open screen is closed.

1 Perform either of the following operations.

- Select [Screen] → [Close] from the menu.
- Click ☒ on the title bar of each screen.

2 The open screen is closed.

Hint! Closing all screens.

Select [Screen] → [Close All] from the menu to close all open screens.

7.7 Basic Operations of Drawing Screen (Editor)

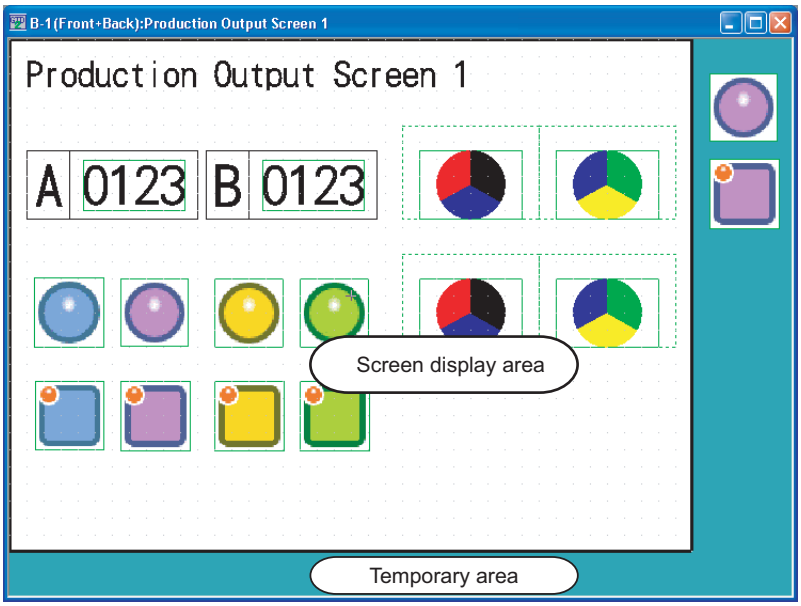
This section explains the basic operations on the drawing screen (editor).
For details of figures and objects, refer to the following section or manual.

☞ Figures: Chapter 11. DRAW AND EDIT

☞ Objects: "GT Designer2 Version □ Screen Design Manual"

7.7.1 Object placement area and display area on GOT

The drawing screen editor for Base Screen and Window Screen provides two areas: screen display area and temporary area.
The temporary area is the area for temporary placement of objects and figures during screen layout change. This feature enables the screen layout to be smoothly changed.



Item	Description
Screen display area	Area displayed on the GOT.
Temporary area	Not displayed on the GOT. In this area, however, figures and objects can be placed during screen creation.

Point

The figures and objects temporarily saved in the temporary area are included in the transfer size of the base screen. After saving the project, delete figures and objects from the temporary area before downloading to the GOT.

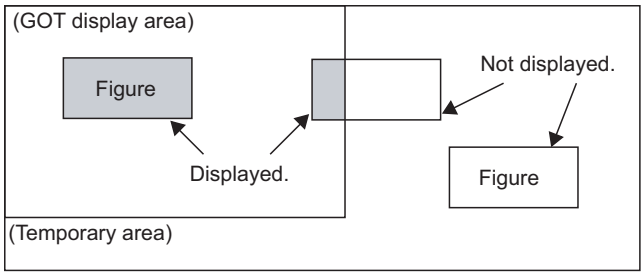
Point

Figures or objects placed on the area boundary

When placed on a boundary between the GOT display area and temporary area, figures or objects will be handled as described below.

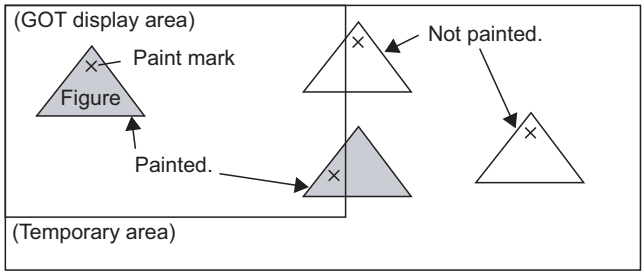
- Figures

  The all figures inside the GOT display area will be displayed.



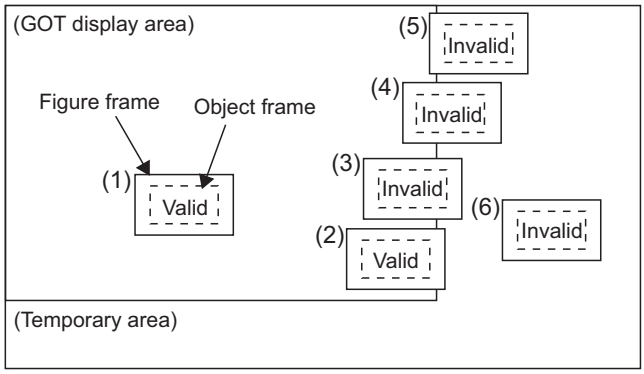
- Paints

  When paint marks ("X" shown below) are placed in the temporary area, the marked figures will not be painted.

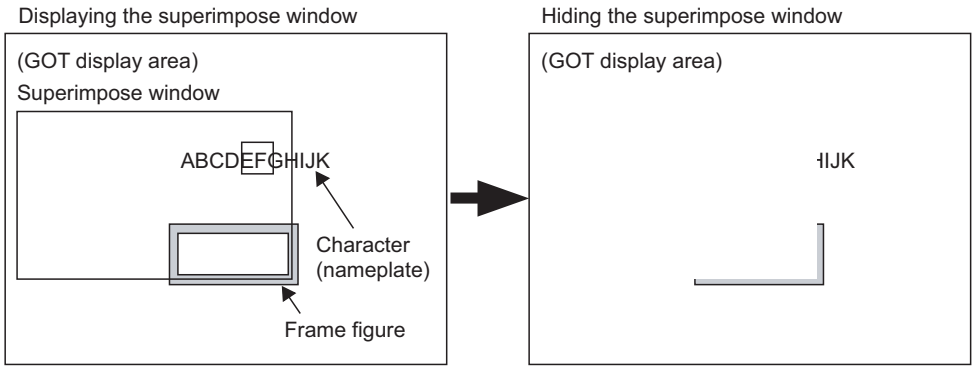


- Objects

  The object is displayed if its entire object frame is inside the GOT display area (1, 2), but not displayed if any part of its object frame is outside the GOT display area (3, 4, 5, 6). The conditions for displaying historical trend graphs are different from those for displaying other graphs. If a historical trend graph scale is forced off the screen the entrie graph cannot be displayed. (Other graphs can be displayed because the scale area of other graphs is not included in the object area.).



- When using Superimpose Window
  If a character (nameplate) or frame figure object arranged in the window screen protrudes to the temporary area, the protruding part is left on the base screen after the superimpose window is displayed then hidden.
  (Switching the base screen erases the remaining character (nameplate) or frame figure.)



When arranging an object, display "object" and "object frame" with GT Designer 2 to check for protrusion in the temporary area.
Or use the data check function of GT Designer 2 to check.
When performing the above check, select the longest comment among those, which are displayed as a character string (nameplate), in the preview number.

7.7.2 Layer display switching operation

This section explains how to switch the layer of the drawing screen.
Layer display switching is performed to overlap objects. Normally select "Front and Back" for drawing.
Refer to the following manual for object overlapping.

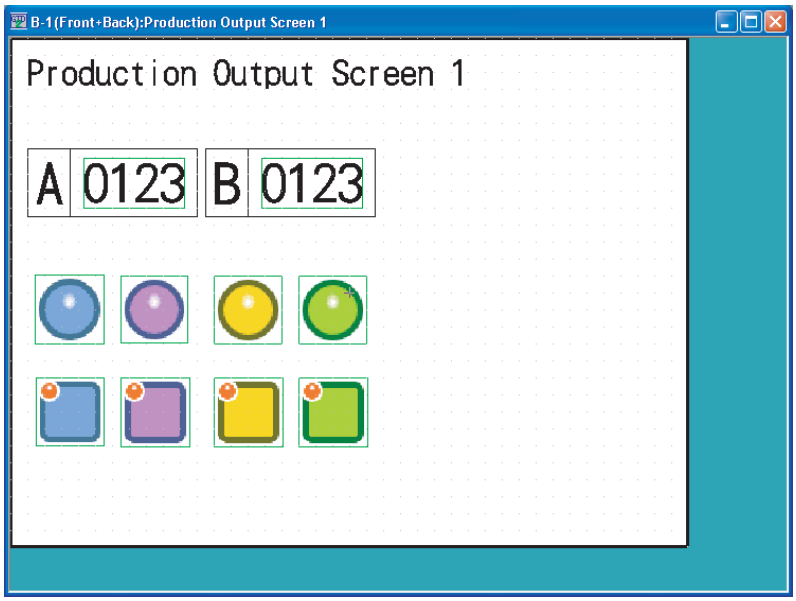
☞ GT Designer2 Version □ Screen Design Manual

1. Choose [View] → [Display with Layer].

2. Select the layer to be displayed.

   (1) When [All Screens] is selected
   Make the display settings (Front and Back, Front, or Back) of the selected layer for all drawing screens (editors).

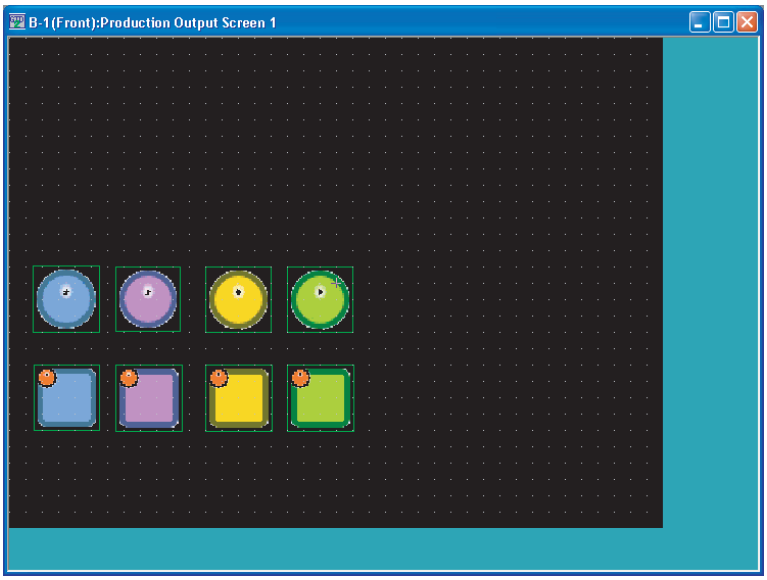
   (2) When [Front and Back] is selected
   All figures and objects placed on the screen will be displayed.
   (The front and back layers will be superimposed.)



(3) When [Front] is selected

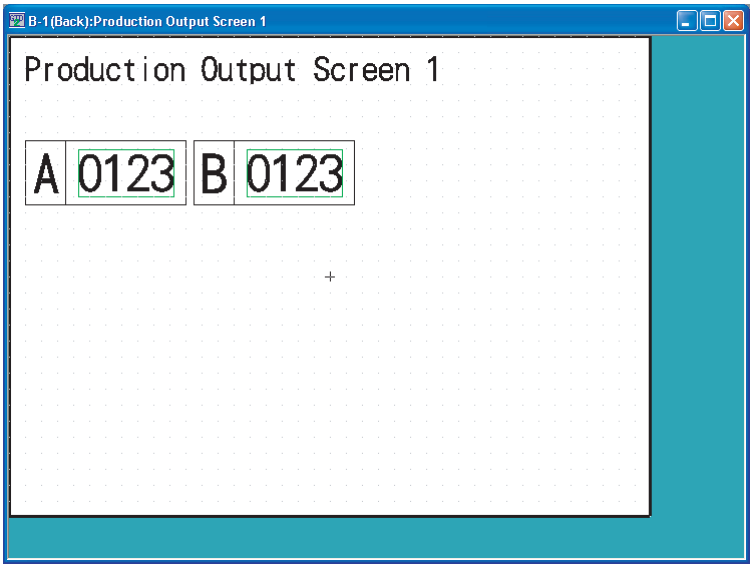
Only the objects placed on the front layer will be displayed.

Note that the screen background color will not be shown.



(4) When [Back] is selected

Only the figures and objects placed on the back layer will be displayed.



Hint!

When objects are overlapped

If objects are overlapped each other on the same layer, the object positions may be reversed on the GOT main unit.

To fix the positions on the GOT main unit, use both the front and back layers to place the objects.

7.7.3 Basic operations for object placement

This section explains object placement.
Refer to the following manual for object setting.

☞ GT Designer2 Version □ Screen Design Manual

1 Placing figures and objects

The operation for placing figures are provided here.

1 Perform either of the following operations.

- From the [Object] menu, select the object to be placed.

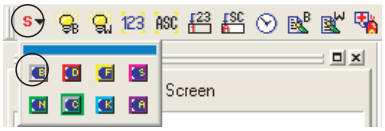
  Example) Bit switch object

  Choose [Object] → [Switch] → [Bit Switch].
  The cursor changes to + (placement mode).

- On the object toolbar, click the object to be placed.

  Example) Bit switch object

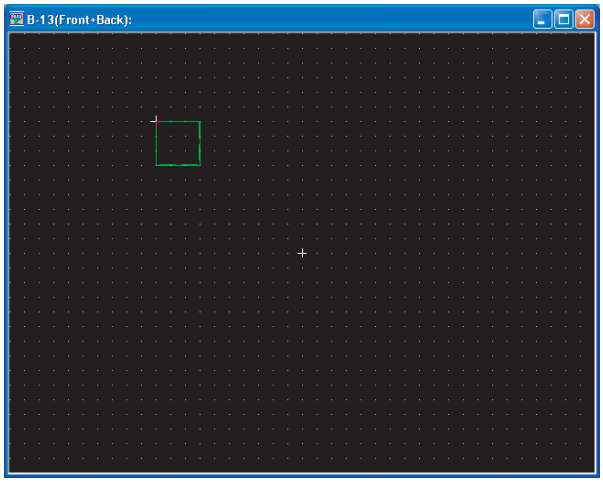
  Click on the Object toolbar, and click [Bit Switch] from among the submenu items.
  The mouse cursor changes to + (placement mode).



2 Move the cursor to the desired position, and click the mouse to place the object.

Objects of the same type can be placed consecutively by clicking the mouse repeatedly.

When stopping this operation, right-click the mouse after placing the object to release the cursor from the placement mode.



2 Layers (front, back) where figures and objects can be placed

Refer to the following manual for the layers where figures and objects can be placed.

☞ GT Designer2 Version □ Screen Design Manual

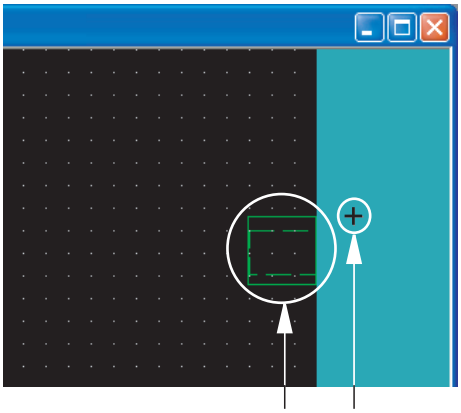
Point

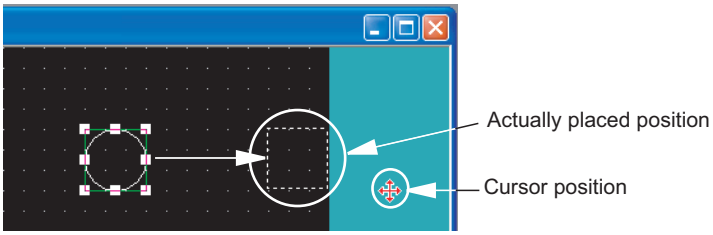
Placing and moving a figure or object

If this action is performed while holding down the Alt key, figure or object can only be placed or moved within the screen display area. If a figure or object is to be placed in the temporary area, it will be placed on the right or lower edge of the screen display area.

In addition, the setting to move a figure or object to the temporary area can be made in the preference dialog.

☞ Section 5.4.3 Customizing the drawing environment of GT Designer2





7.7.4 Figure drawing/text input

The following explains how to draw a frame line and text.

1 How to draw a frame line

An example of drawing a rectangle is provided here.
Refer to the following section for details of figure drawing and text input.

Section 11.1.1 Drawing figures

1 Click "Rectangle" on the Figure toolbar.
The mouse cursor changes to +.

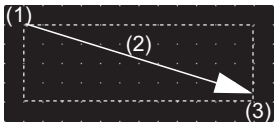


2 Draw a rectangle.

(1) Left-click at the starting point. (1 below)

(2) Drag the mouse to move the cursor to the end point. (2 below)

(3) Releasing the left button of the mouse draws a rectangle. (3 below)
(Then, right-click the mouse to exit from the placement mode.)

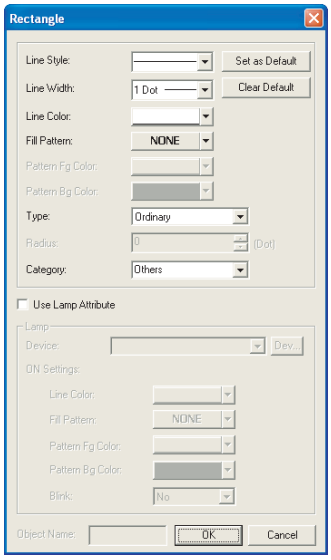


3 Set the frame line and paint of the rectangle.

(1) Double-click the created rectangle.
The Setting dialog box appears.

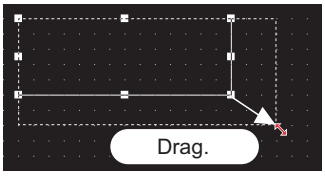
(2) Change the color and thickness of the line.

(3) Clicking the OK button determines the settings and closes the dialog box.
Click the Cancel button to cancel the settings and close the dialog box.



Hint! Changing the figure size

Select the figure to be resized and then drag the handle (■) to change its size.
(Example) When resizing a rectangle



2 How to draw a text

This section explains how to draw a figure text briefly.
Refer to the following section for detailed explanation of figure drawing and text entry.

☞ Section 11.1.2 Entering texts

1 Click A "Text" on the Figure toolbar.

The mouse cursor changes to +.

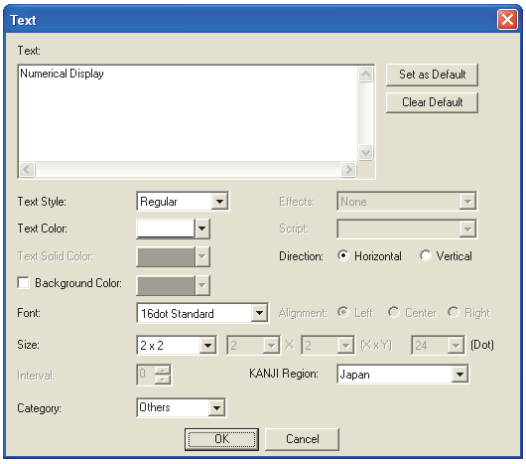


2 Enter a text.

(1) When the mouse cursor changes to +, click the mouse on the text drawing position.

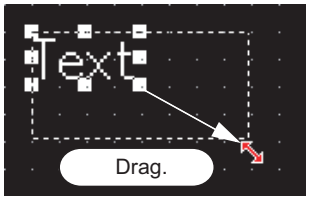
(2) When the Text dialog box appears, input a text.
The input will be immediately reflected on the screen.

(3) Click the OK button to close the dialog box.



Hint! Changing the text size

Select the text to be resized and then drag the handle (■) to change its size.
The size can also be changed in the above dialog.
(Example) When resizing a text



7.7.5 Object function setting

This section provides the reqiured operations for setting the following object functions.
Refer to the following manual for object details.

☞ GT Designer2 Version □ Screen Design Manual

- "Numerical Display" object
- "Bit Lamp" object
- "Bit Switch" object

1 Setting the "Numerical Display" object

The operation for setting the "Numerical Display" object is briefly explained here.

1 Click 123 "Numerical Display" on the Object toolbar.

The mouse cursor changes to +.



2 Click the mouse on the desired position to place the object.

(Then, right-click the mouse to exit from the placement mode.)

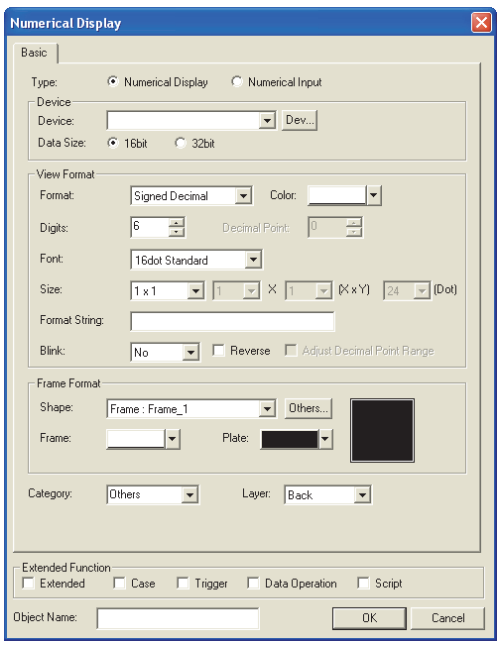


3 Set the "Numerical Display" object.

(1) Set the "Numerical Display" object.
The dialog box appears.

(2) Set the Type, View Format, Frame Format, etc.

(3) Then, click the OK button.



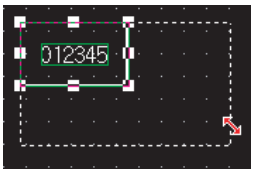
☞ "GT Designer2 Version □ Screen Design Manual" for details of objects

☞ Section 7.7.6 Basic operations of dialog box

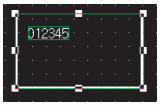
Point

Changing the object size

Select the object to be resized and then drag the handle (■) to change its size. However, if there is no frame figure, the numerical display will be changed.

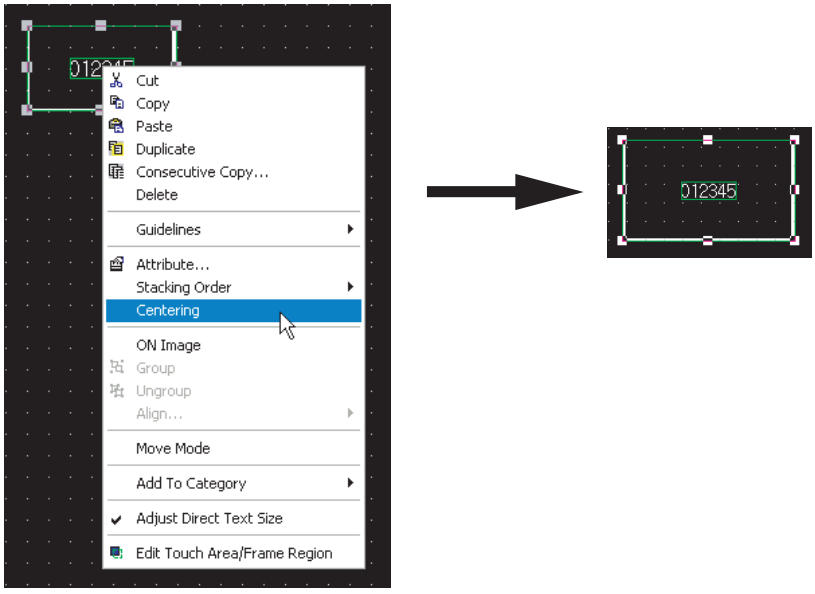


When the object size is changed, this may result in misalignment between the figure frame and the object as shown below.



In this case, perform the following operation.

1. Select the object.
2. Right-click the mouse and select [Centering].
   This will automatically correct the misalignment.



Hint!

Edit Touch Area/Frame Region

By selecting [Edit Touch Area/Frame Region], the figure frame and object can be moved separately.

2 Setting the "Lamp [Bit Lamp]" object

The operation for setting the "Lamp [Bit Lamp]" object is briefly explained here.

1 Click "Bit Lamp" on the Object toolbar.

The mouse cursor changes to +.



2 Click the mouse on the desired position to place the object.

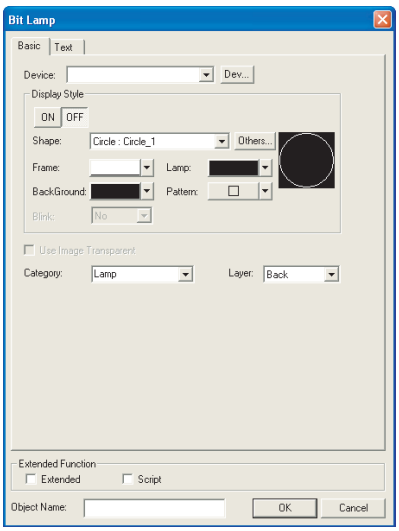
(Then, right-click the mouse to exit from the placement mode.)



3 Set the "Lamp [Bit Lamp]" object.

(1) Double-click the placed "Lamp [Bit Lamp]" object.
The dialog box appears.

(2) Set the Device, Display Style, etc. in the Basic tab.

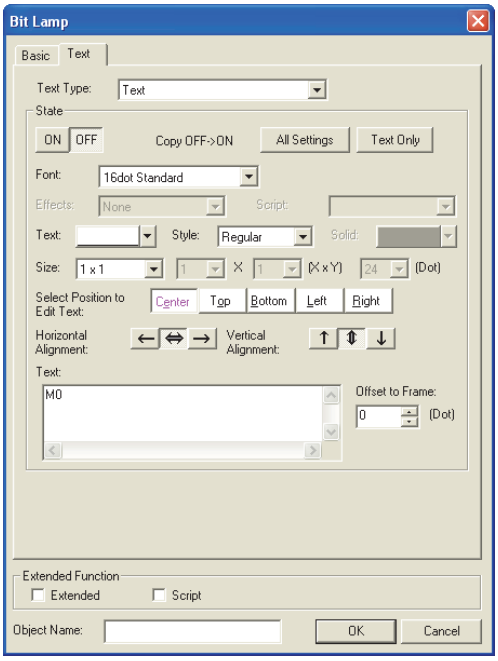


☞ "GT Designer2 Version □ Screen Design Manual" for details of objects

☞ Section 7.7.6 Basic operations of dialog box

(3) Set the text color, text size, etc.
The settings of "ON Display" and "OFF Display" can be made in the Text tab, and both settings are required.

Click the [ON] button to set the ON status display, and the [OFF] button to set the OFF status display.
A text can be registered in each display position (Center, Top, Bottom, Left, Right). The text-registered display position button is displayed in purple characters.



☞ "GT Designer2 Version □ Screen Design Manual" for object details

☞ Section 7.7.6 Basic operations of dialog box

(4) Then, click the [OK] button.

Hint!

Making the ON Display and OFF Display the same

To set the ON display the same as the OFF display, after setting the character tab ON or OFF, click the [All Settings] or [Text Only] button at [Copy ON → OFF] or [Copy OFF → ON].

[All Settings] button: Copy characters, character formats, fonts, character sizes, and display positions.

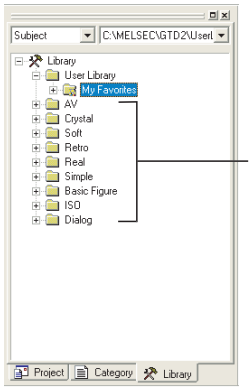
[Text Only] button: Copy only text.

Hint!

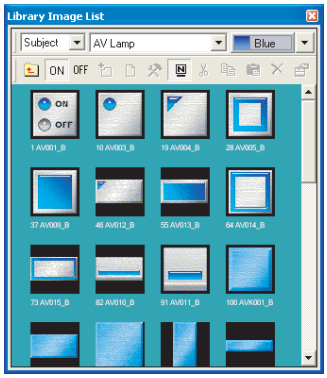
Placing the "Lamp" or "Switch" objects with figures from the Library

Lamps or Switches with figures can also be placed from the System Library by drag and drop.

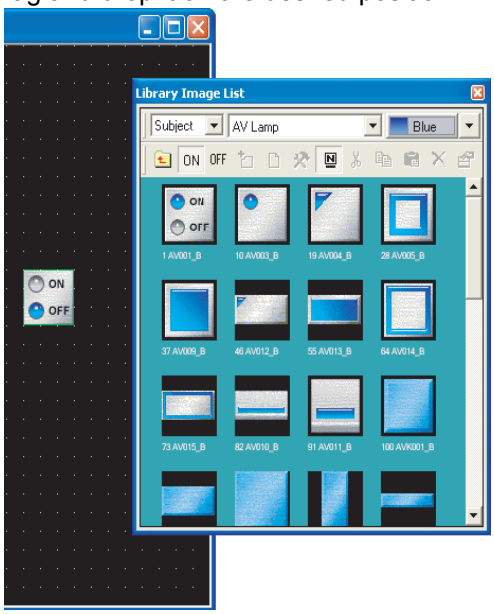
1 Click the Library tab in the workspace.
The workspace display changes to the Library workspace.



2 Double-click the "AV Lamp" or "AV Switch" folder in the "AV" folder.
The "Library Image List" window appears.



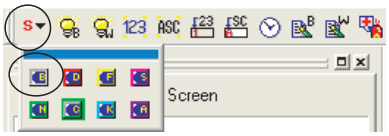
3 Click the target Lamp or Switch object in the "Library Image List" window, and drag and drop it on the desired position.



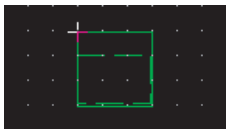
3 Setting the Touch Switch [Bit Switch] object

The operation for setting the Touch Switch (Bit Switch) object is briefly explained here.

1 Click on the Object toolbar, and click [Bit Switch] from among the submenu items.
The mouse cursor changes to +.



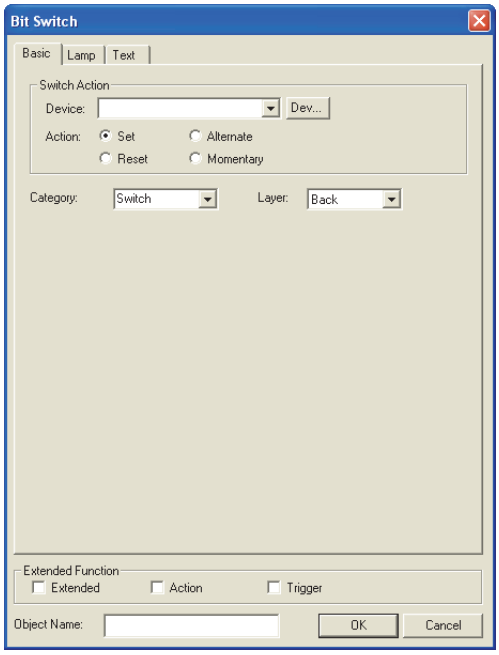
2 Click the mouse on the desired position to place the object.
(Then, right-click the mouse to exit from the placement mode.)



3 Set the Touch Switch [Bit Switch] object.

(1) Double-clicking the placed "Touch Switch [Bit Switch]" object displays the dialog box.

(2) Set the Switch Action, etc. in the Basic tab.

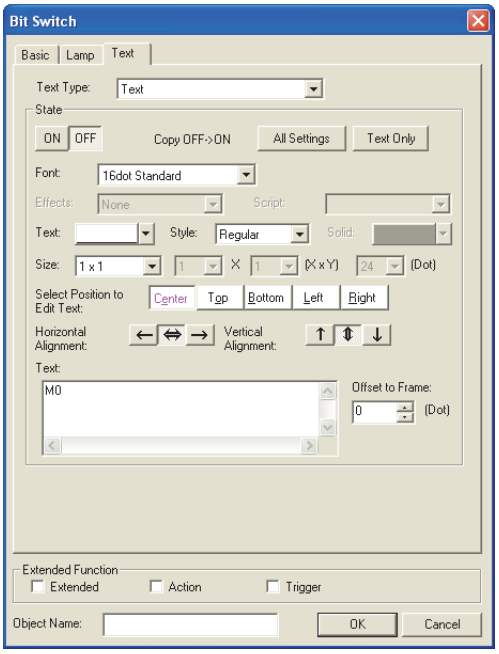


☞ "GT Designer2 Version □ Screen Design Manual" for object details.

☞ Section 7.7.6 Basic operations of dialog box

(3) Set the Text/Lamp function, etc. in the Text/Lamp tab.
The settings of "ON Display" and "OFF Display" can be made in the Text tab, and both settings are required.

Click the [ON] button to set the ON status display, and click the [OFF] button to set the OFF status display.
A text can be registered in each display position (Center, Top, Bottom, Left, Right). The text-registered display position button is displayed in purple characters.



☞ "GT Designer2 Version ☐ Screen Design Manual" for object details

☞ Section 7.7.6 Basic operations of dialog box

(4) Then, click the [OK] button.

Hint!

Making the ON Display and OFF Display the same

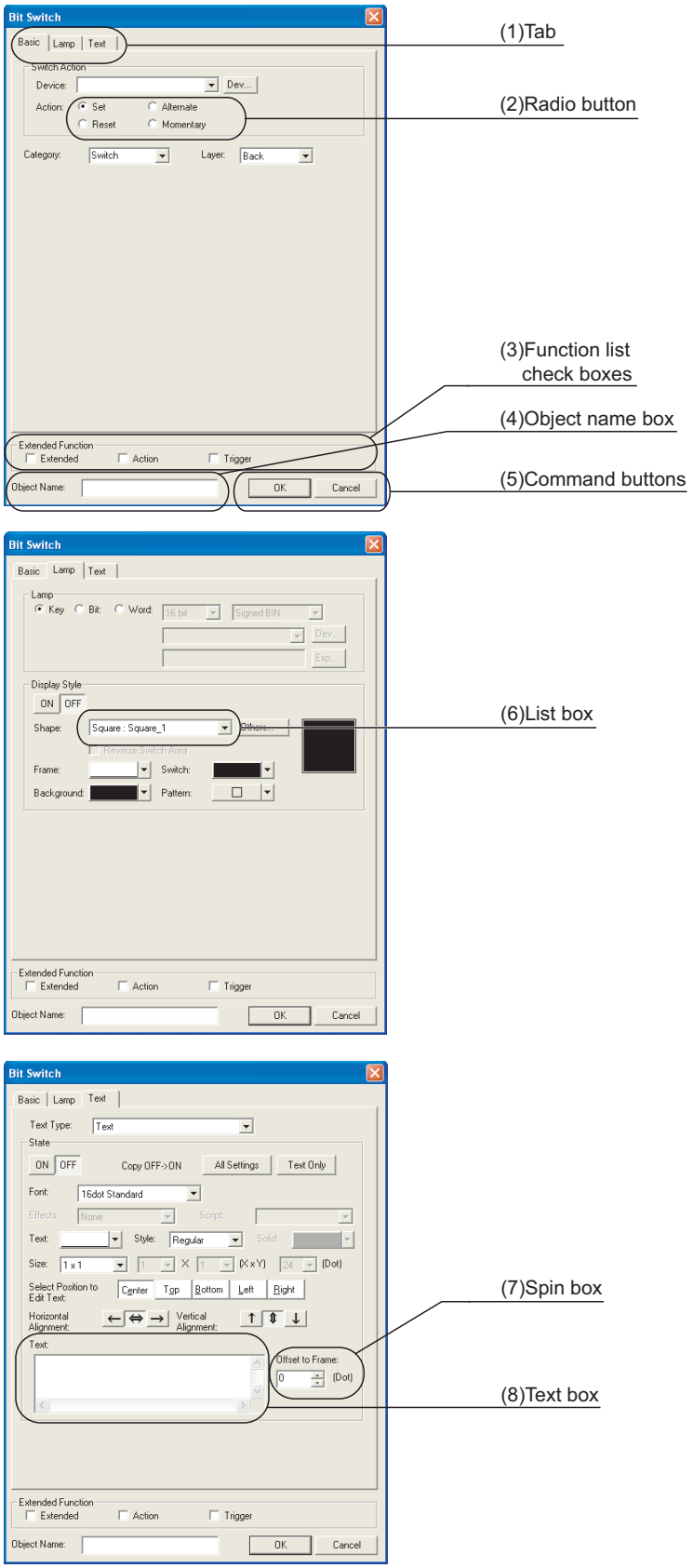
To set the ON display the same as the OFF display, after setting the character tab ON or OFF, click the [All Settings] or [Text Only] button at [Copy ON → OFF] or [Copy OFF → ON].

[All Settings] button: copy characters, character formats, fonts, character sizes, and display positions.

[Text Only] button: Copy only text.

7.7.6 Basic operations of dialog box

This section explains the basic operations of the dialog box.



(1) Tab

Click [ ] to switch from one tab to the other.
Checking the Function list check box additionally displays the corresponding extended tab.
On the extended tab, more details can be set than on the basic tab.

(2) Radio button

Select an item by clicking the corresponding ○.

(3) Function list check box

When displaying the extended tabs, click □ to put a check mark ✔.
Upon unchecking the box, a dialog asking whether to initiate the settings appears. Clicking [Yes] initializes the settings made on the extended tabs. Clicking [No] saves the settings made on the extended tabs even when the tabs are hidden.

(4) Object name box

The object name being set can be changed to a name for each application.
The changed object name is displayed on GT Designer2 (Data View, Property sheet, etc.).
The object name is displayed on the tabs other than Basic tab.

(5) Command button

The command buttons such as [OK] and [Cancel] are provided. Click the command button to execute the corresponding item.

(6) List box

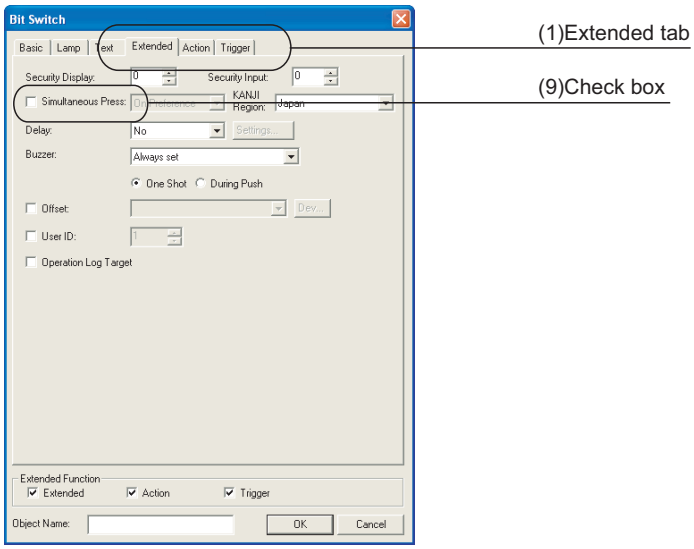
Click ▼ to display the selection list, and click and select an item.

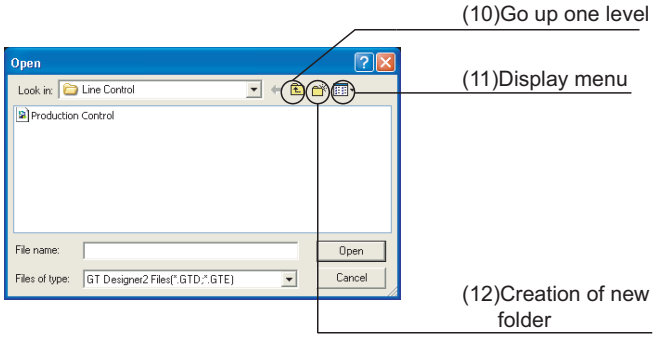
(7) Spin box

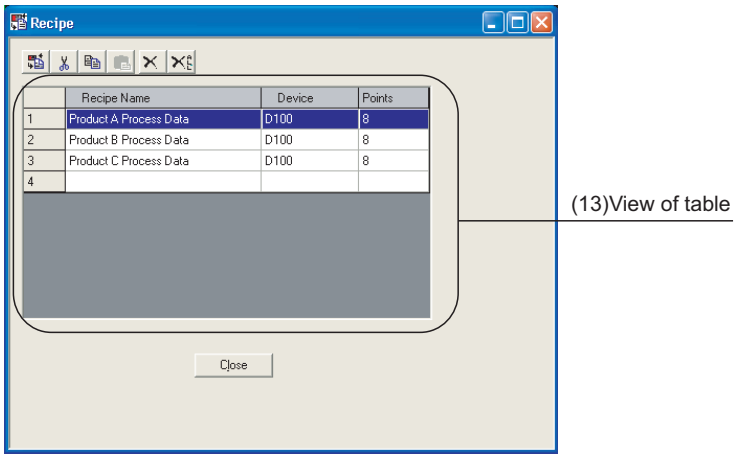
Enter a value directly, or change the numerical value by clicking ▲ ▼ .

(8) Text box

Enter a text from the keyboard.







(9) Check box
When executing the item, click ☐ to put a check mark ✔ .

(10) Go up one level
Displays contents of the directory above the current directory.

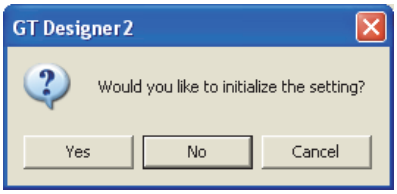
(11) Display menu
Provides the viewing mode of the folders and files in the current folder; select from detailed display, list display and other modes.

(12) Creation of new folder
Creates a new folder.

(13) View of table
Select an item by clicking the corresponding leftmost field.

Point

If the Extended Function check box in the object setting dialog is unchecked, the following message is displayed.



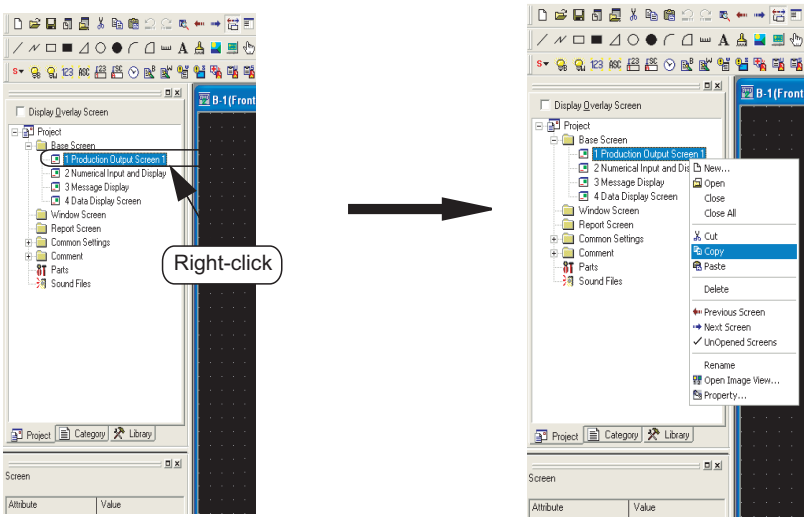
Item	Contents
Yes	Initialize all unchecked function settings and hide the initialize page.
No	Leave all unchecked function settings as-is and hide the initialize page.
Cancel	Close the message without making changes, and do not hide the page.

7.7.7 Workspace operations

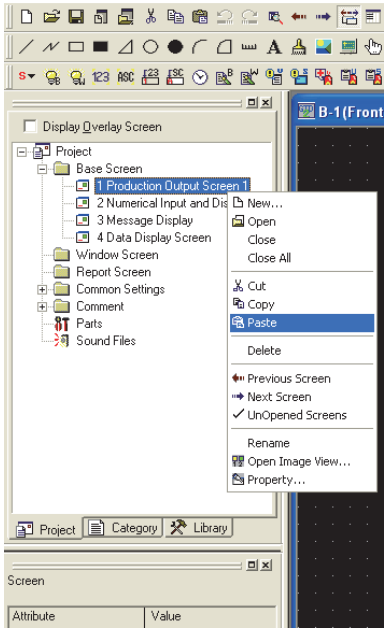
1 Workspace

The workspace displays the whole project settings by data type in the tree structure.
The data of the whole project can be managed/edited easily.
This is an explanation of how to use the workspace and how to copy the existing screen.

1 In the Project workspace, select and right-click the screen, and select the [Copy] menu. (Up to 25 screens can be copied at a time.)



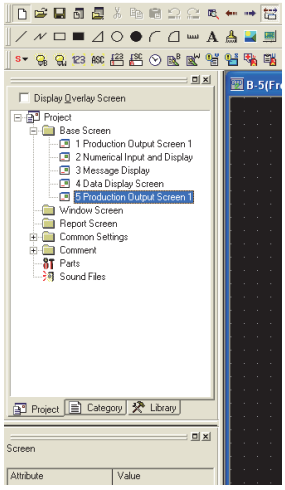
2 Right-click the mouse again and select the [Paste] menu.



3 When the Screen Property dialog box appears, set the screen number, etc. of the screen to be copied.

☞ Section 7.5 Creating a New Screen

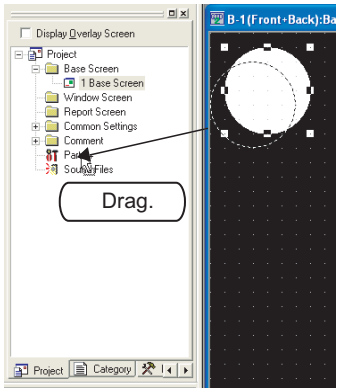
4 When the OK button is clicked after the settings are made, the screen is copied.



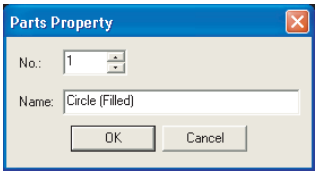
Example 2) Parts registration

A figure can be registered as a part in the workspace.

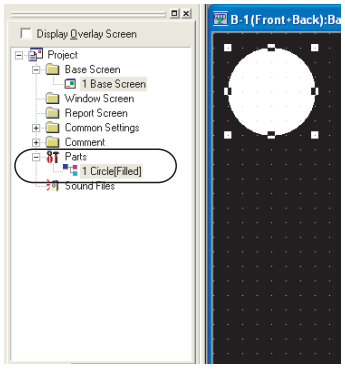
1 Select the figure to be registered, and drag it to the Parts folder in the workspace.



2 Set the number and name of the part.

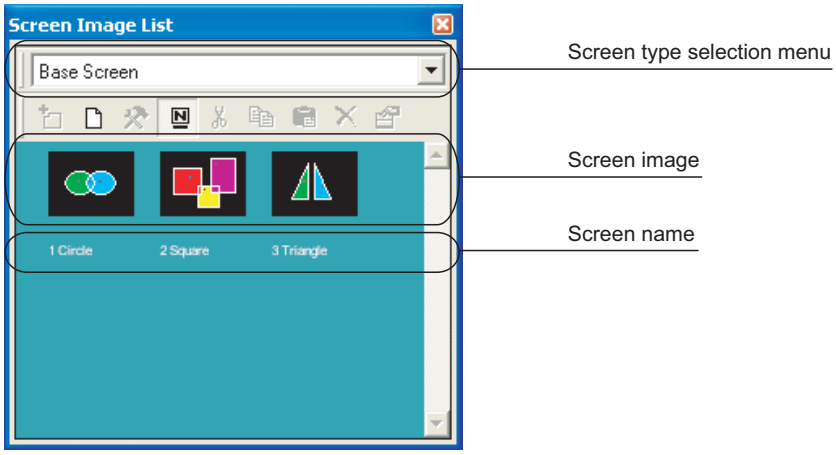


3 Click the ON button to register the figure as the part.



2 Basic operations of Screen Image List Window

In the project workspace, Screen Image List Window is displayed when [Open Image View...] is selected after right-clicking Base Screen or Window Screen. In the Screen Image List, an image from Base Screen, Window Screen, or an image of set overlay screen (Base Screen/Window Screen) can be displayed, and screen can be created or edited.



Item	Contents
Screen type selection menu	Screen type is switched.
(Register)	Figures and objects that are selected with screen editor are placed on the created screen.
(New)	New screen is created.
(Edit)	Registered screen details are edited with screen editor.
(Name)	Display/non-display of the screen name is selected.
(Cut)	Selected screen is cut.
(Copy)	Selected screen is copied.
(Paste)	Copied screen, cut screen are pasted on the screen with the press of each Copy, Cut button.
(Delete)	Selected screen is deleted.
(Property)	Property of the screen is displayed.

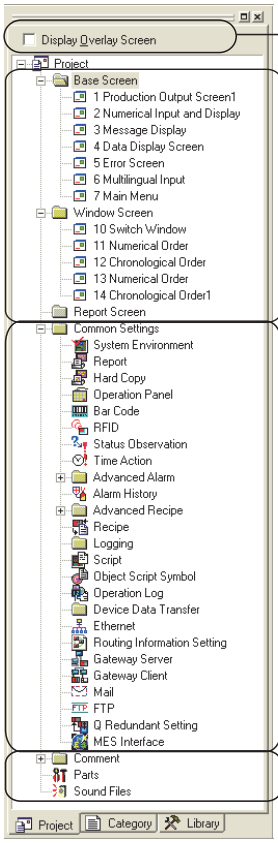
3 Workspace types

This section explains the workspace types.

■ Project workspace

Displays the whole project settings, such as the created screens and common settings, in the tree structure.

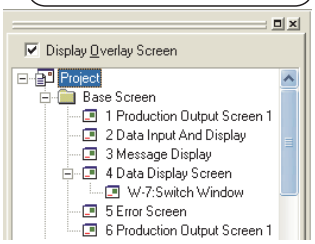
It is convenient for confirming the currently set project contents, checking the operation progress, and copying the screen.



Display Overlay Screen

Check here to display the screen call condition in the tree structure.

Called screens will be displayed in tree structure.



Screen

Displays the created screens in the tree structure by type (Base Screen, Window Screen, Report Screen).

Common Settings

Displays the common object function settings in the project in the tree structure.
Double-click a function to display the corresponding setting dialog box.

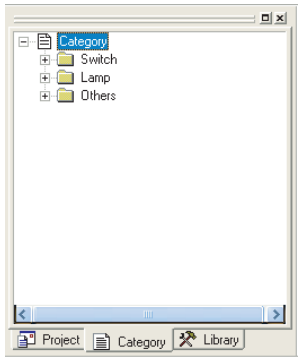
Common files

Displays the files (Parts, Comments, Sound Files) common to multiple object functions in the tree structure.

■ Category workspace

Displays the whole project settings by category (type) in the tree structure.

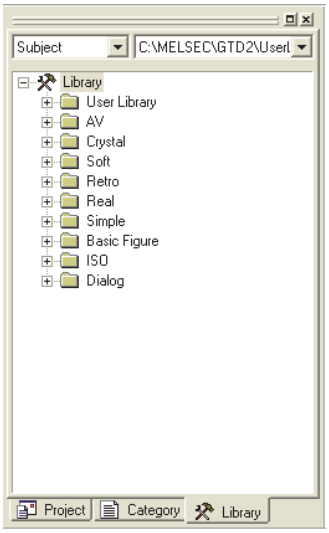
By classifying the settings according to application, this workspace enables the objects to be easily managed and edited.



☞ Section 12.1.2 Batch setting and managing objects/figures for each purpose (Category workspace)

■ Library workspace

Enables objects and figures to be registered and the registered ones to be pasted on a screen.



☞ 10. USING LIBRARY

7.8 Operating multiple screens

7.8.1 Cascading/Aligning open screens

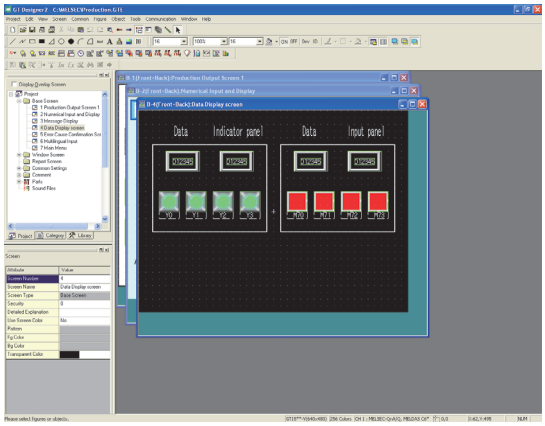
Overlay multiple open screens in the project.

1 Choose [Window] → [Cascade]/[Tile Vertical]/[Tile Horizontal].

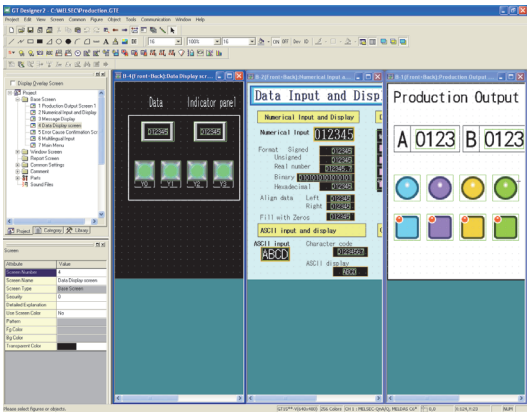
2 Multiple open screens will be displayed as shown below.

(Examples)

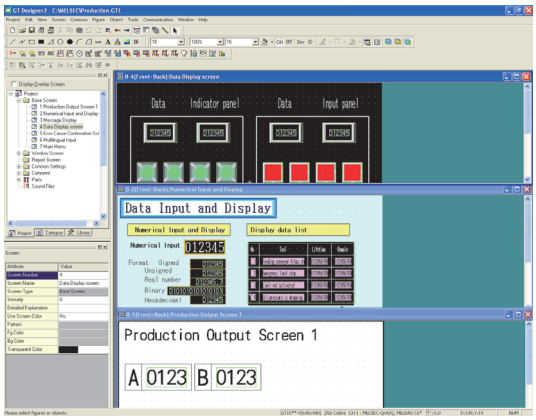
- Display example when [Cascade] is selected



- Display example when [Tile Vertical] is selected



- Display example when [Tile Horizontal] is selected

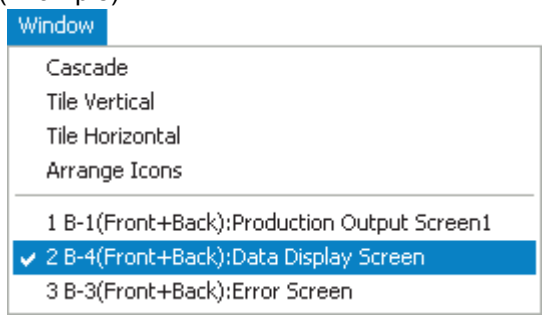


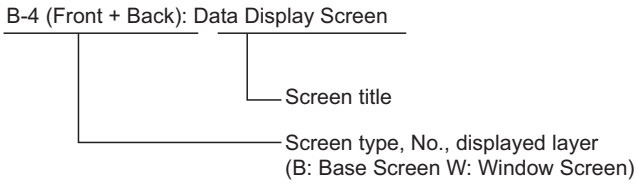
7.8.2 Activating the screen to be edited

When editing one of the multiple open screens, activate the target one by any of the following methods.

1 From the [Window] menu, select the screen name to be activated.

(Example)

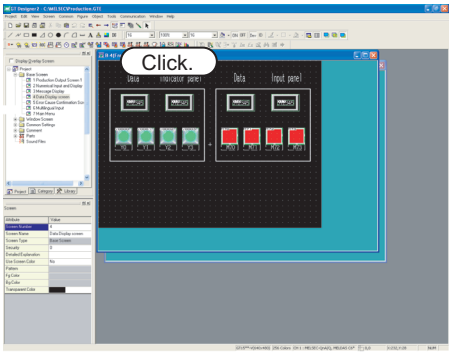




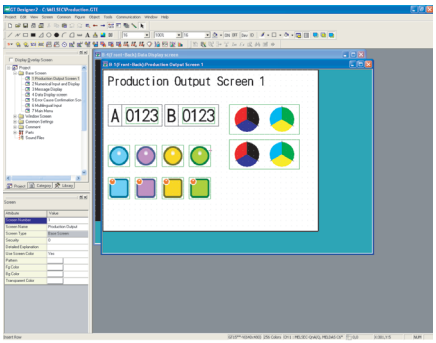
2 Click any part of the screen.

Click any part of the screen to be activated.

(Example)



Click a part of left back window.



The clicked window is brought to front.

Remark Activating the screen using (Previous Screen) or (Next Screen) on the toolbar

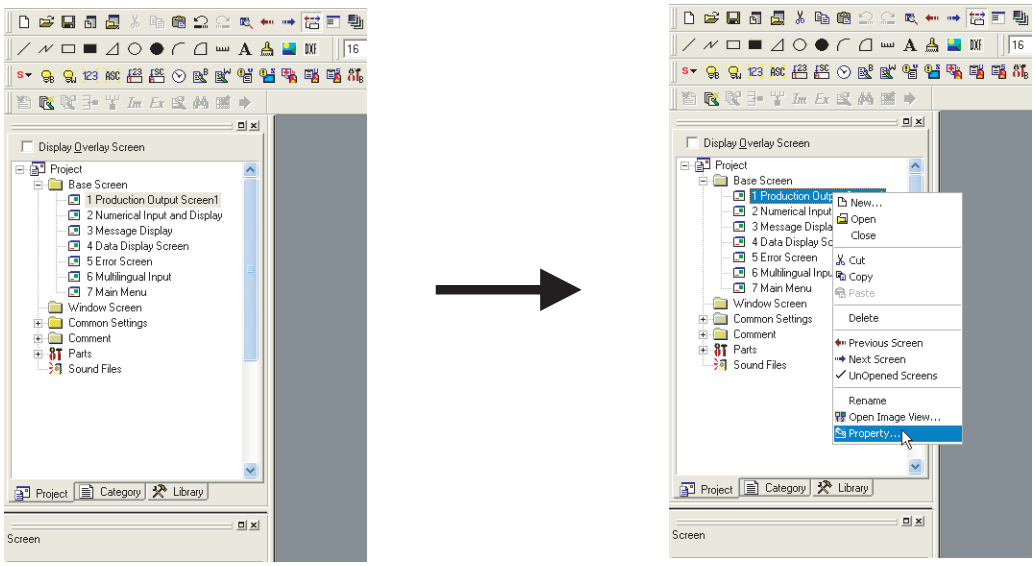
Clicking , on the toolbar switches the active screen from one to another within the active screen types (Base Screen/Window Screen).

7.9 Changing Screen Property

Screen settings such as screen number or home are changed.

7.9.1 Screen properties changing procedure

1 Select the desired screen to change the property in the project workspace and select [Property...] by right clicking on the mouse.



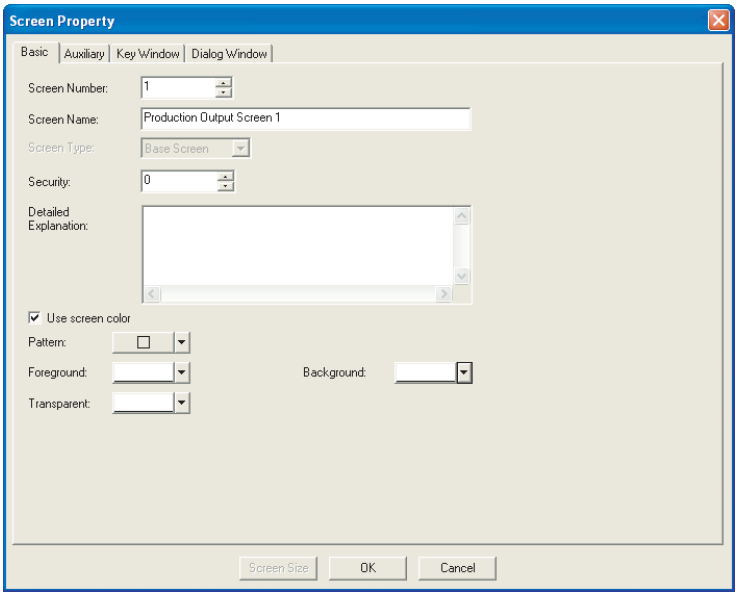
2 The screen property dialog box appears.

■ **Basic tab**

The screen number or name is changed.

Refer to the following section for settings details.

☞ Section 7.5 Creating a New Screen

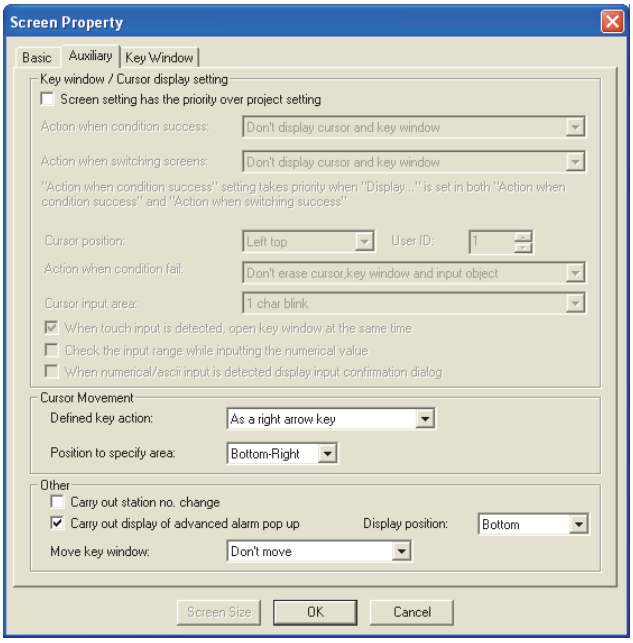


■ **Auxiliary setting tab**

Settings for data input operation and use/non-use of the object function are changed on the setting screen.

Refer to the following manual for the settings.

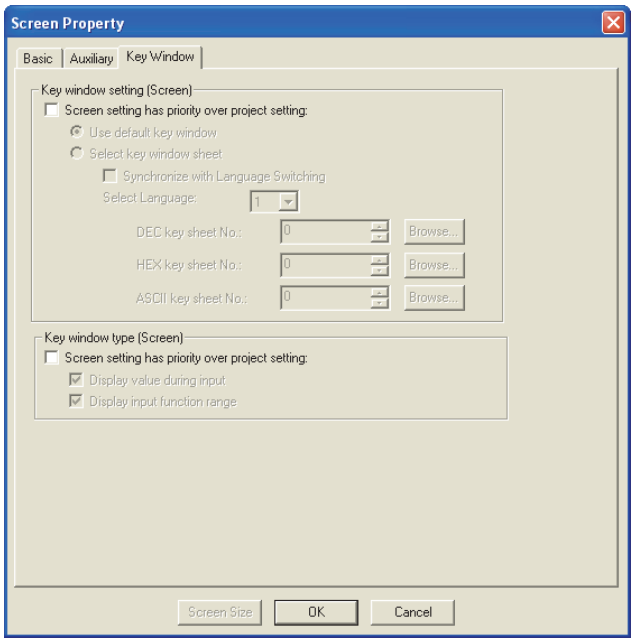
☞ GT Designer2 Version □ Screen Design Manual



■ **Key window tab**

Settings for key window used on the setting screen are changed.

☞ GT Designer2 Version □ Screen Design Manual



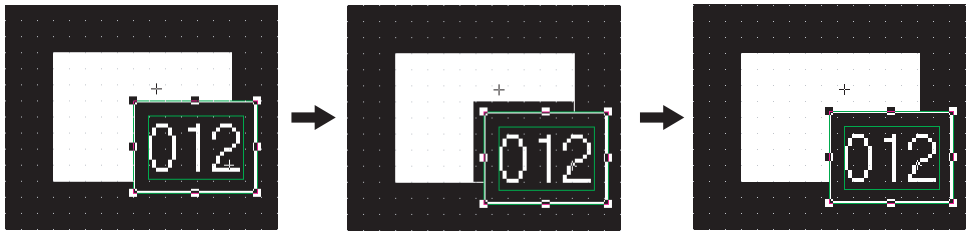
3 After changing settings of each tab, click the OK button.

7.10 Redisplaying the Screen

In some cases, use of Paint may cause some area to remain unpainted.
Executing redisplay can display the screen correctly.

7.10.1 Screen re-displaying procedure

Example) When the object placed on the figure marked with Paint is moved



The object placed on the figure marked with Paint is moved.

Some area remains unpainted in the figure.

Choose [View] → [Redisplay] menu to refresh display.

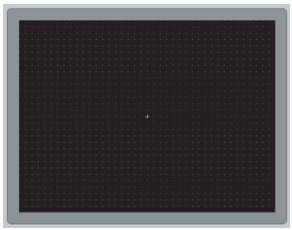
1 Choose the [View] → [Redisplay] menu.

2 The display of the drawing screen will be corrected.

7.11 Displaying the Frame

This function displays an outer frame, which looks like a GOT frame, on the drawing screen.
With this function, a screen can be created as if it is displayed on the GOT.

7.11.1 Frame re-displaying procedure



1 Choose the [View] → [Show Terminal Display] → [Standard] menu.

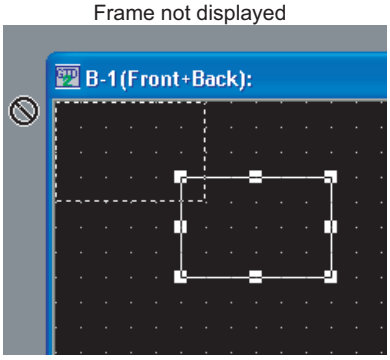
2 A frame will be displayed according to the selected menu item.

Hint!

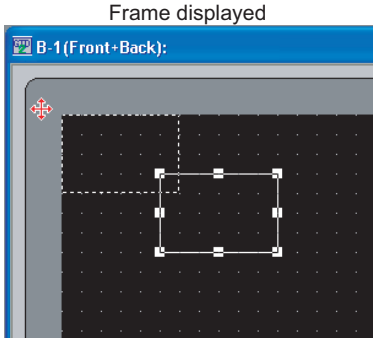
Editing the screen edges

With this function, the drawing screen is displayed as if it appears on the GOT. Also, it enables the screen edges to be edited easily.

Frame not displayed



Frame displayed



7.12 Viewing Created Screen Image

7.12.1 Previewing the Base Screen

Image displayed on the GOT is checked.

1 Perform either of the following operations.

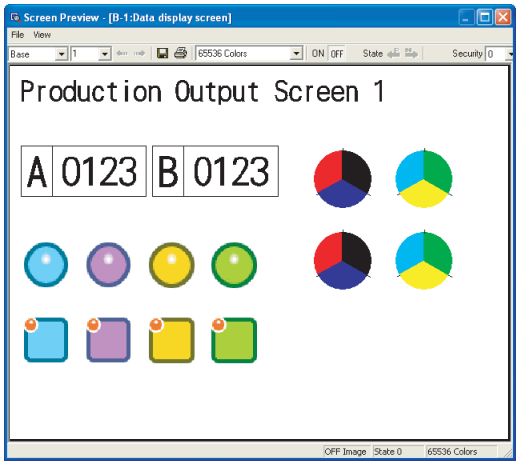
- Click (Screen Preview)
- Select [View] → [Preview] menu.

2 The image displayed on the GOT is displayed on the preview screen.

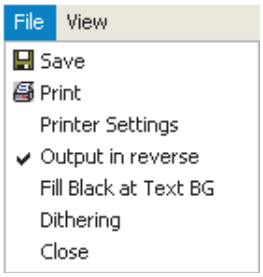
The preview display can be changed/output from each menu.

However, window display settings must be made in advance to preview the windowed screen. Refer to the following section for the operation.

☞ Section 7.12.2 Previewing the Base Screen with window



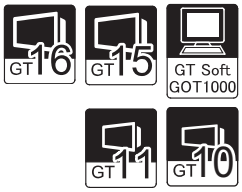
File menu



View menu



Item		Description
Screen		The preview screen to be displayed is selected.
File	Save	Preview display is saved in a file (BMP format file).
	Print	Preview display is printed.
	Printer Settings	Printer settings, paper and paper orientation are set.
	Output in reverse	Black and white is reversed when printing based on the printer/file setting.
	Fill Black at Text BG	Letters are filled in white and letter background is filled in black to make clearly visible reversed when printing based on the printer/file setting.
	Dithering	Intermediate color tone is provided on the two tone monochrome screen when printing based on the printer/file setting.
	Close	Preview screen is closed.
View	Menu and Title	Display/non-display of the title bar is selected.
	Toolbar	Display/non-display of the toolbars is selected.
	Status Bar	Display/non-display of the status bar is selected.
	Next Screen	The screen Number is changed to the setting for one screen below.
	Previous Screen	The screen Number is changed to the setting for one screen above.
	Use Preview No.	[Checked] Display Word Comment and Word parts Display of the set Preview No. [Not checked] Display Word Comment and word parts Display according to the settings of each state.

Item		Description
View	ON Image	Every time the menu item is selected, the preview screen display status switches between ON and OFF. The display contents are the same as those of the ON/OFF display on the drawing screen. [When ON is selected] • Object of bit device ..... Figure/text set to ON is displayed. • Object of word device ..... Status set to State 1 is displayed. [When OFF is selected] • Object of bit device ..... Figure/text set to OFF is displayed. • Object of word device ..... Status set to State 0 (normal) is displayed.
	Next State	Switches the screen display, which has been set in Object "State", in ascending order.
	Previous State	Switches the screen display, which has been set in Object "State", in descending order.
	Overlap 1	Select whether Overlap Window 1 will be displayed[*1] or hidden.
	Overlap 2	Select whether Overlap Window 2 will be displayed[*1] or hidden.
	Overlap 3 	Select whether Overlap Window 3 will be displayed[*1] or hidden.
	Overlap 4 	Select whether Overlap Window 4 will be displayed[*1] or hidden.
	Overlap 5 	Select whether Overlap Window 5 will be displayed[*1] or hidden.
	Superimpose 1	Select whether Superimpose 1 will be displayed[*1] or hidden.
	Superimpose 2	Select whether Superimpose 2 will be displayed[*1] or hidden.
	Key Window	Select whether Key Window will be displayed[*1] or hidden.
View	16 (Gray Scale)[*2]  (GT105□)	Set the colors of the displayed screen. Make selection according to the used GOT.
	2 colors (Gray Scale) 	
	256 colors  (GT105□)	
	65536 colors 	

Item	Description
Security	Select the security level of the displayed object. Objects with a number lower than the selected level are displayed.
Language Switching	Select the comment group to be displayed.

*1 To display a window in the preview window, the window must have been displayed in the Editor window of the Base Screen.

☞ Section 7.12.2 Previewing the Base Screen with window

*2 16 (Gray Scale) can be selected on GT15□□-Q and GT11□□.

Point

Cautionary items on preview display

(1) Parts (bit, word or fixed)

The specified base screen or window screen is not displayed if the part type setting is "base screen" or "window screen."

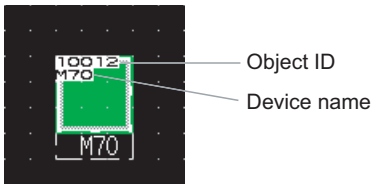
The main body of the GOT displays the specified base screen or window screen.

(2) Items displayed in preview window

The items displayed in the preview window (show/hide object, object ID, device name, etc.) can be specified in [Preferences...] (Display items in View tab).

☞ Section 5.4.3 Customizing the drawing environment of GT Designer2

The object ID and device name are not displayed on the GOT.

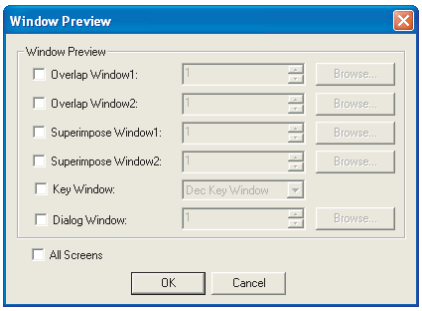


7.12.2 Previewing the Base Screen with window

This section explains how to preview the image of the windowed screen that will be displayed on the GOT.

1 Choose [View] → [Window Preview] → [Custom...].

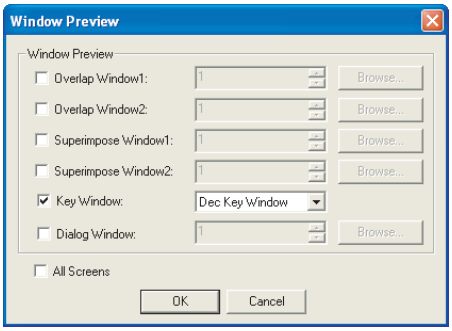
2 The Window Preview setting dialog box appears.



3 Put a check mark (✔) in the check box of the window to be displayed on the Base Screen.

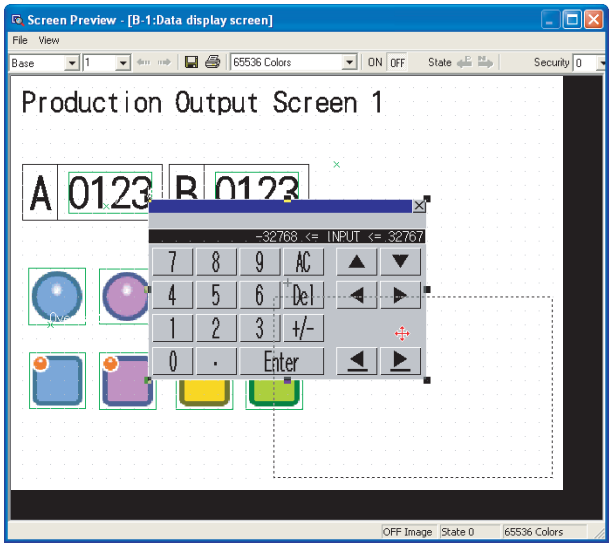
When displaying Overlap Window (1, 2) or Superimpose Window (1, 2), click the Browse... button and select the window screen to be displayed.

Example) Make the following settings to display a Dec Key Window.



Hint! Window display position adjustment

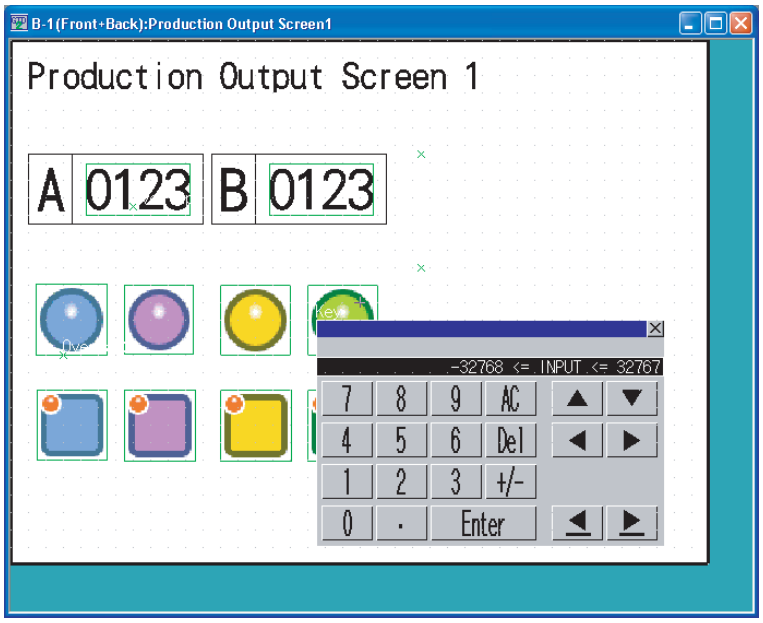
When the "Window Preview" and "Window Position" are set, the positions of the windows to be displayed on the Base Screen can be adjusted easily.



4 Click the OK button to display the windows set on the Base Screen.

To display the windows, however, the window display positions must have been set in advance. Choose the [Object] → [Window Position] menu, and set the display positions.
Refer to the following manual for the settings of the window display position.

☞ GT Designer2 Version □ Screen Design Manual

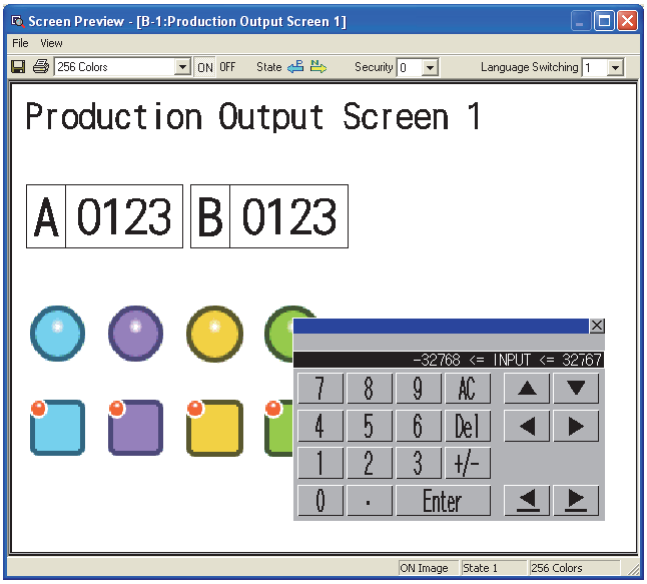


5 Perform either of the following operations.

- Click.
- Choose the [View] → [Preview] menu.

6 The image of the screen, which will be displayed on the GOT, is displayed on the Screen Preview window.

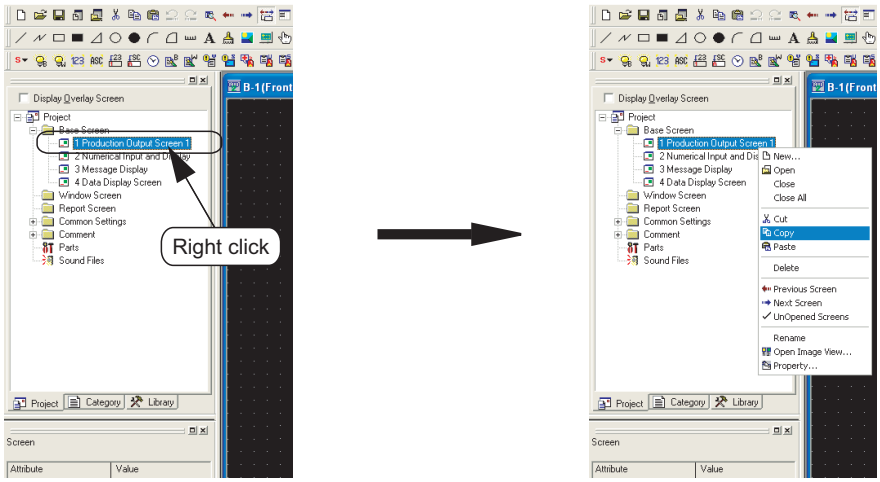
For the operation of the Screen Preview window, refer to "Section 7.12.1 Previewing the Base Screen".



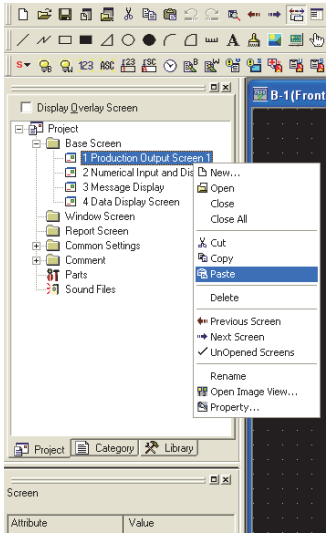
7.13 Copying/Deleting Screen

7.13.1 Copying screen data

1 Select the desired screen for copying in the project workspace and right click the mouse to select the [Copy] menu. Up to 25 screens can be copied at a time.



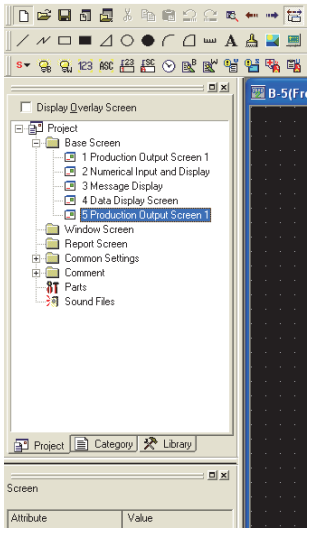
2 Right click the mouse again and select the [Paste].



3 The screen property dialog box appears. Set the screen number of the copying screen.

☞ Section 7.5 Creating a New Screen

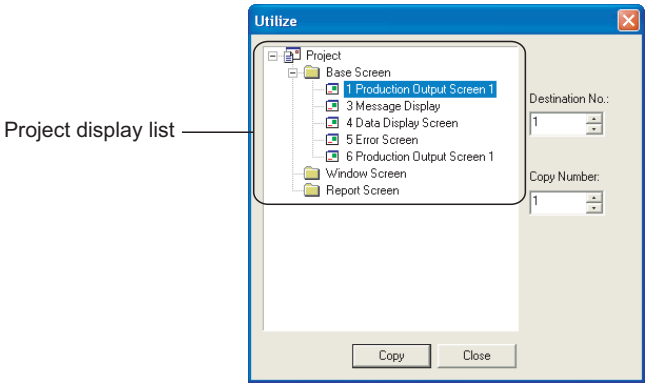
4 When the OK button is clicked after the settings are made, the screen is copied.

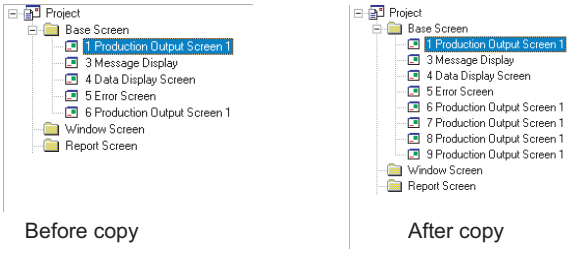


Hint! To copy screens continuously

One screen can be copied to multiple screens.

1. Select [Screen] → [Utilize...].
2. The Utilize dialog box appears.
   Set the following items and click the Copy button.



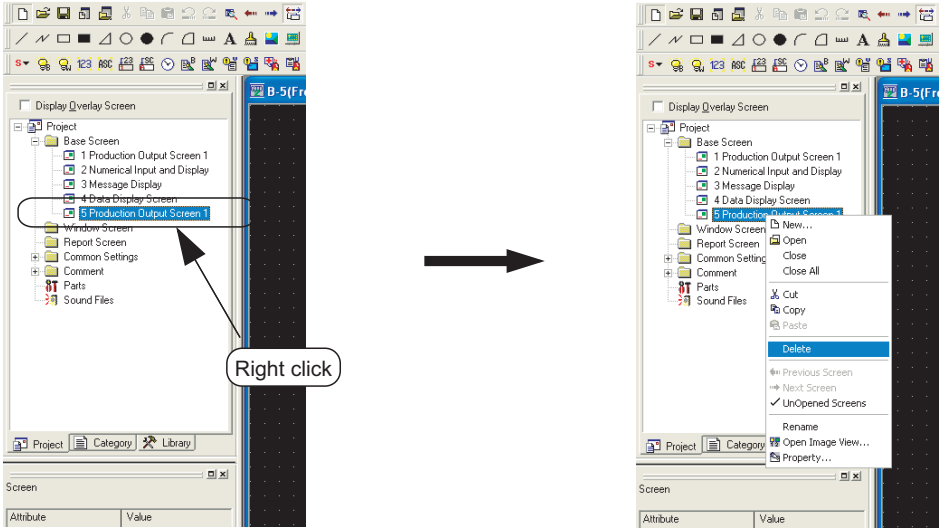
Item	Description
Project display list	The screen to be copied is selected (up to 25 screens).
Destination NO.	Set the copy destination screen number (1 to 32767).
Copy Number	The number of copies is set. Up to 100 screens can be copied at a time. Example: When the screen is copied based on the following settings: the Destination No. "7" and Copy Number "3". The screen will be copied to Base Screens 7, 8, 9.  Before copy　　After copy

3. The screen is copied.
4. Property (name, attribute, etc.) of the copied screen is checked or edited.

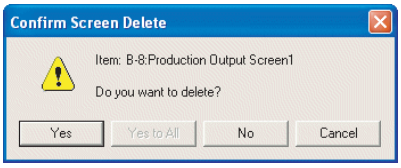
☞ Section 7.5 Creating a New Screen

7.13.2 Deleting the screen

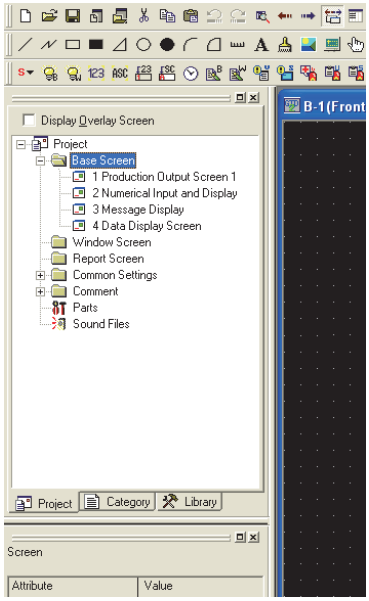
1 Select the screen to be deleted at the workspace (project tab) and right-click the mouse and select [Delete] from the menu, or press the DEL key.



2 The confirmation screen for deletion of the screen appears. Click the Yes button.

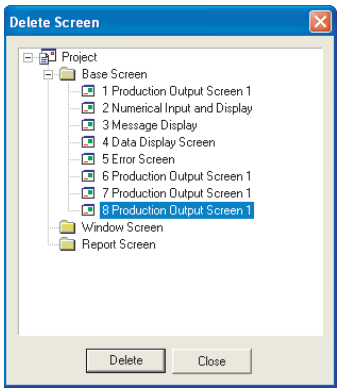


3 The selected screen is deleted.

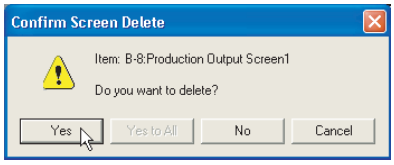


Hint! Deleting screen data from menu bar

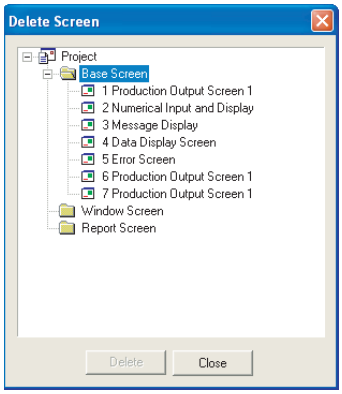
1. Select [Screen] → [Delete...] from the menu or press the DEL key.
2. The Delete Screen dialog box appears.
   Select the screen to be deleted and click the Delete button.



3. As the Delete Screen confirmation screen appears, click the Yes button.



4. The selected screen is deleted.



7.14 Setting Screen Switching Device

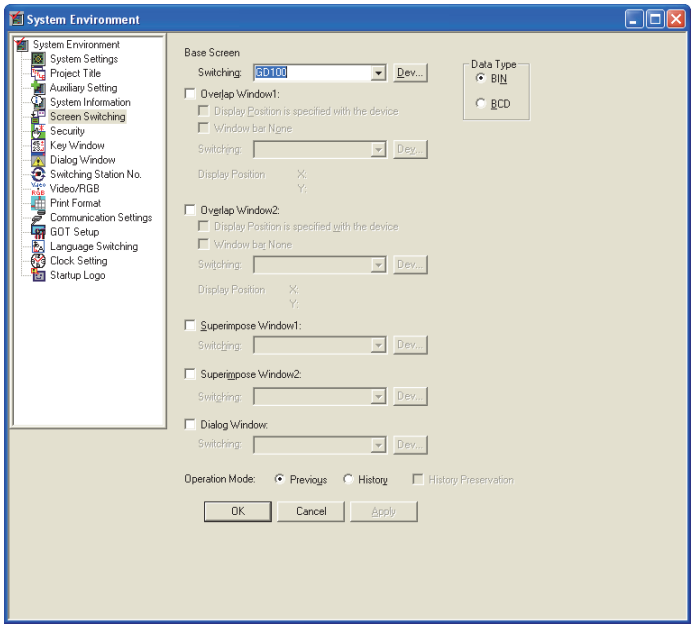
To switch the screen on the GOT or to display the window screen, use the dedicated device for screen switching.
Refer to the manual below for details of the screen switching device.

☞ GT Designer2 Version □ Screen Design Manual

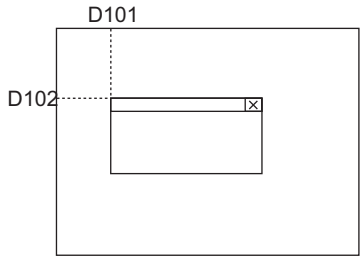
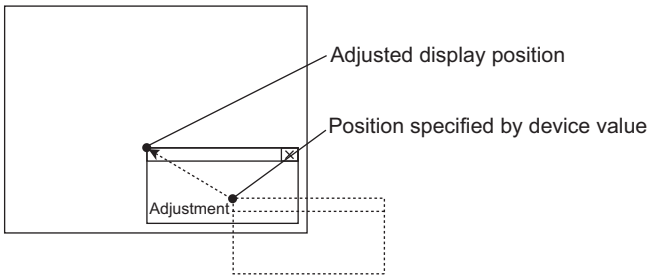
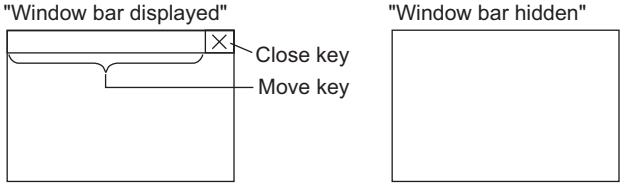
7.14.1 Setting screen switching device

1. Select [Common] → [System Environment] menu of the menu bar.
2. Double click [Screen Switching] of the system environment.
3. The screen switching setting dialog box appears.

   After setting, click the OK button.



Item	Description
Data Type	Select the data format for the screen switching device value. • BIN: The screen switching device value will be handled as a binary value. • BCD: The screen switching device value will be handled as a BCD (binary coded decimal) value. The range of the screen (screen No.) that can be switched changes depending on the set data format. BIN :1 to 32767 BCD :1 to 9999
Base Screen	Set the screen switch device for the Base Screen. Refer to the manual below for details of the settings. ☞ GT Designer2 Version ☐ Screen Design Manual.

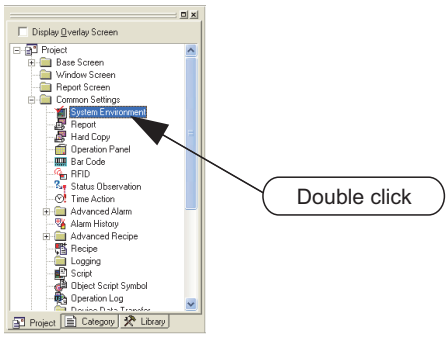
Item	Description
Overlap Window 1 Overlap Window 2  Overlap Window 3 Overlap Window 4 Overlap Window 5  	Check this item when displaying Overlap Window 1 or Overlap Window 2. (Overlap Windows 3 to 5 can be selected for the GT16□□ and GT SoftGOT1000.) Then, set the screen switching device for each window. When the screen switching device is not set, the overlap window will not be displayed. Refer to the manual below for details of the settings. ☞ GT Designer2 Version □ Screen Design Manual.
Display Position is specified with the device	Check this item when specifying the window display position based on the device value. The devices for storage of the display position will be set consecutively starting with the device set as the screen switching device. (Example) In the case that screen switching device is set to D100 Display position Horizontal :D101 Vertical :D102 The window screen will be displayed as shown below.  If the value exceeding the position that can be displayed on the GOT is stored into the display position device, the display position will be automatically adjusted and displayed. After that, the adjusted display position will not be reflected on the device value. 
Window bar None	Check this item when displaying the overlap window without the window bar.  The screen can be moved or closed manually. The screen cannot be moved manually. When closing the screen, set "0" to the screen switching device.
Superimpose Window 1 Superimpose Window 2	Check this item when displaying the superimpose window. Then, set the screen switching device for the superimpose window. When the screen switching device is not set, the superimpose window screen will not be displayed. ☞ GT Designer2 Version □ Screen Design Manual.

Item	Description
Dialog Window 	Check this item when displaying the dialog window. Then, set the screen switching device for the dialog window. ☞ GT Designer2 Version ☐ Screen Design Manual
Operation Mode ☞ GT Designer2 Version ☐ Screen Design Manual.	Select the operation to be performed when the switching destination is set to "Front Screen" with the touch switch (Screen Switching). Previous : Operation is performed in the hierarchy mode (higher hierarchy switch mode). History : Operation is performed in the history mode (front screen switch mode). Refer to the following manual for details of the touch switch (Screen Switching). ☞ GT Designer2 Version ☐ Screen Design Manual.
History Preservation 	Available in the "History" operation mode. Check this item when saving the history information into the memory card.

Remark

(1) Setting in project workspace

Double click the system environment. The System Environment dialog box appears. Double click [Screen Switching].



(2) What is the screen switching device?

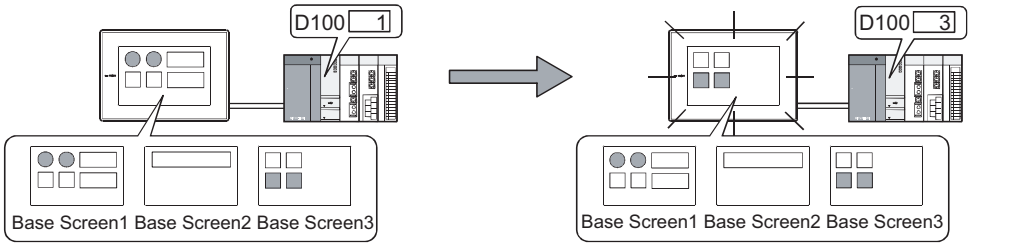
To switch a screen on the GOT or to display the window screen, use the screen switching device.

The GOT displays the screen for the value stored in the screen switching device.

Use the device set for the screen switching only for screen switching on the GOT.

When the screen switching device value is "1," the GOT displays base screen 1.

When the screen switching device value is "1 → 3," the GOT displays base screen 3.



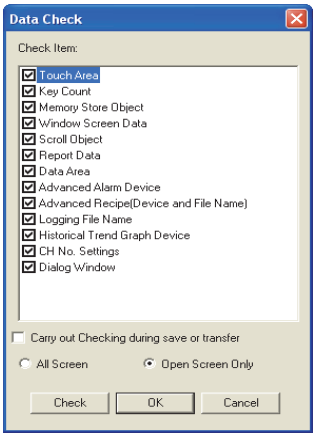
7.15 Data Check

Whether the project data created with the GT Designer2 has an error or not is checked.

7.15.1 Operation method of data check

1 Select [Tools] → [Data Check...] menu.

2 The data check dialog box is displayed.
Select check items and screen to be checked in the Data Check dialog box, and click the Check button.



Item		Description
Check Item		Select the check item for the data.
	Touch Area	Checks whether the settings of the touch switch functions are overlapped as described below. In addition, checks whether the switch operates as the touch key or not. • The touch switches are overlaid each other. • Numerical input/ASCII input is overlapped with touch switches.
	Key Count	Checks whether more than 1000 touch switch functions (all touch switch objects) are placed in the GOT display area for each screen (Front and Back).
	Memory Store Object	Checks whether the objects exceeding the following numbers are set to be stored into memory. • Line graph (path display): 2 or more/project • Trend graph (memory store): 17 or more/project • Scatter graph (memory store): 17 or more/project • User alarm (memory store): 17 or more/project
	Window Screen Data GT16 GT15 GT Soft GOT1000 GT11	Checks whether the data list display and alarm history display are set on the window screen. (The data list display and alarm history display are inapplicable to the window screen.)
	Scroll Object	Checks whether multiple objects (Data List Display, Alarm History Display, User Alarm) that need to be scrolled are set on a single screen.
	Report Date GT16 GT15 GT Soft GOT1000	Checks the following items: 1) Whether the [Screen Property] - [Format/Trigger] is set. 2) Whether the [Screen] - [Header/Repeat...] is set.
	Data Area	Checks whether any of the objects is set outside the screen range.

Item		Description
	Advanced Alarm Device 	Checks for incorrect alarm device and alarm range settings.
	Advanced Recipe 	Consistency of the external control device and external notification device common for the advanced recipe with the screen switching device, station number switching device and device specified in the system data is checked and duplication of the advanced recipe file name of each piece of advanced recipe data is checked.
	Logging File Name 	Check that the set logging file name does not already exist.
	Historical Trend Graph Device 	Check that there are no bugs in the logging settings and historical trend graph device settings.
	CH No. Settings 	Checks are performed on the following items. 1) Adjust CH. No. Check Check that the CH No. set to "None" in Communication Settings is not set at Adjust CH No. on Clock Setting in System Environment dialog. 2) Broadcast CH. No. Check Check that the CH No. set to "None" in Communication Settings is not set at Broadcast CH No. on Clock Settings in System Environment dialog. 3) CH. No. for Switching Station No. Check Check that the CH No. set to "None" in Communication Settings is not set at CH No. Switching Station No. on Switching Station No. in System Environment dialog. 4) Connected Device Type CH. No. Check Check that the CH No. set to "None" in Communication Settings is not set to Controller Type CH No. on GOT Setup in System Environment dialog.
	Dialog Window 	Checks the following items: 1) Whether there is a window screen set as a replacement for the system dialog. 2) Whether the set window screen size exceeds 320 × 240. (only for GT15)
	CH No. Settings 	Check that there are no settings invalid in the CH No.Settings.
Carry out Checking during save or transfer		Check this item to automatically carry out the data check when saving the project or downloading the project data to the GOT.
All Screen		Perform data check on all screens.
Open Screen Only		Perform data check on open screen.

Point

Data check target

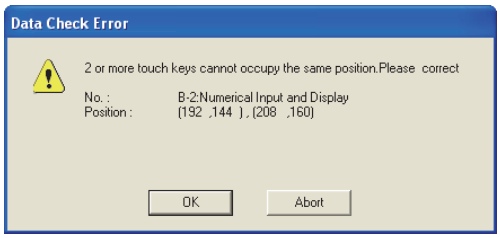
A data check is made on open screens only. Unopened screens are not checked.
To check all screens, start a check after opening all screens.
Objects in the temporary area are not checked.

3 When the data check is performed with the settings, click the Check button.

(To close the dialog box after updating the settings, click the OK button.)

4 If an error is detected after checking, the following dialog box is displayed.

(Ex.)



•When OK is clicked, data check is continued for any other error.

• When Abort is clicked, data check is cancelled.

7.16 Saving Project

7.16.1 Overwriting and saving project

When an existing data has been edited, the project is overwritten and saved.

1 Perform either of the following operations.

- Click (Save Project).
- Select [Project] → [Save] menu.

Point

When a floppy disk (FD) is used

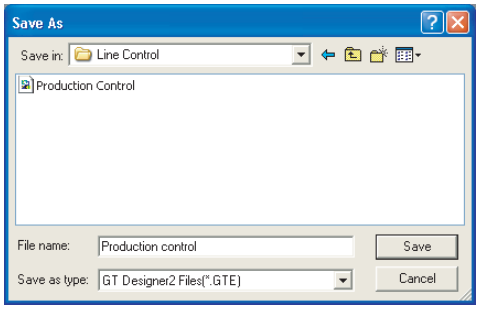
When a project is overwritten and saved, the same size of free disk space as the project data size is required. If an Floppy disk is used, overwriting and saving may not be carried out due to insufficient disk space.
If overwriting and saving is not allowed, save the project in the PC hard disk. Then, copy it to the FD.

7.16.2 Saving as project name

When a newly created project is saved or an existing project is saved with a different project name, set as follows:

1 Select [Project] → [Save as...].

2 The save as dialog box appears.
Set the following items and click the Save button.



Item	Description
Save in	The location to save the project is selected.
File name	The project name to be saved is set.
Save as type	GT Designer2 Files(*.GTE) File is saved as GT Designer2 format project data.

Point

When an existing project is saved as a different project

The library data (GTD2.ldb) with registration of user-created objects and figures are not saved as a different project file.
The project saved as a different project refers to the same library data (GTD2.ldb) as the existing project.
If you want to separate a library from the existing project data, save the existing project library as a different file.

☞ Section 10.3.7 Saving a library

7.17 Ending GT Designer2

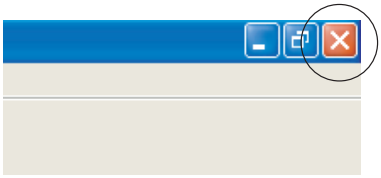
7.17.1 Ending GT Designer2

1. Select [Project] → [Exit].
2. The GT Designer2 is ended.

Point

Ending GT Designer2 from title bar

Click on the title bar to end the GT Designer2



MEMO

8. TRANSFERRING DATA

8.1 Data Types and Sizes Transferred to the GOT

8.1.1 Data types and storage destinations

1 Outlines of data types and transfer destinations

The following data is in GOT. The Boot OS, Standard monitor OS and Communication driver are necessary to operate the GOT and must be installed before the created project data is downloaded. (Standard monitor OS and Communication driver are preinstalled on the GT10. Communication driver may need to be replaced in some cases.)

☞ Refer to 2 to 8 in this section for the data storage destinations in the GOT

Data type	Outline	Storage destination (Drive in GOT)			
		GT16□□	GT15□□	GT11□□	GT10□□
Boot OS ☞ 3 in this section	The OS required to control the GOT hardware and make a communication between the PC and GOT. Factory-installed.	C: Built-in Flash Memory (system area)	C: Built-in Flash Memory (system area)	C: Built-in Flash Memory (system area)	–
OS ☞ 4 to 7 in this section	The monitoring function, OS and screen data installation, OS and screen data deletion, touch key control, system screen and guidance display function and other features for controlling the GOT are installed. • Standard monitor OS	A: Standard CF Card or C: Built-in Flash Memory (system area)	A: Standard CF Card or C: Built-in Flash Memory (system area)	C: Built-in Flash Memory (system area)	C: Built-in Flash Memory (system area)
	• Communication driver (First)	A: Standard CF Card C: Built-in Flash Memory (user area)			
	• Communication driver (From the second) • Extended function OS • Option OS, etc.		A: Standard CF Card C: Built-in Flash Memory (user area)	C: Built-in Flash Memory (system area)	–
Project data ☞ 8 in this section	• User screen data • Parts • Common Settings • Comment • Sound Files • HQ Font • True Type Font, etc.	A: Standard CF Card or B: Extended Memory Card or C: Built-in Flash Memory (user area)	A: Standard CF Card or B: Extended Memory Card or C: Built-in Flash Memory (user area)	A: Standard CF Card or C: Built-in Flash Memory (user area)	C: Built-in Flash Memory (user area)
Special data ☞ Section 8.4 Downloading Special Data [PC to GOT]	An option OS corresponding to special data to be used must be installed.	A: Standard CF Card C: Built-in Flash Memory (user area)	A: Standard CF Card C: Built-in Flash Memory (user area)	–	–

*1 The GT11□□ and GT10□□ support only the alarm log file (alarm history) and recipe data. However, the recipe data cannot be used by the user if uploaded.

Data type	Outline	Storage destination (Drive in GOT)				
		GT16□□	GT15□□	GT11□□	GT10□□	
					GT1020	GT1030 GT104□ GT105□
Resource data ☞ 9 in this section	• Alarm log file (Alarm History, Advanced alarms)*1 • Advanced Alarm log file*1 • Recipe data file *1 • Advanced recipe data file*1 • Data log file*1 • Screen transition information file*1 • Image file*1 (Hard Copy) • Operation log file*1	A: Standard CF Card or B: Extended Memory Card	A: Standard CF Card or B: Extended Memory Card	A: Standard CF Card or D: Built-in SRAM	C: Built-in Flash Memory	D: Built-in SRAM

*1 The GT11□□ and GT10□□ support only the alarm log file (alarm history) and recipe data. However, the recipe data cannot be used by the user if uploaded.

Point

Downloading Project data and Special data (for only GT15, 16) on to GT11, 15, 16

If the OS (Standard monitor OS, Communication driver, Extended function, OS option) used by GT Designer2 in downloading Project data and Special data is newer than the OS installed in the GOT, new functions may be unavailable. Re-installing the OS is recommended when downloading Project data and Special data to the GOT.

Installation of the OS on to GT11, 15, 16

Make sure that OSs (Standard monitor OS, Communication driver, Extended function OS, Option OS) are of the same major version and minor version.
If their version numbers are different, the GOT will not operate.
Refer to the following section for the OS version checking method.

☞ 3 "How to view the OS information" in this section.

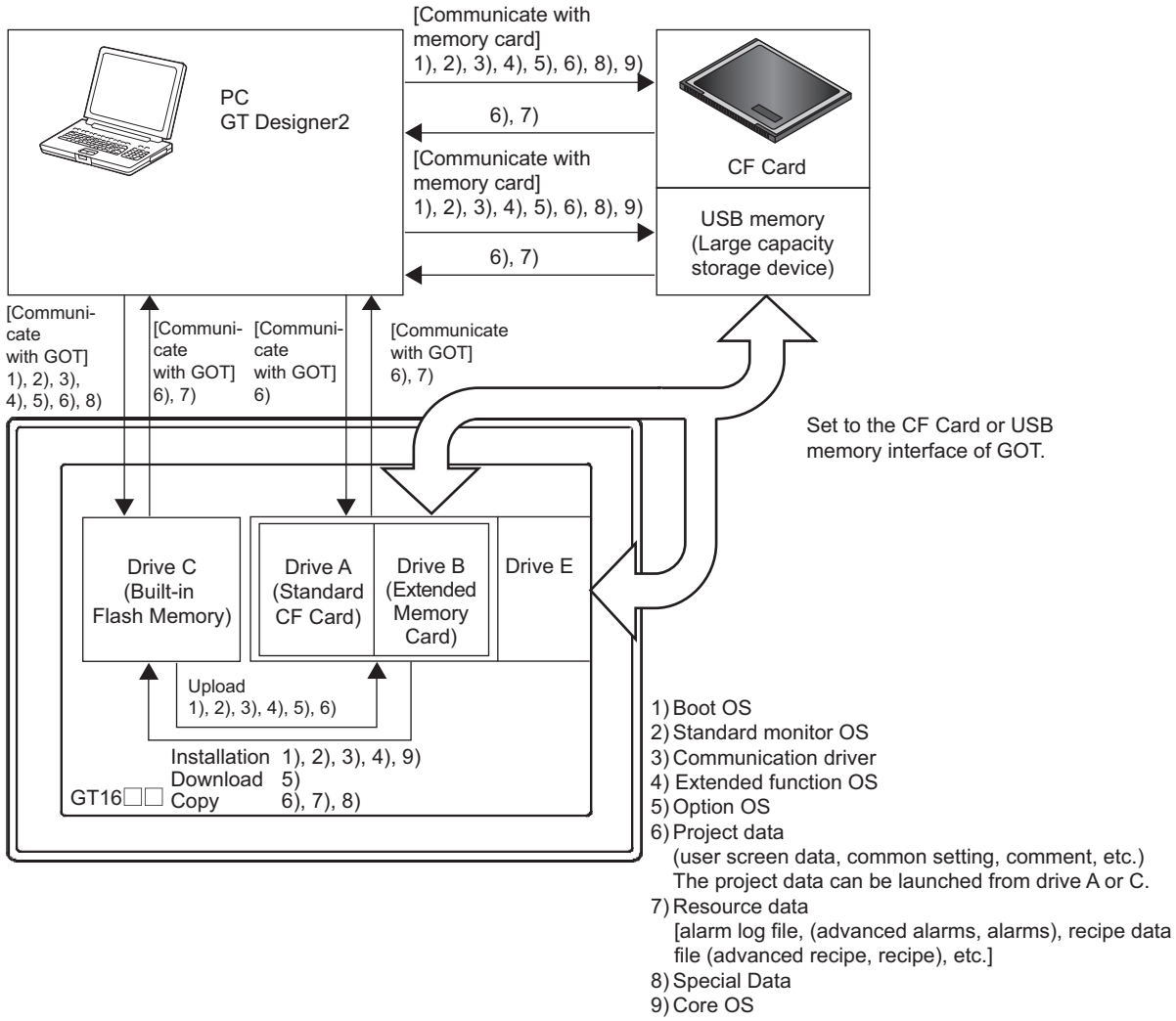
(Example 1)
Standard monitor OS :[01.00.00]
Communication driver :[01.00.00]
Extended function OS :[01.00.00]
Option OS :[01.00.00]
GOT operates.

(Example 2)
Standard monitor OS :[01.00.00]
Communication driver :[02.00.00]
Extended function OS :[01.00.00]
Option OS :[01.00.00]
GOT does not operate.

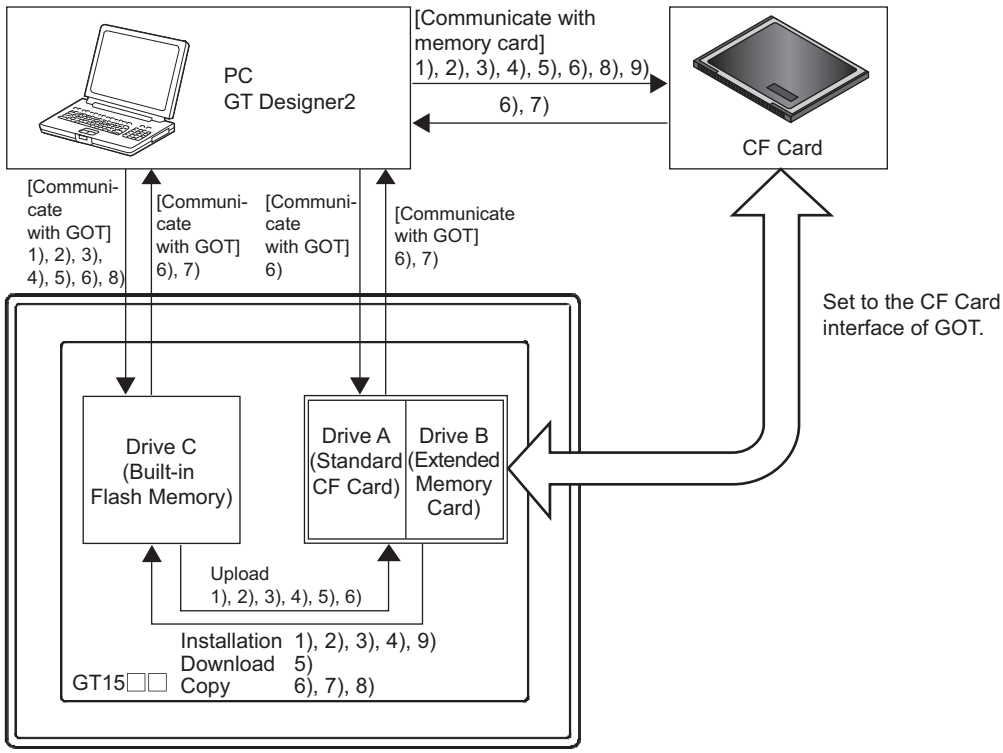
2 Data storage destinations in the GOT

The data storage drives change depending on the GOT.

■ For GT16□□

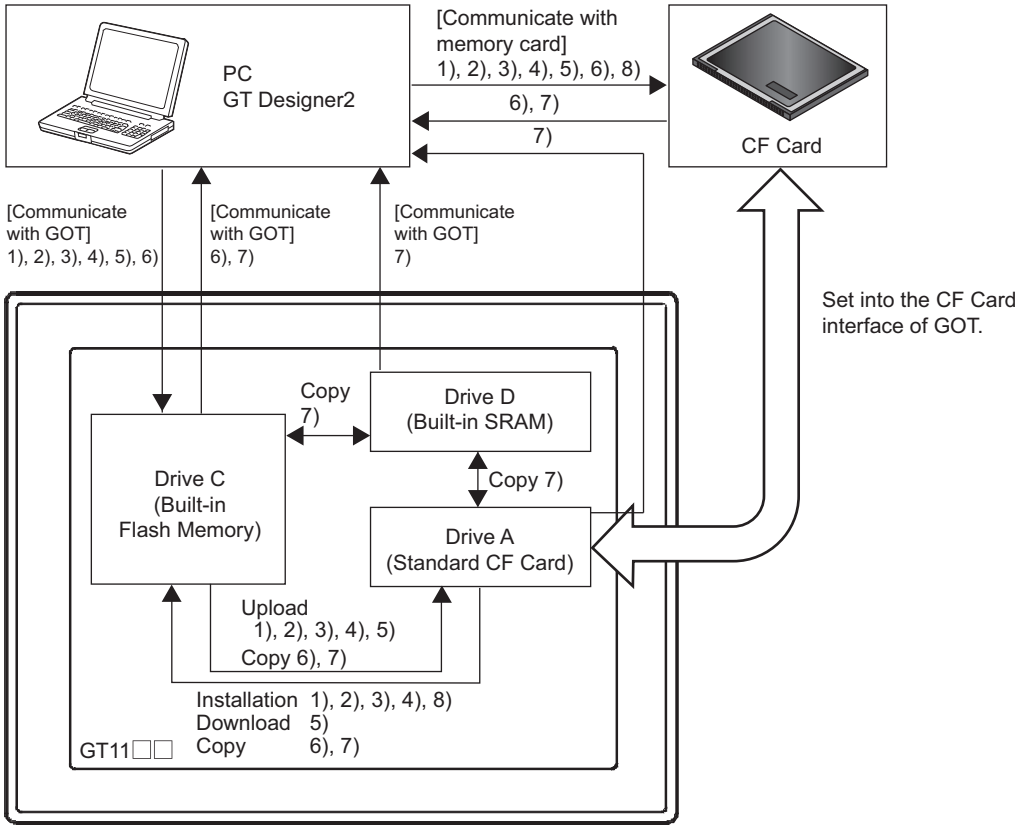


■ For GT15□□



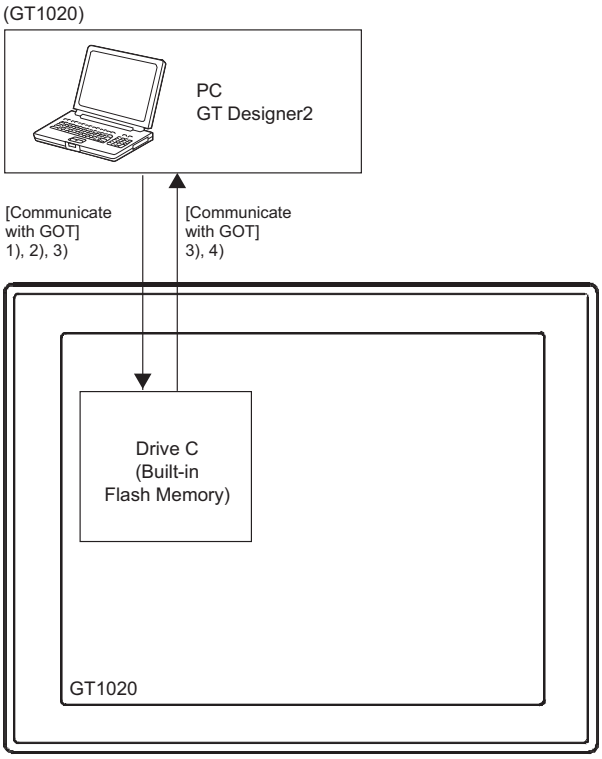
1) Boot OS
2) Standard monitor OS
3) Communication driver
4) Extended function OS
5) Option OS
6) Project data
(user screen data, common setting, comment, etc.)
The project data can be launched from drive A or C.
7) Resource data
[alarm log file, (advanced alarms, alarms), recipe data file (advanced recipe, recipe), etc.]
8) Special Data
9) Core OS

■ For GT11□□

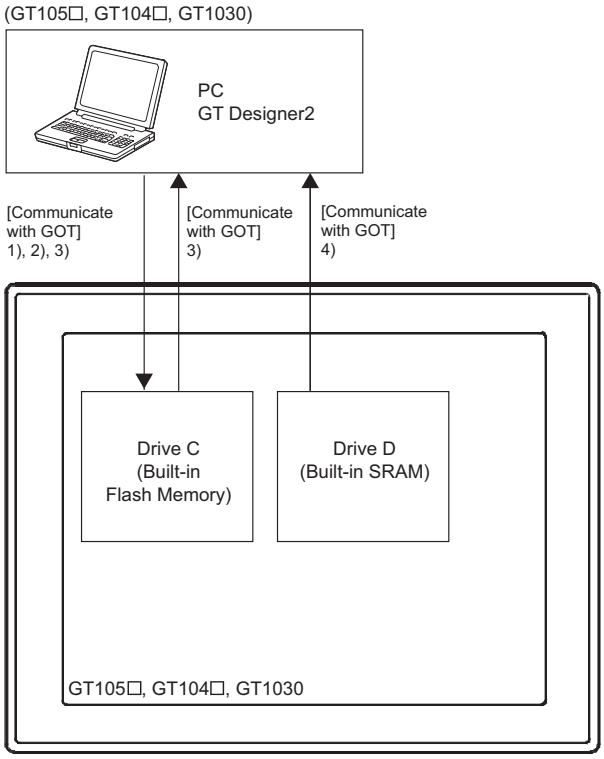


1) Boot OS
2) Standard monitor OS
3) Communication driver
4) Extended function OS
5) Option OS
6) Project data (user screen data, common setting, comment, etc.)
The project data can be launched from drive C only. (It may not be launched from drive A.)
7) Resource data (alarm log file, recipe data)
8) Core OS

■ For GT10□□



1) Standard monitor OS
2) Communication driver
3) Project data (user screen data, common setting, comment, etc.)
4) Resource data (alarm log file, recipe data)



1) Standard monitor OS
2) Communication driver
3) Project data (user screen data, common setting, comment, etc.)
4) Resource data (alarm log file, recipe data)

3 Boot OS

This is the program needed to control GOT hardware, and during communication between GOT and PCs.

Boot OS is installed in the GOT at factory shipment so installation is not usually necessary.

However, if functions not supported by the Boot OS version are used in the GOT, Boot OS must be upgraded.

☞ App5. List of Functions Added by GT Designer2 Version Upgrade (For GOT1000 Series)

The GOT can be initialized to the factory preset condition by installing the Boot OS, except GT10.

(1) File name and storage destination in GOT

Data type	File name	Storage destination*1
Boot OS	G1OSBTOS.OUT	C:\G1BOOT\

*1 The storage destination folder in the GOT is created when the Boot OS is installed.

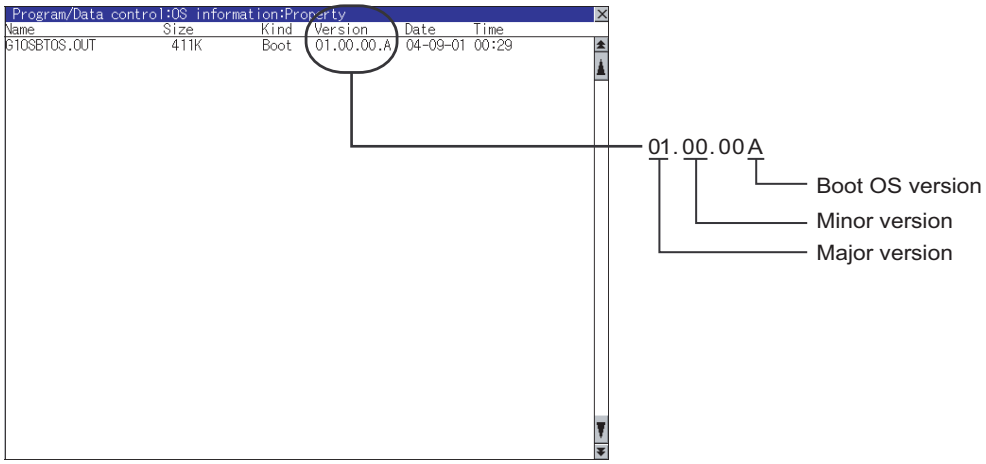
(2) Checking the Boot OS version

The version of the Boot OS installed in the GOT can be checked from the "Property of OS information" or "rating plate (nameplate)" of the GOT.

However, if the Boot OS has been updated (installed) by the user, the actual version may differ from the one given on the rating plate. It is recommended to check it from the property of the OS information.

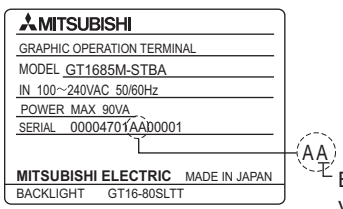
Immediately after purchase of the product, the version may be checked with the rating nameplate.

(a) Property of OS information

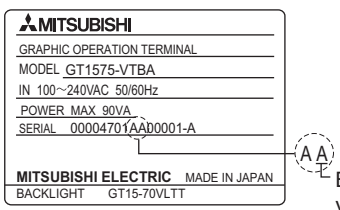


(b) Rating plate (nameplate)

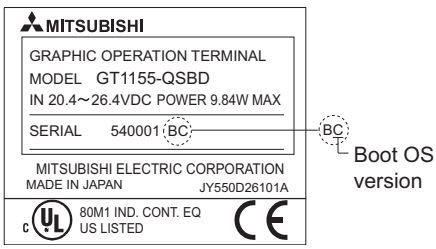
For GT16□□



For GT15□□



For GT11□□



Remark How to view the OS information

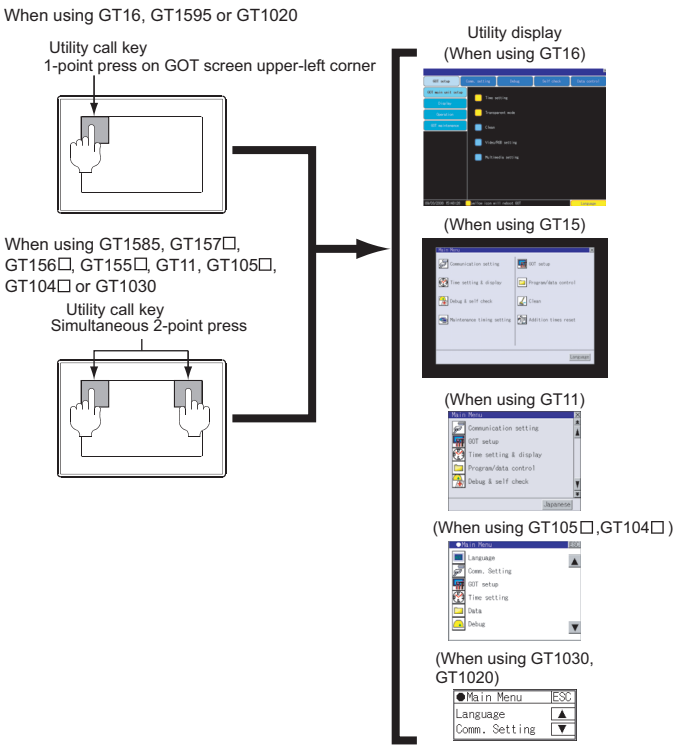
The OS information utility can be displayed by the following operation.
Refer to the following manual for details of the utility starting method and operation method.

☞ GT16□□ : GT16 User's Manual (Basic Utility)
GT15□□ : GT15 User's Manual
GT11□□ : GT11 User's Manual
GT10□□ : GT10 User's Manual

1 Touch the Utility Call Key or Special Function Switch (Utility).
(Touch the above Key or Switch after installing the OS from GT Designeer2 to the GOT.)

(1) When using the Utility Call key
While the user-created screen is being displayed, touch the Utility Call Key to display the Main Menu.
The Utility Call Key can be set using the GOT's utility screen or GT Designer2. Refer to the following manual for the setting method.

☞ Settings within utility: GT16 User's Manual (Basic Utility) for GT16□□
GT15 User's Manual for GT15□□
GT11 User's Manual for GT11□□
GT10 User's Manual for GT10□□
Settings on GT Designer2: GT Designer2 Version□ Screen Design Manual



Point

If the Utility Call Key is set in one place

If the “Pressing Time” on the Utility Call Key setting screen is set to non-zero value, hold the Utility Call Key continuously until the beeper sounds. Refer to the following document for information about Utility Call Key settings.

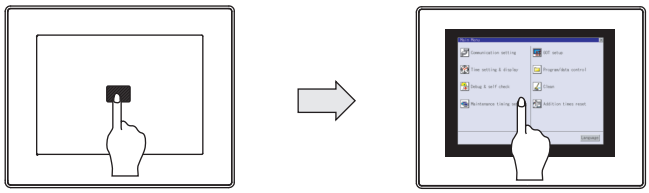
☞ GT□□User's Manual

(2) When using the Special Function Switch (Utility)

While the user-created screen is being displayed, touch the Special Function Switch (Utility) to display the Main Menu.

Refer to the following manual for the Special Function Switch (Utility).

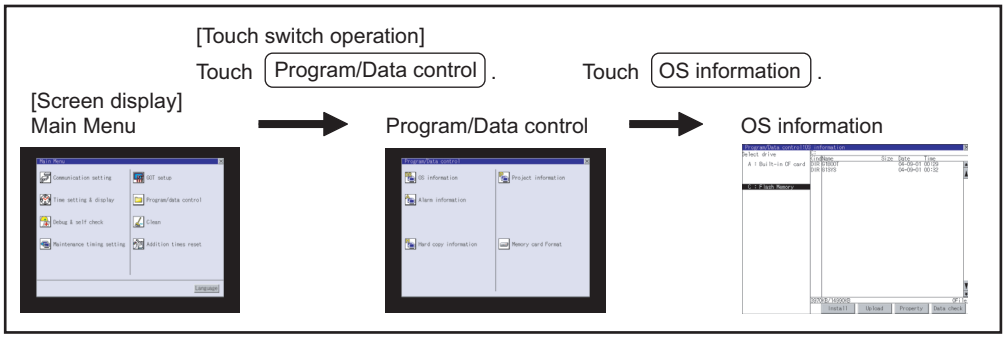
☞ GT Designer2 Version□ Screen Design Manual



Touch a Special Function Switch (Utility).

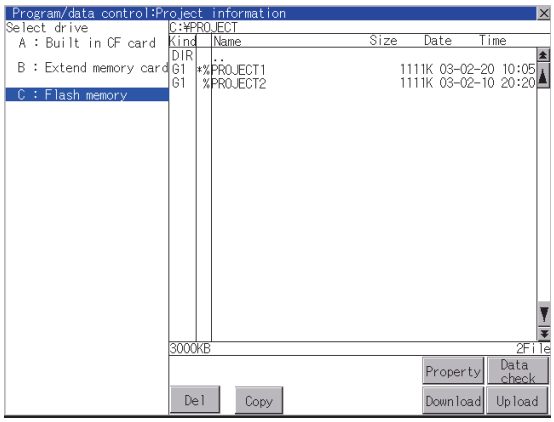
Main Menu of Utility appears.

2 Touch [Main Menu] - [Program/data control] - [OS information] - [C: Flash Memory].

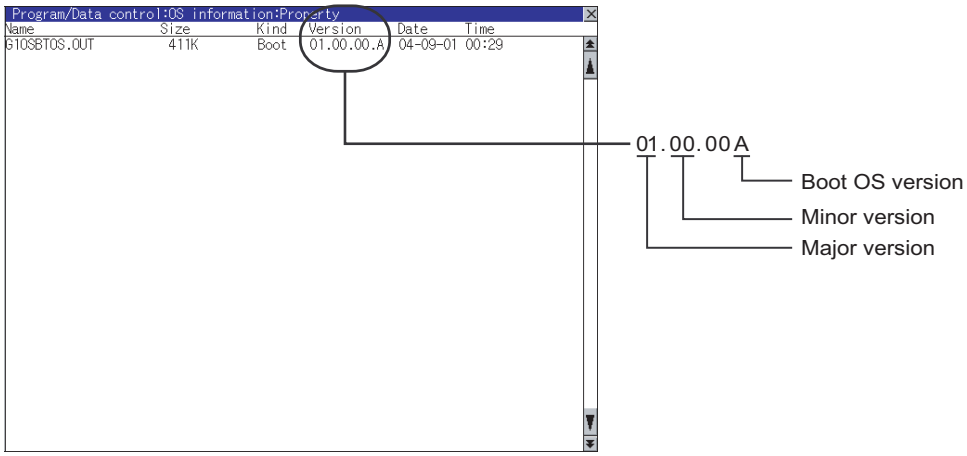


3 The OS information is displayed.

Touch [OS storage folder] - [Property].



4 The Property display screen appears.



(3) Installation method

Basically it is not necessary to install the Boot OS as it has been factory-installed in the GOT. The Boot OS can be installed in either of the following methods.

(a) Installing the Boot OS into the GOT using the USB or RS-232 cable

☞ Section 8.2.5 Installing the Boot OS [PC to GOT]

(b) Installing the Boot OS into the GOT via the memory card

☞ Section 8.9.2 Installing the Boot OS [PC to memory card and memory card to GOT]

Remark

Initializing the GOT (Returning the GOT to factory-settings)

1) If Boot OS is installed, the GOT can be in the same condition as at the time of shipment. However, when Boot OS is installed, the currently installed OS and Project data is automatically deleted. If Project data backup is necessary, upload it to a PC or memory card (CF card) before installing Boot OS.

2) Even after performing step 1), only if the GOT is not in the same condition as at the time of shipment, install CoreOS. (This installation is not normally necessary.)

☞ Section 8.9.2 Installing the Boot OS [PC to memory card and memory card to GOT]

☞ Section 8.9.1 Installing CoreOS [PC to memory card and memory card to GOT]

4 Standard monitor OS

The Standard monitor OS includes the Standard monitor OS, Standard Font, System Screen Data, etc. They are programs that operate the GOT, e.g. interface control, OS/screen data installation, OS/project data deletion, touch key control, and screen/guidance display functions.

Standard monitor OS, 12dot Standard Font [Japanese (supporting Europe)](GT105□, GT104□ and GT1030), and 16dot Standard Font (Gothic) [Japanese (supporting Europe)] are preinstalled on the GT10.

Installation from GT Designer2 onto the GT10 cannot be performed.

Check the Standard monitor OS version when using the Standard Font.

☞ App5. List of Functions Added by GT Designer2 Version Upgrade (For GOT1000 Series)

(1) File names that are used by GT11, 15,16 and storage destination folder in GOT

Data type			File name	Storage destination*1
Standard monitor OS			G1OSMONT.OUT	C:\G1SYS\
	6 × 8 dot Font (ASCII character)			
	24dot Numerical HQ Font			
	32dot Numerical HQ Font			
Standard Font	True Type Numerical Font		G1FTTNMG.FON	
	12dot Standard Font (Gothic)*2		G1F12STG.FON	
	16dot Standard Font (Mincho)*2		G1F16STM.FON	
	16dot Standard Font (Gothic)*2		G1F16STG.FON	
	Japanese	12dot*2	G1F12STG.FON	
		16dot (Mincho)*2	G1F16STM.FON	
		16dot (Gothic)*2	G1F16STG.FON	
	Japanese (supporting Europe)	12dot*2	G1F12SLG.FON	
		16dot (Mincho)*2	G1F16SLM.FON	
		16dot (Gothic)*2	G1F16SLG.FON	
	Chinese (Simplified)	12dot*2	G1F12SGM.FON	
		16dot (Mincho)*2	G1F16SGM.FON	
	Chinese(Simplified) (suppoting Europe)	12dot*2	G1F12SBM.FON	
		16dot (Mincho)*2	G1F16SBM.FON	
	Chinese(Traditional) (suppoting Europe)	12dot*2	G1F12SFG.FON	
		16dot (Gothic)*2	G1F16SFG.FON	
True Type Numerical Font Gothic			G1FTTNMG.FON	
True Type Numerical Font 7-seg			G1FTTNM7.FON	
System Screen Data			G1OSMONT.G1	
System Screen Information			G1OSMONT.G1D	

(2) File names that are used by GT10 and storage destination folder in GOT

Data type			File name	Storage destination
Standard monitor OS			–	C:
Standard Font	6 × 8 dot Font (ASCII character)			
	24dot Numerical HQ Font			
	32dot Numerical HQ Font			
	Japanese	12dot*2		
		16dot (Mincho)*2		
		16dot (Gothic)*2		
	Japanese*3 (supporting Europe)	12dot		
		16dot (Gothic)		
	Chinese(Simplified)	12dot*2		
		16dot (Mincho)*2		
	Chinese(Simplified) (suppoting Europe)	12dot*2		
		16dot (Mincho)*2		
	Chinese(Traditional) (suppoting Europe)	12dot*2		
		16dot (Gothic)*2		
True Type Numerical Font Gothic				
True Type Numerical Font 7-seg*4				

*1 The storage destination folder in the GOT is created when the Standard monitor OS (Standard monitor OS, Standard Font) is installed.

*2 Install the font to be used onto the main body of GOT.
The font to be used on the GOT needs to be the same as Standard Font in the system setting on GT Designer2.

*3 Standard Font [Japanese (supporting Europe)] is preinstalled on the GT10. (12dot Standard font is installed only onto the GT105□, GT104□ and GT1030.)

*4 Not supported depending on the BootOS version. (The BootOS cannot be overwritten.)

☞ App5. List of Functions Added by GT Designer2 Version Upgrade (For GOT1000 Series)

☞ GT10 User's Manual

Point

- In the case of 16dot Standard Font, either Mincho or Gothic can be installed. Make sure to select and install the font specified in the System Settings.
  (With the download item in the Standard monitor OS unchecked, select the font other than the 16dot Standard Font again. This will select the font specified in the system setting.)
- If the 16dot Standard Font specified in the system setting differs from the font to be installed into the GOT, note that the text or object text of the 16dot Standard Font will look differently from the one drawn on GT Designer2, as the GOT uses the installed font to display.
- When the Standard Font Japanese or Chinese (Simplified) is installed, some characters in the European languages (characters with a mark on the top or bottom of the alphabet) are displayed as two-byte characters. When Japanese (supporting Europe), Chinese (Simplified) (supporting Europe) or Chinese(Traditional) (suppoting Europe) is installed, some characters in the European languages (characters with a mark on the top or bottom of the alphabet) are displayed as one-byte-characters.
- Install the same Standard Font as that specified in the system setting. If the font language specified in the system setting differs from the Standard Font to be installed into the GOT, note that the text will look differently from the one drawn on GT Designer2, as the GOT uses the installed Standard font to display.
- To select [German] for the language to display in the GOT utility, install [Supporting Europe].
- When the font certified by Chinese government must be displayed, install Chinese (Simplified).
- Check the Boot OS version when using the TrueType numerical font 7-seg.

Hint!

Displaying Simplified Chinese or Traditional Chinese

Perform the following three steps to display Simplified Chinese characters or Traditional Chinese characters on the GT16☐☐ or GT15☐☐.

(a) Install the following fonts (Option OS) while installing the OS.

12-dot Simplified Chinese (GB) (Mincho)	The Simplified Chinese (GB) font is a GB2312-encoded font mainly used on mainland China.
16-dot Simplified Chinese (GB) (Mincho)	
12-dot Traditional Chinese (Big5) (Gothic)	The Traditional Chinese (Big5) font is a Big5-encoded font mainly used in Taiwan.
12-dot Traditional Chinese (Big5) (Gothic)	

(b) Set each shape and object's KANJI Region to China (GB) - Mincho or China (Big5) - Gothic.

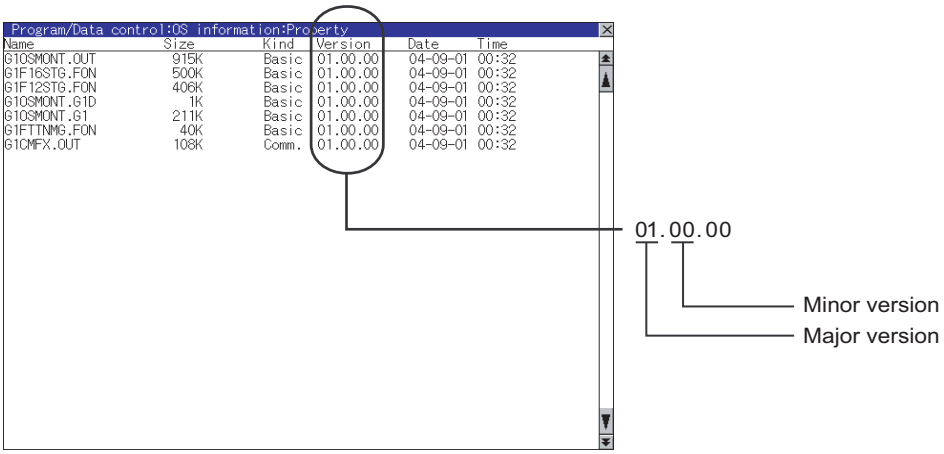
(c) Insert the Extended function board into the GOT. (only for GT15☐☐)

If the Extended function board is not inserted, or if the font (Option OS) is not installed, Japanese characters will be displayed.

(3) Checking the Standard monitor OS version

The version of the Standard monitor OS installed in the GOT can be checked from the "Property of OS information" of the GOT.

☞ 3 " How to view the OS information" in this section



(4) Installation method

The Standard monitor OS has not been factory-installed in the GOT. Therefore, make sure to install it after purchase, then download the project data.

The Standard monitor OS can be installed in either of the following methods.

(a) Installing the OS into the GOT using the USB or RS-232 cable

☞ Section 8.2.6 Installing the OS [PC to GOT]

(b) Installing the OS into the GOT via the memory card

☞ Section 8.9.3 Downloading/installing project data/OS [PC to memory card and memory card to GOT]

5 Communication driver

The communication driver performs communication between the GOT and the controller. Always select and install a communication driver that is appropriate for the controller's protocol. Up to four communication drivers can be installed on the GT16□□, GT15□□, and GT11□□.
Communication driver (MELSEC-FX) is preinstalled on the GT10. The following file names are used by GT16□□, GT15□□, and GT11□□.
Refer to the following manual for details on the connection protocol and controller settings.

☞ GOT1000 Series Connection Manual

(1) File names and storage destinations in GOT

Connection method used		Communication driver name to be installed	File name	Storage destination*1
Bus connection 	QCPU (Q mode)	Bus (Q)	G1CMQBUS.OUT	C:\G1SYS\
	A/QnACPU	Bus (A/QnA)	G1CMABUS.OUT	
CPU direct connection	A/QnA/QCPU 	A/QnA/Q CPU, QJ71C24	G1CMAQDR.OUT	
	FXCPU 	MELSEC-FX	G1CMFX.OUT	
	QnA/QCPU 	QnA/Q CPU	–	C:
	A CPU 	MELSEC-A		
	FX CPU 	MELSEC-FX		

Connection method used		Communication driver name to be installed	File name	Storage destination[*1]
Computer link connection	QCPU 	A/QnA/Q CPU, QJ71C24	G1CMAQDR.OUT	C:\G1SYS\
	QnACPU 	AJ71QC24, MELDAS C6*	G1CMQC24.OUT	
	QCPU (A mode), ACPU 	AJ71C24/UC24	G1CMC24.OUT	
Computer link connection	QCPU 	QnA/Q CPU	–	C:
MELSECNET/H connection (PC-to-PC net) 		MELSECNET/H	G1CMNETH.OUT	C:\G1SYS\
MELSECNET/10 connection (PC-to-PC net) 		MELSECNET/10	G1CMNET1.OUT	
CC-Link IE Controller Network connection 		CC-Link IE Controller Network	G1CMNETG.OUT	
CC-Link(ID) connection (Intelligent device station)		CC-Link Ver. 2(ID)	G1CMCCV2.OUT	
		CC-Link(ID)	G1CMCCID.OUT	
CC-Link(G4) connection (Via G4) 		CC-Link(G4)	G1CMCCG4.OUT	
CC-Link(G4) connection (Via G4) 		CC-Link(G4)	–	C:

Connection method used	Communication driver name to be installed	File name	Storage destination*1
Ethernet connection 	Ethernet(MELSEC),Q17nNC, CRnD-700	G1CME71.OUT	C:\G1SYS\
MODBUS/TCP connection 	MODBUS/TCP	G1CMSMC.OUT	
MODBUS/RTU connection 	MODBUS/RTU	G1CMMRTU.OUT	C:\G1SYS\
MODBUS/RTU connection 	MODBUS/RTU	–	C:
OMRON PLC connection 	OMRON SYSMAC	G1CMSMC.OUT	C:\G1SYS\
OMRON PLC connection 	OMRON SYSMAC	–	C:
KEYENCE PLC connection 	KEYENCE KV-700/1000	G1CMKEY.OUT	C:\G1SYS\
KEYENCE PLC connection 	KEYENCE KV-700/1000	–	C:
KOYO PLC connection 	KOYO KOSTAC/DL	G1CMKSTC.OUT	C:\G1SYS\
SHARP PLC connection 	SHARP JW	G1CMJW.OUT	C:\G1SYS\
JTEKT PLC connection 	JTEKT TOYOPUC-PC	G1CMTOYO.OUT	
TOSHIBA PLC connection 	TOSHIBA PROSEC T/V	G1CMPSCT.OUT	
TOSHIBA MACHINE PLC connection 	TOSHIBA MACHINE TCmini	G1CMTCMI.OUT	
TOSHIBA MACHINE PLC connection 	TOSHIBA MACHINE TCmini	–	C:

Connection method used		Communication driver name to be installed	File name	Storage destination[*1]
HITACHI IES PLC connection 		HITACHI HIDIC H	G1CMHDCH.OUT	C:\G1SYS\
		HITACHI HIDIC H (Protocol2)	G1CMHDC2.OUT	
HITACHI PLC connection 		HITACHI S10mini/S10V	G1CMHS10.OUT	
FUJI FA PLC connection 		FUJI MICREX-F	G1CMFMRX.OUT	
PANASONIC PLC connection 		Panasonic MEWNET-FP	G1CMMWNT.OUT	
PANASONIC PLC connection 		Panasonic MEWNET-FP	–	C:
YASKAWA Electric PLC connection	Serial connection 	YASKAWA GL/CP9200(SH/H)/ CP9300MS	G1CMYGL.OUT	C:\G1SYS\
	Ethernet connection 	Ethernet (YASKAWA)	G1CMYKET.OUT	
YASKAWA Electric PLC connection 		YASKAWA MP	–	C:
YOKOGAWA Electric PLC connection	Serial connection 	YOKOGAWA FA500/FA-M3/ STARDOM	G1CMYGFA.OUT	C:\G1SYS\
	Ethernet connection 	Ethernet (YOKOGAWA)	G1CMYGET.OUT	

Connection method used		Communication driver name to be installed	File name	Storage destination*1
Allen-Bradley PLC connection	Serial connection 	AB SLC500, AB1:N	G1CMRWSL.OUT	C:\G1SYS\
		AB MicroLogix	G1CMRWML.OUT	
		AB Control/Compact Logix	G1CMRWCL.OUT	
	Ethernet connection 	Ethernet/IP(AB)	G1CMETIP.OUT	
Allen-Bradley PLC connection 		AB SLC 500	–	C:
		AB MicroLogix		
GE FUNAC AUTOMATION PLC connection 		GE FUNAC AUTOMATION(SNP-X)	G1CMGESX.OUT	C:\G1SYS\
LS INDUSTRIAL PLC connection 		LSIS Master-K		
LS INDUSTRIAL PLC connection 		LSIS Master-K	–	C:
SIEMENS PLC connection 		SIEMENS S7-200	G1CMSS72.OUT	C:\G1SYS\
		SIEMENS S7-300/400	G1CMSS7.OUT	
SIEMENS PLC connection 		SIEMENS S7-200	–	C:
Microcomputer connection 		Computer	G1CMMICR.OUT	C:\G1SYS\
Microcomputer connection 		Computer	–	C:

Connection method used	Communication driver name to be installed	File name	Storage destination*1
OMRON temperature controller connection 	OMRON THERMAC/INPANEL NEO	G1CMNEO.OUT	C:\G1SYS\
SHINKO indication controller connection 	SHINKO TECHNOS CONTROLLER	G1CMSKTS.OUT	
FUJI SYS temperature controller connection 	FUJI PXR/PXG/PXH	G1CMFC.OUT	
YAMATAKE temperature controller connection 	YAMATAKE SDC/DMC	G1CMYTK.OUT	
YOKOGAWA temperature controller connection 	YOKOGAWA GREEN/UT100/ UT2000	G1CMYGUT.OUT	
RKC temperature controller connection 	RKC SR Mini HG (MODBUS)	G1CMRKC.OUT	C:\G1SYS\
CHINO controller connection 	CHINO Controllers (MODBUS)	G1CMCNDB.OUT	
Inverter connection 	FREQROL 500/700	G1CMFQRL.OUT	
Inverter connection 	FREQROL 500/700	–	C:
Servo amp connection 	MELSERVO-J3,J2S/M	G1CMSV2.OUT	C:\G1SYS\
Servo amp connection 	MELSERVO-J3,J2S/M	–	C:
GOT Multi-Drop Connection 	Multidrop(Slave)	G1CMMLDS.OUT	C:\G1SYS\
GOT Multi-Drop Connection 	Multidrop(Slave)	–	C:

*1 The storage destination folder in the GOT is created when the Communication driver is installed.

(2) Installation method

The Communication driver has not been factory-installed in the GT16□□, GT15□□, and GT11□□. Therefore, make sure to install it after purchase, then download the project data.
The Communication driver can be installed in either of the following methods.

(a) Installing the driver into the GOT using the USB or RS-232 cable

☞ Section 8.2.6 Installing the OS [PC to GOT]

(b) Installing the driver into the GOT via the memory card

☞ Section 8.9.3 Downloading/installing project data/OS [PC to memory card and memory card to GOT]

6 Extended function

The extended function become available after the extended function OS is installed.
The available number of items in the extended function depends on the version of Boot OS.
Refer to the following section for details.

☞ App5. List of Functions Added by GT Designer2 Version Upgrade (For GOT1000 Series)

(1) Extended function and necessary external device

Extended function	Necessary external device	Remarks
System monitor 	–	The "System monitor" function included in extended function must be installed.
Barcode	Barcode reader	The "Barcode" function included in extended function must be installed. (Installation of the “Barcode” function in extended function OS is not required for the GT10.)
RFID 	RFID controller	The "RFID" function included in extended function must be installed.
PC Remote Operation 	–	The "PC Remote Operation" function included in extended function must be installed on the GOT, and the computer remote operation driver must be installed on the personal computer. For details, refer to the following. ☞ GT Designer2 Version□Screen Design Manual
Report 	–	The "Report" function included in extended function must be installed.
Printer 	Printer	The "Printer" function included in extended function must be installed.
Video/RGB[*2] 	Video camera equipment	The "Video/RGB" function included in extended function must be installed.
Multimedia 	Video camera equipment	The "Multimedia" function included in extended function must be installed.
Device name converter[*1] 	–	The "Device name converter" included in extended function must be installed.

Extended function		Necessary external device	Remarks
Stroke Standard Font (GT16 GT15)	Stroke Font Support Data	–	–
	Stroke Standard Font (JPN)	–	The "Stroke Font Support Data" and the "Stroke Standard Font (JPN)" included in extended function must be installed.
	Stroke Standard Font (JPN) (suppoting Hangul)	–	The "Stroke Font Support Data" and the "Stroke Standard Font (JPN) (supporting Hangul)" included in extended function must be installed.
	Stroke Standard Font (China GB)	–	The "Stroke Font Support Data" and the "Stroke Standard Font (China GB)" included in extended function must be installed.
	Stroke Standard Font (China GB) (suppoting Hangul)	–	The "Stroke Font Support Data" and the "Stroke Standard Font (China GB)(supporting Hangul)" included in extended function must be installed.
Sound Output (GT16 GT15)		Speaker	The "Sound Output" included in extended function must be installed.
External I/O/Operation panel (GT16 GT15)		External I/O device operation panel	The "External I/O/Operation panel" included in extended function must be installed.
Operator authentication (GT16 GT15)	Password authentication	–	The "Operator authentication" included in extended function must be installed.
	External authentication	RFID	The "Operator authentication"and the "RFID" included in extended function must be installed.
	Fingerprint authentication	Fingerprint unit	The "Operator authentication"and the "Fingerprint authentication" included in extended function must be installed.
Backup/Restore (GT16 GT15)		–	The "Backup/Restore" included in extended function must be installed.
CNC Data I/O (GT16 GT15)		–	"CNC Data I/O" and "GOT Platform library" in extended function must be installed.
Device Data Transfer (GT16 GT15)		–	The “Device Data Transfer” included in extended function must be installed.

*1 When the log files collected by the operation log function are converted to the CSV/Unicode text files on the GOT, or the device name is output by the operation log information control function, the "Device name converter" is needed.

*2 Only GT15**-S (800 × 600) can use this function.

Point Stroke font

- Install "Stroke Font Support Data" in extended function and "Stroke Standard Font" that corresponds to the language to be displayed in order to use stroke font on the GOT. (Example: Select "Stroke Standard Font (JPN)" to display Japanese.)
- Install "Stroke Standard Font" and "Stroke Font" in option function that corresponds to the language to be displayed in order to display various Chinese characters that are used in multiple areas.
- Select "Stroke Standard Font (supporting Hangul)" in extended function to display Korean (Hangul).
- The total amount of OS may differ depending on the combination of "Stroke Standard Font" in extended function and "Stroke Font" in option function even when displayable stroke font on the GOT is the same.

(2) File name and data storage location

Data type		File name	Storage location
System monitor function		G1OSSYSM.OUT	C:\G1SYS\
Barcode function		G1OSBCD.OUT	
RFID		G1OSRFID.OUT	
PC Remote Operation		G1OSRMUS.OUT	
Report function		G10SRPT.OUT	
Printer function		G10SPRPB.OUT	
Video/RGB function		G1OSVRIN.OUT	
Multimedia		G1OSMMR.OUT	
Device name converter		G1OSDEV.OUT	
Stroke Standard Font	Stroke Font Support Data	G1OSSTRK.OUT	
	Stroke Standard Font (JPN)	G1SFRSLG.FON	
	Stroke Standard Font (JPN) (supporting Hangul)	G1SFRSKG.FON	
	Stroke Standard Font (China GB)	G1SFRSBG.FON	
	Stroke Standard Font (China GB) (suppoting Hangul)	G1SFRGKG.FON	
Sound Output		G1OSSND.OUT	
External I/O / Operation Panel		G1OSDIO.OUT	
Operator authentication		G1OSAU.OUT	
Fingerprint authentication		G1OSFPA.OUT	
Backup/Restore		G1OSBKUP.OUT	
CNC Data I/O		G1OSNCIO.OUT	
GOT Platform library		G1OSPTFM.OUT	
Device Data Transfer		G1OSDVMV.OUT	

7 Option functions

Functions and fonts that are available by installing the Option OS or mounting the option function board (including the one with add-on memory) or option function board dedicated to each function.

The following shows the option functions and the devices (the option function board, option function board with add-on memory, or multi-color display board) need to be mounted on the GOT.
Refer to the following manual for the recipe function, font and maintenance report function.

☞ GT Designer2 Version□ Screen Design Manual

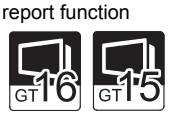
The available number of items in the option function depends on the version of Boot OS.
Refer to the following section for details.

☞ App5. List of Functions Added by GT Designer2 Version Upgrade (For GOT1000 Series)

(1) Option function and necessary device

Option function	Necessary device	Remarks
Multi-color display function (Function that uses 65536 colors to display image data) 	Multi-color display board For GT16: Not required For GT15: (It is not required depending on the function version of the GOT main unit. Refer to the GT15 User's Manual.)	• The Option OS is not required. • Check "Use 65536 colors for image data display" in System Settings of [Common] - [System Environment].
Multi-Channel function 	For GT16: Not required For GT15: Expansion memory-attached option function board*2	The Option OS is not required.
Recipe function	For GT16: Not required For GT15: Option function board or expansion memory-attached option function board*1 For GT11: Option function board For GT10: Not required	It is necessary to install the Option OS, "Recipe". (Installation of the "Recipe function" on the Option OS is not required for the GT10.)
Advanced Recipe function 	For GT16: Not required For GT15: Option function board or expansion memory-attached option function board*1	The Option OS, "Advanced Recipe" function must be installed.
Logging funciton 		The Option OS, "Logging" function must be installed.
Object Script function 		The Option OS, "Object Script" function must be installed.
Operation Log function 	For GT16: Not required For GT15: • Option function board or expansion memory-attached option function board*1 • CF card	The Option OS, "Operation Log" function must be installed.
Document Display function 	For GT16: Not required For GT15: • Expansion memory-attached option function board*2 • CF card	The Option OS, "Document Display" function must be installed.
MES Interface function 	MES Interface function attached option function board*3	The Option OS, "MES Interface" function must be installed.

Option function	Necessary device	Remarks
Ladder monitor function for MELSEC-A 	For GT16: Not required For GT15: Option function board or expansion memory-attached option function board[*1]	The Option OS, "Ladder monitor for MELSEC-A" function must be installed.
Ladder monitor function for MELSEC-Q/QnA 	For GT16: Not required For GT15: Expansion memory-attached option function board[*2]	The Option OS, "Ladder monitor for MELSEC-Q/QnA" function must be installed.
Ladder monitor function for MELSEC-FX 	For GT16: Not required For GT15: Option function board or expansion memory-attached option function board[*1]	The Option OS, "Ladder monitor for MELSEC-FX" function must be installed.
Ladder editor function 		The Extended function OS, "GOT Platform library" and the Option OS, "Ladder editor" and "GOT Function Expansion Library" must be installed.
Network monitor function 		The Option OS, "Network monitor" function must be installed.
SFC monitor function 		The Extended function OS, "GOT Platform library" and the Option OS, "SFC Monitor" and "GOT Function Expansion Library" must be installed.
Intelligent module monitor function 		The Option OS, "Intelligent unit monitor" function must be installed.
Q motion monitor function 		The Option OS, "Q motion monitor" function must be installed.
Servo amplifier monitor function 		The Option OS, "Servo amplifier monitor" function must be installed.
CNC monitor function 		The Option OS, "CNC monitor" function must be installed.
List editor for MELSEC-FX[*4]	For GT16: Not required For GT15: Option function board or expansion memory-attached option function board[*1] For GT11: Option function board For GT10: Not required	The Option OS, "MELSEC-FX" must be installed. The installation is not necessary, as it is included in the Standard monitor OS for GT105□ and GT104□.
List editor function for MELSEC-A 	For GT16: Not required For GT15: Option function board or expansion memory-attached option function board[*1] For GT11: Option function board	The Option OS, "List editor for MELSEC-A" function must be installed.

Option function		Necessary device	Remarks
Gateway (Server, Client) function 		For GT16: Not required For GT15: Option function board or expansion memory-attached option function board[*1]	The Option OS, "Gateway (Server, Client)" function must be installed.
Gateway (Mail) function 			The Option OS, "Gateway (Mail)" function must be installed.
Gateway (FTP) function 			The Option OS, "Gateway (FTP)" function must be installed.
Standard Font (China: Simplified) (Simplified Chinese [GB] Mincho) 			The Option OS, "Standard Font (China GB)" must be installed.
Standard Font (China : Big5) (Traditional Chinese) (Big5) (Gothic)) 			The Option OS, "Standard Font (China Big 5)" must be installed.
Standard Font (Japanese) 			The Option OS, "Standard Font (Japanese)" must be installed.
Stroke Font	Stroke Font (JPN) 		The "Stroke Font Support Data" in extended function and "Stroke Font (JPN)" in option function must be installed.
	Stroke Font (China GB) 		The "Stroke Font Support Data" in extended function and "Stroke Font (China GB)" in option function must be installed.
	Stroke Font (China Big5) 		The "Stroke Font Support Data" in extended function and "Stroke Font (China Big5)" in option function must be installed.
Kana-Kanji conversion function	Kana-Kanji conversion 		This function is dedicated to Japanese version.
	Kana-kanji conversion (Enhanced Version) 		This function is dedicated to Japanese version.
Maintenance report function 		For GT16: Not required For GT15: • Option function board or expansion memory-attached option function board[*1] • Battery	The Option OS is not required.

*1 For the GT11□□, use the option function board.
For the GT15□□, use the option function board or expansion memory attached option function board. If the total amount of data residing in GOT exceeds the standard memory amount, use the expansion memory attached option function board.

*2 The multi-channel function and ladder monitor function for MELSEC-Q/QnA cannot be used on the GT15-FNB.

*3 Installing the Option OS for MES Interface function requires 8218 KB on the option function board as work memory for MES Interface function in addition to the space required for MES Interface function data (3216KB). Other option functions (except multi-color display function) can be used by inserting the option function board with MES Interface function.
For the GT16□□, use GT16-MESB.

*4 Only GT105□ and GT104□ can use this function.

Point

Precaution for using the option function board

An option function board (GT15-FNB or GT11-50FNB) is built in the following GOTs.

Item	Model	Description
GT16	All models	To use the MES Interface function, the option function board is required.
GT15*1	All models	Function version D or later
GT11	GT1155-QTBDQ, GT1155-QTBDA, GT1155-QSBDQ, GT1155-QSBDA, GT1150-QLBDQ, GT1150-QLBDA	
	GT1155-QTBD	Hardware Version A or later
	GT1155HS-QSBD, GT1150HS-QLBD	Hardware Version B or later
	GT1155-QSBD, GT1150-QLBD	Hardware Version C or later

*1 For using an option function board built in the GOT, the latest standard monitor OS must be installed on the GOT.
For OS versions, refer to the followings.

☞ Section App5. List of Functions Added by GT Designer2 Version Upgrade (For GOT1000 Series)

Option functions operated with the GT15-FNB or GT11-50FNB can be used without installing an additional option function board.
For using functions operated with the GT15-QFNB(M) or GT15-MESB48M, and for adding more memory to the GT15, install an applicable option function board.
An additional option function board can be installed on the GOT with a built-in option function board. (An option function board inapplicable to the GOT cannot be used. (An option function board for the GT11 cannot be installed on the GT15.))

For how to check function version and hardware version, refer to the following manuals.

☞ GT16 User's Manual
GT15 User's Manual
GT11 User's Manual
GT11 Handy GOT User's Manual

Hint!

GT16 GT15

Displaying Simplified Chinese or Traditional Chinese characters

The 12-dot standard font and 16-dot standard font use Unicode 2.1, and for part of the Traditional Chinese and Korean character sets, characters similar to the proper character may be displayed.
To display Simplified Chinese and Traditional Chinese characters on the GT16□□ or GT15□□, install the standard font (China GB) and standard font (China Big5), and perform kanji region settings so that instead of 12-dot standard font and 16-dot standard font, the standard font (China GB) and standard font (China Big5) can be displayed.
The Simplified Chinese (GB) font is a GB2312-encoded font mainly used on mainland China.
The Traditional Chinese (Big5) font is a Big 5-encoded font mainly used in Taiwan.

(2) File names and data storage destinations

Data type	File name	Storage destination[*1]
Advanced Recipe function	G1OSARCP.OUT	C:\G1SYS\
Logging function	G1OSLOG.OUT	
Object Script function	G1OSSCR.OUT	
Operation Log function	G1OSOPLG.OUT	
Document Display function	G1OSDOCV.OUT	
MES Interface function	G1OSMES.OUT	
Ladder monitor function for MELSEC-A	G1OSACIR.OUT	
Ladder monitor function for MELSEC-Q/QnA	G1OSQCIR.OUT	
Ladder monitor function for MELSEC-FX	G1OSFCIR.OUT	
Network monitor function	G1OSNETM.OUT	
Intelligent unit monitor function	G1OSSPM.OUT	
Q motion monitor function	G1OSMTM.OUT	
Servo amplifier monitor function	G1OSSVM.OUT	
CNC monitor function	G1OSCNCM.OUT	

Data type		File name	Storage destination[*1]
List editor for MELSEC-FX		G1OSFLST.OUT	C:\G1SYS\
List editor for MELSEC-A		G1OSALST.OUT	
Gateway (Server, Client) function		G1OSGWYE.OUT	
Gateway (Mail) function		G1OSGWYM.OUT	
Gateway (FTP) function		G1OSGWYF.OUT	
Racipe function		G1OSRECP.OUT	
Standard Font (China GB)	12-dot characters	G1F12GBM.FON	
	16-dot characters	G1F16GBM.FON	
Standard Font (China Big5)	12-dot characters	G1F12BGG.FON	
	16-dot characters	G1F16BGG.FON	
Standard Font (Japanese)	12-dot characters	G1F12JSG.FON	
	16-dot characters	G1F16JSG.FON	
Stroke Font	Stroke Font (JPN)	G1SFRJSG.FON	
	Stroke Font (China GB)	G1SFRGBG.FON	
	Stroke Font (China Big5)	G1SFRBGG.FON	
Kana-kanji conversion function[*2]		G1OSFEP.OUT	
Kana-kanji conversion function (Enhanced Version)		G1OSFEP2.OUT	
Maintenance report function		G1OSMONT.OUT	

*1 The storage destination folder in the GOT is created when the Option OS is installed.

*2 This function is dedicated to Japanese version.

(3) Installation method

Option OSs such as the Recipe, Standard Font (China GB) and Standard Font (China Big5) have not been factory-installed in the GOT. Therefore make sure to install them after purchase to make the option functions usable, then download the project data.

The Option OSs can be installed in either of the following methods.

(a) Installing the OS into the GOT using the USB or RS-232 cable

☞ Section 8.2.6 Installing the OS [PC to GOT]

(b) Installing the OS into the GOT using the USB or RS-232 cable

☞ Section 8.9.3 Downloading/installing project data/OS [PC to memory card and memory card to GOT]

8 Project data

Data for monitor screens created by the user

(1) File names and data storage destinations

Data type	File name	Storage destination*1		
		GT16, GT15	GT11	GT10
Project data	G1PRJCT.G1	A:\Project1*2\ or B:\Project1*2\ or C:\Project1*2\	C:\Project1*2\	C:\Project1*2\
User screen data (base screen, window screen and advanced recipe*4)				
Parts				
Comment				
Sound Files				
Common Settings				
HQ Font*3				

*1 The storage destination folder in the GOT is created when the project data is downloaded.

*2 Specify the project folder name in [Common] - [System Environment] - [System Settings]. (The default setting is Project 1.)

☞ Section 7.2 Creating a New Project

*3 Check HQ Font when the high-quality font has been set for texts or objects (except Numerical Display and Numerical Input). (The font cannot be selected separately.)

*4 If the file is downloaded after the recipe setting is changed, update the recipe file, too. Otherwise the device values will not be loaded or written according to the settings changed with GT Designer 2. For details, refer to the following manual.

☞ See GT Designer 2 Version ☐ Screen Design Manual

(2) Downloading method

Project data can be downloaded in either of the following methods.

(a) Downloading project data into the GOT using the USB, RS-232 cable or Ethernet.

☞ Section 8.3 Downloading Project Data [PC to GOT]

(b) Downloading project data into the GOT via the memory card.

☞ Section 8.9.3 Downloading/installing project data/OS [PC to memory card and memory card to GOT]

9 Resource data

The Resource data indicates various data generated in the GOT.
For details of each data, refer to the corresponding function's explanation in the following manual.

☞ GT Designer2 Version□ Screen Design Manual

Data type	File name	File format	Storage destination[*1]					Remarks
			GT16	GT15	GT11	GT10		
						GT105□ GT104□ GT1030	GT1020	
Advanced Alarm log file	AAM#####.CSV[*2*3]	CSV	A:\,B:\,C:\ (any path specified in the corresponding object settings)\	A:\,B:\ (any path specified in the corresponding object settings)\	–	–	–	File output by the Advanced Alarm function
	AAM#####.TXT[*2*3]	TXT						
	AAM#####.G1A[*2*4]	Binary file						
Alarm log file	ALARMHST.CSV	CSV			A:\ D:\	D:\[*6]	C:\[*6]	File output by the Alarm History function
	ALARMHST.G1H[*4]	Binary file				–	–	
Advanced Recipe file	ARP#####.CSV[*3*5]	CSV			–			File output by the advanced recipe function
	ARP#####.TXT[*3*5]	TXT						
	ARP#####.G1P[*5]	Binary file						
Recipe data file	RECIP###.CSV[*2]	CSV			A:\ D:\	D:\[*6]	C:\[*6]	File output by the recipe function
	RECIP###.TXT[*2*3]	TXT			–	–	–	
	RECIP###.G1R[*4]	Binary file	-	-	A:\ D:\			
Data log file	LOG###.CSV[*2*3]	CSV	A:\,B:\,C:\ (any path specified in the corresponding object settings)\	A:\,B:\ (any path specified in the corresponding object settings)\	–			File output by the logging function
	LOG###.TXT[*2*4]	TXT						
	LOG###.G1L[*2]	Binary file						
Operation log file	OPELOG_YYYYMMDD_xx.CSV	CSV						File output by the operating log function
	OPELOG_YYYYMMDD_xx.TXT	TXT						
	OPELOG_YYYYMMDD_xx.G10	Binary file						
Screen transition information file	BASEHIST.G1C	Binary file	A:\,B:\,C:\ (project folder name)\	A:\,B:\ (project folder name)\	A:\			File output when the screen switching operation mode is set to the history mode (save)

Data type	File name	File format	Storage destination*1					Remarks
			GT16	GT15	GT11	GT10		
						GT105□ GT104□ GT1030	GT1020	
Operator management information file	AUTHINF.G1U	Binary file	C:\Directly under	C:\Directly under	–	–	–	File for setting the operator information and setting used for the operator authentication
Fingerprint information administrator file	FINGAUTH.G1F	Binary file	C:\Directly under	C:\Directly under				File for storing the administrator password used for the fingerprint authentication device
Image file (BMP format)	SNAP####.BMP*2	BMP	A:\,B:\,C:\ (any path specified in [Common] - [Hard Copy])	A:\,B:\ (any path specified in [Common] - [Hard Copy])				File output by the hard copy function
Image file (JPEG format)	SNAP####.JPG*2	JPEG						

*1 The storage destination folder in the GOT is created when the project data is downloaded.

*2 ### indicates a serial No. of each data type.
The file name can also be specified by the user in the common settings or object settings.

*3 Must be converted from the BIN file by the utility function.

*4 On GT Designer2, the user cannot use these binary files even if they are uploaded. Therefore, upload them to GT Designer2 after converting them into text format or CSV format files on the GOT.
On the GT11□□, however, the binary files cannot be converted into any other format files.

*5 The binary file is necessary, too, if a CSV/TXT file is to be converted into a binary file with GT Designer 2. In this case, upload the binary file, too.

*6 In the case that resource data is uploaded with GT Designer 2.

8.1.2 Drive capacity required for data transfer

The GOT operates by expanding the OS or Project data stored in the built-in flash memory (ROM) to the user memory (RAM).
For the GT16, since a part of the data is compressed to be stored in the built-in flash memory (ROM), the data size becomes larger when it is expanded to the user memory (RAM).
Boot OS, Standard monitor OS, Communication driver, Extended function OS, Option OS, Special data, Project data and other data are stored in the system area and user area of the drive specified by the GOT.
Regarding Boot OS, Standard monitor OS and first communication driver on the GT15 that are stored in the system area of the C drive, it is not necessary to check the data capacity before installation.
However, when the GT16 or GT15 is used, for extended function OS, option function, communication driver (the second or later communication driver for the GT15) and project data that are stored in the user area, data will not be transferred if there is insufficient space on the target drive.
When performing data transfer (OS installation, project data download), confirm the amount of space available on the specified drive's user area and the amount of data to be transferred.

User area capacity

Transfer destination		User area capacity		Remarks
GT16	Drive C (C: Built-in Flash memory)	15MB		The total memory size of Extended function OS, Option OS, Special data, and Communication driver must be smaller than the user area capacity. Download (store) the Project data to Drive A (A: Standard CF Card) or Drive B (B: Extended Memory Card) if user area does not have enough space for Project data, Extended function OS, Option OS, Special data, Communication driver, and buffering.
	Drive A (A: Standard CF Card)	Check the CF Card capacity.		
	Drive B (B: Extended Memory Card)	Check the CF Card capacity.		
	Drive E (E: USB memory)	Check the USB memory capacity.		
GT15	Drive C (C: Built-in Flash memory)	GT1595-X, GT1585V-S, GT1585-S, GT1575V-S, GT1575-V, GT1565-V, GT1555-V, GT1555-Q, GT1550-Q	9MB	The total memory size of Extended function OS, Option OS, Special data, and the second or later Communication driver must be smaller than the user area capacity. An option function board with add-on memory is necessary if user area does not have enough space for Project data, Extended function OS, Option OS, Special data, Communication driver, and buffering.
		GT1575-VN, GT1572-VN, GT1562-VN	5MB	
	Drive A (A: Standard CF Card)	Check the CF Card capacity.		
	Drive B (B: Extended Memory Card)	Check the CF Card capacity.		
GT11	Drive C (C: Built-in Flash memory)	3MB		The project data size is a maximum of 3MB.
GT10	Drive C (C: Built-in Flash memory)	GT105□	3MB	The project data size is a maximum of 3MB.
	Drive C (C: Built-in Flash memory)	GT104□	3MB	The project data size is a maximum of 3MB.
	Drive C (C: Built-in Flash memory)	GT1030	1.5MB	The project data size is a maximum of 1.5MB.
	Drive C (C: Built-in Flash memory)	GT1020	512KB	The project data size is a maximum of 512KB.

Each type of data is grouped and shown as ⓐ, ⓑ, Ⓐ, ...
Apply the corresponding size when calculating the data size with the following expressions or flow charts.

Data type (GT16)
ⓐ Extended function OS stored in the ROM
ⓑ Option OS stored in the ROM
Ⓐ Extended function OS expanded to the RAM
Ⓑ Option OS expanded to the RAM
Ⓒ Communication driver
Ⓓ Special data
Ⓔ Project data
Ⓕ Buffering area

Data type (GT15)
Ⓐ Extended function OS
Ⓑ Option OS
Ⓒ Second or later communication driver
Ⓓ Special data
Ⓔ Project data
Ⓕ Buffering area

Data size of extended functions

For GT16

			User area capacity	
			ⓐ Built-in flash memory (ROM)	Ⓐ User memory (RAM)
GT16	System monitor		450KB	692KB
	Barcode		50KB	84KB
	RFID		50KB	166KB
	Report		150KB	235KB
	Printer		552KB	1104KB
	Video/Multimedia	Video/RGB	298KB	480KB
		Multimedia	292KB	1074KB
	PC Remote Operation		50KB	84KB
	Device name converter		400KB	800KB
	Stroke Standard Font	Stroke Font Support Data	300KB	400KB
		Stroke Standard Font (JPN)	2160KB	2160KB
		Stroke Standard Font (JPN) (supporting Hangul)	3175KB	3175KB
		Stroke Standard Font (China GB)	1474KB	1474KB
		Stroke Standard Font (China GB) (supporting Hangul)	2016KB	2016KB
	Sound Output		100KB	200KB
	External I/O/Operation Panel		70KB	100KB
	Operator authentication		460KB	730KB
	Fingerprint authentication		270KB	616KB
	Backup/Restore		420KB	766KB
	CNC Data I/O		210KB	383KB
	GOT Platform library		77KB	200KB
	Device Data Transfer		50KB	100KB

For GT15

			Ⓐ User area capacity
	System monitor		746KB
	Barcode		84KB
	RFID		166KB
	Report		640KB
	Printer		235KB
	Video/RGB		1104KB
	Device name converter		800KB
	Stroke Standard Font	Stroke Font Support Data	400KB
		Stroke Standard Font (JPN)	2160KB
		Stroke Standard Font (JPN) (supporting Hangul)	3175KB
		Stroke Standard Font (China GB)	1474KB
		Stroke Standard Font (China GB) (supporting Hangul)	2016KB
	Sound Output		200KB
	External I/O/Operation Panel		100KB
	Operator authentication		784KB
	Fingerprint authentication		616KB
	Backup/Restore		820KB
	CNC Data I/O		437KB
	GOT Platform library		100KB
	Device Data Transfer		100KB

For GT11

		User area capacity
	System monitor	0KB
	Barcode	0KB
	RFID	0KB

Data size of optional functions

For GT16

			User area capacity	
			b Built-in flash memory (ROM)	B User memory (RAM)
	Standard Font (China GB)	12-dot characters	1280KB	1280KB
		16-dot characters		
	Standard Font (China Big5)	12-dot characters	1920KB	1920KB
		16-dot characters		
	Standard Font (Japanese)	12-dot characters	1280KB	1280KB
		16-dot characters		
	Stroke Font	Stroke Font (JPN)	1037KB	1037KB
		Stroke Font (China GB)	1248KB	1248KB
		Stroke Font (China Big5)	1680KB	1680KB
	Recipe		70KB	100 KB
	Advanced Recipe		310KB	1187KB
	Logging		380KB	740KB
	KANA KANJI (JPN) (Enhanced Version)		1242KB	2774KB
	Object Script		180KB	360KB
	Operation Log		384KB	1221KB
	Document Display		1598KB	3072KB
	MES Interface function		310KB	13461KB
	Ladder monitor	Ladder monitor for MELSEC-A	342KB	674KB
		Ladder monitor for MELSEC-Q/QnA	590KB	4170KB
		Ladder monitor for MELSEC-FX	342KB	674KB
	Ladder editor		2567KB	8192KB
	Network monitor		210KB	370KB
	Intelligent module monitor		390KB	770KB
	Q motion monitor		390KB	770KB
	Servo amplifier monitor		390KB	770KB
	CNC monitor		390KB	770KB
	SFC monitor		442KB	2108KB
	GOT Function Expansion Library		4729KB	19381KB
	List editor for MELSEC-A		542KB	1024KB
	List editor for MELSEC-FX		542KB	1024KB
	Gateway (Server, Client)		50KB	100KB
	Gateway (Mail)		50KB	100KB
	Gateway (FTP)		50KB	84KB

For GT15

			B User area capacity
	Multi-color display		0 KB
	Multi-channel function		0 KB
	Maintenance report function		0 KB
	Standard Font (China GB)	12-dot characters	1280KB
		16-dot characters	
	Standard Font (China Big5)	12-dot characters	1920KB
		16-dot characters	
	Standard Font (Japanese)	12-dot characters	1280KB
		16-dot characters	
	Stroke Font	Stroke Font (JPN)	1037KB
		Stroke Font (China GB)	1248KB
		Stroke Font (China Big5)	1680KB
	Recipe		100 KB
	Advanced Recipe		1241KB
	Logging		740KB
	KANA KANJI (JPN)		1223KB
	KANA KANJI (JPN)(Enhanced Version)		2774KB
	Object Script		360KB
	Operation Log		1218KB
	Document Display		2048KB
	MES Interface function		3196KB
	Ladder monitor	Ladder monitor for MELSEC-A	523KB
		Ladder monitor for MELSEC-Q/QnA	1082KB
		Ladder monitor for MELSEC-FX	592KB
	Ladder editor		5121KB
	Network monitor		324KB
	Intelligent module monitor		384KB
	Q motion monitor		607KB
	Servo amplifier monitor		524KB
	CNC monitor		588KB
	SFC monitor		1373KB
	GOT Function Expansion Library		4729KB
	List editor for MELSEC-A		1058KB
	List editor for MELSEC-FX		1058KB
	Gateway (Server, Client)		100KB
	Gateway (Mail)		100KB
	Gateway (FTP)		64KB

For GT11

		User area capacity
	Recipe	0KB
	List editor for MELSEC-A	0KB
	List editor for MELSEC-FX	0KB

C Communication driver data size

For GT16

			User area capacity
	Bus/Network Group	Bus (A/QnA)	150KB
		Bus (Q)	180KB
		MELSECNET/H	200KB
		CC-Link IE Controller	200KB
		CC-Link Ver.2 (ID)	150KB
	Ethernet Connection	Ethernet (MELSEC), Q17nNC, QRnD-700	150KB
		Ethernet (YASKAWA)	160KB
		Ethernet (YOKOGAWA)	150KB
		Ethernet/IP (AB)	150KB
		MODBUS/TCP	150KB
	A/QnA/Q CPU, QJ71C24		180KB
	AJ71QC24, MELDASC6*		150KB
	AJ71C24/UC24		150KB
	MELSEC-FX		180KB
	CC-Link (G4)		150KB
	MELSERVO-J3, J2S/M		150KB
	FREQROL 500/700		150KB
	OMRON SYSMAC		150KB
	OMRON SYSMAC/INPANEL NEO		150KB
	KEYENCE KV-700/1000		150KB
	KOYO KOSTAC/DL		150KB
GT16	JTECT TOYOPUC-PC		160KB
	SHARP JW		150KB
	SHINKO TECHNOS CONTROLLER		150KB
	TOSHIBA PROSEC T/V		150KB
	TOSHIBA MACHINE TC mini		150KB
	HITACHI HIDC H		150KB
	HITACHI HIDC H (Protcol2)		150KB
	HITACHI SIDmini/SIDV		150KB
	FUJI PXR/PXG/PXH		150KB
	FUJI MICREX-F		150KB
	Computer		230KB
	MATSUSHITA MEWNET-FP		150KB
	YASKAWA GL/CP9200 (SH/H) /CP9300MS		150KB
	YAMATAKE SDC/DMC		150KB
	YOKOGAWA FA500/FA-M3/STARDOM		150KB
	YOKOGAWA GREEN/UT100/UT200		150KB
	RKC SR Mini HG (MODBUS)		150KB
	AB SLC500-AB I :N		150KB
	AB MicroLogix		150KB
	AB Control/CompactLogix		150KB
	GE Fanuc Automation (SNP-X)		180KB
	LS Industrial Systems Master-K		150KB
	SIEMENS S7-300/400		150KB

		User area capacity
GT16	SIEMENS S7-200	150KB
	CHINO Controllers (MODBUS)	150KB

For GT15
Communication drivers use 150 KB each.

Ⓕ Buffering area size (data size)

Refer to the following manual for the data size of the buffering area size.

☞ GT Designer2 Version□ Screen Design Manual

1 Newly transferring data to the GOT

Check whether the following expression is satisfied or not.
Refer to the following section for the project data size.

☞ 3 Checking the project data size to be downloaded in this section

- For GT16□□
  The GT16□□ can store the project data into Drive C or Drive A (A: Standard CF Card).

User area space (ROM Size) > Project data size Ⓔ + Extended function OS data size ⓐ*1 + Option OS data size ⓑ*1*2 + Communication driver data size Ⓒ + Special Data Ⓓ

*1 Calculate the sizes of Extended function OS and Option OS with the values ⓐ and ⓑ which are the sizes when they are stored in the built-in flash memory (ROM).

- For GT15□□
  The GT15□□ can store the project data into Drive C or Drive A (A: Standard CF Card).

User area space > Project data size Ⓔ + Extended function OS data size Ⓐ + Option OS data size Ⓑ*2 + Second or later Communication driver data size Ⓒ + Special Data Ⓓ

- For GT11□□, GT10□□
  The GT11□□, GT10□□ can store the project data into Drive C.

User area space[A] > Project data size

*2 When the GOT project data created on PX Developer (Ver.1.15 or later) is used, logging function and object script function are required.
Refer to the PX Developer User's Manual for details.

Point

(1) When free space of transfer destination drive is sufficient but the insufficient space message appears

After deleting all data from the project folder, check Download and download all project data.

When it is necessary to back up the project data, upload it to the PC or memory card before downloading.

(2) Memory for storage (ROM) and memory for operation (RAM)

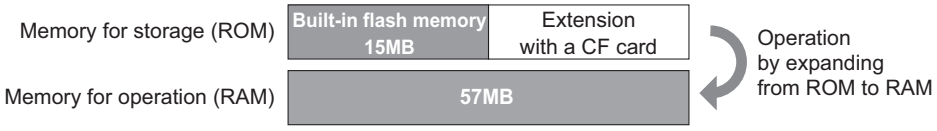
For GT16□□

- The GT16□□ operates by expanding the OS or project data stored in the memory for storage (ROM) to the memory for operation (RAM).

  Memory for storage (ROM) :Built-in flash memory 15MB Included as standard

  Memory for operation (RAM) :User memory 57MB Included as standard

  The memory for storage can be extended by using the CF card if the OS or project data exceeds 15MB.



  The built-in flash memory corresponds to "Drive C", and the CF card corresponds to "Drive A (standard)" or "Drive B (extended)".

- The memory for operation (RAM) cannot be extended.

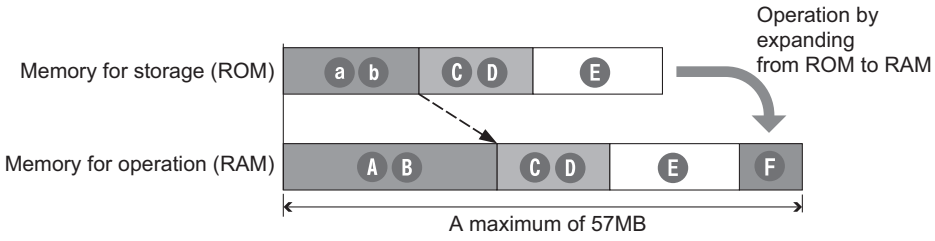
  If the amount of data expanded to the memory for operation (RAM) exceeds 57MB, data must be resized by reducing the project data or deleting the unnecessary OS.

  For the extended function OS and option OS, the compressed data ⓐ and ⓑ are stored in the memory for storage (ROM) and the data size becomes larger as shown by Ⓐ and Ⓑ when they are expanded to the memory for operation (RAM).

  The buffering area Ⓕ is an area for storing the resource data such as logging or advanced alarm and uses the memory for operation (RAM). The data size varies depending on the setting.

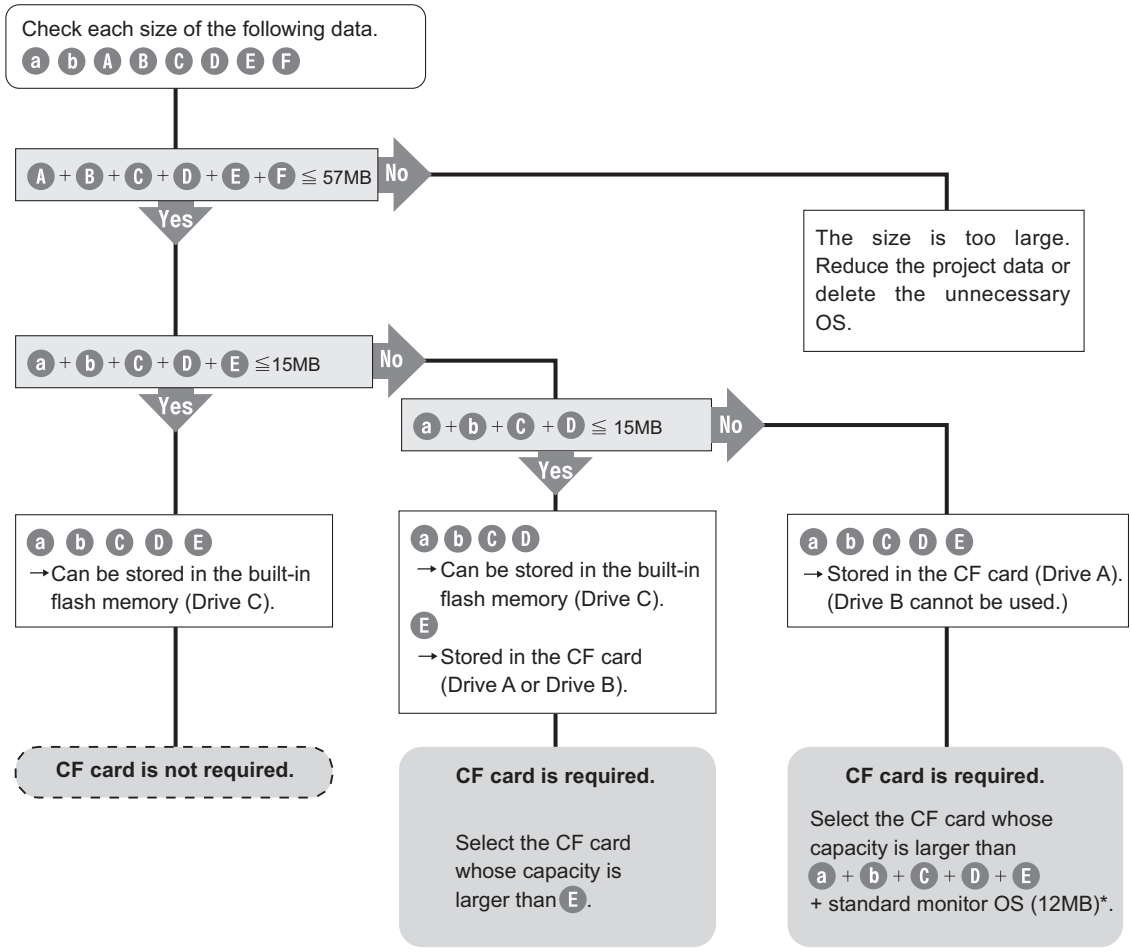
  The stored resource data is stored to the specified storage destination (Drive A or Drive B) when saving to a file is specified by GT Designer2. (The memory for storage (ROM) is not used.)

  If the amount of data expanded to the memory for operation (RAM) exceeds 57MB, data must be resized by deleting the project data or unnecessary OS.



Data type
a Extended function OS stored in the ROM
b Option OS stored in the ROM
A Extended function OS expanded to the RAM
B Option OS expanded to the RAM
C Communication driver
D Special data
E Project data
F Buffering area

- Whether the CF card is required or not and the required capacity of CF card vary depending on the data size.
  Select whether to use the CF card and its capacity using the following flow chart.



* : When the extended function OS and option OS are stored in the CF card (Drive A), the standard monitor OS (standard monitor OS, basic font, etc.) must be stored also in the CF card (Drive A).

For GT15□□

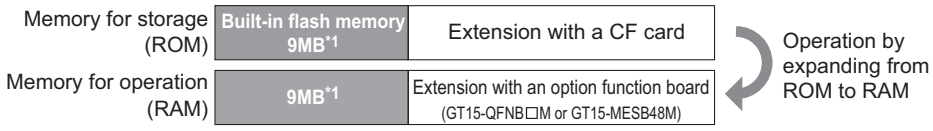
- The GT15□□ operates by expanding the OS or project data stored in the memory for storage (ROM) to the memory for operation (RAM).

  Memory for storage (ROM): Built-in flash memory 9MB or 5MB[*1] Included as standard

  Memory for operation (RAM): 9MB or 5MB[*1] Included as standard

  *1: Varies depending on the GOT main unit model. GT15L_L_-L_TBL_: 9MB
  GT15L_L_-VNBL_: 5MB

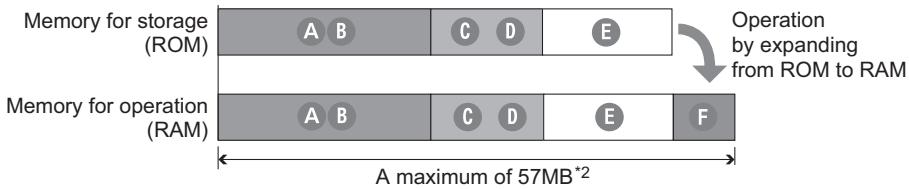
  The memories can be extended by using the CF card and expansion memory-attached option function board (GT15-QFNB□M or GT15-MESB48M) if the OS or project data exceeds 9MB or 5MB.



  The built-in flash memory corresponds to "Drive C", and the CF card corresponds to "Drive A (standard)" or "Drive B (extended)".

- The memory for operation (RAM) can be extended up to 57MB[*2] with the option function board.
  If the amount of data expanded to the memory for operation (RAM) exceeds 57MB[*2], data must be resized by deleting the project data or unnecessary OS.

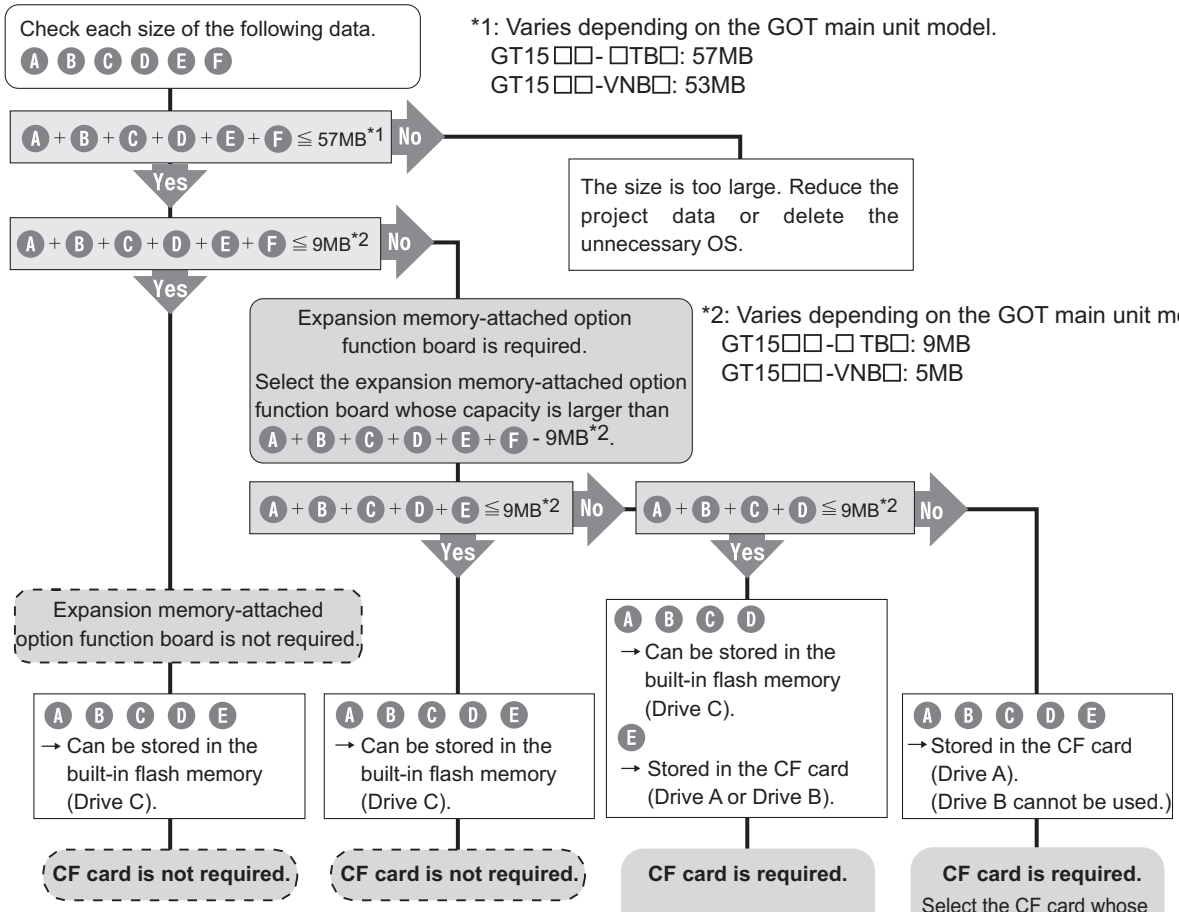
  The buffering area Ⓕ is an area for storing the resource data such as logging or advanced alarm and uses the memory for operation (RAM). The data size varies depending on the setting. The stored resource data is stored to the specified storage destination (Drive A or Drive B) when saving to a file is specified by GT Designer2. (The memory for storage (ROM) is not used.)



  *2: Varies depending on the GOT main unit model. GT15L_L_-L_TBL_: 57MB
  GT15L_L_-VNBL_: 53MB

Data type
Ⓐ Extended function OS
Ⓑ Option OS
Ⓒ Second or later communication driver
Ⓓ Special data
Ⓔ Project data
Ⓕ Buffering area

• Whether the expansion memory-attached option function board or CF card is required or not and the required capacity of expansion memory-attached option function board or CF card vary depending on the data size.
Select whether to use the expansion memory-attached option function board or CF card and their capacity using the following flow chart.



*1: Varies depending on the GOT main unit model.
GT15□□- □TB□: 57MB
GT15□□-VNB□: 53MB

*2: Varies depending on the GOT main unit model.
GT15□□-□ TB□: 9MB
GT15□□-VNB□: 5MB

*3: When the extended function OS and option OS are stored in the CF card (Drive A), the standard monitor OS (standard monitor OS, basic font, first communication driver, etc.) must be stored also in the CF card (Drive A).

Point

Limit to write OS

(1) When the drive of the Standard OS in the Boot Drive is C drive
Even when the option function board with add-on memory is mounted to the GOT, the total volume of the Communication driver (the second or later one for the GT15□□), Extended function OS, and Option OS cannot exceed the user area capacity in the C drive.

(2) When the drive of the Standard OS in the Boot Drive is A drive
For GT16□□: Since the memory for operation (RAM) is included as standard, the total volume of the Communication driver, Extended function OS, Option OS, project data, special data, and etc. can be up to the max. total capacity.

Max. RAM capacity

Transfer destination	Target models	Max. capacity
GT16	GT1695M-X, GT1685M-S GT1675M-S GT1675M-V GT1665M-S GT1665M-V	57MB

Refer to the following manual for details about the capacities of the memory for operation (RAM).

☞ GT16 User's Manual (Hardware)

For GT15□□: When the option function board with add-on memory is mounted to the GOT, the total volume of the second or later Communication driver, Extended function OS, Option OS, project data, special data, and etc. can be up to the max. total capacity when the option function board with add-on memory is used.

Max. total capacity when option function board with add-on memory is used.

Transfer destination	Target models	Max. total capacity
GT15	GT1595-X, GT1585V-S, GT1585-S, GT1575V-S, GT1575-V, GT1565-V, GT1555-V, GT1555-Q, GT1550-Q	57MB
	GT1575-VN, GT1572-VN, GT1562-VN	53MB

Refer to the following manual for details about the types and capacities of the option function boards with add-on memory.

☞ GT15 User's Manual

2 When adding a new screen or setting data to the project data in the GOT

Compare the size of the new screen or setting data to be added with the free space of the transfer destination drive.

When transferring the modified existing screen, check it in the method described in 1 within this section.

Refer to the following section for the size of the new screen or setting data to be added.

☞ 3 (2) Checking the project data size at the time of transfer

Refer to the following section for the free space of the transfer destination drive.

☞ 4 Checking the free space in the user area of the transfer destination

(1) When the size of the new screen or setting data to be added is less than the free space of the transfer destination drive, the project data can be transferred.

(2) When the size of the new screen or setting data to be added is greater than the free space of the transfer destination drive, all project data cannot be transferred.
Reexamine the project data contents and reduce the data size.
When the project data has been downloaded to Drive C on the GT16□□ or GT15□□, download it to Drive A (A: Standard CF Card).
Refer to Point (2) on the previous page for details.

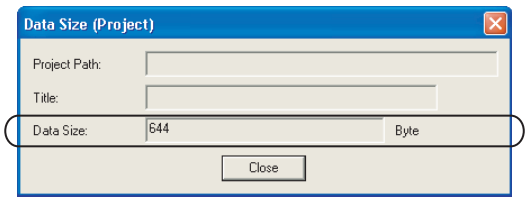
Point

(1) When free space of the transfer destination drive is sufficient but the insufficient space message appears.
After deleting all data in the project folder, check Download and download all project data.
When it is necessary to back up the project data, upload it to the PC or memory card before downloading.

3 Checking the project data size to be downloaded

The project data size can be checked in either of the following methods.

(1) Check the project data size in advance.
Choose [Tools] - [Data Size] - [Project] to display the Data Size (Project) dialog box.



Item	Description
Project Path:	Displays the storage destination and file name of the project data in the PC. The path is not displayed when the data has never been saved.
Title:	Displays the Project Title. The title is not displayed when no Project Title is specified.
Data Size:	Displays the data size of the project.

(2) Checking the project data size at the time of transfer
As the Communicate with GOT dialog box or Communicate with Memory Card dialog box appears, check each data size on the corresponding dialog box.
Refer to the following sections for details of the these dialog boxes.

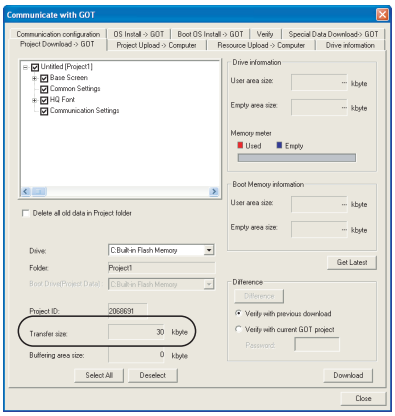
- Communicate with GOT dialog box

☞ Section 8.3 Downloading Project Data [PC to GOT]

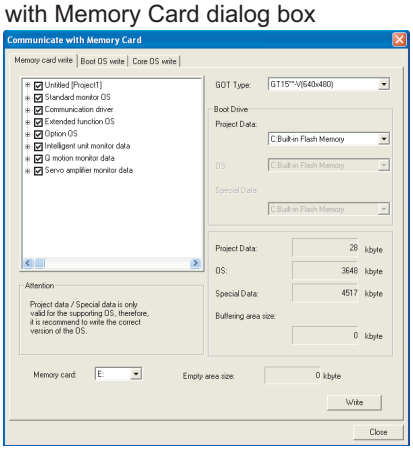
- Communicate with Memory Card dialog box

☞ Section 8.9.3 Downloading/installing project data/OS [PC to memory card and memory card to GOT]

Project Download → GOT tab in Communicate with GOT dialog box



Memory card write tab in Communicate with Memory Card dialog box



4 Checking the free space in the user area of the transfer destination

The free space can be checked by connecting the GOT and PC with the USB cable or RS-232 cable or via Ethernet and choosing [Communication] - [Drive information].
Refer to the following section for the operation method.

☞ Section 8.6 Obtaining the Drive Information [GOT to PC]

For the connection of the USB, RS-232 and Ethernet cables, refer to the following section and manual.

☞ Section 8.2.1 Connecting the PC and GOT with the USB cable

☞ Section 8.2.2 Connecting the PC and GOT with the RS-232 cable

☞ Section 8.2.3 Connecting a PC to a GOT via an Ethernet communication unit and cable

☞ For the GT16□□, refer to the GT16 User's Manual (Hardware).
For the GT15□□, refer to the GT15 User's Manual.
For the GT11□□, refer to the GT11 User's Manual.
For the GT10□□, refer to the GT10 User's Manual.

8.2 Preparation for Project Data Transfer [USB/RS-232/Ethernet]

This section explains how to transfer data.
As data transfer operation is performed on the GT Designer2, no operation is needed on the GOT except for the following case.

- When transferring project data to the GT11☐☐ with the RS-232 cable under the condition that the Standard I/F-2 (RS-232 interface) is set to other than "Host PC" in the communication setting, change the channel No. of the RS-232 interface to "9" on the Standard I/F Setting screen of the GOT.
- When transferring project data to/from GT10☐☐ under the condition that the Standard I/F-2 (PC connection interface) is set to a setting other than "Host PC" in the communication setting, display "PC transfer screen" on the GOT.

Point

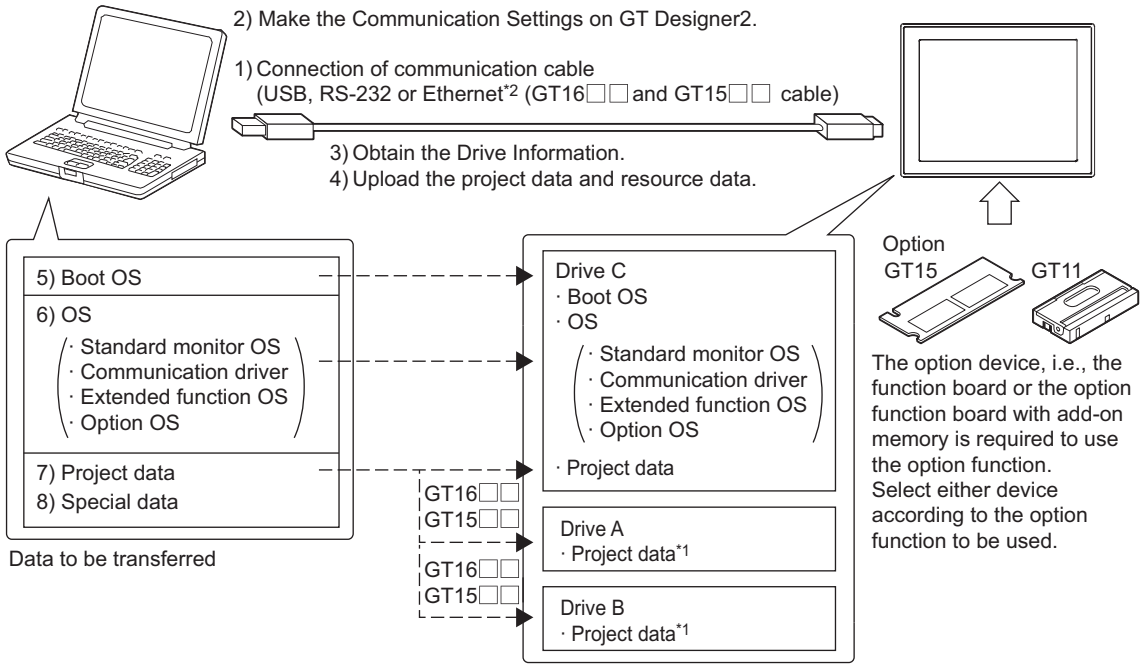
Transfering via Ethernet

GT16 GT15

Only project data download/upload, special data download and resource data can be performed via Ethernet transfer. (Boot OS and OS installation cannot be performed.) Install the Boot OS and OS to the GOT and download the communication settings in advance.

1 General procedure

Transfer data in the following procedure.



*1 For the GT16☐☐ and GT15☐☐, the project data can be stored into Drive A and started from there.

*2 The Ethernet communication unit must be installed on the main body side to use the Ethernet cable. (Only GT15☐☐) (The Boot OS and OS may not be transmitted.)

1 Connect the transfer cable.

☞ Section 8.2.1 Connecting the PC and GOT with the USB cable or Section 8.2.2 Connecting the PC and GOT with the RS-232 cable or Section 8.2.3 Connecting a PC to a GOT via an Ethernet communication unit and cable

2 Make the Communication Settings on GT Designer2.

☞ Section 8.2.4 Setting communication

3 Obtain the drive information.

☞ Section 8.6 Obtaining the Drive Information [GOT to PC]

4 Upload the project data and resource data (no operation is required at the first transfer).

Direct upload to PC

☞ Section 8.7 Uploading Project Data [GOT to PC]

Upload to PC via memory card

☞ Section 8.9.5 Opening project data [GOT to memory card and memory card to PC]

☞ Section 8.8 Uploading Resource Data [GOT to PC]

5 Install the Boot OS. (This operation is required at the time of upgrade only.)



Direct installation from PC

☞ Section 8.2.5 Installing the Boot OS [PC to GOT]

Installation from PC via memory card

☞ Section 8.9.2 Installing the Boot OS [PC to memory card and memory card to GOT]

6 Install the OS (Standard monitor OS, Communication driver, Extended function OS, Option OS).
(This operation is required at the first transfer or GT Designer2 software version upgrade.)

Direct installation from PC

☞ Section 8.2.6 Installing the OS [PC to GOT]

Installation from PC via memory card

☞ Section 8.9.3 Downloading/installing project data/OS [PC to memory card and memory card to GOT]

7 Download the project data.

Direct installation from PC

☞ Section 8.3 Downloading Project Data [PC to GOT]

Installation from PC via memory card

☞ Section 8.9.3 Downloading/installing project data/OS [PC to memory card and memory card to GOT]

8 Download Special Data



Direct installation from PC

☞ Section 8.4 Downloading Special Data [PC to GOT]
If download is performed using a memory card.

☞ Section 8.9.4 Downloading Special Data [PC to memory card to GOT]

Remark

Project data transfer

The project must have been opened on GT Designer2 to download the project data. The other data (Boot OS, Standard monitor OS, Communication driver, Extended function OS, Option OS) can be transferred even when the project has not been opened on GT Designer2.

2 Precautions

(1) Transfer cable
Make sure that the connector of the used USB, RS-232 or Ethernet cable is securely connected to that of the GOT and PC.

(2) Precaution for uploading
When the "upload destination" is specified as a project file (.GTE) of the GT Designer2, all data in the specified project file are deleted. (Even for a partial uploading (comment data, etc.), all data in the file are also deleted.)

(3) Data transfer timing
Communication from the PC is not accepted while the message "Booting." or "Booting project data" is on the GOT at power-on.
Transfer the data after the message has gone.

(4) Detailed explanation and category set on project or screen
Detailed explanation and category set on the project or the screen are not downloaded to the GOT. Therefore, they are not saved if they are uploaded again from the GOT after downloading.

(5) Data within the GOT
When the data already existing in the GOT is the same as the project data to be downloaded (both the project data name and project ID are the same), it will be overwritten during download.
Checking the "Delete all old data in Project folder" will allow a new program download.
Refer to the following sections for installation of the Boot Os and OS.

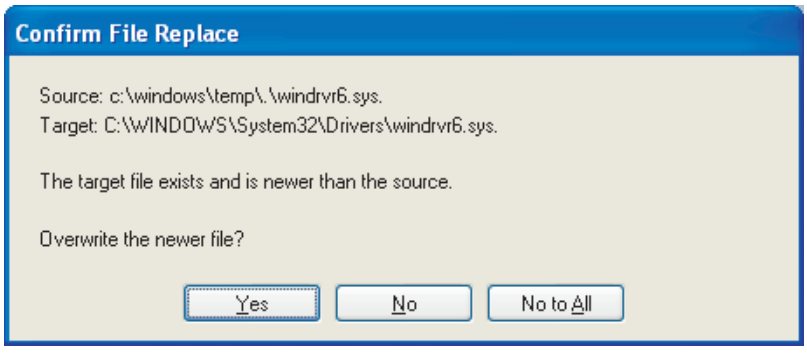
☞ Section 8.2.5 Installing the Boot OS [PC to GOT]
☞ Section 8.2.6 Installing the OS [PC to GOT]
☞ Section 8.3.1 Downloading project data [PC to GOT]

(6) Power saving function of PC
When data is transferred with the GOT connected, turn OFF the power saving function of the PC and Windows®.

Refer to the PC manual or Windows® Help for details of the power saving function setting.

(7) Precautions for installing the USB driver of the other company product
When installing the USB driver of the other company product, the "Confirm File Replace" message of the USB driver file (windrvr6.sys) may be displayed.

When a newer file already exists, click the No button to discontinue the overwriting processing. If the file is overwritten, USB communication between GT Desigenr2 and GOT may not be made correctly.

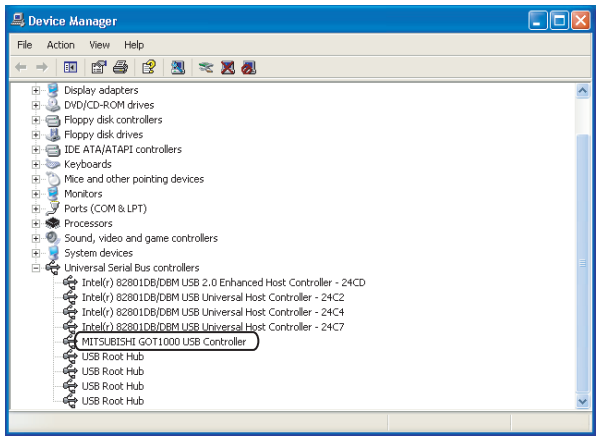


(8) Precautions for using the USB cable

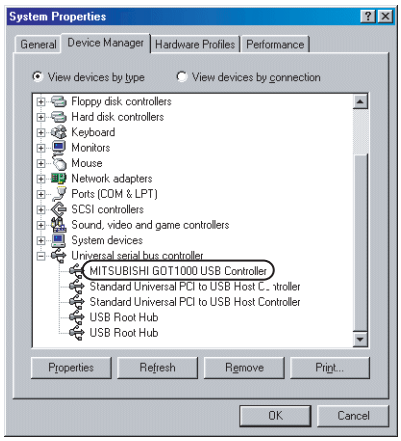
- When performing data transfer between the PC and GOT connected via the USB cable, do not set the resume function, suspend function, power-saving function and standby mode of the PC. For the setting details of the resume function, suspend function, power-saving function and standby mode, refer to the PC manual or Windows® Help.
- If the USB cable is disconnected/reconnected during the data transfer, the GOT is reset or powered off/on, which may result in a unrecoverable communication error.
  In this case, perform either of the following operations.

(a) The Personal Computer will check for a USB connection.
Please check that MITSUBISHI GOT1000 USB Controller is displayed in the Universal Serial Bus controllers.

In the case of Windows®XP



In the case of Windows®98



(b) After disconnecting the USB cable from the GOT for more than 5 seconds, reconnect the cable and restart communication.

(c) After powering on the GOT again, restart the communication.

(9) Communication error that may occur when the PLC is not connected to the GOT
If the GOT and PLC has not been connected but the relevant connection settings have already been made on the GOT, the GOT performs retry communication processing as it cannot communicate with the PLC. If the following operation is performed on GT Designer2 in this status, the communication error may occur (error No.: 8011000a). Refer to the following section for corrective action.

☞ Refer to Note in 8 Communication of Section 8.12 Error Messages Displayed at Data Transfer

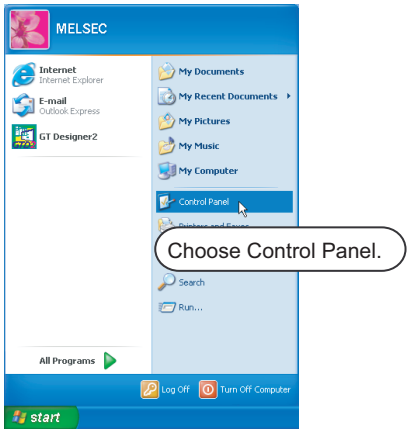
- OS installation
- Project data download
- OS, project data or resource data deletion
- Drive formatting

(10) When a communication error has occurred
A communication error, such as a time-out error, may occur due to the communication port settings on the PC. Check and change the settings in the following procedure.
The following items may not be present depending on the PC used.

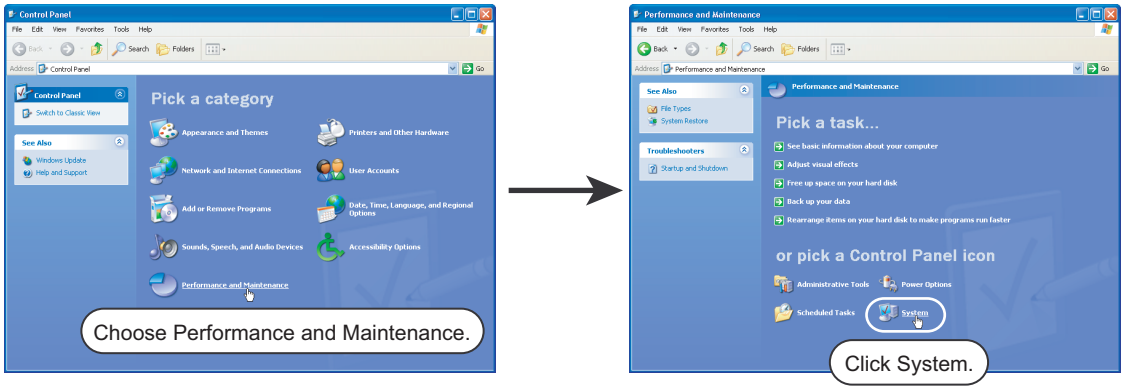
<Method 1>

The following screens and operations apply to Windows® XP.

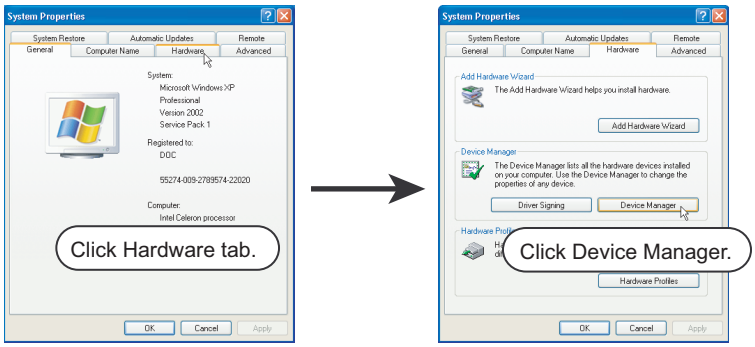
1 Choose [Start] - [Control Panel].
(For Windows® 2000, choose [Start] - [Settings] - [Control Panel].)



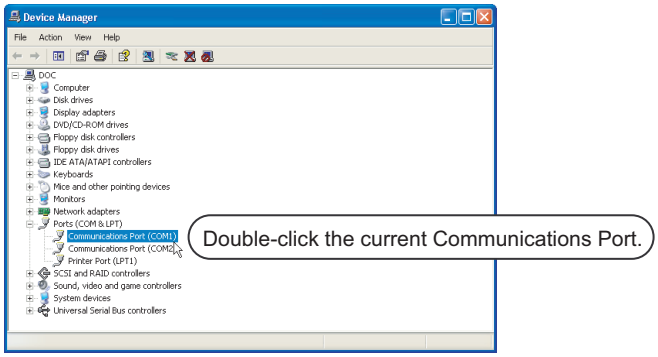
2 Choose "Performance and Maintenance" and click the "System" icon.
The System Properties dialog box will appear.
(For Windows® 2000, double-click [System].)



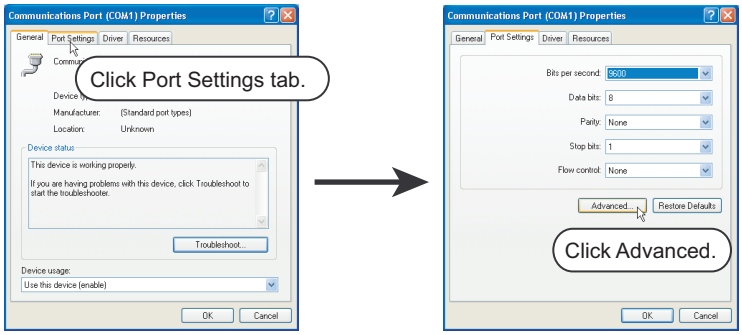
3 Click "Device Manager" on the Hardware tab.
The Device Manager window will appear.



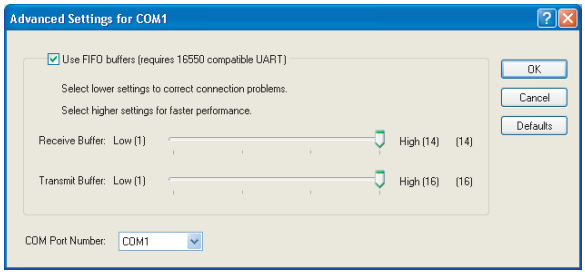
4 Choose "Ports" and double-click the "Communications Port" icon.
The Communications Port Properties dialog box will appear. (When COM1 is selected)



5 Click the Advanced button of the Port Settings tab to display the Advanced Setting for COM1 dialog box of the port.



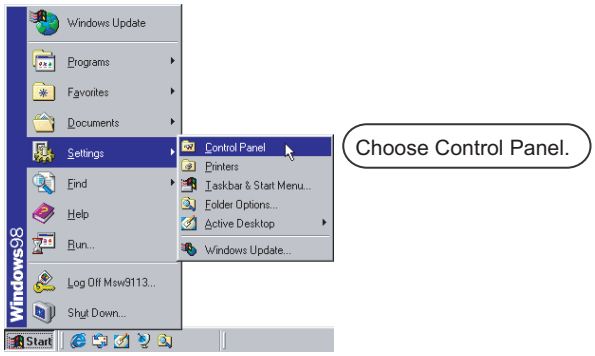
6 Uncheck [Use FIFO buffers].



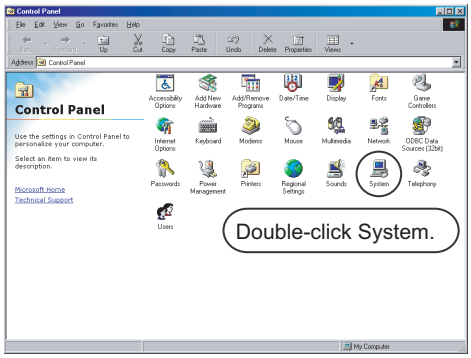
<Method 2>

The screens and operations apply to Windows® 98.

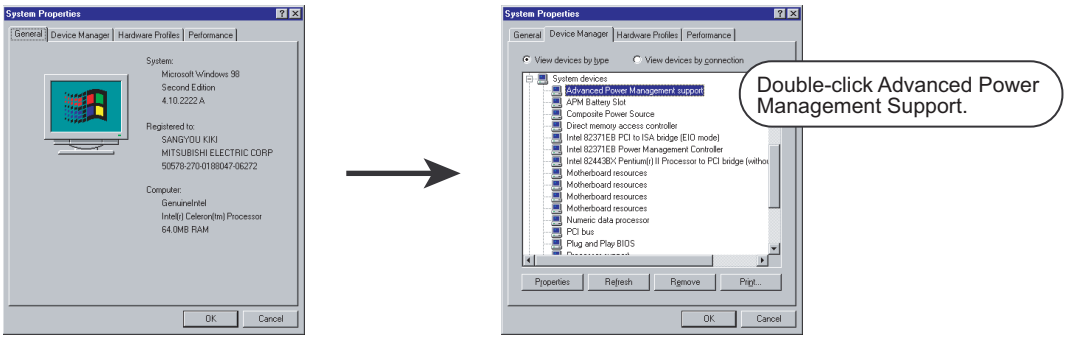
1 Choose [Start] - [Settings] - [Control Panel].



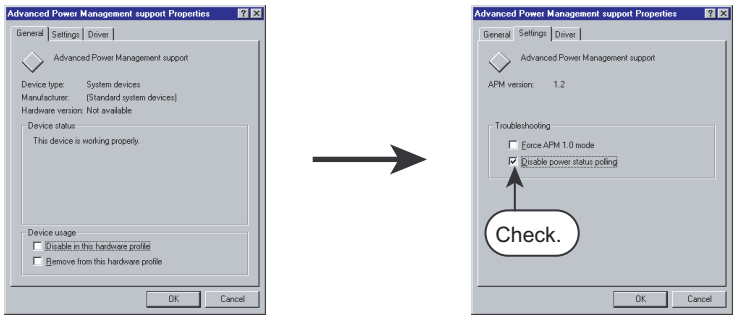
2 Double-click the "System" icon.
The System Properties dialog box will appear.



3 Click the Device Manager tab (when displayed by type), choose "System devices", and double-click the "Advanced Power Management Support" icon.
The Advanced Power Management Support Properties dialog box will appear.



4 Check "Disable power status polling" on the Setting tab.



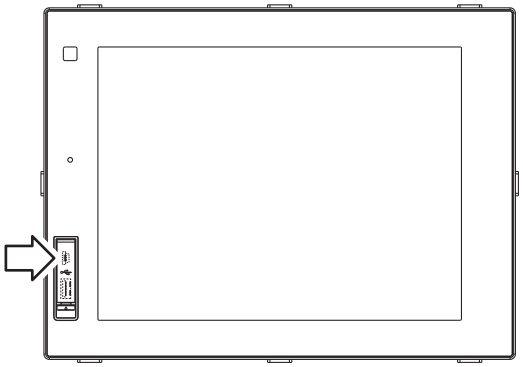
8.2.1 Connecting the PC and GOT with the USB cable

Securely connect the PC and GOT with the USB cable in the following procedure.

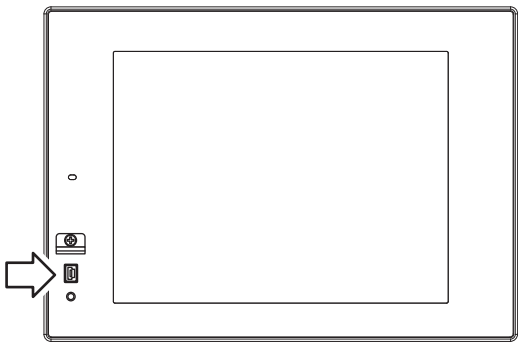
Point Always install GT Designer2 before connecting GOT to a PC.

1. Connect the USB cable to the USB Type-A connector of the PC.
2. Connect the USB cable to the USB connector of the GOT.
   When the PC and GOT are USB connected, install the USB driver into the PC. Refer to the following for the installation of the USB driver.

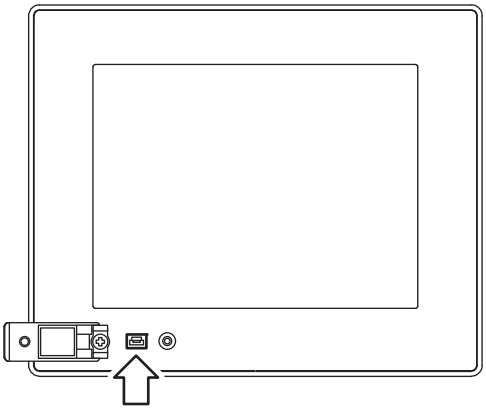
GT16□□



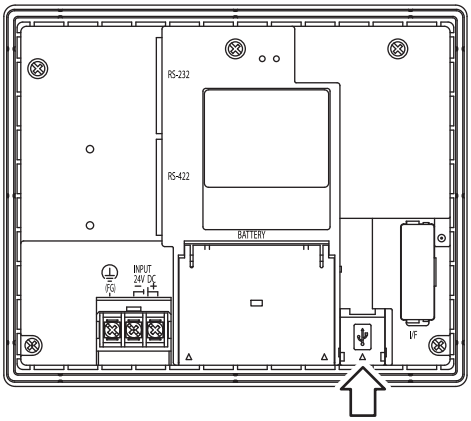
GT15□□



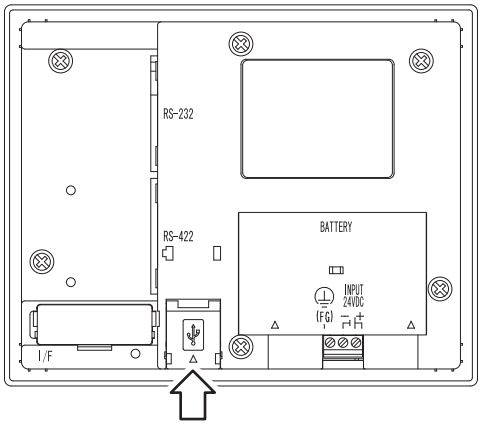
GT11□□



GT105□



GT104□



1 Installing the USB driver

To make the USB communication with the GOT in the following OS environment, Windows Vista®, Windows® XP, Windows® 2000 Professional, Windows® Millennium Edition (Me) or Windows® 98 Second Edition, the USB driver must be installed.

Note that the administrator authority is required to use Windows Vista®, Windows® XP or Windows® 2000 Professional.

Windows®	USB driver installation	Necessity of Administrator authority at USB driver installation	Operation during USB driver installation
Windows Vista®	○ (Required for each USB connector)	○ (Required)	Not required (Installed when PC and GOT are USB connected.)
Windows® XP	○ (Required for each USB connector)	○ (Required)	Operation required (Refer to next page)
Windows® 2000 Professional	○ (Required for each USB connector)	○ (Required)	Not required (Installed when PC and GOT are USB connected.)
Windows® Millennium Edition(Me)	○ (Required)	-	Not required (Installed when PC and GOT are USB connected.)
WindowsNT® 4.0	N/A		
Windows® 98 Second Edition	○ (Required)	-	Not required (Installed when PC and GOT are USB connected.)

Point

(1) When using GT Designer2 on Windows® 2000 Professional by the user authority other than the administrator authority

When the PC has multiple USB connectors, the USB driver must be installed to each USB connector. As the USB driver cannot be installed by the user authority other than the administrator authority, it is recommended to install the USB driver to all USB connectors, that may be used by the administrator authority, at the first installation of the USB driver.

(2) When the USB driver cannot be installed

Check the following settings.

(a) When Windows® XP is used

If "Block - Never install unsigned driver software" has been selected in [Control Panel] - [System] - [Hardware] - [Driver Signing...], the USB driver may not be installed.

Choose "Ignore - Install the software anyway and don't ask for my approval" or "Warn - Prompt me each time to choose an action" in [Driver Signing...], and install the USB driver.

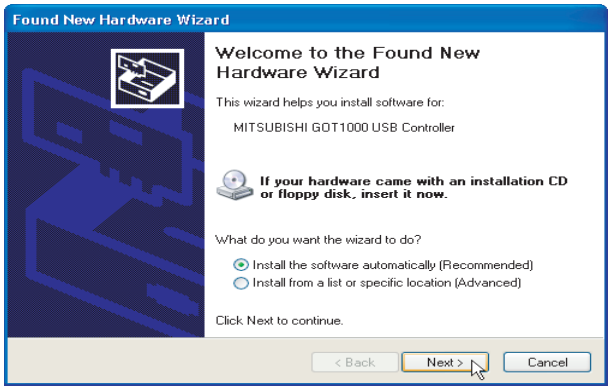
(b) When Windows® 2000 Professional is used

If "Block - Prevent installation of unsigned files" has been selected in [Control Panel] - [System] - [Hardware] - [Driver Signing...], the USB driver may not be installed.

Choose "Ignore - Install all files, regardless of file signature" or "Warn - Display a message before installing an unsigned file " in [Driver Signing...], and install the USB driver by the administrator authority.

USB driver installation when Windows® XP Professional or Windows® XP Home Edition is used

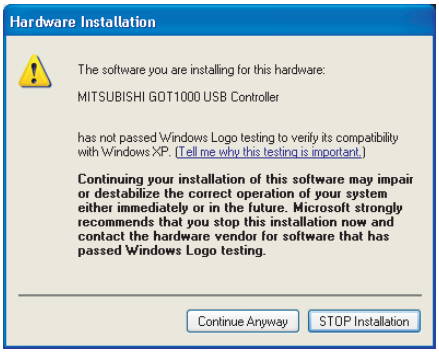
The following describes a USB driver installation procedure.



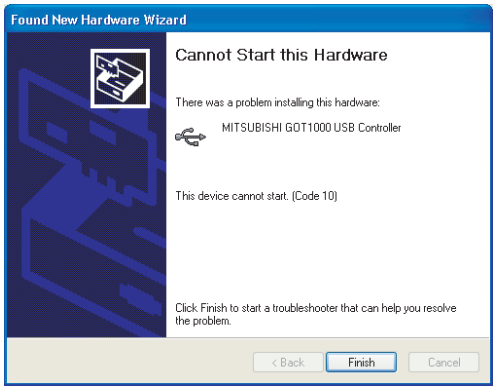
1 When the PC and GOT are connected with the USB cable for the first time, the left screen appears. Choose "Install the software automatically (Recommended)", and click the Next> button.

(To next page)

(From previous page)



2 The left warning screen appears, but click the Continue Anyway button to continue installation. (Mitsubishi Electric has concluded that proper operation is performed without any problems.)



3 When the left screen appears, this indicates that the installation is completed.
Click the Finish button to end the installation.

Point

Re-install the USB driver.

Re-installation procedure is shown below.

1 GTDesigner2 is uninstalled.

☞ Section 2.3 Uninstalling the Software Programs

2 GTDesigner2 is installed.

☞ Section 2.2 Installing the Software Programs

3 USB driver is installed.

☞ Section 8.2.1 Connecting the PC and GOT with the USB cable

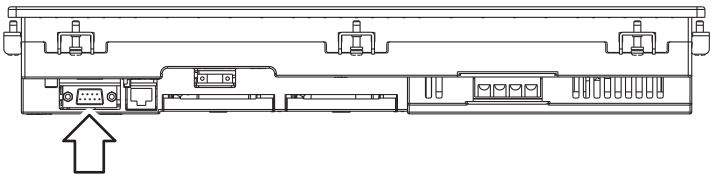
8.2.2 Connecting the PC and GOT with the RS-232 cable

Securely connect the PC and GOT with the RS-232 cable.

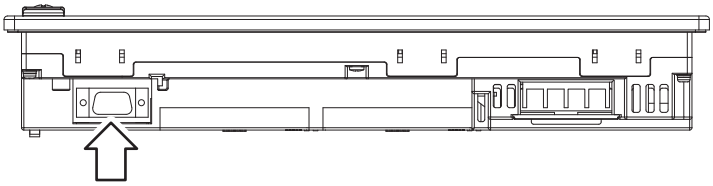
1 Connect the RS-232 cable to the COM port of the PC.

2 Connect the RS-232 cable to the RS-232 connector of the GOT.

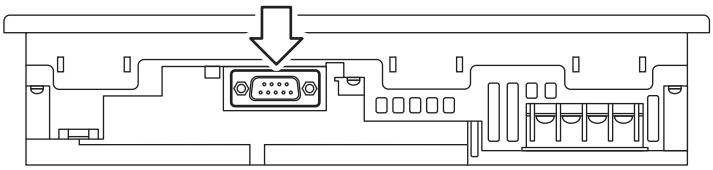
GT16□□



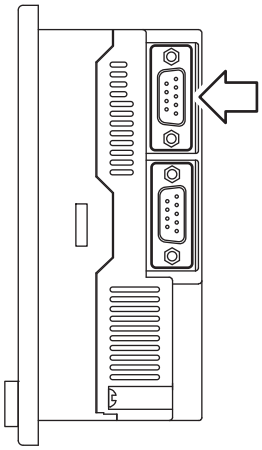
GT1575-V



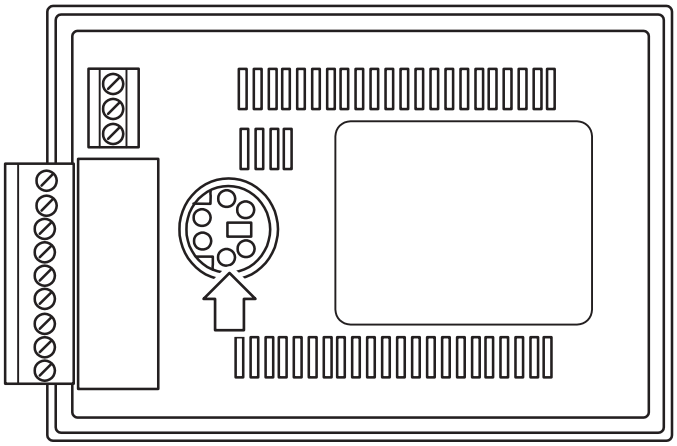
GT1565-V



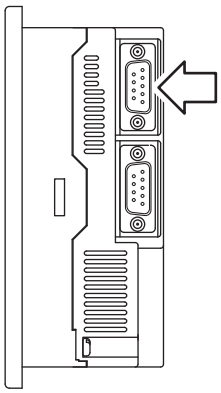
GT11□□



GT1020 and GT1030



GT104□ and GT105□



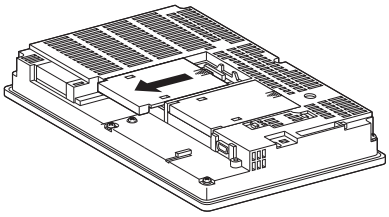
8.2.3 Connecting a PC to a GOT via an Ethernet communication unit and cable

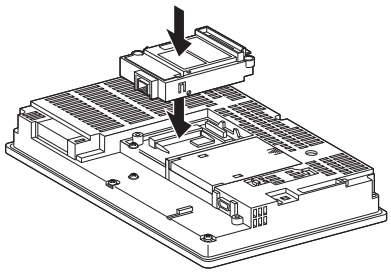
Point

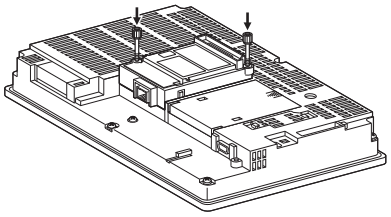
Turn the GOT off before installing the communication unit or connecting cables.
Connect the Ethernet cable securely between the PC and GOT.

1 Communication unit installation method

GT15 Only



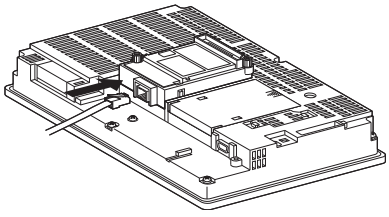




- Install the Ethernet communication unit to the expansion unit installation connector of the GOT.
  For details of the Ethernet communication unit, refer to the following manuals.
  ☞ See GT15 Ethernet communication unit Operation Manual
  ☞ Section 1.5.4 Ethernet communication unit and cable to be used

2 Cable connection method

GT16 GT15



- Connect a twisted pair cable to the Ethernet communication unit or GT16 main unit.
  ☞ For the Ethernet cable, refer to the following section.
  Section 1.5.4 Ethernet communication unit and cable to be used

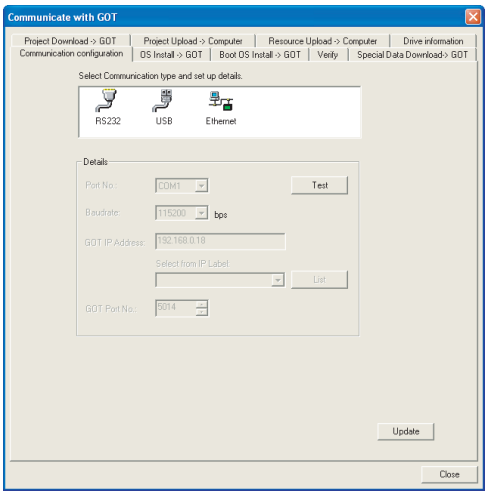
8.2.4 Setting communication

Communication setting of the PC that transfers data to the GOT is made.
Settings can be made in either the Communicate with GOT dialog box or the Communication Configuration dialog box.
(When one dialog box is set, the other dialog box automatically has the same settings.)

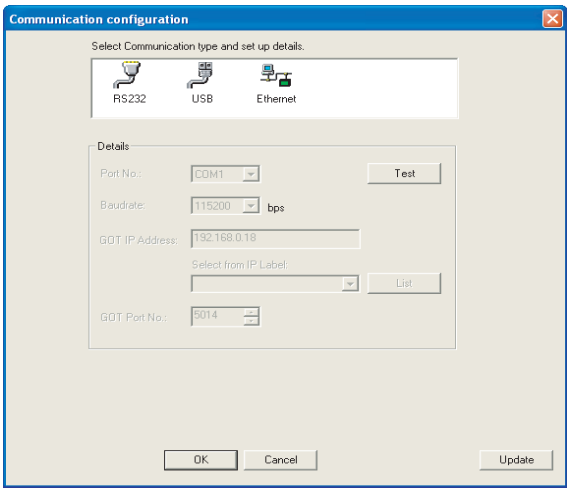
1 Communication setting procedure

1. Click the [Communication] → [To/From GOT...]/[Communication configuration].
2. The setting dialog box appears. Make settings referring to the description below.

Communicate with GOT dialog box
(Communication configuration tab)



Communication configuration dialog box



Boot OS Install → GOT | OS Install → GOT | Project Download → GOT | Project Upload → Computer | Resource Upload → Computer | Drive information | **Communication configuration** | Verify | Special Data Download → GOT

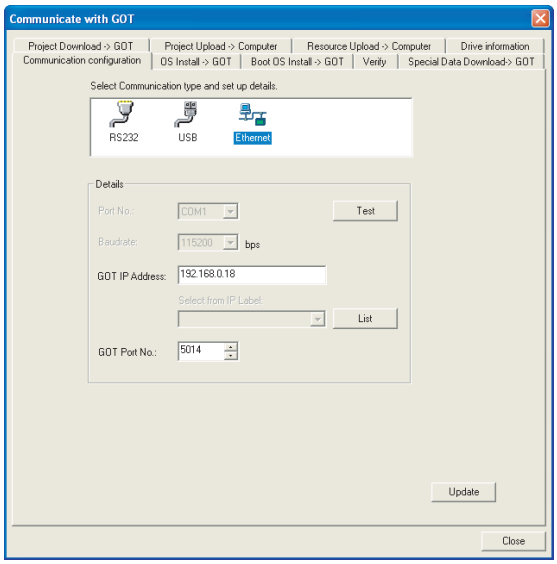
Item	Description
Connection method	Select either RS232, USB or Ethernet (only GT15) as the PC and GOT connection method.
Port No.:	PC port connected to the GOT is selected.
Baudrate:	The transmission speed between the PC and the GOT is set. Set the rate suitable for the PC.
GOT IP Address:	Enter the IP address of the GOT. (Valid only if "Ethernet" is selected as a connection method.)
Select from IP Label:	Select the IP address of the GOT among registered labels. (Invalid if the connection method is not "Ethernet" or no IP label is registered.)
Update	Reflect changes. Entered data is not reflected unless the Update button is clicked. (The button becomes valid only if changes are made in the entered data.)
Test	When Ethernet is selected: Open the Test dialog box. When RS232 or USB is selected: Start the communication test.
List	Open the IP Label List dialog box. (The button is valid only if the connection method is "Ethernet.")
GOT Port No.:	Enter the port number. (Setting range: 1024 to 65534) (The setting is accepted only if the connection method is "Ethernet.")

2 List creation procedure

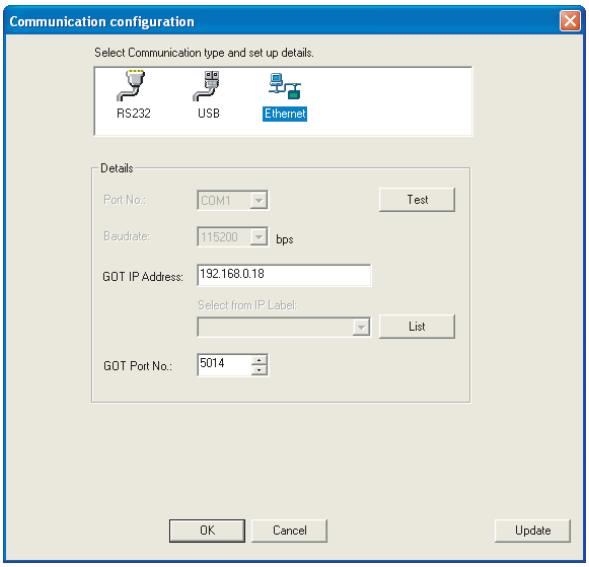
1 Click on [Communication] → [To/From GOT...] / [Communication configuration] in the menu.

2 The setting dialog box is displayed. Select "Ethernet" as a connection method and click on the list creation tab.

Communication with GOT dialog box
(Communication configuration tab)

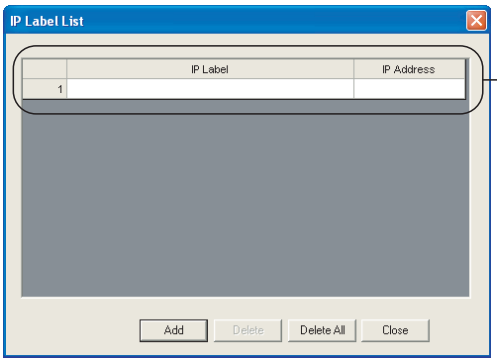


Communication configuration dialog box



3 The IP Label List dialog box is displayed. While referring to the following description, enter the IP label and IP address.

IP Label List dialog box (List button)



Item	Description
Add	Add an IP label.
Delete All	Delete all IP labels.

Point

(1) You may not register duplicate IP labels.

(2) To use the entered IP label and IP address at another PC

The entered IP label and IP address are not saved in the project. (They are saved in the PC.)

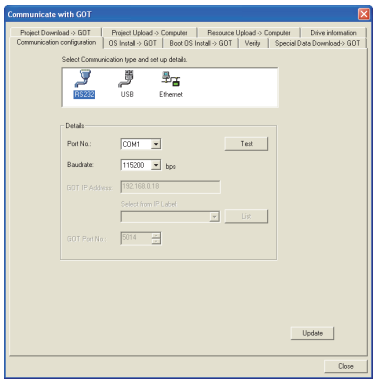
To use the project at another PC, enter the IP label and IP address again.

3 Communication test procedure (RS232, USB)

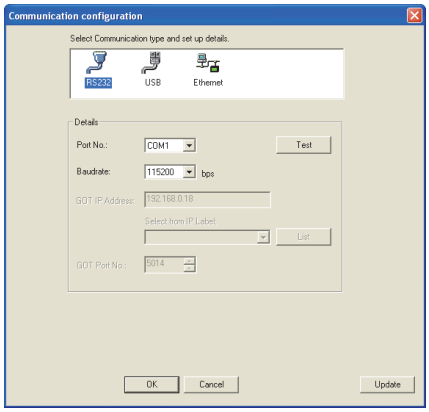
1 Click the [Communication] → [To/From GOT...]/[Communication Configuration...] menu.

2 The setting dialog box is displayed. Select "RS232" or "USB" for communication type and click the Test button.

Communicate with GOT dialog box (Communication configuration tab)

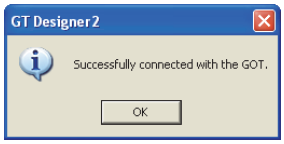


Communication configuration dialog box



3 The test result is displayed.

(Communication succeeded)



(Communication failed)

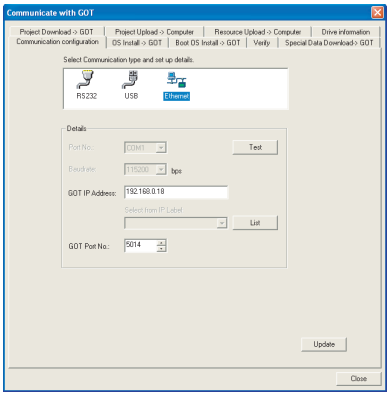


4 Communication test procedure(Ethernet)

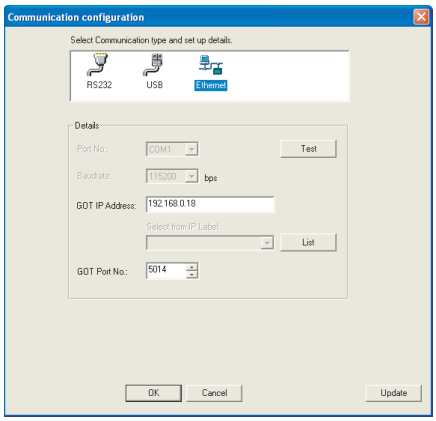
1 Click on [Communication] → [To/From GOT...] / [Communication configuration] in the menu.

2 The setting dialog box is displayed. Select "Ethernet" as a connection method and click on the Test button.

Communicate with GOT dialog box (Communication configuration tab)

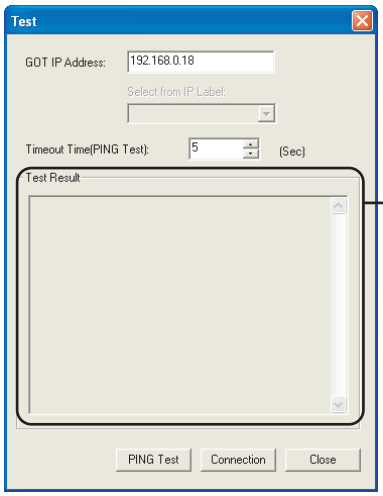


Communication configuration dialog box



3 The Test dialog box is displayed. Click on either the PING Test or Connection button.

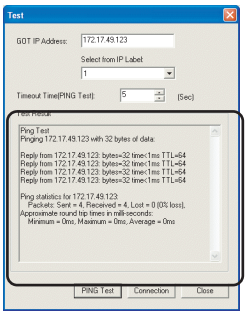
Test dialog box



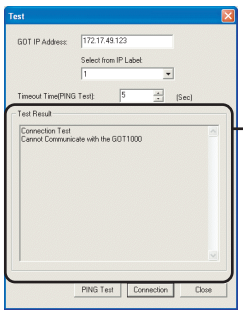
Results of test

4 The results of the test are displayed. While referring to the following description, enter data.

(PING test)

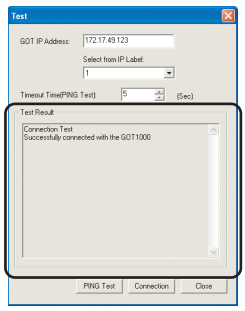


(Connection)



Results of test

(Connection)



Item	Description
GOT IP Address:	Enter the IP address with which the communication test is made. (The default setting is the IP address having been entered in the Communication configuration dialog box.)
Select from IP Label:	Select the IP label of the GOT.
Timeout Time (PING Test):	Designate the timeout interval of the PING test.
Test Result	The specified IP address, and the results of the PING test or connection are displayed.
PING Test	A PING is issued to the specified IP address.*1
Connection	The device located at the specified IP address is checked to be GOT1000. *1

*1 When PING Test or Connection is pressed, the results of the previous test are reset.

8.2.5 Installing the Boot OS [PC to GOT]



Normally, the BootOS does not need to be installed as it is factory-installed in the GOT. However, the BootOS needs to be installed depending on the functions to be used. For the functions and OS version, refer to the following.

Point

(1) When installing the BootOS
The BootOS cannot be installed if the GOT is in its factory-shipped condition. (When only the BootOS is installed)
Make sure that the standard monitor OS is installed before starting the BootOS installation.

(2) When Boot OS versions are different
The Boot OS cannot be overwritten with the older version.
During Boot OS installation, the version of the installed one is compared with the one to be installed for check. If the latter one is older, the installation will be discontinued.

(3) About data installed in or download to the GOT
When Boot OS is installed, the project data folder in the GOT, OS (Standard monitor OS, Communication driver, Extended function OS, Option OS), and Special Data folder are all deleted.
If project data back up is necessary, upload the project data to a PC or memory card (CF card) before installing Boot OS.
Special Data cannot be uploaded to a PC: upload special data to a memory card (CF card).

Direct upload to PC

☞ Section 8.7 Uploading Project Data [GOT to PC]

Upload to PC via memory card

☞ Section 8.9.5 Opening project data [GOT to memory card and memory card to PC]

(4) Precautions to be taken during Boot OS installation
Once Boot OS installation is started, it cannot be interrupted.
Do not do any of the following operations to interrupt the installation, as it may disable the GOT from operating.
- Power off the GOT.
- Press the reset button of the GOT.
- Disconnect the communication cable.
- Power off the PC.

If the GOT does not operate, please contact a service representative.

Remark

Initializing the GOT (Returning the GOT to factory-settings)

Installing the Boot OS returns the GOT to the factory-settings.
Note that when the Boot OS is installed, the Project Data, OS (Standard monitor OS, Communication driver, Option OS) and Special Data in the GOT are deleted.
When it is necessary to back up the Project Data, upload the data to the PC or memory card (CF card) before installing the Boot OS.
Direct upload to PC

☞ Section 8.7 Uploading Project Data [GOT to PC]

Upload to PC via memory card

☞ Section 8.9.5 Opening project data [GOT to memory card and memory card to PC]

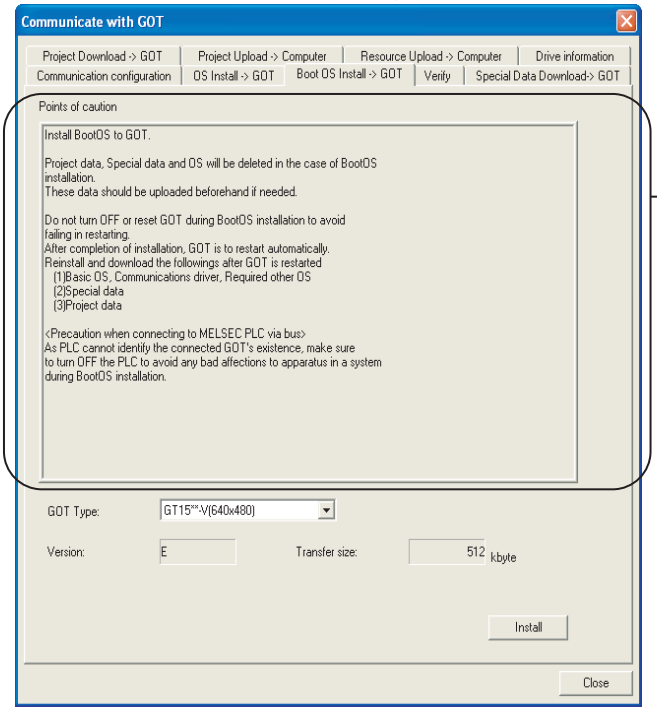
The following explains how to install the Boot OS.

1 Click the [Communication] - [To/From GOT...] menu.

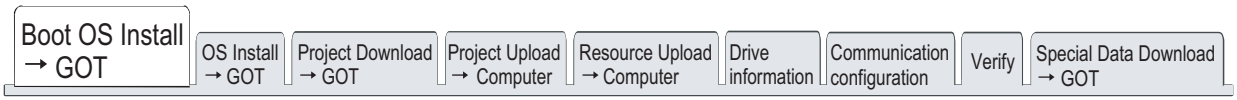
2 As the setting dialog box appears, click the Boot OS Install → GOT tab.

3 Select the GOT Type. Carefully read the Points of caution before starting installation.

Communicate with GOT dialog box (Boot OS Install → GOT tab)



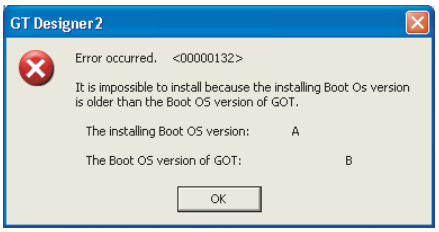
Precautions for Boot OS installation



Item	Description
Points of caution	Provides the precautions for Boot OS installation. Make sure to read before installation.
GOT Type:	Select the GOT type in which the Boot OS will be installed.
Version:	Displays the Boot OS version.
Transfer Size:	Displays the Boot OS size to be transferred.
Install	Click this button to install the Boot OS to the GOT.

4 Clicking the [Install] button checks the Boot OS version in the GOT against the one of GT Designer2.

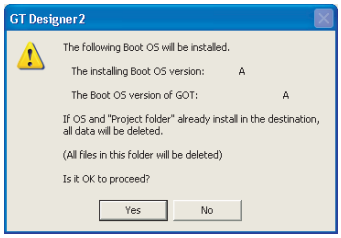
(1) When the target Boot OS version of GT Desinger2 is older than the one in the destination GOT, the installation cannot be performed.



(2) When the target Boot OS version of GT Designer2 is the same or newer than the one in the destination GOT, the following messages appears during the installation.

Click the [Yes] button to start the installation.

Click the [No] button to cancel the installation.



5 After the installation is completed, the GOT automatically restarts.

6 After a restart, install/download the Standard monitor OS and other OS (Communication driver, Option OS, etc.) and project data.

Screen displayed after restart



8.2.6 Installing the OS [PC to GOT]

Point

(1) Standard monitor OS is not installed on the GT11, 15, 16.
(Factory-settings or Boot OS installed)
Because install method may be different depending on the Boot OS version, refer to the followings.

☞ App5. List of Functions Added by GT Designer2 Version Upgrade (For GOT1000 Series)

If the Standard monitor OS is not installed to GT11, GT15 and GT16 depending on the BootOS version, only Standard monitor OS may be installed to GT11, GT15 and GT16 from GT Designer2. For such case, install the communication driver and the optional function after installing the Standard monitor OS.

(2) GT10 factory-settings
Standard monitor OS and Communication driver are factory-installed on GT10.
Only the Communication driver can be installed from GT Designer2 on to the GT10.

(3) Data installed in the GOT
When the Standard monitor OS is installed, the project data stored in the project folder and Special data in the GOT are deleted.
When it is necessary to back up the project data, upload the data to the PC or memory card (CF card) before installing the OS.

Direct upload to PC

☞ Section 8.7 Uploading Project Data [GOT to PC]

Upload to PC via memory card

☞ Section 8.9.5 Opening project data [GOT to memory card and memory card to PC]

(4) During OS installation
OS installation cannot be interrupted.
Do not do any of the following operations to interrupt the installation, as it may disable the GOT from operating.

- Power off the GOT.
- Press the reset button of the GOT.
- Disconnect the communication cable.
- Power off the PC.

<Restoring the GOT>
If the GOT has been disabled from operation due to any of the above operations during installation, reinstall the OS in the following procedure.

1. Turn OFF the GOT.
2. When the CF Card has been set, turn OFF the CF Card access switch, and remove the CF Card.
   While the CF Card access LED is ON, do not remove the CF Card or power OFF the GOT.
   When the CF Card has not been set, proceed to the next step.
3. Power ON the GOT.
4. The following message appears on the GOT.



5. Reinstall the Standard monitor OS from GT Designer2.
6. After the installation is completed, the GOT automatically restarts.

Screen displayed after restart



If the GOT cannot be restored by the above procedure, please contact a service representative.

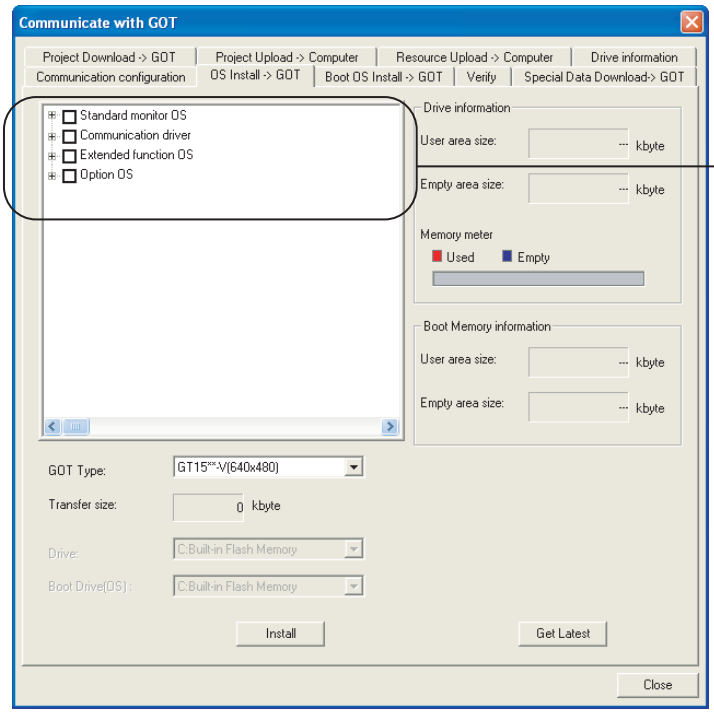
1 Installing the OS (Standard monitor OS, Communication driver, Extended function OS, or Option OS) on to GT11, 15, 16

1 Click the [Communication] → [To/From GOT...].

2 The setting dialog box appears. Click the OS Install → GOT tab. Refer to the following descriptions for setting.

After setting, click the Install button to start installation.

Communicate with GOT dialog box (OS Install → GOT tab)



Boot OS Install → GOT | **OS Install → GOT** | Project Download → GOT | Project Upload → Computer | Resource Upload → Computer | Drive information | Communication configuration | Verify | Special Data Download → GOT

Item	Description
Function tree	Standard monitor OS, Communication drivers, Extended function OS, and Option OS each has a tree display, so check the items that need to be installed. Because install method may be different depending on the Boot OS version, refer to the followings. ☞ App5. List of Functions Added by GT Designer2 Version Upgrade (For GOT1000 Series) Depending on the BootOS version, only Standard monitor OS can be installed from GT Designer2 when the Standard monitor OS is not installed to the main body of GOT(factory setting or Boot OS installed). For such case, install the communication driver, extended function, and the option function after installing the Standard monitor OS Refer to the followings for details about the contents of the items. • Standard monitor OS ☞ 8.1.1 4 Standard monitor OS • Communication driver ☞ 8.1.1 5 Communication driver • Extended function OS ☞ 8.1.1 6 Extended function • Option OS ☞ 8.1.1 7 Option functions
GOT type:	The type of GOT to which the OS is installed is selected.
Transfer size:	Size of the OS selected in the "function tree" is displayed.
Drive:	Displays the drive in which the OS will be installed. (Fixed to "C: Built-in Flash Memory")

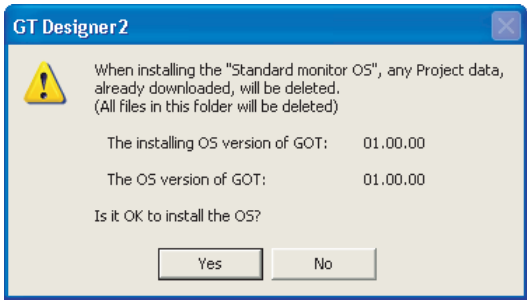
Boot OS Install → GOT | **OS Install → GOT** | Project Download → GOT | Project Upload → Computer | Resource Upload → Computer | Drive information | Communication configuration | Verify | Special Data Download → GOT

Item	Description
Boot Drive (OS):	Displays the drive in which the OS will be started. (Fixed to "C: Built-in Flash Memory")
Install	The OS is installed.
Drive information*1	Displays the total space, available space and memory meter of the specified drive.
Boot memory information*1 	Displays user area size and empty area size.
Get Latest	Reads drive information from the specified GOT drive.

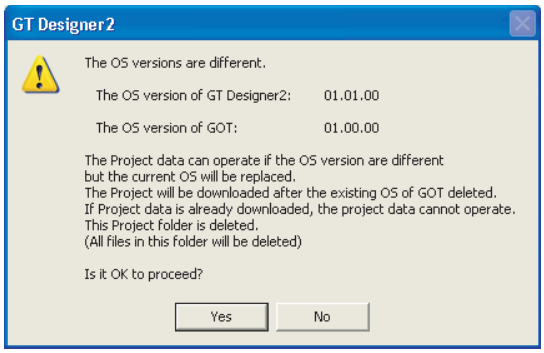
*1 Refer to the following section for details about drive information and Boot memory information.
Section 8.6 Obtaining the Drive Information [GOT to PC]

3 Clicking the Install button checks the OS version in the GOT against the one of GT Designer2.

(1) When the OS versions are the same, the following dialog box appears.
Click the Yes button to start the installation.
Click the No button to cancel the installation.



(2) When the OS versions are different, the following dialog box appears.
Click the Yes button to start the installation.
Click the No button to cancel the installation.

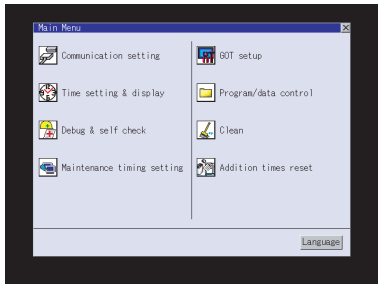


4 After the installation is completed, the GOT automatically restarts.
After a restart, the Utility screen appears.

Screen displayed during restart



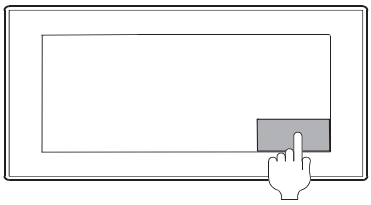
After restart, Utility screen appears.



(Screen of GT15□□.)

2 Installing the OS (Standard monitor OS, Communication driver) on to GT10

1 Turn on the power supply while the down-right corner of the display on GT10 is touched.



Touch the bottom-right corner.

2 OS installation screen appears.



Point OS installation screen

The OS can be transferred from GT Designer2Version2 without displaying the OS installation screen by using the combination below.

Model	Description
GT1020	Boot OS version F or later
GT1030	Boot OS version F or later

Refer to the following manual for the checking method of Boot OS version.

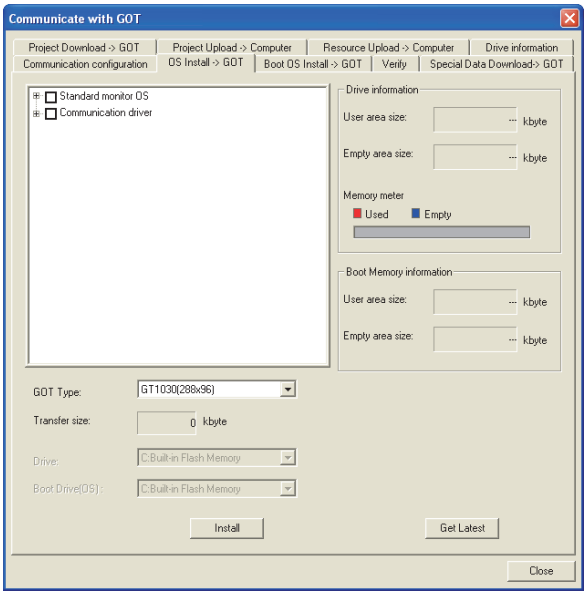
☞ GT10 User's Manual

Refer to the following section for the checking method of Standard monitor OS version.

☞ App5.List of Functions Added by GT Designer2 Version Upgrade (For GOT1000 Series)

3 Click [Communication] → [To/From GOT...].

4 The Communication with GOT dialog box appears. Click OS Install → GOT tab to select Standard monitor OS and Communication driver to be installed.



5 At the completion of OS installation, the GOT is automatically rebooted, and the user-created screen will appear.

A message indicating that no project data is available is displayed when the GOT does not have project data.



Point

Check box for the Standard monitor OS

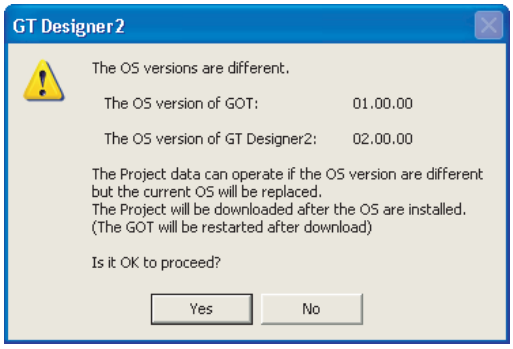
It takes a long time to install the entire Standard monitor OS of GT10. Therefore, select and install the necessary Standard monitor OS individually (only for GT10).

8.3 Downloading Project Data [PC to GOT]

Point

(1) When the OS version in the GOT differs from the one of GT Designer2

The following dialog box appears when the OS major version of GT Designer2 differs from the one in the GOT.
As the project data does not operate properly on the OS version other than the one GT Designer2, click the Yes button to download the OS. (Click the No button to stop project data downloading.)
However, as the OS is installed after older one is deleted once, the OS file types and number of OSs in the GOT may change.
(Unsupported OSs are deleted.)



(2) While downloading project data

Do not do the following while project data is downloaded.

- Turning off the GOT
- Pushing the reset button of the GOT
- Disconnecting the communication cable
- Turning off the PC

<GOT restoration method>

The events listed above during project data download may stop downloading.
If downloading fails, use the utilities function of the GOT to delete project data, and then download the project data again.

8.3.1 Downloading project data [PC to GOT]

Point

To make a communication between the GOT and PLC

It is necessary to install the Communication driver and download the Communication Settings.
Install the Communication driver and download the Communication Settings.
Refer to the following items for the installation of the Communication driver and the download of the Communication Settings.

Installation of Communication Driver

☞ GOT1000 Series Connection Manual

Download of Communication Settings

☞ GT Designer2 Version☐ Screen Design Manual

The following explains how to download the project data.

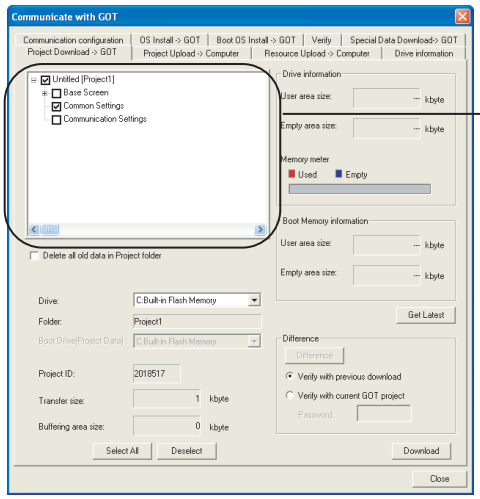
1 Click the [Communication] → [To/From GOT...].

2 As the setting dialog box appears, click the Project Download → GOT tab, and make the settings by referring to the following explanation.

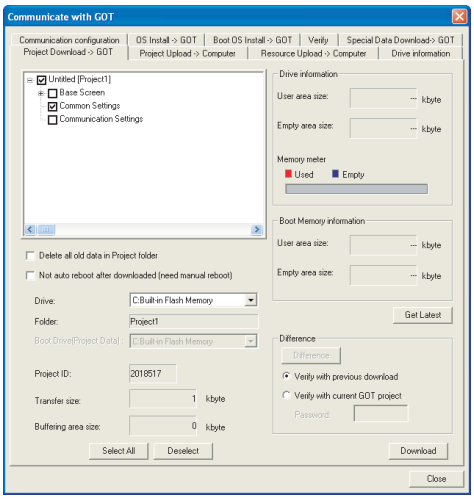
Then, click the Download button to start downloading.

Communicate with GOT dialog box (Project download→GOT tab)

(If the connection method is "USB" or "RS232")



(If the connection method is "Ethernet")



Boot OS Install → GOT | OS Install → GOT | **Project Download → GOT** | Project Upload → Computer | Resource Upload → Computer | Drive information | Communication configuration | Verify

Item	Description
Project configuration display tree	Displays the project configuration in the tree structure. Check the item to be downloaded. Right-click the mouse to enable [SelecT ALL] or [Unselect All].
Delete all old data in Project folder	Check this item when downloading the project folder to the GOT after deleting the already downloaded data. (This item is checked as a default on GT10.)
Not self reset after downloaded	Place a check mark to refrain from rebooting the GOT automatically after the project data is downloaded to the GOT. (The GOT is rebooted automatically with USB or RS232 connection.) To change the Communication Settings, the GOT must be rebooted. (Only if the connection method is "Ethernet")
Drive:	Select the download destination drive of the project data. • For the GT16 ☐☐ and GT15 ☐☐, the download destination drive can be selected. • For the GT11 ☐☐, the download destination drive is fixed to "C: Built-in Flash Memory".
Folder:	Displays the storage destination folder of project data. Set the folder name in "System Settings" of the "System Environment" window. Refer to the following section. ☞ Section 7.2 Creating a New Project
Boot Drive (Project Data):	Displays the drive in which the project data will be started. (Displays the drive set as Drive.)
Project ID:	Project ID is displayed.
Memory meter	Displays the available user area in meter form when the drive information of the GOT has been obtained from Drive Information.
Transfer size:	Displays the size of the project data selected in the Project configuration display tree.
Buffering area size	Displays the total buffering area size capacity to be used by items such as advanced alarms.
Drive information*1	Displays memory size, empty area size, and memory meter of selected drive.
Boot memory information*1 	Displays the user partition space and empty space.
Select the difference after the download	When "Difference" is executed, the data changed after the download is selected.
Verify with GOT and select the disagreement data	When "Difference" is executed, the data is verified with the connected GOT, and the data that does not agree or that exists only at the drawing side is selected.
Password	Enter the password if necessary when the "Verify with GOT and select the disagreement data" is selected.

Item	Description
Difference	When project data download is executed once during edition of the project, the items corresponding to the data changed after the download will be checked in the Project configuration display tree. Select this item and then click the Download button when downloading the changed items only. When download has never been executed, the Difference button is inactive. Also when the project is closed, the Difference button is inactive.
Deselect	Click this button to deselect all items in the "Project configuration display tree". (The Common Settings are not deselected.)
Download	Click this button to download the project data.
Get latest	Drive information is retrieved from the specified GOT drive.

*1 Refer to the following section for details about drive information and Boot memory information.

☞ Section 8.6 Obtaining the Drive Information [GOT to PC]

8.3.2 Downloading only the changed project data. [PC to GOT]

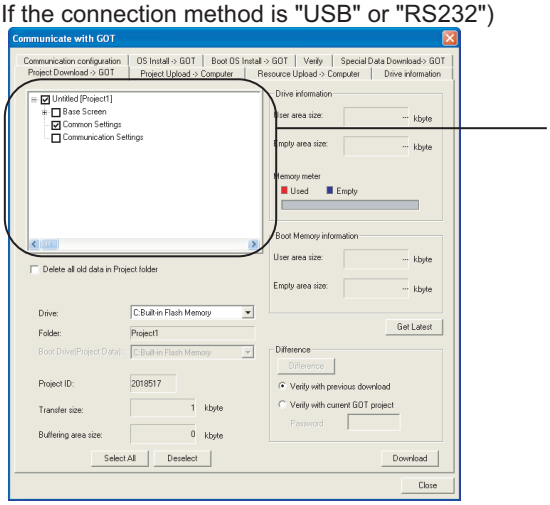
Use of this function during project data debugging or editing, only the screens and settings changed since the last download can be selected. The download time can be reduced by downloading only the selected items.

1. Click the [Communication] → [To/From GOT...] menu.
2. As the setting dialog box appears, click the Project Download → GOT tab.
3. Select "Select the difference after the download" or "Verify with GOT and select the disagreement data", and then click the Difference button.
   Only the changed items will be selected.
   After that, the settings of the items to be downloaded and the other setting items can be changed.
   Refer to the following (previous) section for the setting items of the dialog box.

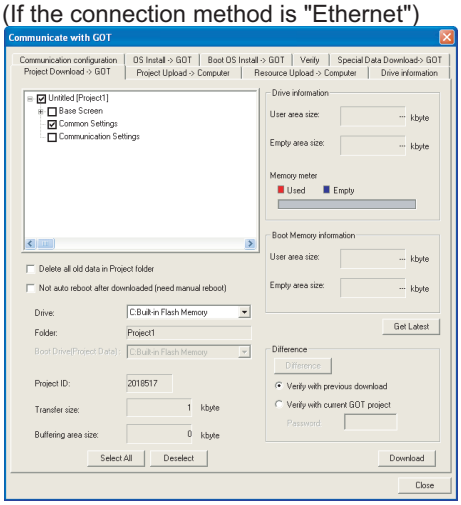
   ☞ Section 8.3 Downloading Project Data [PC to GOT]

   When downloading only the changed data, note that if the "Delete all old data in Project folder" check box has been checked, only the changed items will be within the download destination folder after download.

Communicate with GOT dialog box (Project Download → GOT tab)
(If the connection method is "USB" or "RS232")



(If the connection method is "Ethernet")



4. Click the Download button to start downloading.

8.4 Downloading Special Data [PC to GOT]

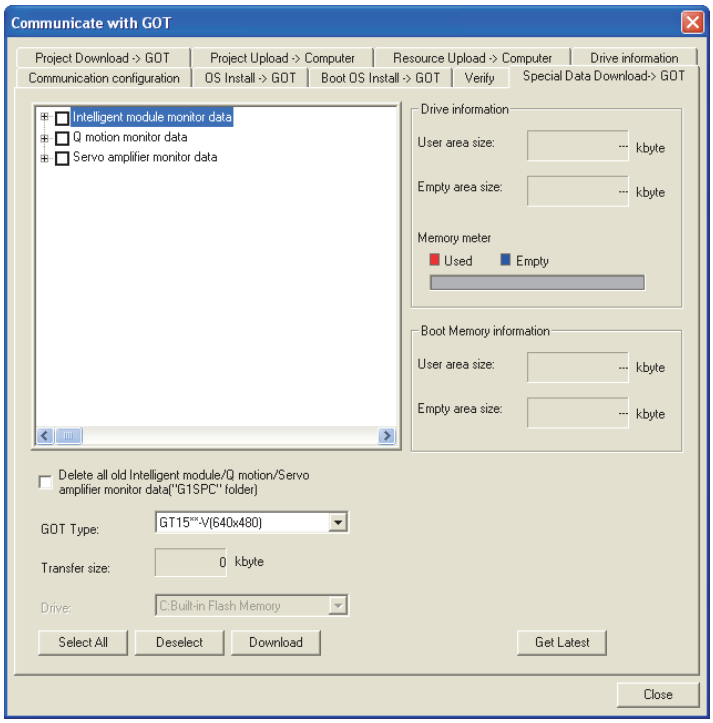
8.4.1 Downloading Special Data [PC to GOT]

Download special data as follows.



1. Click the [Communication] → [To/From GOT...] menu.
2. As the setting dialog box appears, click the Special Data Download → GOT tab, and refer to the following explanation when making settings.

   After making settings, click the Download button to commence download.



Boot OS Install → GOT | OS Install → GOT | Project Download → GOT | Project Upload → Computer | Resource Upload → Computer | Drive information | Communication configuration | Verify | **Special Data Download → GOT**

Item	Contents
Special data tree	Special data is displayed in tree format.
Delete all old Intelligent unit/ Q motion/Servo amplifier monitor data ("GISPC" folder")	Check to download selected special data after deleting all intelligent unit/Q motion monitor/ Servo amplifier monitor data previously downloaded to the GOT.
GOT Type	Select GOT Type.
Transfer size	Displays checked data size.
Drive	Displays drive which downloads special data.
Drive information*1	Displays memory size, empty area size, and memory meter of the selected drive.
Boot memory information *1	Displays the user area size and empty area size.

Item	Contents
Select all	Select all special data.
Deselect	Delete all selected items from the special data tree (common settings are not deleted).
Download	Download special data.
Get Latest	Drive information is retrieved from the specified GOT drive.

*1 Refer to the following section for details about drive information and boot memory information

Section 8.6 Obtaining the Drive Information [GOT to PC]

Point

Installing Option Function OS

When special data is used, the special data must be downloaded and the Option Function OS must be installed.

Install both special data to be used and the Option Function OS.

8.5 Verifying project data [PC : GOT]

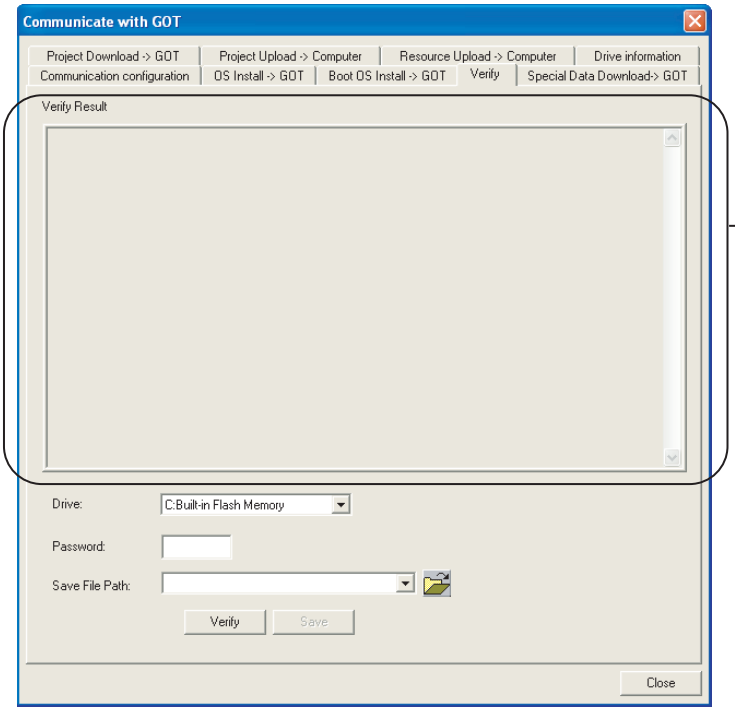
Verify the project data located at the GOT with that opened by GT Designer 2.

8.5.1 Verifying project data [PC : GOT]

Follow the steps below to verify.

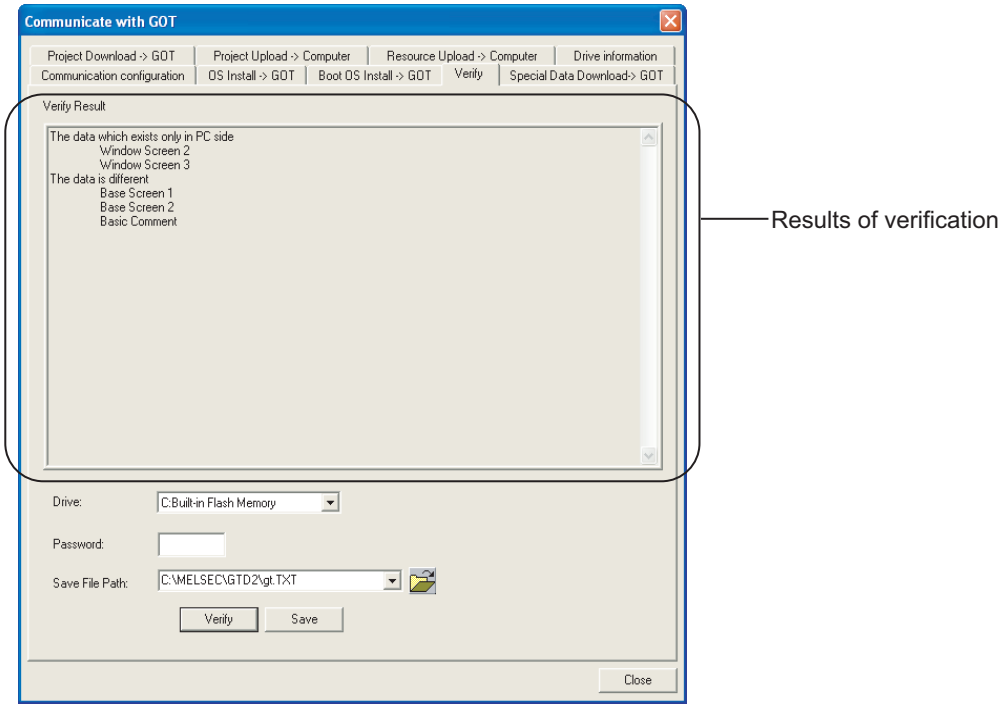
1. Click on [Communication] → [To/From GOT...] in the menu.
2. The Communicate with GOT dialog box is displayed. Click on the Verify tab.

Communicate with GOT dialog box (Verify)



3. Designate the name of the drive where the project data is verified.
4. Click on the Verify button.

5 Results of verification are displayed. If disagreement is found, transmit again.
While referring to the following description, enter data.
After entering, click on the Save button to save the results of verification.





Item	Description
Results of verification	The results of verification are displayed.
Drive:	Select the target drive where the project data is verified. • A: Standard CF Card • B: Extended Memory Card • C: Built-in Flash Memory Note that if the specified drive is not valid for the target GOT, an error is displayed when the Verify button is clicked.
Password:*1	Enter the password when the uploading password has been set. The entered password will be indicated with asterisks (*).
Save File Path:	Specify the destination of saving of the results.Click on the button to designate the destination.Note that if the Save button is clicked though no destination is specified, a warning message is displayed and the results are not saved.
Verify	The project data located at the specified GOT drive is verified against one located on the PC.
Save	The results of verification are saved in the text format (.txt) under the specified file name at the specified location. The button becomes valid after verification is made.

*1 For the setting method of the uploading password, refer to the following manual.

See GT Designer 2 Version □ Reference Manual

Point Verification

(1) Verification methods

Verification is carried out with the following three methods depending on the data type.

Verification methods		
Verification by Date/Time	Verification by the setting value for each item	Verification by all settings
Base Screen Window Screen Report Screen Advanced Recipe Separate Setting Parts Basic Comment Advanced Comment Sound Files	GOT Setup Communication Settings	Common Advanced Recipe Common Setting HQ Font MES Interface Startup Logo

Some verification methods have the following restriction.

(a) When data is verified by Date/Time information

The result of the verification may differ without changing the settings when the following operations are performed.

- GOT Type or Controller Type is changed.
- Edit dialog of the object is closed with the OK button pressed.

(b) When data is verified by the setting value for each item

The result of the verification may differ even when the project data of the GOT main unit is the same as that of GT Designer2, when Standard OS version of each differs and the following conditions are applied.

- When Standard OS version of the GOT main unit is older than that of GT Designer2.
- When the existing settings are edited with GOT main unit.

(2) When the standard monitor OS versions of project data differ at verification

To execute verification, the standard monitor OS major versions of project data must be the same.

For details of the versions, refer to the following.

App5.List of Functions Added by GT Designer2 Version Upgrade (For GOT1000 Series)

In the following cases under the above condition, the result of the verification may show that the project data are unmatched.

- When GT Designer2 version (earlier than 2.81K) for creating project data differs from that for transferring the project data to the GOT and the data are verified by GT Designer2 2.81K
- When the standard monitor OS minor version of project data (in the personal computer) is later than that of GT Designer2 for executing verification

8.6 Obtaining the Drive Information [GOT to PC]

The following explains how to check the drive information.

8.6.1 Drive information acquisition procedure

Point

After deleting the Extended function OS and option OS using the [Delete] button provided in the Drive Info dialog box, turn the GOT off then on again.

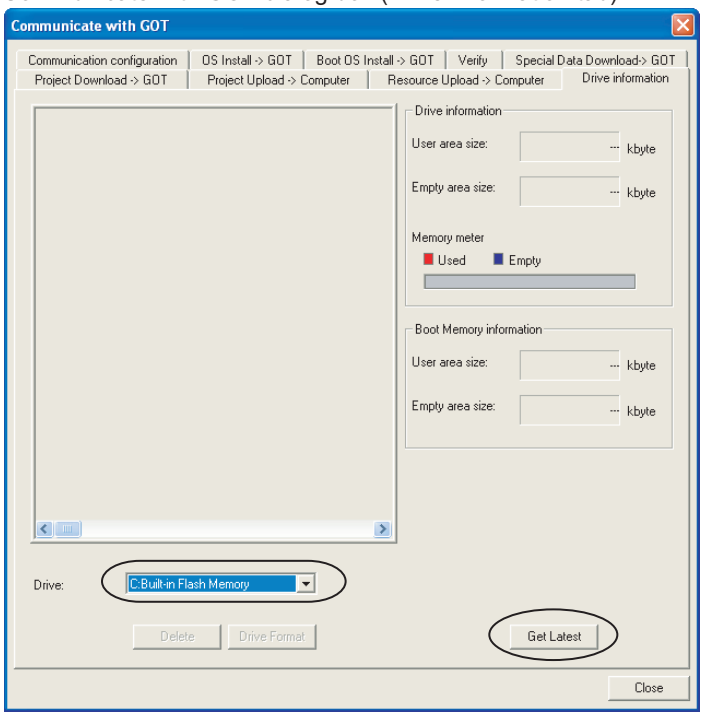
1 The following explains how to check the drive information.

- Click the [Communication] → [Drive Information...] menu.
- Click the [Communication] → [To/From GOT...] menu.

As the setting dialog box appears, click the Drive information tab.

2 The Communicate with GOT dialog box (Drive information tab) appears.

Communicate with GOT dialog box (Drive information tab)



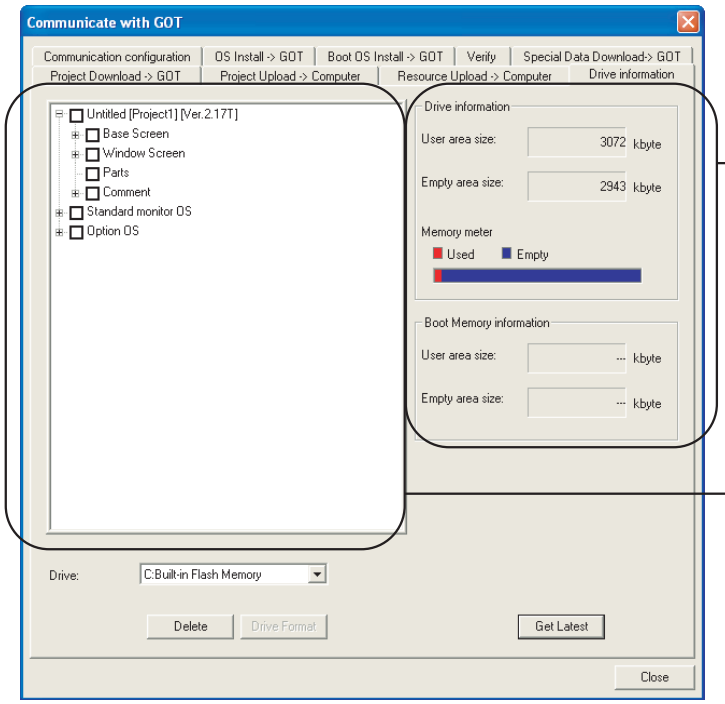
3 Specify the drive of which information will be obtained.

4 Click the [Get Latest] button.

If the version of the OS of the main body of the GOT is later than the version of the OS of GT Designer 2, the unrecognized OS is displayed "Other."

5 The information of the specified drive in the GOT appears.

Communicate with GOT dialog box (Drive information tab)



Drive memory, Available size, User area size, Boot Drive Size, etc. of selected drive are displayed.

Obtained drive information tree is displayed.

Boot OS Install → GOT | OS Install → GOT | Project Download → GOT | Project Upload → Computer | Resource Upload → Computer | **Drive information** | Communication configuration | Verify | Special Data Download → GOT

Item	Description
Drive information tree	Displays the project data, OS information, etc. obtained from the specified drive in the tree structure. Right-click the mouse to enable [Select all] or [Unselect All].
Drive:	Select the drive of which the drive information will be obtained.
User area size:*1	Displays the amount of space available for the user on the specified GOT drive (in kilobytes).
Empty area size:	Displays the amount of empty space available out of the total user area size on the specified GOT drive.
Memory meter:	Displays the free space of the specified GOT drive in meter form. Red: Used area Blue: Empty space
User area size: GT16 GT15	Displays the total memory in the Built-in Flash Memory and Add-on Memory (for GT15☐☐only).
Empty area size: GT16 GT15	Displays the amount of available memory out of the boot memory.
Get Latest	Click this button to read the drive information from the specified GOT drive.
Delete	Click this button to delete the item, which is checked in the Drive information tree, from the drive.

Boot OS Install → GOT | OS Install → GOT | Project Download → GOT | Project Upload → Computer | Resource Upload → Computer | **Drive information** | Communication configuration | Verify | Special Data Download → GOT

Item	Description
Drive Format	Click this button to initialize the specified GOT drive. (A: Standard CF Card, B: Extended Memory Card only) The drive can be formatted only when "A: Standard CF Card" is specified as the target. (An error will occur if C: Built-in Flash Memory is specified.)

*1 After ladder monitor data was saved onto the C drive by using an optional Ladder monitor function, data transfer from Designer 2 to the GOT may not be possible even when it appears that enough free space is available on the C drive. To solve this situation, delete the ladder monitor data by using the utility function on the GOT, and perform data transfer from Designer 2 to the GOT.
Refer to the following manual for setting the destination folder and for the deletion of the ladder monitor data in ladder monitor function.

☞ GOT1000 Series Extended/Option Functions Manual

8.7 Uploading Project Data [GOT to PC]

When the Boot OS or OS is installed into the GOT, the project data in the GOT are deleted.
To back up the project data, execute upload and store the GOT project data once into the hard disk of the PC.

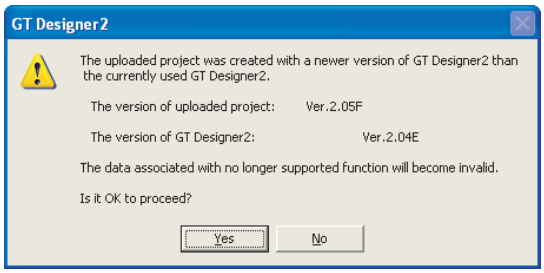
Point

When the OS version in the GOT differs from the one of GT Designer2

When the OS version of GT Designer2 differs from the one in the GOT, the upload will be performed differently as shown below.

(1) When the OS version (major, minor) in the GOT is older than the OS major version of GT Designer2
The project data can be uploaded by GT Designer2 without any problem.
However, the OS information of the project data will be changed to the version of GT Designer2 in which the project data has been uploaded.

(2) When the OS major version in the GOT is newer than one of the OS GT Designer2
The project data cannot be opened on the GT Designer2, but can be uploaded as the GOT1000 series binary file (*.G1).
To open this project data, GT Designer2 of the newer OS version than the one in the GOT is required.



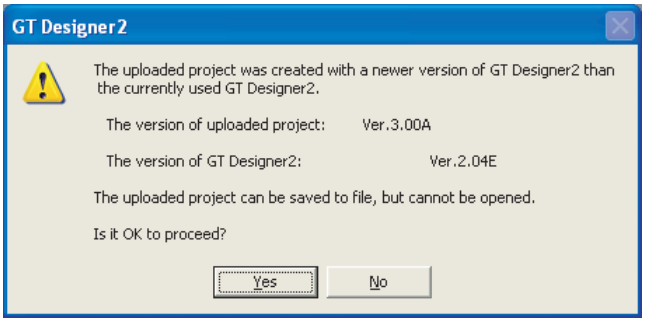
(3) When the OS minor version in the GOT is newer than the one of GT Designer2 (When the major versions are the same)
The project data can be uploaded and opened on GT Designer2. However, note that that the unsupported functions are deleted.
When the following dialog appears, it is recommended to check the OS version in the GOT and upload the project data again using GT Designer2 of the newer OS version. For how to check the OS version in the GOT, refer to the following section and manuals.

☞ Section 8.1.1 4 Standard monitor OS

☞ GT11 User's Manual for the GT11 □□

☞ GT15 User's Manual for the GT15 □□

☞ GT16 User's Manual (Basic Utility) for the GT16 □□



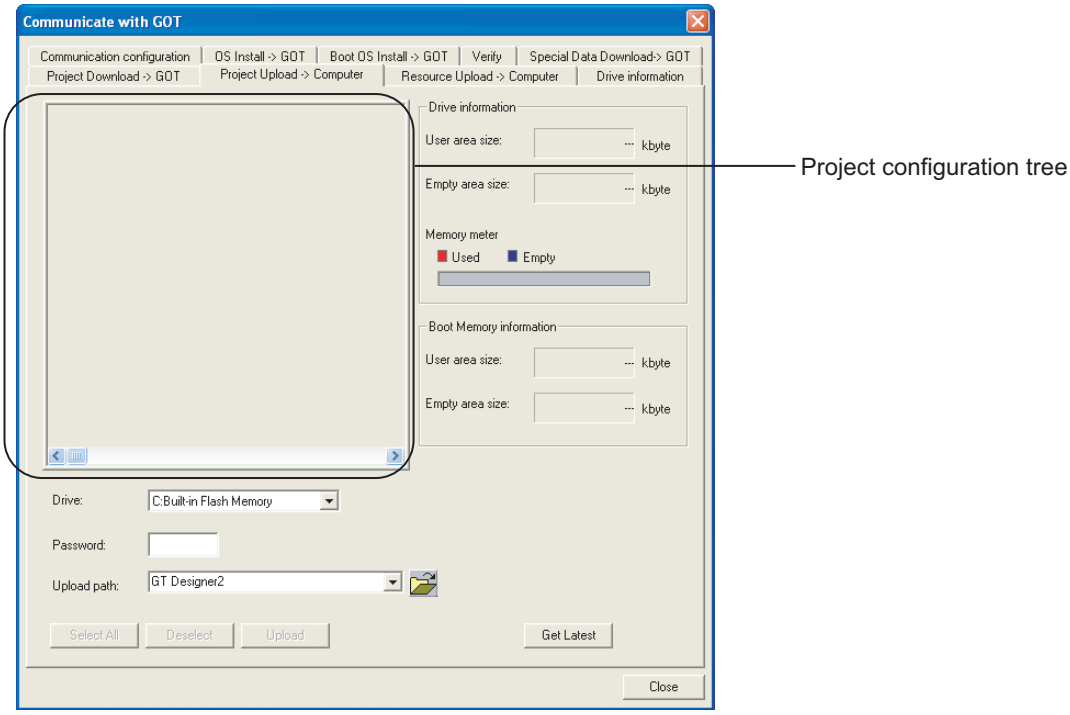
8.7.1 Project data uploading procedure

The following explains how to upload project data.

1 Click the [Communication] → [To/From GOT...] menu.

2 As the setting dialog box appears, click the Project Upload → Computer tab.

Communicate with GOT dialog box (Project Download →Computer tab)

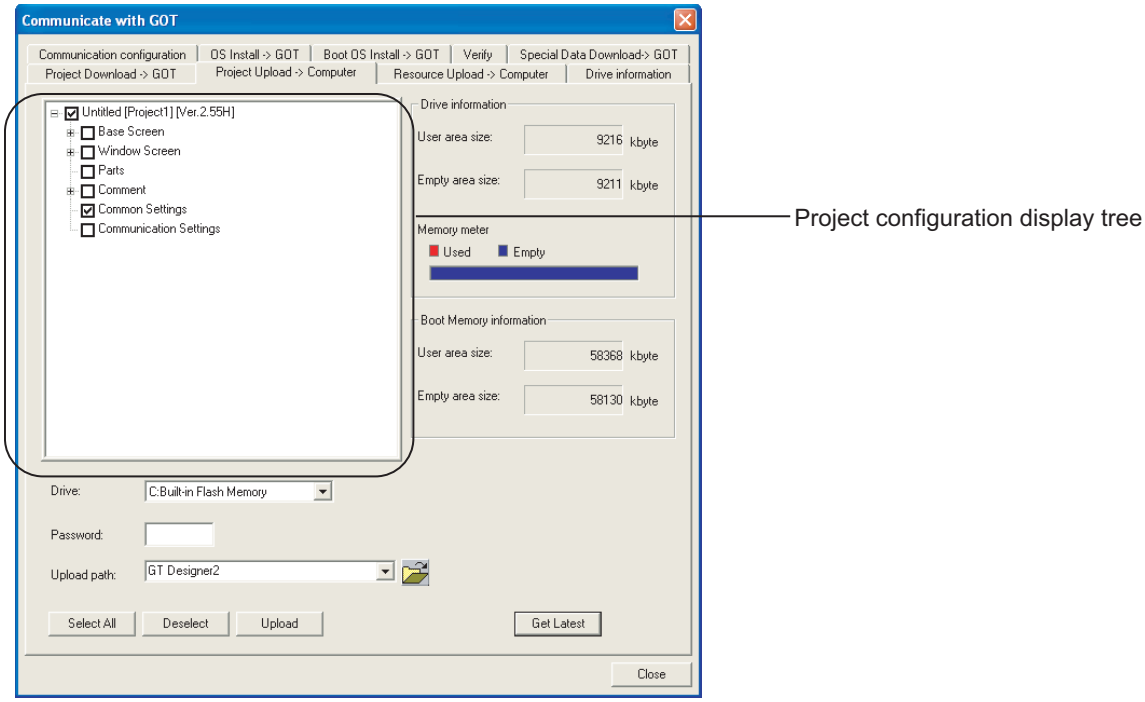


3 Specify the drive from which the project data will be uploaded.

4 Click the Get Detail button.
(This operation is not required when the Project configuration display tree of the upload target is already displayed.)

5 The Project configuration tree is displayed.
Make the settings by referring to the following explanation.
Then, click the Upload button to start uploading.

Communicate with GOT dialog box (Project Upload→ Computer tab)



Boot OS Install → GOT | OS Install → GOT | Project Download → GOT | **Project Upload → Computer** | Resource Upload → Computer | Drive information | Communication configuration | Verify | Special Data Download → GOT

Item	Description
Project configuration display tree	Displays the project data configuration tree after the information of the specified drive is obtained. Right-click the mouse to enable [Select all] or [Unselect all].
Drive:	Select the drive from which the project data will be uploaded. • A: Standard CF Card • B: Extended Memory Card • C: Built-in Flash Memory Note that if the specified drive is not valid for the target GOT, an error is displayed when the Get Detail button is clicked.
Password:*1	If the uploading password has been set, enter the password. The entered password is indicated with asterisks (*).
Upload path:	Set the storage destination of the uploaded project data. (When the button is used, the storage destination can be easily specified.) (Up to five past specified destinations are held.) When data is uploaded with the default (GT Designer2) settings, the uploaded data will be imported to currently open GT Designer2.
Drive information*2	Displays memory size, empty area size, and memory meter of the selected drive.

Boot OS Install → GOT | OS Install → GOT | Project Download → GOT | **Project Upload → Computer** | Resource Upload → Computer | Drive information | Communication configuration | Verify | Special Data Download → GOT

Item	Description
Boot Memory information*2 	Displays the user area size and empty area size.
Select all	Select all the items included in the project configuration tree.
Deselect	Deselect all of the selected items in the project configuration tree.
Get Detail	Click this button to read the drive information from the specified GOT drive.
Upload	Click this button to upload the item, which is checked in the Project configuration tree, from the specified drive. Uploading is interrupted if the Upload destination has run out of space.

*1 For the method of entering the uploading password, refer to the following manual.

See GT Designer 2 Version □ Reference Manual

8.8 Uploading Resource Data [GOT to PC]

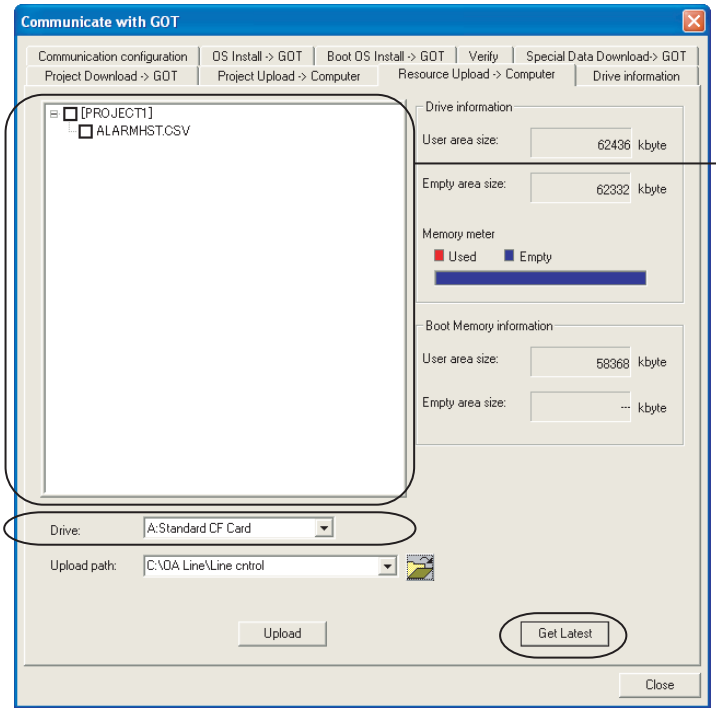
The following explains how to upload the resource data.

8.8.1 Resource data uploading procedure

1 Click the [Communication] → [To/From GOT...] menu.

2 As the Communicate with GOT dialog box appears, click the Resource Upload → Computer tab.

Communicate with GOT dialog box (Resource Upload→ Computer tab)



3 Specify the drive from which the resource data will be uploaded.

4 Click the Get Detail button.
(This operation is not required when the Resource data display tree of the upload target has already been displayed.)

Point

Reading a large-quantity of resource data

When a large-quantity of resource data exists in a CF card, the resource data may not be acquired even if you click the [Get Detail] button.
In such case, read the data using either of the following methods.

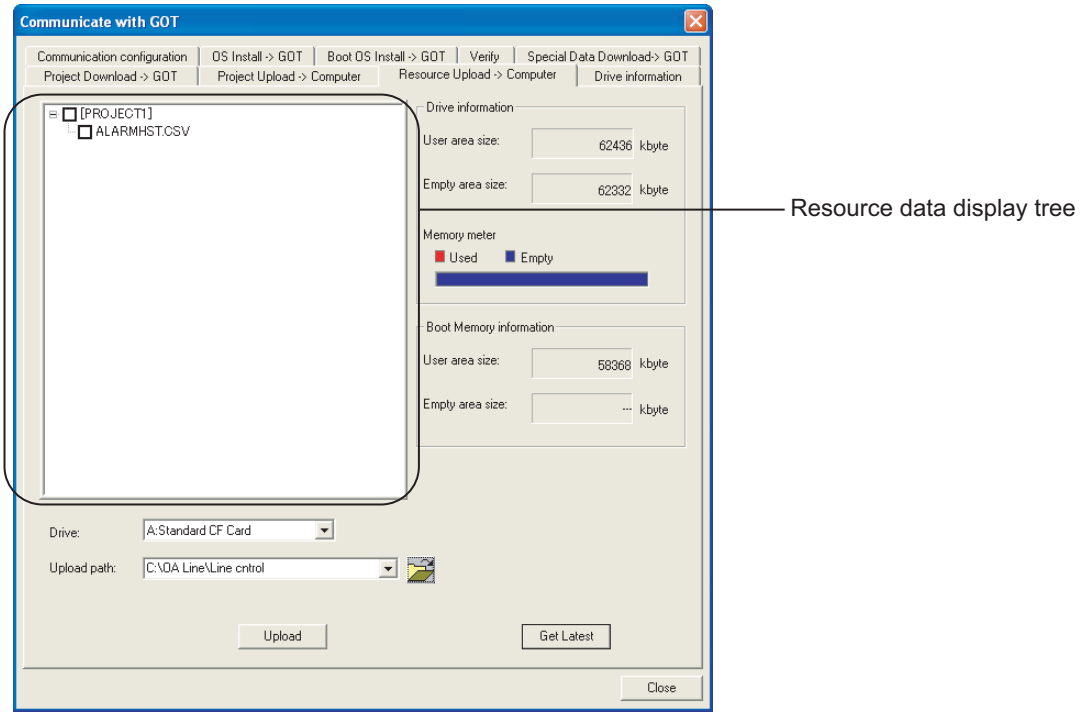
- Read the resource data from the CF card using a personal computer.
- Copy the resource data to a USB memory, and read the data from the USB memory using a personal computer. (only for GT16)

  ☞ GT16 User's Manual (Basic Utility)
- Read the resource data from the CF card connected to the GOT via Ethernet FTP. (only for GT15 and GT16)

  ☞ GOT1000 Series Gateway Functions Manual for GT Works3

5 The Resource data display tree is displayed. Make the settings by referring to the following explanation. Then, click the Upload button to start uploading.

Communicate with GOT dialog box (Resource Upload → Computer tab)





Item	Description
Resource data display tree	Displays the resource data configuration tree after the information of the specified drive is obtained. Right-click the mouse to enable [Select ALL] or [Unselect All].
Drive:	Select the drive from which the resource data will be uploaded. • A: Standard CF Card • B: Extended Memory Card (GT16 ☐☐ and GT15 ☐☐) • C: Built-in Flash Memory • D: Built-in SRAM Note that if the specified drive is not valid for the target GOT, an error is displayed when the Get Detail button is clicked. The GT15 ☐☐ does not include "D: Built-in SRAM" as hardware.
Upload path:	Set the storage destination of the uploaded resource data. (When the button is used, the storage destination can be easily specified.) (Up to five past specified destinations are held.)
Drive information*1	Displays memory size, empty area size, and memory meter of the selected drive.
Boot Memory information*1 	Displays the user area size and empty area size.

Item	Description
Get Detail	Click this button to read the drive information from the specified GOT drive. Note that when the drive invalid for the target GOT is specified in Drive name, an error is displayed when the Get Detail button is clicked, and the information cannot be obtained.
Upload	Click this button to upload the item, which is checked in the Resource data display tree, from the specified drive. Uploading is interrupted if the upload destination has run out of space.

*1 Refer to the following section for details about drive information and memory information.

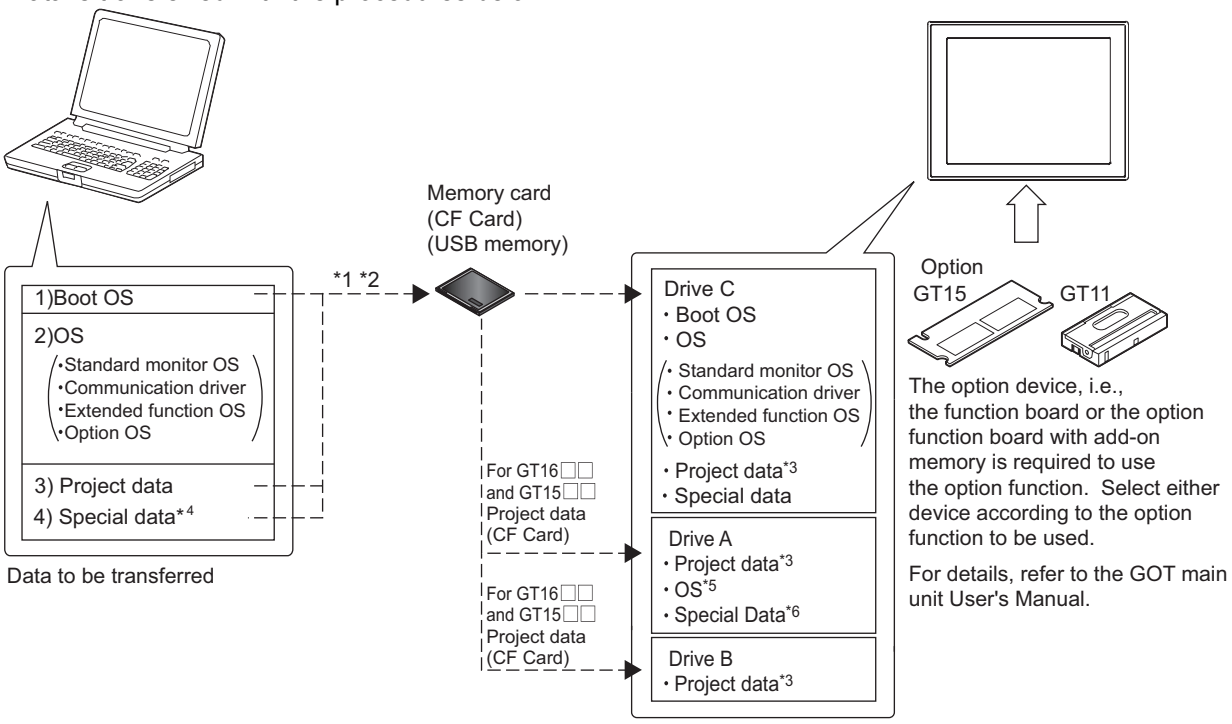
☞ Section 8.6 Obtaining the Drive Information [GOT to PC]

8.9 Transferring Data Using a Memory Card [PC to memory card and memory card to GOT]

This section explains how to transfer data using a memory card.
Use of memory card eliminates the necessity to carry the PC and cable when downloading the project to multiple GOTs.

1 Procedures

Data is transferred with the procedures below.



*1 Data 1) and "2) or 3)" or 4)" cannot be transferred to the same memory card.
*2 Depending on the capacity of the memory card, data 2), 3) and 4) can be transferred simultaneously.
*3 GT15 □□ can start from the A drive or B drive by storing the project data on these drives.
*4 For GT15 □□ only
*5 Only GT15 □□ can start from the A drive by storing the OS on this drive.
*6 Only GT15 □□ can start from the A drive by storing the Special Data on this drive.

1 Install the Boot OS.

☞ Section 8.9.2 Installing the Boot OS [PC to memory card and memory card to GOT]

2 Install the OS (Standard monitor OS, Communication driver, Extended function OS, Option OS)

☞ Section 8.9.3 Downloading/installing project data/OS [PC to memory card and memory card to GOT]

3 Download the project data.

☞ Section 8.9.3 Downloading/installing project data/OS [PC to memory card and memory card to GOT]

4 Download the special data 

☞ Section 8.9.4 Downloading Special Data [PC to memory card to GOT]

Remark Transferring project data to memory card

The project must be open on GT Designer2 to transfer the project data from the PC to the memory card.
The other data can be transferred if the project is not open on GT Designer2.

2 Precautions

(1) Detailed explanation and category set on project or screen
Detailed explanation and category set on the project or screen are not downloaded to the GOT. After downloading, they are not saved when they are uploaded again from the GOT.

(2) Transferring project data to memory card
Make sure to transfer the project data from GT Designer2 to the memory card. When it is copied using Explorer of the PC, the GOT cannot recognize the data in the memory card.

(3) Data in the GOT/memory card
When the project data of the same name as the download target data has already been within the GOT/memory card, it will be installed/downloaded after the folders (G1BOOT, S1SYS, project folder) in the GOT/memory card are deleted.

Point Folders and files in the memory card

When the OS or project data is transferred to the memory card, multiple folders and files are created.
Do not delete/edit these folders and files as they are managed by the GOT.
If they are deleted/edited, the GOT will not operate normally.

(4) Memory card formatting
Prior to use, make sure to format the memory card in either of the following methods.

(a) Using a PC (CF Card).
Format the CF Card using the PC that satisfies the following conditions.
1) Includes the CF Card drive.
2) Windows® 98, Windows® Millennium Edition, Windows® 2000 Professional, or Windows® XP Professional/Home Edition, Windows Vista® is installed.
(The CF Card cannot be formatted when Windows NT® 4.0 is used.)

Point When using a PC for formatting

Set the format type to FAT16 to format the CF Card to be used on the GOT.

(b) Refer to the following manual for details of the utility menu used for Program/data control (Memory card Format) of the utility menu.

☞ GT11 User's Manual for GT11 □□

☞ GT15 User's Manual for GT15 □□

☞ GT16 User's Manual (Basic Utility) for GT16 □□

(5) Time for transfer (write) to memory card

The time for transferring data from GT Designer2 to the memory card depends on the environment of the personal computer.

Hence, more time may be taken depending on the used memory card and personal computer OS (Windows®).

8.9.1 Installing CoreOS [PC to memory card and memory card to GOT]

Install CoreOS only if the GOT is not in its factory-shipped condition after the re-installation of Boot OS. Normally, installation is not required.

Point

Precautions for installing CoreOS

(1) CoreOS installation guideline
Installation cannot be cancelled.
Do not do the following while installing CoreOS.
- Power OFF the GOT
- Press the GOT reset button
- Set the CF card access switch to ON
- Remove the CF card

(2) A drive to install CoreOS
CoreOS can be installed only on the A drive. CoreOS cannot be installed on to the B drive.

If the GOT is not recovered even after installing CoreOS, there may be a hardware problem. Please consult your nearest sales office or FA Center, explaining a detailed description.

1 Before installing CoreOS

(1) About the installation method
CoreOS can only be installed with the memory card.
It cannot be installed via a USB/RS-232/Ethernet connection.

(2) About the CF Card
Use a CF card with at least 32 MB of memory.

(3) About Boot OS
When CoreOS is installed, Boot OS is also automatically installed. (This means the user does not need to install Boot OS.)

(4) When installing CoreOS
When installing CoreOS, remove all units mounted on the extended I/F.
Refer to the following manuals for details on mounting the unit.

☞ GT15 User's Manual

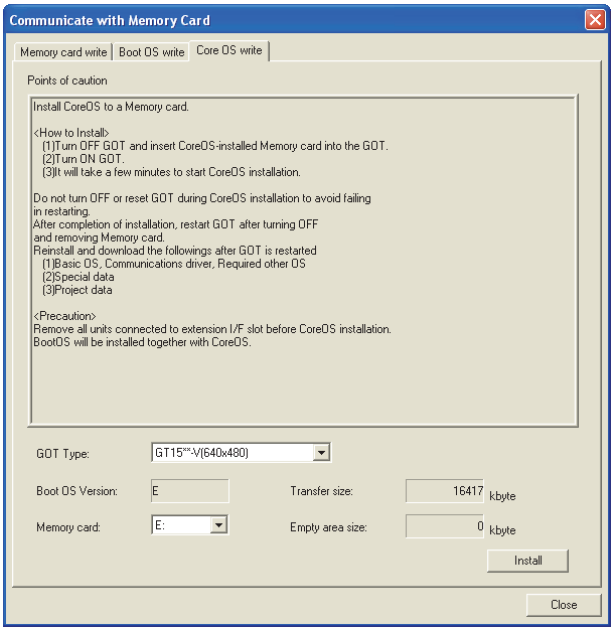
☞ GT16 User's Manual (Hardware)

2 How to install CoreOS

CoreOS installation method is listed below.

1 Click the [Communication] → [To Memory Card...] menu.

2 As the Communicate with Memory Card... dialog box appears, click the CoreOS write tab and refer to the following explanation when making settings.
After making settings, click the Install button to commence saving to the memory card.



Memory card write | Boot OS write | Core OS write

Item	Contents
Points of caution	Points of caution must be followed when installing CoreOS. Be sure to read these points before installing CoreOS.
GOT Type	Select the GOT type where CoreOS will be installed.
Boot OS version	Boot OS version is displayed.
Transfer size:	The Boot OS size to be transferred is displayed.
Empty area size:	The amount of empty space available out of the total in the Boot memory amount is displayed.
Memory card	PC drive to be assigned to the memory drive.
Install	Boot OS is installed to the memory card.

3 If CoreOS cannot be installed

If CoreOS cannot be installed, check the following items.
If CoreOS still cannot be installed even after checking these items, there may be a hardware problem. Please consult your nearest sales office or FA Center, explaining a detailed description.

Item	Contents
Even though the CF card is inserted into the GOT, CoreOS cannot be installed.	• Check if the GOT's CF card access switch is ON. If the switch is OFF, set the switch to ON. • It is possible that data was not written correctly to the memory card from GT Designer2. Write to the memory card from GT Designer2 again.
The following message is displayed at the GOT. GOT error. Consult your local sales office.	GOT is broken. Please consult your nearest sales office or FA Center, explaining a detailed description.
The following message is displayed at the GOT. CF card error. Installation will be canceled. Check whether the CF card can be used.	There is an abnormality in the CF card. • Perform the operation again after formatting the CF card. • Replace the CF card.
The following message is displayed at the GOT. Optional unit has been connected to extension I/F slot.	Power OFF the GOT and remove the communication unit or others mounted on the extended I/F, and then le-execute the installation of CoreOS.
The following message is displayed at the GOT. GOT type and OS version do not match.	Le-execute the installation of CoreOS with the installation function of CoreOS of the correct model.
The following message is displayed at the GOT. The version of OS is not acceptable to this GOT.	Le-execute the installation of CoreOS with the installation function of the newer version of CoreOS.
The following message is displayed at the GOT. Memory card access switch is off.	Set the CF card access switch to ON, and then execute the installation of CoreOS again.

4 How to Install to the GOT

1 Power OFF the GOT and set the CF card access switch to OFF.

2 Insert the CF Card to which CoreOS is written into the A drive on GOT.
Refer to the following for details on writing CoreOS to the CF card.

☞ in this section 2 .

Refer to the following manuals for details on inserting the CF card.

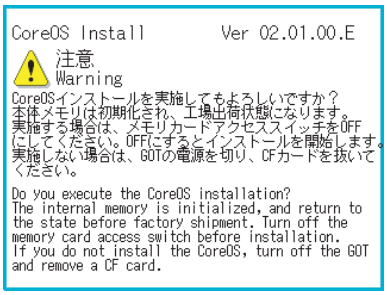
☞ GT11 User's Manual

☞ GT15 User's Manual

☞ GT16 User's Manual (Hardware)

3 Set the GOT CF card access switch to ON.

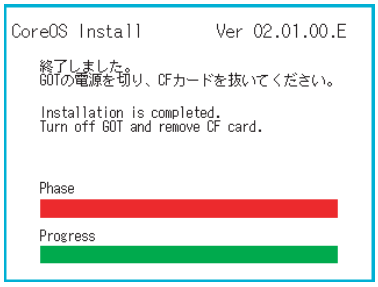
4 Power ON the GOT to display this screen. Turn the CF card access switch OFF to commence installation of the CoreOS.



5 Install CoreOS to the built-in flash memory (C drive).
The CF card access LED is lit during installation.
Do not do the following while the CF card access LED is lit.

- Remove the CF card
- Turn the CF card access switch ON
- Power OFF the GOT
- Press the GOT reset button





6 When the installation is complete, the power LED starts to flash. Turn off the power, remove the CF card, and then turn on the power again.

Screen displayed after restart



7 Transfer the OS, project data and special data.

8.9.2 Installing the Boot OS [PC to memory card and memory card to GOT]

Point

(1) When using a memory card
When installing the Boot OS into a memory card, do not store any other data into the memory card.
The other data are all erased when the Boot OS is installed.

(2) Data installed/downloaded in the GOT
When the Boot OS is installed, the project data and OS (Standard monitor OS, Communication driver, Extended function OS, and Option OS) in the GOT are deleted.
When it is necessary to back up the project data, upload the data to the PC or memory card (CF Card) before installing the Boot OS.
However, Special Data cannot be uploaded to PCs, so upload Special Data to a memory card (CF card).

Direct upload to PC

☞ Section 8.7 Uploading Project Data [GOT to PC]

Upload to PC via memory card

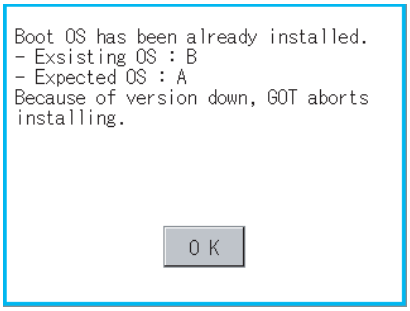
☞ Section 8.9.5 Opening project data [GOT to memory card and memory card to PC]

(3) During installation of Boot OS into the GOT
Once Boot OS installation is started, it cannot be interrupted.
Do not do any of the following operations to interrupt the installation, as it may disable the GOT from operating.
- Remove the memory card.
- Power off the GOT.
- Press the reset button of the GOT.

If the GOT does not operate, please contact a service representative.

(4) When the Boot OS versions are different

During Boot OS installation, the Boot OS version is checked against the preinstalled one to prevent the newer one from being overwritten. Installation is interrupted when the versions are different (when the Boot OS version in the memory card is older).



(5) Initializing the GOT (Returning the GOT to factory-settings)

Installing the Boot OS returns the GOT to the factory settings.

Note that when the Boot OS is installed, the project data and OS (Standard monitor OS, Communication driver, Extended function OS, and Option OS) in the GOT are deleted.

When it is necessary to back up the project data, upload the data to the PC or memory card (CF card) before installing the Boot OS.

Direct upload to PC

☞ Section 8.7 Uploading Project Data [GOT to PC]

Upload to PC via memory card

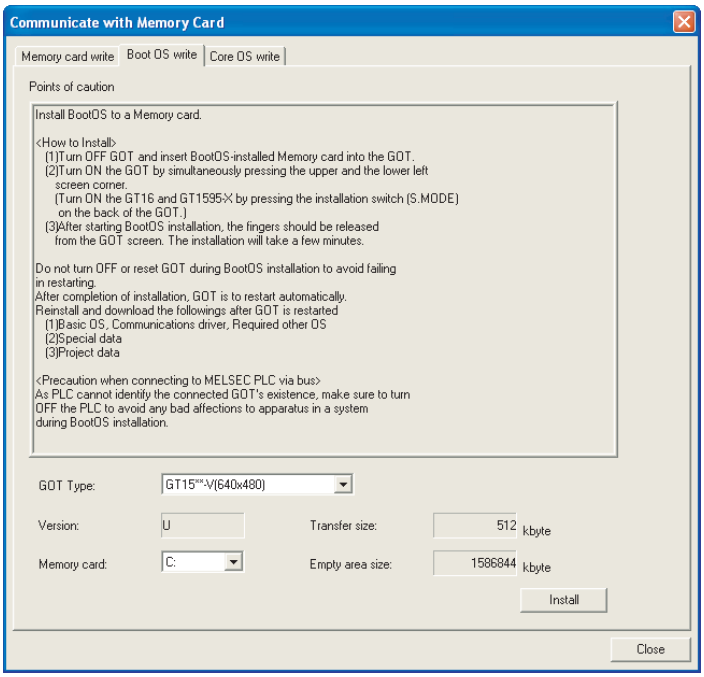
☞ Section 8.9.5 Opening project data [GOT to memory card and memory card to PC]

The following explains how to install the Boot OS.

1 How to write to the memory card

1. Click the [Communication] → [To Memory Card...] menu.
2. As the setting dialog box appears, click the Boot OS write tab, and make the settings by referring to the following explanation.
   Then, click the Install button to start storing into the memory card.

Communicate with Memory Card dialog box (Boot OS write tab)



Memory card write | **Boot OS write** | Core OS write

Item	Description
Points of caution	The precautions for Boot OS installation are provided. Make sure to read them before installation.
GOT Type:	Select the GOT type in which the Boot OS will be installed.
Version:	Displays the Boot OS version.
Transfer size:	Displays the data size of the Boot OS to be transferred.
Empty area size:	The amount of available space out of the total in the Boot memory amount is displayed.
Memory card:	Select the drive of the PC to which the memory card drive has been assigned.
Install	Click this button to install the Boot OS to the memory card.

2 How to install the Boot OS into the GOT

The Boot OS can be installed into the GOT in either of the following methods.

- How to install while the GOT is powered ON.
  Refer to this section.
- Installation by the utility (Program/data control) function of the GOT
  Refer to the following manual for the installation method.

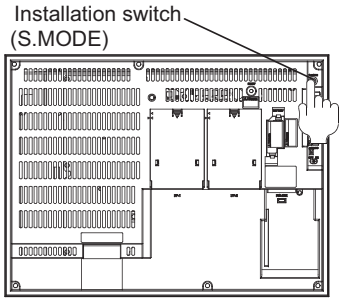
☞ GT11 User's Manual

☞ GT15 User's Manual

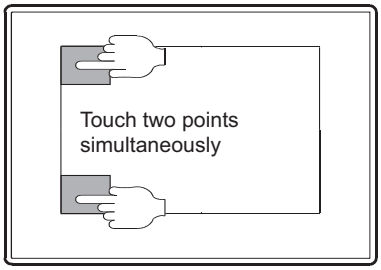
☞ GT16 User's Manual (Basic Utility)

How to Install while the GOT is Powered ON

The messages displayed on the GOT during installation differ depending on the condition of the installation of the Standard moitor OS. If a message requesting an operation is displayed on the screen, follow the instructions on the screen.



For the GT16☐☐, and GT1595-X



For the GT1585V-S, GT1585-S, GT1575V-S, GT1575-S, GT1575-V,GT1575-VN,GT1572-VN, GT1565-V,GT1562-VN, GT1555-V, GT1555-Q, GT1550-Q and GT11

(1) When installing with the CF card

1 Power OFF the GOT and turn OFF the CF Card access switch.

2 Insert the CF Card to which Boot OS is written into the A drive on GOT.
(B drive cannot be used for the installation.)
Refer to the following for how to write the Boot OS to the CF Card.

☞ 1 in this section

Refer to the following manual for the CF Card installation method.

☞ GT11 User's Manual

☞ GT15 User's Manual

☞ GT16 User's Manual (Hardware)

3 Turn ON the CF Card access switch of the GOT.

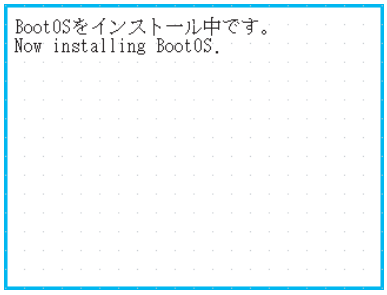
4 Power ON the GOT.

- For the GT16□□, and GT1595-X
  Power the GOT ON while pressing the GOT installation switch (S.MODE switch) on the rear of the GOT. (the 1-point press installation function)
- For the GT1585V-S, GT1585-S, GT1575V-S, GT1575-S, GT1575-V, GT1575-VN, GT1572-VN, GT1565-V, GT1562-VN, GT1555-V, GT1555-Q, GT1550-Q and GT11
  Power the GOT ON while touching the lower and upper portions of the left side of the GOT screen. (the 2-point presses installation function)

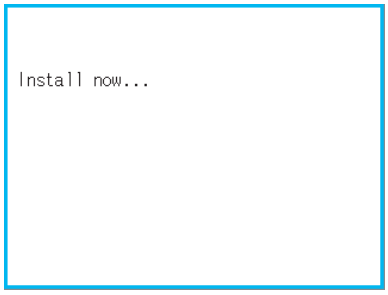
5 Install the Boot OS into the built-in Flash Memory (Drive C).
The CF Card access LED is on during installation.
Do not perform the following operations while the CF Card access LED is on.

- Remove the CF Card.
- Turn Off the CF Card access switch of the GOT.
- Power OFF the GOT.
- Press the reset button of the GOT.

When Standard monitor OS is not yet installed



When Standard monitor OS is already installed

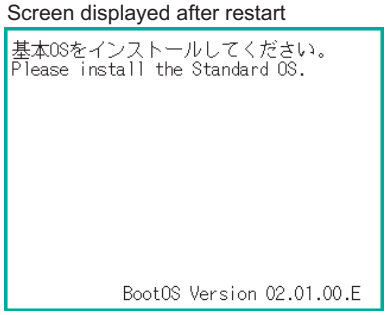


6 After the installation is completed, the GOT automatically restarts
(When the Standard monitor OS is already installed, touch the OK button, and the GOT will restarts.)
Then, turn OFF the CF Card access switch of the GOT, make sure that the CF Card access LED is off, and then remove the CF Card from the GOT.

Screen displayed during restart



Screen displayed after restart



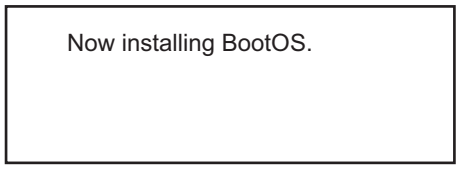
7 Transfer the OS or project data.

(2) When installing with USB memory (Only GT16☐☐)

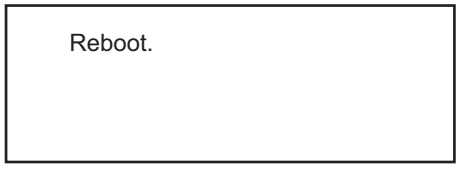
1 Power off the GOT, and install the USB memory where the BootOS, standard monitor OS or project data is stored in the USB interface of the GOT.
The BootOS cannot be stored in the USB memory where the standard monitor OS or project data is stored.

2 Power on the GOT.
Power on the GOT while pressing the install switch (S.MODE switch) on the back of the GOT.
(1-point press installation function)

3 The BootOS and standard monitor OS are installed in the built-in flash memory.
The USB memory access LED is lit during the installation execution.
Do not pull out the USB memory or power off the GOT while the USB memory access LED is lit.



4 The GOT restarts automatically after the installation is completed.
(When the standard monitor OS is already installed, the GOT restarts by touching the OK button.)



5 After confirming normal restart, confirm that the USB memory access LED is not lit, and remove the USB memory from the USB interface of the GOT.
For removing methods of the USB memory, refer to the following.

☞ GT16 User's manual (Basic Utility)

8.9.3 Downloading/installing project data/OS [PC to memory card and memory card to GOT]

Point

(1) When using a CF Card or USB memory (for GT16☐☐ only)
When downloading/installing the project data/OS into a memory card, do not store any other data into that memory card.
The other data are all erased when the project data/OS is downloaded/installed.

(2) Data installed in the GOT
When the OS is installed, the project data stored in the project folder in the GOT is deleted.
When it is necessary to back up the project data, upload the data to the PC, CF Card, or USB memory (for GT16☐☐ only) before installing the OS.

Direct upload to PC

☞ Section 8.7 Uploading Project Data [GOT to PC]

Upload to PC via memory card

☞ Section 8.9.5 Opening project data [GOT to memory card and memory card to PC]

(3) During OS installation
OS installation cannot be interrupted.
Do not do any of the following operations to interrupt the installation, as it may disable the GOT from operating.
- Remove the memory card.
- Remove the USB memory.
- Power off the GOT.
- Press the reset button of the GOT.

<Restoring the GOT>
If the GOT has been disabled from operation due to any of the above operations during installation, reinstall the Boot OS by using the installation method provided in the following section.

☞ Section 8.9.2 Installing the Boot OS [PC to memory card and memory card to GOT]

The following explains how to download/install the project data/OS.

1 How to write to the memory card

Point

To make communication between the GOT and PLC

It is necessary to install the Communication driver and download the Communication Settings.

Install the Communication driver and download the Communication Settings.

Refer to the following items for the installation of the Communication driver and the download of the Communication Settings.

Installation of Communication driver

☞ GOT1000 Series Connection Manual

Download of Communication Settings

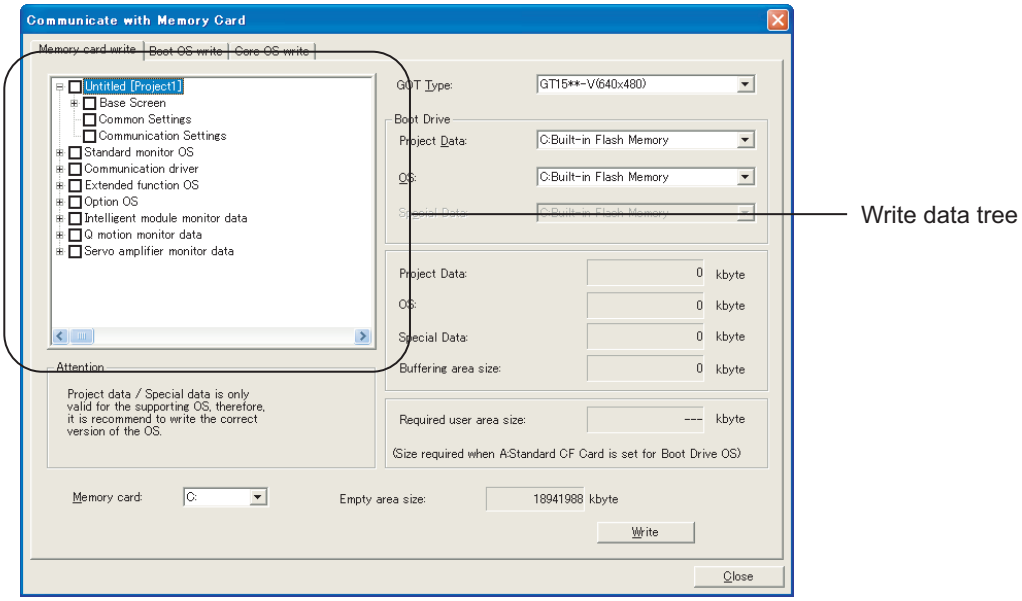
☞ GT Designer2 Version ☐ Screen Design Manual

1 Click the [Communication] → [To Memory Card...] menu.

2 As the setting dialog box appears, click the Memory card write tab, and make the settings by referring to the following explanation.

Then, click the Write button to start writing to the memory card.

Communicate with Memory Card dialog box (Memory card write tab)



Memory card write | Boot OS write | Core OS write

Item	Description
Write data tree	Check the item to be downloaded in the displayed structure tree of the project data and OS configuration. Right-click the mouse to enable [Select monitor data] or [Unselect monitor data].
GOT type:	Select the GOT type in which the OS will be installed.

Memory card write | Boot OS write | Core OS write

Item		Description
Boot Drive	Project Data:	Select the GOT drive in which the project data will be started. • For the GT16 ☐☐, the drive can be selected. • For the GT15 ☐☐, the drive can be selected. • For the GT11 ☐☐, the drive is fixed to "C: Built-in Flash Memory".
	OS:	Select the GOT drive in which the OS will be started.*1
	Special data	The special data boot location (Fixed at C: built-in flash memory) is displayed
Empty area size:		Displays the free space of the memory card (specified drive of the PC).
Project data:		Displays data size of the project data to be transferred.
OS:		Displays the data size of the OS to be transferred.
Special data		The amount of special data to be transferred is displayed.
Required user area size (Size required when A: Standard CF Card is set for Boot Drive OS)		When the driver of the OS in the Boot drive is [A: Standard CF Card], required memory size (user area size) of the GOT main unit is displayed. (Standard monitor OS and the first Communication driver are not included.)
Buffering area size		The total buffering area size to be used by items such as advanced alarms is displayed.
Memory card:		Select the PC drive to be assigned to the memory drive.
Write		Click this button to write the data to the memory card.

*1 When [A: Standard CF Card] is selected in the OS in the Boot drive, project data and special data in the Boot drive are fixed to [A: Standard CF Card]. (GT16 ☐☐ and GT15 ☐☐)

Point

When [A: Standard CF Card] is selected in the Boot drive

- When [A: Standard CF Card] is selected in the Boot drive, the GOT can start with the CF card. Refer to the following section for details.

☞ Section 12.7 Starting the GOT with the CF card

- Communication driver, Extended function OS, and Option OS that exceed the limit of the user area capacity (C drive) can be used. Refer to the following section for details.

☞ Section 8.1.2 Drive capacity required for data transfer

- Startup Logo that is downloaded to the CF card may not be displayed depending on the Boot OS version that is installed in the GOT. Refer to the following section for details.

☞ App5. List of Functions Added by GT Designer2 Version Upgrade (For GOT1000 Series)

2 How to install the OS to the GOT/How to download project data

There are two methods of installing to the GOT/downloading.

- How to install while the GOT is powered ON.
  Refer to this section.
- Installation/downloading by the utility (Program/data control) function of the GOT
  Refer to the following manual for the installation/downloading method.

☞ GT11 User's Manual

☞ GT15 User's Manual

☞ GT16 User's Manual (Basic Utility)

How to install/download while the GOT is powered ON

The messages displayed on the GOT during installation/download differ, depending on if the Standard moitor OS is being installed or not.
The instructions below are based on the assumption that the Standard moitor OS is installed in the GOT.
If a request message is displayed on the screen, follow the screen's request.
(If the Standard monitor OS and project data is being written to a CF card, the project data will be downloaded after the Standard monitor OS is installed.

1 Power OFF the GOT and also turn OFF the CF Card access switch.

2 Insert the CF Card, to which project data is written into the A drive on GOT.
(B drive cannot be used for the installation.)
Refer to the following for how to write project data to the CF Card.

☞ 1 in this section

Refer to the following manual for the CF Card installation method.

☞ GT11 User's Manual

☞ GT15 User's Manual

☞ GT16 User's Manual (Hardware)

3 Turn ON the CF Card access switch of the GOT.

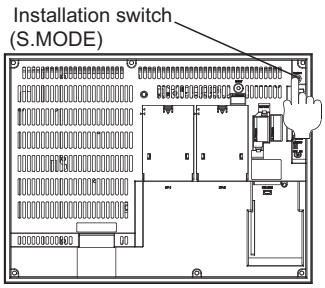
4 Power ON the GOT.

• For the GT16□□, and GT1595-X

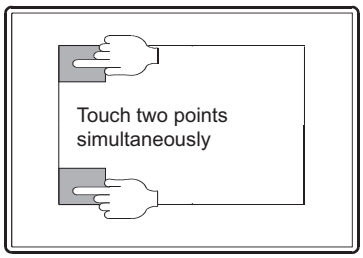
Power the GOT ON while pressing the GOT installation switch (S.MODE switch) on the rear of the GOT. (the 1-point press installtion function)

• For the GT1585V-S, GT1585-S, GT1575V-S, GT1575-S, GT1575-V, GT1575-VN, GT1572-VN, GT1565-V, GT1562-VN, GT1555-V, GT1555-Q, GT1550-Q and GT11

Power the GOT ON while touching the lower and upper portions of the left side of the GOT screen. (the 2-point presses installation function)

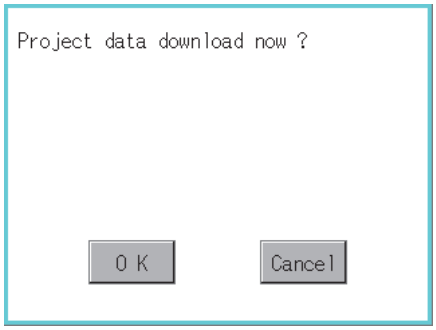


For the GT16□□, and GT1595-X



For the GT1585V-S, GT1585-S, GT1575V-S, GT1575-S, GT1575-V, GT1575-VN, GT1572-VN, GT1565-V, GT1562-VN, GT1555-V, GT1555-Q, GT1550-Q, and GT11

5 The following screen will be displayed. Press OK to commence download of project data.



The CF card access LED is lit during installation.

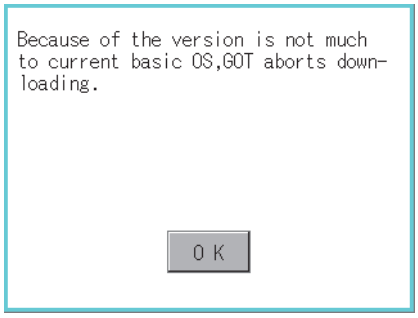
Do not do the following while the CF card access LED is flashing.

- Remove the CF card
- Turn the CF card access switch ON
- Power OFF the GOT
- Press the GOT reset button

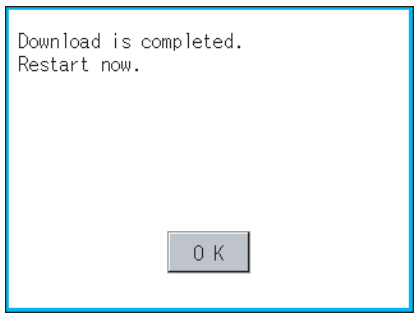
Point

If the OS version in the GOT is different from the GT Designer2 OS version in which the project data was created

If the OS version in the GOT is different from the GT Designer2 OS version in which the project data was created, the project data may not function properly on the OS in the GOT.
In this case, the following message will be displayed on the GOT.
Therefore, installation of the appropriate OS is recommended when the project data is downloaded to the memory card.
However, after the OS is deleted, the file types in the GOT and the OS number can change for the reinstall. (Unsupported OS will be deleted).



6 After download is complete, the following screen will be displayed. Press OK to commence reboot operations.
After rebooting, set the GOT CF card access switch to OFF. Confirm that the CF card access LED is off and remove the CF card.



8.9.4 Downloading Special Data [PC to memory card to GOT]

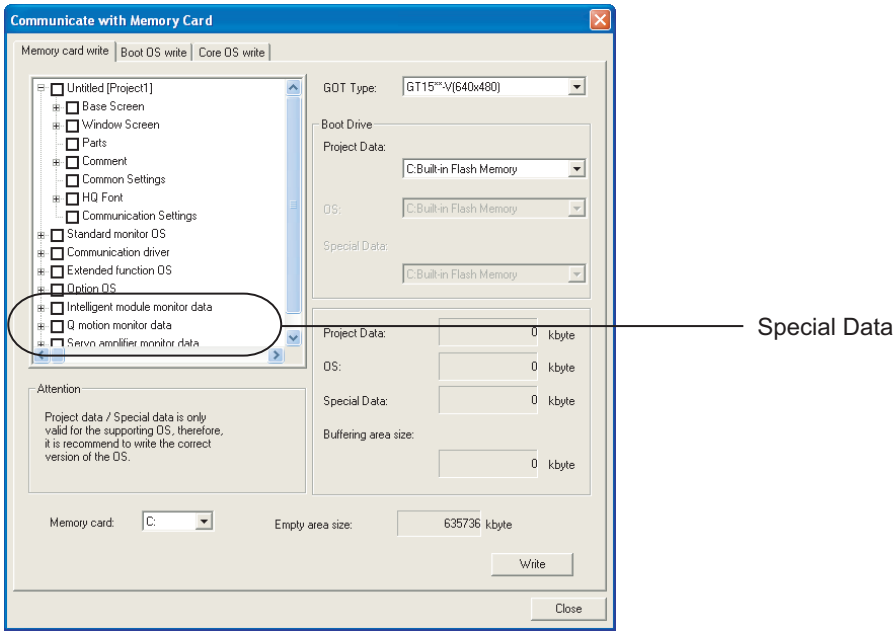
The special data download method is explained below.



1 How to write the memory card

1. Click the [Communication] → [To Memory Card...] menu.
2. As the setting dialog box appeares, click the Memory card write tab and refer to the following explanation when making settings.

   After making settings, click the Write button to commence saving to the memory card.



Memory card write | Boot OS write | Core OS write

Item		Contents
Write data tree		Check the item to be downloaded in the displayed structure tree of the project data and OS configration. Right-click the mouse to enable [Select All] or [Deselect].
GOT Type		Select the GOT type in which the OS will be installed.
Boot drive	Project data	Select the GOT drive in which the project data will be started. • For the GT16☐☐ and GT15☐☐, the drive can be selected. • For the GT11☐☐, the drive is fixed to C: Built-in flash memory.
	OS	The drive in which the OS will be started is displayed. (fixed to C: Built-in flash memory)
	Special data	The special data boot drive is displayed (fixed to C: Built-in flash memory).
Empty area size		Available space on the memory card (specified PC drive) is displayed.
Project data		The size of the project data to be transferred is displayed.
OS		The size of the OS to be transferred is displayed.
Special data		The amount of special data to be transferred is displayed.
Buffering area size		The total buffering area size to be used by items such as advanced alarms is displayed.

Memory card write | Boot OS write | Core OS write

Item	Contents
Memory card	Select the PC drive to be assigned to the memory drive.
Write	Click this button to write the data to the memory card.

Point

Installing the OptionOS

To use special data, both the special data and the OptionOS must be installed.
Install both the special data to be used and the OptionOS.

2 How to download special data to the GOT

There are two methods for downloading to the GOT.

- Install while the GOT is powered ON

Refer to this section for details.

- Install/download using the GOT utility (program/data control) functions.

Refer to the following manuals for details on the download/install method.

☞ GT11 User's Manual

☞ GT15 User's Manual

☞ GT16 User's Manual (Basic Utility)

Downloading while the GOT is Powered ON

The messages displayed during the download are based on the assumption that the Standard moitor OS is installed in the GOT. If a request message is displayed on the screen, follow the screen's request.

1. Power OFF the GOT and set the CF card access switch to OFF.
2. Insert the CF Card, to which special data is written into the A drive on GOT.
   (B drive cannot be used for the installation.)
   Refer to the following for details on writing special data to the CF card.

   ☞ in this section 1

   Refer to the following manuals for details on inserting the CF card.

   ☞ GT11 User's Manual

   ☞ GT15 User's Manual.

   ☞ GT16 User's Manual (Hardware)
3. Set the GOT CF card access switch to ON.

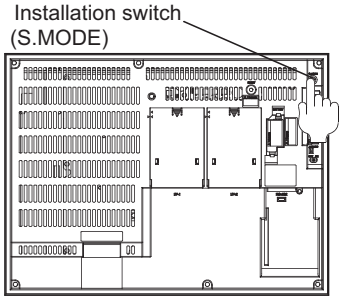
4 Power the GOT ON.

• For the GT16□□, and GT1595-X

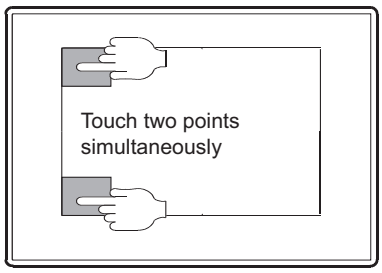
Power the GOT ON while pressing the GOT installation switch (S.MODE switch) on the rear of the GOT. (the 1-point press installation function)

• For the GT1585V-S, GT1585-S, GT1575V-S, GT1575-S, GT1575-V, GT1575-VN, GT1572-VN, GT1565-V, GT1562-VN, GT1555-V, GT1555-Q, GT1550-Q and GT11

Power the GOT ON while touching the lower and upper portions of the left side of the GOT screen. (the 2-point presses installation function)



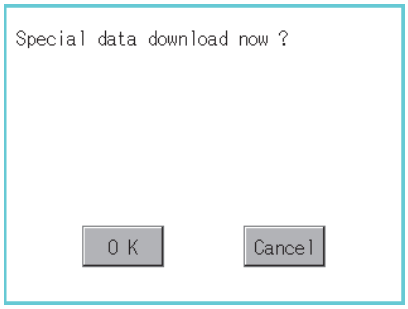
For the GT16□□, and GT1595-X



For the GT1585V-S, GT1585-S, GT1575V-S, GT1575-S, GT1575-V, GT1575-VN, GT1572-VN, GT1565-V, GT1562-VN, GT1555-V, GT1555-Q, GT1550-Q and GT11

5 The following screen will be displayed. Press OK to commence download of project data.

(If the special data is not written on the memory card, this download processing is not performed.)



The CF card access LED is lit during installation

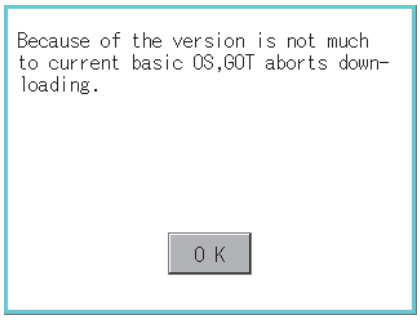
Do not do the following while the CF card access LED is lit.

• Remove the CF card
• Turn the CF card access switch ON
• Power OFF the GOT
• Press the GOT reset button

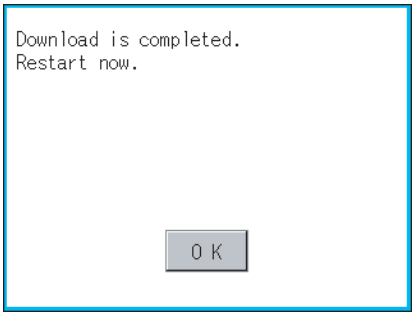
Point

If the OS version in the GOT is different from the GT Designer2 OS version in which the special data was created

If the OS version in the GOT is different from the GT Designer2 OS version in which the special data is created, the special data may not function properly on the OS in the GOT.
In this case, the following message will be displayed on the GOT.
Therefore, installation of the appropriate OS is recommended when the special data is downloaded to the memory card.
However, after the OS is deleted, the file types in the GOT and the OS number can change for the reinstall.
(Unsupported OS will be deleted).



6 After download is complete, the following screen will be displayed. Press OK to commence reboot operations.
(When the Standard moitor OS has been installed, touch the OK button to restart.)
After rebooting, set the GOT CF card access switch to OFF. Confirm that the CF card access LED is off and remove the CF card.



8.9.5 Opening project data [GOT to memory card and memory card to PC]

The following explains how to open the project data stored in the memory card.

1 Perform either of the following operations.

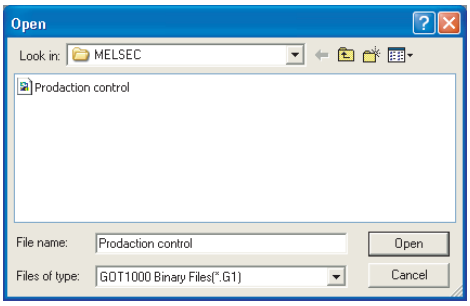
- Click (Open).
- Choose the [Project] → [Open...] menu.

2 The Open dialog box appears.
Refer to the following section for the Open dialog box operation method.

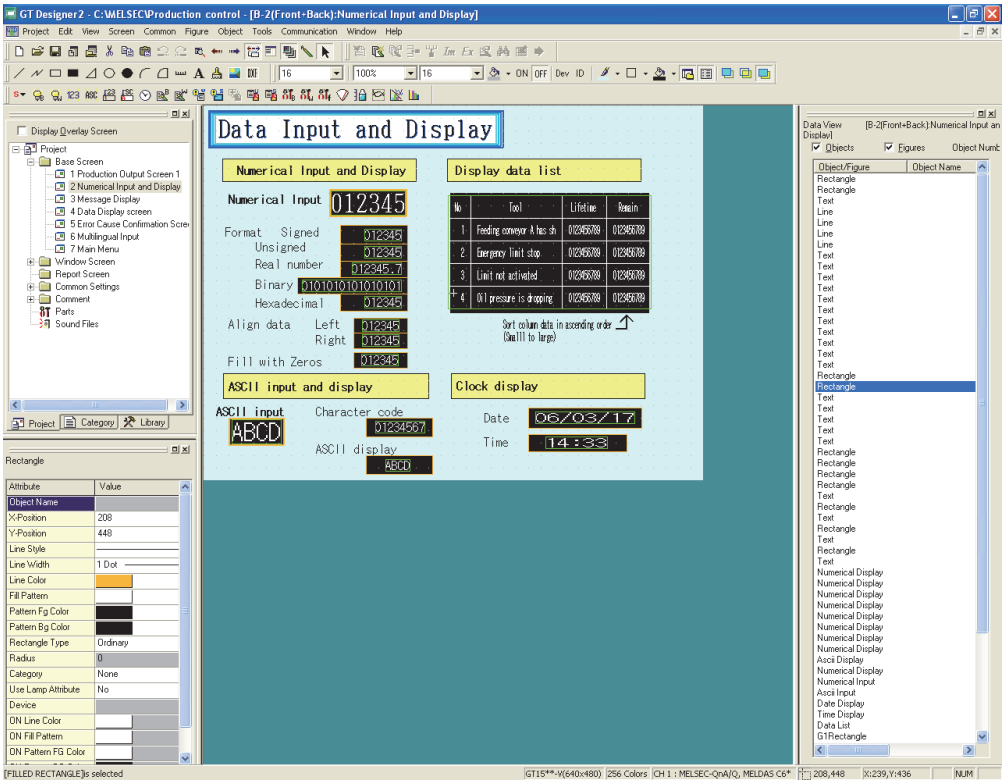
☞ Section 7.3.1 Opening the project data

3 Specify the folder that stores the project within the memory card.

4 Change the file type to "GOT1000 Binary Files (*.G1)".



5 Select the project file (*.G1) and click the Open button to open the specified project.



8.10 Transferring Data Using GT10-LDR

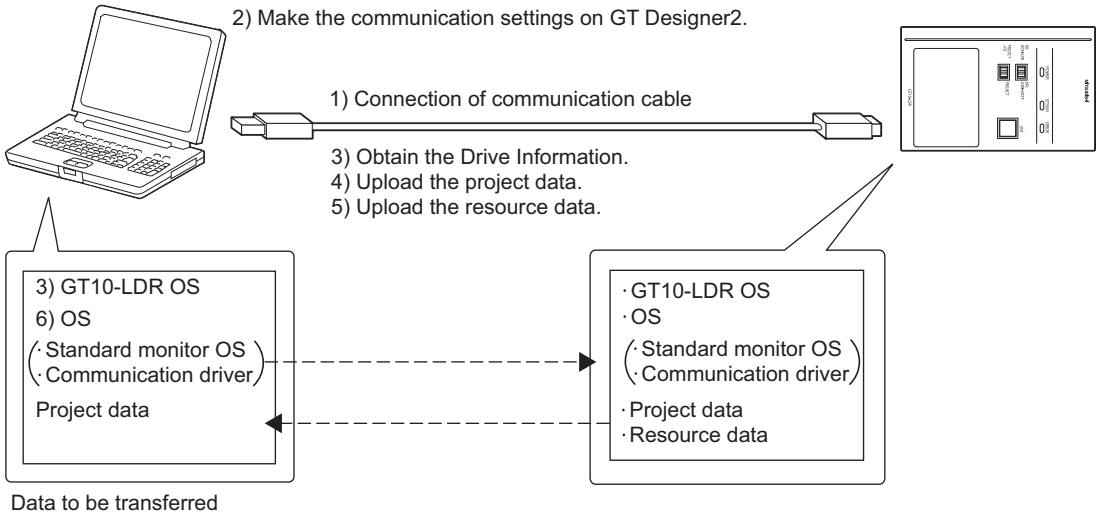
8.10.1 Preparation for data transfer

The GT105□ and GT104□ does not support GT10-LDR

GT10 Only

1 General procedure

Data is transferred with the following procedures.



1 Connection of communication cable

☞ Section 8.10.2 Connecting the PC and GT10-LDR via USB cable

2 Make the communication settings on GT Designer2

☞ Section 8.10.3 Setting communication

3 Install GT10-LDR OS

☞ Section 8.10.4 Installing GT10-LDR OS [GT10-LDR OS Install]

4 Obtain memory information

☞ Section 8.10.6 Obtaining memory information

5 Upload the project data [GT10-LDR → Computer(Project)]

☞ Section 8.10.7 Uploading the project data [GT10-LDR to Computer(Project)]

6 Upload the resource data [GT10-LDR → Computer(Resource)]

☞ Section 8.10.8 Uploading the resource data [GT10-LDR to Computer(Resource)]

7 Download the OS (Standard monitor OS and communication driver) and project data [Computer → GT10-LDR (OS/Project)]

☞ Section 8.10.5 Downloading the OS (Standard monitor OS and communication driver) and project data [Computer to GT10-LDR (OS/Project)]

2 Precautions

(1) Transfer cable
Make sure that the connector of the used USB, RS-232 or Ethernet cable is securely connected to that of the GOT and PC.

(2) Precaution for uploading
When the "upload destination" is specified as a project file (.GTE) of the GT Designer2, all data in the specified project file are deleted. (Even for a partial uploading (comment data, etc.), all data in the file are also deleted.)

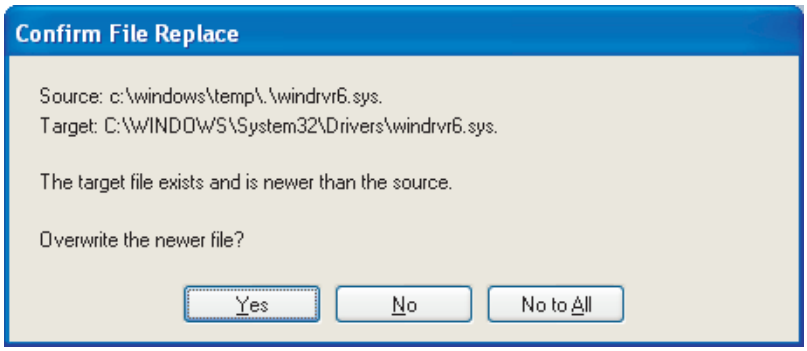
(3) Detailed explanation and category set on project or screen
Detailed explanation and category set on the project or the screen are not downloaded to the GT10-LDR.
Therefore, they are not saved if they are uploaded again from the GT10-LDR after downloading.

(4) Data within the GT10-LDR
When data is downloaded into GT10-LDR from GT Designer2, perform writing after all data within GT10-LDR are deleted.

☞ Section 8.10.5 Downloading the OS (Standard monitor OS and communication driver) and project data [Computer to GT10-LDR (OS/Project)]

(5) Precautions for installing the USB driver of the other company product
When installing the USB driver of the other company product, the "Confirm File Replace" message of the USB driver file (windrvr6.sys) may be displayed.

When a newer file already exists, click the [No] button to discontinue the overwriting processing. If the file is overwritten, USB communication between GT Desigenr2 and GT10-LDR may not be made correctly.



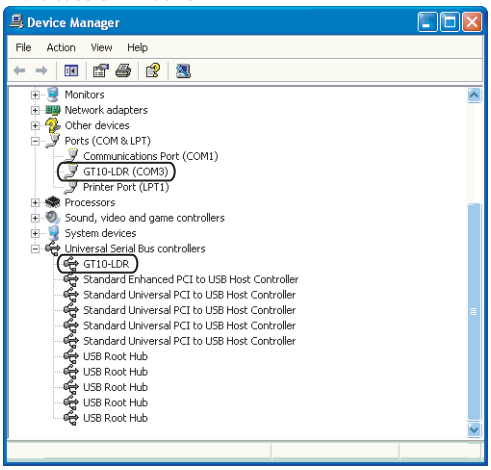
(6) Precautions for using the USB cable

• When performing data transfer between the PC and GT10-LDR connected via the USB cable, do not set the resume function, suspend function, power-saving function and standby mode of the PC.
For the setting details of the resume function, suspend function, power-saving function and standby mode, refer to the PC manual or Windows® Help.

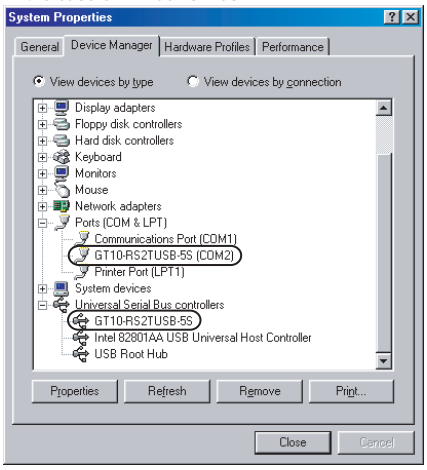
• If the USB cable is disconnected/reconnected during the data transfer, the GT10-LDR is reset or powered off/on, which may result in a unrecoverable communication error.
In this case, perform either of the following operations.

(a) The Personal Computer will check for a USB connection.
Please check that GT10-LDR is displayed in the Universal Serial Bus controllers and Port (COM/LPT).

In the case of Windows®XP



In the case of Windows®98



(b) After disconnecting the USB cable from GT10-LDR for more than 5 seconds, reconnect the cable and restart communication.

(7) When a communication error has occurred

A communication error, such as a time-out error, may occur due to the communication port settings on the PC. Check and change the settings in the following procedure.

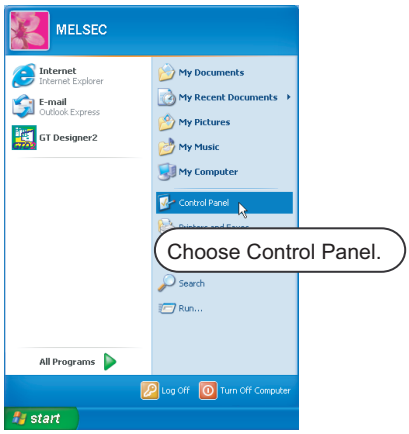
The following items may not be present depending on the PC used.

<Method 1>

The following screens and operations apply to Windows® XP.

1 Choose [Start] - [Control Panel].

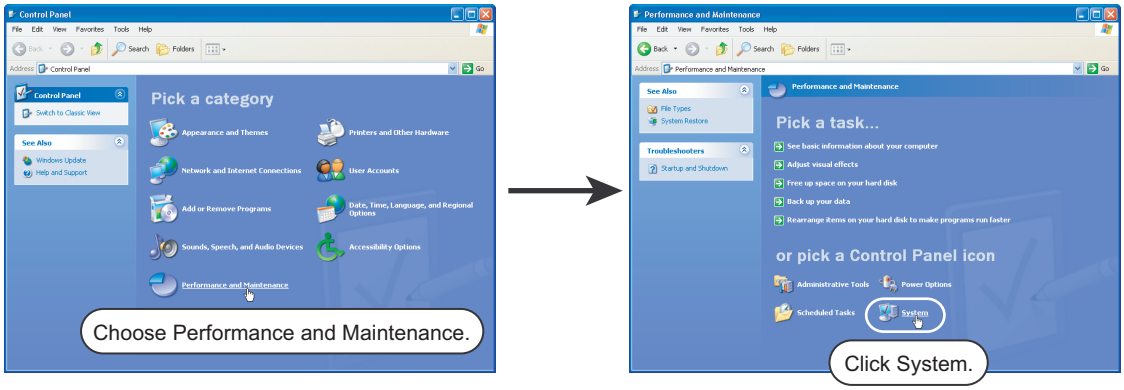
(For Windows® 2000, choose [Start] - [Settings] - [Control Panel].)



2 Choose "Performance and Maintenance" and click the "System" icon.

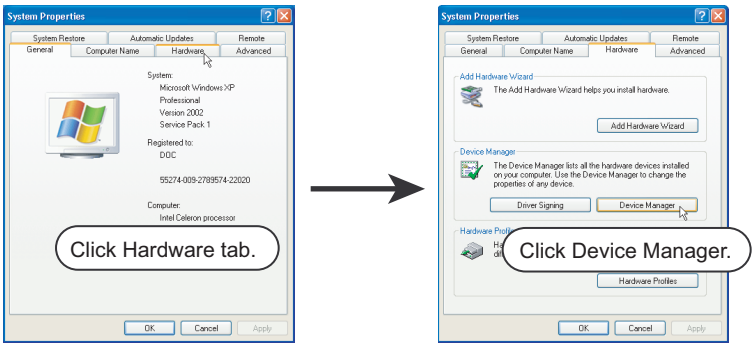
The System Properties dialog box will appear.

(For Windows® 2000, double-click [System].)

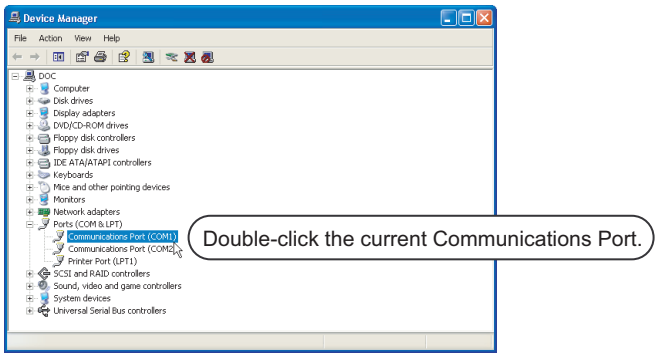


3 Click "Device Manager" on the Hardware tab.

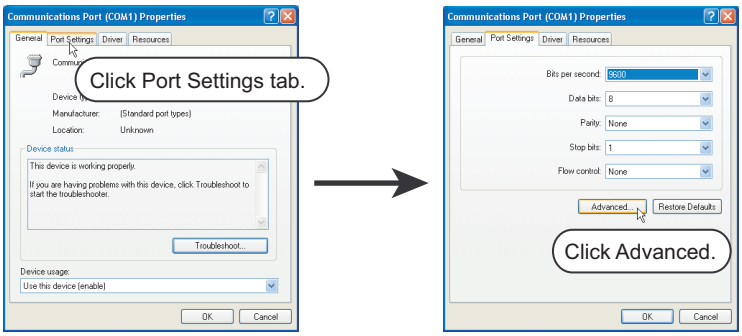
The Device Manager window will appear.



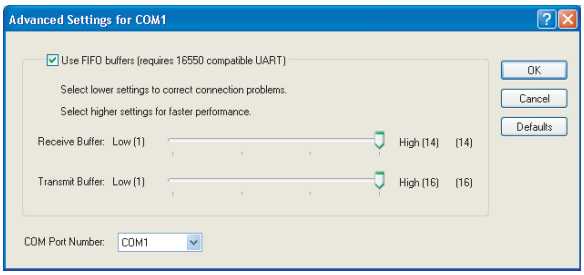
4 Choose "Ports" and double-click the "Communications Port" icon.
The Communications Port Properties dialog box will appear. (When COM1 is selected)



5 Click the Advanced button of the Port Settings tab to display the Advanced Setting for COM1 dialog box of the port.



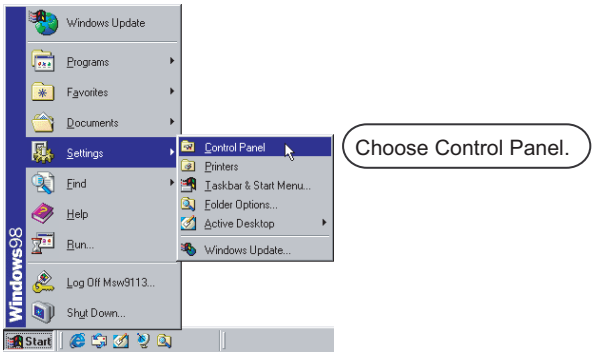
6 Uncheck [Use FIFO buffers].



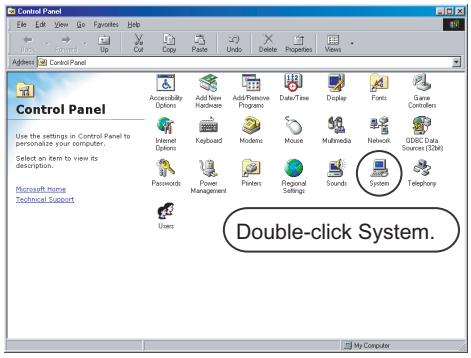
<Method 2>

The screens and operations apply to Windows® 98.

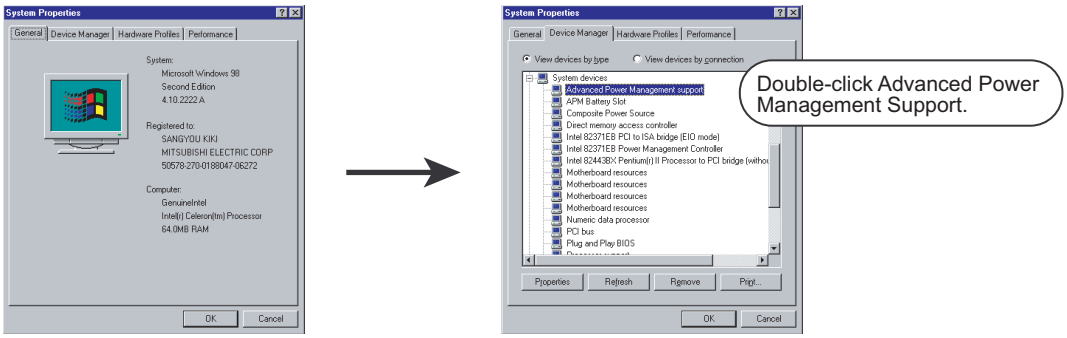
1 Choose [Start] - [Settings] - [Control Panel].



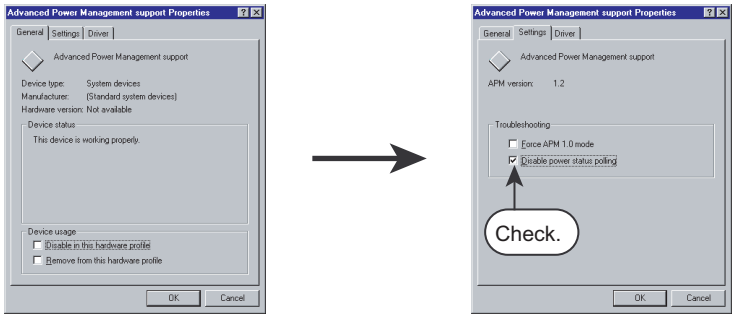
2 Double-click the "System" icon.
The System Properties dialog box will appear.



3 Click the Device Manager tab (when displayed by type), choose "System devices", and double-click the "Advanced Power Management Support" icon.
The Advanced Power Management Support Properties dialog box will appear.



4 Check "Disable power status polling" on the Setting tab.



8.10.2 Connecting the PC and GT10-LDR via USB cable

Make sure to follow the procedures to securely connect the USB cable to the PC and GT10-LDR.

Point

Before connecting GT10-LDR to the PC, be sure to install GT Designer2 Version2 2.76E or later into the OS according to the table below.

☞ Section 2.2 Installing the Software Programs

1 Connect the USB cable to the USB Type-A connector of the PC.

2 Connect the USB cable to the USB connector of the GT10-LDR.
When the PC and GT10-LDR are USB connected, install the USB driver into the PC. Refer to the following for the installation of the USB driver.

1 Installing the USB driver

To make the USB communication with the GOT in the following OS environment, Windows Vista® , Windows® XP, Windows® 2000 Professional, Windows® Millennium Edition (Me) or Windows® 98 Second Edition, the USB driver must be installed.

Note that the administrator authority is required to use Windows Vista® , Windows® XP or Windows® 2000 Professional.

Windows®	USB driver installation	Necessity of Administrator authority at USB driver installation	Operation during USB driver installation
Windows Vista®	○ (Required for each USB connector)	○ (Required)	Operation required (Refer to next page)
Windows® XP	○ (Required for each USB connector)	○ (Required)	
Windows® 2000 Professional	○ (Required for each USB connector)	○ (Required)	
Windows® Millennium Edition(Me)	○ (Required)	-	
WindowsNT® 4.0	N/A		
Windows® 98 Second Edition	○ (Required)	-	Operation required (Refer to next page)

Point

(1) When using GT Designer2 on Windows® 2000 Professional by the user authority other than the administrator authority
When the PC has multiple USB connectors, the USB driver must be installed to each USB connector.
As the USB driver cannot be installed by the user authority other than the administrator authority, it is recommended to install the USB driver to all USB connectors, that may be used by the administrator authority, at the first installation of the USB driver.

(2) When the USB driver cannot be installed
Check the following settings.

(a) When Windows® XP is used

If "Block - Never install unsigned driver software" has been selected in [Control Panel] - [System] - [Hardware] - [Driver Signing...], the USB driver may not be installed.
Choose "Ignore - Install the software anyway and don't ask for my approval" or "Warn - Prompt me each time to choose an action" in [Driver Signing...], and install the USB driver.

(b) When Windows® 2000 Professional is used

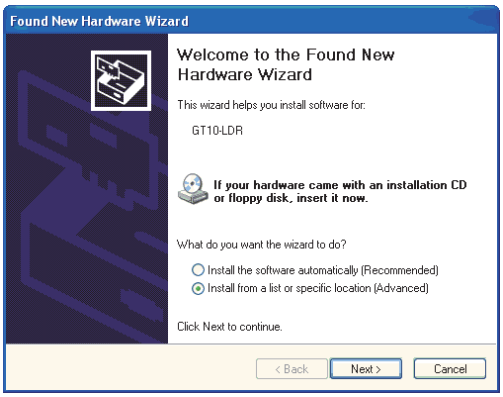
If "Block - Prevent installation of unsigned files" has been selected in [Control Panel] - [System] - [Hardware] - [Driver Signing...], the USB driver may not be installed.
Choose "Ignore - Install all files, regardless of file signature" or "Warn - Display a message before installing an unsigned file " in [Driver Signing...], and install the USB driver by the administrator authority.

USB driver installation when Windows® XP is in use

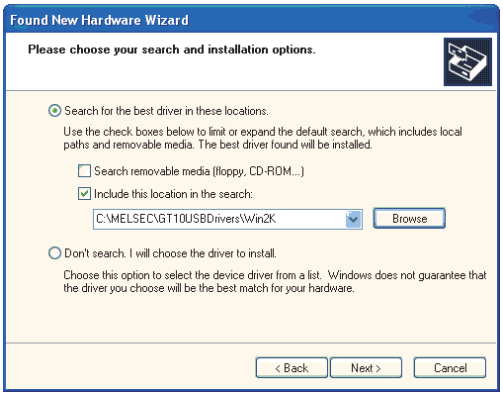
The following describes USB driver installation procedures.



1 When the PC and GT10-LDR are connected with the USB cable for the first time, the left screen appears.
Select "No,not this time", and click the Next> button.



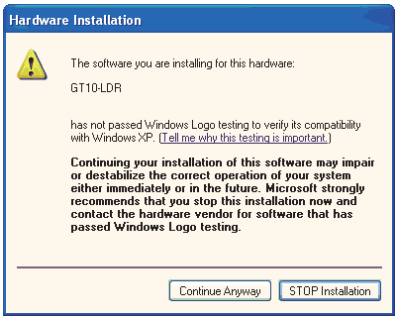
2 When the left screen appears, select "Install from a list of specific location [Advanced]" , and click the Next> button.



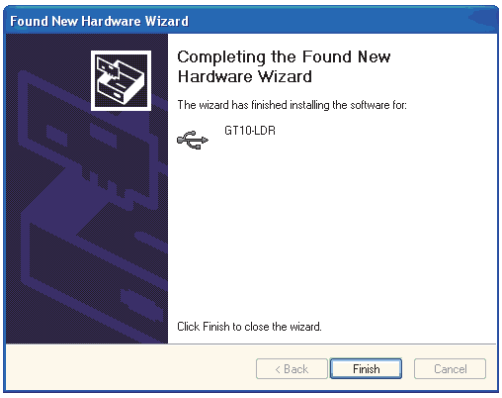
3 When the left screen appears, check-mark the "Include this location in the search" checkbox and click the [Browse] button. Then, select "GT Designer2 install path*1\GT10USBDrivers \Win2K*2", and click the Next> button.

*1 The place, which is specified by users is selected when GT Designer2 is installed.
For standard, "C:\Program Files\MELSOFT" is selected.

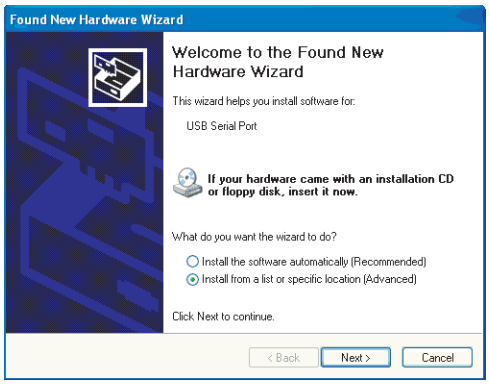
*2 · For Windows Vista®, Windows® XP, and Windows® 2000, select "GT Designer2 install path\GT10USBDrivers\Win2K"
· For Windows® ME and Windows® 98, select "GT Designer2 install path\GT10USBDrivers\Win98"



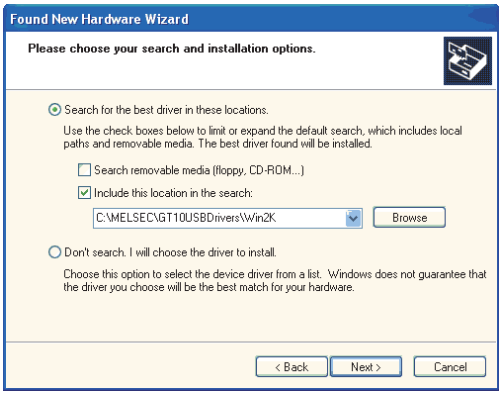
4 The left warning screen appears, but click the Continue Anyway button to continue the installation. (Mitsubishi Electric has concluded that proper operation is performed without any problems.)



5 When the left screen appears, this indicates that the installation is completed.
Click the Finish button.



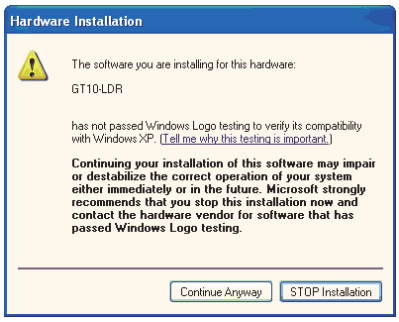
6 Next, the left screen appears. Select the "Install from a list or specific location [Advanced]" and click the Next> button.



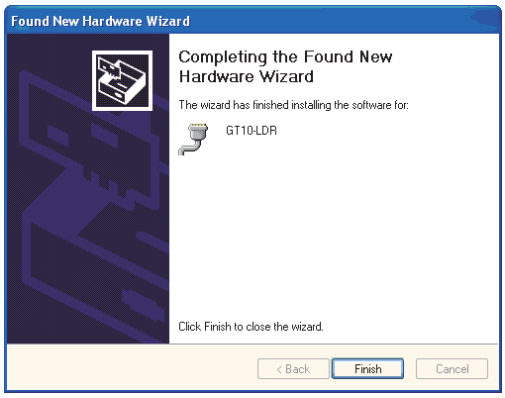
7 When the left screen appears, check-mark the "Include this location in the search" checkbox and click the [Browse] button. Then, select "GT Designer2 install path*1\GT10USBDrivers \Win2K*2", and click the Next> button.

*1 The place, which is specified by users is selected when GT Designer2 is installed. For standard, "C:\Program Files\MELSOFT" is selected.

*2 · For Windows Vista®, Windows® XP, and Windows® 2000, select "GT Designer2 install path\GT10USBDrivers\Win2K"
· For Windows® ME and Windows® 98, select "GT Designer2 install path\GT10USBDrivers\Win98"



8 The left warning screen appears, but click the Continue Anyway button to continue the installation. (Mitsubishi Electric has concluded that proper operation is performed without any problems.)

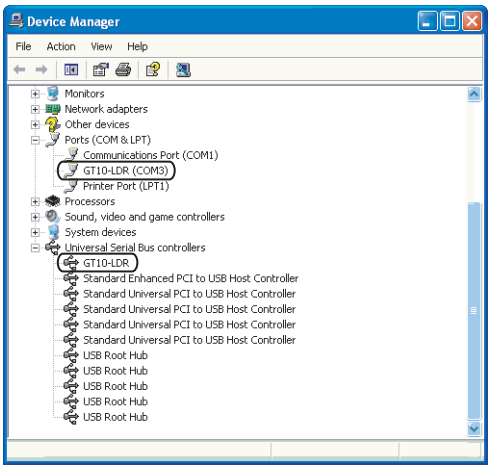


9 When the left screen appears, this indicates that the installation is completed.
Click the Finish button to end the installation.

Point

Confirmation of driver installation

The device manager of Windows® can confirm that the driver is installed properly.

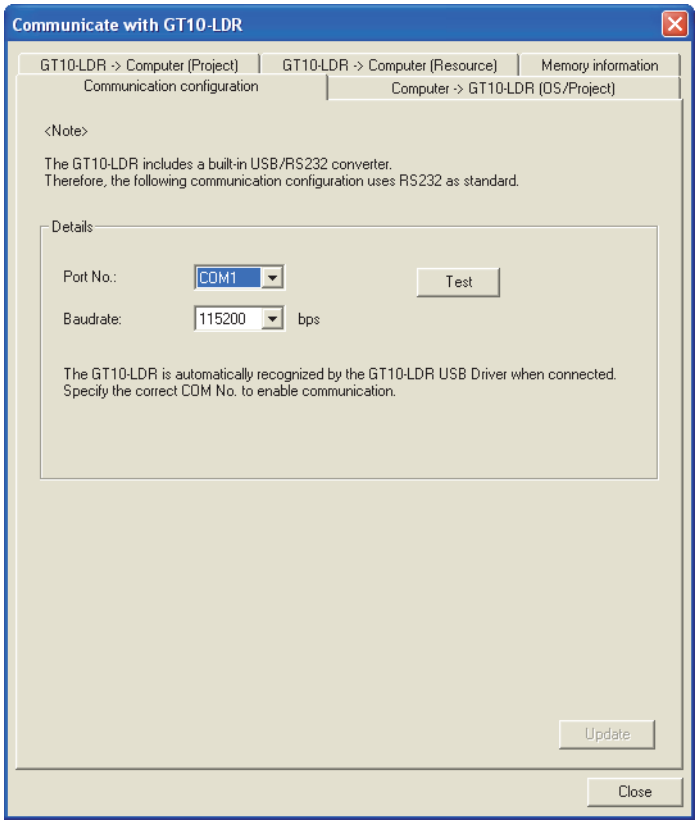


8.10.3 Setting communication

The communication setting of the PC, which transfers the data to GT10-LDR.
Communicate with GT10-LDR dialog box is used for the settings.

1 Communication setting procedure

1. Click the [Communication] → [To/From GT10-LDR...]/[Communication configuration].
2. The setting dialog box appears. Make the settings referring to the description below.

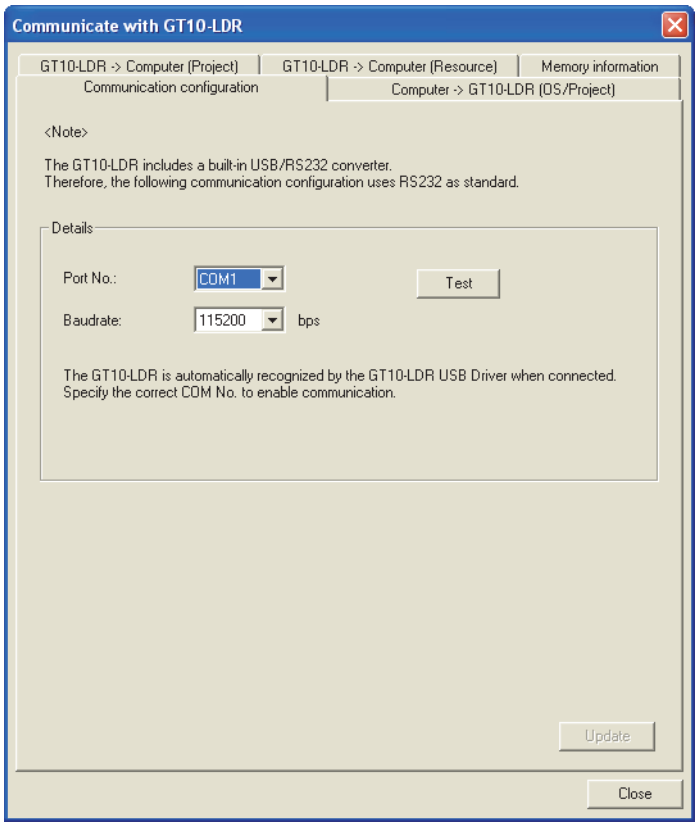


Item	Description
Port No.:	PC port connected to GT10-LDR is selected. (Select the COM number that USB driver for GT10-LDR recognizes.)
Baudrate:	Set the transmission speeds on the PC and GT10-LDR. The transmission speed setting must be consistent with that of the PC.
Test	Communication test with GT10-LDR is performed.
Update	Changes are reflected. Entered data is not reflected unless the Update button is clicked. (The button becomes valid only if changes are made in the entered data.)

2 Communication test procedure

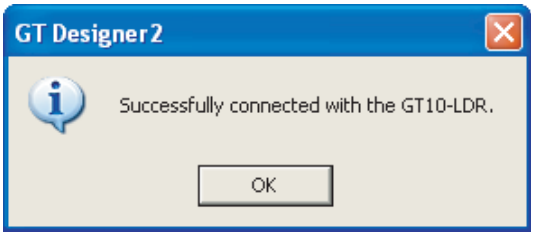
1 Click the [Communication] → [To/From GT10-LDR...]/[Communication configuration].

2 When setting dialog box appears, set the communication port and transmission speed, and click the Test button.

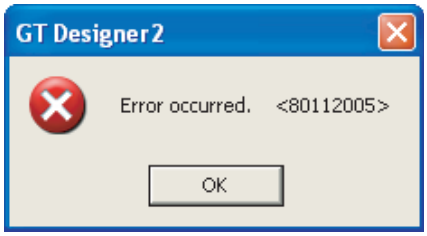


3 The test result is displayed.

(Communication succeeded)



(Communication failed)



8.10.4 Installing GT10-LDR OS [GT10-LDR OS Install]

Point

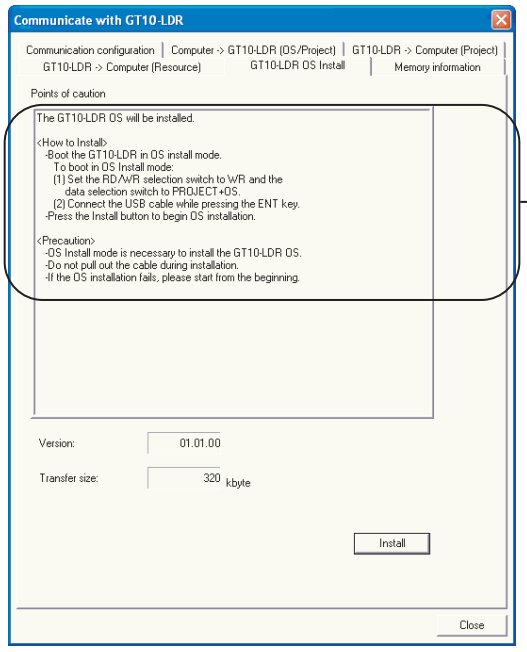
When installing GT10-LDR OS

Normally, the GT10-LDR OS does not need to be installed as it is factory-installed in the GT10-LDR. However, the GT10-LDR OS needs to be installed depending on the functions to be used.
For the functions and OS version, refer to the following.

☞ App5. List of Functions Added by GT Designer2 Version Upgrade (For GOT1000 Series)

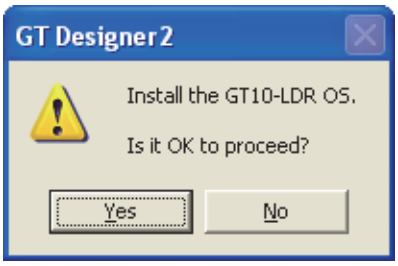
The following explains how to install GT10-LDR OS.

1. Click the [Communication] → [To/From GT10-LDR...].
2. When setting dialog box appears, click the [GT10-LDR OS Install] tab. Make settings referring to the description below. After the setting, click the Install button to start the installation.

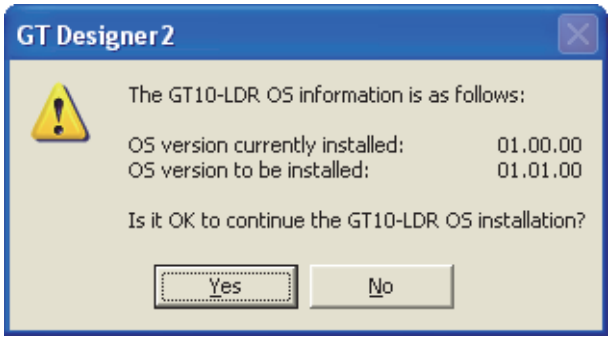


Item	Description
Points of caution	The precautions for GT10-LDR OS installation are provided. Read them when installing GT10-LDR OS.
Version:	Displays the version of the GT10-LDR OS to be transferred.
Tranfer size:	Displays the data size of the GT10-LDR OS to be transferred.
Install	Click this button to install the GT10-LDR OS to the GT10-LDR.

3 Clicking the [Install] button displays the message confirming the installation.
Click the [Yes] button to start the installation.
Click the [No] button to cancel the installation.



4 Clicking the [Yes] button checks the OS version in the GT10-LDR against the GT Designer2 version.
Click the [Yes] button to continue the installation.
Click the [No] button to cancel the installation.

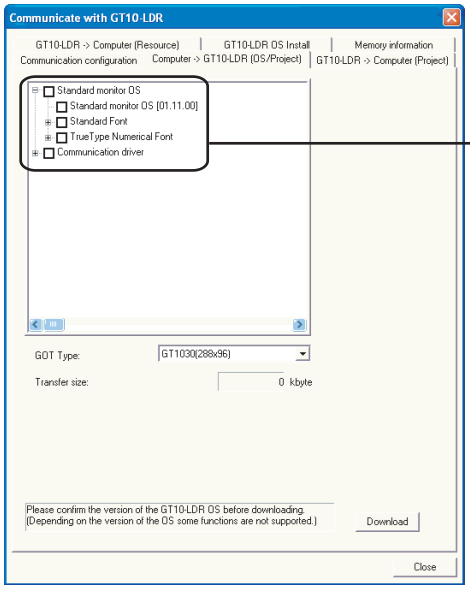


8.10.5 Downloading the OS (Standard monitor OS and communication driver) and project data [Computer to GT10-LDR (OS/Project)]

The following explains how to download the OS and project data.

1 Click the [Communication] → [To/From GT10-LDR...].

2 When setting dialog box appears, click the [Computer → GT10-LDR (OS/Project)] tab. Make settings referring to the description below.
After the setting, click the Download button to start the download.



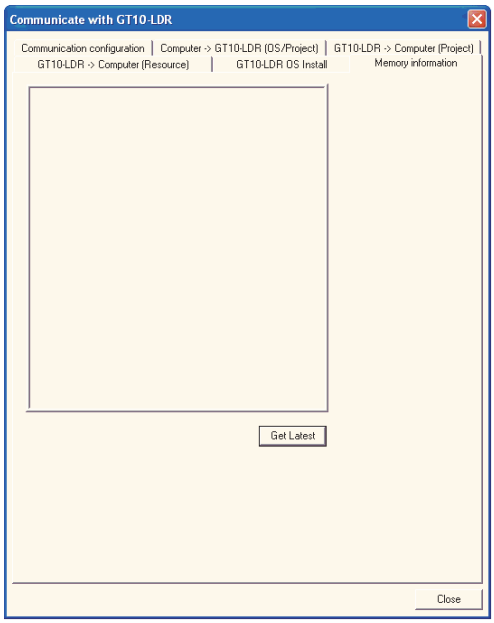
Item	Description
OS/Project configuration display tree	OS/Project configuration display tree appears. Items to be downloaded are checked.
GOT Type	GOT Type is selected. (Selectable when project other than GT10 is opened or when project has not been created)
Folder	Storage destination folder of project data appears. Folder name is set in "System Settings" of the "System Environment" window. Refer to the following section. ☞ Section 7.2.1 Creating a new project
Project ID	Project ID appears.
Tranfer size	The capacity of the OS and project data appears, which are selected in the OS/Project configuration display tree.
Precautions	The precautions for downloading the OS and project data are provided. Read them before downloading the OS and project data.
Download	The OS and project data are downloaded.

8.10.6 Obtaining memory information

The following explains how to confirm the memory information.

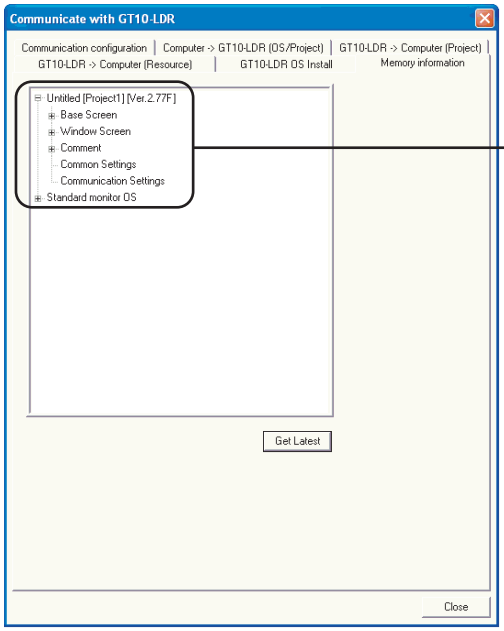
1. Click the [Communication] → [To/From GT10-LDR...].
   When setting dialog box appears, click the memory information tab.

2. Communicate with GOT dialog box (Memory information tab) appears.



3. Click the Get Latest button.

4. After the details are obtained, the list of all data stored in the GT10-LDR is displayed.



Memory information tree

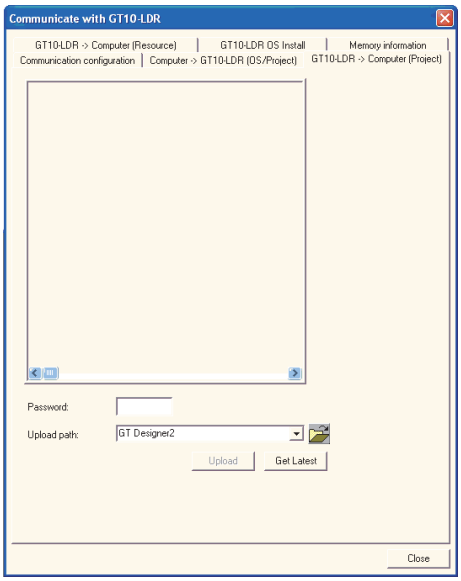
Item	Description
Memory information tree	Project data and OS information stored in the GT10-LDR are displayed in a tree structure.
Get Latest	Memory information is read out from GT10-LDR.

8.10.7 Uploading the project data [GT10-LDR to Computer(Project)]

The following explains how to upload the project data.

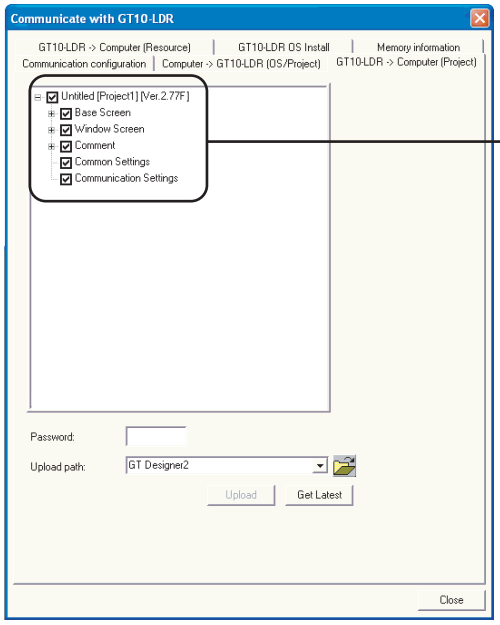
1 Click the [Communication] → [To/From GT10-LDR...].

2 When setting dialog box appears, click the [GT10-LDR → Computer (Project)] tab.



3 Click the Get Latest button. (This operation is not required when the Project configuration display tree of the upload target has already been displayed.)

4 When Project configuration display tree appears, make settings referring to the description below. After the setting, click the Upload button to start the upload.



Project configuration display tree

Item	Description
Project configuration display tree	Project data stored in the GT10-LDR is displayed in a tree structure.
Password*1	When a password has been set in the project data stored in the GT10-LDR, enter the password . The entered password is indicated with asterisks (*).
Upload path	The storage destination of the uploaded project data is set. (When the button is used, the storage destination can be easily specified.) (Up to five past specified destinations are held.) When data is uploaded with the default (GT Designer2) settings, the uploaded data will be imported to currently open GT Designer2.
Upload	The items checked*2 in the Project configuration tree is uploaded from GT10-LDR. Uploading is interrupted if the Upload destination has run out of space.
Get Latest	The details are read out from GT10-LDR.

*1 For the method of entering the uploading password, refer to the following manual.

GT Designer2 Version □ Screen Design Manual

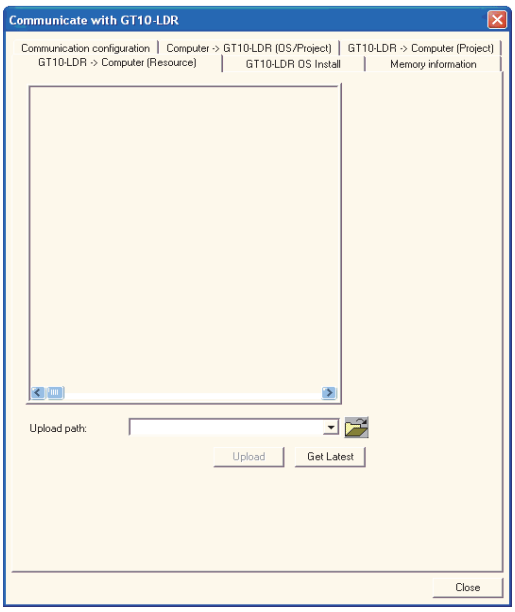
*2 Items cannot be checked individually. (Package acquisition)

8.10.8 Uploading the resource data [GT10-LDR to Computer(Resource)]

The following explains how to upload the resource data.

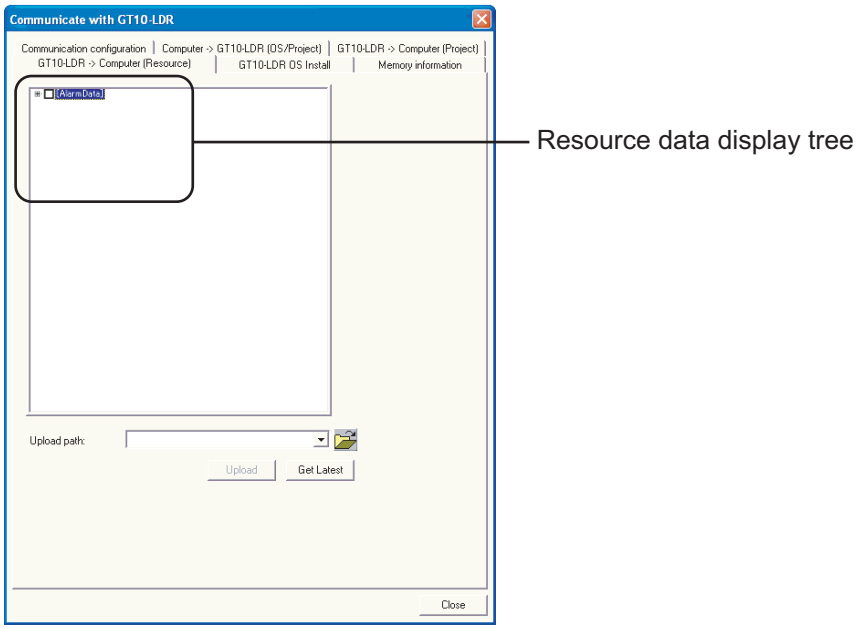
1 Click the [Communication] → [To/From GT10-LDR...].

2 When Communicate with GOT dialog box appears, click the [GT10-LDR → Computer(Resource)] tab.



3 Click the Get Latest button. (This operation is not required when the Project configuration display tree of the upload target has already been displayed.)

4 Resource data display tree appears. Make settings referring to the description below.
After the setting, click the Upload button to start the upload.



Item	Description
Resource data display tree	The list of resource data stored in GT10-LDR is displayed.
Upload path	The storage destination of the uploaded resource data is set. (When the button is used, the storage destination can be easily specified.) (Up to five past specified destinations are held.)
Upload	The items checked in the resource data display tree is uploaded from GT10-LDR. Uploading is interrupted if the Upload destination has run out of space.
Get Latest	The details are read out from GT10-LDR.

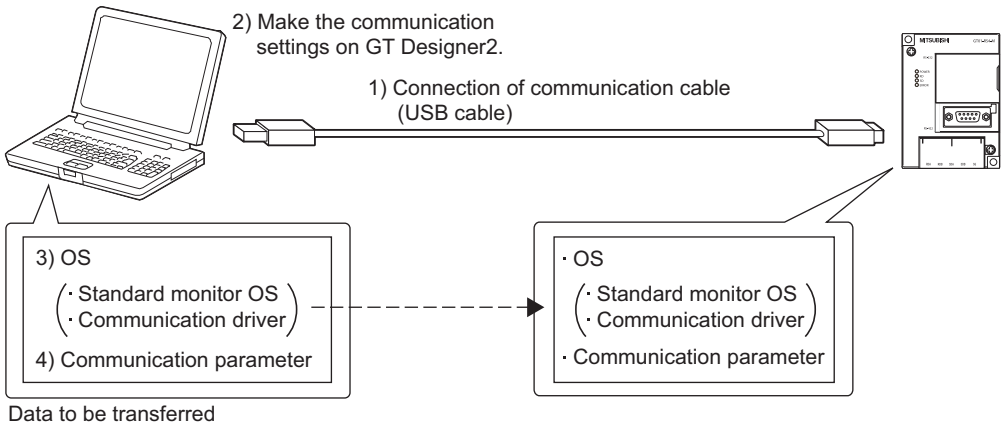
8.11 Transferring Data Using GT01-RS4-M

8.11.1 Preparation for data transfer

1 General procedure



Data is transferred according to the following procedures.



1 Connection of communication cable to GT01-RS4-M

☞ Section 8.11.2 Connecting the PC and GT01-RS4-M via USB cable

2 Make the communication settings on GT Designer2

☞ Section 8.11.3 Setting communication

3 Install the OS to GT01-RS4-M

☞ Section 8.11.4 Installing the OS to GT01-RS4-M [Computer to GT01-RS4-M(OS)]

4 Download the communication parameter to GT01-RS4-M

☞ Section 8.11.5 Downloading the communication parameter to GT01-RS4-M [Computer to GT01-RS4-M(Comm.Param.)]

5 Install the communication driver (multi-drop (slave)) to the GOT

☞ Section 8.2.6 Installing the OS [PC to GOT]

Installation from PC via memory card

☞ Section 8.9.3 Downloading/installing project data/OS [PC to memory card and memory card to GOT]

6 Download the communication detail settings to the GOT

☞ Section 8.3 Downloading Project Data [PC to GOT]

Installation from PC via memory card

☞ Section 8.9.3 Downloading/installing project data/OS [PC to memory card and memory card to GOT]

Refer to the following manual for details of the communication detail settings

☞ GT Designer2 Version□ Screen Design Manual

8.11.2 Connecting the PC and GT01-RS4-M via USB cable

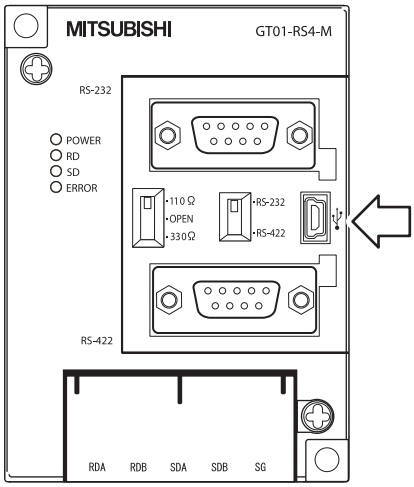
Please to follow the procedures to securely connect the USB cable to the GT01-RS4-M and GOT.

Point

Before connecting GT01-RS4-M to the PC, be sure to install GT Designer2 Version2 2.91V or later.

1. Connect the USB cable to the USB Type-A connector of the PC.
2. Connect the USB cable to the USB connector of the GT01-RS4-M.
   When the PC and GT01-RS4-M are USB connected, install the USB driver into the PC.
   Refer to the following for the installation of the USB driver.

Section 8.2.1 Connecting the PC and GOT with the USB cable

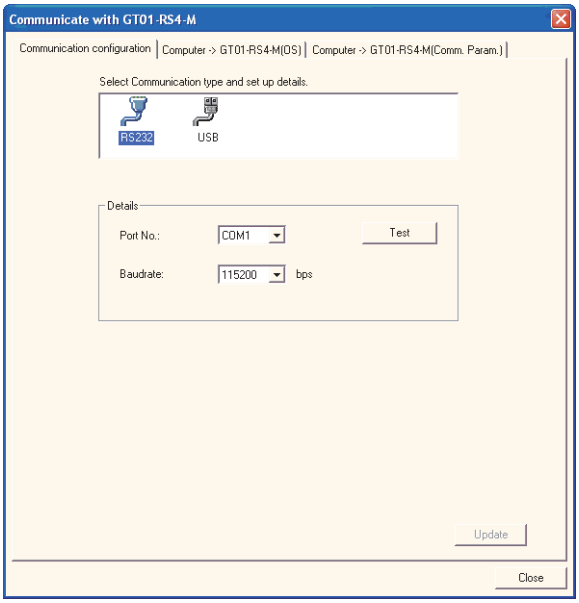


8.11.3 Setting communication

Communication settings of the PC, which transfers the data to GT01-RS4-M.
To communicate with GT01-RS4-M a dialog box is used for the settings.

1 Communication setting procedure

1. Click the [Communication] → [To/From GT01-RS4-M].
2. The setting dialog box appears. Make the settings according to the description below.

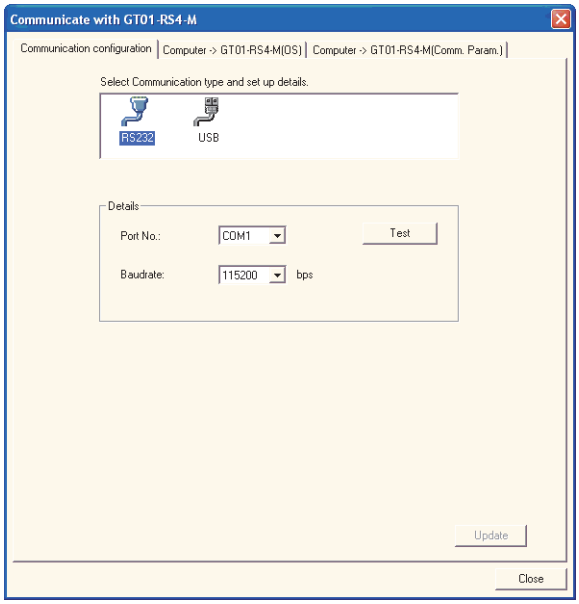


Item	Description
Communication type	Select USB as a communication type to connect the PC and GT01-RS4-M.
Port No:	PC port connected to GT01-RS4-M is selected. (Valid only if "RS-232" is selected as a communication type.)
Baudrate:	Set the transmission speeds on the PC and GT01-RS4-M. The transmission speed setting must be consistent with that of the PC. (Valid only if "RS-232" is selected as a communication type.)
Update	Changes are reflected. Entered data is not reflected unless the Update button is clicked. (The button becomes valid only if changes are made in the entered data.)
Test	When USB is selected: Communication test with GT01-RS4-M is performed.

2 Communication test procedure (USB)

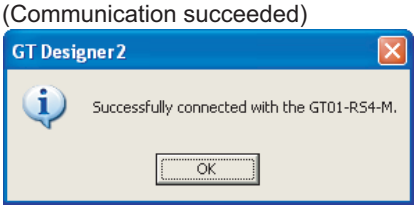
1 Click the [Communication] → [To/From GT01-RS4-M].

2 When setting dialog box appears, select "USB" as a communication type and click the test tab.

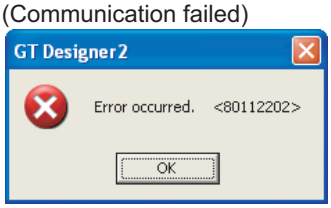


3 The test result is displayed.

(Communication succeeded)



(Communication failed)



8.11.4 Installing the OS to GT01-RS4-M [Computer to GT01-RS4-M(OS)]

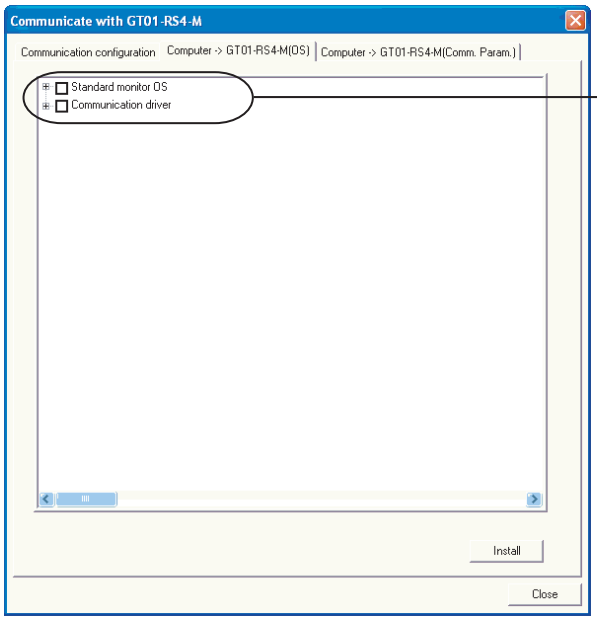
Point

When installing the Standard monitor OS and communication driver

The Standard monitor OS and communication driver (MELSEC-FX) are factory-installed in the GT01-RS4-M.
Typically, the Standard monitor OS does not need to be installed, however install the driver for the connected PLC as a communication driver.

How to install the OS (Standard monitor OS and communication driver)

1. Click the [Communication] → [To/From GT01-RS4-M].
2. When Communicate with GT01-RS4-M dialog box appears, click the [Computer → GT01-RS4-M(OS)] tab. Make the settings referring to the description below.

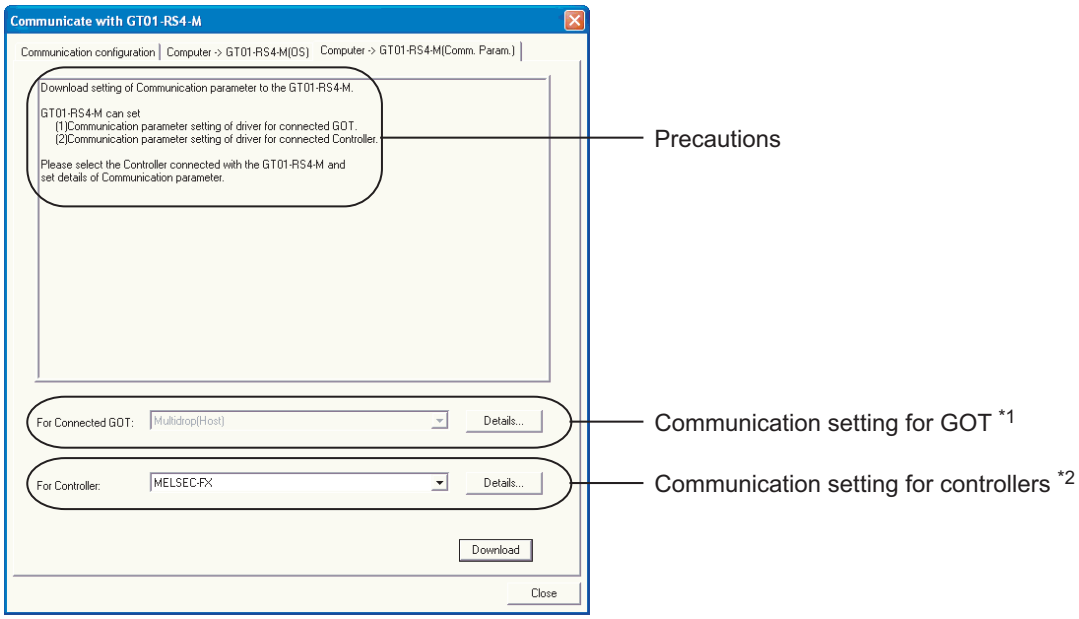


Item	Description
Function tree	Standard monitor OS and Communication drivers each have a tree display, so check the items that need to be installed.
Install	The OS is installed.

8.11.5 Downloading the communication parameter to GT01-RS4-M [Computer to GT01-RS4-M(Comm.Param.)]

How to download the communication parameter

1. Click the [Communication] → [To/From GT01-RS4-M].
2. When Communicate with GT01-RS4-M dialog box appears, click the [Computer → GT01-RS4-M(Comm.Param.)] tab. Make settings according to the description below.



Item	Description
Precautions	The precautions for downloading the communication parameters are provided. Read them when downloading the communication parameters.
For connected GOT:	Fixed to Multidrop(HOST)
Details*1	Set the communication parameters between GT01-RS4-M and GOT. Refer to the GOT1000 Series Connection Manual for details.
For controller	The controller is selected. Refer to the GOT1000 Series Connection Manual for details.
Details*2	Set the communication parameters between GT01-RS4-M and controller. Refer to the GOT1000 Series Connection Manual for details.
Download	The communication parameters are downloaded.

8.12 Error Messages Displayed at Data Transfer

8.12.1 Error messages displayed at data transfer

1 Communication settings

Error No.	Error message	Error definition and cause	Corrective action
-	Invalid communication port is using.	The communication port has not been set.	In "Port No." of "Communication configuration", set the port to which the communication cable for the GOT is connected.

2 Drive information

Error No.	Error message	Error definition and cause	Corrective action
-	The deleting items is not selected.	The deleting items is not selected.	Select the item to be deleted and re-execute the deletion.

3 Boot OS Install → GOT

Error No.	Error message	Error definition and cause	Corrective action
00000132	It is impossible to install because the installing Boot Os version is older than the Boot OS version of GOT. The installing Boot OS version: AA The Boot OS version of GOT: BB	The older Boot OS than the one in the GOT cannot be installed.	Update GT Designer2.
00000133	GOT Type error occurred.	The set "GOT Type" is different from the actual GOT.	Execute the installation again, after selecting the "GOT Type" that is the same as the actual GOT.

4 OS Install → GOT

Error No.	Error message	Error definition and cause	Corrective action
00000133	GOT Type error occurred.	The set "GOT Type" is different from the actual GOT.	Re-execute after selecting the "GOT Type" that is the same as the actual GOT.
801f4102	The “Standard monitor OS” cannot be installed on this GOT H/W version. Please use the correct version of GT Designer2 for this H/W.	The Standard monitor OS of the currently used software cannot be installed, as it is too old and incompatible with the GOT H/W version.	Update GT Designer2.
801f4107	GOT Memory dose not have enough space	The OS cannot be installed as the installation destination drive does not have enough free space.	Confirm the GOT information by clicking "Get latest" in "Drive Information", delete the functions and data written to the GOT, and then install the OS again.
-	OS is not selected for Installing.	Item to be installed is not selected.	Selecting the target item and execute the installation again.

5 Project Download → GOT

Error No.	Error message	Error definition and cause	Corrective action
00000133	GOT type error occurred.	The set “GOT type” is different from the actual GOT .	Execute the download again, after selecting the "GOT Type" that is the same as the GOT.
801f4107	GOT Memory dose not have enough space.	The project cannot be downloaded as the download destination drive does not have enough free space.	Confirm the items written to the GOT by clicking "Get latest" in "Drive Information". Delete the items written to the GOT, and download the project again. When "C: Built-in Flash Memory" is specified as the download destination on the GT16 □□ or GT15 □□ and the CF card is mounted to the GOT, the project data download destination can be changed to "A: Standard CF Card".
-	Built-in and Option memory do not have enough space. The Project will not operate correctly without sufficient buffering area. Please check Project size and Buffering area size. Is it OK to continue the download?	Though the download destination drive has enough space, the built-in memory and add-on memory of the GOT do not have enough space. Therefore, the downloaded project may not operate correctly.	Adjust the project data size or buffering size (Advanced Alarm). Alternatively, change the add-on memory board for the one with larger capacity.

6 Project Upload → PC

Error No.	Error message	Error definition and cause	Corrective action
801f4101	Password Error occurred.	The entered password is not correct.	Execute the upload after entering a correct password.
-	The specified drive, folder and file names are incorrect Please check the following : • The specified drive does not exist. • A reserved word is used for the folder and file names. • Incorrect characters are used for the folder and file names.	The specified drive, folder or file name is incorrect.	Check if the specified drive, folder name or file name is applicable to the following. • Check if the specified drive exists. • Check if reserved words are used for the folder or file name. • Check if incorrect characters are used in the folder or file name.

7 Verify

Error No.	Error message	Error definition and cause	Corrective action
00000133	GOT Type occurred	The GOT type of the target project data is inconsistent with the type of the GOT.	Check the GOT type of the project data to be verified.
00000137	The version of the Standard Monitor in the GOT dose not support the Compare functionality.	The OS installed in the GOT does not support the verification function.	Save the project data in the GOT and re-install the Standard Monitor OS from ver. 2.09K or later version of GT Designer 2.
00000138	The version of GT Designer2 are different The version of project in GOT : Ver. *. *** The version of GT Designer2 : Ver. *. ***	The version of project data saved in the GOT differs from that of GT Designer 2 you use.	Use GT Designer 2 of the same version as that used to create the project data, to verify.
-	The specified drive, folder and file names are incorrect Please check the following : • The specified drive does not exist. • A reserved word is used for the folder and file names. • Incorrect characters are used for the folder and file names.	The specified drive, folder name or file name is incorrect.	Check if the specified drive, folder name or file name is applicable to the following. • Check if the specified drive exists. • Check if reserved words are used for the folder or file name. • Check if incorrect characters are used in the folder or file name.
801f4101	Password Error occurred.	The entered password is not correct.	Execute the upload after entering a correct password.

8 Communication

Refer to Section 8.2 2 (7) to (11) for the cautions for use of the USB cable and the precautions on the PC settings.

Error No.	Error message	Error definition and cause	Corrective action
00000134	Standard monitor OS is not installed. Please install the Standard monitor OS.	As only the Boot OS is installed in the GOT, communication cannot be made for the purpose other than the OS installation.	Install the Standard monitor OS by performing OS installation.
00000135	Confirm the followings. (1) GOT is processing. Wait up to 60 secinds. (2) GOT Type disacoord. Check the connected GOT Type.	Communication fails due to one of the following causes. (1) Communication fails because GOT is busy. (2) There is inconsistency in the GOT type.	(1) It takes 60 seconds until the GOT completes the process. Wait for 60 seconds before starting communication again. If communication with the GOT fails even after 60 seconds, check the state of the GOT. (2) Check if the type of the connected GOT is correct.
80110003	Please check Port NO.	The communication port settings are incorrect.	In "Port No." of "Communication configuration", set the port to which the communication cable for the GOT is connected.
80110004	Time out error	The cable is disconnected or broken.	Check if the cable is connected correctly.
		The GOT does not respond.	• Check if the GOT is powered on. • Using the GOT utility perform the I/O check. • When the USB cable is used, disconnect it from the GOT for more than 5 seconds. • When the USB cable is used, power the GOT off and then on again.
		A communication error has occurred as the communication with the GOT is instable.	For RS-232 communication, change "Baudrate" of "Communication configuration" to a value lower than the currently set one.

Error No.	Error message	Error definition and cause	Corrective action
80110006	The GOT is being accessed by another application.	Communication is disabled as the GOT is communicating with another application.	Check whether the GOT is communicating with another application. When GX Developer is used, check whether the GX Developer monitor screen is open. If open, close the monitor screen or stop monitoring.
80110007	Quality of communication signal error. Please check communication settings.	A communication error has occurred as the communication with the GOT is instable.	For RS-232 communication, change "Baudrate" of "Communication configuration" to a value lower than the currently set one.
80110008	Please check Baud rate.	The baudrate settings are incorrect.	Set "Baudrate" of "Communication configuration" again.
80110009	Send error.	Data cannot be sent to the GOT.	• When the USB cable is used, disconnect it from the GOT for more than 5 seconds. • Cycle the GOT power.
8011000a	Communication error. Consider the following cause. • The comunucation port settings are incorret. • The cable is disconnected or broken. • The GOT is Powered OFF.	Communication is disabled as the GOT is processing.	Refer to The communication error that may occur when the PLC is not connected to the GOT[*1].
80112202 80112005	Communication error. Consider the following cause. • The comunucation port settings are incorret. • The cable is disconnected or broken. • The GOT is Powered OFF.	The cable is disconnected or broken.	• Check the communication port. • Check if the cable is connected correctly.
		The GOT does not respond.	• Check if the GOT is powered on. • Using the GOT utility perform the I/O check.
80112208	Communication error. Consider the following cause. • The comunucation port settings are incorret. • The cable is disconnected or broken. • The GOT is Powered OFF.	The USB cable is disconnected or broken while communicating.	• Check if the USB cable is connected correctly.
		The GOT does not respond.	• Check if the GOT is powered on.
-	The following Drive is not inserted. X:XXXXXX Please check the installation of Drive.	The specified drive is inaccessible.	Check whether the specified drive has been set.
80112401	An error occurred, the GOT and PC cannot communicate via Ethernet. Following causes can be considered. (1) The Standard Monitor OS is not installed. (2) The version of the Standard Monitor OS dose not support Ethernet functionality. (3) The GOT is Powered OFF. (4) Communication Settings are incorrect. (5) GOT IP Address is incorrect. (6) Both GOT and PC are not properly connected together via Ethernet cabling. * The "OS" cannot be installed by Ethernet. Please install the "OS" using Standard CF Card, USB or RS232.	Communication between the GOT and Ethernet fails due to one of the following causes. (1) The Standard Monitor OS is not installed in the GOT. (2) The Standard Monitor OS of the GOT does not support the Ethernet download function. (3) The GOT is not turned on. (4) Communication Settings include a fault. (5) The IP address of the GOT is incorrect. (6) Wiring is incorrect.	Check the following. (1) Check if the Standard Monitor OS is installed in the GOT. (2) Check if the Standard Monitor OS of the GOT supports the Ethernet download function. (3) Check if the GOT is turned on. (4) Check if the Communication Settings are correct. (5) Check if the IP address of the GOT is correct. (6) Check if wiring is correct.
80112402	An error has occurred, the GOT and PC cannot communicate via Ethernet. Following causes can be considered. (1) GOT is communicating with another PC. (2) GOT IP Address is incorrect. GOT Port No. is incorrect.	Communication fails because the GOT is communicating with another PC or the specified IP address of the GOT indicates a network device other than the GOT. Communication fails because the GOT port number is incorrect.	Check if the GOT communicates with another PC or if the specified IP address of the GOT indicates a network device other than the GOT. Enter the correct downloading port number where the GOT is connected.
80112405	Please check if both GOT and PC are properly connected together via Ethernet.	Communication fails because the GOT is not connected to the network correctly.	Check if the GOT is connected with the network correctly.

Error No.	Error message	Error definition and cause	Corrective action
80112406	An error has occurred, the GOT and PC cannot communicate via Ethernet. Following causes can be considered. (1) GOT is communicating by USB or RS232. (2) The GOT is Powered OFF.	Communication fails because the GOT communicates via USB or RS232 or the GOT is turned off.	Check if the GOT communicates via USB or RS232 or if the GOT is turned off.

- If these corrective actions can not cancel the errors, please consult the nearest sales office or FA Center, and then explain a detailed description of the problem.

*1 The communication error that may occur when the PLC is not connected to the GOT

If the GOT and PLC are not yet connected while the settings of the connection with the PLC have been made on the GOT, the GOT performs retry communication processing as it cannot communicate with the PLC. If any of the following operations is performed from GT Designer2 in this status, a communication error may occur (error No.: 8011000a). In this case, take any of the following corrective actions.

The operations that may cause a communication error

- OS installation
- Project data downloading
- OS, project data or resource data deletion
- Drive formatting

Corrective action for communication error
Refer to the following manual for the utility operation.

☞ GT10 User's Manual
☞ GT11 User's Manual
☞ GT15 User's Manual
☞ GT16 User's Manual (Basic Utility)

Refer to the following section for installation by pressing two points on the GOT.

☞ Section 8.9.3 Downloading/installing project data/OS [PC to memory card and memory card to GOT]

(1) Using the utility, set the interface to be connected with the PLC as described below, and perform the operation again from GT Designer2. When making a communication between the GOT and PLC after connecting with the PLC, return the changed Communication Settings to "1".

(a) When connecting the GOT and PLC via the RS-232 interface
Change the "CH No." of the standard interface RS-232 in [Communication Settings] of the utility from "1" to "0" or from "1" to "9".



(b) When connecting the GOT and PLC via bus type connection (GT16, GT15, and GT11 Bus)
Change the "CH No." of the extension interface in [Communication Settings] of the utility from "1" to "0".



(c) When connecting the GOT and PLC via the RS-422 interface (GT16, GT11)
Change the "CH No." of the standard interface RS-422 in [Communication Settings] of the utility from "1" to "0".

(2) Perform the installation by pressing two points on the GOT or using the utility function.
OS deletion cannot be made by the utility function.

(a) OS installation, project data downloading
Install/Download the OS or project data by pressing two points on the GOT, or from [Program/data control] of the utility.

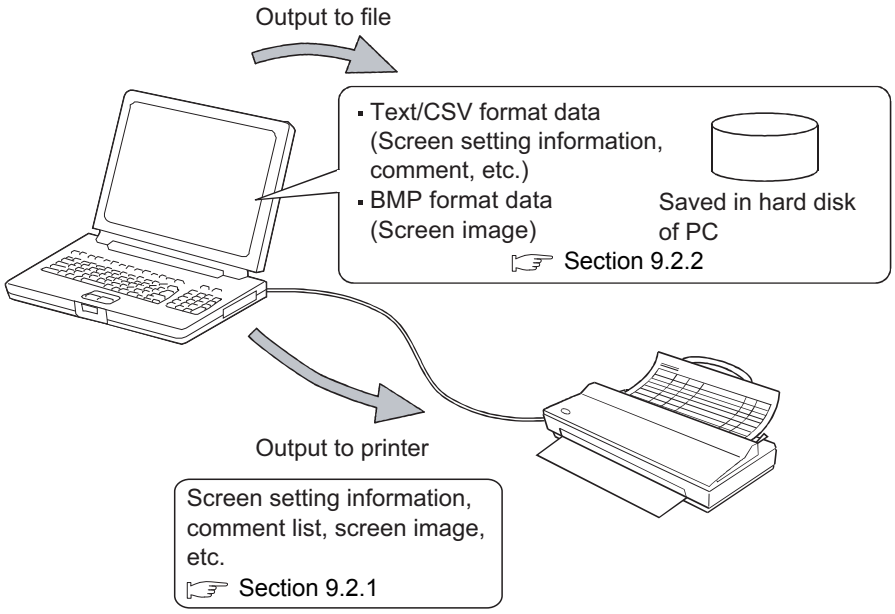
(b) Project data/resource data deletion, drive formatting
Delete project data/resource data or format a drive from [Program/data control] of the utility.

9 Transfer to memory card (Memory card write)

Error No.	Error message	Error definition and cause	Corrective action
000000c9	Create Folder Error.	The drive in which the memory card is set has not been specified.	Select the drive in which the memory card is set.
		The memory card is write-protected.	Enable the memory card to be written.
–	OS is not selected for Installing.	OS is not selected for Installing.	Select the OS to be installed.

9. PRINTING PROJECT/FILE OUTPUT

Project settings or screen image created on the GT Designer2 can be output to a file or printer.
The data output to a file can be used for various documents after editing with a commercially available word processor software.



Point

Print setting

(a) Papers are printed in the portrait mode.

(b) Font and font size for printing cannot be changed.

(c) The header information (date, file name) are automatically printed when output to a printer.

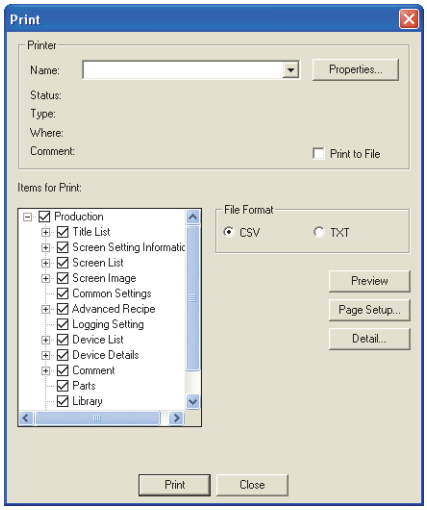
9.1 Printing method

9.1.1 Setting method

1. Select the [Project] → [Print...].
2. The Print dialog box appears. Refer to the following description for setting.

9.1.2 Setting items

Setting items for printing are described.

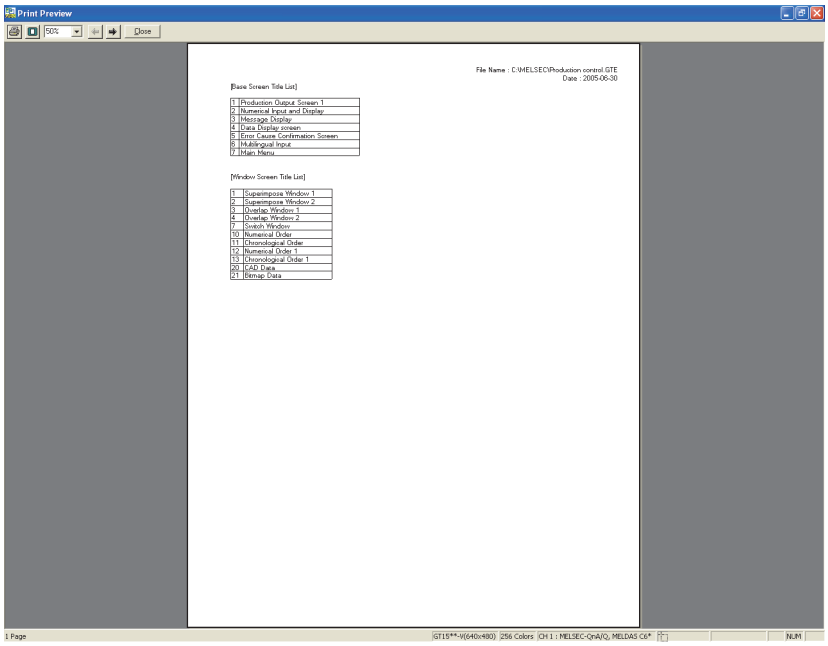


Item		Description
Printer	Name	Select the printer for printing. To make basic settings of the printer, click the [Properties...] button. Printer setting varies depending on the printer driver of Windows®.
	Print to File	Save the data in a file without printing from the printer. Check [Print to File] and click the [Print] button. The Save as dialog box is displayed. Set the file target. Printing an object name becomes valid only if Print to File is selected.
Items for Print		Select the items to be printed. Refer to the following for the print image of each item: ☞ Section 9.2 Printing example
File Format		When data are written to files, select the file format (CSV/TXT).
[Preview] *1		Preview in printing is displayed.
[Page Setup...] *2		Set the page or screen image to be printed.
[Detail...] *3		Set each screen's details and select the device used for printing.
[Print]		Outputs the data to the printer or file based on the settings.
[Close]		Closes the dialog box without printing.

Refer to the next page for details of 1 to 3.

*1 Print Preview

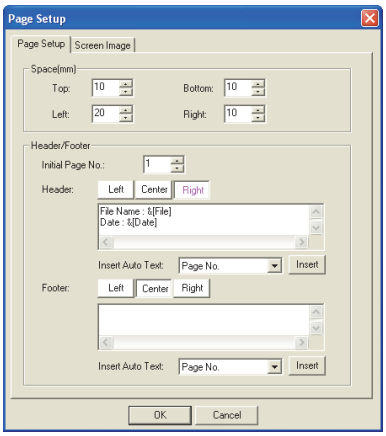
Each icon of print preview is described.



Item	Description
(Print)	Printing is performed.
(One page)	The entire page is displayed.
50% (Zoom)	The display image is enlarged/reduced.
(Previous, Next)	Image on the previous/next page is displayed.
Close (Close Preview)	Print Preview is closed.

*2 Page Setup...

(1) Page Setup tab

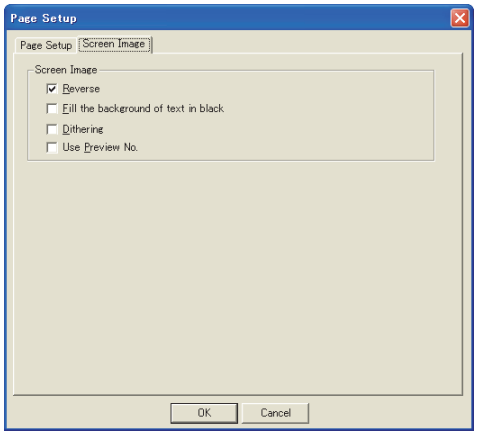


Page Setup | Screen Image

Item	Contents
Space	Set the upper, lower, left and right margins in mm (0 mm to 100 mm)
Initial page no.	Set the initial page number, to be used during printing.
Display position	Each display position for headers/footers can be registered. The position button for the character being registered for display will be highlighted.
Header/footer edit text box	Input/edit printed headers/footers. Comments or auto-text can be input to headers/footers. (Headers/footers have a maximum of two lines.)
Insert Auto Text	The selected auto text will be inserted into the header/footer. Select the auto-text at the combo box and insert using the pushbutton. Auto text can also be input from the PC keyboard.

Auto text	Keyboard input
Page No.	&[Page]
Date	&[Date]
Time	&[Time]
GOT Type	&[GOT]
Controller Type	&[Controller]
Project Title	&[Project]
File Name	&[File]

(2) Screen Image tab

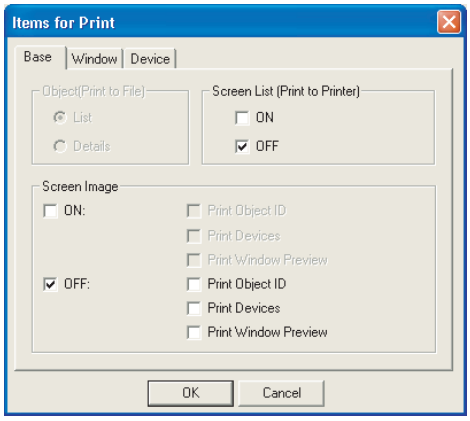


Page Setup | Screen Image

Item	Description
Reverse	Check this item to output the screen image with black and white inverted.
Fill the background of text in black	Check this item to output the text in the black background.
Dithering	Check this item to convert the screen image into black and white, apply monochrome dithering to the image and output it.
Use Preview No.	Check this item to output the screen image with comments corresponding to the comment column No. set as the preview No. displayed.

*3 Detail...

(1) Base tab

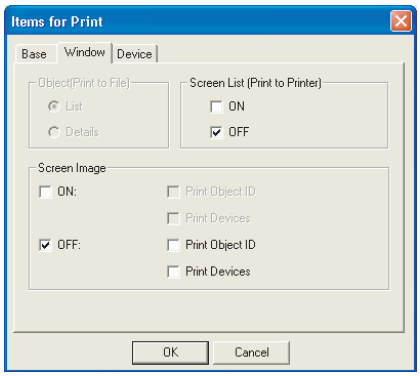


Base tab

Base Window Device

Item	Description
Object (Print to File)	Select whether the object setting to be output in [List] or [Details] format for the screen setting check. Selectable only for output to file. (Fixed to [List] for output to printer.)
Screen List (Print to Printer)	Set the image (ON/OFF) to be output to a screen list. When both are checked, both of ON and OFF screen images are output. When neither of them is checked, no screen list is output. Selectable only for output to printer.
Screen Image	Set the image (ON/OFF) to be output to a screen image. When both are checked, both of ON and OFF screen images are output. In addition to a normal screen image, the screen image that includes the object ID or devices or windowed screen image can be output. Print Object ID :Outputs the screen image on which the object ID is put. Print Devices :Outputs the screen image on which devices are put. Print Window Preview :Outputs the screen image on which the window is put.

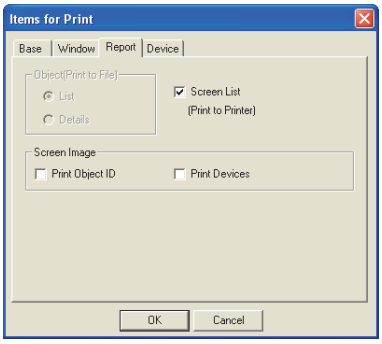
(2) Window tab



Base | Window | Device

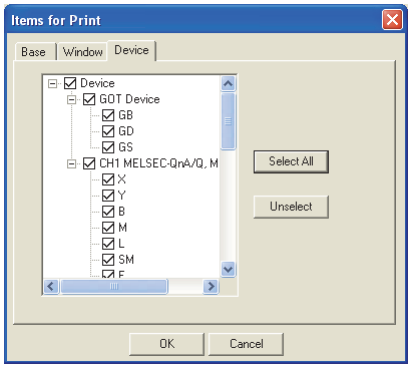
Item	Description
Object (Print to File)	Select whether the object setting to be output in [List] or [Details] format for the screen setting check. Selectable only for output to file. (Fixed to [List] for output to printer.)
Screen List (Print to Printer)	Set the image (ON/OFF) to be output to a screen list. When both are checked, both of ON and OFF screen images are output. (Selectable only for output to printer.) When neither of them is checked, no screen list is output.
Screen Image	Set the image (ON/OFF) to be output to a screen image. When both are checked, both of ON and OFF screen images are output. In addition to a normal screen image, the screen image on which the object ID or devices are put can be output. Print Object ID :Outputs the screen image on which the object ID is put. Print Devices :Outputs the screen image on which devices are put.

(3) Report tab



Item		Description
Object(Print to File)		Select whether the object setting to be output in [List] or [Details] format. Selectable only for output to a file. (Fixed to [List] for output to a printer.)
Screen List		Check when outputting a screen list. (Output ON images.)
Screen Image		Outputs a screen image. In addition to a normal screen image, the screen image on which the object ID or devices are put can be output.
	Print Object ID	Outputs the screen image on which the object ID is put.
	Print Devices	Outputs the screen image on which devices are put.

(4) Device tab



Base | Window | Device

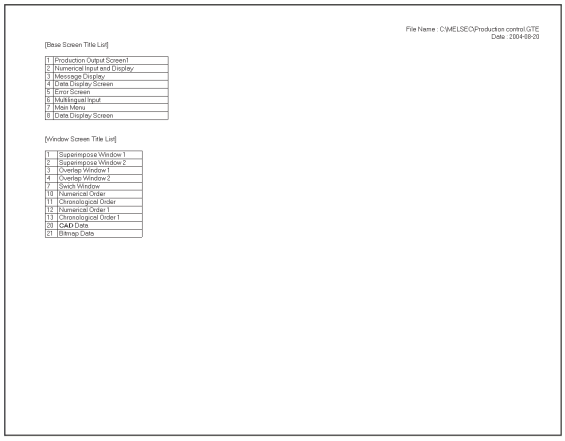
Item	Description
Device	Select a device name to be printed in a device list or device details. The applicable devices change depending the PLC type of System Environment.
Select All	Selects all devices.
Unselect	Unselects all devices.

9.2 Printing example

9.2.1 Printer output

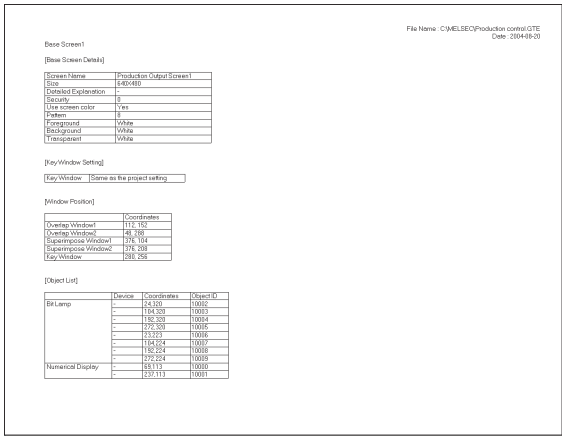
Title List

Each screen title is printed as shown below.



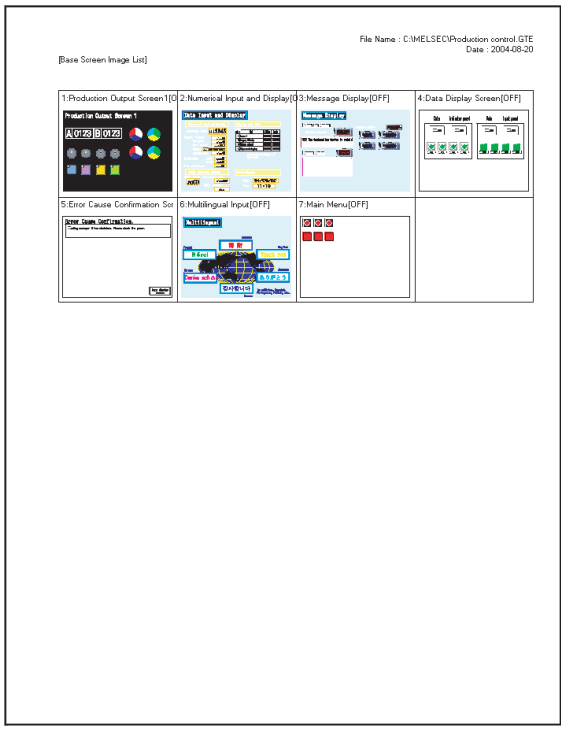
Screen Setting Information

Setting items in each screen are printed as shown below.



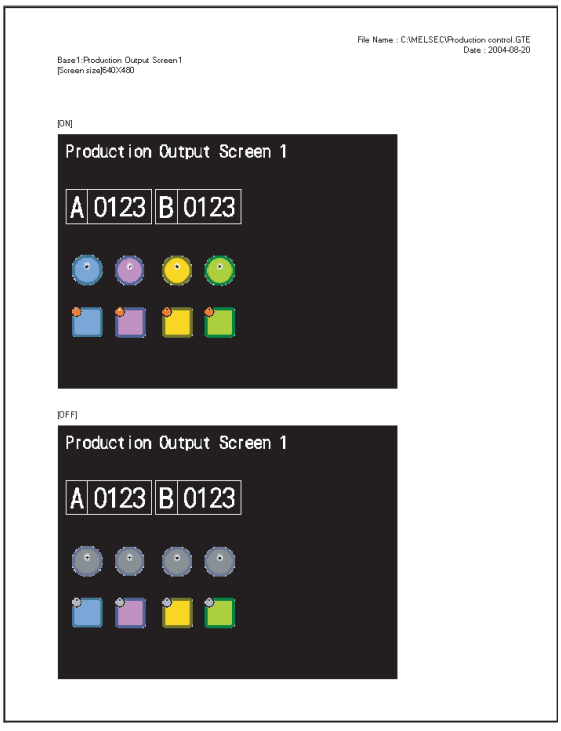
Screen List*1

List of created screens*1 is printed as shown below.



Screen Image

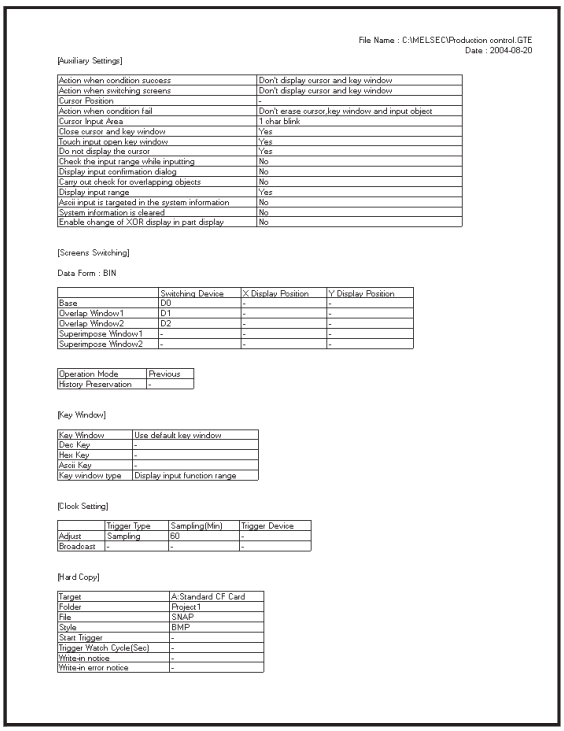
Each screen image is printed as shown below.



*1 The number of screens displayed on the Screen Image view is fixed to 16 screens (4 x 4) per page.

Common Settings

Details of Common Settings are printed as shown below.



File Name : C:\MELSEC\Production control.GTE
Date : 2004-08-20

[Auxiliary Settings]

Action when condition success	Don't display cursor and key window
Action when switching screens	Don't display cursor and key window
Cursor Position	-
Action when condition fail	Don't erase cursor,key window and input object
Cursor Input Area	1 char blink
Close cursor and key window	Yes
Touch input open key window	Yes
Do not display the cursor	Yes
Check the input range while inputting	No
Display input confirmation dialog	No
Carry out check for overlapping objects	No
Display input range	Yes
Ascii input is targeted in the system information	No
System information is cleared	No
Enable change of XOR display in part display	No

[Screens Switching]

Data Form : BIN

	Switching Device	X Display Position	Y Display Position
Base	D0	-	-
Overlap Window1	D1	-	-
Overlap Window2	D2	-	-
Superimpose Window1	-	-	-
Superimpose Window2	-	-	-

Operation Mode	Previous
History Preservation	-

[Key Window]

Key Window	Use default key window
Dec Key	-
Hex Key	-
Ascii Key	-
Key window type	Display input function range

[Clock Setting]

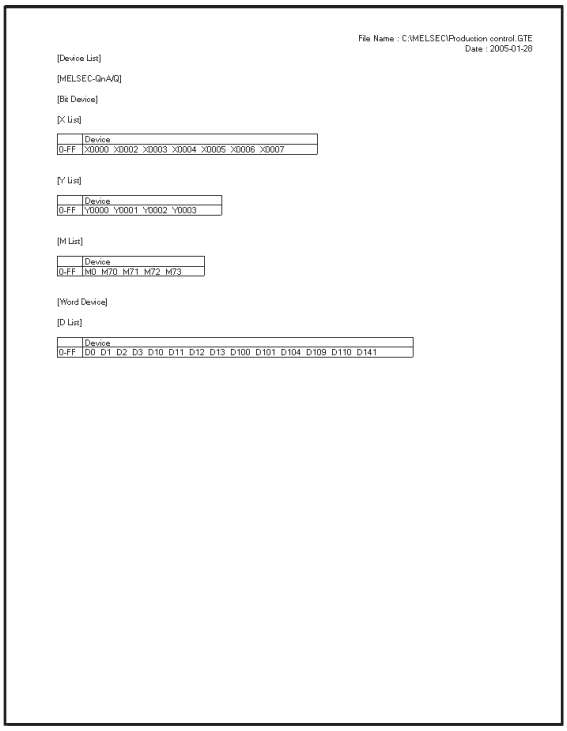
	Trigger Type	Sampling(Min)	Trigger Device
Adjust	Sampling	60	-
Broadcast	-	-	-

[Hard Copy]

Target	A:Standard CF Card
Folder	Project1
File	SNAP
Style	BMP
Start Trigger	-
Trigger Watch Cycle(Sec)	-
Write-in notice	-
Write-in error notice	-

Device List

List of set devices is printed as shown below.



File Name : C:\MELSEC\Production control.GTE
Date : 2005-01-28

[Device List]

[MELSEC-QnA/Q]

[Bit Device]

[X List]

	Device
0-FF	X0000 X0002 X0003 X0004 X0005 X0006 X0007

[Y List]

	Device
0-FF	Y0000 Y0001 Y0002 Y0003

[M List]

	Device
0-FF	M0 M70 M71 M72 M73

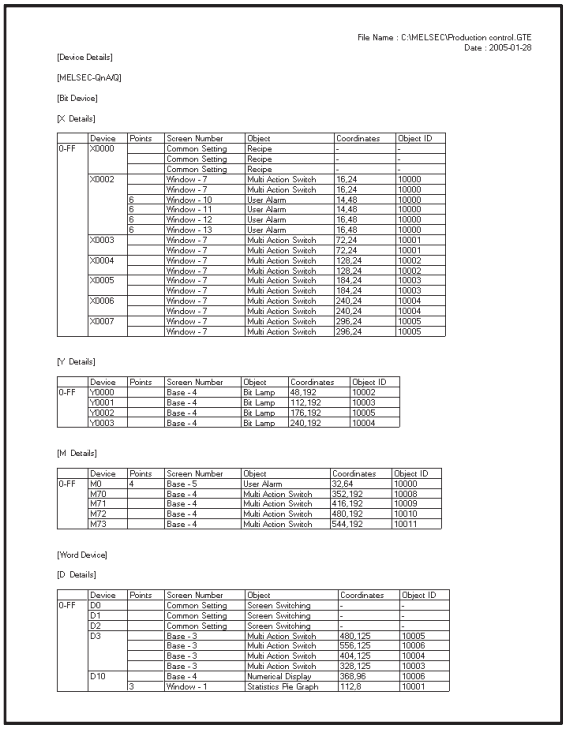
[Word Device]

[D List]

	Device
0-FF	D0 D1 D2 D3 D10 D11 D12 D13 D100 D101 D104 D109 D110 D141

Device Details

Details of set devices are printed as shown below.



File Name : C:\MELSEC\Production control.GTE
Date : 2005-01-28

[Device Details]

[MELSEC-QnA/Q]

[Bit Device]

[X Details]

	Device	Points	Screen Number	Object	Coordinates	Object ID
0-FF	X0000		Common Setting	Recipe	-	-
			Common Setting	Recipe	-	-
			Common Setting	Recipe	-	-
	X0002		Window - 7	Multi Action Switch	16,24	10000
			Window - 7	Multi Action Switch	16,24	10000
		6	Window - 10	User Alarm	14,48	10000
		6	Window - 11	User Alarm	14,48	10000
		6	Window - 12	User Alarm	16,48	10000
		6	Window - 13	User Alarm	16,48	10000
	X0003		Window - 7	Multi Action Switch	72,24	10001
			Window - 7	Multi Action Switch	72,24	10001
	X0004		Window - 7	Multi Action Switch	128,24	10002
			Window - 7	Multi Action Switch	128,24	10002
	X0005		Window - 7	Multi Action Switch	184,24	10003
			Window - 7	Multi Action Switch	184,24	10003
	X0006		Window - 7	Multi Action Switch	240,24	10004
			Window - 7	Multi Action Switch	240,24	10004
	X0007		Window - 7	Multi Action Switch	296,24	10005
			Window - 7	Multi Action Switch	296,24	10005

[Y Details]

	Device	Points	Screen Number	Object	Coordinates	Object ID
0-FF	Y0000		Base - 4	Bit Lamp	48,192	10002
	Y0001		Base - 4	Bit Lamp	112,192	10003
	Y0002		Base - 4	Bit Lamp	176,192	10005
	Y0003		Base - 4	Bit Lamp	240,192	10004

[M Details]

	Device	Points	Screen Number	Object	Coordinates	Object ID
0-FF	M0	4	Base - 5	User Alarm	32,64	10000
	M70		Base - 4	Multi Action Switch	352,192	10008
	M71		Base - 4	Multi Action Switch	416,192	10009
	M72		Base - 4	Multi Action Switch	480,192	10010
	M73		Base - 4	Multi Action Switch	544,192	10011

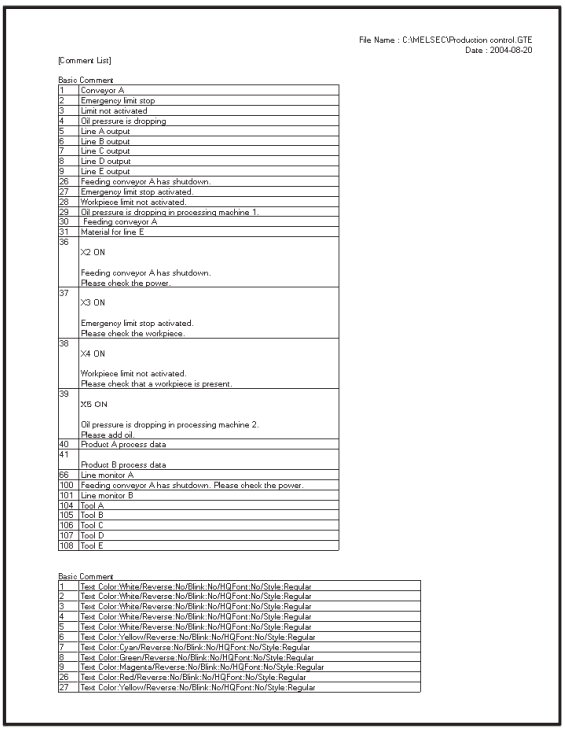
[Word Device]

[D Details]

	Device	Points	Screen Number	Object	Coordinates	Object ID
0-FF	D0		Common Setting	Screen Switching	-	-
	D1		Common Setting	Screen Switching	-	-
	D2		Common Setting	Screen Switching	-	-
	D3		Base - 3	Multi Action Switch	480,125	10005
			Base - 3	Multi Action Switch	556,125	10006
			Base - 3	Multi Action Switch	404,125	10004
			Base - 3	Multi Action Switch	328,125	10003
	D10		Base - 4	Numerical Display	368,96	10006
		3	Window - 1	Statistics Pie Graph	112,8	10001

Comment

Created comments and their attributes are printed as shown below.



File Name : C:\MELSEC\Production control.GTE
Date : 2004-08-20

[Comment List]

Basic Comment

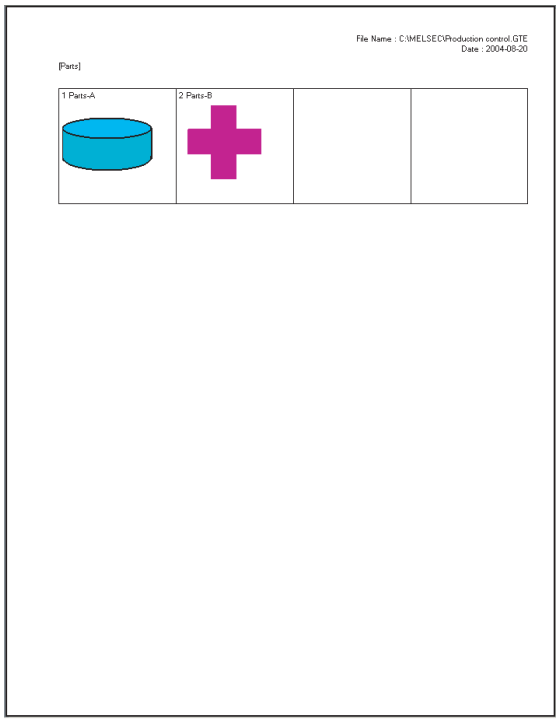
1	Conveyor A
2	Emergency limit stop
3	Limit not activated.
4	Oil pressure is dropping
5	Line A output
6	Line B output
7	Line C output
8	Line D output
9	Line E output
26	Feeding conveyor A has shutdown.
27	Emergency limit stop activated.
28	Workpiece limit not activated.
29	Oil pressure is dropping in processing machine 1.
30	Feeding conveyor A
31	Material for line E
36	X2 ON Feeding conveyor A has shutdown. Please check the power.
37	X3 ON Emergency limit stop activated. Please check the workpiece.
38	X4 ON Workpiece limit not activated. Please check that a workpiece is present.
39	X5 ON Oil pressure is dropping in processing machine 2. Please add oil.
40	Product A process data
41	Product B process data
66	Line monitor A
100	Feeding conveyor A has shutdown. Please check the power.
101	Line monitor B
104	Tool A
105	Tool B
106	Tool C
107	Tool D
108	Tool E

Basic Comment

1	Text Color:White/Reverse:No/Blink:No/HQFont:No/Style:Regular
2	Text Color:White/Reverse:No/Blink:No/HQFont:No/Style:Regular
3	Text Color:White/Reverse:No/Blink:No/HQFont:No/Style:Regular
4	Text Color:White/Reverse:No/Blink:No/HQFont:No/Style:Regular
5	Text Color:White/Reverse:No/Blink:No/HQFont:No/Style:Regular
6	Text Color:Yellow/Reverse:No/Blink:No/HQFont:No/Style:Regular
7	Text Color:Cyan/Reverse:No/Blink:No/HQFont:No/Style:Regular
8	Text Color:Green/Reverse:No/Blink:No/HQFont:No/Style:Regular
9	Text Color:Magenta/Reverse:No/Blink:No/HQFont:No/Style:Regular
26	Text Color:Red/Reverse:No/Blink:No/HQFont:No/Style:Regular
27	Text Color:Yellow/Reverse:No/Blink:No/HQFont:No/Style:Regular

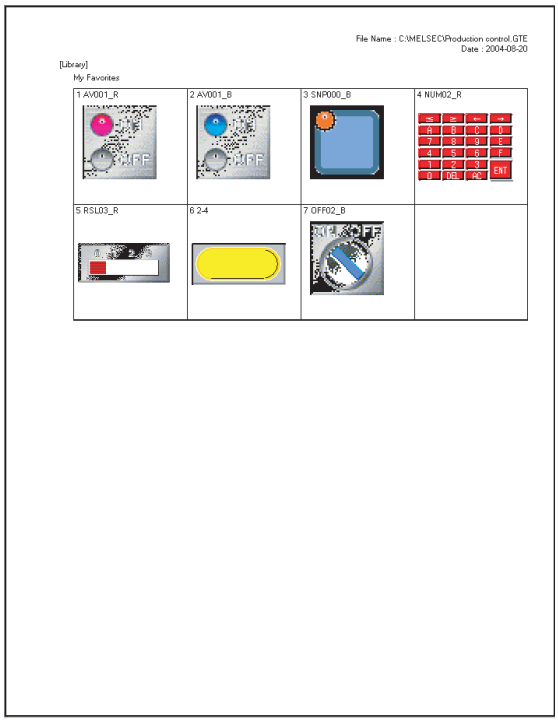
Parts

List of created parts is printed as shown below.



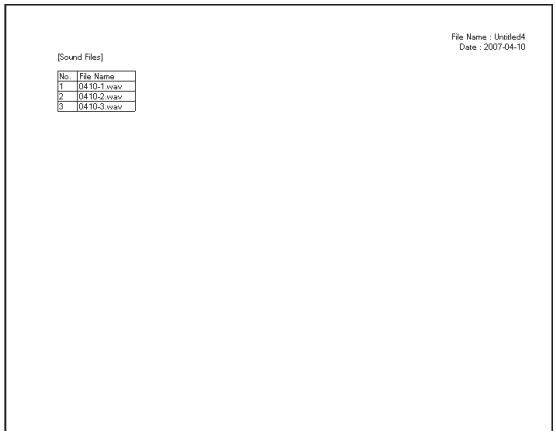
Library

List of My favorites or user-defined libraries is printed as shown below.



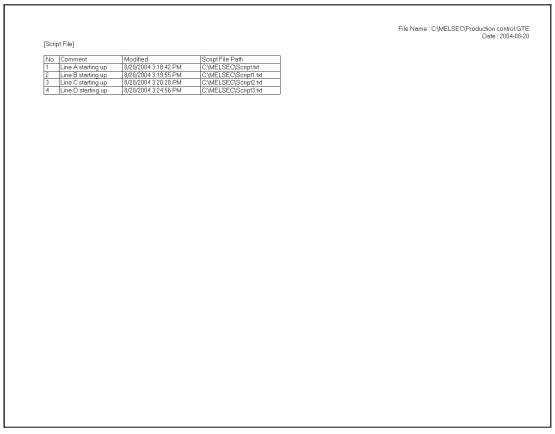
Sound Files

List of Sound File is printed as shown below.



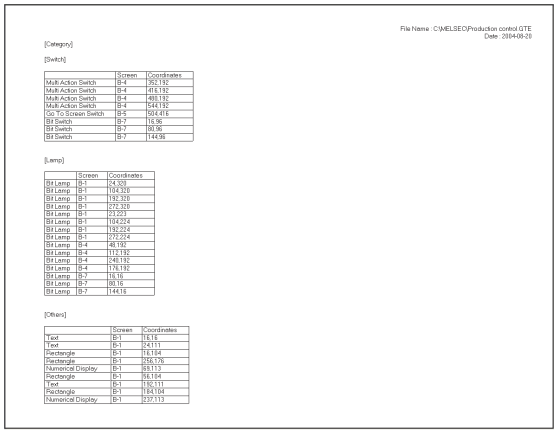
Script

List of set script files is printed as shown below.



Category

Each category list is printed as shown below.



9.2.2 File output

1 Files to be output

In file output, the following files are output to the specified folder.

(1) Image file (Substitute "*****" with the screen number.)

(a) Base Screen

Base ON-*****.BMP
Base OFF-*****.BMP
Base ON Object ID-*****.BMP
Base OFF Object ID-*****.BMP
Base ON Device-*****.BMP
Base OFF Device-*****.BMP

(b) Window Screen

Window ON-*****.BMP
Window OFF-*****.BMP
Window ON Object ID-*****.BMP
Window OFF Object ID-*****.BMP
Window ON Device-*****.BMP
Window OFF Device-*****.BMP

(c) Parts, Library

Part-*****.BMP
Library-*****.BMP

(2) Text file

Title List.CSV/TXT
Screen Setting Information.CSV/TXT
Common Settings.CSV/TXT
Device List-CH □ .CSV/TXT*1
Device Detail-CH □ .CSV/TXT*1
Device List-GOT.CSV/TXT
Device Detail-GOT.CSV/TXT
Comment list.CSV/TXT
Parts.CSV/TXT
Library.CSV/TXT
Script.CSV/TXT
Advanced Recipe Common.CSV/TXT
Category.CSV/TXT
Device Data Transfer.CSV/TXT
Sound Files.CSV/TXT
Advanced Recipe Settings-*****.CSV/TXT

*1 GT Designer2 that is installed in Windows98 or Windows Millennium Edition is not compatible to Unicode text file.

*2 A file is created for each CH. Each CH No. will be in the square in the file name.

Remark

(1) If a file, which was saved in CSV format once by GT Designer2, is opened by other software, this may change the format settings, and the file may not be correctly displayed.
In this case, adjust the settings by using the corresponding menu or other of the software.

(2) If a file, which was saved in TXT format once by GT Designer2, is opened by other software, this may disrupt the settings of tab or space, and the text may appear misaligned.
In this case, adjust the text poison by adding/deleting tabs or spaces.

2 Output image (When set to CSV file format)

The output image (in CSV file format) is shown below:

Title List

Each screen title is output as shown below.

	A	B	C	D	E	F	G	H	I
1	[Title List]								
2									
3		[Base Screen Title List]							
4			1	Production Output Screen1					
5			2	Numerical Input and Display					
6			3	Message Display					
7			4	Data Display Screen					
8			5	Error Screen					
9			6	Multilingual Input					
10			7	Main Menu					
11									
12		[Window Screen Title List]							
13			1	Superimpose Window 1					
14			2	Superimpose Window 2					
15			3	Overlap Window 1					
16			4	Overlap Window 2					
17			7	Swich Window					

Screen Setting Information

Setting items in each screen are output as shown below.

	A	B	C	D	E	F	G	H	I
1	[Screen Setting Information]								
2									
3	Base Screen1								
4									
5	[Base Screen Details]								
6	Screen Na	Production Output Screen1							
7	Size	640X480							
8	Detailed E	:-							
9	Security	0							
10	Use scree	Yes							
11	Pattern	8							
12	Foregroun	White							
13	Backgroun	White							
14	Transpare	White							
15									
16									
17	[Key Window Setting]								

Common Setting

Details of common setting are output as shown below.

	A	B	C	D	E	F	G	H	I
1	[Project Title]								
2	-								
3									
4	[ProjectID]								
5	685405403								
6									
7	[Author]								
8	-								
9									
10	[Detailed Explanation]								
11	-								
12									
13	[GOT Type]								
14	GT15**-V(640x480)								
15									
16	[PLC Type]								
17	MELSEC-QnA/Q								

Device List-GOT

List of set devices in the GOT is output as shown below.

	A	B	C	D	E	F	G	H	I
1	[Device List]								
2									
3	[GOT Device]								
4	[Word Device]								
5		[GD List]							
6			Device						
7		0-FF	GD100						
8									
9									
10									
11									
12									
13									
14									
15									
16									
17									

Device List-CH□

List of devices set to each CH No. is output as shown below.

	A	B	C	D	E	F	G	H	I
1	[Device List]								
2									
3	[CH1:MELSEC-QnA/Q, MELDAS C6*]								
4	[Bit Device]								
5		[X List]							
6			Device						
7		0-FF	X0000	X0002	X0003	X0004	X0005	X0006	X0007
8									
9		[Y List]							
10			Device						
11		0-FF	Y0000	Y0001	Y0002	Y0003			
12									
13		[M List]							
14			Device						
15		0-FF	M0	M70	M71	M72	M73		
16									
17	[Word Device]								

Device Details-GOT

Details of set device in the GOT are output as shown below.

	A	B	C	D	E	F	G	H	I
1	[Device Details]								
2									
3	[GOT Device]								
4	[Word Device]								
5		[GD Details]							
6			Device	Points	Screen Nu	Object	Coordinate	Object ID	
7		0-FF	GD100		Common S	Screen Sw	-	-	
8									
9									
10									
11									
12									
13									
14									
15									
16									
17									

Device Details-CH□

Details of devices set to each CH No. is output as shown below.

	A	B	C	D	E	F	G	H	I
1	[Device Details]								
2									
3	[CH1:MELSEC-QnA/Q, MELDAS C6*]								
4	[Bit Device]								
5		[X Details]							
6			Device	Points	Screen Nu	Object	Coordinate	Object ID	
7		0-FF	X0000		Common S	Recipe	-	-	
8					Common S	Recipe	-	-	
9					Common S	Recipe	-	-	
10			X0002		Window - 7	Multi Actio	16,24	10000	
11					Window - 7	Multi Actio	16,24	10000	
12				6	Window - 1	User Alarm	14,48	10000	
13				6	Window - 1	User Alarm	14,48	10000	
14				6	Window - 1	User Alarm	16,48	10000	
15				6	Window - 1	User Alarm	16,48	10000	
16			X0003		Window - 7	Multi Actio	72,24	10001	
17					Window - 7	Multi Actio	72,24	10001	

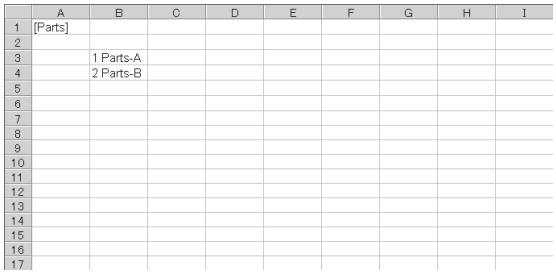
Comment

Created comments and their attributes are output as shown below.

	A	B	C	D	E	F	G	H	I
1	[Comment List]								
2									
3			1	Conveyor A					
4			2	Emergency limit stop					
5			3	Limit not activated					
6			4	Oil pressure is dropping					
7			5	Line A output					
8			6	Line B output					
9			7	Line C output					
10			8	Line D output					
11			9	Line E output					
12			26	Feeding conveyor A has shutdown.					
13			27	Emergency limit stop activated.					
14			28	Workpiece limit not activated.					
15			29	Oil pressure is dropping in processing machine 1.					
16			30	Feeding conveyor A					
17			31	Material for line E					

Parts

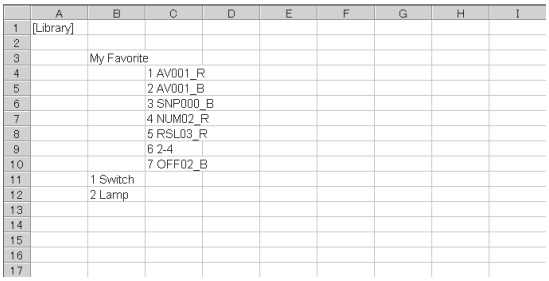
List of registered parts is output as shown below.



	A	B	C	D	E	F	G	H	I
1	[Parts]								
2									
3		1 Parts-A							
4		2 Parts-B							
5									
6									
7									
8									
9									
10									
11									
12									
13									
14									
15									
16									
17									

Library

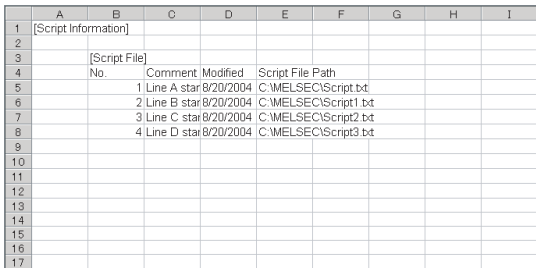
List of registered libraries is output as shown below.



	A	B	C	D	E	F	G	H	I
1	[Library]								
2									
3		My Favorite							
4			1 AV001_R						
5			2 AV001_B						
6			3 SNP000_B						
7			4 NUM02_R						
8			5 RSL03_R						
9			6 2-4						
10			7 OFF02_B						
11		1 Switch							
12		2 Lamp							
13									
14									
15									
16									
17									

Script

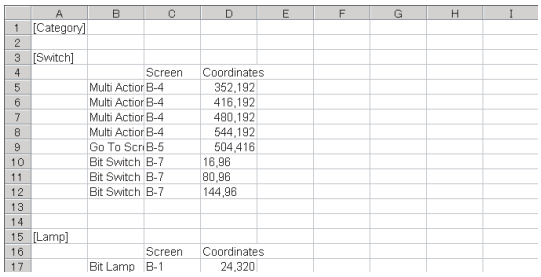
List of script files is output as shown below.



	A	B	C	D	E	F	G	H	I
1	[Script Information]								
2									
3		[Script File]							
4		No.	Comment	Modified	Script File Path				
5		1	Line A star	8/20/2004	C:\MELSEC\Script.txt				
6		2	Line B star	8/20/2004	C:\MELSEC\Script1.txt				
7		3	Line C star	8/20/2004	C:\MELSEC\Script2.txt				
8		4	Line D star	8/20/2004	C:\MELSEC\Script3.txt				
9									
10									
11									
12									
13									
14									
15									
16									
17									

Category

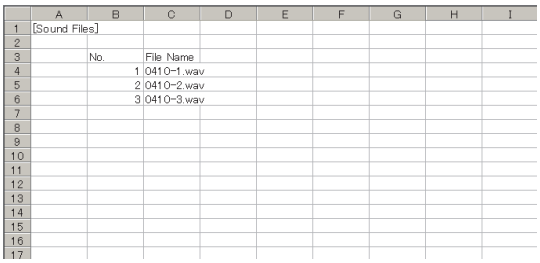
Each category list is output as shown below.



	A	B	C	D	E	F	G	H	I
1	[Category]								
2									
3	[Switch]								
4			Screen	Coordinates					
5		Multi Actior	B-4	352,192					
6		Multi Actior	B-4	416,192					
7		Multi Actior	B-4	480,192					
8		Multi Actior	B-4	544,192					
9		Go To Scri	B-5	504,416					
10		Bit Switch	B-7	16,96					
11		Bit Switch	B-7	80,96					
12		Bit Switch	B-7	144,96					
13									
14									
15	[Lamp]								
16			Screen	Coordinates					
17		Bit Lamp	B-1	24,320					

Sound Files

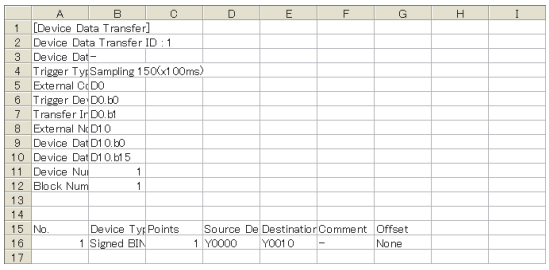
List of sound file is printed as shown below.



	A	B	C	D	E	F	G	H	I
1	[Sound Files]								
2									
3		No.	File Name						
4		1	0410-1.wav						
5		2	0410-2.wav						
6		3	0410-3.wav						
7									
8									
9									
10									
11									
12									
13									
14									
15									
16									
17									

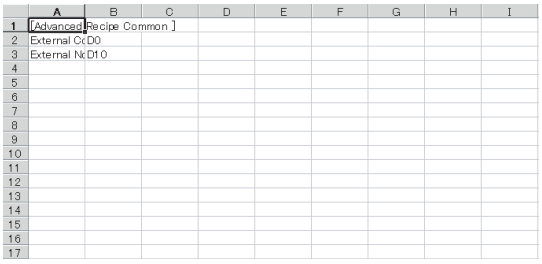
Device Data Transfer

The information that is set by using the device data transfer function is output.



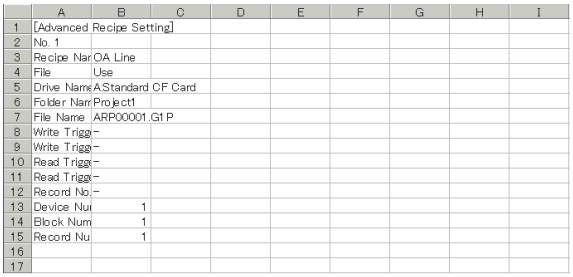
	A	B	C	D	E	F	G	H	I
1	[Device Data Transfer]								
2	Device Data Transfer ID : 1								
3	Device Dat	–							
4	Trigger Typ	Sampling	150(x100ms)						
5	External Cc	D0							
6	Trigger Dev	D0.b0							
7	Transfer Ir	D0.bf							
8	External Nc	D10							
9	Device Dat	D10.b0							
10	Device Dat	D10.bf	5						
11	Device Nui	1							
12	Block Num	1							
13									
14									
15	No.	Device Ty	Points	Source De	Destinatior	Comment	Offset		
16	1	Signed Bit	1	Y0000	Y0010	–	None		
17									

Advanced Recipe Common



	A	B	C	D	E	F	G	H	I
1	[Advanced Recipe Common]								
2	External Cc	D0							
3	External Nc	D10							
4									
5									
6									
7									
8									
9									
10									
11									
12									
13									
14									
15									
16									
17									

Advanced Recipe Settings



	A	B	C	D	E	F	G	H	I
1	[Advanced Recipe Setting]								
2	No. 1								
3	Recipe Nar	OA Line							
4	File	Use							
5	Drive Name	A:Standard CF Card							
6	Folder Nam	Project1							
7	File Name	ARP00001.G1P							
8	Write Trigg	–							
9	Write Trigg	–							
10	Read Trigg	–							
11	Read Trigg	–							
12	Record No.	–							
13	Device Nui	1							
14	Block Num	1							
15	Record Nu	1							
16									
17									

10. USING LIBRARY

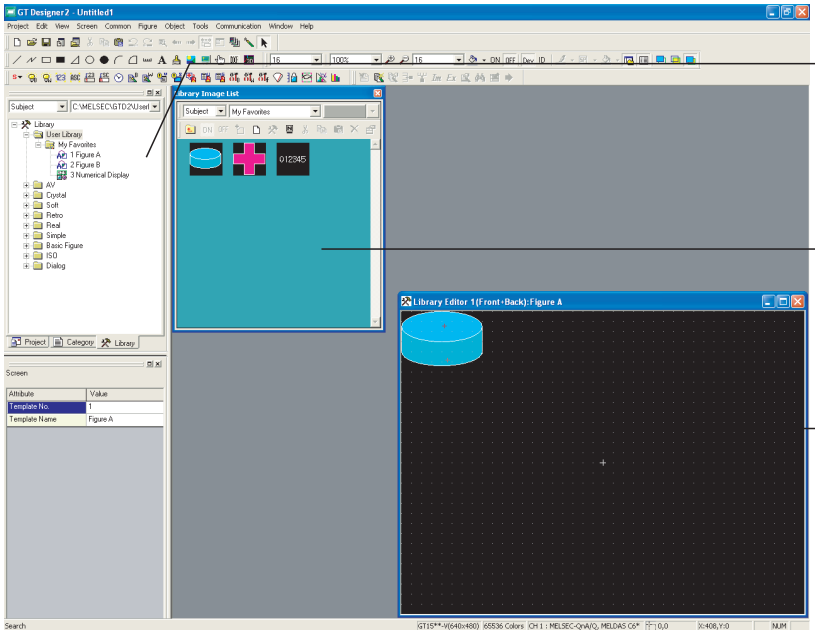
Figures and objects created by the user can be registered as a library.
Registered figures and objects can be easily pasted on the screen.

10.1 What is Library?

10.1.1 What you need to know before using library

1 Screen used for library

In library, registration and readout are performed on the screen below:

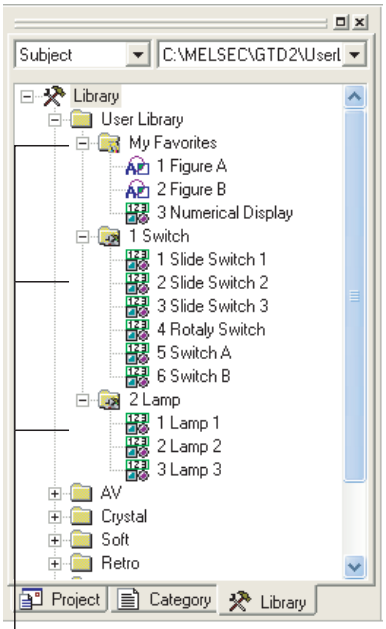


"Library Workspace"
Registered objects or figures are displayed in a tree.
To display the library workspace, click the library tab of the workspace.

"Library Image List"
The library can be operated while displaying image of registered objects or figures.

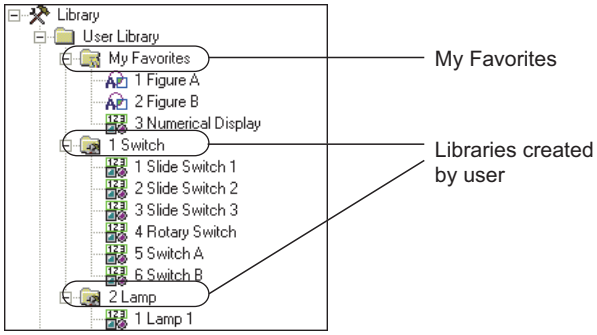
"Library Editor"
Double click the registered objects or figures to edit them with the dedicated editor.

2 Library type



Template
Figures and objects registered in the library are registered in the template.
The template is registered in any library.

(1) Library that can be created by the user
Objects and figures created by the user can be registered.



(a) My Favorites
Objects or figures registered as "My favorites" are registered on the "My Favorites" toolbars.
When frequently used objects/figures are registered on My Favorites toolbars, it is convenient to use them.

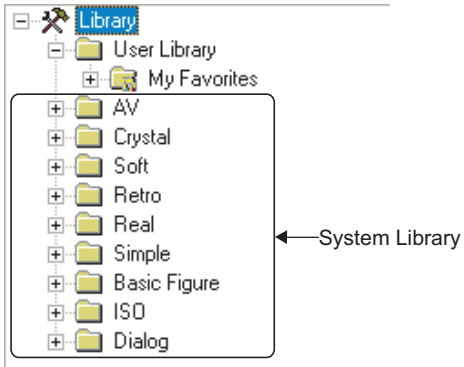


(b) User Library
It is a library to register user created figures/objects.
When folders are classified for each type, it is convenient to use them.



User-created objects or figures are registered.

(2) System Library
The library (not changed by a user) provided by the GT Designer2 has been registered.
Retrieving a preset template and arrange it on the screen facilitates settings of lamps or switches.
Libraries/templates in the system library cannot be registered, deleted or changed for their attributes.

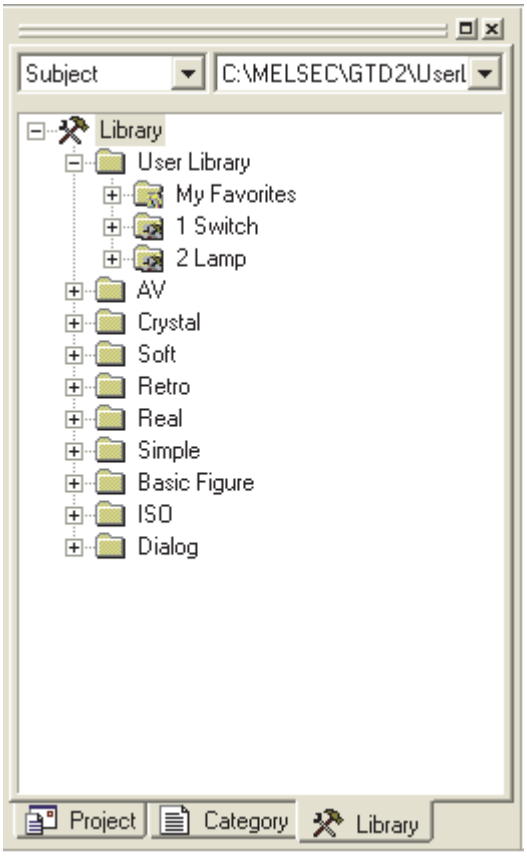


3 Number of templates that can be registered

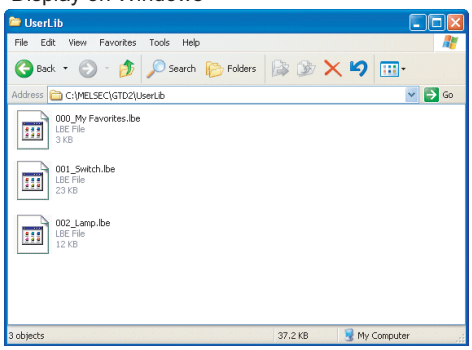
The maximum number of user created libraries is 250. For one library, the maximum 200 templates can be registered.

4 Configuration of library file

Each "User Library" including "My Favorites" is stored in the "User Lib" folder under the name "***.lbe." Display on Windows®.



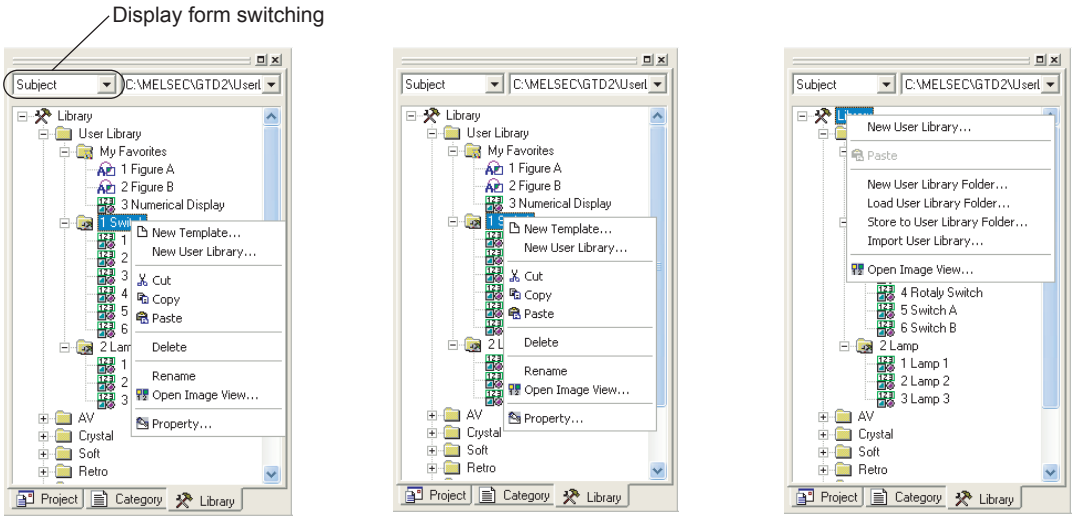
Display on Windows®



10.1.2 Basic operation of library

1 Basic operation of library workspace

Select the item for operation and right click the mouse to select the setting item.
As shown below, the display varies depending on the selected items.

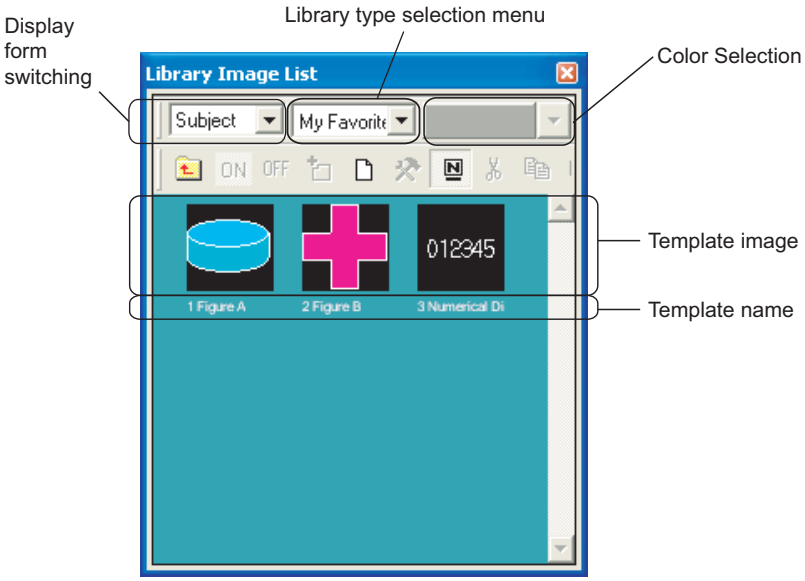


Item	Description
Display form switching	Display format of the tree structure is switched by the target and the function.
New Template...	New template is added to My Favorites or the user created library.
New User Library...	A new library is added to the user created library. *1
Edit	Registered template is edited/modified with the library editor.
Cut	Registered library/template is cut.
Copy	Registered library/template is copied.
Paste	Cut and registered library/template is pasted to the new library/template.
Delete	Registered library/template is deleted.
Rename	The name of the registered library/template is changed.
Open Image View...	Template image is displayed on the [Library Image list] screen.
Property...	The "No." and "Name" of the registered library/template is changed.
New User Library Folder...	A new user library folder is created in the specified path.
Load User Library Folder...	A desired user library file is searched for in the specified path folder and, if one is found, the user library is opened.
Store to User Library Folder...	The user library folder displayed in the current library workspace and subordinate files are saved in the specified user library folder.
Import User Library ...	Another library file from the currently edited library data (My Favorites, user created library) is imported.

1 Any special symbol (\ /:;?"<>|) is not allowed for the library name or a period (.) cannot be used for the last character.

2 Basic operation of Library Image List dialog box

Select the [View] → [Library] → [User Library] → [My Favorites]/Library Image List.
The Library Image List appears.
The template image is displayed in the Library Image List based on the ON/OFF time display settings of the screen.

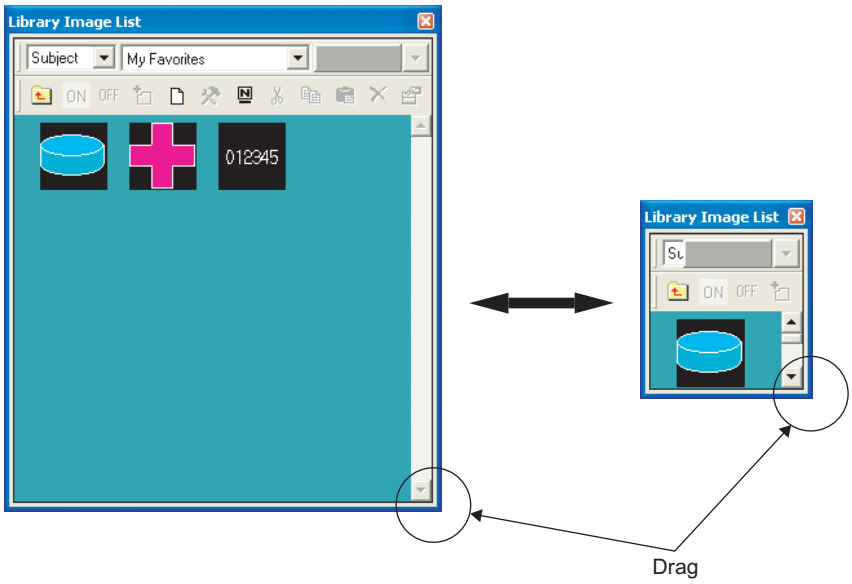


Item	Description
Display form switching	Display format of the tree structure is switched by the target and the function.
Color selection	A list of different shapes of the figure with the selected color is displayed.
Library type selection menu	The library type to be displayed is changed.
(Register)	Objects or figures selected on the drawing screen are registered on the library.
(New)	Template is newly created.
(Edit)	Registered template is edited with the library editor.
(Name)	Template name is displayed/not displayed.
(Cut)	Selected template is cut.
(Copy)	Selected template is copied.
(Paste)	Template copied with the Copy button is pasted.
(Delete)	Selected template is deleted.
(Property)	Property of a template is displayed.
(Level UP)	Hierarchy is switched by the tree structure displayed in the Library Image List.

Hint!

Display of dialog box

The mouse operation can adjust the size of Library Image List dialog box.



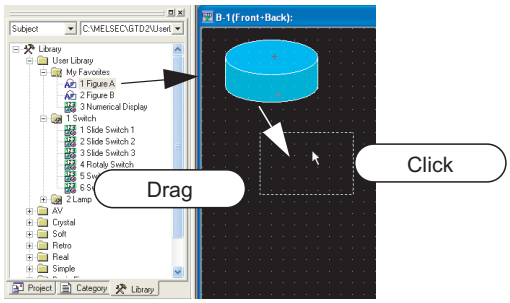
10.2 Pasting Objects or Figures from Library

10.2.1 Pasting objects or figures from library

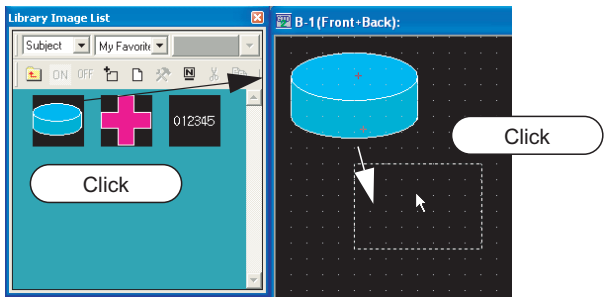
Objects or figures registered to the library are pasted on the screen.

1 Select the template for pasting and paste it on the drawing screen.

(1) Pasting from library workspace

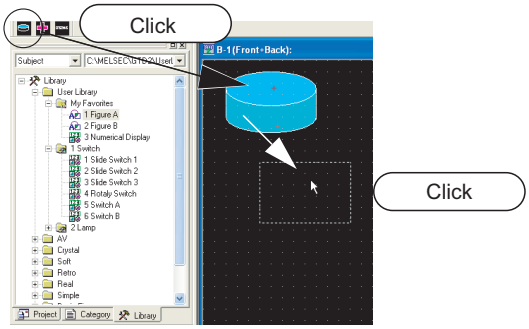


(2) Pasting from Library Image List



Hint! Loading My Favorites library

Objects or figures registered to the My Favorites library can be read out from the My Favorites icon on the toolbar.

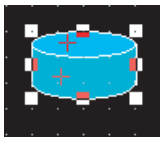


10.3 Creating Original Library

10.3.1 Registering objects or figures on library

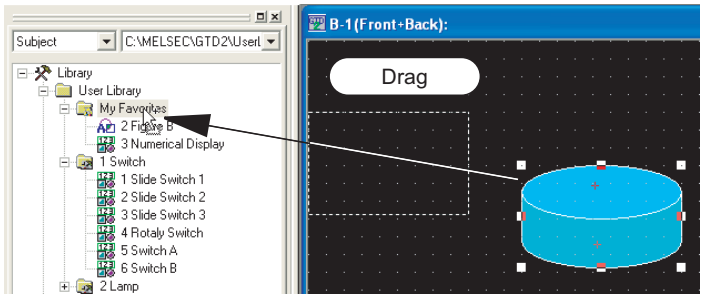
Objects or figures are registered to My Favorites or the user created library.

1 Select the object/figure for registration.



2 Perform the following operation:

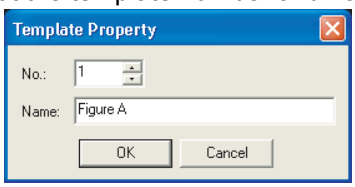
(1) Using library workspace
Drag the object or figure into the workspace.



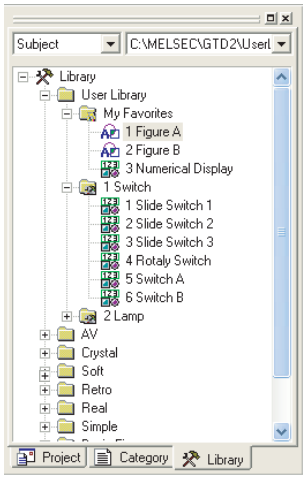
(2) Using library image list
Click the (Register) button.

3 The Template Property dialog box appears.

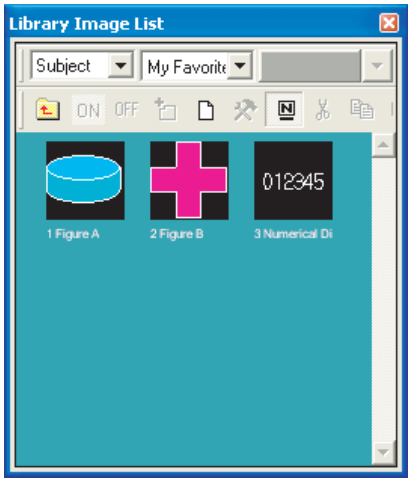
Input the template number and name and click the OK button.



4 Registration is completed.



Library workspace

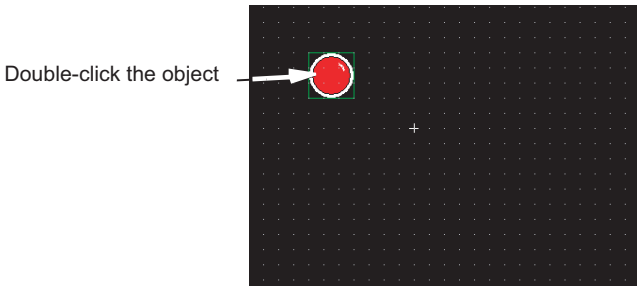


Library Image List

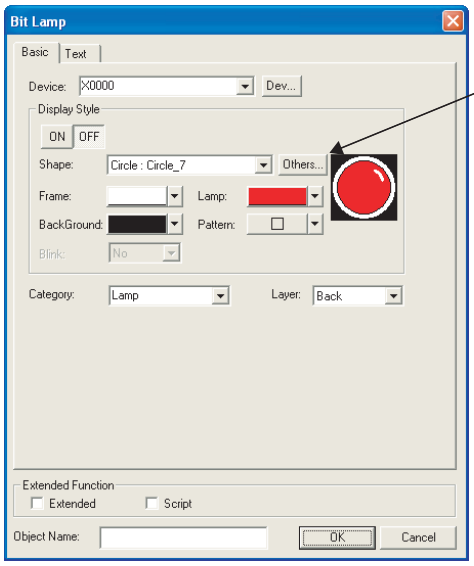
10.3.2 Registering only objects on library

Objects are registered to My Favorites or user created library.

1 Select the object for registration.

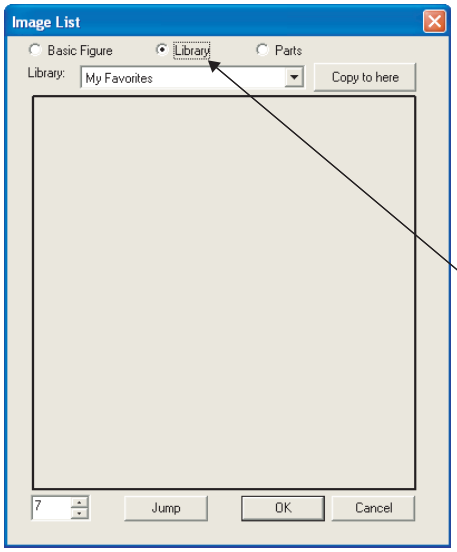


2 The object setting dialog appears.
Click Others... on the basic tab.



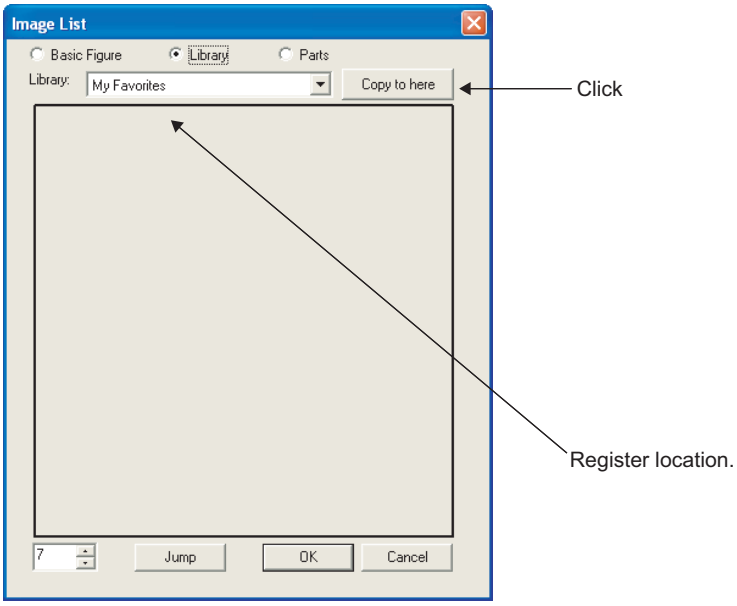
Click the Others... button.

3 The Image List appears.
Select a [Library].

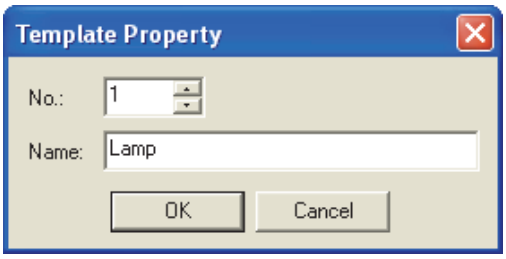


Select [Library]

4 Select a user created library to register to and click the Copy to here button.
Only user created libraries can be used. System libraries cannot be registered to.



5 Input the template number and name, and click the OK button.



6 Complete registration.
Click the OK button and close the Image List, then close the object setting dialog.

Library workspace

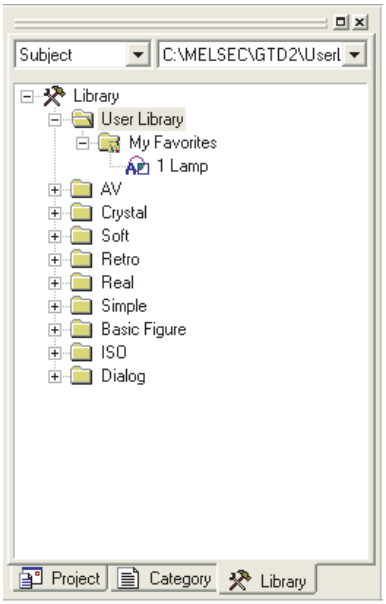
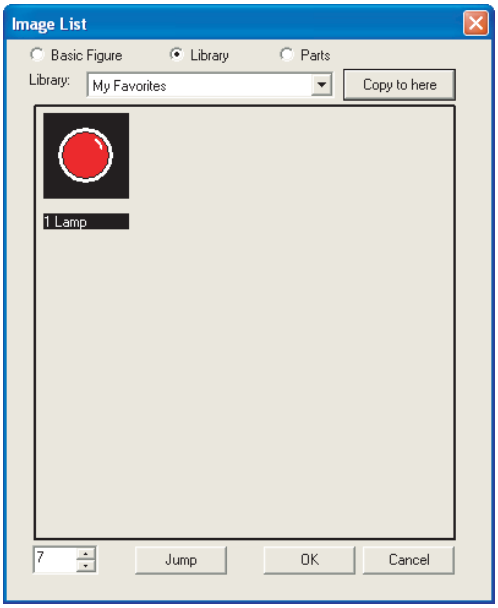
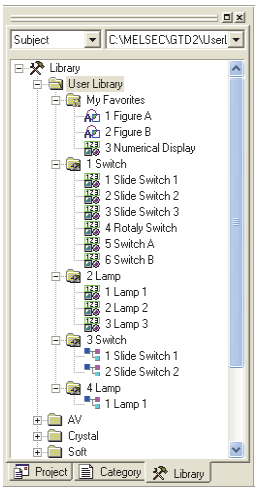


Image List dialog



Point

In the icon view on the library workspace, the template including objects is recognized differently from one including no object.



1 : Indicates a user library created with the GT Designer2 earlier than Version2.09K.

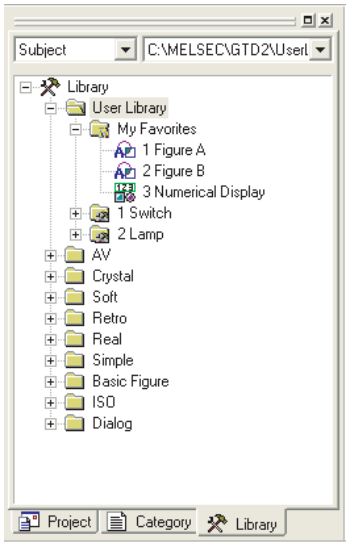
2 : Indicates a user library including objects.

3 : Indicates a user library including no object.

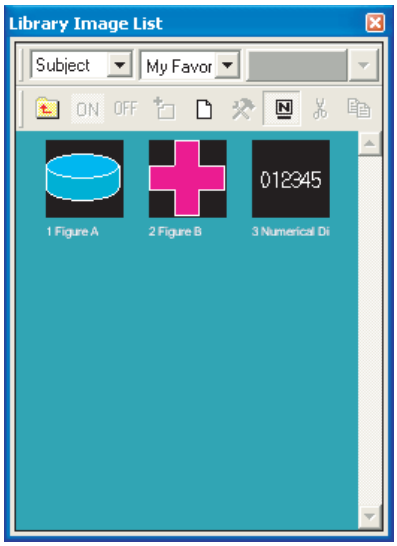
10.3.3 Copying registered library/template

User created library or registered template is copied.

1 Select the user created library/template for copying.



Library workspace

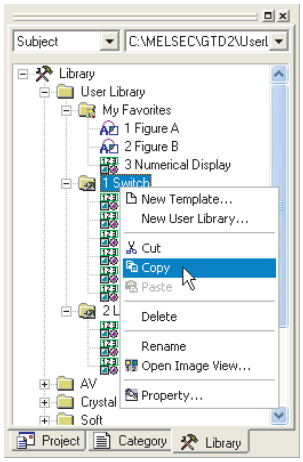


Library Image List

2 Perform either of the following operations.

- When copying the user-created library

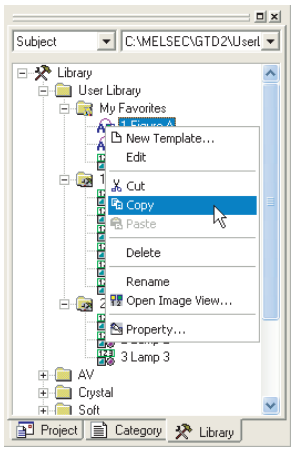
(1) Right-click the target library in the library workspace, and select the [Copy] menu.



(2) Right-click again, and select the [Paste] menu.

• When copying the template in the library workspace

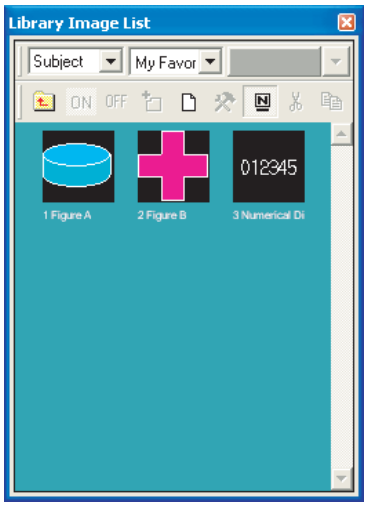
(1) Right-click the target template in the library workspace, and select the [Copy] menu.



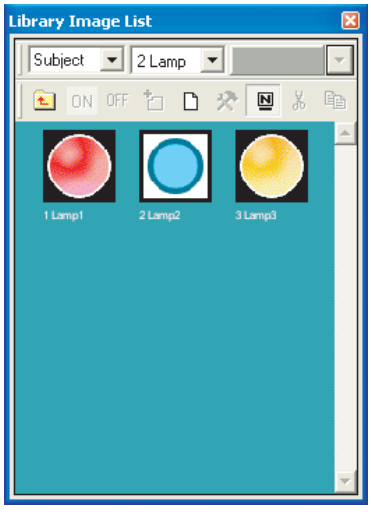
(2) Right-click the library where the template will be pasted, and select the [Paste] menu.

• When copying the template in the library image list

(1) Select the template (image) to be copied, and click [Copy].

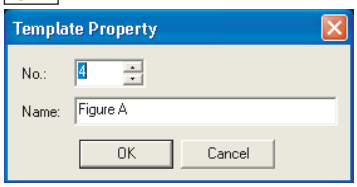


(2) Select the library, where the template will be pasted, to display the library images.



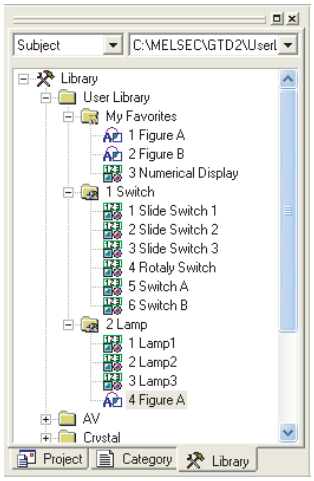
(3) Click (Paste).

3 The Library Property/Template Property dialog box appears.
Set the user created library/template number of copy destination and the library/template name. Click the OK button.

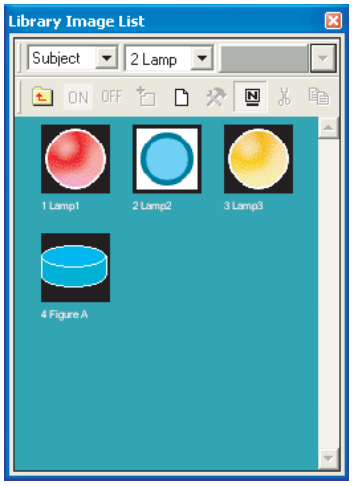


Template Property

4 The selected user created library/template is copied.



Library workspace

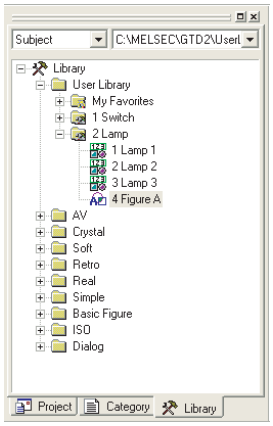


Library Image List

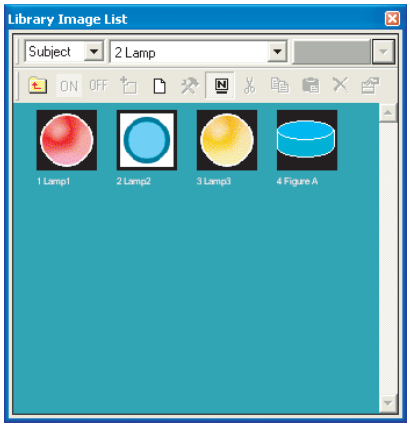
10.3.4 Deleting registered library/template

User created library or registered template is deleted.

1 Select the user created library/template for deletion.



Library workspace

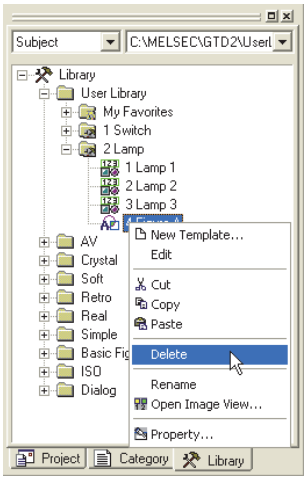


Library Image List

2 Perform the operations below:

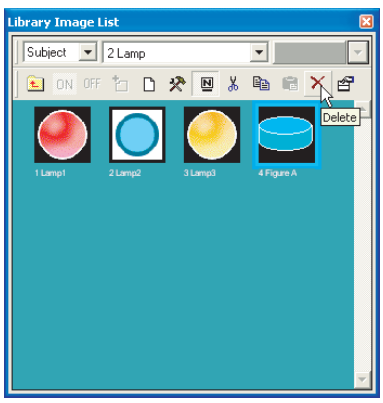
- Deleting in library workspace

Right click the mouse to select the [Delete] menu.



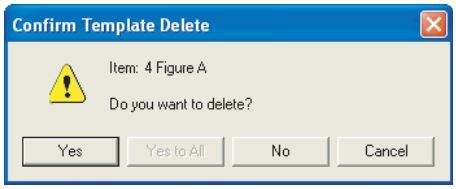
- Deleting in library image list

Click the (Delete) button.



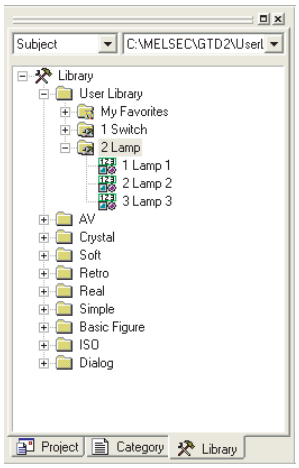
3 The Confirm Template Delete dialog box appears.

Click the Yes button.

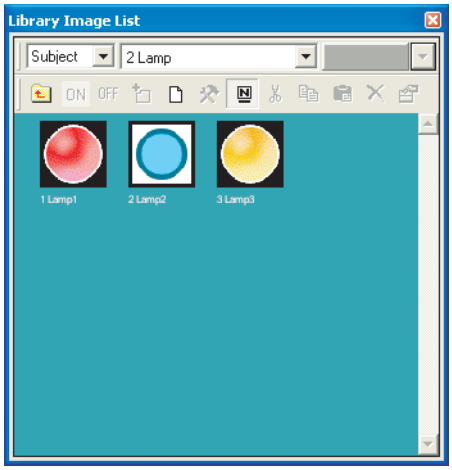


Confirm Template Delete

4 The selected user created library/template is deleted.



Library workspace



Library Image List

Point

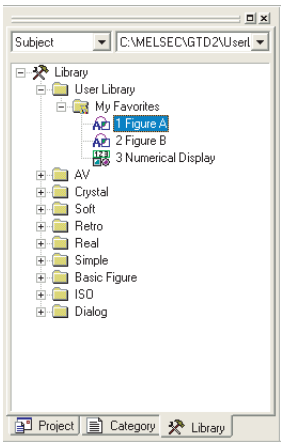
Deleting user created library

When the user created library is deleted, note that all templates registered on the library are deleted.

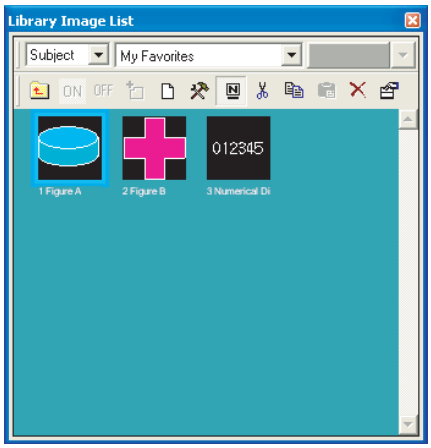
10.3.5 Editing registered objects and figures

Objects and figures registered to My Favorites or the user created library are edited.

1 Select the template for editing.



Library workspace

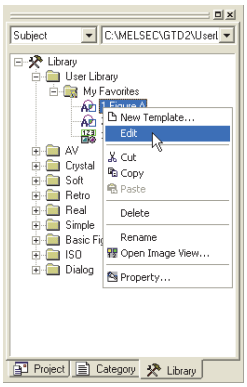


Library Image List

2 Perform the operations below:

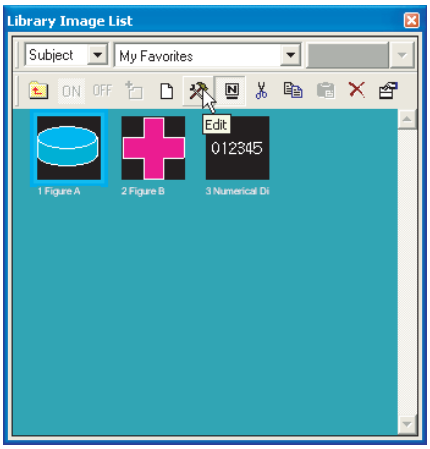
- Editing in library workspace

Right click the mouse to select the [Edit] menu.
(The template can be edited by double clicking.)

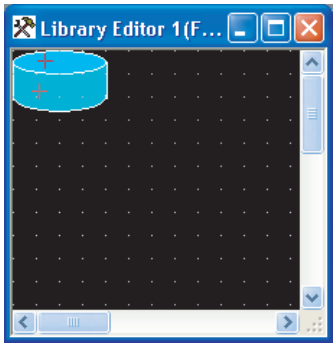


- Editing in library image list

Click the  (Edit) button.
(The template can be edited by double clicking.)



3 The library editor screen appears. Edit the template.



4 After editing the template, close the screen. (Click the button on the upper right of the screen.)
If you want to cancel the edited result on the library editor screen, cancel the edition operation before closing the library editor screen.

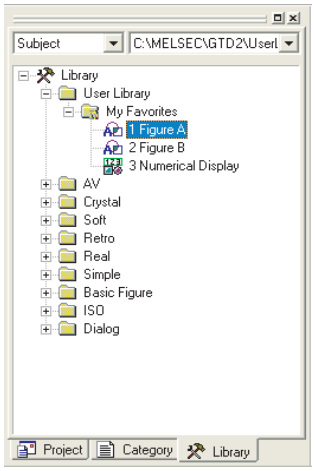
Hint! Undoing and redoing the action

- Undo
  Reverses the last action just performed.
  - Click (Undo).
  - Choose the [Edit] → [Undo] menu.
- Redo
  Re-executes the last action undone by clicking (Undo).
  - Click (Redo).
  - Choose the [Edit] → [Redo] menu.

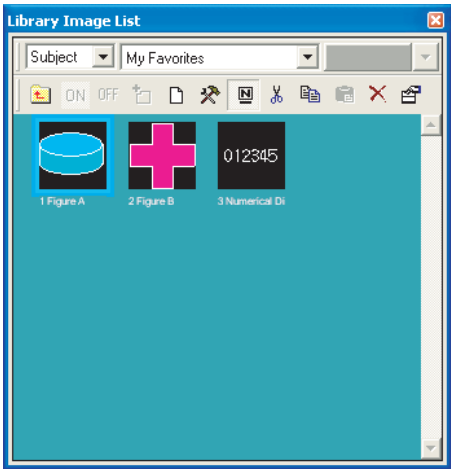
10.3.6 Changing library property

Number or name of user created library or registered template is changed.

1 Select the user-created library/template to be changed.



Library workspace



Library Image List

2 Perform the following operation:

- Editing in library workspace

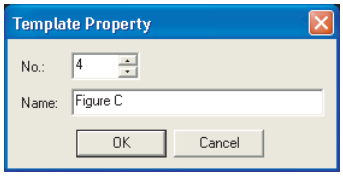
Right click the mouse to select [Property...].

- Editing in library image list

Click the (Property) button.

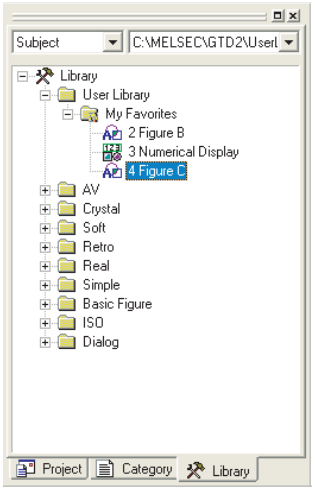
3 Template Property dialog box appears.

Change the library/template number and the library/template name. Click the OK button.

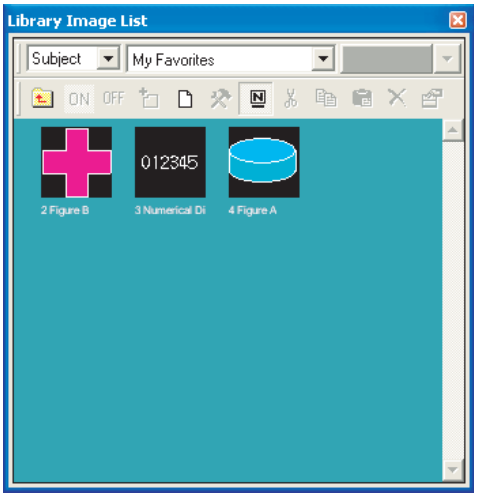


Template Property

4 Property of the selected user created library/template is changed.



Library workspace



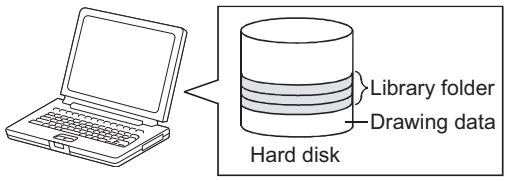
Library Image List

10.3.7 Saving a library

The data contained in the user library (My Favorites, User Library) can be saved in a folder separately from the one used for the currently edited library.
You can save two or more library folders in the hard disk of the PC to use the desired library suitable for drawing.
Saving the library on a floppy disk enables to share the library among multiple PCs.

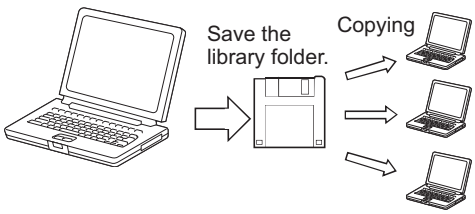
☞ For the library opening operation, refer to "Section 10.3.8 Loading library from folder".

(Ex. 1)



Save multiple library folders in the hard disk of the PC.

(Ex. 2)

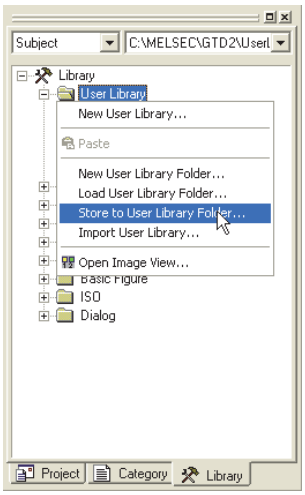


A created library is shared with multiple PCs.

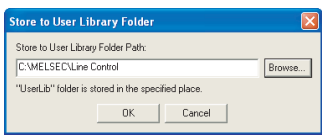
1 Saving created library

Save the created library according to the following procedure.

1. Select and right-click [Library] and then click [Store to User Library Folder...].



2. As the Specify Library dialog box appears, specify the storage destination of the library file. Then, click the OK button.



Designate the User Library

Point

To save multiple libraries

When storing multiple libraries, create a folder for each library folder since the library folder name is fixed.

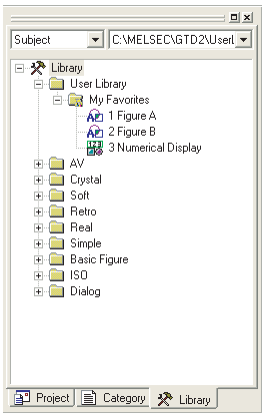
3 The User Lib folder is automatically created in the specified folder in which the library file (***.lbe) is saved.

At this time, [My Favorites] is saved as the "000_My Favorites.lbe" file.

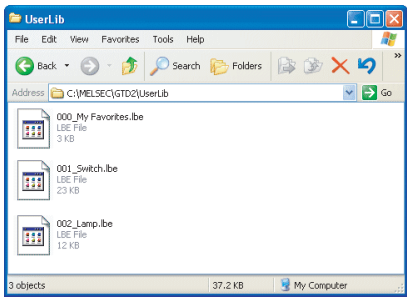
Note that the user library created by the user is named with the library number and name.

Example: User library "1abc"

1 abc → 001_abc.lbe
No. Name File name



Display on Windows®



Point

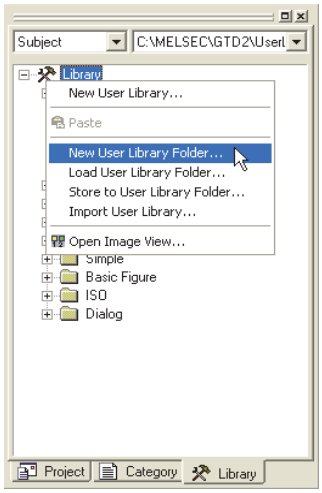
Saved library file

Do not operate the "User Lib" folder or files in the folder (adding, deleting or renaming) on Explorer.

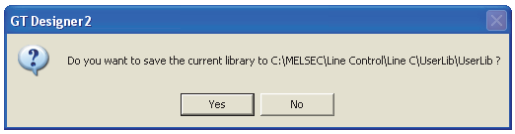
2 Creating a new library irrespective of the one already created.

Create a new library irrespective of the one already created, according to the following procedure.

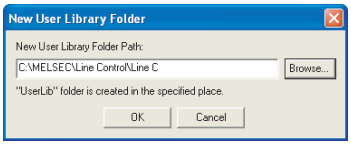
1 Select "Library" and click the right mouse button. Click on the [New User Library Folder] in the menu.



2 The dialog box appears asking whether the currently edited library data is saved or not.
When saving the library, click the Yes button.



3 Specify the storage destination (folder) of a library file to be created.
Then, click the OK button.

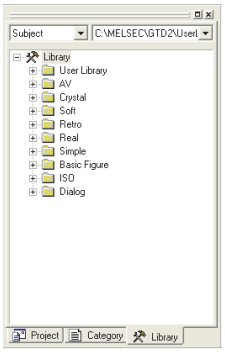


Designate the User Library

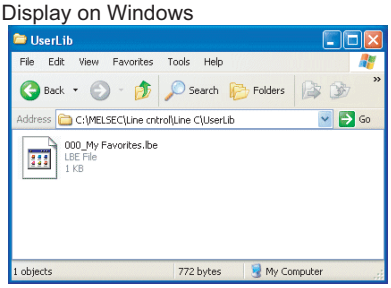
Point Saving multiple libraries

As the library file names are fixed, make sure to create a folder for each library file when saving multiple libraries.

4 The User Lib folder is automatically created in the specified folder and the library file (***.lbe) is saved (created) in it.



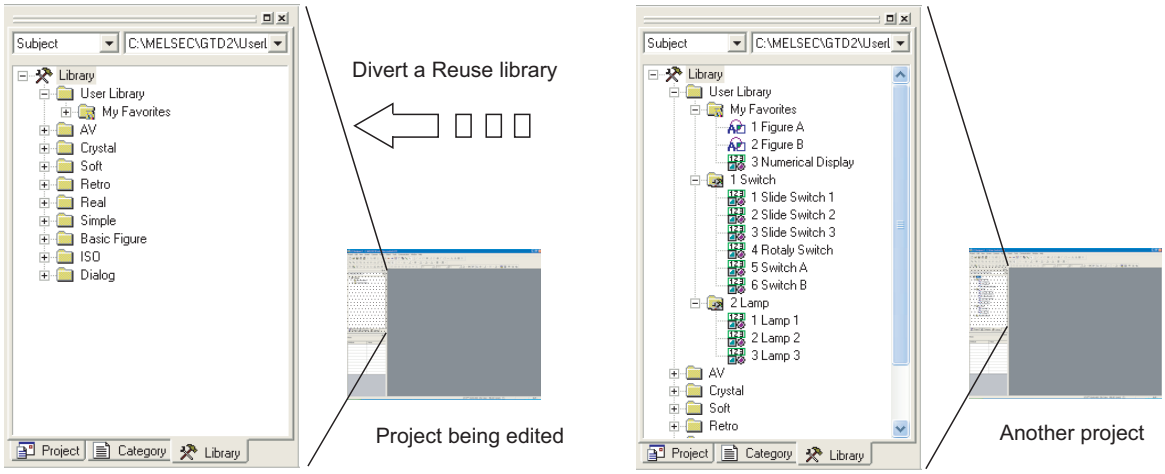
Display on Windows



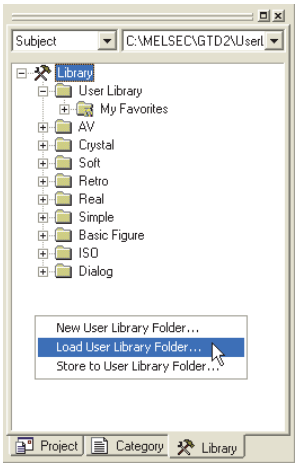
10.3.8 Loading library from folder

The specified user library folder can be opened to modify the data in My Favorites and user created libraries.
A user library folder created by another PC can also be opened to save it as a library of the project being edited.

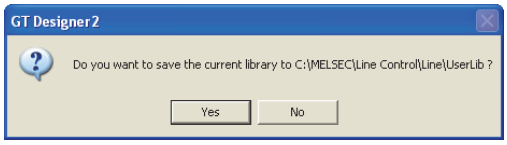
(Example) Loading the library of another project to the project being edited



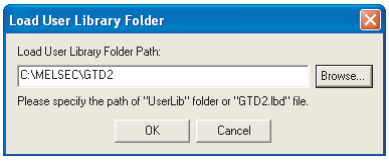
1 Click on a blank space in the library workspace and click [Load User Library Folder...] in the menu.



2 The dialog box to confirm if the currently editing library data are saved or not appears.
Click the Yes or No button.

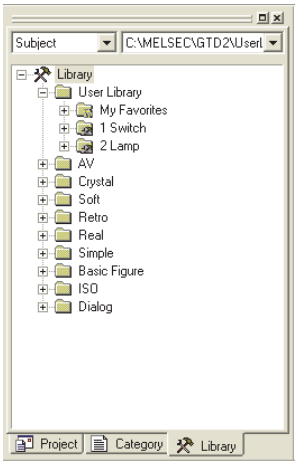


3 The dialog box for specifying the library to load is displayed.
Specify the storage folder of the user library folder (User Lib) to be loaded (one-upper hierarchy folder) and click on the OK button.



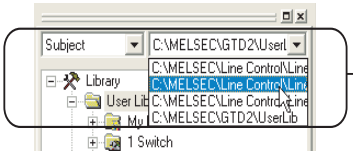
Designate the Specify library

4 The display of Library workspace switches to the library contents (My Favorites, User-created libraries) of the library file in the specified folder.



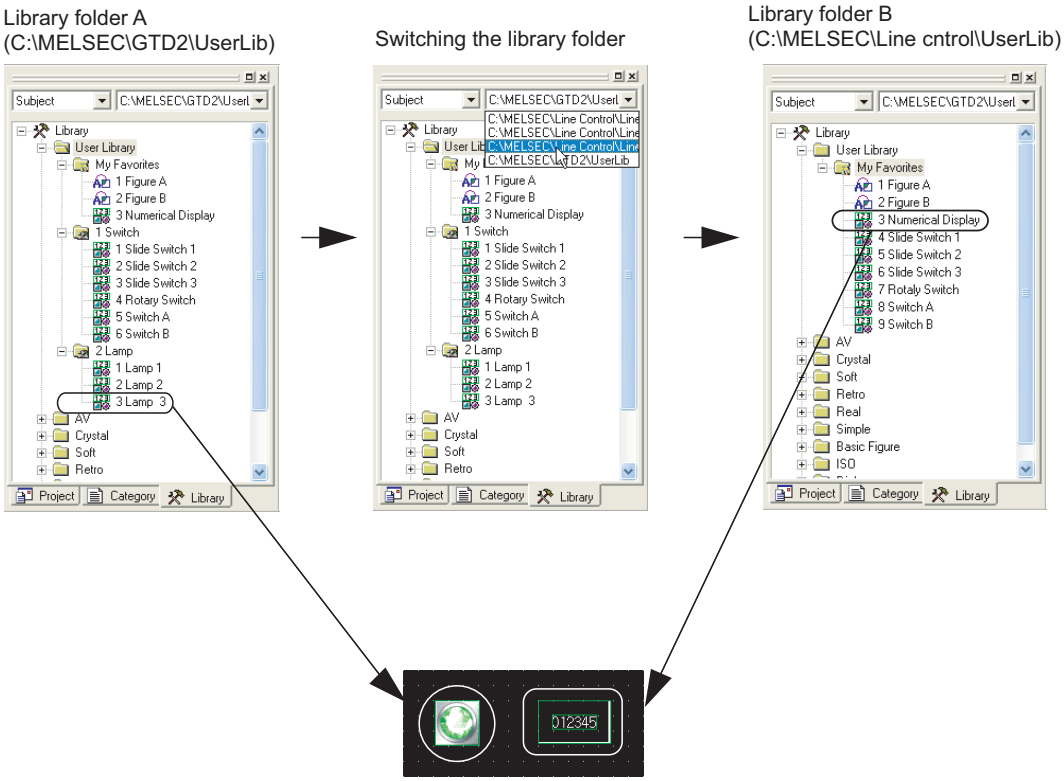
Hint! Loading multiple library folders to create a project

Alternate loading of multiple library folders facilitates use of multiple library folders with one project.



The storage location of the loaded library folder is displayed on the list box at the upper part of the library workspace. Multiple library folders can be easily loaded.

Ex.) After using the switch of library folder A, use the numerical display of library folder B.



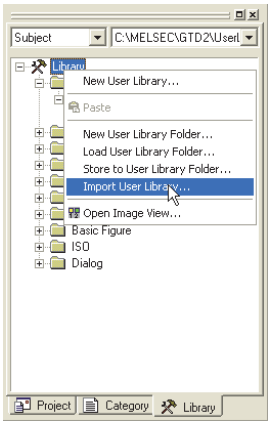
10.3.9 Importing a user library

Another library file that is different from the one being edited can be imported from the context menu located at the library workspace.

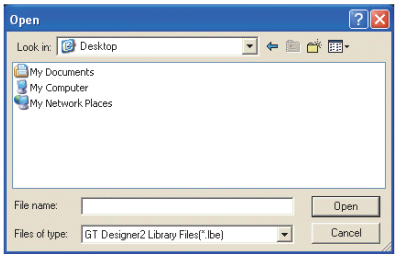
1 Importing the user library

Import the user library in the following procedure.

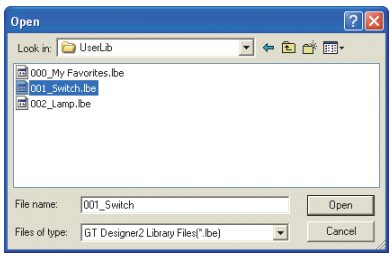
1 Select "Library" and click the right mouse button, and then click on the [Import User Library...] in the menu.



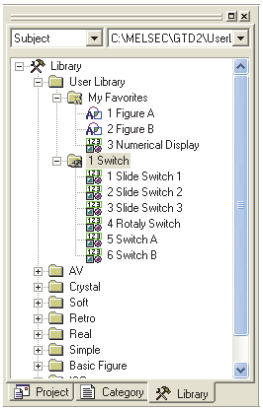
2 Select the type of the file to be imported (GTD2.lbd or *.lbe).



3 Select the file to be imported, and click on Open.



4 The imported file is added to the user library.



* If the file type is ***.lbe
  - Multiple files can be selected.
  - The selected ***.lbe file is automatically allocated to a spare library number when being added to the user library.
  - "000_My Favorites.lbe" is imported by template.

* If the file type is GTD2.lbd
  - The selected GTD2.lbd file is automatically allocated to a spare library number when being added to the user library.
  - "My Favorites" is imported by template.

(Note)

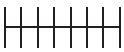
If the user library name of the imported GTD2.lbd includes a special symbol (\ /:;*?"<>|), or if the last character is a period (.), the user library name changes to "New User Library."

11. DRAW AND EDIT

11.1 Drawing Figures

11.1.1 Drawing figures

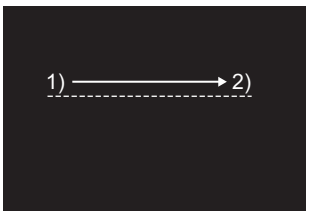
1 Draw each type of figure as follows:

Figure	Drawing example	Operation
Line		• (Line) • [Figure] → [Line] menu
Line FreeForm		• (Line FreeForm) • [Figure] → [Line FreeForm] menu
Rectangle	 	• (Rectangle) • [Figure] → [Rectangle] menu • (Rectangle (Filled)) • [Figure] → [Rectangle] (Filled) menu
Polygon		• (Polygon) • [Figure] → [Polygon] menu
Circle (including ellipse)	 	• (Circle) • [Figure] → [Circle] menu • (Circle (Filled)) • [Figure] → [Circle (Filled)] menu
Arc (including elliptic arc)		• (Arc) • [Figure] → [Arc] menu
Sector		• (Sector) • [Figure] → [Sector] form
Scale		• (Scale) • [Figure] → [Scale] menu
Pinping		• (Piping) • [Figure] → [Piping] menu

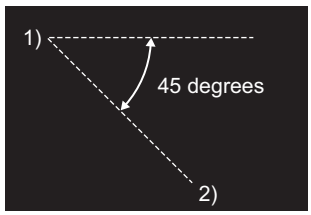
2 Drawing figures

(1) Line

Drag from start point 1) to end point 2), and release the left button of the mouse.

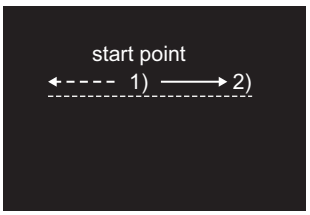


Draw while pressing the Shift key.



Lines can be drawn at the angle of 45 degrees.

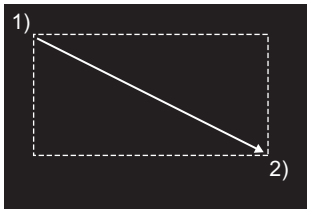
Draw while pressing the Ctrl key.



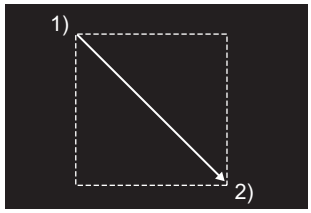
A line can be drawn from the start point as a center.

(2) Rectangle

Drag from start point 1) to end point 2), and release the left button of the mouse.

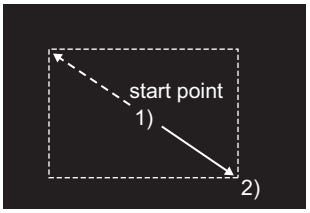


Draw while pressing the Shift key.



A square can be drawn.

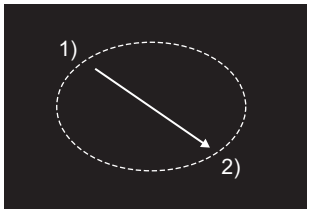
Draw while pressing the Ctrl key.



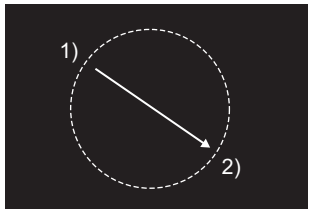
A rectangle can be drawn from the start point as a center.

(3) Circle

Drag from start point 1) to end point 2), and release the left button of the mouse.

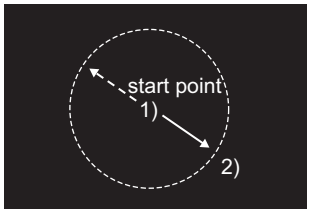


Draw while pressing the Shift key.



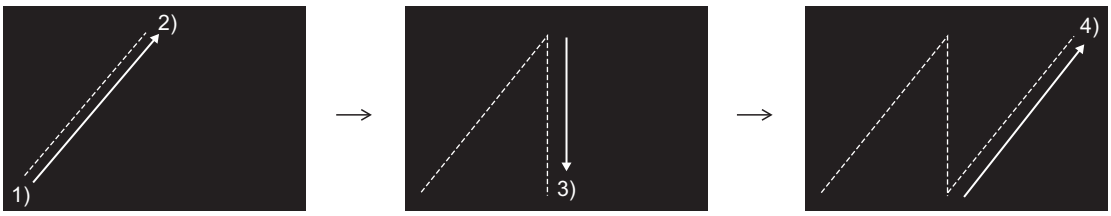
A complete round circle can be drawn.

Draw while pressing the Ctrl key.



A circle can be drawn from the start point as a center.

(4) Line Free Form

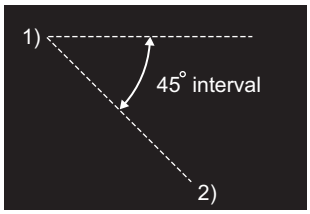


Drag from start point 1) to end point 2) of the first line, and release the left button of the mouse.

Click at the end point of next line 3).

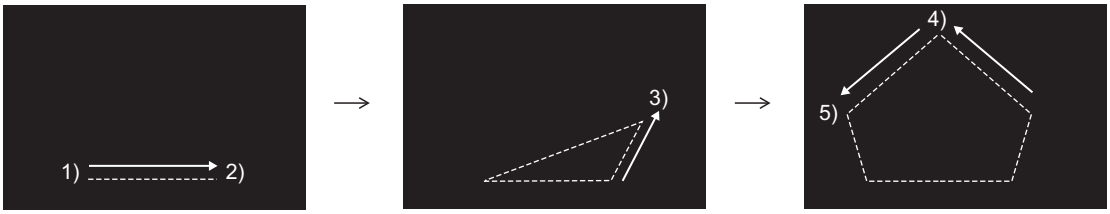
Repeat the operation in 3) until a figure is drawn. Double click end point 4) to complete drawing.

Draw while pressing the Shift key.



Lines can be drawn at the angle of 45° interval.

(5) Polygon

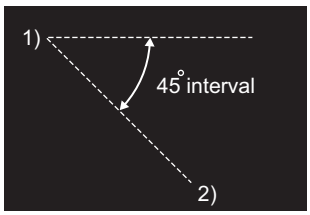


Drag from start point 1) to end point 2) of the first side, and release the left button of the mouse.

A dashed line is displayed. Click at the end point of next side 3).

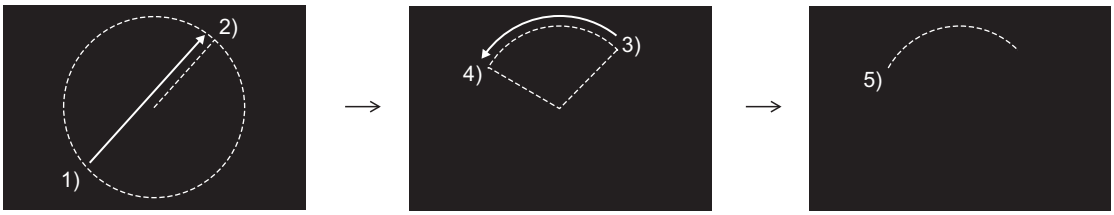
Repeat the operation in 3) until the desired figure is drawn. Double click 4) to complete drawing.

Draw while pressing the Shift key.



Lines can be drawn at the angle of 45° interval.

(6) Arc

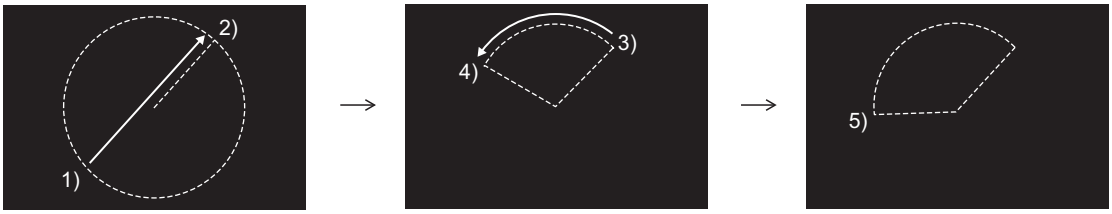


Drag from start point 1) to end point 2) to determine the radius of arc. A dashed line is displayed inside the circle.

Click the left mouse button at the start point of arc 3), and move the cursor to end point 4).

Click end point 4) to complete drawing.

(7) Sector



Drag from start point 1) to end point 2) to determine the radius of sector. A dashed line is displayed inside the circle.

Click the left mouse button at the start point of sector 3), and move the cursor to the end point 4).

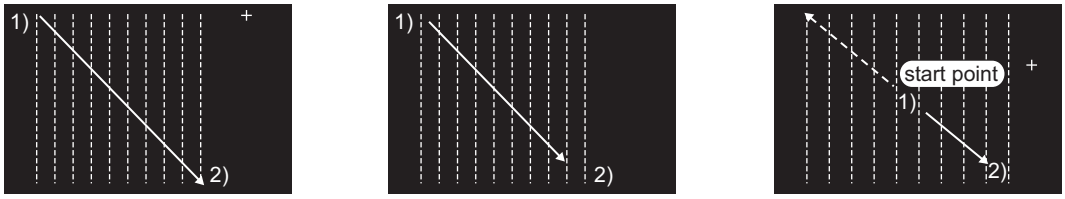
Click end point 4) to complete drawing.

(8) Scale

Drag from start point 1) to end point 2), and release the left button of the mouse.

Draw while pressing the Shift key.

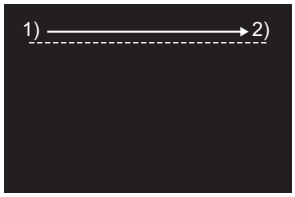
Draw while pressing the Ctrl key.



A scale with the same vertical and horizontal sizes can be drawn.

A scale can be drawn from the start point as a center.

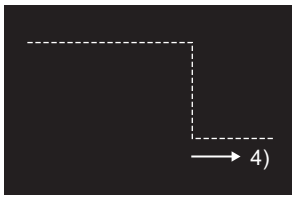
(9) Piping



Drag from start point 1) to end point 2) of the first line, and release the left button of the mouse.

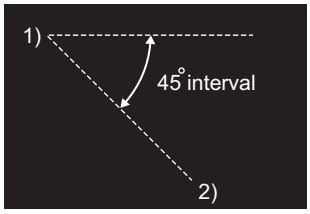


Click at the end point of next line 3).



Repeat the operation in 3) until a figure is drawn. Double click at the end point 4) to complete drawing.

Draw while pressing the Shift key.

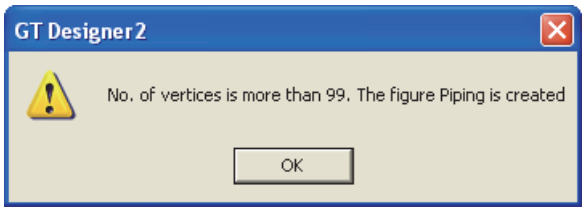


Lines can be drawn at the angle of 45° interval.

Point

When using piping.

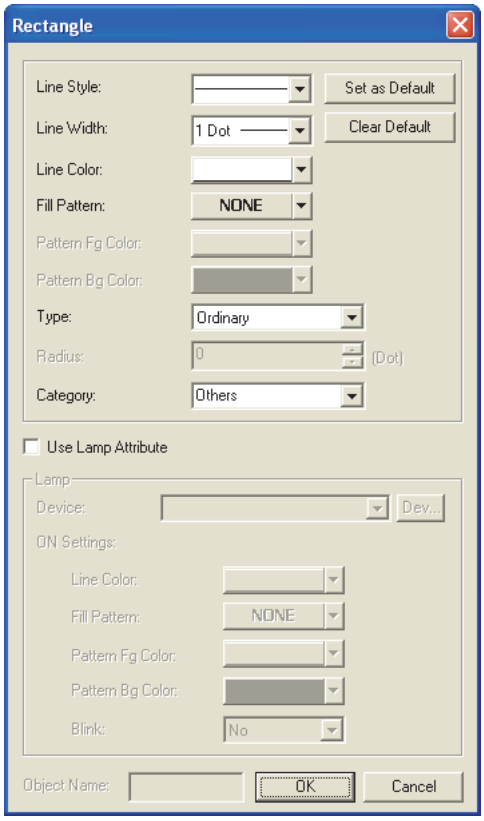
- The vertex can be set up to 100 points. When 100th vertex is set, the editing is defined as the message shown.



- When imported by using GT Designer2 whose version is not compatible with piping, piping figure is deleted.

3 Double click a figure to determine the attribute.

Ex.: Setting of Rectangle



Item	Description
Line Style	Line style of the figure is selected.
Line Width *3	Line width of the figure is selected.
Line Color	Line color of the figure is selected.
Fill Pattern *4	Filling pattern is selected.
Pattern Fg Color *4	Display color of filling pattern is selected.
Pattern Bg Color *4	Background color of filling pattern is selected.
Type *6	Slecet a type of rectangle from Ordinary, Rounded or Octagonal.
Radius	Radius is set when Rounded or Octagonal is selected from Type.
Category	If a category is assigned to the figure, the category is selected. (☞ Section 12.1.2 Batch setting and managing objects/figures for each purpose (Category workspace))
Set as Default *5	Click this to use the current attribute as the default user setting. In the next attribute setting, the default user setting is displayed.
Clear Default	Click this to return the attribute as the default value to the initial status.
User Lamp Attribute	Check this to set the lamp attribute. When the lamp attribute is set, the figure color can be changed when a bit device on in a same way as lamp display. When the lamp attribute is set, it is handled as an object.
Device	The device is set. (Bit specification)
Blink	Select the blink speed from low, medium or high.
Object Name	Valid if "Use Lamp Attribute" is checked. Up to 30 characters can be entered regardless of one or two-byte characters.

Point

When setting Lamp Attribute

The display and operation on GT Designer2 are the same as those of an object. However, the object ID is not assigned.

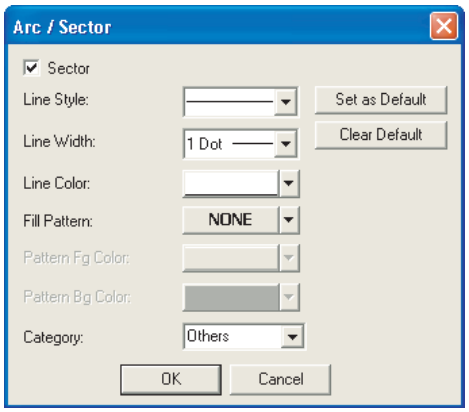
Max. setting points per one screen is counted as a lamp (an object).

For details of max. setting points per one screen of object, refer to the following manual.

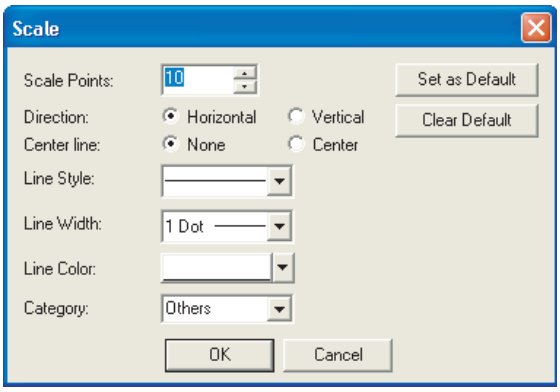
☞ GT Designer2 Version ☐ Specifications of Available Object Functions

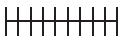
Double click a figure to determine the attribute.

Ex.: Setting of Arc/Sector



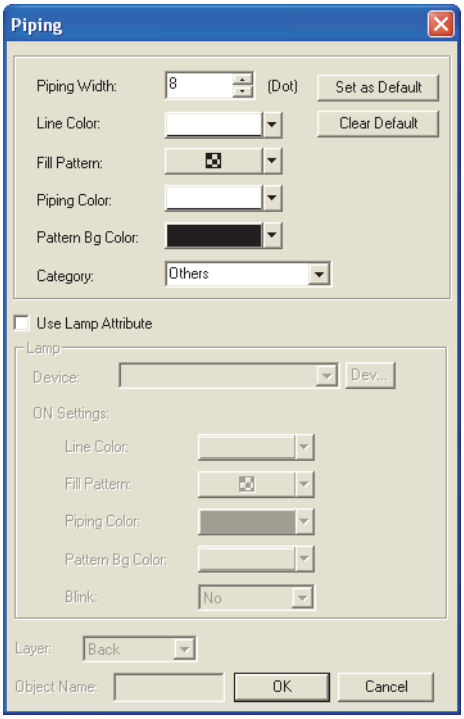
Ex.: Setting of Scale



Item	Description
Sector *1	This is checked to create a sector. Checked Not checked 
Scale Points *2	Number of lines (2 to 255) on the scale is set.
Direction *2	Direction of the scale is selected. Horizontal:  Vertical: 
Center line *2	Position of the center line that makes a right angle to the scale is selected. Center:  None: 
Line Style	Line style of the figure is selected.
Line Width *3	Line width of the figure is selected.
Line Color	Line color of the figure is selected.
Fill Pattern *4	Filling pattern is selected.
Pattern Fg Color *4	Display color of filling pattern is selected.
Pattern Bg Color *4	Background color of filling pattern is selected.
Category	If a category is assigned to the figure, the category is selected. (☞ Section 12.1.2 Batch setting and managing objects/figures for each purpose (Category workspace))
Set as Default *5	Click this to use the current attribute as the default user setting. In the next attribute setting, the default user setting is displayed.
Clear Default	Click this to return the attribute as the default value to the initial status.

Refer to the next page for details of *1 to *5.

Ex.: Setting of Piping



Item	Description
Piping Width	Piping width of the figure is set in dot unit.
Piping Color	Piping color of the figure is selected.
Line Color	Line color of the figure is selected.
Fill Pattern*4	Pattern of the figure is selected.
Pattern Bg Color*4	Background color pattern of the figure is selected.
Category	If a category is assigned to the figure, the category is selected. (☞ Section 12.1.2 Batch setting and managing objects/figures for each purpose (Category workspace))
Set as Default*5	Click this to use the current attribute as the default user setting. In the next attribute setting, the default user setting is displayed.
Clear Default	Click this to return the attribute as the default value to the initial status.
Use Lamp Attribute	Check the box when setting lamp attribute. When the lamp attribute is set, turning on the bit device as the lamp display can be change the figure color. When the lamp attribute is set, the figure is treated an object.
Device	Device is set. (Bit setting)
Blink	Blinking speed is selected from low, middle, and high speed.
Layer	Layer setting is selected from the Front and Back screen.
Object Name	Object Name is valid when [Use Lamp Attribute] is checked. Max. 30 characters can be input regardless of whether the character is single byte or double byte.

*1 Sector

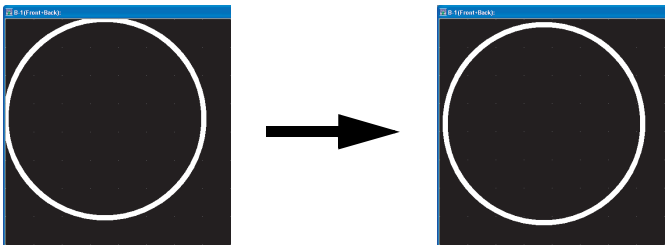
This is the setting item only for Arc and Sector.

*2 Scale points, Direction and Center line

These are the setting items only for Scale.

*3 Line Width

A figure of which line width is 3 dots or more may be partly laid off the screen if it is placed at the edge of the screen. Adjust the figure position as necessary.

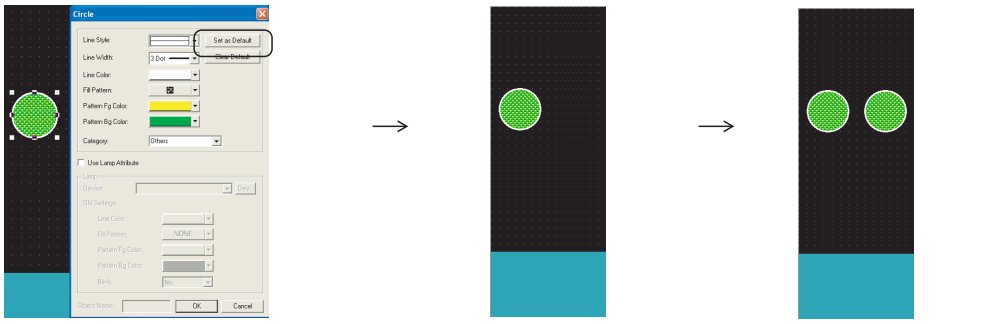


*4 Fill Pattern, Pattern Fg Color, Pattern Bg Color

These setting items are applicable to Rectangle, Circle (ellipse), Polygon, Arc (elliptic arc), and Sector only.

*5 Set as Default

By setting the user-set attributes as defaults, a figure of the same attributes can be drawn consecutively.



Click Set as Default button.

Next time when the same figure is drawn, it will be formed based on the values set as defaults.

*6 Type

Selectable form Ordinary, Rounded, Octagonal.

(When Ordinary is selected) (When Rounded is selected) (When Octagonal is selected)



* When Rounded is selected from Type and Line Witch other than 1 dot is selected, only a straight line can be selected from Line Style.

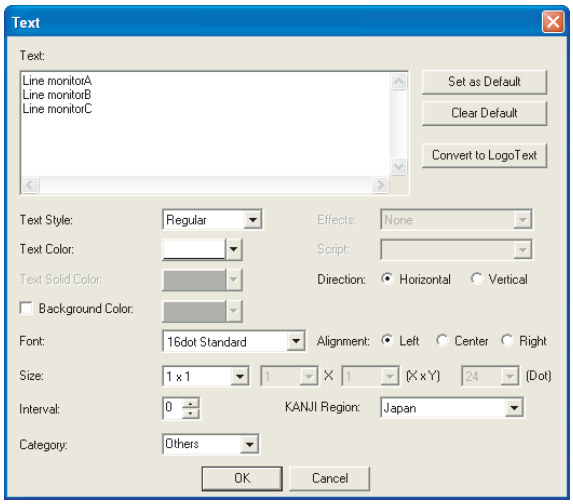
11.1.2 Entering texts

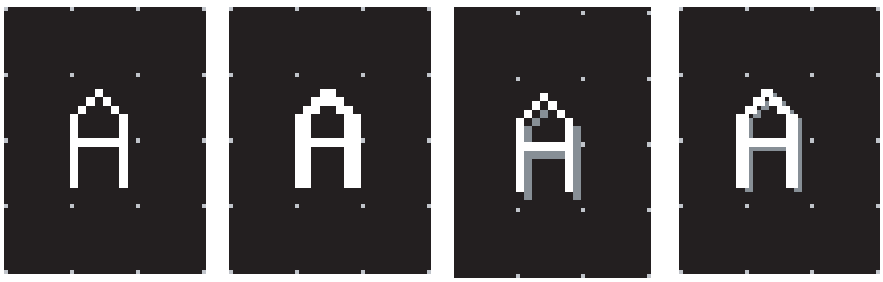
1 Perform either of the following operations.

- Click (Text) on the Figure toolbar.
- Choose the [Figure] → [Text] menu.

2 Clicking on the screen displays the Text dialog box.

Enter the texts to be displayed, set their attributes and click the OK button.
Then, the entered texts will be displayed.



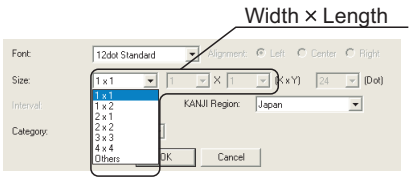
Item	Description
Text:	Enter the text to be displayed. • Up to 512 characters can be entered as texts. (A line feed occupies one character.) • A text can be entered on multiple lines. To start a new line (line feed), press the Enter key at the end of the current line. <Entry example> <Display example> 
Text Style:	Select the text display format.  Regular Bold Solid Raised
Text Color:	Select the text display color.
Effects:	Select the effect of the character. (The option becomes valid if a Windows® font is selected.)
Script:	The scripts that can be selected with the selected Windows® font are displayed. (The option becomes valid if a Windows® font is selected.

Item	Description
Direction:	Select the text orientation (horizontal, vertical). "Horizontal" AAA "Vertical" A A A
Alignment:	Select the position by which character strings on multiple lines will be aligned. (This item is selectable only when the "Direction" item is set to "Horizontal".) Left: AAAA / BB / CCCC Right: AAAA / BB / CCCC Center: AAAA / BB / CCCC
Text Solid Color:	Select the solid color when the "Text Style" item is set to "Solid" or "Raised".
Background Color*3	Check this item to apply the background color to the text.
Font:	Select the font for the text. (GT10 does not support 12-dot Standard or 16-dot Standard (Mincho).) • 6 × 8dot • 12dot Standard • 16dot Standard • 12dot HQ Mincho • 12dot HQ Gothic • 16dot HQ Mincho • 16dot HQ Gothic • True Type Mincho • True Type Gothic • Stroke
Size:	Select the text size (width × height magnification). Depending on the font, the applicable text size and magnification range change as described in *1.
Interval:	Set the interval, i.e., space between lines of character strings. AAA / BBB — Interval
KANJI Region*2:	Select a Kanji region for the text. Japan: Displayed in Japanese kanji character. China (GB)-Mincho: Displayed in simplfied Chinese. China (Big5)-Gothic: Displayed in traditional Chinese. Example) Difference between "Japan" and "China (GB)-Mincho" "Japan" "China (GB)-Mincho" This setting is active only when any of the following "Fonts" is selected on the Text tab. •12dot Standard •16dot Standard •12dot HQ Mincho •12dot HQ Gothic •16dot HQ Mincho •16dot HQ Gothic
Category:	Select the category assigned to a figure. (☞ Section 12.1.2 Batch setting and managing objects/figures for each purpose (Category workspace)
Convert to Logo text	Convert to the logo text.
Set as Default	Click this item to set the current attributes as the user defaults. At the next attribute setting, the attributes set as the defaults will be displayed.
Clear Default	Click this item to return the attributes set as defaults to the initial settings.

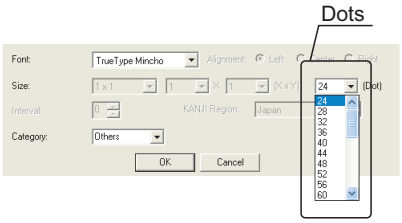
*1

Font	Size	
	Width × Length (1)	Dots (2)
6 × 8dot	N/A	N/A
12dot Standard *2	1 × 1 to 8 × 8	
16dot Standard *2	0.5 × 0.5 to 8 × 8	
12dot HQ Mincho	2 × 2 to 8 × 8	
12dot HQ Gothic	2 × 2 to 8 × 8	
16dot HQ Mincho	2 × 2 to 8 × 8	
16dot HQ Gothic	2 × 2 to 8 × 8	
True Type Mincho	N/A	24 to 128 dots (4-dot unit)
True Type Gothic		24 to 128 dots (4-dot unit)
Font provided for Windows® OS		8 to 128 dots (1 dot increment)
Stroke		

(1) Width × Length



(2) Dots

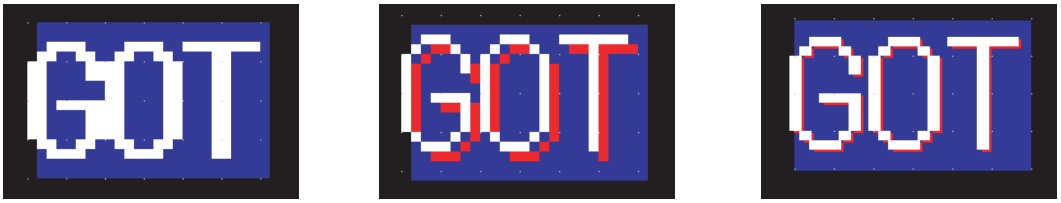


*2 The 12-dot standard font and 16-dot standard font use Unicode 2.1, and for part of the Traditional Chinese and Korean character sets, characters similar to the proper character may be displayed.

To display Simplified Chinese and Traditional Chinese characters on the GT16☐☐ or GT15☐☐, install the following fonts (Option OS) so that the appropriate characters can be displayed.
Set the kanji region for each object and install the following fonts.

Standard font [China GB] 12-dot characters)	The Simplified Chinese (GB) font is a GB2312-encoded font mainly used on mainland China.
Standard font [China GB] 16-dot characters	
Standard font [China Big5] 12-dot characters	The Traditional Chinese (Big5) font is a Big 5-encoded font mainly used in Taiwan.
Standard font [China Big5] 16-dot characters	

*3 When the text background color and text style (Bold, Solid, Raised) are used simultaneously, the left or right of the text string may be located out of the text backgroud color.



Point

(1) Precautions for vertical text

If the text is displayed in the vertical direction, the text is displayed as follows:

(Example 1) In the case of "-"

Horizontal direction: Terminal

Vertical direction:

T
E
R
M
I
N
A
L

(Example 2) In the case of "()"

Horizontal direction: (Caution)

Vertical direction:

(
C
a
u
t
i
o
n
)

(2) Texts supported the GOT

(a) The 6 × 8 dot font uses ASCII characters 20H to 7EH*.
When characters other than above are used, they are displayed differently between GT Designer2 and GOT.

- For GT Designer2: Unsupported characters are displayed as "■".
- For GOT: Characters after unsupported ones cannot be displayed.

Example) | A | B | C | ア | D | イ | 1 | 2 | 3 |

Display on GT Designer2	Display on GOT
A B C ■ D ■ 1 2 3	ABC

Not displayed.

* Alphanumeric: A to Z, a to z, 0 to 9
Symbol : !,",#,$,%,&,',(,),*,+,-,.,.,/,:,;,
<,=,>,?,@,[,\,],^,_,`,{,|,},~,space

(b) The GOT and GT Designer2 supports common Unicode 2.1-compatible fonts. Therefore, they can display fonts used in various countries, e.g. Japanese, Korean, Chinese (Pekingese), English, German and French.For multi-language input, refer to the following section.

☞ Section 12.4 Entering Multiple Languages [Multi-language input function]

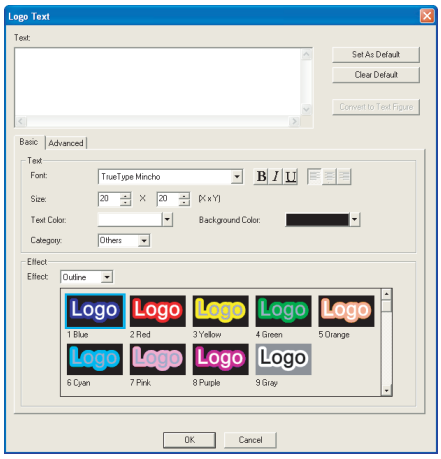
11.1.3 Entering Logo Text

1 Perform either of the following operations.

- Click (Logo text) on the Figure tool bar.
- Choose the [Figure] → [Logo text] menu.

2 Clicking on the screen displays the Text dialog box.
Enter the texts to be displayed, set their attributes and click the OK button.
Then, the entered texts will be displayed.

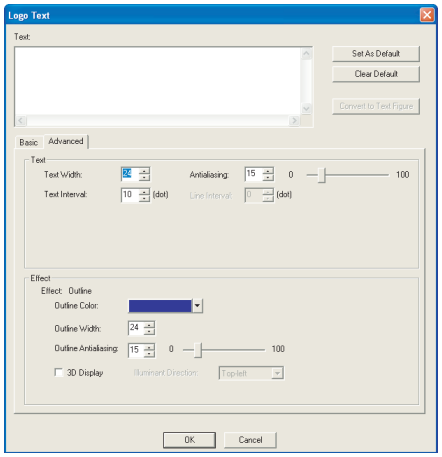
(Basic)



Item		Description
Text:		Enter the text to be displayed. • Up to 512 characters can be entered as texts. (A line feed occupies two characters.) • A text can be entered on multiple lines. To start a new line (line feed), press the Enter key at the end of the line.
Set as Default		Click this item to set the current attributes as the user defaults. At the next attribute setting, the attributes set as the defaults will be displayed.
Clear Default		Click this item to return the attributes set as defaults to the initial settings.
Convert to Text Figure		Convert to the Text Figure.
Font:		Select the font for the text. • True Type Mincho • True Type Gothic • Windows Font
Text style:	B	Set the text style to Bold. 
	I	Set the text style to Italic face. 

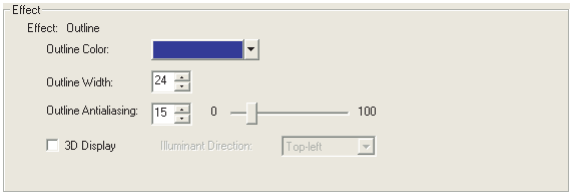
Item		Description
Text style:		Apply an underscore (straight line) to the font. 
(Alignment:) 		Select the position by which character strings on multiple lines will be aligned.
Size:	width	Set the horizontal size of the font. (1 to 800)
	height magnification	Set the vertical size of the font. (1 to 800)
Text Color:*1		Set the text color.
Background Color:		Select the background color for the text.
Effect:		(Outline) (Solid) (3D) (Stamp) (Neon) 

(Advanced)



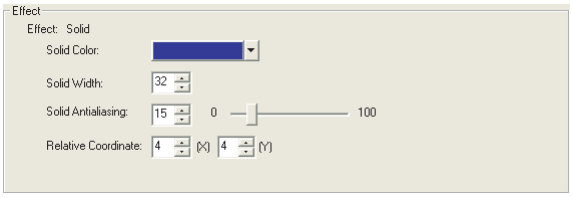
Item	Description
Text Width:	Set the thickness of the text. (0 to 100)
Antialiasing:	Set the antialiasing (which smoothens the aliasing of pixels) value of the text. (0 to 100)
Text Interval:	Set the spacing between texts. (0 to 100)
Line Interval:	Set the spacing between the lines of texts. (0 to 16)

(Effect: Outline)



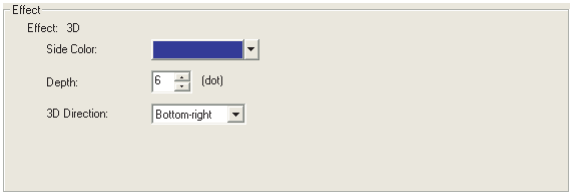
Item	Description
Outline Color:	Set the color of the outline.
Outline Width:	Set the thickness of the outline. (0 to 100)
Outline Antialiasing:	Set the antialiasing (which smoothens the aliasing of pixels) value of the outline. (0 to 100)
3D Display	When this is checked, the outline is shown in solid display.
Illuminant Direction	Set the light-source direction in solid display.

(Effect: Solid)



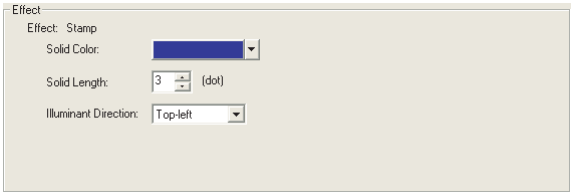
Item		Description
Solid Color:*1		Set the shade color.
Solid Width:		Set the thickness of the shade. (0 to 100)
Solid Antialiasing:		Set the antialiasing (which smoothens the aliasing of pixels) value of the shade. (0 to 100)
Relative Coordinate:	(X)	Set the X-axis relative coordinate of the shade.
	(Y)	Set the Y-axis relative coordinate of the shade.

(Effect: 3D)



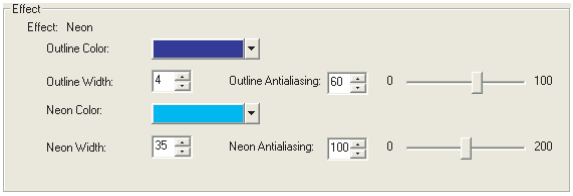
Item	Description
Side Color:*1	Set the color of the solid lateral surface.
Depth:	Set the depth of the solid part. (1 to 20: dot)
3D Direction:	Set the solid direction.

(Effect: Stamp)



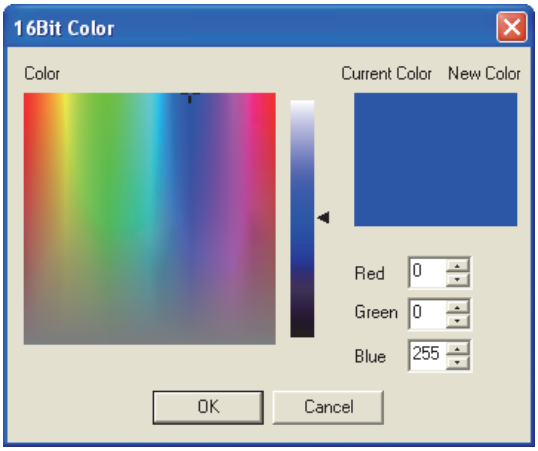
Item	Description
Solid Color:*1	Set the shade color of the stamp.
Solid Length:	Set the length of the stamp shade. (1 to 20: dot)
Illuminant Direction:	Set the light-source direction of the shade.

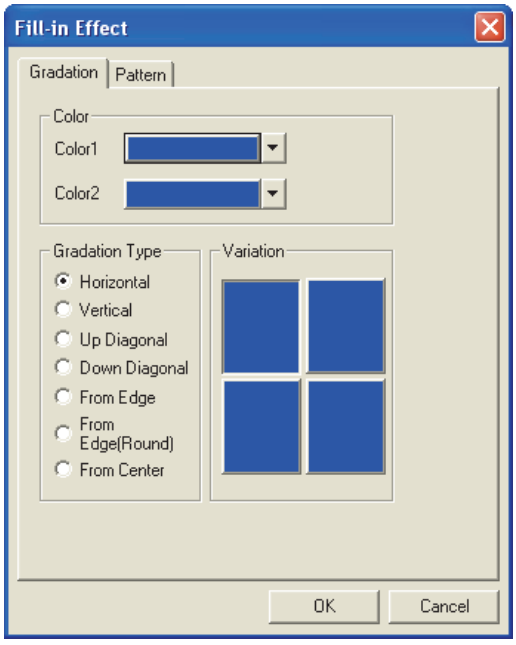
(Effect: Neon)



Item	Description
Outline Color:*1	Set the color of the outline.
Outline Width:	Set the thickness of the outline. (0 to 100)
Outline Antialiasing:	Set the antialiasing (which smoothens the aliasing of pixels) value of the outline. (0 to 100)
Neon Color:	Set the color of the neon.
Neon Width:	Set the thickness of the neon. (0 to 100)
Neon Antialiasing:	Set the antialiasing (which smoothens the aliasing of pixels) value of the neon. (0 to 200)

*1 When other color or the filling effect is selected in the color setting, the following windows are displayed for users to set.
Even when Color Settings are changed in System Settings, the setting of the color selected in "Filled Effect..." is saved.





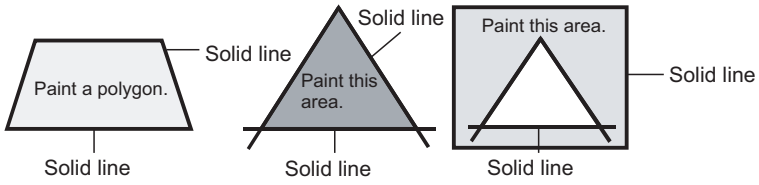
11.1.4 Painting figures

Closed area and polygon are painted.

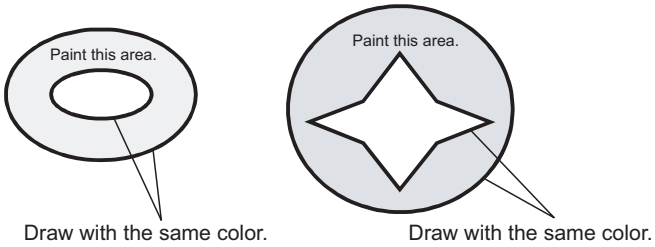
1 Before painting (filling)

Draw areas for painting as follows:

(1) Close the area to paint with solid lines.



(2) Use the same color for outlines of the area to be painted.



Point

(1) Precautions for figure to be painted

(a) Note that any opening of the outline leads to protrusion of paint from the edge of the figure.

(b) Inside of the figure drawn with the same boundary color as the background color cannot be painted. Select a boundary color different from the background color.

(c) The figure may not be painted if the paint area is painted in Fill pattern and the pattern background color is the same as the boundary color.
Shift the paint position.

(2) Redisplay

Note that use of paint may cause some area to remain unpainted.
Executing redisplay can display the screen correctly.
Refer to the following section for redisplay.

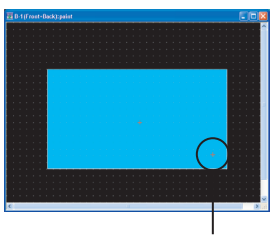
☞ Section 7.10 Redisplaying the Screen

Remark

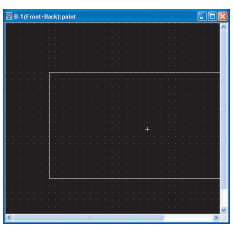
Display of paint mark

If a paint mark is not displayed on the screen, the marked figure is not painted.

When paint mark is displayed



When paint mark is not displayed



2 Painting

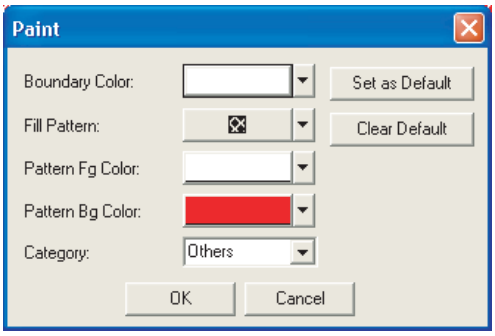
1 Perform either of the following operations.

- Click (Paint) on the Figure toolbar.
- Choose the [Figure] → [Paint] menu.

2 Move the cursor to the area for painting and click within the paint area.

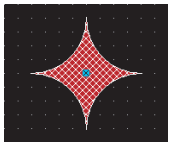


3 The paint setting dialog box appears. Set the attribute, and click the OK button.



Item	Description
Boundary Color	The boundary color of the area is selected. The line set here is the boundary line of the painted area.
Fill Pattern	Filling pattern is selected.
Pattern Fg Color	The color of filling pattern is selected.
Pattern Bg Color	Background color of filling pattern is selected.
Category	When a category is assigned to the figure, the category is selected. (☞ Section 12.1.2 Batch setting and managing objects/figures for each purpose (Category workspace))
Set As Default	Click this to use the current attribute as the default user setting. In the next attribute setting, the default user setting is displayed.
Clear Default	Click this to return the attribute as the default value to the initial status.

4 The paint mark is displayed at the click position and the figure is painted.



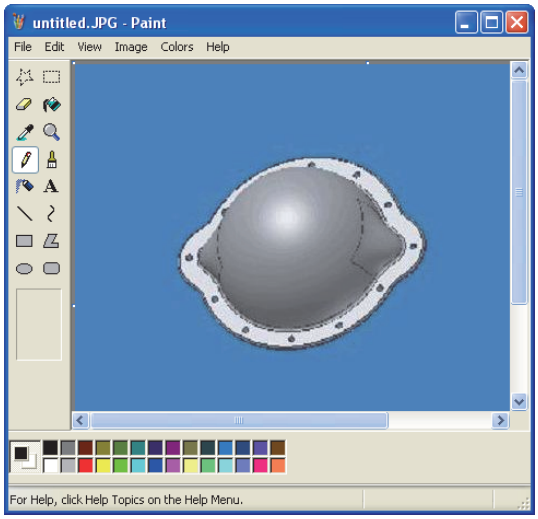
The paint mark is displayed on the GT Desinger2 only and not on the GOT.
To edit the attribute of painting, double click the paint mark.

11.1.5 Capture function

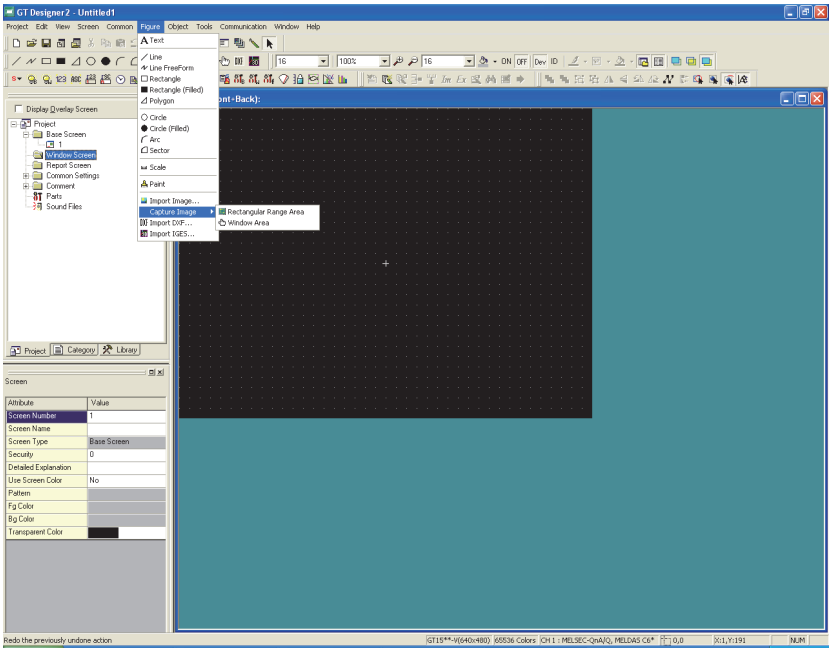
A specified area of the figure can be captured and imported to the GT Designer2 as BMP data.

1 Operation method

1. Click the window that has the figure to import to make it active.



2. Define capture area from [Capture Image] in the menu [Figure] on GT Designer2.
   Once capture area is defined, GT Designer2 window becomes minimized. Only the function to specify capture area can be operated. To cancel this function, press the ESC key.

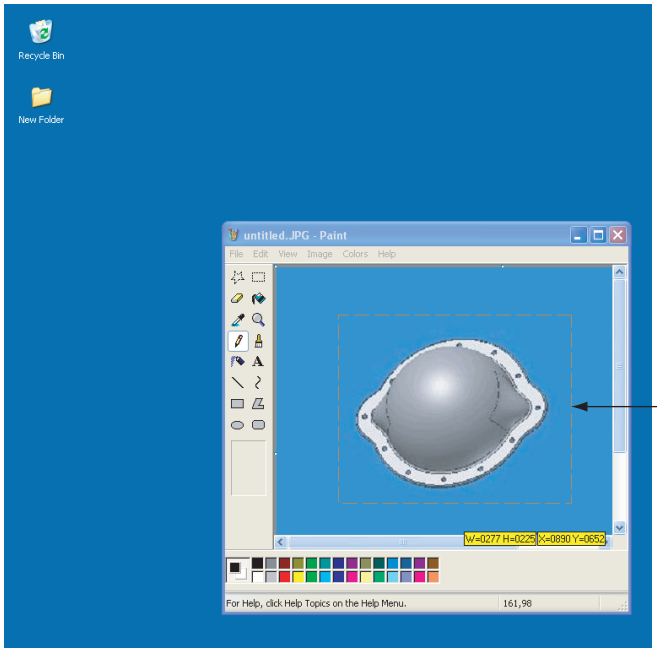


3 There are two ways to specify a capture area.

[Rectangular Range Area]

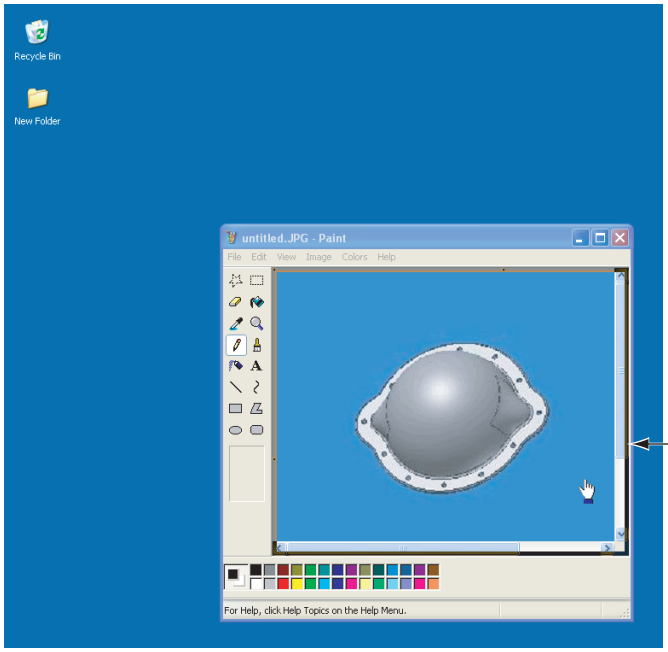
Selecting [Rectangular Range Area] minimizes the GT Designer2 window, and the cursor shape changes to for [Rectangular Range Area].

Drag the cursor from the starting point to the ending point to determine the range to be captured.

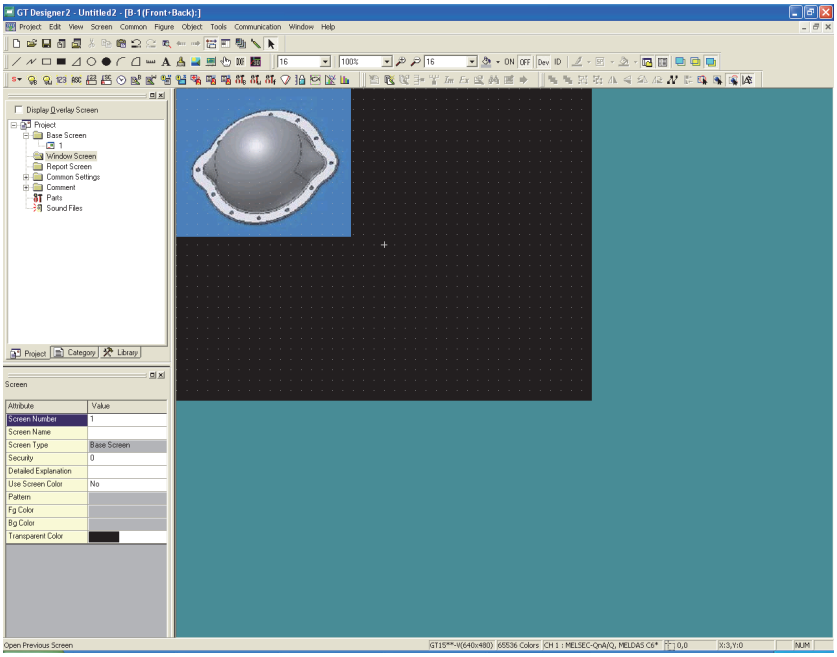


[Window Area]

Selecting [Window Area] minimizes the GT Designer2 window and the cursor changes to for [Window Area]. The area to be captured is framed with black line by moving into the client area. Click the area to select it.



4 After clicking the screen of the GT Designer2, the captured figure can be imported to GT Designer2 as BMP data.



2 How to edit

Refer to Section 11.1.6 Pasting figure data of BMP/JPEG/DXF file for how to edit the imported BMP data.

Point

Note the following points for capturing data.

- It may take some time for the screen to appear when a large captured figure is imported or when the screen on which many figures are pasted is opened.
- When the size of the captured data is bigger than that of temporary area, it is automatically adjusted to fit the temporary area.
- Some files that are created with DirectX or animation application cannot be captured.

11.1.6 Pasting figure data of BMP/JPEG/DXF file

This function imports figure data (BMP/JPEG/DXF (AutoCAD Data Exchange Format) format) to GT Desinger2 and pastes the figure on the screen.

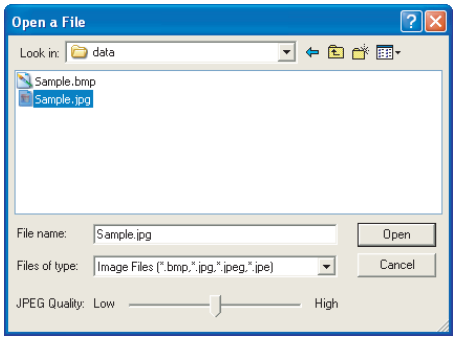
1 Operation method

1 Perform either of the following operations:

File format	Description	Operation
BMP	BMP format file is imported as an image.	• (Import Image) • [Figure] → [Import Image...] menu
JPEG GT16 GT15 GT Soft GOT1000	JPEG format file is imported as an image.	• (Import Image) • [Figure] → [Import Image...] menu
DXF	DXF format file is imported as an image.	• (Import DXF) • [Figure] → [Import DXF...] menu

2 The Open a File dialog box appears.

Select the file of the figure data to be imported and click the Open button.



Point

Note the following when opening a JPEG file.

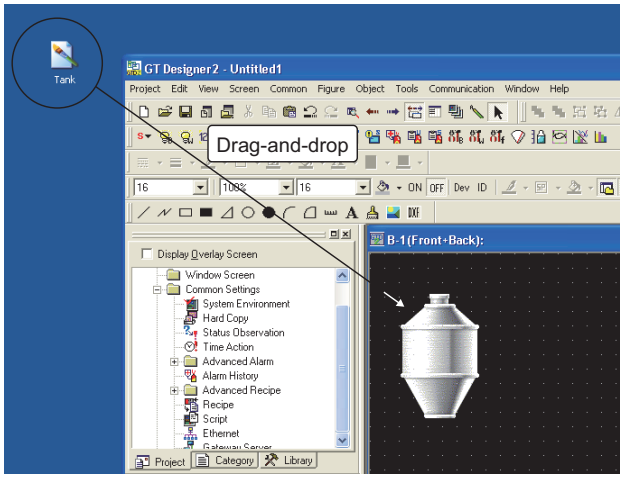
- Image quality parameter is settable only when a JPEG file is selected.
- The lower the image quality, the smaller the file size. The higher the image quality, the larger the file size.

3 When the specified figure data is displayed on the upper left of screen, move the cursor to the area to place and click.

Hint!

Pasting a file by drag-and-drop

The BMP/JPEG/DXF format file can be pasted onto the GT Desinger2 screen by drag-and-drop operation.



2 BMP format file

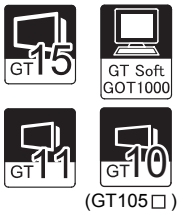
(1) Importable BMP (bitmap) format data
As BMP format data, 2-color(monochrome), 16-color, 256-color, and 24 bit BMP format data can be imported.

(2) The size of the figure to be imported
When the size of the figure to be imported is bigger than that of temporary area, it is automatically adjusted to fit the temporary area.

Point

Note the following points when importing data to GT Designer2.

When the BMP format data that includes more colors than the color setting is imported to GT Desiger2, the imported data will be displayed as indicated below .

System settings	BMP format data			
	24bit	256-color	16-color	2 (monochrome) colors
256 or 65536 colors are used to display the image data *1 	Reduced to 65536 colors	Displayed in 256 colors	Displayed in 16 colors	Displayed in 2 (monochrome) colors
256 colors  (GT105□)	Reduced to 256 colors	Displayed in 256 colors	Displayed in 16 colors	Displayed in 2 (monochrome) colors

System settings	BMP format data			
	24bit	256-color	16-color	2 (monochrome) colors
16 colors 	Reduced to 16 colors	Reduced to 16 colors	Displayed in 16 colors	Displayed in 2 (monochrome) colors
16 (Grayscale)    (GT105□)	Reduced to 16 (Grayscale)	Reduced to 16 (Grayscale)	Reduced to 16 (Grayscale)	Displayed in 2 (monochrome) colors
2 (Mono) 	Reduced to 2 (monochrome)	Reduced to 2 (monochrome)	Reduced to 2 (monochrome)	Displayed in 2 (monochrome) colors

*1 For GOTs that can display 65536 colors, refer to the following.

☞ GT15 User's manual

☞ GT16 User's manual (Hardware)

*2 16 (Gray Scale) can be selected on GT15□□-Q and GT11□□.

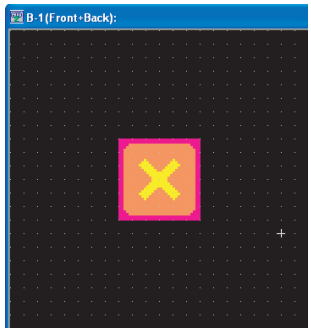
The following occurs when the display color settings are changed.

- When number of colors on the GT16□□ or GT15□□ is reduced The color setting is changed when "65536 colors are used to display the image data" checkbox is unchecked after data is read in BMP format, or when the following operations are performed without changing the editor display during the color setting change in the System Environment.
  1. Double click, image editing by changing properties
  2. Reopening a file after saving it
  3. Closing the screen and reopening it
- When the color setting is changed from 256-color to 2-color (16 (Grayscale)) on the GT11□□
  The above change made in the system settings will be instantly reflected on the editor.
- The BMP format data of which colors are reduced once on GT Designer2 cannot be returned to the previous color setting. Import the BMP file again.
- The image data color scheme displayed in the original BMP image, GT Designer2 image and GOT image differ.

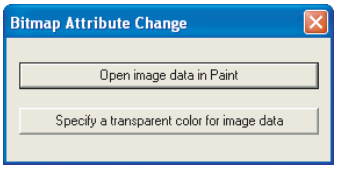
(3) Editing graphic data in the BMP format

(a) Opening an image data file with PAINT

1 Duble-click the image data file to be edited to open the "Bitmap Attribute Change" dialog.

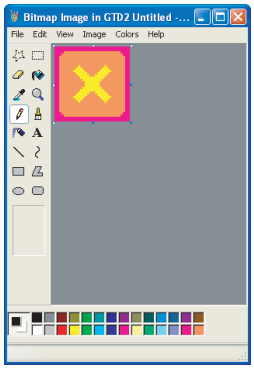


2 Click on "Open image data in Paint" to select it. (GT16□□, GT15□□, GT SoftGOT 1000)



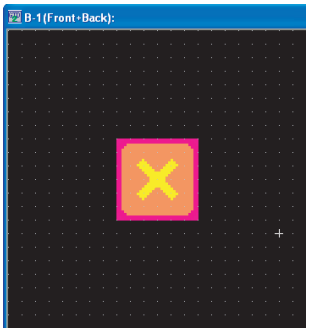
* If an image file is opened with Paint, the transparent color setting becomes invalid.

3 PAINT starts up, and the file is ready to be edited.

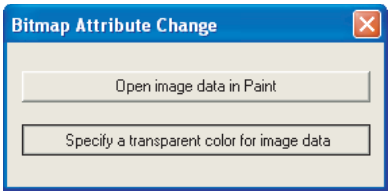


(b) Setting transparent colors (GT16□□, GT15□□, GT SoftGOT 1000)

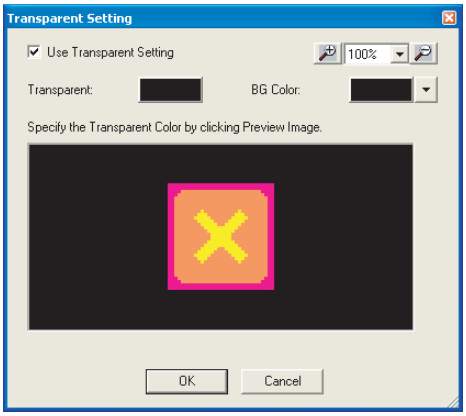
1 Duble-click the image data file to be edited to open the “Bitmap Attribute Change“ dialog.



2 Click on "Specify a transparent color for image data" to select it.



3 The "Transparent Setting" appears. Checking the "Use Transparent Setting" checkbox changes the cursor to the icon.



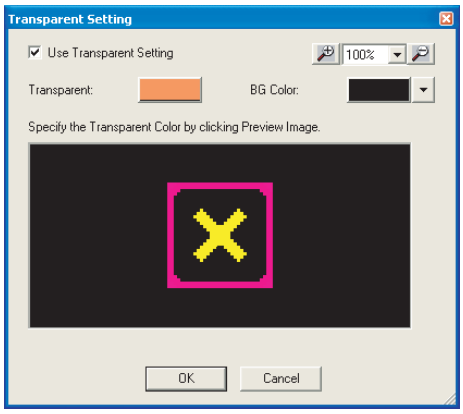
To next page

Continued from previous page

4 Select the color to be made transparent by left-clicking it.

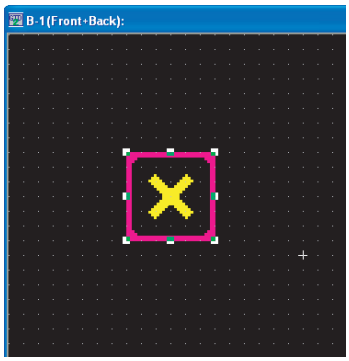


5 The selected color becomes transparent.
Click the OK button to save the setting and close the dialog.
Click the Cancel button to close the dialog without saving the setting.

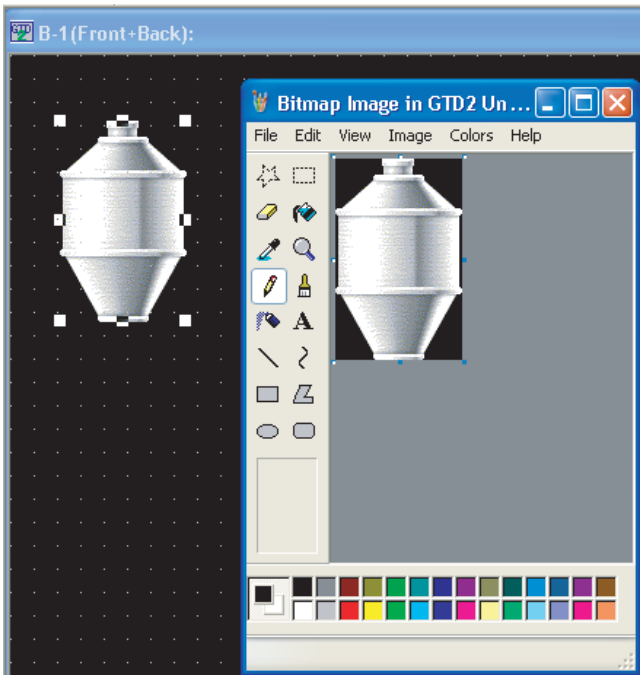


Item	Description
Use Transparent Setting	Checking the checkbox enables transparent color setting.
+ button	This button zooms in on the image.
- button	This button zooms out of the image.
Specify Zoom Level	Magnification setting
Transparent	The color that is selected as the transparent color appears here.
BG Color	The background color for the Preview window can be specified here.

6 The image that is made to be transparent appears.



(4) Editing BMP format figure data
Click the BMP format figure data to start the painting software. Then, modify the figure.
Closing the software ensures the modification on the figure data.



(5) Category
After being imported, the BMP format data will be registered and stored in "Others".

3 JPEG format file



If "GT15 Series" or "GT15 Series" is selected as a GOT type, JPEG files can be selected as loaded image data.

(1) Type of JPEG file format to be loaded
- JFIF
- EXIF

(2) The size of the figure to be imported
- When the size of the figure to be imported is bigger than that of temporary area, it is automatically adjusted to fit the temporary area.

Point When loading to GT Designer 2, note the following.

- The number of colors of the original JPEG file is kept as far as the loaded file remains unedited.
  However, the image is displayed in the specified number of colors of screen display in GT Designer2.
- If the designatedJPEG file specified in the JPEG file loading is in the JFIF format other than the base line type, or if the loaded JPEG image is edited, the image quality may deteriorate. If image quality deterioration is substantial, use a bit map file.

4 DXF format file

(1) Compatible DXF format data

(a) Compatible DXF format data

The DXF format data created using the following Auto CAD (version) can be imported.

• Release 12 • Release 13 • Release 14

(b) Notes on importing data

• The data with the layer off cannot be converted.
• Only the Shift JIS code text is compatible.
• The coordinate unit "1" is converted to 1 dot on GT Designer2.
• 10 minutes or longer may be required in some cases.
• The figure bigger than 2048 x 1536 dot cannot be imported.

(c) Details of DXF data import

The following DXF data can be imported to GT Designer2.
If some figures or attributes cannot be imported, draw them or make the relevant settings on GT Designer2.

Before import (DXF data)	After import (GTD2 data)	Remarks
ARC	Arc	-
ATTDEF	(Ignored)	-
ATTRIB	Text	• The text size is converted to the nearest one (0.5 to 8 times) of GT Desiger2. • The rotation setting is converted to the nearest one in 90-degree units. • The text style including slant angle is not supported.
CIRCLE	Circle	-
DIMENSION	Group	• The color and line style are converted based on the DIMENSION block definition instead of the layer.
ELLIPSE	Circle or Arc	• The slanted figure is converted so that its main axis will be rotated horizontally or vertically.
INSERT	Group	• The color and line style are converted based on the DIMENSION block definition instead of the layer. • The scale and rotation angle are not supported.
LEADER	Line Free Form	• The figure is converted to be a line free form (the end points are connected in a straight line).
LINE	Line	-
LWPOLYLINE	Line Free Form or Polygon	• The figure is converted to be a line free form or polygon (the end points are connected in a straight line). • The curved lines between the points are ignored.
MLINE	Line Free Form	• The MLINESTYLE is not supported. Each line free form color and the line style are converted based on the layer definition. • Cap processing is not supported.
MTEXT	Text	• The text size is converted to the nearest one (0.5 to 8 times) of GT Desiger2. • The rotation setting is converted to the nearest one in 90-degree units. • The form code is deleted. • The text style is not supported.
POINT	Circle, Rectangle, Line	-
POLYLINE	Line Free Form or Polygon	• The figure is converted to a line free form or polygon (the end points are connected in a straight line). • The curved lines between the points are ignored.
SOLID	Polygon	-
SPLINE	Line Free Form or Polygon	• The figure is converted to be a line free form or polygon (the fit lines are connected in a straight line).
TEXT	Text	• The text size is converted to the nearest one (0.5 to 8 times) of GT Desiger2. • The rotation setting is converted to the nearest one in 90-degree units. • The text style including slant angle is not supported.
TRACE	Polygon	-

Point

Notes on importing data

GT Desginer2 converts only the compatible characters within a DXF data during data import.
Therefore, some characters may appear differently from the original data.
Make sure to modify the figure after data import.

Example 1) "ϕ" cannot be imported.
As the "ϕ" in DXF data is not the Shift JIS code, this character cannot be imported.

Example 2) The BLOCK created with rectilinear and circle figures on the AutoCAD screen appear larger than the original size.
As the scale is set in the INSERT, the BLOCK cannot be correctly imported.

(d) Line

Each line is converted as shown below (1-dot width).

Before import (DXF data)	After import (GTD2 data)	
CONTINUOUS		Full line
DASHED		Dotted line
HIDDEN		Dotted line
CENTER		Dashed line
PHANTOM		Dashed line
User definition		Full line
Others		Full line

(e) Color

The color is converted as shown below.

Before import (DXF data)	After import (GTD2 data)
Red (0 × 01)	Red (224)
Yellow (0 × 02)	Yellow (252)
Green (0 × 03)	Green (28)
Light blue (0 × 04)	Light blue (31)
Blue (0 × 05)	Blue (3)
Purple (0 × 06)	Purple (227)
White (0 × 07)	White (255)
Black (0 × 08)	Black (0)
Dark red (0 × 09)	Dark red (160)
Dark yellow (0 × 0A)	Dark yellow (180)
Dark green (0 × 0B)	Dark green (20)
Dark-light blue (0 × 0C)	Dark-light blue (22)
Dark blue (0 × 0D)	Dark blue (2)
Dark purple (0 × 0E)	Dark purple (162)
Dark white (0 × 0F)	Dark white (109)
Others	Others (255)

(2) Editing DXF format figure data

To edit the grouped figure data on GT Desinger2, ungroup it once.
After the edition, group them again.

(3) Category

After being imported, the DXF format data will be registered and stored in "None".
(The ungrouped data will be also stored in "None".)
If necessary, register it again.

11.1.7 Pasting figure data of IGES file

This function imports IGES figure data (standardized CAD data exchange format) into GT Desinger2 and pastes the figure on the screen.

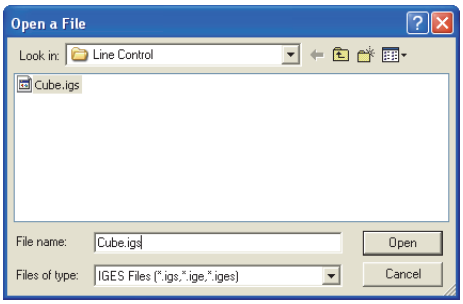
1 Operation method

1 Perform either of the following operations:

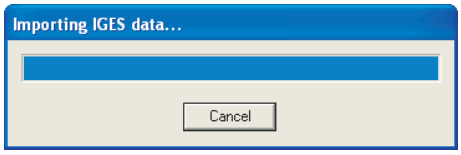
File format	Description	Operation
IGES	IGES format file is imported as figure data.	• (Import IGES) • [Figure] → [Import IGES...] menu

2 The Open a File dialog box appears.

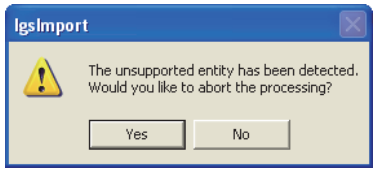
Select the file of the figure data to be imported and click the Open button.



3 Progress bar dialog appears. Importing the specified IGES data is started.
Progress bar dialog is closed when importing is done.



Point The following message appears when IGES data cannot be imported.



Item	Description
Yes	Processing is aborted.
No	Although processing is continued, unsupported entity which cannot be imported is not shown.

Refer to the following for the details about importable IGES data.

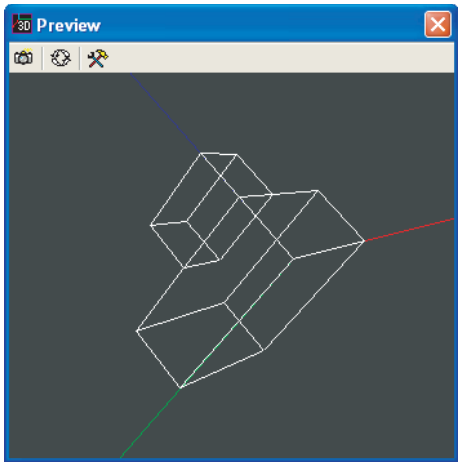
☞ Section 11.1.8 Restrictions for importing data

Unimportable IGES data can be displayed on the GOT by capturing the image on the screen and importing it with the Capture Image function.

☞ Section 11.1.5 Capture function

4 Captured IGES data is preview displayed.

Preview screen can be magnified up to 1600 × 1200 dots (the same size as temporary area).
Figure data is pasted on the drawing screen (editor) as displayed size .



Item		Description
	Save	Saves the direction, size, and option setting.
	Reset	Resets the direction, size.
	Option	Displays Data conversion quality dialog appears.

(1) Operation on the preview window

Determine the direction and size of the display data to make it fit on the preview screen by following operation.

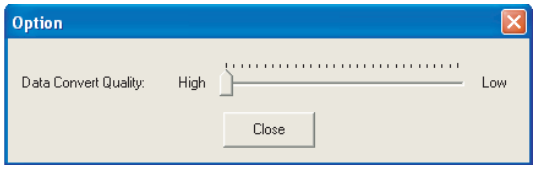
- Left drag : 3D model is rotated to the direction of dragging.
- Right drag : 3D model is moved to the direction of dragging.
- Right and Left drag : The size of 3D model is changed.
  (Expansion: Move the mouse up, Reduction: Move the mouse down)

Display data cannot be saved while display data is located out of the preview screen.

(2) Setting Data conversion quality

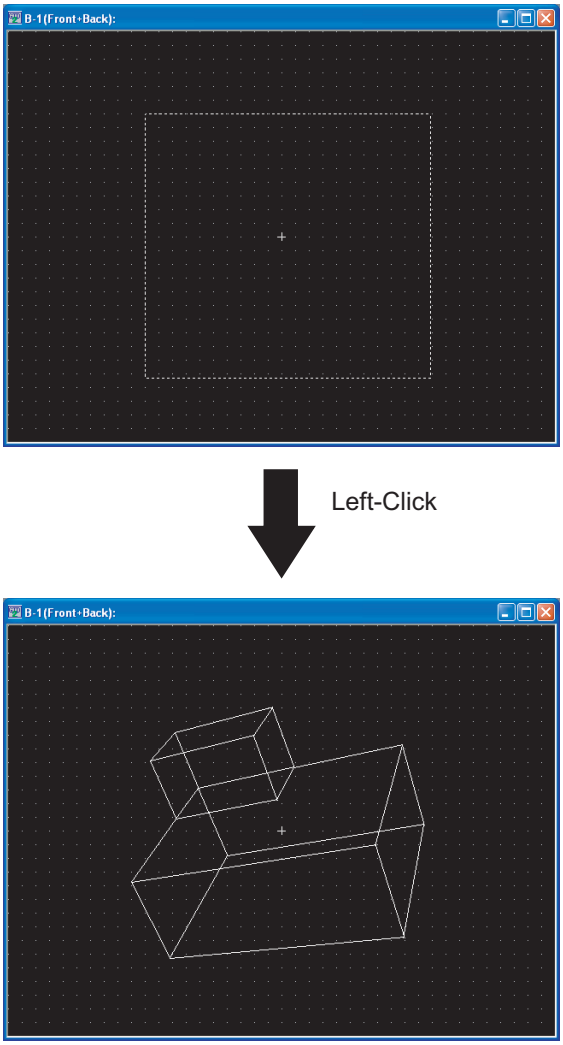
Bring up the Data conversion quality dialog by clicking button, and set the optimization level for converting curve into line.

- Low : Simplifies curves. Data size is decreased.
- High: Curve is drawn. Data size is increased.



5 Save the setting by clicking button.

Determine the position to paste the figure on the Designer2 screen by moving the cursor and paste the figure by clicking the screen.



Hint!

Editing imported IGES data

The type, width, color of line, etc. in the IGES data can be set and changed on the GT Designer2 after the data is imported.

11.1.8 Restrictions for importing data

1 Importable data

(1) Only wire frame format IGES data (*.igs/*.ige/*.iges file) that are created with Autodesk Inventor by Autodesk can be imported.

(2) When IGES data has unsupported entity, the part that comes after unsupported entity in IGES data cannot be imported. When clicking [No] on the message indicating that the data has unsupported entities, the following processes take place.

EX1) Parent entity (importable)-child entity (importable)-grandchild entity (not importable)
→ Parent entity and child entity are displayed. Grandchild entity is not displayed.

EX2) Parent entity (importable)-child entity (not importable)-grandchild entity (importable)
→ Parent entity is displayed. Neither child entity nor grandchild entity is displayed.

EX3) Parent entity (not importable)-child entity (importable)-grandchild entity (importable)
→ None of them is displayed because parent entity is not importable.

2 Entities to be imported

IGES import function allows the entities defined by JAMA-IGES to be imported. Importable entities are as follows.

Entity name	Entity ID
Circular arc	100
Ellipse	104
Line	110
Transformation matrix	124
Rational B-spline curve	126
General note	212
Subfigure definition	308
Color definision	314
Subfigure entity	408

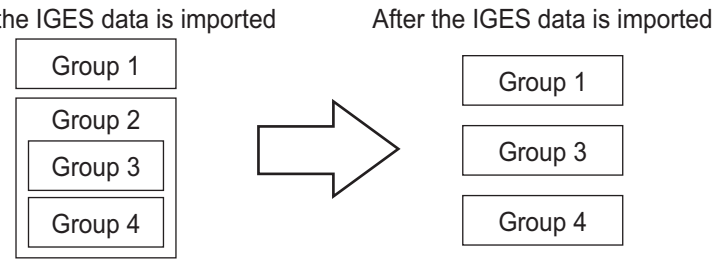
3 Category of figure/characters imported with the IGES import function

Category of figure/characters that are imported with the IGES import function is [None].

4 Nested format group

When importing IGES data in nested format, only the bottom level folders are imported.

(Example)



Point

Unimportable IGES data

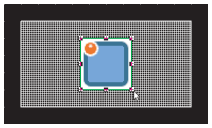
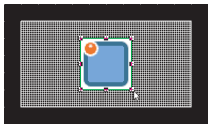
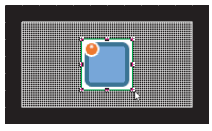
Unimportable IGES data can be displayed on GOT by using Capture Image function.

☞ Section 11.1.5 Capture function

11.2 Editing Figure and Object

11.2.1 Selecting figure and object

Selection items with the cursor (figures and objects) can be changed by clicking.
It is convenient to select the cursor type suitable for the editing item.

Cursor	Description	Selection operation
[Figure and Object] edit cursor	Both figure and object can be selected/edited. (Cursor set in the initial settings)   Both figure and object can be selected.  When a figure and object are overlapped (as shown on the left), the object will be selected with priority.	•  (Select: Figure and Object) • [Edit] → [Object of Selection] → [Figure and Object] menu
"Figure" edit cursor	Figures can be edited.  Only the figure is selected.  If the figure and the object are overlapped, only the figure is selected.	•  (Select: Figure) • [Edit] → [Object of Selection] → [Figure] from the menu
"Object" edit cursor	Objects can be edited.  Only the object is selected.  If the figure and the object are overlapped, only the object is selected.	•  (Select: Object) • [Edit] → [Object of Selection] → [Object] from the menu

Hint!

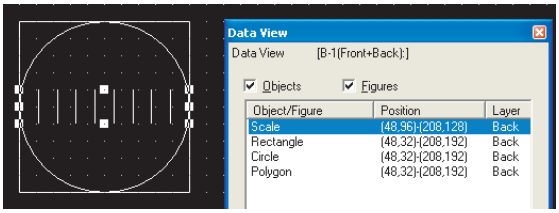
Selection/de-selection of multiple figures or objects

(1) Selecting one from overlapped figures or objects
Move the cursor to the overlapped figures or objects and click while pressing the Ctrl key.

(2) De-selecting one from multiple figures or objects
Move the cursor to the boundary line of a desired figure/object. Click while pressing the Shift key.

(3) Selecting figures or objects from the data view
The data view displays figures and objects on the screen in a list.
If figures or objects are overlapped, a desired figure/object can be simply selected from the data view.

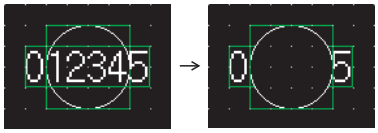
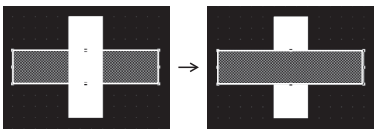
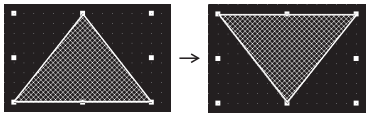
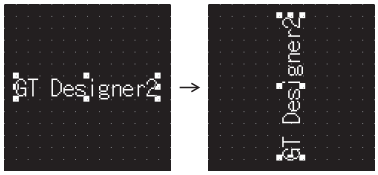
☞ Section 12.1.4 Simple selection of overlapped figure (Data view)



11.2.2 Editing figures and objects

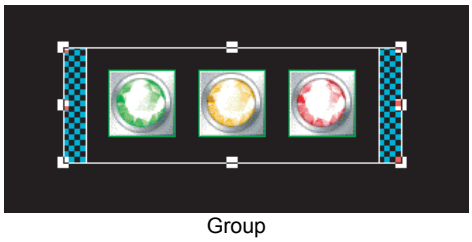
Different types of editing can be made for the figures and objects arranged on the screen.

1. Select the desired figure/object for editing.
2. Perform the following operations according to the editing details.

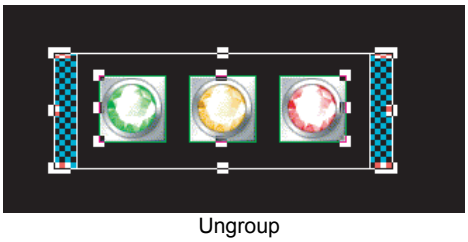
Function	Description	Operation
Delete	Figures and objects are deleted.	• [Edit] → [Delete]
Cut	Figures and objects are cut.	• (Cut) • [Edit] → [Cut]
Copy	Figures and objects are copied.	• (Copy) • [Edit] → [Copy]
Paste	The cut/copied figures and objects are pasted.	• (Paste) • [Edit] → [Paste]
Bring to Front or Front Layer /Send to Back or Back Layer	The front-to-back sequence of objects is changed within the screen. (Ex.) The selected objects are changed in front-to-back sequence. 	• (Bring to Front) • [Edit] → [Stacking order] → [Bring to Front on Front Layer] • (Send to Back) • [Edit] → [Stacking order] → [Send to Back on Back Layer]
Bring to Front of Layer /Sent to Back of Layer	The front-to-back sequence of figures/objects is changed within the same layer. (Ex.) The selected figure is moved to the front. 	• (Bring to Front of Layer) • [Edit] → [Stacking order] → [Bring to Front of Layer] • (Send to Back of Layer) • [Edit] → [Stacking order] → [Send to Back of Layer]
Flip Vertical/Flip Horizontal	The selected figure is flipped. (Not available for objects) (Ex.) Flipping selected figure vertically 	• (Flip Vertical) • [Edit] → [Rotate/Flip] → [Flip Vertical] • (Flip Horizontal) • [Edit] → [Rotate/Flip] → [Flip Horizontal]
Rotate Left/Rotate Right	Figure is rotated 90 degrees to right/left. (Not available for objects) (Ex.) Rotating selected figure 90 degrees to left 	• (Rotate Left) • [Edit] → [Rotate/Flip] → [Rotate Left] • (Rotate Right) • [Edit] → [Rotate/Flip] → [Rotate Right]

11.2.3 Grouping/Ungrouping multiple figures and objects

Grouping of multiple figures and objects enables users to handle them as a single figure.



Group



Ungroup

1 Select the desired figures and objects for grouping (ungrouping).

2 Group/ungroup the selected figures and objects by either of the following operations:

Function	Description	Operation
Group	Multiple figures and objects are grouped.	• (Group) • [Edit] → [Group]
Ungroup	Multiple figures and objects are ungrouped.	• (Ungroup) • [Edit] → [Ungroup]

11.2.4 Undo, redo

The last action such as deletion and movement of figures (including objects) can be reversed or re-executed. Up to 500 actions can be recorded.

1 Undo

Reverses the last action just performed.

- Click (Undo).
- Choose the [Edit] → [Undo] menu.

2 Redo

Re-executes the last action undone by clicking (Undo).

- Click (Redo).
- Choose the [Edit] → [Redo] menu.

11.2.5 Aligning figures and objects

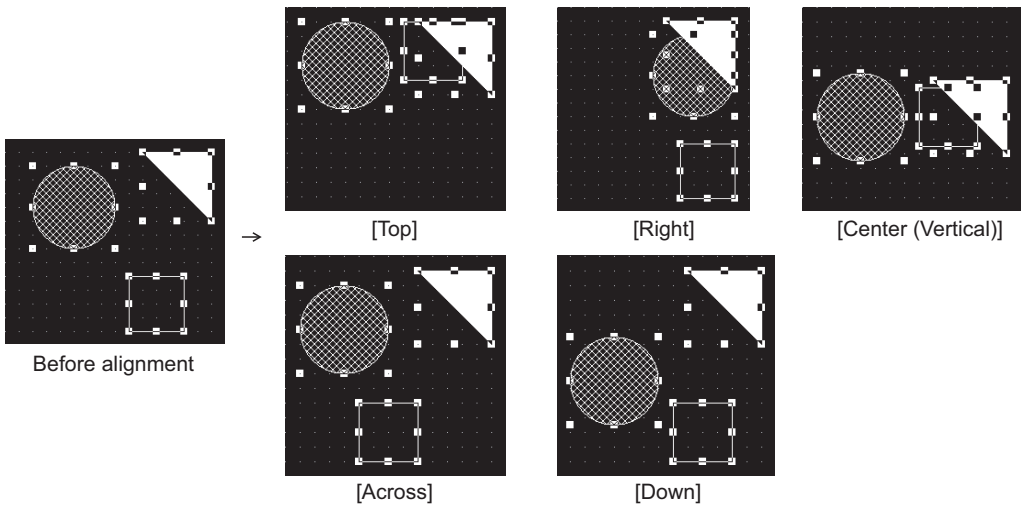
Multiple figures and objects can be aligned in several patterns.

1 Aligning in one direction

1. Select the desired figures and objects for alignment.
2. Perform the following operations according to the alignment:

Function	Description	Operation
Left	Figures and objects are aligned with the leftmost figure.	• (Align Left) • [Edit] → [Align] → [Left]
Center (Horizontal)	Figures and objects are aligned at the center in the horizontal direction.	• (Align Center (Horizontal)) • [Edit] → [Align] → [Center (Horizontal)]
Right	Figures and objects are aligned with the rightmost figure.	• (Align Right) • [Edit] → [Align] → [Right]
Top	Figures and objects are aligned with the uppermost figure.	• (Align Top) • [Edit] → [Align] → [Top]
Center (Vertical)	Figures and objects are aligned at the center in the vertical direction.	• (Align Center (Vertical)) • [Edit] → [Align] → [Center (Vertical)]
Bottom	Figures and objects are aligned with the lowermost figure.	• (Align Bottom) • [Edit] → [Align] → [Bottom]
Across	Selected figures are equally aligned in the horizontal direction.	• (Align Across) • [Edit] → [Align] → [Across]
Down	Selected figures are equally aligned in the vertical direction.	• (Align Down) • [Edit] → [Align] → [Down]

(Ex.) Alignment of figures and objects

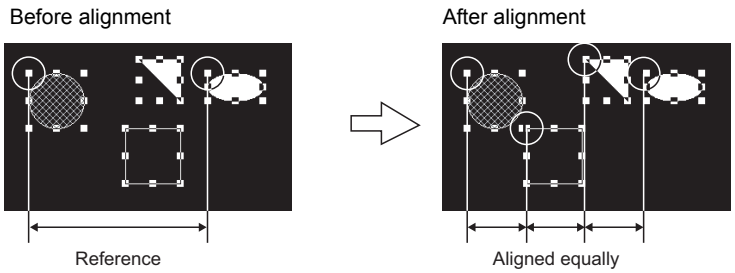


Remark

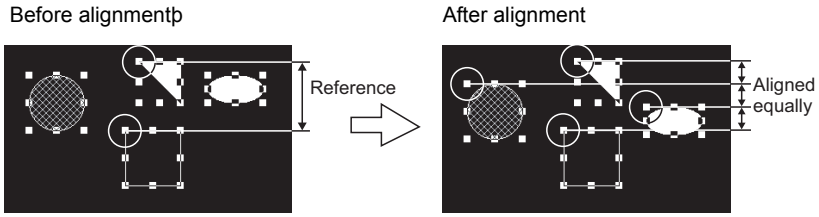
Across and Down

The "Across" function aligns the figures/objects equally based on the top-left coordinates of the leftmost and rightmost figures/objects.
The "Down" function aligns the figures/objects equally based on the top-left coordinates of the uppermost and lowermost figures/objects.

Across



Down

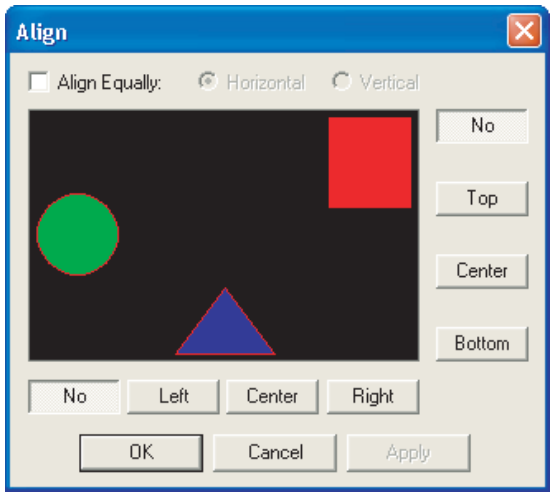


If figures are overlapped by alignment or similar operation, click (Undo) to reverse the last action.

☞Section 11.2.4 Undo, redo

2 Alignment in combination of multiple directions

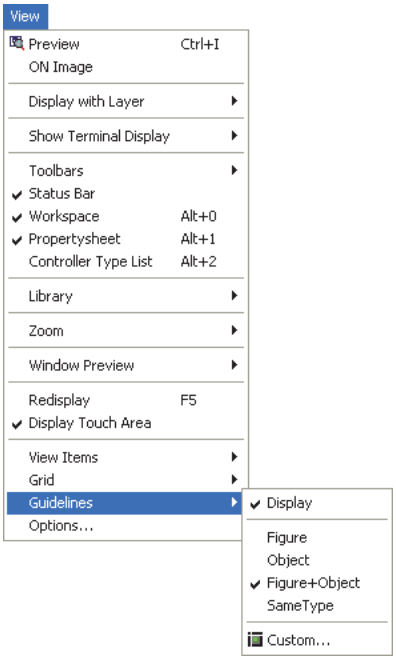
1. Select the desired figures and objects for alignment.
2. Perform either of the following operations:
   - Click  (Align).
   - Select the [Edit] → [Align] → [Align...] from the menu.
3. The Align dialog box appears.
   Click any direction button. The image of alignment is displayed.
   Select the direction of alignment, and click the OK button.

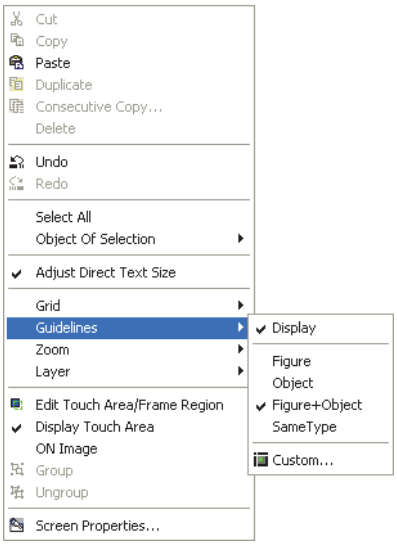


Item	Description
No	Disables alignment in the selected direction.
Top	Aligns figures relative to the top one.
Bottom	Aligns figures relative to the bottom one.
Left	Aligns figures relative to the leftmost one.
Right	Aligns figures relative to the rightmost figure.
Center	Aligns figures in the center of the selected direction.
Align Equally	Check this item to align figures equally. Horizontal : Aligns figures equally in the horizontal direction. Vertical : Aligns figures equally in the vertical direction.

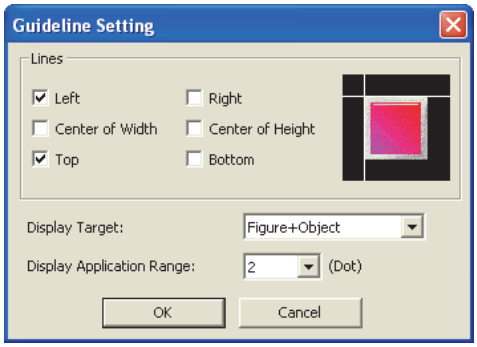
3 Alignment using the guideline function

1 Select [View] → [Guideline]/[Context menu] → [Guideline] from the menu.



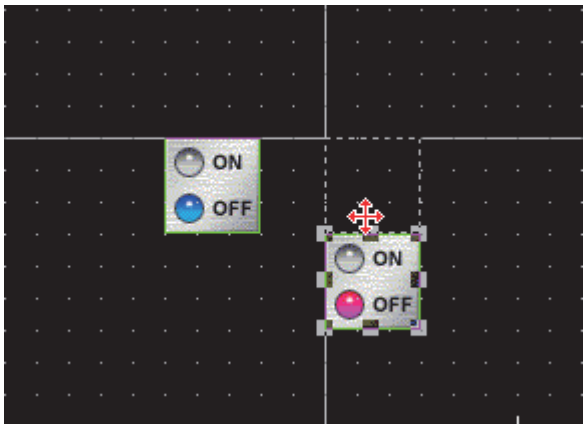


Item	Description
Display	Displays the guideline.
Figure	Select a figure as the display target of the guideline.
Object	Select an object as the display target of the guideline.
Figure and Object	Select a figure and object as the display target of the guideline.
Same type	Select the same type of data as the display target of the guideline.
Custom	Displays the guideline setting dialog box.



Item	Description
Line display	Set the lines to be displayed as the guideline.
Line display target	Select the line display target. The guideline is displayed when the moving figure or object touches the target.
Displaying distance	Specify the displaying distance of the figure or object.

2 Drag and move the figure or object.



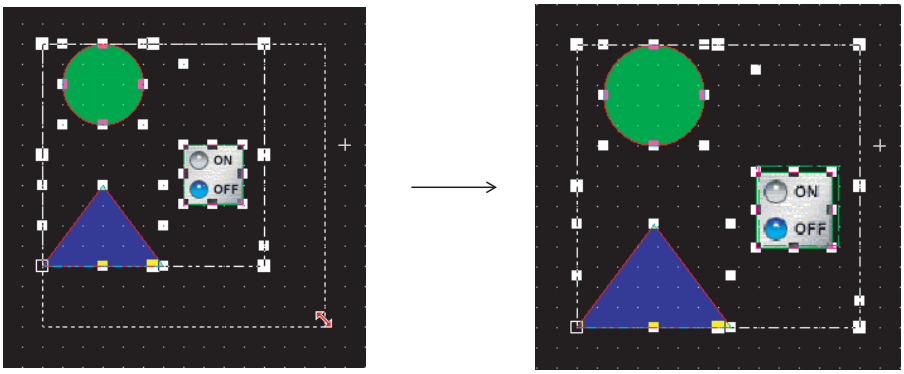
Point

- When the center of width or height is selected, the guideline is displayed at the center of the width or height of the display target.
- The type of grouped figures and objects is "group", and the guideline is displayed for the grouped figures and objects regardless of the contents of the group.
- The touch area of touch switch is not the target of the guideline.
- The guideline is not displayed when operating the keyboard.

11.2.6 Enlarging or reducing multiple figures and objects

Multiple figures and objects can be enlarged or reduced when they are selected.

1. Select the figures and objects to be enlarged or reduced.
2. All the selected figures and objects can be enlarged or reduced by dragging the handle.

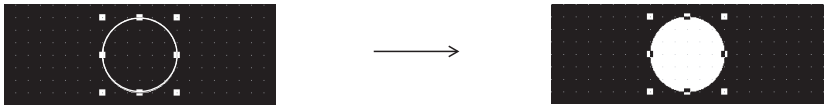


11.2.7 Changing attributes of figures and objects

1 Changing attributes with property sheet

1. Select the desired figure/object.
2. Change the attribute of the selected figure/object on the property sheet.

(Ex.) Changing foreground color of a circle from black to white



Property Sheet — Circle

Attribute	Value
Object Name	
X-Position	192
Y-Position	64
Width	49
Height	33
Line Style	
Line Width	1 Dot
Line Color	
Fill Pattern	
Pattern Fg Color	
Pattern Bg Color	
Category	Others
Use Lamp Attribute	No
Device	
ON Line Color	
ON Fill Pattern	
ON Pattern FG Color	
ON Pattern BG Color	
Blink	No

Pattern Fg color is changed.

Property Sheet — Circle

Attribute	Value
Object Name	
X-Position	192
Y-Position	64
Width	49
Height	33
Line Style	
Line Width	1 Dot
Line Color	
Fill Pattern	
Pattern Fg Color	
Pattern Bg Color	
Category	Others
Use Lamp Attribute	No
Device	
ON Line Color	
ON Fill Pattern	
ON Pattern FG Color	
ON Pattern BG Color	
Blink	No

Change will be reflected on figure.

Remark

(1) Changing attributes of multiple figures/objects
Attributes of different types of objects/figures cannot be changed at a time.

Ex.) Touch switch and lamp
Bit lamp and word lamp
Circle and rectangle

Attributes of grouped objects/figures of different types cannot be changed at a time, either.

(2) Figure frame of object
The figure frame of object cannot be set with "Yes/No" on the property sheet.
Set "Yes/No" of the figure frame by using the dialog box of each object.

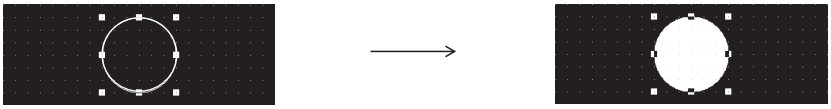
(3) Specify the width in the range of 1 to 2000, and specify the height in the range of 1 to 1600.
If the value out of the range is specified, an error occurs.

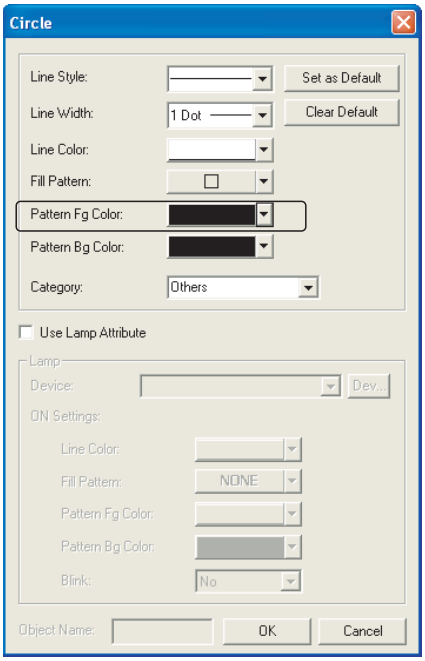
2 Changing attribute with dialog box

1 Select the desired figure/object.

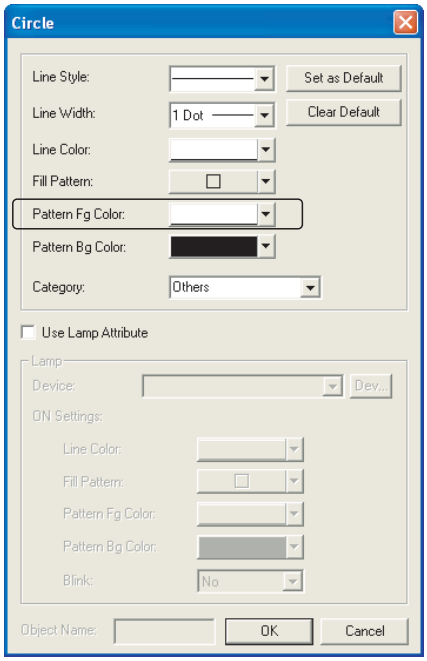
2 Double click on the selected figure/object. The settings dialog box of each figure/object appears. Change attributes there.
For the settings dialog box of each figure/object, see below:

(Ex.) Changing foreground of a circle from black to white





Change the setting of Pattern Fg Color.



The change is displayed on the figure.

- Figure setting dialog box

  ☞ Section 11.1.1 Drawing figures

- Object setting dialog box

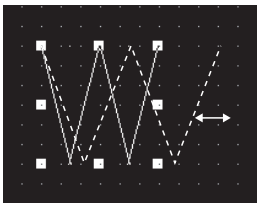
  ☞ GT Designer2 Version ☐ Screen Design Manual

11.2.8 Changing size of figures/objects

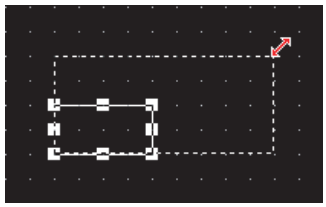
1 Changing overall size (scaling up/down)

1. Select the desired figure or object.
2. Move the cursor to a handle of figure or object. Drag it to change the size of figure or object.

(Ex.) Changing vertical and horizontal sizes



(Ex.) Changing vertical and horizontal sizes from corner

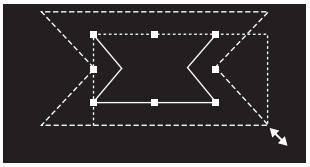


Hint!

(1) Operation in combination with the Ctrl and Shift keys

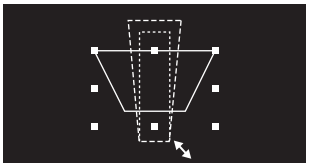
Operation in combination with the Ctrl and Shift keys allows the following changes of size:

(Ex.) Changing sizes without changing the horizontal to vertical ratio



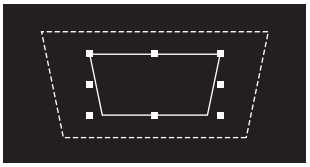
Drag while pressing the Shift key.

(Ex.) Changing vertical and horizontal sizes from the center



Drag while pressing the Ctrl key.

(Ex.) Changing sizes from the center without changing the horizontal to vertical ratio



Drag while pressing the Shift and Ctrl keys.

(2) Text resizing

Text can be resized by performing the operation in above (1).

When high-quality or True Type font is used, the text may not be resized as intended, since they are restricted in the applicable size.

2 Changing length of specified side (Edit Vertex)

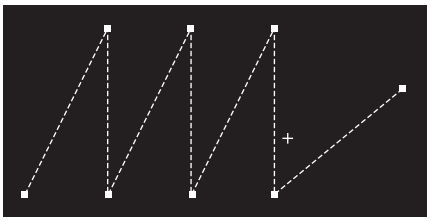
1 Select the desired figure or object.

2 Perform either of the following operations to change the handle to the "Edit Vertex" mode:

- Click  on the toolbars.
- Select the [Edit] → [Edit Vertex] menu.

3 Move the cursor to a handle of the figure. Drag the handle to move the vertex.

(Ex.) Vertex edit of Line free form



Point

Adjust Direct Text Size

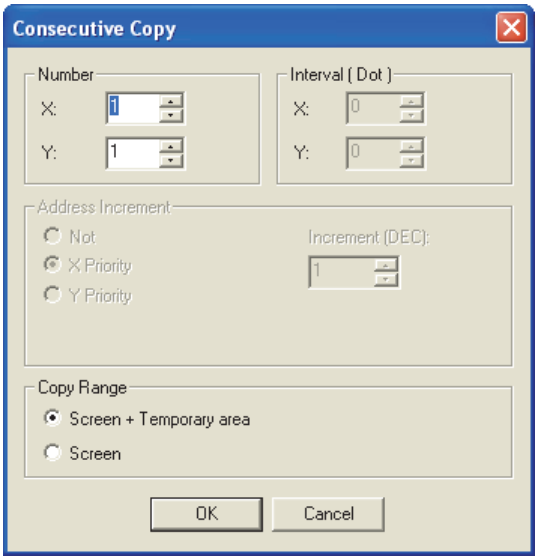
Text size can be automatically adjusted to fit a character string by setting Adjust Direct Text Size.
Refer to the following manual for the target object and setting for Adjust Direct Text Size.

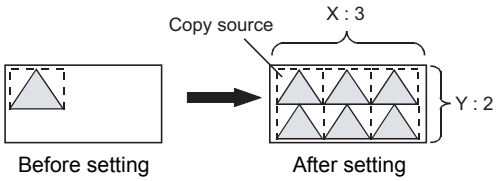
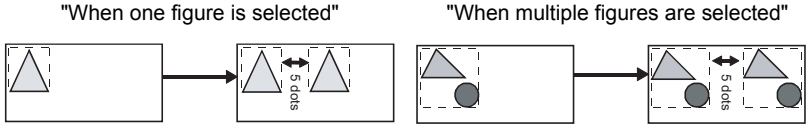
☞ Screen Design Manual (Section 5.3.3 Object size change)

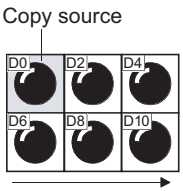
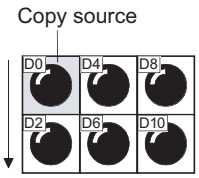
11.2.9 Copying figures and objects consecutively

Figures and objects can be copied at a time.

1. Select the desired figure or object for consecutive copies.
   (For consecutive copy of multiple figures or objects, select multiple figures/objects at a time.)
2. Select the [Edit] → [Consecutive Copy...]/[Context menu] → [Consecutive Copy...] from the menu.
   The Consecutive Copy dialog box appears.
   After setting the copy details, click the [OK] button to make copies.



Item		Description
Number		Set the number of figures (copy source + its copies) that will appear on the screen. For example, when Number is set to "2", two figures, i.e., the copy source and its one copy will appear on the screen. Example) Number is set to X: 3 and Y: 2. 
	X	Set the number of figures (copy source + its copies) in the X direction (rightward from the copy source). (1 to 100)
	Y	Set the number of figures (copy source + its copies) in the Y direction (downward from the copy source). (1 to 100)
Interval (dot)*1		Set the interval (dots) between copy source and its copies. Example) Interval is set to X: 5 dots. 
	X	Set the interval (dots) between figures in the X direction (rightward from the copy source). (0 to 100)
	Y	Set the interval (dots) between figures in the Y direction (downward from the copy source). (0 to 100)

Item	Description
Address Increment	It is set to offset the device of the object to the device number for the increments when copying a object. For a touch switch, the write device only for the bit/word operation is applicable. Not : Increment is not performed. X Priority : Incremented in the X direction (right) Y Priority : Incremented in the Y direction (down) After selecting the priority direction, set the device No. increment. Increment (Dec) : -10000 to 10000 (Ex. 1) Priority in the X direction Number of increments: 2  Priority is given to the X direction (right). (Ex. 2) Priority in the Y direction Number of increments: 2  Priority is given to the Y direction (down).

For details of *1, see below:

*1 Copying with 0 interval

If a figure/object is copied with 0 interval, the pasted figure/object is overlapped with the source by 1 dot. Set the interval to 1 or more to avoid overlapping of figures or objects.

Ex.)


Copying with 0 interval.

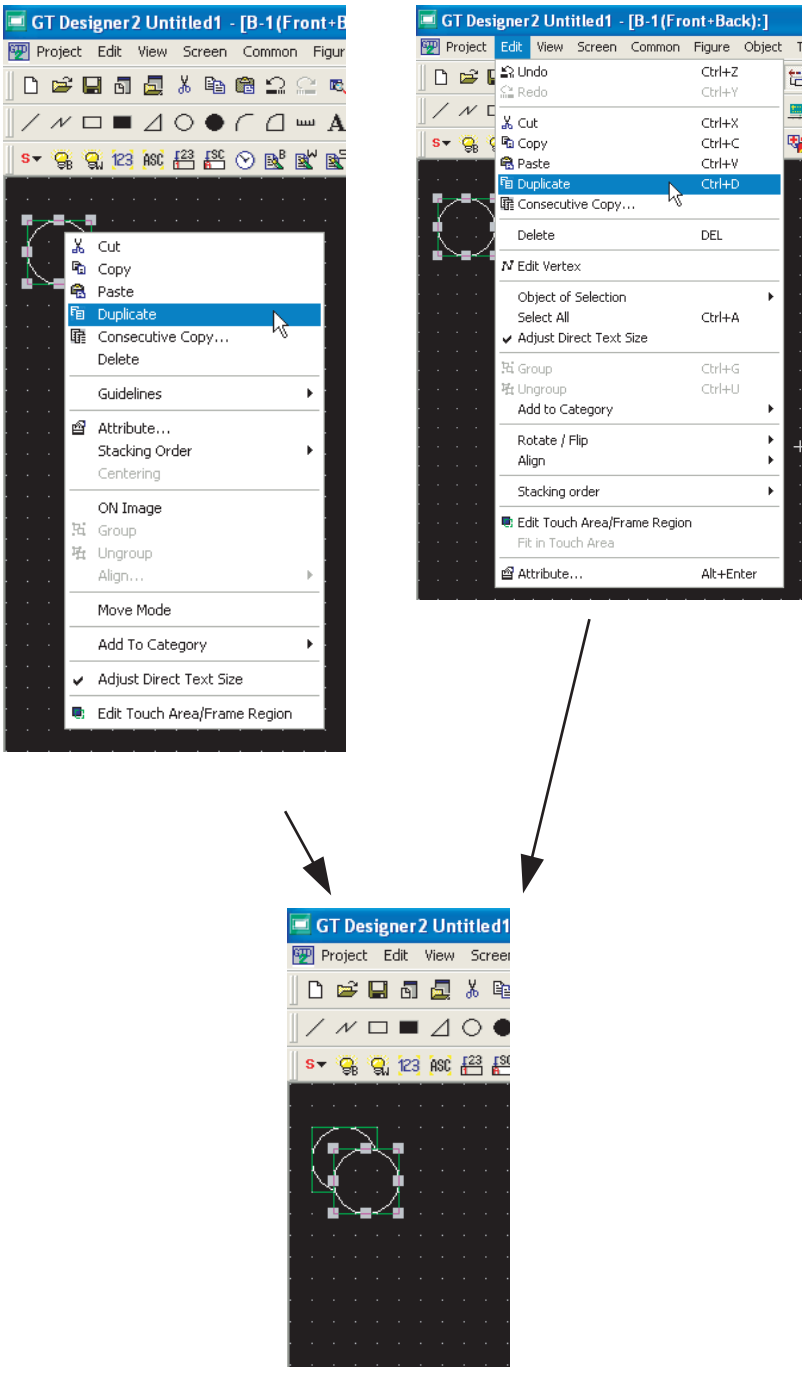

Copying with the interval of 16

Copy Range	Select the copy range from "Screen + temporary area" and "Screen".

11.2.10 Copying figures and objects

Figures and objects can be copied at a time.

1. Select the desired figure or object for copies.
2. Select [Edit] → [Duplicate] menu/[Context menu] → [Duplicate] from the menu.
   When the Copy is selected, copied figure or object is placed.



12. USEFUL FUNCTIONS

12.1 Edit Function

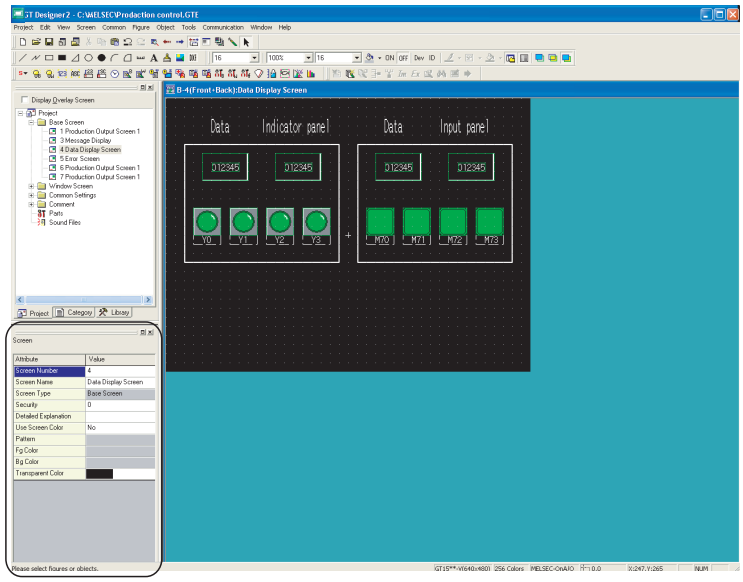
This chapter describes useful edit functions of the GT Designer2.

12.1.1 Batch setting of multiple objects/figures on the same screen (Propertysheet)

1 What is Propertysheet?

The Propertysheet displays all setting items and details of object/figure/screen currently selected in a list.
Since the Propertysheet allows setting of the selected object/figure/screen, the setting details can be checked and set (changed) without opening the dialog box.

Propertysheet

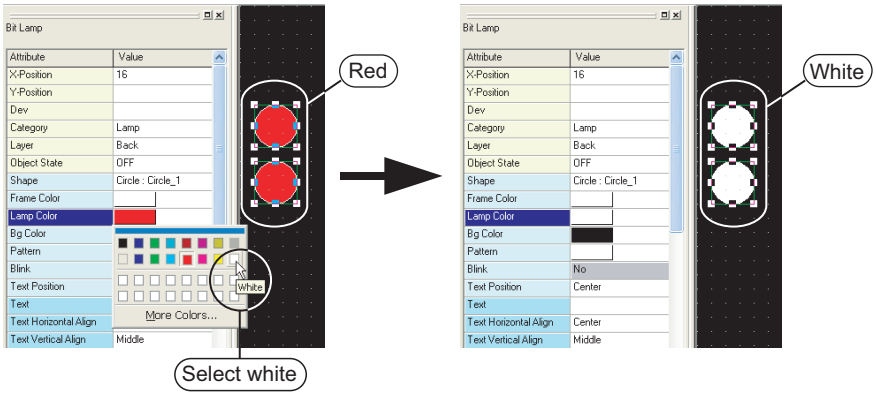


2 Useful for cases below:

It is useful when the setting of multiple objects/figures arranged on the same screen is changed at a time.

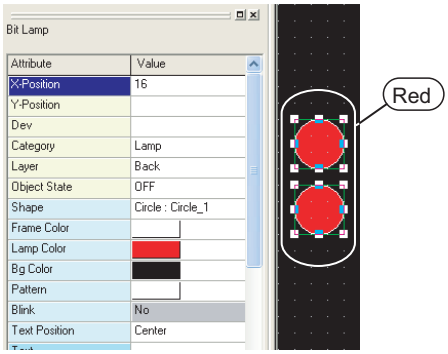
(Ex.) Changing the display color of 2 lamps at a time

Change the setting of the lamp color. The colors of all selected lamps can be changed.

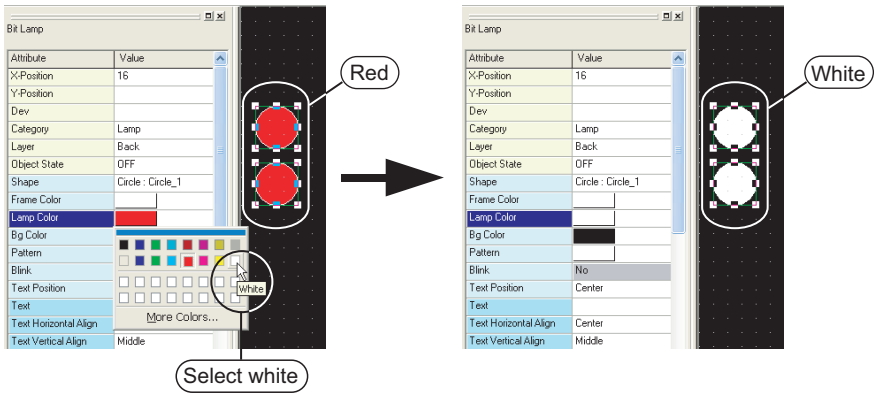


3 Operation method

1 Select the desired object/figure/screen to change settings.
(Multiple objects/figures can be selected.)



2 The attributes are displayed on the Propertysheet. Change the desired attributes.
Example) Changing the Lamp Color from red to white.



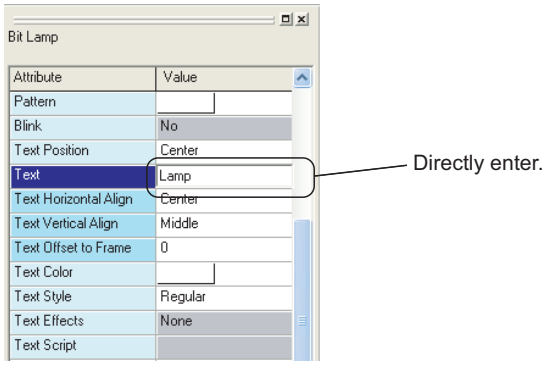
Point Attribute change

Attributes displayed in the Propertysheet correspond to the setting items of the Object or Figure setting dialog box. The attributes (setting items) can be set in the same way as the dialog box is set.

☞ For the figure setting items, refer to "Chapter 11. DRAW AND EDIT".

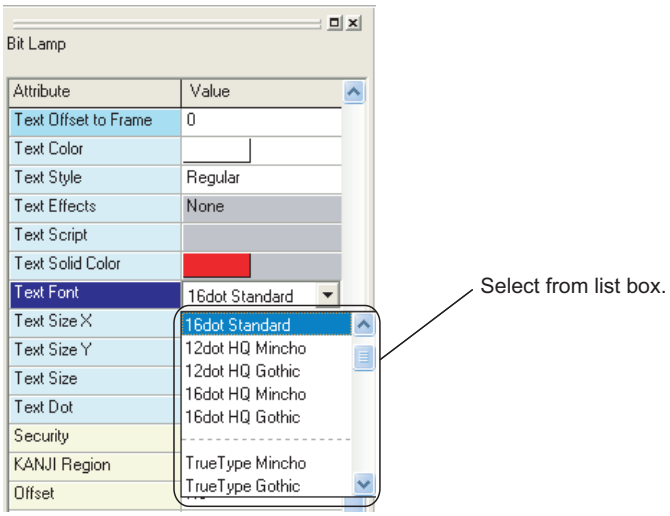
(1) Direct input

Some attributes such as text, numerical value and device can be set by direct input.
A character string on multiple lines can be entered/edited in the text attribute field, but the first one line of the character string will be displayed in the text filed of the Propertysheet.



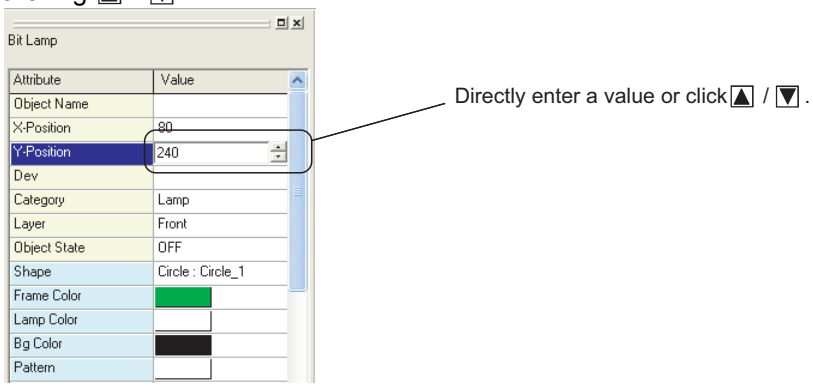
(2) List box

When setting the attributes such as function, color, layer, text size and font, select an option from the displayed list.



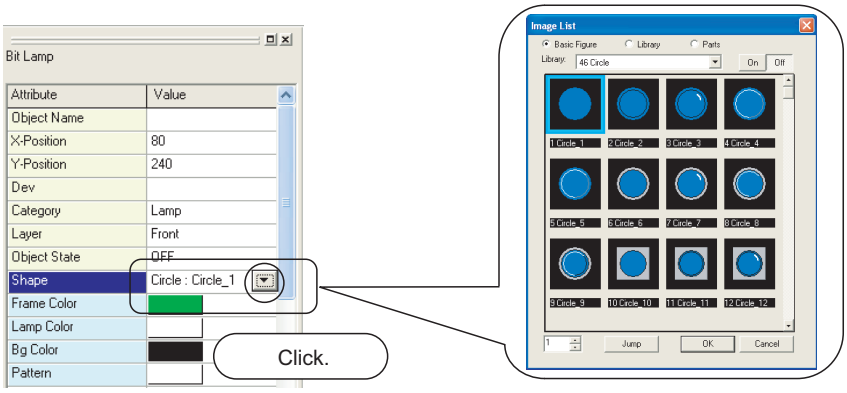
(3) Spin box

When setting the attributes such as coordinates, number of numerical value display digits and security, directly enter a value or select the numerical value by clicking ▲ / ▼ .



(4) Dialog box

When setting the attributes such as device and figure, select an option from the displayed dialog box.



4 Precautions

(1) Different types of objects/figures cannot be checked/set at a time.
Different types of grouped objects/figures cannot be checked/set at a time.

Ex.:

- Touch switch and lamp
- Bit lamp and word lamp
- Circle and rectangle

(2) Objects/figures distributed on multiple screens cannot be checked/set.



Batch editing objects/figures scattered on multiple screens

Use of batch edit allows change of attributes (color, device, etc.) in batch that are different in types or scattered on multiple screens.

☞Section 12.1.3 Batch editing attributes of objects/figures scattered on multiple screens (Batch edit)

(3) The property sheet makes the settings of all selected objects and figures same. Note that if different devices has been set for each object, using the Propertysheet will change the settings of all selected objects to the same device.

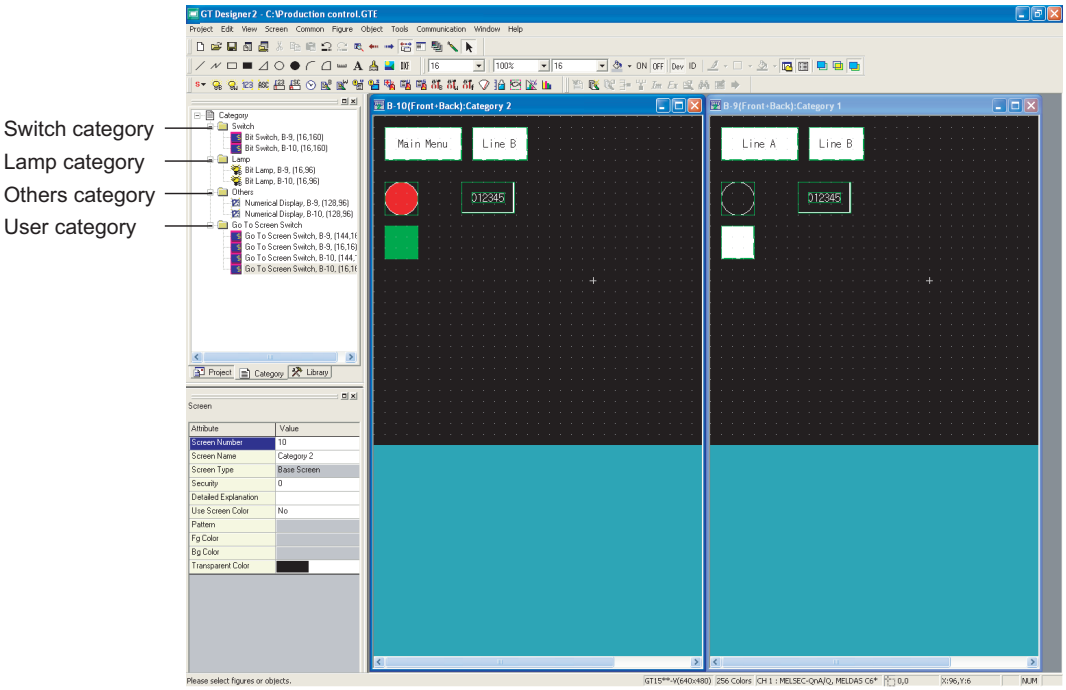
(4) The figure frame of the object cannot be set with "Yes/No" on the propertysheet.
Set "Yes/No" of the figure frame by using the dialog box of each object.

(5) Specify the width in the range of 1 to 2000, and specify the height in the range of 1 to 1600.
If the value out of the range is specified, an error occurs.

12.1.2 Batch setting and managing objects/figures for each purpose (Category workspace)

1 What is Category?

The set objects/figures are stored in any of the following categories: Switch, Lamp and Others. Sorting objects and figures into the user category for each application allows management of objects and figures.

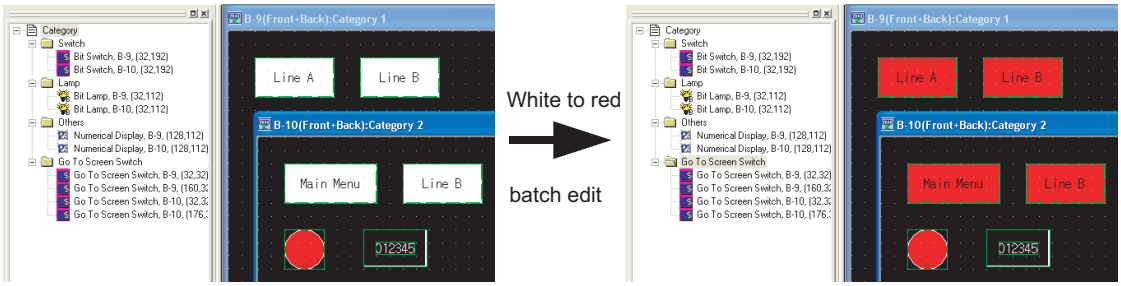


Category	Description
Switch category	Stores all objects and figures set as "Switch". By default, all touch switches are included.
Lamp category	Stores all objects and figures set as "Lamp". By default, all lamp displays are included.
Others category	Stores all objects and figures set as "Others". By default, objects and figures other than the touch switches and lamp displays are included.
User category	User-set category. It is possible to move the objects from the Switch/Lamp/Others category to user categories and manage them for purpose of use.

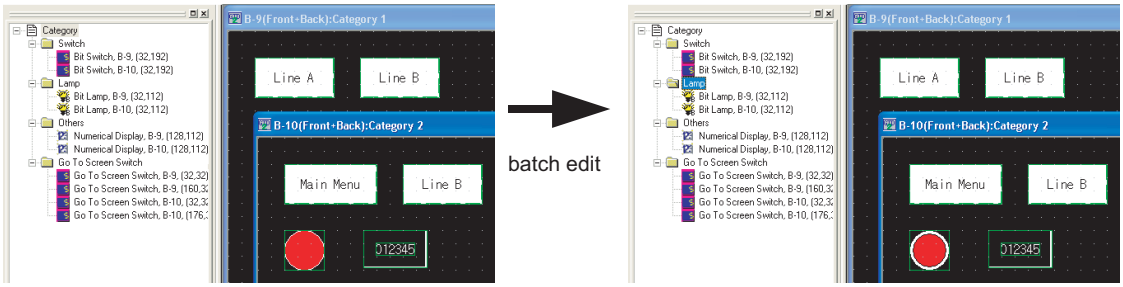
2 Convenient for the case below:

Color/device of the Go To Screen Switch can be changed in batch. It is convenient to make batch edit for each purpose.
Figures of the switch or the lamp can be changed in batch.

Ex. 1) Batch editing display color of Go To Screen Switch



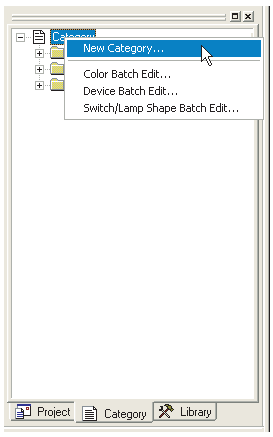
Ex. 2) Batch editing lamp figure



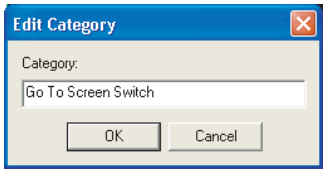
3 Creating user category

The method to create a user category is shown below:
In this section, an example of category creation for the Go To Screen Switch is described.

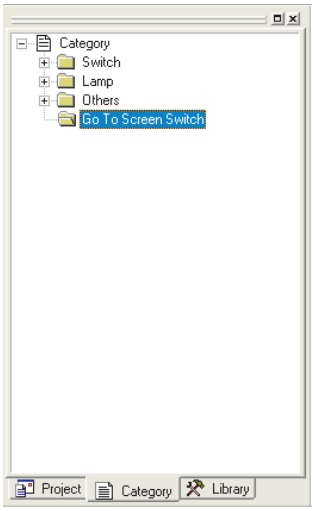
1 Select a category from Switch, Lamp and Others. Right click the mouse and select "New Category...".



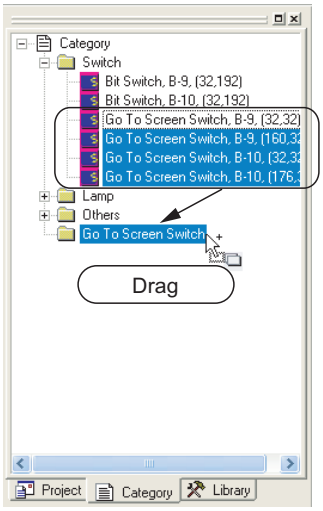
2 The Edit Category dialog box appears. Enter the category name (enter "Go To Screen Switch" here). Click the OK button. The dialog box is closed.



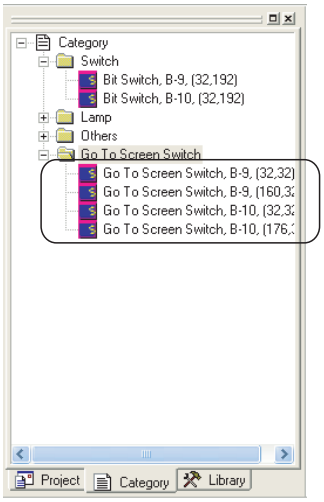
3 The user category is added.



4 Select the Go To Screen Switches in the Switch category, and move them to the Go To Screen Switch category.

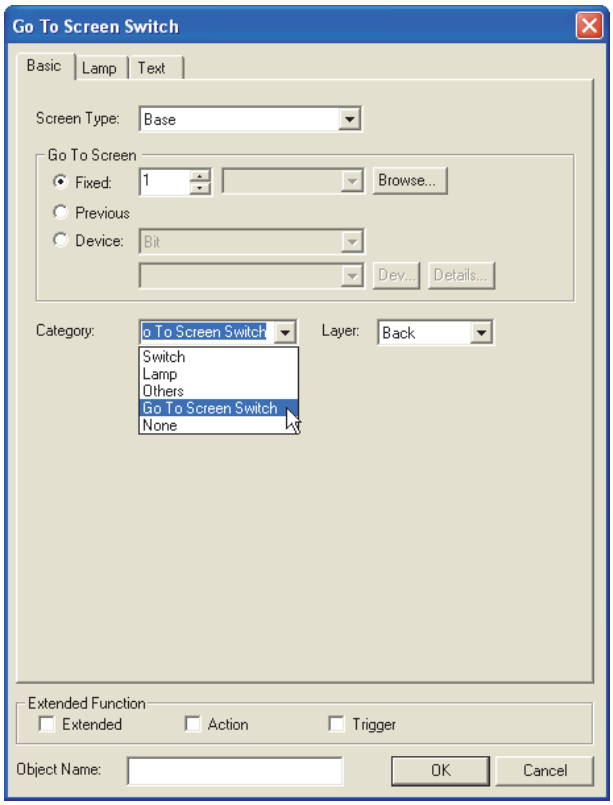


5 The Go To Screen Switch is stored in the Go To Screen Switch category.



Hint! Category registration of objects and figures

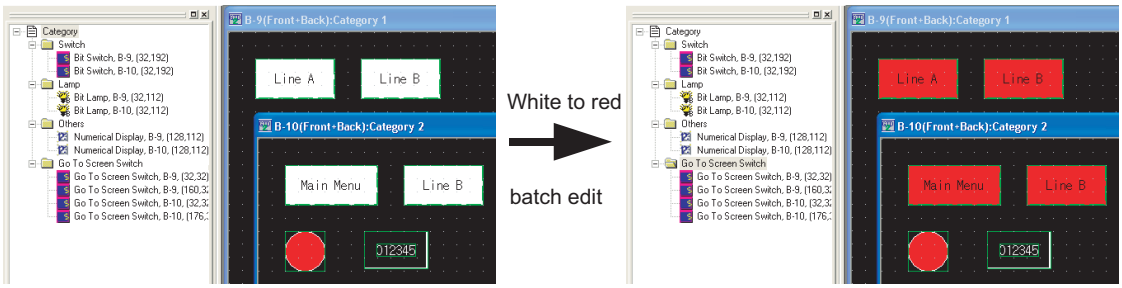
Create a user category first. The created user category can be selected when setting the storage location of objects and figures.
The category name can be edited or new user category can be created by directly entering the name in the Category list box.



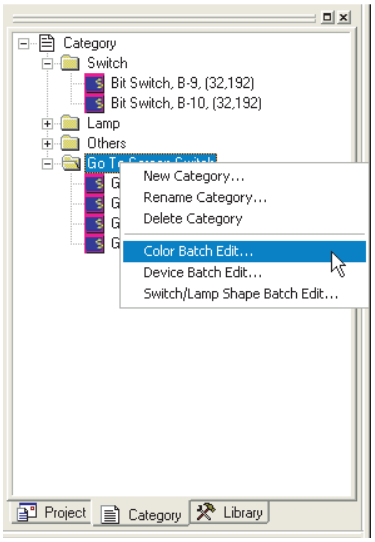
4 Method to make batch settings for each category

Batch setting method of a category is described.

An example of batch-changing the switch color in the Go To Screen Switch category from white to red is provided here for explanation.



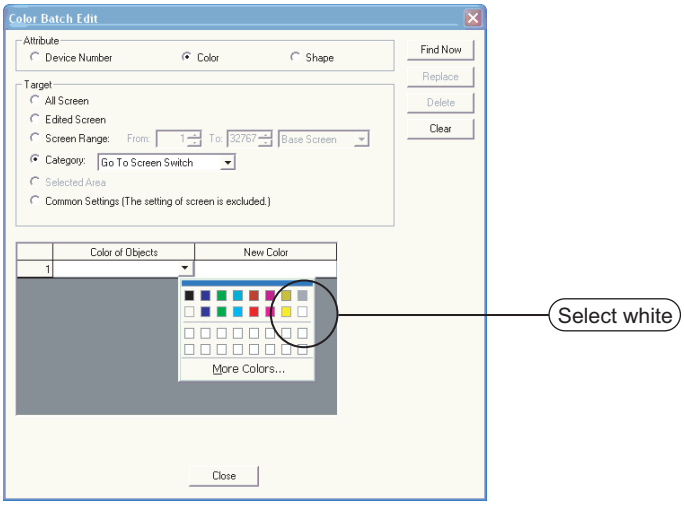
1 Select the desired category for batch edit and right click the mouse to select [Color Batch Edit...].



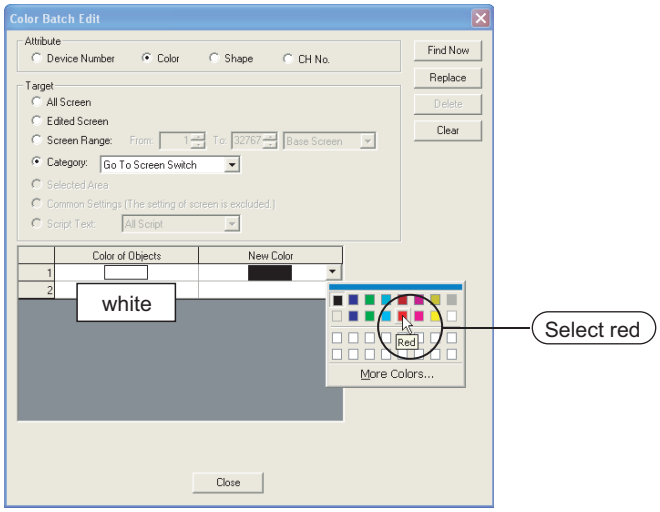
2 The Color Batch Edit dialog box appears. Specify the color (white) before change.

Refer to the following for details of the Color Batch Edit dialog box.

☞ Section 12.1.3 Batch editing attributes of objects/figures scattered on multiple screens (Batch edit)

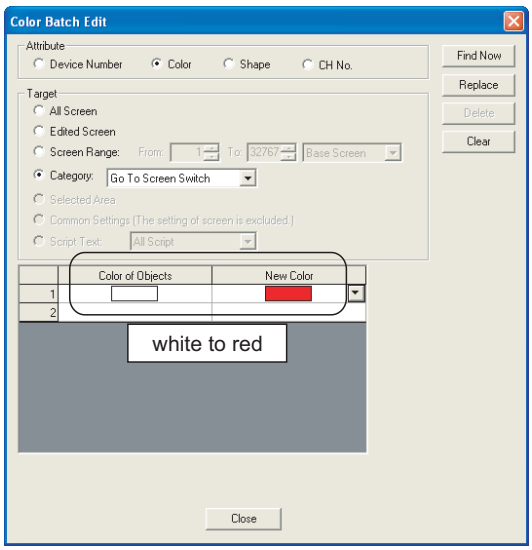


3 Specify a new color (red).



4 Click the Replace button. The color is changed to the specified color. (white to red)

Click the Close button to close the dialog box.



Hint!

(1) Find Now button

Click the Find Now button to display a list of all devices/colors/figures (only one of these kinds) used in the category.
It is convenient to batch edit multiple devices/colors/figures.

(2) Target other than category

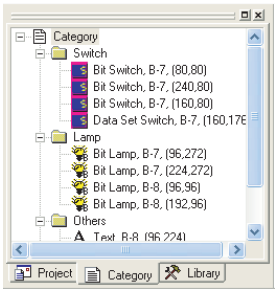
Other than categories, screens or common settings can be batch edited.

☞ Section 12.1.3 Batch editing attributes of objects/figures scattered on multiple screens (Batch edit)

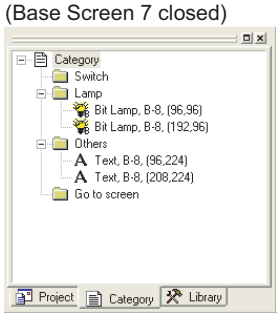
5 Precautions

(1) The categories set on a closed screen are not displayed.

Bases Screen 7, 8 open



Only Base Screen 8 open
(Base Screen 7 closed)



(2) A single object/figure cannot be stored into multiple categories.

(3) Multiple attributes cannot be batch-changed. (Example: The device and color cannot be batch-changed.)

(4) Before performing batch editing, refer to the precautions for batch editing.

☞ Section 12.1.3 Batch editing attributes of objects/figures scattered on multiple screens (Batch edit)

12.1.3 Batch editing attributes of objects/figures scattered on multiple screens (Batch edit)

1 What is batch edit?

Color or other attributes of objects/figures are changed in batch.

The following attributes can be batch edited:

- Device of object
- Color of object/figure
- Figure used for lamp/switch

2 Convenient for the case below:

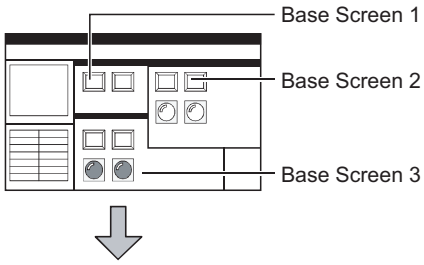
It is convenient to batch edit device, color or lamp/switch figure of objects or figures scattered on multiple screens.

Different types of figures (circle and rectangle) or object (switch and Numerical Display) can be batch edited.

The following types of batch edit are available.

Each change method and image after change are shown below.

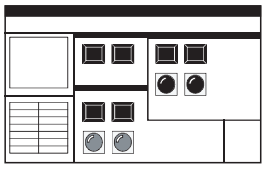
<Image before change>



<Image after change>

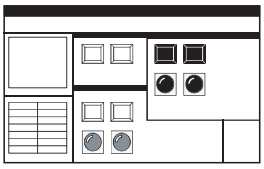
Batch editing all screens
(Change of color: □→■)

Color of objects/figures on all screens (Base Screen 1, Base Screen 2, Base Screen 3) is batch edited.



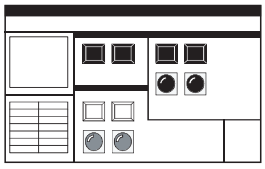
Batch editing screen
(Change of color: □→■)

Color of objects/figures on the editing screen (Base Screen 2) is batch edited.



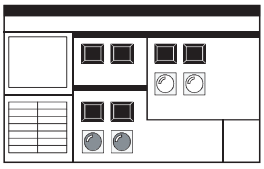
Batch editing specified screens
(Change of color: □→■)

Color of objects/figures on screens for the specified numbers (Base Screen 1 to Base Screen 2) is batch edited.



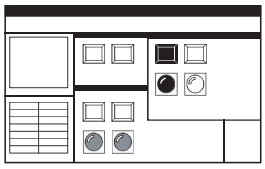
Batch editing each category
(Change of color: □→■)

Color of the specified category (Go To Screen Switch) is batch edited.



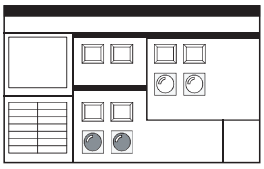
Batch editing selected areas
(Change of color: □→■)

Color of objects/figures on the selected area in the editing screen is batch edited.



Batch editing common settings
(Change of device)

Devices (Switching screen device, start trigger device of hard copy, etc.) set in the common settings are batch edited.

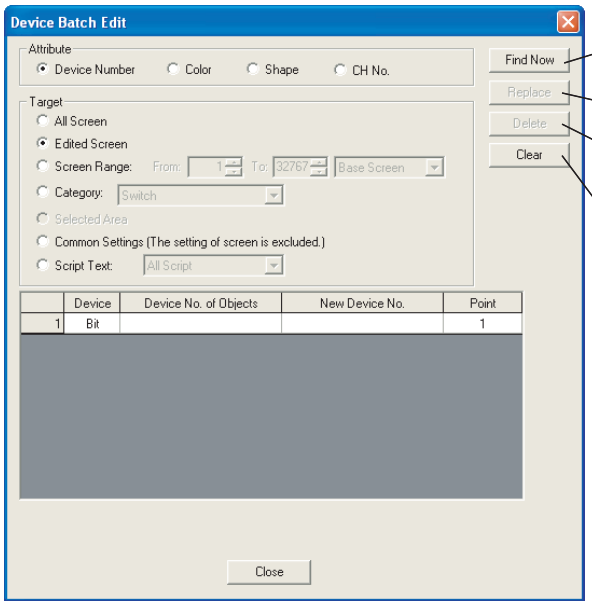


3 Operation method

The batch edit method is described.

1 Select the [Tools] - [Batch Edit] - [Replace Device.../Replace Colors.../Replace Shapes.../Replace CH No....] menu.

2 The setting dialog box appears. Refer to the following descriptions for setting.



Device/Color/Shape/CH No.(GT16 and GT15) specified on the screen are searched.

Batch edit is performed.

Items selected for change are deleted.

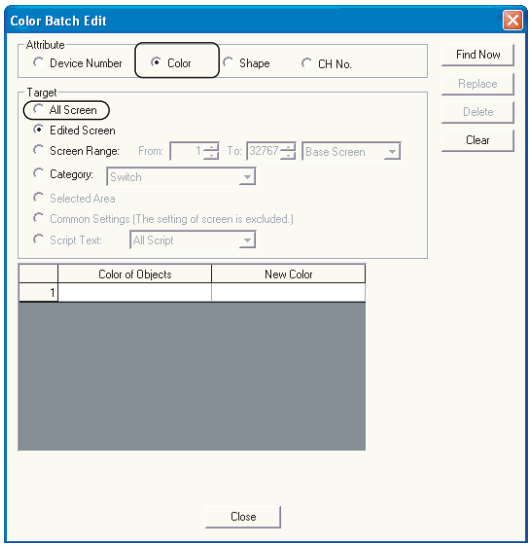
Items set on the edit list are cleared.

Item	Description
Attribute	Attribute for batch edit is selected. • Device Number : Device number is batch edited. • Color : Color is batch edited. • Shape : Figures of switch or lamp are edited. • CH No.: CH No. is batch edited.(for GT16 and GT15)
Target	Unit for batch edit is selected. • All Screen : All screens are the target for batch edit. • Edited Screen : The editing screen is the target for batch edit. • Screen Range : The specified screen is the target for batch edit. After selection, the range and the type on the screen are specified. • Category : Category is the target for batch edit. After selection, select the category for batch edit. • Selected Area : Objects/figures selected on the editing screen are the target for batch edit. • Common Settings (The setting of screen is encluded) : Common Settings are the target for batch edit. The device assigned to object set on each screen is not the target. • Script Text : The script of the target is selected.
Edit list	Attributes to be changed are set. When figures are selected by attributes, switch figures and lamp figures can be classified for setting. • Device No of Objects : Device/Color/Shape/CH No.(GT16 and GT15) before change is selected. • New Device No. : Device/Color/Shape/CH No.(GT16 and GT15) after change is selected. • Device : Device type (bit/word) is selected for batch edit of device. • Point : Points are set for consecutive edit of devices. (In Device No of Objects: M0/New Device No.: M10, set 4. M0 to M3 are changed to M10 to M13.)

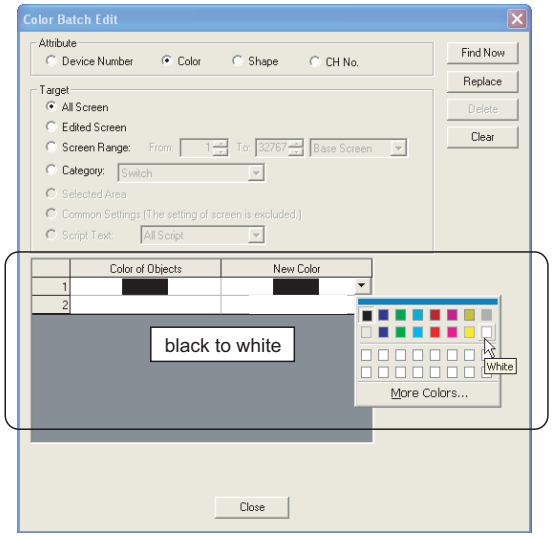
4 Method of batch edit

Method of batch edit is explained.
An example to change the color of objects or figures set on all screens from black to white is described here.

1 Display the device batch edit dialog box. Select "Color" from "Attributel" and "All screen" from "Target."



2 Select black from "Color of Objects" and select white from "New Color."



Hint! Find Now button

Click the Find Now button so that one of the devices/colors/figures/channel numbers (GT16 and GT15) that are used in all the screens will be displayed.
This is convenient if batch eadit of multiple devices/colors/figures/channel numbers (GT16 and GT15) is performed.

3 After selection, click the Replace button. Items set in black are changed to white.

5 Precautions

(1) Change of device

(a) When the device format (bit device, word device, bit specification for word device) is specified, the device cannot be changed to a different device type.

(b) The object device with the specified offset device cannot be changed to the word specification for bit device.

(c) When the head device of the device which is automatically and consecutively set is changed, do not make the data length out of the device range.
The following operation occurs depending on the device data length.
- When the data length is 16 bits and the set device is out of the range, the device is not changed.
- When the data length is 32 bits and the set device is out of the range, the area out of the device range is not set for the device.

(2) Change of shape
Changes from Basic Figure to Library and from Library to Basic Figure are not allowed.

(3) Change of CH No.

(a) Batch change of CH No. of devires on the script cannot be performed.

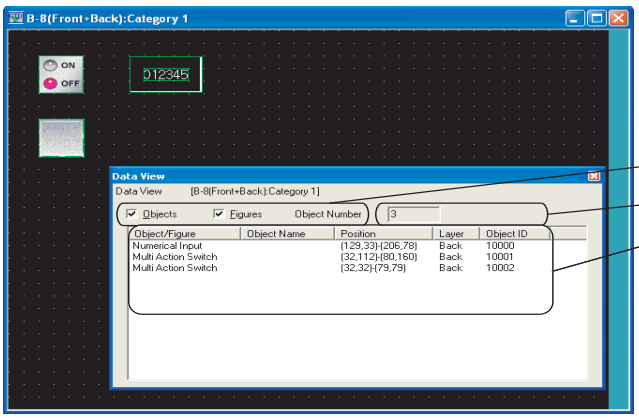
(b) If non-existent device is used for the selected device after CH No. is changed, the device must be assigned again.
If non-existent device is used for the selected device after CH No. is changed, [??] is displayed on the setting dialog for each setting or each object setting.

(c) If confirm that there are no duplicate device numbers.

12.1.4 Simple selection of overlapped figure (Data view)

1 What is Data View?

The Data View displays all figures and objects arranged on the screen in a list.
The listed figures and objects can be double clicked and edited directly.



Check an item for display.

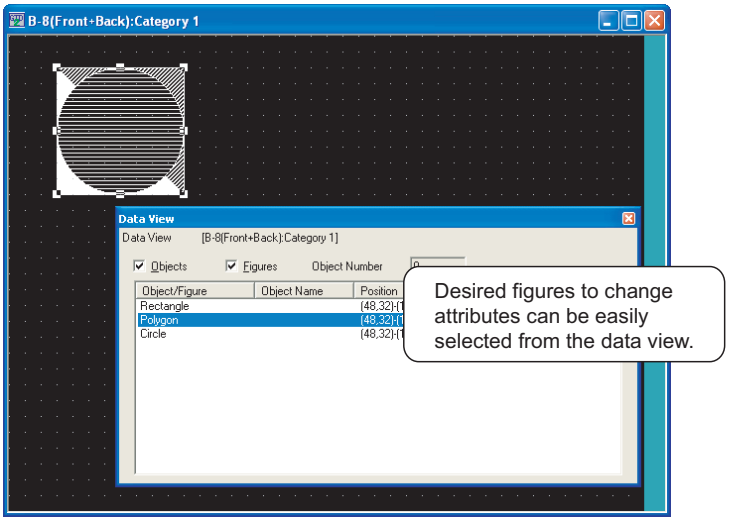
The number of objects is displayed.

Object/Figure names, coordinates, layers and object IDs (objects only) are displayed.

When the figure is a grouped one, its name is preceded by "G".

2 Useful for cases below:

If multiple objects or figures are overlapped, desired figures or objects can be easily selected and edited.



3 Operation method

1. Select the [Tools] → [Data View] from the menu.
2. The Data View is displayed.
3. Double-click the object/figure to be edited from the data list.

Point Individual settings for grouped objects

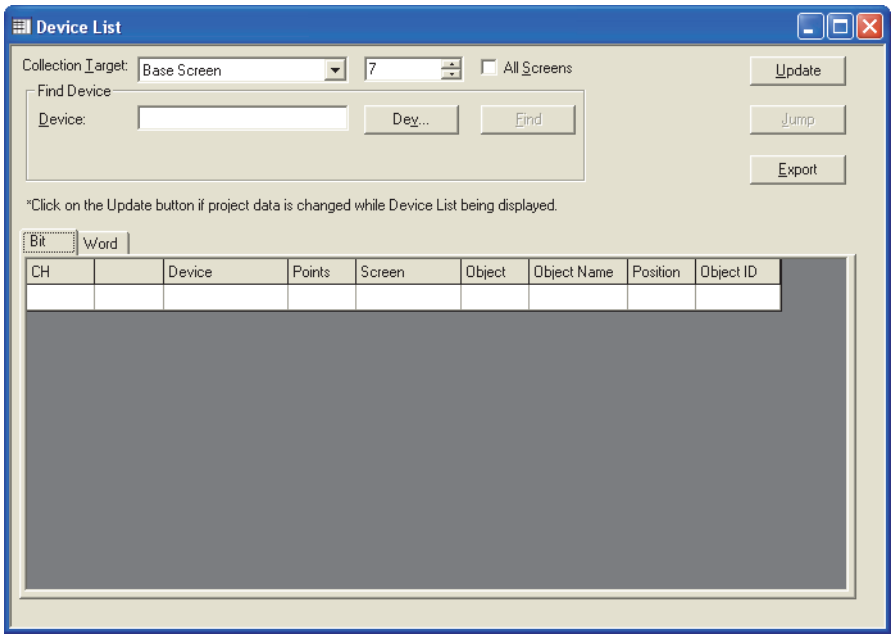
Grouped objects selected from the data list can have individual settings changed without ungrouping.

12.1.5 Checking devices in use (Device List)

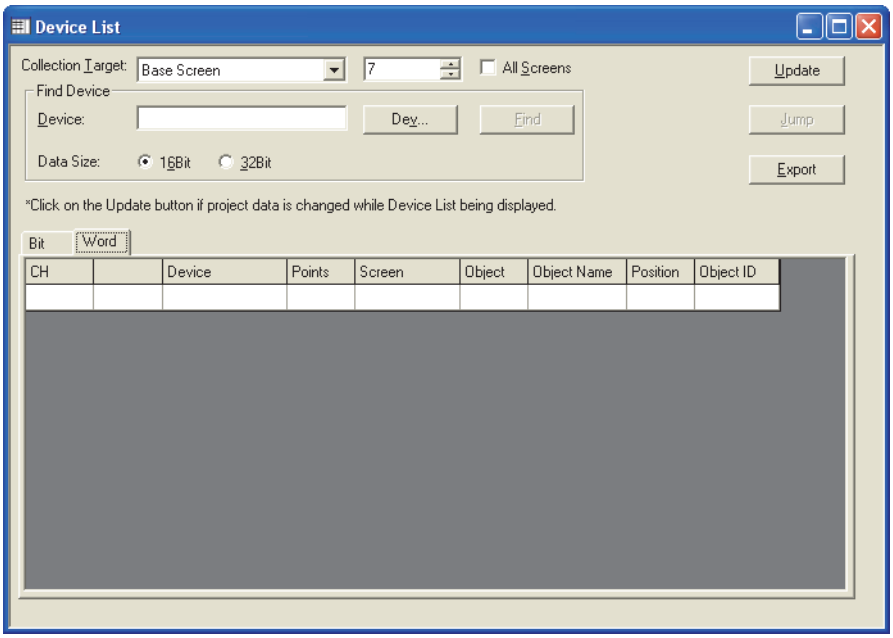
1 Device List

The Device List displays the devices used for the editing screen or the entire project.
The refining, Jump, and preset file output can be performed.

Bit device page



Word device page



2 Useful for cases below:

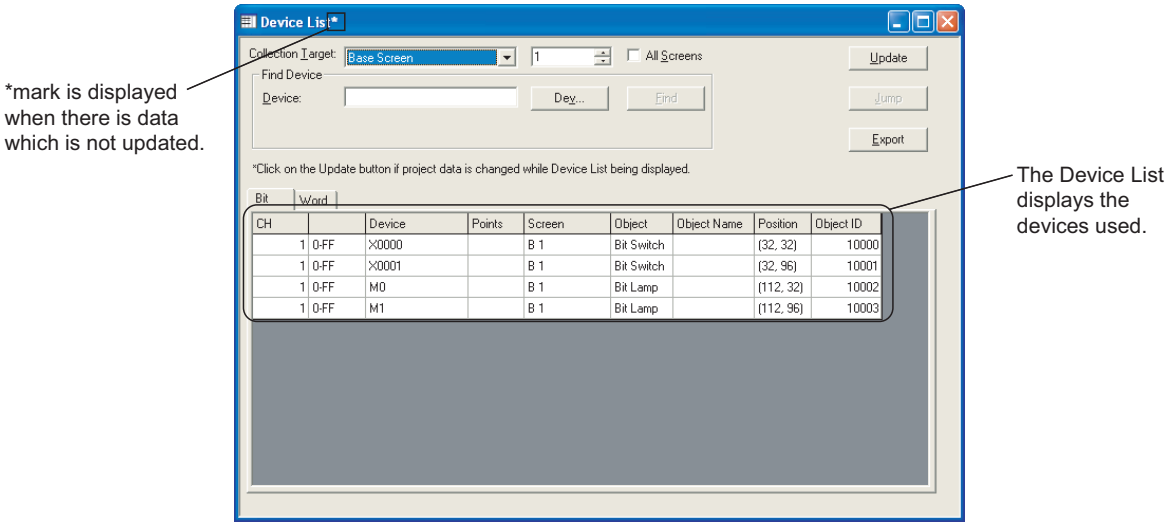
The Device List is useful to check and search devices used for the project/screen created.

3 Operation method

1 Select the [Tools] → [Device List] → [Screen.../Project...].

- When the [Screen...] is selected, the collection target is Base Screen.
- When the [Project...] is selected, the collection target is the whole Project.

2 The Device List is displayed. Check the devices used.



Item	Description
Collection Target	The display target is selected from [Project (incl. script text)], [Project (excl. script text)], [Base Screen], [Window Screen], [Report Screen], [All Script Text], [Script List], [Project/Screen Script Text], and [Object Script Text]. (When the [Project] is selected, Screen No. and all screen check box are disabled.)
Screen NO.	The screen NO. to be searched is specified from 1 to 32767 (from 1 to 8 for only Report Screen).
All Screens check box	All screens of the Screen Type that are selected in the collection target are the objects.
Update button	The list information is updated.
Jump button	The specified setting screen is opened, and the object is pointed with a cursor. Jump button is enabled when a line is selected in the list.
Export button	The Device List currently displayed is output to the CSV or Unicode Text file.
Find button	When the device is set, and when the return key or the Find button is pressed, the search is performed.

Point

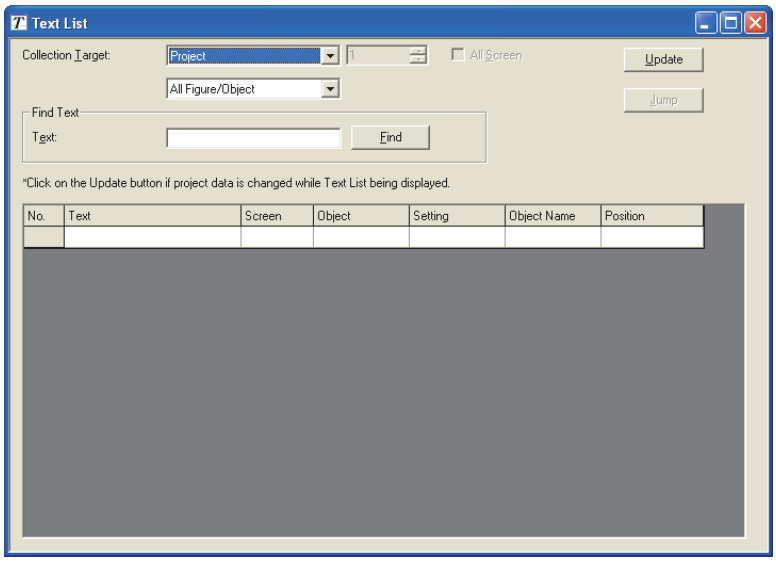
When using the Device List

- Devices in the script cannot be displayed as a device list.
- Object ID misplacement
  After the objects on the screen are erased, or the order of the objects are changed, if the Jump is performed without updating the devise list, an error that the cursor jumps to the different object may occur.

12.1.6 Checking Text in use (Text List)

1 Text List

The Text List displays the direct text setting by the refining setting.
The specific figure or object can be selected by the jump function.



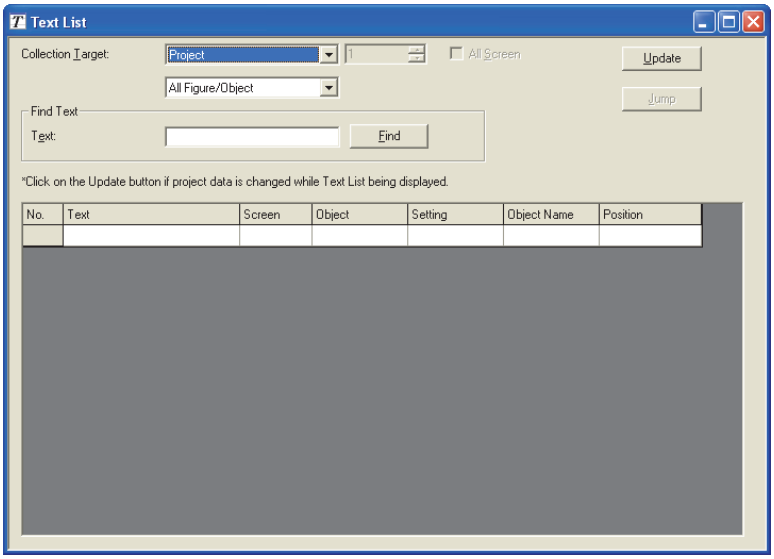
2 Useful for cases below:

The Text List is useful to check and search direct text settings used for the project/screen created.

3 Operation method

1 Select the [Tools] → [Text List].

2 The Text List is displayed. Check the devices used.

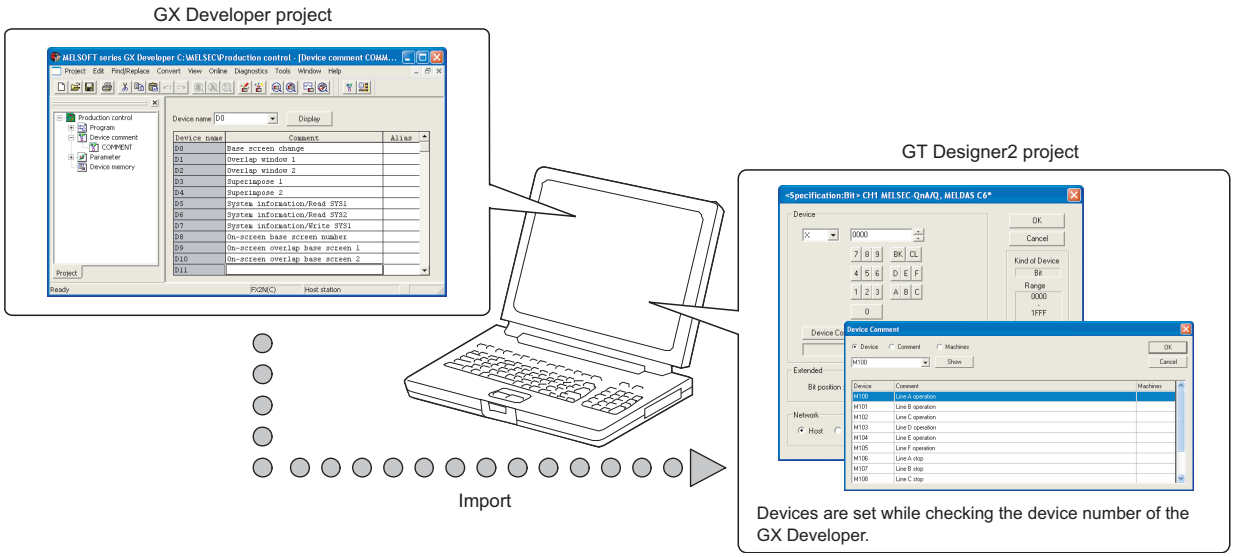


Item	Description
Collection Target	The display target is selected from [Project], [Base Screen], [Window Screen], [Report Screen], [Parts], and [User Library].
Screen NO.	For [Base Screen], [Window Screen], and [Parts], the screen NO. to be searched is specified from 1 to 32767. For [Report Screen], the screen NO. to be searched is specified from 1 to 8. For [User Library], the screen NO. to be searched is specified from 1 to 250.
All Screens check box *1	All screens of the Screen Type that are selected in the collection target are the objects.
Update button	The list information is updated.
Jump button	The specified setting screen is opened, and the object is pointed with a cursor. Jump button is enabled when a line is selected in the list.
Find target 2	The target to be displayed in the list is refined.
Find button	When the device is set, and when the return key or the Find button is pressed, the search is performed.

*1 When the [User Library] is selected, the name becomes [All User Library (S) (0: Including My Favorites)].

12.2 Referring to Device Comment When Setting Devices

The device comment and the device name created on the GX Developer can be checked when setting devices on the GT Designer2. Since devices can be set on the GT Designer2 while checking the devices used for the PLC program, errors in device number setting can be prevented.



Point

PLC types available for the device comment check

The device comments of the GX Developer can be checked when the PLC type is "MELSEC-A", "MELSEC-QnA, Q", "MELSEC-Q (Multi)" or "MELSEC-FX".

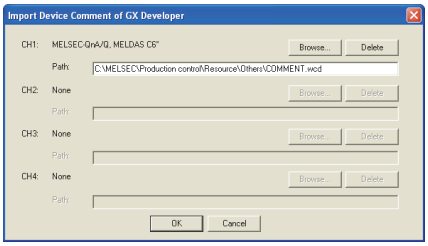
12.2.1 Importing the device comments

To look through the devices on GT Designer2, import the device comments of GX Developer to GT Designer2.

1 Choose the [Project] → [Import Device Comment of GX Developer...] menu.

2 As the "Import Device Comment of GX Developer" dialog box appears, specify the device comment file in the project of GX Developer.

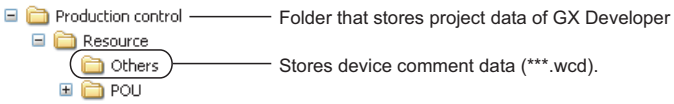
The path of the currently specified device comment data can be erased by clicking the Delete button in the "Import Device Comment of GX Developer" dialog box.



Point

Device comment data storage destination

The device comment data (***.wcd) of GX Developer are created in the project data of GX Developer.



4 Click the OK button to complete the import of device comments.

Point

(1) GX Developer data used for this function
Only the device comment data (***.wcd) of the GX Developer is required for this function.
Other project data of the GX Developer is not required.

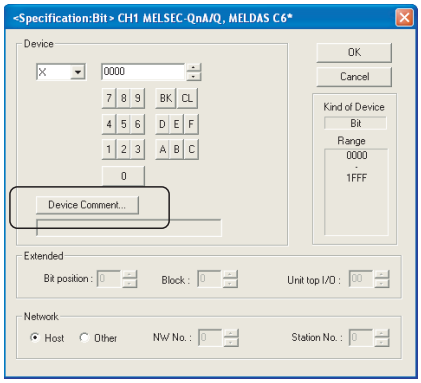
(2) Modification of device comment on the GX Developer
If the device comment data (***.wcd) once specified is edited on the GX Developer, it is not updated on the GT Designer2.
To update the edition, specify the device comment data (***.wcd) again.

(3) Specified path
The path is stored after the GT Desiner2 is completed.

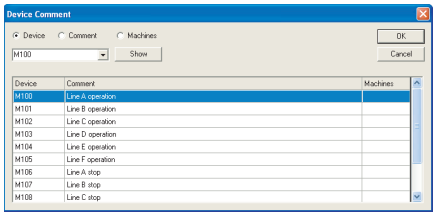
12.2.2 Check method of device comment

The check method of device comment is shown below:

1 Click the Device Comment... button in the device settings dialog box of each object.



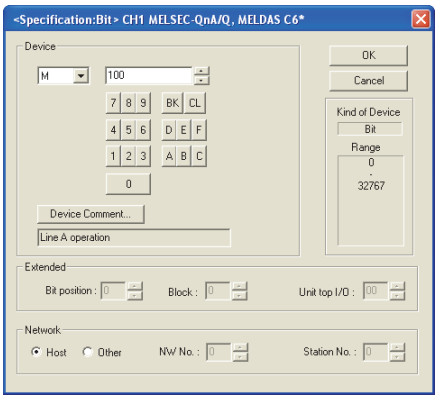
2 The Device Comment dialog box appears. A device can be set while checking the Device comment.



For the device searching method, refer to Hint on the next page.

3 After setting, click the OK button.

The Device Comment dialog box will close, and the selected device will be set to the Device setting dialog box.

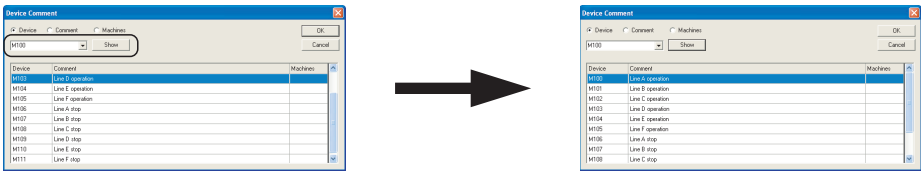


Hint! Search for device

In the Device comment dialog box, search can be performed by device, comment or machines.

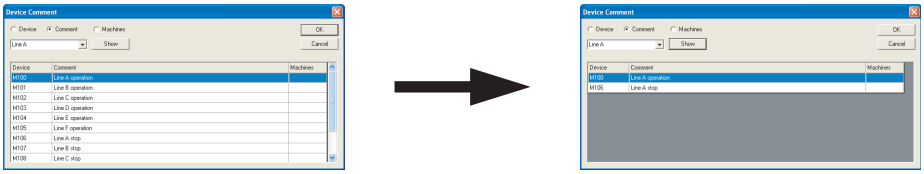
(1) Search by device No.

After entering the device No. to be searched for, click the Show button. This displays the entered device No. at the top of the list.



(2) Search by Comment/Machines name

After entering the keyword to be searched for, click the Show button. This displays comment/machines names including the entered keyword in the list.



12.3 Checking Project Data for Errors

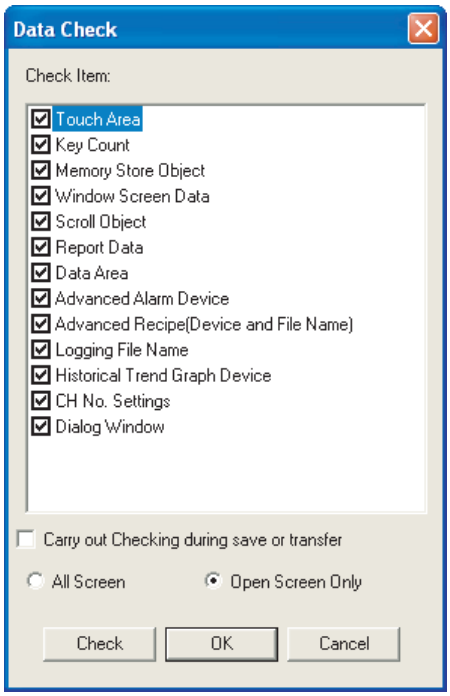
The project data created on GT Designer2 can be checked for errors.
Refer to the following section for details of the error checking method.

☞ Section 7.15 Data Check

12.3.1 Data Check Procedure

1. Open all screens to be checked. The unopened screens are not checked.
2. Choose the [Tools] → [Data Check...] menu.
3. The Data Check dialog box appears.

   Set the data check items and click the Check button to execute a data check.



*1 In case of GT11☐☐, the "Advanced Alarm Device", "Advanced Recipe (Device and File Name)","Logging File Name", "Historical Trend Graph Device" and "CH No. Settings" check items are not displayed.

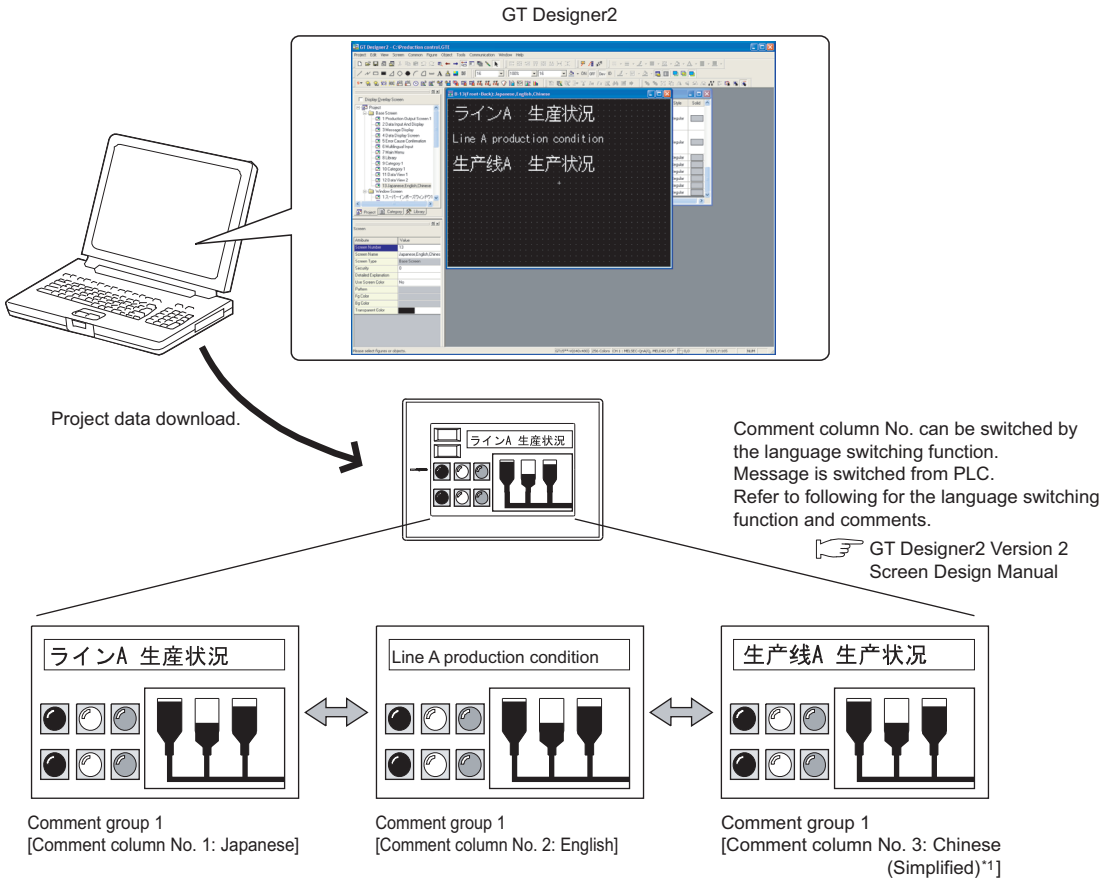
Point

Data check target

The targets of data check are only open screens. Unopened screens are not checked. To check all screens, open all screens and then start a data check.

12.4 Entering Multiple Languages [Multi-language input function]

The GOT1000 series can display Unicode 2.1 characters. Using the Windows® multi-language function or language input software enables the various languages to be entered on GT Designer2, and their characters can be displayed as they are on the GOT.
Characters or comments can also be entered in the various languages and the corresponding screens can be displayed on a single GOT.



*1 When displaying Simplified Chinese on the GT15☐☐, set the Kanji region to Simplified Chinese, and install Simplified Chinese using the option function of OS installation.

Point OS (Windows®) that allows input of multiple languages

Multiple language input is available for the OS (Windows®) below:

- Windows®2000 Professional
- Windows®XP Professional
- Windows®XP Home Edition

Multiple languages can be entered in either of the following methods.

- Use the multi-language function of Windows® to enter.

  Multiple languages can be entered on GT Designer2 by using the Windows® multi-language function.

  (Windows®-incompatible languages cannot be entered.)

  ☞ Section 12.4.1 Using the Windows® multi-language function

12.4.1 Using the Windows® multi-language function

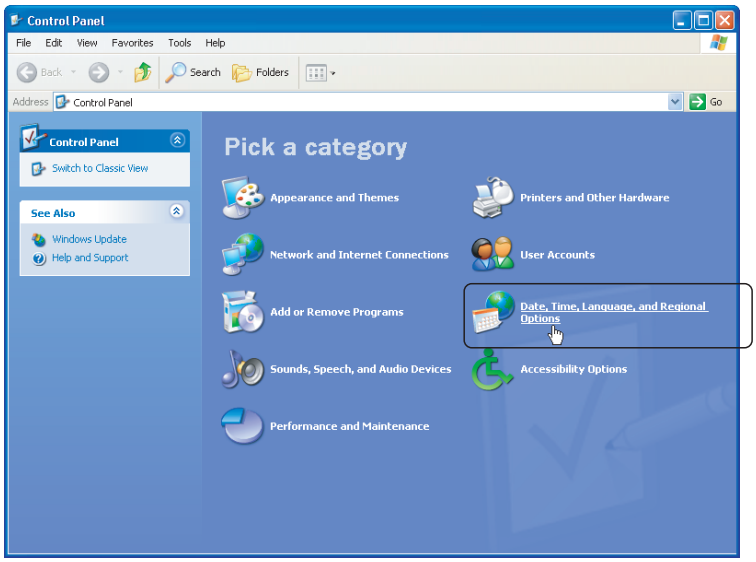
The following provides a procedure to enter various languages.

For details of the Windows® operation method, refer to Windows® Manual/Help.

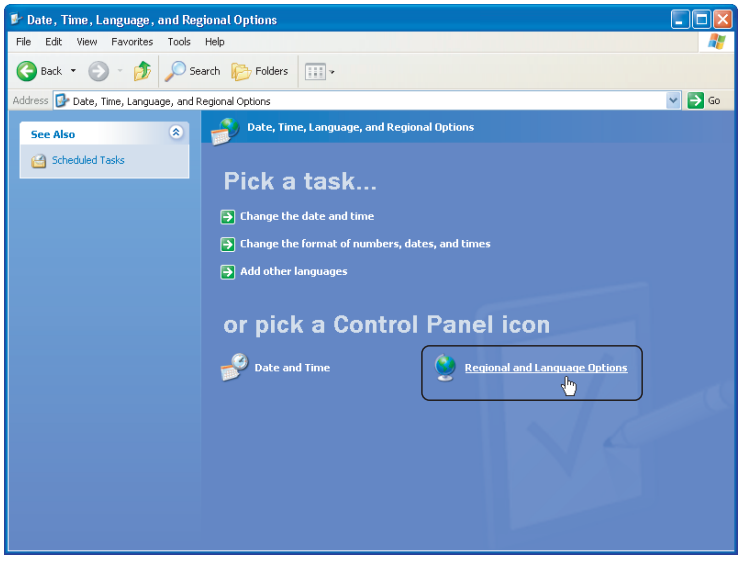
1 Windows® settings

■ For Windows® XP Professional, Windows® XP Home Edition

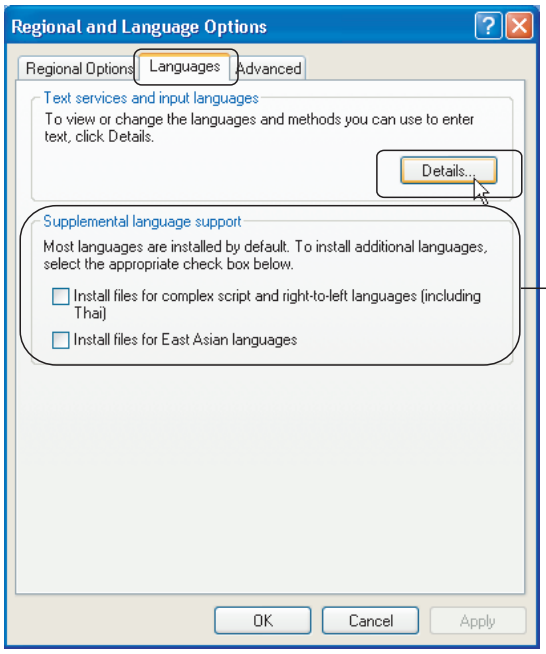
1 Choose the [Start] → [Control Panel] menu, and click "Date, Time, Language, and Regional Options".



2 Click "Regional and Language Options".

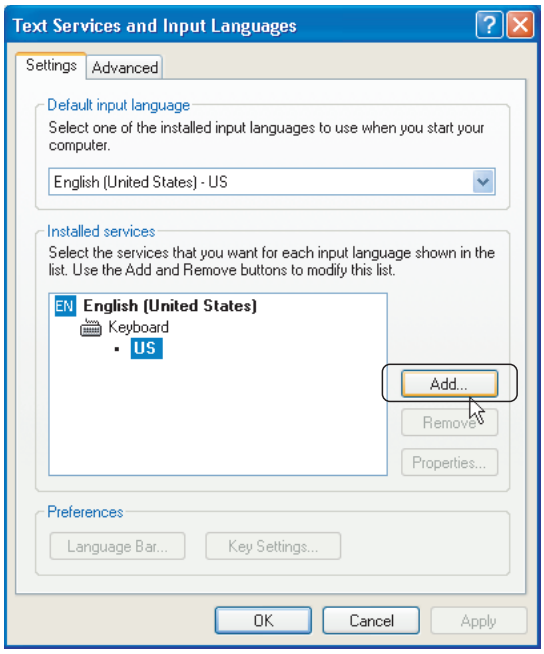


3 As the "Regional and Language Options" dialog box appears, select the Language tab and click the Details... button in "Text services and input languages". Multi language support requires the setting of additional input languages. Please set additional languages.

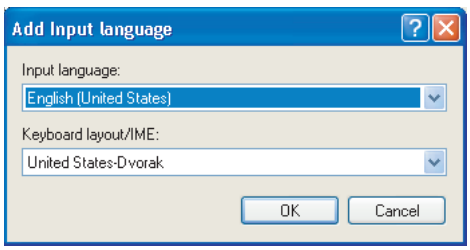


If a language is to be added for the first time, Windows® XP CD-ROM is required.

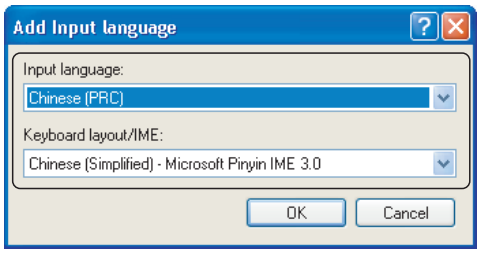
4 As the "Text Services and Input Languages" dialog box appears, click the Add... button in "Installed services".



5 The "Add input language" dialog box appears.

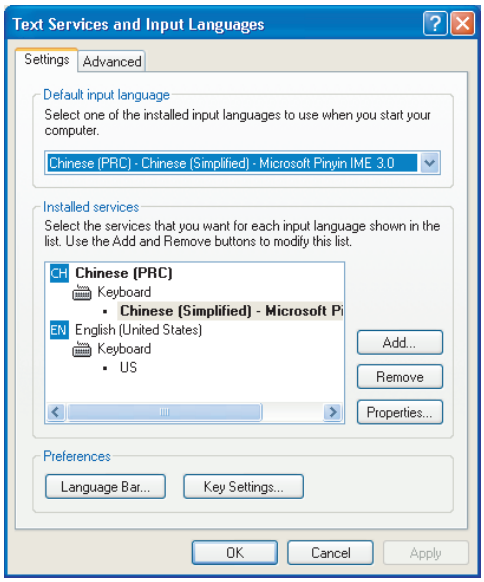


6 Set the necessary language as Input language, and click the OK button.



Setting example:
Input language: Chinese [PRC]
Keyboard layout/IME:
Chinese (Simplified) - Microsoft® Pinyin IME 3.0

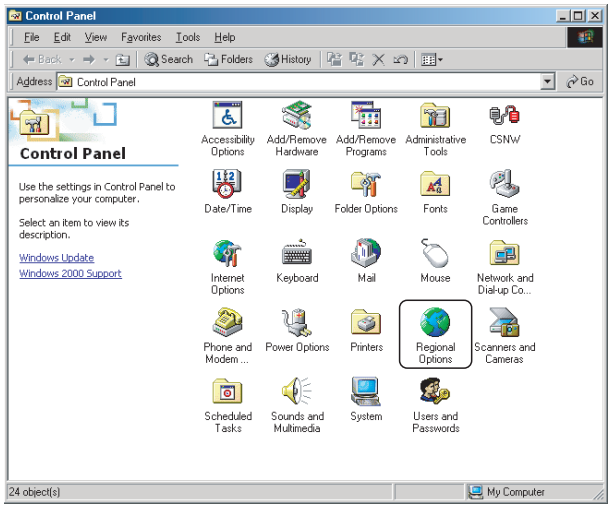
Clicking the OK button will result in the following settings.



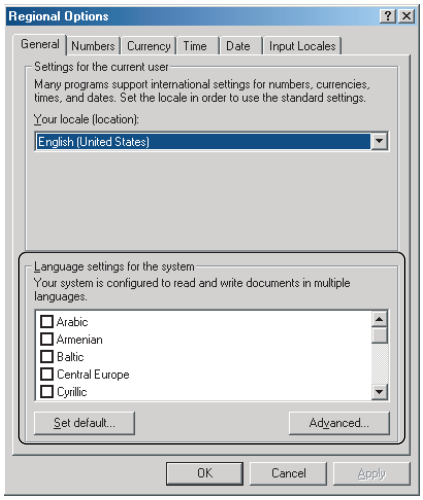
7 Click the OK button to apply the settings and close the dialog box.

■ For Windows® 2000 Professional

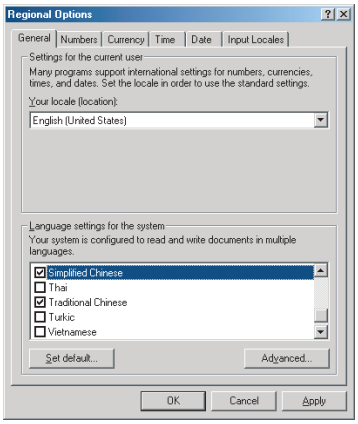
1 Choose the [Start] → [Control Panel] menu, and double-click "Regional Options".



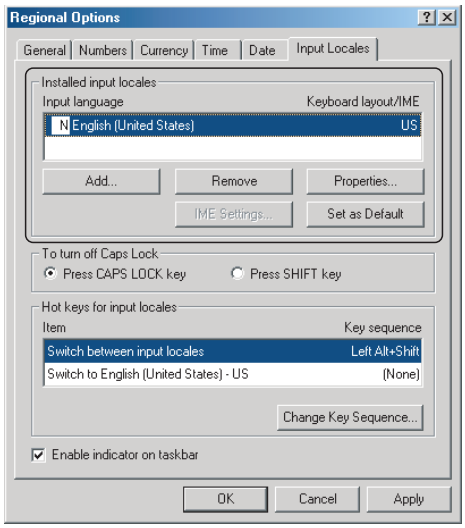
2 The "Regional Options" dialog box appears.
Set the language to be added in "Language settings for the system".



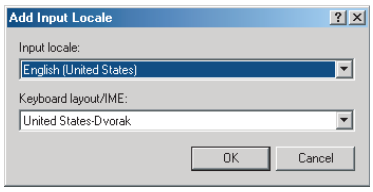
(Example) When using Simplified Chinese
Check the Simplified Chinese check box.



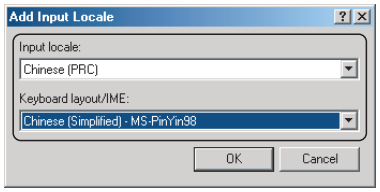
3 Click the Input Locales tab, and click the Add button in "Installed input locales".



4 The "Installed input locales" dialog box appears.

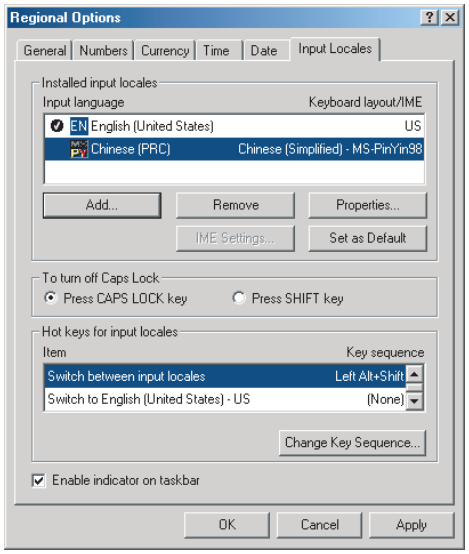


5 Set the necessary language and click the OK button.
When the input language is set for the first time, the Windows® 2000 CD-ROM is required.
To validate the added setting, make sure to restart Windows® 2000.



Setting example:
Input locale: Chinese [PRC]
Keyboard layout/IME: Chinese [Simplified]- MS-PinYin98

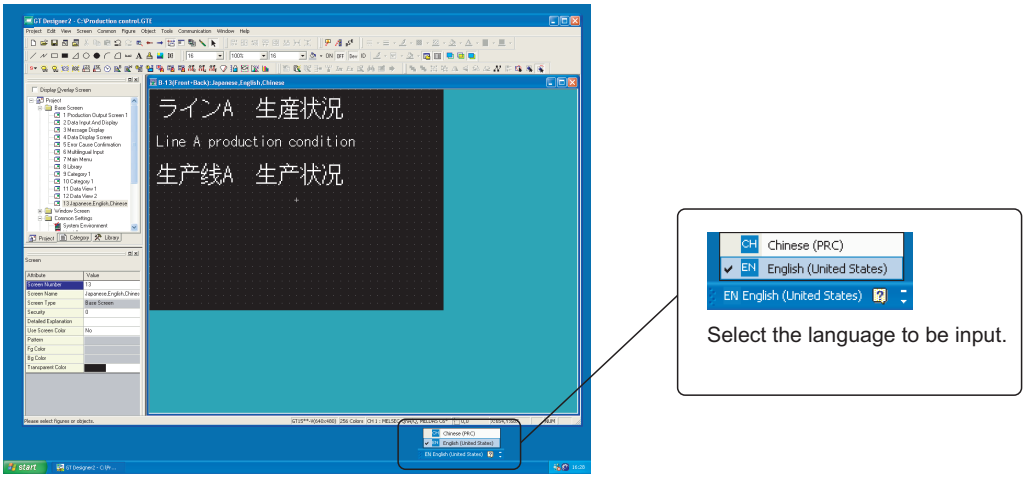
Clicking the OK button will result in the following settings.



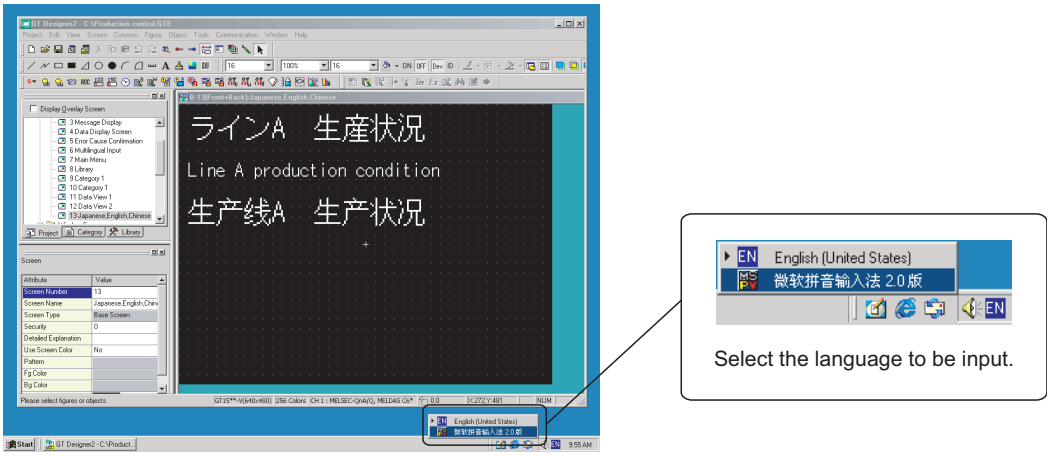
2 Input method

Click the language selection icon on the task bar at the bottom right of the screen to select the language to be input.
After selection, multiple languages can be entered on GT Designer2.

Example) Windows®XP Professional



Example) Windows®2000 Professional



12.4.2 Precautions

1 Intended characters and the corresponding characters to be displayed

GT Designer2 and GOT use the Unicode 2.1 fonts to display texts. Therefore, when displaying Simplified Chinese, traditional Chinese and Korean characters, similar ones may appear instead of the intended ones.



Displaying Simplified or Traditional Chinese Characters (GT16☐☐ and GT15☐☐)

To display Simplified Chinese and Traditional Chinese characters on the GT16☐☐ and GT15☐☐, perform the following two actions.

(1) Install the following fonts (Option OS) while installing the OS.

Standard font [China GB] 12-dot characters)	The Simplified Chinese (GB) font is a GB2312-encoded font mainly used on mainland China.
Standard font [China GB] 16-dot characters	
Standard font [China Big5] 12-dot characters	The Traditional Chinese (Big5) font is a Big 5-encoded font mainly used in Taiwan.
Standard font [China Big5] 16-dot characters	

(2) Set each shape and object's KANJI Region to China (GB) - Mincho or China (Big5) - Gothic.

2 Precautions for printing

When "Output to file" is executed for printing, only the languages supported by the OS (Windows®) as standard can be output.

3 Import/export of comments entered in multiple languages

Use the Unicode text file format to import/export the comments entered in multiple languages.
Characters may be garbled if a normal text file or CSV file is used.
Refer to the following manual for the import/export of comments.

☞ GT Designer2 Version ☐ Screen Design Manual

4 When the project data created in multiple languages is drawn in the OS (Windows®) environment other than Windows® 2000 Professional/Windows® XP Professional/ Windows® XP Home Edition

(1) Precautions for editing

Do not edit the settings (comments, texts, etc.) on which the OS (Windows®)-incompatible languages have been entered.
This may garble the characters.

(2) Display on workspace, property sheet and dialog
Multi-language characters may be garbled on the Workspace, Propertysheet, but are correctly displayed on the GOT if they are correctly displayed on GT Designer2.

12.5 Confirming the created data size

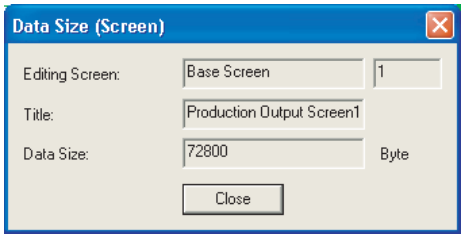
Before transferring the monitor data created using GT Designer2 to the GOT, data size can be confirmed for each screen or project.

12.5.1 Confirmation method

1. Select [Tools] → [Data Size] →[Screen...]/[Project...] menu.
2. The Data Size dialog box (refer to the next section) appears. Confirm the data size.

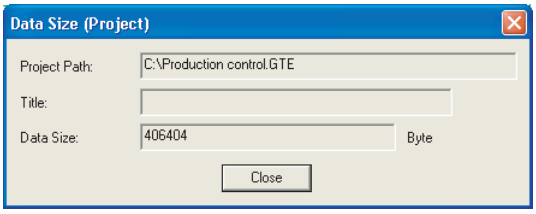
12.5.2 Confirmation items

1 Screen



Item	Description
Editing Screen	The editing screen type and screen No. are displayed
Title	The screen title is displayed.
Data Size	The screen data size is displayed.

2 Project



Item	Description
Project Path	The path for the editing project is displayed.
Title	The project title is displayed.
Data Size	The project data size is displayed.

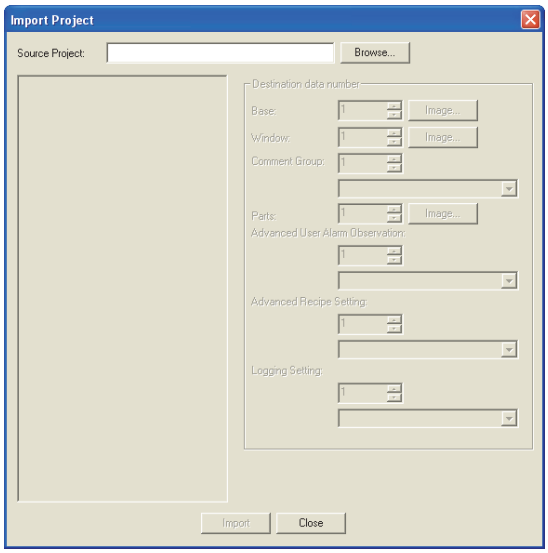
12.6 Utilizing other project data (GOT1000)

It is possible to utilize other project data, i.e., import other project data (Source project) into the currently edited project (Destination data).
This function is effective when utilizing multiple project data.
When utilizing the project data of the GOT-900 series, refer to the following section.

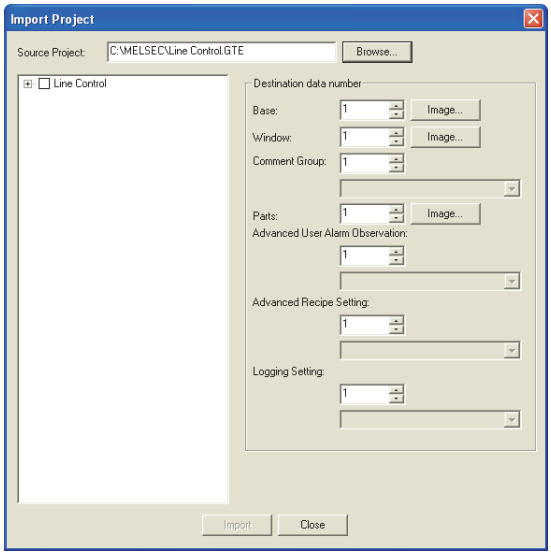
☞ App3. Utilizing the Existing Data

12.6.1 Importing data

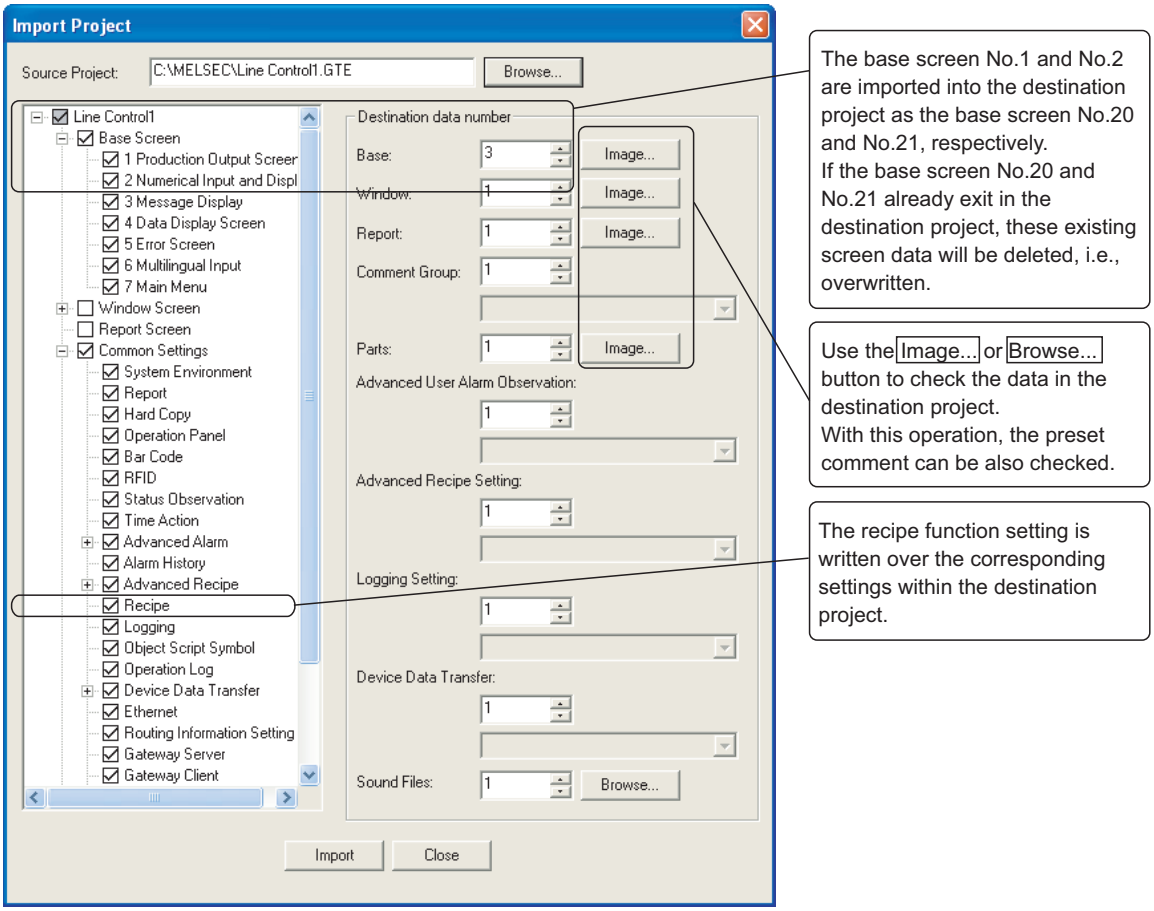
1. Select [Project] - [Import Project...] from the menu.
2. The Import Project dialog box appears.



3. Click the Browse... button and select a project to be imported, i.e., source project (or directly enter the path).
After the selection, the project data is displayed in tree format.



4 When selecting screen, parts or comments data for utilization, set it the No. to be used in the destination project. (When selecting multiple data, set the head No.)
If the data of the same No. already exists in the destination project, the existing data will be deleted, i.e., overwritten. (Use the Image... or Browse... button to check the data in the destination project.)
All common settings will be overwritten.



5 Click the Import... button to import the selected data.

6 After the data import is completed, confirm the imported data and the relevant settings.

12.6.2 Cautions

1 If the GOT type or Controller type set for the source project differs from that for the destination project.

(1) If the GOT type set for the source project differs from that for the destination project, the GOT type of the imported data is changed to the one set for the destination project.
With this import, some functions may be deleted due to the GOT type incompatibility.

(2) If the controller type set for the source project differs from that for the destination project, the controller type of the imported data is changed to the one set for the destination project.
GT Designer2 may delete some devices, as the device type is incompatible or they are out of the applicable setting range.
Make the device settings as necessary.



Hold the incompatible devices

The incompatible devices, i.e., devices to be deleted after the data import (described in (2) above), can be held by executing the following.

1. Change the controller type set for the source project to the one for the destination project.
2. Check for the objects converted to "??" in the device list. (The incompatible devices are converted to "??".)
3. Make the settings of the devices for the objects converted to "??".
4. Save the modified source project. Then, open the destination project, and execute the series of operations for [Import project], i.e., utilizing other project data.

2 To import project data for DU/WIN series

(1) When converting the project data of F900 created on DU/WIN to that of GT11 for GT Designer2, GT11 is selected for the GOT type of GT Designer2.The imported project data is converted to the project data of GT11, however, some functions unsupported by the GOT 1000 series will be deleted.For details of data conversion, refer to the following.

☞Project Data Conversion Summary

(2) When importing the project data of F900 created on DU/WIN as that of F900 series for GT Designer2, F900 is selected for the GOT type of GT Designer2. Import the data after selecting the menu of [Project] -[Import Project...]. selected for the GOT type of GT Designer2.For details of data conversion, refer to the following.

☞Section 12.6.1 Importing data

3 Incompatible data

(1) The GT Designer2 cannot import the data of functions, if the functions are unsupported by the GOT type of the destination project.

(2) If the monitor data is imported using the GT Designer2 version that is older than the one used to create the source project, some functions or settings may be deleted.
To import the relevant data, make sure to use the GT Designer2 version that is the same or newer than the one used to create the source project.
For the compatibility between monitor data and GT Designer2 version, refer to the following.

☞ App4. Precautions for Project Data

(3) The GT Designer2 cannot import the data of the following common settings.
Therefore, make the settings again in the destination project.
• [System Settings] and [Project Title] within [System Environment]

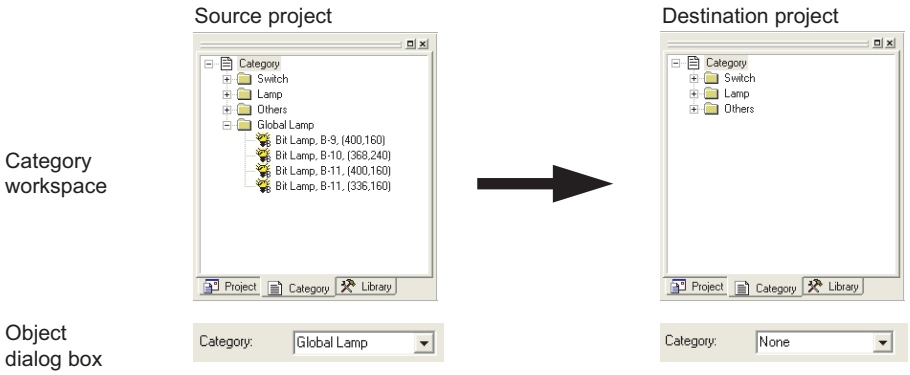
Hint!

Make the settings again

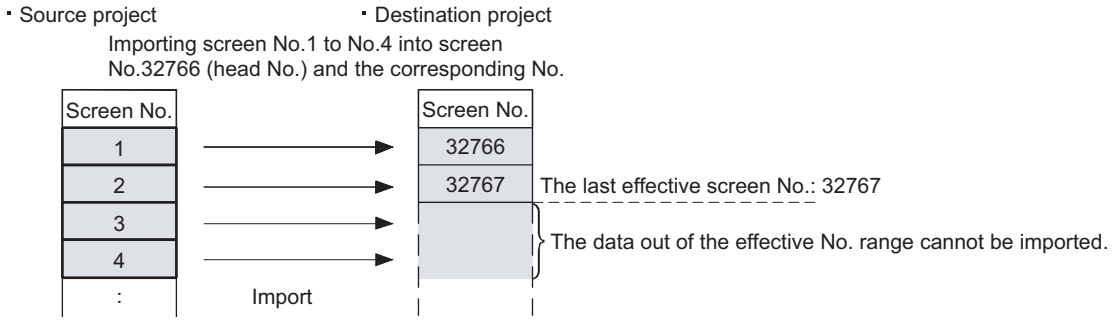
Start two GT Designer2 windows. Open the source project on the one window, and the destination project on the other window, and make the settings by comparing the two project settings.

(4) When the object data is imported to the project in which the corresponding category is not set, the object will be registered within the [None] category, even if the category has been set in the source project.
To set the category, create the same category within the destination project, in advance or after the data import.

(Example) When the data in the "Global Lamp" category is imported.



(5) When a data import is executed based on the setting so that the data No. to be assigned will exceed the effective No. range, the data out of the No. range cannot be imported.



(6) When the [System Environment] setting window is opened on the destination project, [System Environment] cannot be selected. (Not displayed in the tree structure.)
When importing the [System Environment] setting, close the [System Environment] setting window on the destination project, and then select the project to be imported.

4 Status Observation function

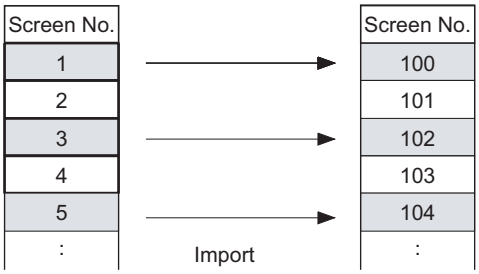
The Screen Status Observation function cannot be imported from the Common Settings.
Import the screen data that includes the setting.
The Project Status Observation function can be imported from the Common Settings.

5 Other cautions

When selecting multiple screen No., they will be imported into the screen No. at the same intervals as before the import.

- Source project
- Destination project

Importing screen No.1, 3, 5 into screen No.100 (head No.) and the corresponding No.



12.7 Starting the GOT with the CF card

GT16 GT15

GOT can start with the easy operation of inserting the CF card into it. OS that exceeds the limit of the user area capacity (C drive) can be used with the use of the option function board with add-on memory. Refer to the following section for details of user area capacity.

☞ Section 8.1.2 Drive capacity required for data transfer

12.7.1 To start up

1. Set the Boot drive of the OS to [A: Standard CF Card] in the transfer dialog, and transfer the data to the memory card.
   Refer to the following section for details.

   ☞ Section 8.9.3 Downloading/installing project data/OS [PC to memory card and memory card to GOT]

2. Start the GOT with the CF card into the main unit.
   Refer to the following manual for details of the starting operation.

   ☞ GT15 User's Manual

   ☞ GT16 User's Manual

Point

When GOT is started with the CF card

(1) When GOT is started with the CF card, the following operations cannot be performed.

- Installation of Boot OS*3
- Installation of OS*1*3
- Download of special data*1*3
- Download of the special data to a drive other than A drive*3
- Deleting in the drive information*2*3
- Format in the drive information*2*3

*1 Write to the CF card again with GT Designer2.
*2 Mount the CF card to the PC, use PC to perform the operation.
*3 Stop starting the GOT with the CF card, and perform the operation with GT Designer2.

(2) When GOT is started with the CF card, [GOT1000-STATUS.txt] and [GOT1000-TIME.txt] are created in the card.
Do not delete these files because they are required for the system.

12.8 Verifying Project Data to Project Data File

Verify the project data opened by GT Designer2 to the project data file saved on the personal computer.

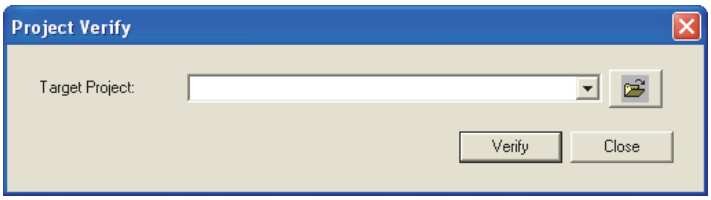
12.8.1 Verifying project data

Follow the steps bellow to verify.

1. Click on [Project] → [Project Verify] in tne menu.

2. The setting dialog box appears for users to set along the description below.

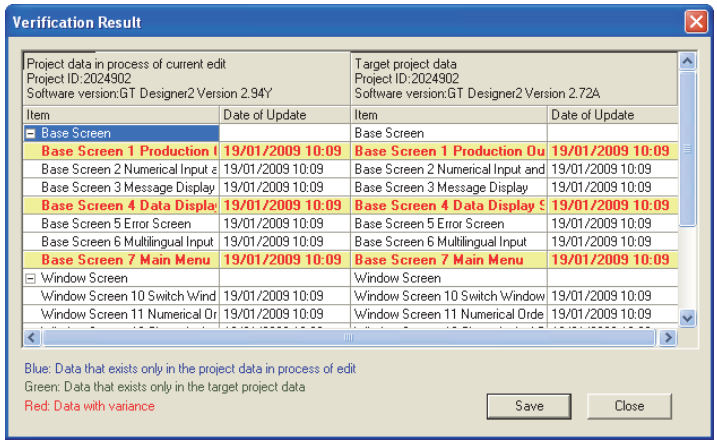
   After the setting, click the Verify button to start the verification.



Item	Description
Target Project	Specify the file to be verified by using the directory button or direct input. The project formats that can be verified are as follows: • GTE format file • G1 format file
Directory button	Specify the file to be verified.
Verify button	The verification is started.
Close button	The dialog box is closed.

3. The verification result is displayed.

   Click the Save button to save the verification result.



Item	Description
Results of verification	The results of verification are displayed.
Save button	The results of verification are saved in the text format (.txt) under the specified file name at the specified location. The button becomes valid afer verification is made.

Point

File verification

- Unlike the communication verification, the file verification is available even when the OS major version is different.
- When the currently used GT Designer2 version differs from the GT Designer2 that edited the project data to be verified, the verification result may differs.
- When the HQ Font is set, the font that is not set by the user is displayed.
  In addition, when the HQ Font to be used is changed, the difference is displayed for all the HQ Fonts.
- When the Project to which the detailed explanations on the Base/Window/Report Screens are set is compared with the Project saved by writing to the memory card and the Project saved after uploaded from the GOT using the Data Transfer Tool, the difference may be displayed.
- When the Buffering area size is changed, the difference is displayed in the Common Settings.
  Example: 1. When whether the File Convert External Control in the Advanced Recipe Common Setting is used or not is switched
  2. When the Record Number in the Advanced Recipe Setting is changed

APPENDIX

App1. List of Shortcut Keys

App.1.1 List of shortcut keys

1 List of shortcut keys for menu operation

Item			Shortcut keys
[Project (P)]		New	Ctrl+N
		Open...	Ctrl+O
		Save	Ctrl+S
		Print...	Ctrl+P
		Exit	Alt+F4
[Edit (E)]		Undo	Ctrl+Z
		Redo	Ctrl+Y
		Cut	Ctrl+X
		Copy	Ctrl+C
		Paste	Ctrl+V
		Duplicate	Ctrl+D
		Delete	DEL
		Select All	Ctrl+A
		Group	Ctrl+G
		Ungroup	Ctrl+U
		Flip Vertical	Ctrl+J
		Flip Horizontal	Ctrl+H
		Rotate Left	Ctrl+L
		Rotate Right	Ctrl+R
		Bring to Front on Front Layer	Ctrl+F
		Send to Back on Back Layer	Ctrl+B
		Attribute...	Alt+Enter

Item			Shortcut keys
[View (V)]		Preview	Ctrl+I
		Workspace	Alt+0
		Propertysheet	Alt+1
		Redisplay	F5
		Controller type list	Alt+2
		Zoom	Ctrl+Wheel
[Screen (S)]		Close	Ctrl+W

2 List of shortcut keys for comment creating/editing operation (Valid for Comment list window only)

Item			Shortcut keys
Comment creating/editing operation		New	Alt+N
		Copy	Ctrl+C
		Paste	Ctrl+V
		Delete	DEL
		Line feed	Alt+Enter
		Edit	F2
		Import...	Alt+I
		Export...	Alt+X
		Select All	Ctrl+A
		Mouse click*1	Space*1

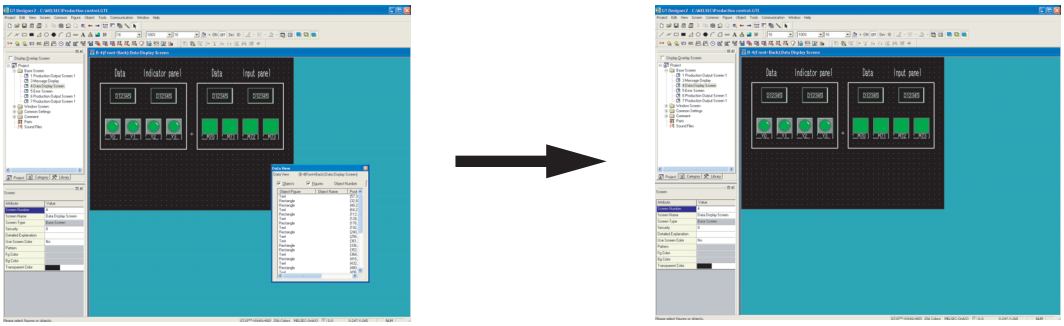
*1 When the cursor is located in the cell position of the comment No. comment, text color or high-quality font, pressing Space provides the same operation as performed by a mouse click. Using the Space key together with the Tab key that moves the cursor in the horizontal direction of the cell enables convenient keyboard operation.

App2. Q&A of GT Designer2 Operation

App.2.1 Q&A of GT Designer2 operation

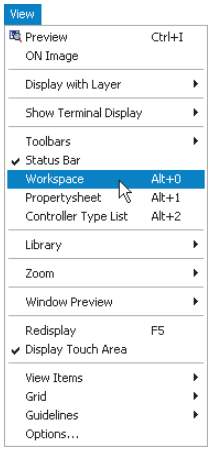
Q&A for GT Desinger2 operation is described below:

Q1. The Workspace/Propertysheet/Data view has disappeared from the screen. How can it be displayed?

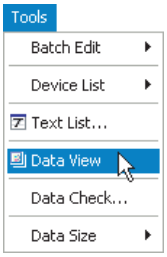


A1. Select [View] → [Workspace/Propertysheet] to display the Workspace and the Propertysheet.
Select [Tools] → [Data View] to display the Data view.

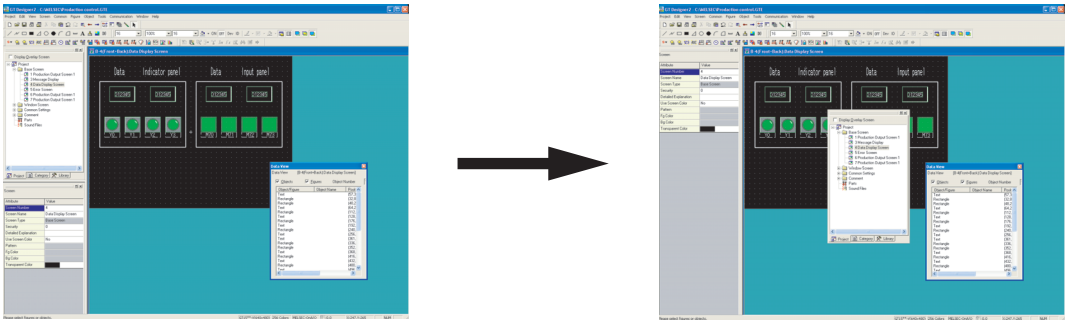
For Workspace/Propertysheet



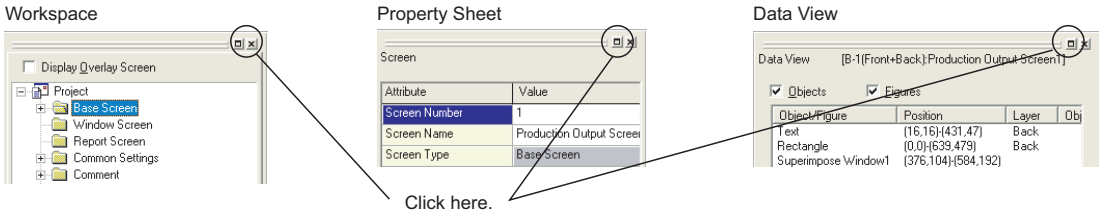
For Data View



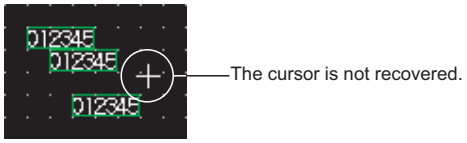
Q2. I don't know how to pop up the Workspace, property sheet or the data view.



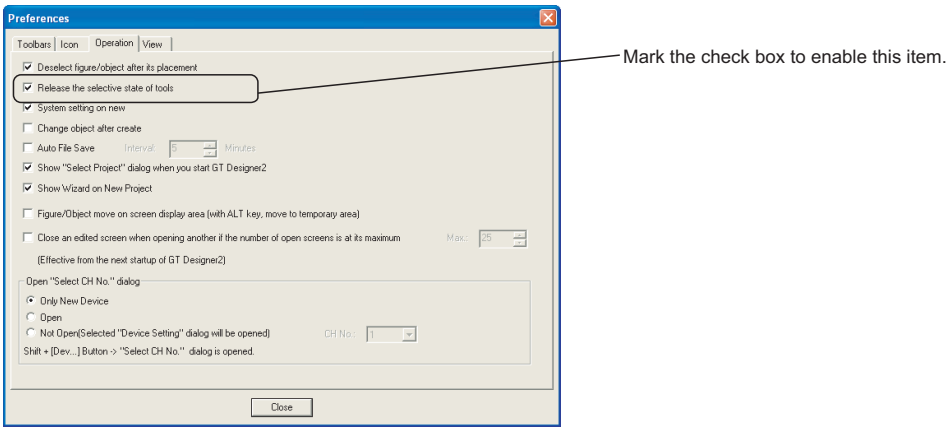
A2. The Workspace, Propertysheet and Data View can be easily popped up by clicking ▣ located at top right.



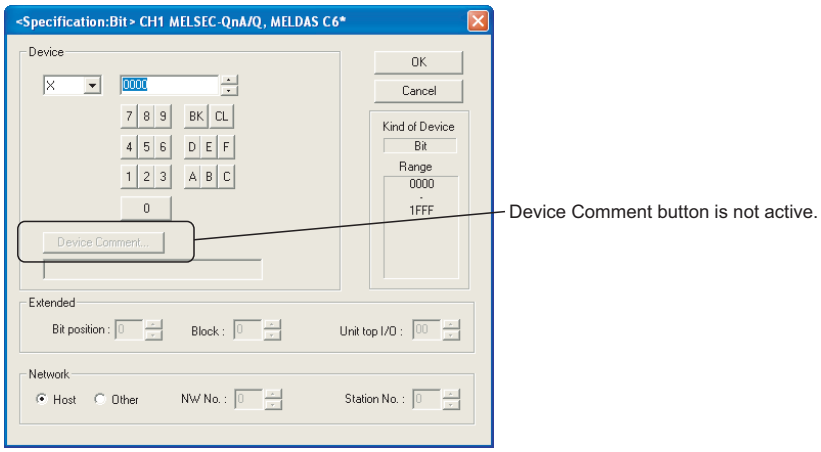
Q3. The cursor remains to be + mark. Objects are continuously arranged. How can the cursor be recovered?



A3. After arrangement of an object, right click the mouse or press the Esc key on the keyboard to recover the cursor to ↖ .
To maintain the cursor to an arrow mark, select [Project] → [Preferences...] and check "Release the selective state of tools" on the operation tab.

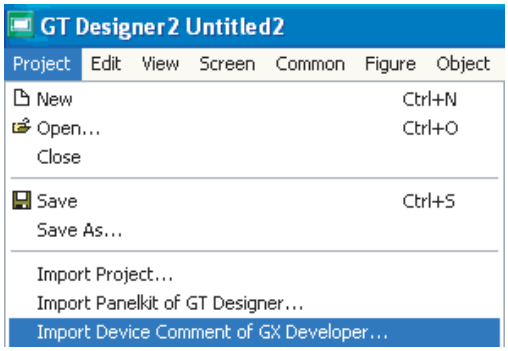


Q4. The device comment cannot be selected in device setting.

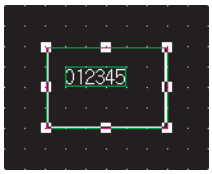


A4. To select the device comment, the comment data of the GX Developer needs to be imported into the GT Desinger2.
Before setting the device, select [Project] → [Import Device Comment of GX Developer...] and select the project of the GX Developer to be imported.
Refer to the following for the device comment reference of the GX Developer.

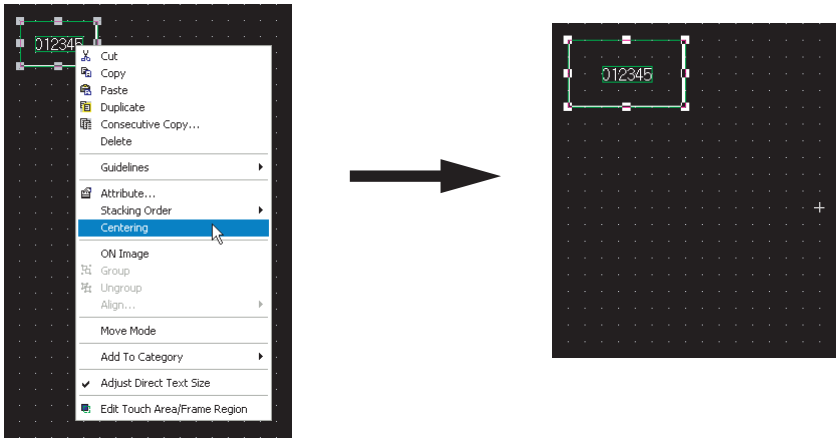
☞ Section 12.2 Referring to Device Comment When Setting Devices



Q5. Object figure is not accurately arranged.



A5. Right click the mouse on the object and select [Edit Touch Area/Frame Region] and [Centering]. The object is then accurately arranged.
When Centering is selected, the object is automatically moved to the center of the figure.
When Edit Touch Area/Frame Region is selected, the object and the figure are independently moved, enlarged or reduced. The arrangement position of the object and the figure can be finely adjusted.
(When the touch switch is set, the valid area of the touch switch can be set.)



App3. Utilizing the Existing Data

App3-1 General procedure

The following describes a general procedure for converting the existing data into GT Designer2 data.

Point

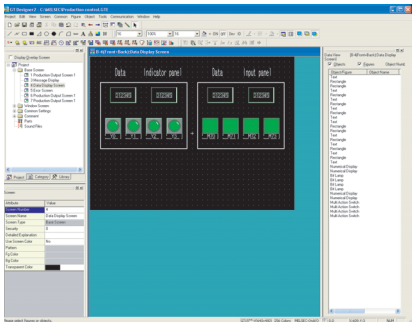
Once the data is converted into GT10, 11, 15, or 16 data, it cannot be returned to GOT-A900 or GOT-F900 data.
To prevent accidental deletion of the settings at the time of GOT type change, it is recommended to create and save a backup file of the converted project data.

1 General procedure for utilizing the GOT-A900 series project data

GOT-A900 series project data created/edited on GT Designer2

GOT-A900 series project data created/edited on GT Designer

GT Designer2



1) Open the project data on GT Designer2.
Refer to the following section for the file opening operation.

☞ Section 7.3.1 Opening the project data

2) Change the GOT type on GT Designer2. (GOT-A900 ⇨ GOT1000)

☞ GT Designer2 Screen Design Manual

Refer to the following section for differences between the GOT-A900 and GOT1000 series functions.

☞ Appendix 3-2 List of Differences between the GOT1000 series and GOT-900 series functions

3) Install the Communication driver and download the Communication Settings.
Refer to the following items for the installation of the Communication driver and the download of the Communication Settings.

Installation of Communication driver
☞ Section 8.2.6 Installing the OS [PC to GOT]

Download of Communication Settings
☞ GT Designer2 Version□ Screen Design Manual

Point

(1) Precautions for conversion from GOT-A900 to GOT1000 series data
Some supported functions and settings differ between the "GOT-A900 series" and "GOT1000 series". Note that when GOT type of the project data is changed from the GOT-A900 series to the GOT1000 series, the functions which are unsupported by the GOT1000 series will be deleted.
Refer to the following section for the functions supported by the GOT1000 series and GOT-900 series.

☞ Section App3-2 List of Differences between the GOT1000 series and GOT-900 series functions

(2) Precautions for conversion from GT Designer to GT Designer2 (GOT900) data

☞ Section App3-3 Precautions for utilizing GT Designer data for GT Designer2

2 General procedure for utilizing the GOT-F900 series project data to GOT 1000 Series

GOT-F900 series project data created/edited on GT Designer2 or GT Designer

1) Open the project data on GT Designer2.
Refer to the following section for the file opening operation.
☞ Section 7.3.1 Opening the project data

2) Change the GOT type on GT Designer2.
(GOT-F900 ⇨ GOT1000)
☞ GT Designer2 Screen Design Manual

Refer to the following section for differences between the GOT-F900 and GOT1000 series functions.
☞ Appendix 3-2 List of Differences between the GOT1000 series and GOT-900 series functions

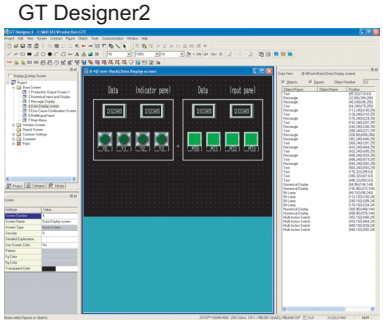
GOT-F900 series project data created/edited on FX-PCS-DU/WIN

1) Start GT Designer2 with GT11.

2) Import the GOT project data on GT Designer2.
☞ Section 12.6 Utilizing other project data (GOT1000)

Refer to the following section for differences between the GOT-F900 and GOT1000 series functions.
☞ Appendix 3-2 List of Differences between the GOT1000 series and GOT-900 series functions

GT Designer2



3)Install the Communication driver and download the Communication Settings. Refer to the followings for the installation of the Communication driver and the download of the Communication Settings.

☞ Installation of Communication driver
Section 8.2.6 Installing the OS [PC to GOT]

☞ Download of Communication Settings
GT Designer2 Screen Design Manual

* Refer to the following manual for details of project data conversion.
☞ Project Data Conversion Summary

Point

(1) Precautions for conversion from GOT-F900 to GOT-A900 to GOT1000 series data
Some supported functions and settings may differ between the "GOT-F900 series", "GOT-A900 series" and "GOT1000 series". When the GOT type is changed, the functions that are unsupported by the GOT-A900 series or GOT1000 series will be deleted.
Refer to the following section for the functions supported by the GOT1000 series and GOT-900 series.

☞ Section App3-2 List of Differences between the GOT1000 series and GOT-900 series functions

(2) Precautions for conversion from GT Designer to GT Designer2 (GOT-900) data

☞ Section App3-3 Precautions for utilizing GT Designer data for GT Designer2

(3) Data cannot be changed to GOT-A900 in type through GOT type change

When following operations are performed by using project data created/edited on FX-PCS-DU/WIN, the GOT type of the project data cannot be changed to the GOT-900 or -1000 series.

(a) Project data that opened the file on GT Designer 2

(b) Project data that was uploaded from the GOT-F900 series, on which the project data created by FX-PCS-DU/WIN had been downloaded, to GT Designer2

<Data checking method>
All the project data described in a) and b) include the following Base Screen and setting item. Check whether the followings are included in the project data.

- Base Screen No. 0
- "Interface Devices" setting item ([View/Project] → [System Settings...] menu)
  (The System information setting item is not included.)

(4) Touch key with screen switching function

The touch key with screen switching function is converted to the multi action switch with the base screen switching function.

(5) Lamp

The color for the outer frame on the lamp remains.

3 General procedure for utilizing the GOT-800 series project data or Digital Electronics Corporation's package data for the GOT1000 series

GOT-800 series project data

Digital Electronics Corporation's package data

Convert the GOT-800 series project data or Digital Electronics Corporation's package data to the GOT1000 series project data.

GT Converter2

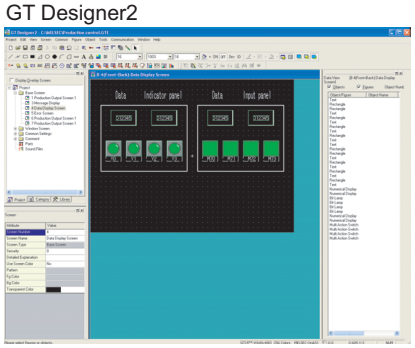


Refer to the following manual for GT Converter2 operations.

GT Converter2 Operating Manual

Converted GOT1000 series project data

GT Designer2



Open the project data, which has been converted by GT Designer2, as "GOT1000 Binary Files" (file type).
Refer to the following section for file opening operation.

Section 7.3.1 Opening the project data

Point

Precautions for conversion from GOT-800 series data to GOT1000 series data

GT Converter2 can convert the GOT-800 series project data into the GOT-A900 series or GOT1000 series project data.
However, some functions operate differently between the "GOT-800 series" and "GOT1000 series".

☞ Section App3-5 Different actions of functions between GOT-800 Series and GOT1000 Series, and corrective actions

App3-2 List of Differences between the GOT1000 series and GOT-900 series functions

1 Common

○ : Supported function, × : Function deleted/no corresponding function,
△ : Function partly deleted when utilized for GOT1000 series

Function		GOT-F900 series	GOT-A900 series	GOT1000 series					Remarks
				GT10	GT11	GT Soft GOT1000	GT15	GT16	
System Environment	System Settings	○	○	○	○	○	○	○	−
	Project Title	○	○	○	○	○	○	○	−
	Auxiliary Setting	○	○	○	○	○	○	○	The settings can be made to take precedence for each Base Screen in the GOT-A900 and GOT1000 series.
	System Information	○	○	○	○	○	○	○	−
	Screen Switching	○	○	○	○	○	○	○	−
	Security (Password)	○	○	○	○	○	○	○	−
	Key Window	○	○	○	○	○	○	○	key windows can be set to operate with priority for each Base Screen in the GOT-A900 and GOT1000 series.
	Dialog Window	×	×	×	○	○	○	○	−
	Switching Station No.	×	○	×	×	○	○	○	−
	Video/RGB	×	○	×	×	×	○	○	Only the A985GOT-V, GT1575V, GT1585V, GT1695M-X and GT1685M-S supports this function.
	Print Format	×	○	×	×	○	○	○	−
	Communication Settings	×	×	○	○	×	○	○	−
	GOT Setup (Setup)	○	×	○	○	○	○	○	The GOT-F900 series setup settings cannot be utilized for the GOT1000 series.
	Language	○	×	×	×	×	×	×	The GOT-A900 and GOT1000 series do not require language settings if the OS that includes multiple languages input function is used.
	Language Switching	×	×	○	○	○	○	○	−
	Clock Setting	×	×	○	○	×	○	○	−
	Menu Key	○	×	×	×	×	×	×	On the GOT1000 series, re-set "Utility Call Key" in the [System Environment] → "GOT Setup" menu.
	GT11 Handy GOT	○	×	×	○	×	×	×	−
	Serial Port	○	×	×	×	×	×	×	−
	Startup Logo	×	×	○	○	○	○	○	−
Report		×	○	×	×	○	○	○	−
Hard Copy		○	○	×	×	○	○	○	−

○ : Supported function, × : Function deleted/no corresponding function,
△ : Function partly deleted when utilized for GOT1000 series

Function	GOT-F900 series	GOT-A900 series	GOT1000 series					Remarks
			GT10	GT11	GT Soft GOT1000	GT15	GT16	
Operation Panel	○	○	×	×	○	○	○	In the GOT-F900 series, the Operation Panel can be set with priority for each project on "Operation Panel".
Bar Code	○	○	○	○	×	○	○	−
RFID	×	×	×	○	×	○	○	−
Status Observation	○	○	△	△	○	○	○	The GT11☐☐ and GT10☐☐ does not support the voice output function.
Time Action	○	○	△	△	△	△	△	The GOT1000 series does not support the following functions. • Mail sending function (SoftGOT) • Setting in second-unit (GOT-F900)
Sampling	○	×	×	×	×	×	×	−
Advanced Alarm Observation	×	×	×	×	○	○	○	−
Advanced Alarm Popup Display	×	×	×	×	○	○	○	−
Alarm History	○	○	△	△	△	△	△	The GOT1000 series does not support the history printing function.
Floating Alarm	○	○	○	○	×	×	×	When using the GT16☐☐ or GT15☐☐, use either of the following functions instead of the Floating Alarm function. • Advanced Alarm Popup Display function • Advanced Alarm User Alarm monitor
Advanced Recipe	×	×	×	×	○	○	○	−
Recipe	○	○	○	○	○	○	○	−
Logging	×	×	×	×	○	○	○	−
Script	×	○	×	○	○	○	○	−
Object Script	×	×	×	×	○	○	○	−
Device Data transfer	×	×	×	×	○	○	○	−
Operation Log	×	×	×	×	○	○	○	−
Ethernet	×	○	×	×	○	○	○	−
Gateway Sever	×	○	×	×	×	○	○	−
Gateway Client	×	○	×	×	×	○	○	−
Mail	×	○	×	×	○	○	○	−
FTP	×	○	×	×	×	○	○	−
Routing Information Setting	×	×	×	×	○	○	○	−
Q Redundant Setting	×	×	×	○	○	○	○	−
MES Interface Setting	×	×	×	×	×	○	○	−

○ : Supported function, × : Function deleted/no corresponding function,
△ : Function partly deleted when utilized for GOT1000 series

Function	GOT-F900 series	GOT-A900 series	GOT1000 series					Remarks
			GT10	GT11	GT Soft GOT1000	GT15	GT16	
GOT800 Compatible Mode	×	○	△	△	△	△	△	• Set [Enable change of XOR display in part display] in Auxiliary Setting of System Environment. • Set [Change the order of switch action] in Operation Order Change of the Switch function. • The GOT1000 does not support the [Delete “USER ROM CHECK" button] setting function.
Basic Comment	○	○	○	○	○	○	○	The item called as comments on the GOT900 series is called as basic comments on the GOT1000 series.
Comment Group	×	×	○	○	○	○	○	−
Parts	○	○	○	○	○	○	○	−
Custom characters	○	×	×	×	×	×	×	−
Sound Files	×	○	×	×	○	○	○	−

2 Figure/Text/Import Image/Import DXF

○ : Supported function, × : Function deleted/no corresponding function,
△ : Function partly deleted when utilized for GOT1000 series

Function	GOT-F900 series	GOT-A900 series	GOT1000 series					Remarks
			GT10	GT11	GT Soft GOT1000	GT15	GT16	
Text	○	○	○	○	○	○	○	The GOT1000 series differs from other series in available font types. Only the F900 can specify background colors of characters.
Logo text	×	×	○	○	○	○	○	−
Line	○	○	○	○	○	○	○	−
Line Free Form	×	○	○	○	○	○	○	−
Rectangle	○	○	○	○	○	○	○	−
Polygon	×	○	○	○	○	○	○	−
Circle	○	○	○	○	○	○	○	−
Arc	○	○	○	○	○	○	○	−
Sector	×	○	○	○	○	○	○	−
Scale	×	○	○	○	○	○	○	−
Piping	×	×	○	○	○	○	○	−
Paint	×	○	○	○	○	○	○	−
BMP file loading	○	○	○	○	○	○	○	−
JPEG file loading	×	×	×	×	○	○	○	−
Import DXF	○	○	○	○	○	○	○	−
Import IGES	×	×	×	○	○	○	○	−
Capture Image	○	○	○	○	○	○	○	−

3 Object

○ : Supported function, × : Function deleted/no corresponding function,
△ : Function partly deleted when utilized for GOT1000 series

Function		GOT-F900 series	GOT-A900 series	GOT1000 series					Remarks
				GT10	GT11	GT Soft GOT1000	GT15	GT16	
Switch	Bit Switch	○	○	○	○	○	○	○	The GOT-A900 and GOT1000 series do not support the auto repeat settings of the GOT-F900 series.
	Data Set Switch	○	○	○	○	○	○	○	
	Special Function Switch	○*1	○*1	△*1	△*1	△*1	△*1	△*1	• GOT-A900, GOT-F900 and GOT1000 series support respective operation settings.*1 • The GOT-A900 and GOT1000 series do not support the auto repeat setting of the GOT-F900 series.
	Go To Screen Switch	○	○	○	○	○	○	○	The GOT-A900 and GOT1000 series do not support the auto repeat setting of the GOT-F900 series.
	Change Station No. Switch	×	○	×	×	○	○	○	–
	Data Change Switch	○	×	○	○	○	○	○	–
	Recipe Transfer Switch	○	×	×	×	×	×	×	–
	Key Code Switch	○	○	○	○	○	○	○	The GOT-A900 and GOT1000 series do not support the auto repeat setting of the GOT-F900 series.
	Multi Action Switch	○	○	○	○	○	○	○	
Lamp	Bit Lamp	○	○	○	○	○	○	○	–
	Word Lamp	×	○	○	○	○	○	○	–
	Bit Lamp Area	○	×	×	×	×	×	×	–
	Screen Lamp	○	×	×	×	×	×	×	When using the GOT-A900 or GOT1000 series, use the Superimpose Window or Set Overlay Screen function.
	External Lamp	○	×	×	×	×	×	×	–
Numerical Display		○	○	○	○	○	○	○	The GOT-A900 and GOT1000 series do not support the Format String function of the GOT-F900 series.
Ascii Display		○	○	○	○	○	○	○	–
Data List		○	○	○	○	○	○	○	–
Numerical Input		○	○	○	○	○	○	○	The GOT-A900 and GOT1000 series do not support the Format String function of the GOT-F900 series.
Ascii Input		○	○	○	○	○	○	○	–
Date Display		○	○	○	○	○	○	○	–
Time Display		○	○	○	○	○	○	○	The GOT-A900 and GOT1000 series do not support the display format of the GOT-F900 series. The display format is fixed to "hour: minute".
Comment Display	Bit Comment	○	○	○	○	○	○	○	–
	Word Comment	○	○	○	○	○	○	○	The GOT-A900 and GOT1000 series do not support the display comment offset setting of the GOT-F900 series. When making the offset settings, use the data operation function.
	Simple Comment	×	×	○	○	○	○	○	

○ : Supported function, × : Function deleted/no corresponding function,
△ : Function partly deleted when utilized for GOT1000 series

Function		GOT-F900 series	GOT-A900 series	GOT1000 series					Remarks
				GT10	GT11	GT Soft GOT1000	GT15	GT16	
Alarm	Advanced Alarm Display (Advanced User Alarm)	×	×	×	×	○	○	○	−
	Advanced Alarm Display (Advanced System Alarm)	×	×	×	×	○	○	○	−
	Alarm History	○	○	△	△	△	△	△	The GOT1000 series does not support the history print function.
	Alarm List (User Alarm)	○	○	○	○	○	○	○	−
	Alarm List (System Alarm)	×	○	×	○	○	○	○	−
Parts Display	Bit Parts	○	○	○	○	○	○	○	−
	Word Parts	○	○	○	○	○	○	○	−
	Fixed Parts	○	○	○	○	○	○	○	−
Parts Movement	Bit Parts	×	○	×	○	○	○	○	−
	Word Parts	×	○	×	○	○	○	○	−
	Fixed Parts	×	○	×	○	○	○	○	−
	Parts Move Route	×	○	×	○	○	○	○	−
Document Display		×	×	×	×	○	○	○	−
Panel Meter		○	○	○	○	○	○	○	−
Level		×	○	×	○	○	○	○	−
Graph	Line Graph	○	○	○	○	○	○	○	−
	Trend Graph	○	○	○	○	○	○	○	−
	Bar Graph	○	○	○	○	○	○	○	−
	Statistics Bar Graph	○	○	○	○	○	○	○	−
	Statistics Pie Graph	○	○	○	○	○	○	○	−
	Scatter Graph	×	○	×	○	○	○	○	−
	Circle Graph	○	×	×	×	×	×	×	−
	Historical Trend Graph	×	×	×	×	○	○	○	−
Keyboard		○	×	×	×	×	×	×	−
Buzzer		○	×	×	×	×	×	×	−
Set Overlay Screen		○	○	○	○	○	○	○	−
Window Position	Overlap Window 1	○	○	○	○	○	○	○	Supported as the Base Screen overlay function by the GOT-F900 series.
	Overlap Window 2	○	○	○	○	○	○	○	
	Overlap Window 3 to 5	×	×	×	×	×	×	○	
	Superimpose Window 1	×	○	○	○	○	○	○	The GOT-A 900 series supports only one Superimpose Window screen.
	Superimpose Window 2	×	×	○	○	○	○	○	
	Key Window	○	○	○	○	○	○	○	−

○ : Supported function, × : Function deleted/no corresponding function,

△ : Function partly deleted when utilized for GOT1000 series

Function		GOT-F900 series	GOT-A900 series	GOT1000 series					Remarks
				GT10	GT11	GT Soft GOT1000	GT15	GT16	
Key Window Setting	Project Setting	×	○	○	○	○	○	○	−
	Input Value Area	×	○	○	○	○	○	○	−
	Input Range Area	×	○	×	○	○	○	○	−
Numerical Print		×	○	×	×	○	○	○	−
Bit Comment Print		×	○	×	×	○	○	○	−
Word Comment Print		×	○	×	×	○	○	○	−

*1 The Special Function Switch operates differently as indicated in the following list.

4 Special Function Switch (Switch Action)

○ : Supported function, × : Function deleted/no corresponding function,
△ : Function partly deleted when utilized for GOT1000 series

Applicable operation	GOT-F900 series	GOT-A900 series	GOT1000 series				
			GT10	GT11	GT Soft GOT1000	GT15	GT16
Utility	×	○	○	○	○	○	○
Self Check	×	×	×	○	×	○	○
Data Maintenance	×	×	×	○	×	○	○
Communication Setting	×	×	○	○	×	○	○
Setup	×	×	○	○	○	○	○
Maintenance Report	×	×	×	×	×	○	○
Ladder Monitor	×	○	×	×	×	○	○
Intelligent Module Monitor	×	×	×	×	×	○	○
Key Window	×	○	○	○	○	○	○
System Monitor	×	○	×	○	×	○	○
Device Monitor	×	×	○	×	×	×	×
System Alarm Display	×	×	×	○	×	○	○
Test Window	×	○	×	○	×	○	○
Special Function Monitor	×	○	×	×	×	×	×
Start Hard Copy	×	○	×	×	○	○	○
Abort Hard Copy	×	○	×	×	○	○	○
Password (Security Level)	○	○	○	○	○	○	○
Preservation Function	×	×	○	○	×	○	○
Advanced Recipe	×	×	×	×	○	○	○
Logging	×	×	×	×	○	○	○
Clock Setting	○	○	○	○	×	○	○
Clean/Display Screen	×	○	○	○	×	○	○
Network Monitor	×	○	×	×	×	○	○
Change Brightness	○	○	○	○	×	○	○
A List Editor	×	○	×	○	×	○	○
FX List Editor	○	×	○*2	○	×	○	○
Q Motion Monitor	×	×	×	×	×	○	○
Motion/CNC Monitor	×	○	×	×	×	○	○
Servo Amplifier Monitor	×	○	×	×	×	○	○
Network Unit Display	×	×	×	×	×	○	○
Operation Log	×	×	×	×	○	○	○
FX List Monitor	×	×	○*2	○	×	○	○
GOT Start Time	×	×	×	○	×	○	○

○ : Supported function, × : Function deleted/no corresponding function,

△ : Function partly deleted when utilized for GOT1000 series I

Applicable operation	GOT-F900 series	GOT-A900 series	GOT1000 series				
			GT10	GT11	GT Soft GOT1000	GT15	GT16
PX Developer Function call	×	×	×	×	○	×	×
Operator Information Management	×	×	×	×	○	○	○
Log-in/Log-out (Operator Authentication)	×	×	×	×	○	○	○
Password Change (Operator Authentication)	×	×	×	×	○	○	○
Backup/Restore	×	×	×	×	×	○	○
CNC Data Input/Output	×	×	×	×	×	○	○
SFC Monitor	×	×	×	×	×	○	○
Multimedia	×	×	×	×	×	×	○
USB Device Display	×	×	×	×	×	×	○
Batch Self Check	×	×	×	×	×	×	○
Fingerprint Authentication	×	×	×	×	×	○	○
Ladder Editor	×	×	×	×	×	○	○
Operator Management	×	×	×	×	○	○	○

*2 Only GT105□ can use this function.

5 Screen types

○ : Supported function, × : Function deleted/no corresponding function,

△ : Function partly deleted when utilized for GOT1000 series

Function	GOT-F900 series	GOT-A900 series	GOT1000 series					Remarks
			GT10	GT11	GT Soft GOT1000	GT15	GT16	
Base Screen	○	○	○	○	○	○	○	−
Window Screen	○	○	○	○	○	○	○	The GOT-F900, GT10 series supports only the Key Window.
Report Screen	×	○	×	×	○	○	○	−

6 Screen settings (Screen Property, etc.)

○ : Supported function, × : Function deleted/no corresponding function,
△ : Function partly deleted when utilized for GOT1000 series

Function		GOT-F900 series	GOT-A900 series	GOT1000 series					Remarks
				GT10	GT11	GT Soft GOT1000	GT15	GT16	
Screen Property	Auxiliary	○	○	○	○	○	○	○	The settings can be made to take precedence for each base screen in the GOT-A900 and GOT1000 series.
	Key Window	×	○	○	○	○	○	○	The key window settings with higher priority than common settings can be made for each base screen.
etc.	Operation Panel	○	×	×	×	×	×	×	• In the GOT-A900 series, the operation panel can be set for each project. • In the GOT-F900 series, the Operation Panel can be set with priority for each project.

7 PLC CPU connected to GOT

○ : Supported function, × : Function deleted/no corresponding function,
△ : Function partly deleted when utilized for GOT1000 series

Function			GOT-F900 series	GOT-A900 series	GOT1000 series							Remarks
					GT10	GT11 (Built in A Bus)	GT11 (Built in Q Bus)	GT11	GT Soft GOT1000	GT15	GT16	
MITSUBISHI PLC CONNECTIONS	Bus connection	QCPU(Q mode)	×	○	×	×	○	×	○	○	○	−
		A/QnACPU	×	○	×	○	×	×	×	○	○	−
		QnU(D)(H)	×	×	×	×	○	×	○	○	○	−
		Q17nD	×	×	×	×	○	×	×	○	○	−
		Q17nNC	×	×	×	×	○	×	×	○	○	−
		Q17nDR	×	×	×	×	○	×	×	○	○	−
	CPU direct connection	A/QnA/QCPU	○	○	○	×	×	○	○	○	○	−
		FXCPU	○	○	○	×	×	○	○	○	○	−
		QnU(D)(H)	×	×	○	×	×	○	○	○	○	−
		Q17nD	×	×	×	×	×	○	×	○	○	−
		Q17nNC	×	×	×	×	×	○	○	○	○	−
		Q17nDR	×	×	×	×	×	○	×	○	○	−
	Computer link connection	QCPU	○	○	○	×	×	○	○	○	○	−
		QnACPU	○	○	○	×	×	○	○	○	○	−
		QCPU(A mode), ACPU	○	○	×	×	×	○	○	○	○	−
		QnU(D)(H)	×	×	○	×	×	○	○	○	○	−
		Q17nD	×	×	×	×	×	○	×	○	○	−
		Q17nNC	×	×	×	×	×	○	○	○	○	−
		Q17nDR	×	×	×	×	×	○	○	○	○	−
	MELSECNET/H connection (PLC to PLC network)		×	×	×	×	×	×	○	○	○	−
	MELSECNET/10 connection (PLC to PLC network)		×	○	×	×	×	×	○	○	○	−
	CC-Link IE Controller Network connection		×	×	×	×	×	×	○	○	○	−
	CC-LINK(ID) connection (Intelligent device station)		×	○	×	×	×	×	×	○	○	−
	CC-LINK(RD) connection (Remote device station)		×	○	×	×	×	×	×	×	×	−
	CC-LINK(G4) connection(Via G4)		×	○	○	×	×	○	×	○	○	−

○ : Supported function, × : Function deleted/no corresponding function,
△ : Function partly deleted when utilized for GOT1000 series

Function		GOT-F900 series	GOT-A900 series	GOT1000 series							Remarks
				GT10	GT11 (Built in A Bus)	GT11 (Built in Q Bus)	GT11	GT Soft GOT1000	GT15	GT16	
MITSUBISHI PLC CONNECTIONS	Ethernet connection	×	△	×	×	×	×	○	○	○	Connecting to Q17nNC, QnU(D)(H) and Q17nD is not possible on GOT-A900 series.
	FX(2N)-10GM/20GM	○	×	×	×	×	×	×	×	×	−
	Micro computer connection	○	○	○	×	×	○	×	○	○	−
MODBUS/TCP connection		×	×	×	×	×	×	×	○	○	−
MODBUS/RTU connection		×	×	○	×	×	○	×	○	○	−
RFID connection		×	×	×	○	○	○	×	○	○	−
OMRON PLC connection		○	○	×	×	×	○	○	○	○	−
KEYENCE PLC connection		×	×	○	×	×	○	×	○	○	−
KOYO EI PLC connection		×	×	×	×	×	○	×	○	○	−
SHARP PLC connection		×	○	○	×	×	○	×	○	○	−
JTEKT PLC connection		×	×	×	×	×	○	×	○	○	−
TOSHIBA PLC connection		×	○	×	×	×	○	×	○	○	−
TOSHIBA MACHINE PLC connection		×	×	○	×	×	○	×	○	○	−
HITACHI IES PLC connection		×	○	×	×	×	○	×	○	○	−
HITACHI PLC connection		×	×	×	×	×	○	×	○	○	−
FUJI FA PLC connection		○	×	×	×	×	○	×	○	○	−
PANASONIC PLC connection		○	○	○	×	×	○	×	○	○	−
YASKAWA Electric PLC connection	Serial connection	○	○	○	×	×	○	○	○	○	The GOT-F900 series does not support connection to the GL, PROGIC8, CP9200H and CP9300MS (MS compatibility) series.
	Ethernet connection	×	×	×	×	×	×	○	○	○	−
YOKOGAWA PLC connection	Serial connection	×	×	×	×	×	○	×	○	○	−
	Ethernet connection	×	×	×	×	×	×	○	○	○	
Allen-Bradley PLC connection	Serial connection	○	○	○	×	×	○	×	○	○	−
	Ethernet connection	×	×	×	×	×	×	○	○	○	−

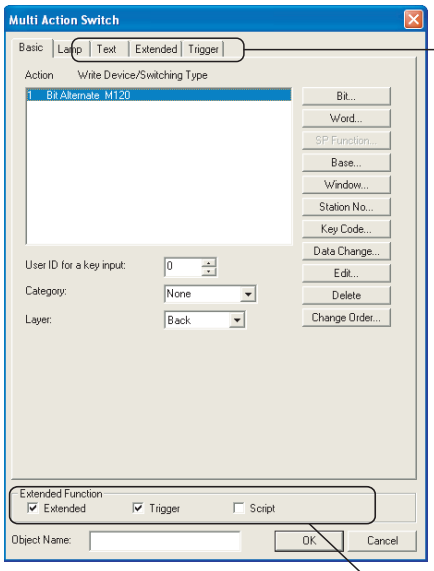
○ : Supported function, × : Function deleted/no corresponding function,
△ : Function partly deleted when utilized for GOT1000 series

Function		GOT-F900 series	GOT-A900 series	GOT1000 series							Remarks
				GT10	GT11 (Built in A Bus)	GT11 (Built in Q Bus)	GT11	GT Soft GOT1000	GT15	GT16	
GE FANUC PLC connection		×	×	×	×	×	○	×	○	○	−
SIEMENS PLC connection		○	○	○	×	×	○	×	○	○	The GOT-A900 series does not support connection to the S7-200 series.
LS INDUSTRIAL SYSTEMS PLC connection		×	×	○	×	×	○	○	○	○	−
OMRON temperature controller connection		×	×	×	×	×	○	×	○	○	−
SHINKO indication controller connection		×	×	×	×	×	○	×	○	○	−
FUJI SYS temperature controller connection		×	×	×	×	×	○	×	○	○	−
YAMATAKE temperature controller connection		×	×	×	×	×	○	×	○	○	−
YOKOGAWA temperature controller connection		×	×	×	×	×	○	×	○	○	−
RKC temperature controller connection		×	×	×	×	×	○	×	○	○	−
CHINO controller connection		×	×	×	×	×	○	×	○	○	−
FREQROL series		○	×	○	×	×	○	×	○	○	−
MELSERVO-J3J2S/M connection		×	×	×	×	×	○	×	○	○	−
CNC connection	MELSEC NET/H connection (PLC to PLC network)	×	×	×	×	×	×	○	○	○	−
	CC-LINK(ID) connection (Intelligent device station)	×	×	×	×	×	×	×	○	○	−
	CC-LINK(ID) connection Ver.2 (Intelligent device station)	×	×	×	×	×	×	×	○	○	−
	Ethernet connection	×	×	×	×	×	×	○	○	○	−
	CPU direct connection	×	×	×	×	×	×	○	○	○	−
Multiple-GOT connection		○	×	△	×	×	△	×	×	×	The GOT-F900 series can be connected up to four but the GT11, GT15 can be connected two.
GOT MULTI-DROP connection		×	×	○	×	×	○	×	○	○	−

(1) The Object setting dialog box is displayed with all advanced functions selected.

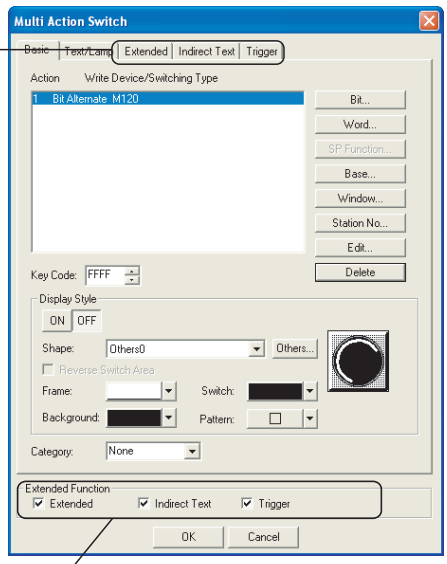
(Example) For Touch Switch setting

When utilized for GOT1000 series



Advanced function tabs are all displayed.

When utilized for GOT-900 series



Advanced function check boxes are all checked.

(2) The objects grouped as switches on GT Designer will be changed to normally grouped objects on GT Designer2.

(3) The category setting will be set to None (No categories).

Point

When project data is opened on GT Designer2

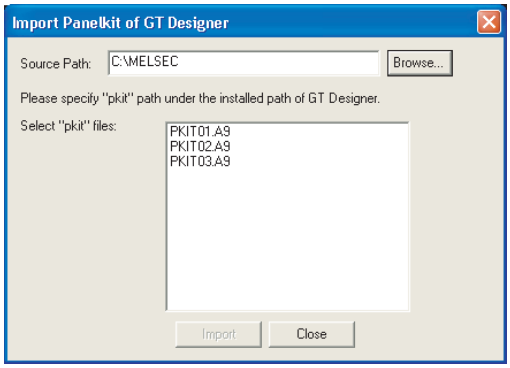
The project data cannot be saved in a GT Designer format file after being opened on GT Designer2.

App3-4 Utilizing the panelkit of GT Designer

The panelkit created by GT Designer can be used on GT Designer2 by importing to the user library.
The panelkit of GT Designer is equivalent to the user library of GT Designer2.

1 Choose the [Project] → [Import Panelkit of GT Designer...] menu.

2 As the Import Panelkit of GT Designer appears, make the settings by referring to the following explanation.



Item	Description
Source Path:	Specify the place in which the panelkit of GT Designer is stored.
Select "pkit" files:	Displays the panelkit files stored in the "Source Path". The selected panelkit file will be imported to GT Designer2.

3 Click the [Import...] button to import the panelkit.

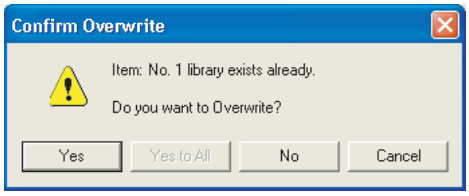
Point

Panelkit No. and user library No.

As the panelkit and user library are assigned to the same No., the following message is displayed if the user library of the same No. has already been created.

To allow the user library to be overwritten, click the [Yes] button.

To prevent the user library from being overwritten, click the [No] or [Cancel] button. The user library No. can be changed on the user library property.



App3-5 Different actions of functions between GOT-800 Series and GOT1000 Series, and corrective actions

Item	Description	Procedures to replace the GOT800 Series with the GOT-A1000 Series
Parts Display	When you have selected [Display Mode] - [XOR], the parts that group overlapping figures are displayed as follows: GT800 Series : All grouped figures are displayed at once, when using XOR-display. GOT1000 Series : Each in the grouped figures is displayed one at a time in the overlapping order, when using XOR-display.	Check "While display mode of part display is XOR, grouped figures are displayed by XOR." in the "Other" settings in [Common] → [System Environment] → "Auxiliary Setting".
	When you create data by setting the same line color and pattern color with pattern type 8 (fill) after selecting [Display mode] - [XOR] in the GOT-800 Series and then convert it into the GOT1000 Series, the outside of that data part is displayed one dot smaller.	
Parts Movement	If the device value becomes a negative numeric value or out of the display range, the data created by setting [Indirect] for [Parts indication] using the "Parts movement" function of the GOT-800 Series is displayed as follows: GOT-800 Series : Parts are not displayed. GOT1000 Series : Parts are displayed.	No problem will occur unless you have set [Indirect] using the "Parts movement" function. In addition, there is no problem to set [Indirect] unless the device value becomes a negative numeric value or out of the [Display range]. If the device value becomes a negative numeric value or out of the [Display range] range, set the part number to "0" and out of the [Display range]. (Setting the [Display part] number to "0" hides parts.)
Switch	The priority varies depending on the GOT when duplicate switches have been set. GOT-800 Series : Word SET → Bit SET GOT1000 Series : Bit SET → Word SET	Change the Switch overlap setting priority using "Operation order change" of the switch function.
System Information [Before/after change]	The values of system information before and after changes vary depending on the GOT, when you enter a negative value via 16-bit signed BIN numeric value input. Example: Value before numeric value input: -1 Value for numeric value input : -2 **<System information of the GOT-800 Series>** Value before change: 0X0000FFFF Value after change : 0X0000FFFE **<System information of the GOT1000 Series>** Value before change: 0XFFFFFFFF Value after change : 0XFFFFFFFE	No problem will occur unless you enter a negative value via 16-bit signed BIN numeric value input. In addition, there is no problem if the GOT references sequence programs using a negative value before changing the system information as 16 bits. When the GOT references sequence program using the value before changing the System Information as 32 bits, extract the lower 16 bits and then reference.
System Information [Automatic Screen Saver Disable Signal (b0), Forced Screen Saver Enable Signal (b1)]	In the GOT1000 Series, the operation of b1 (forced screen saver enable signal) takes precedence of the operation of b0 (automatic screen saver disable signal). This may cause some GOTs to work differently if both b0 and b1 are turned on. **<If both b0 and b1 are turned on>** GOT-800 Series: The display and backlight are both turned off by the screen saver. GOT1000 Series: The display and backlight both remain on.	

App4. Precautions for Project Data

This section provides the points to be checked for using the created project data.
It is recommended to use the project data after confirming the following points.

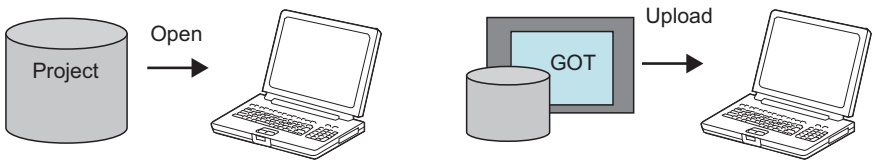
1 When opening/uploading project data

When opening or uploading project data, make sure to use the same or newer version of GT Designer2 than the one used to create the project data.
When the older version is used, the file may not be opened or the functions and settings may be deleted.
Refer to the following section for details.

☞ Section App4-1 Opening project data

or

☞ Section App4-2 Uploading project data



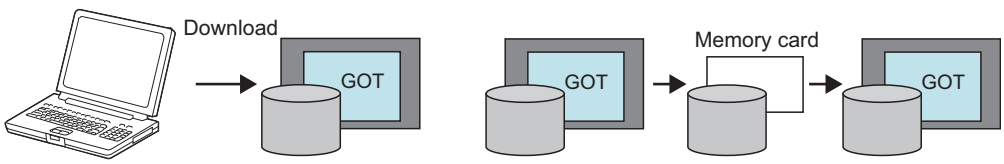
2 When downloading/copying project data to the GOT

Make sure to install the same OS version as the copy/download source project data.
If the OS version of GT Designer2 used to create the project data does not match the OS version installed in the GOT, download the project data after installation of the OS.
Refer to the following section for details.

☞ Section App4-3 Downloading project data

or

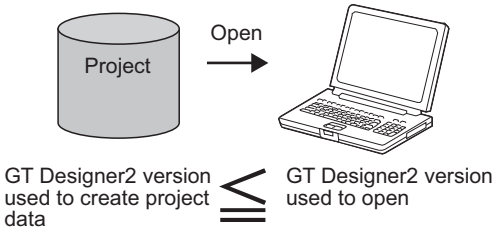
☞ Section App4-4 Downloading/copying project data to the GOT using a memory card



App4-1 Opening project data

1 Point

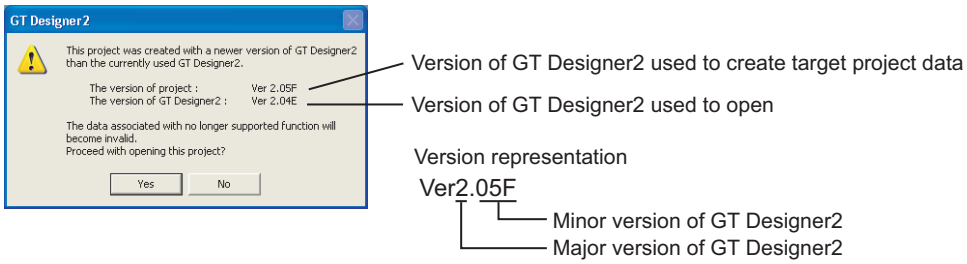
The target project data can be opened using the same or newer version of GT Designer2 than the one used to create the target project data.



2 Precautions

- When project data is opened using the newer version of GT Designer2 than the one used to create the project data, the project data version will be changed to the GT Desginer2 version used to open it.
- The following message will appear when project data is opened using GT Designer2 of the same major version as: older minor version than the one used to create the project data.
  - Click the Yes(Y) button to delete the functions and settings, which are unsupported by GT Designer2 used to open the project data, and open the project data.
  - Click the No(N) button to discontinue the project opening processing.

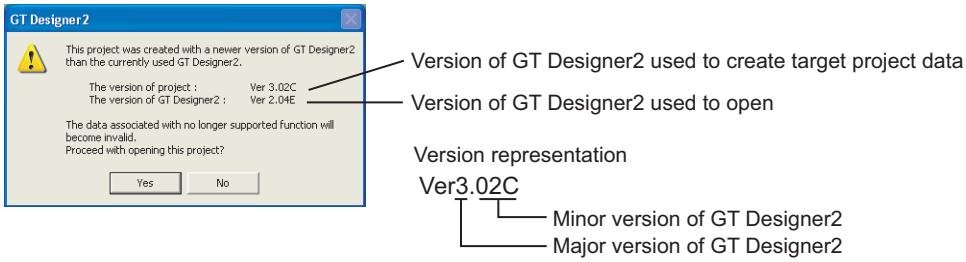
  Therefore, it is recommended to open the project data using GT Designer2 of which version is the same or newer than the one used to create the project data.



- When GT Designer2 used to open the project data of which major version is older than the one used to create it, a message will be displayed depending on the file type as shown below.
  Therefore, it is recommended to open the project data using GT Designer2 of which version is the same or newer than the one used to create the project data.

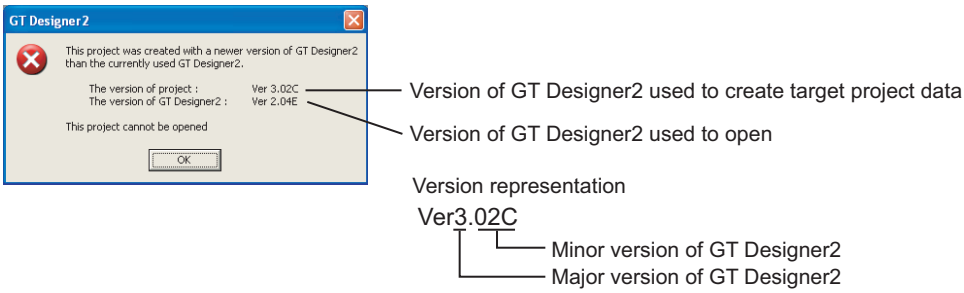
  (a) GOT1000 file (*.GTE) of GT Designer2

  - Click the [Yes(Y)] button to delete the functions and settings, which are unsupported by GT Designer2 used to open the project data, and open the project data.
  - Click the [No(N)] button to discontinue the project opening processing.



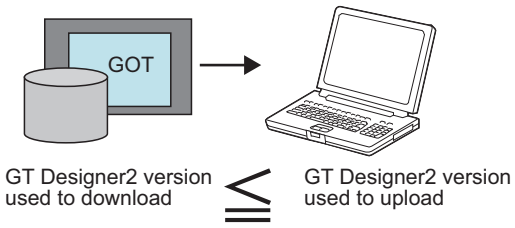
  (b) GOT1000 binary file (*.G1) stored in the GOT (memory card)

  The project data cannot be opened. Click the [OK] button to discontinue the processing.



1 Point

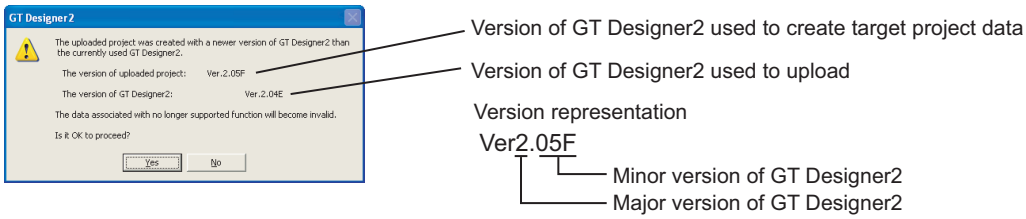
When uploading project data from the GOT, make sure use the same or newer version of GT Designer2 than the one used to download the project data.



2 Precautions

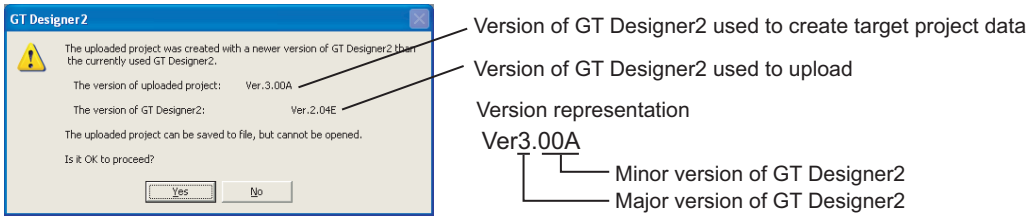
- When project data is uploaded using the newer version of GT Designer2 than the one used to download the project data, the project data version will be changed to GT Desinger2 version used to upload.
- The following message will appear when project data is uploaded using GT Designer2 of the same major version as: older minor version than the one used to download the project data.
  - Click the Yes(Y) button to delete the functions and settings, which are unsupported by GT Designer2 used to upload the project data, and upload the project data.
  - Click the No(N) button to discontinue upload.

  Therefore, it is recommended to upload the project data using GT Designer2 of the same or newer version than the one used to download the project data.



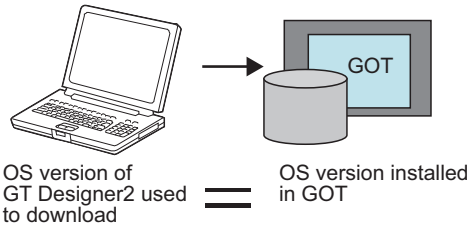
- The following message will appear when project data is uploaded using GT Designer2 of the older major version than the one used to download the project data.
  - Click the Yes(Y) button to upload the project data and save it as the GOT1000 binary file (*.G1). To open the saved project data, the same or newer version of GT Designer2 than the one used to download is required.
  - Click the No(N) button to discontinue upload.

  Therefore, it is recommended to upload the project data using the same or newer version of GT Designer2 than the one used to download.



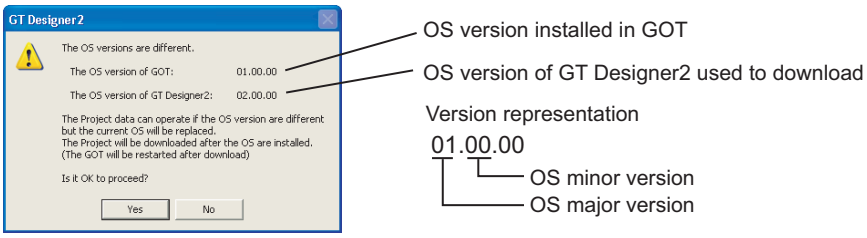
1 Point

Make sure to download the project data after installing the same OS version as GT Designer2 into the GOT.



2 Precautions

- The following message will appear when the OS major version of GT Designer2 used to download the project data differs from the one installed in the GOT.
  - Click the Yes(Y) button to install the OS of GT Designer2 and then download the project data.
  - Click the No(N) button to discontinue download.



- When project data is downloaded using GT Designer2 of the same major version as: different minor version from the one installed in the GOT, the download will be performed differently as shown below.

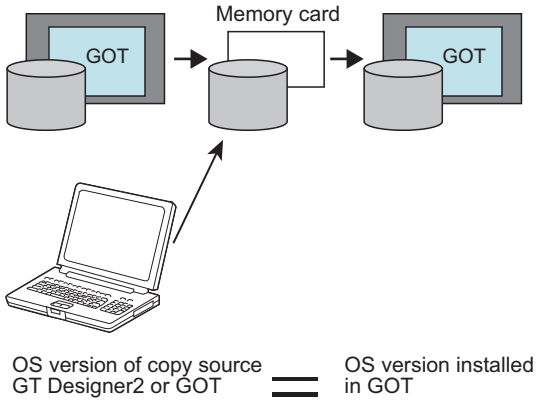
  (a) When the OS minor version of GT Designer2 is older
  The project data can be downloaded.

  (b) When the OS minor version of GT Designer2 is newer
  The project data can be downloaded, but the functions and settings unsupported by the OS in the GOT are invalid.
  Therefore, it is recommended to download the project data after installation of the OS.

App4-4 Downloading/copying project data to the GOT using a memory card

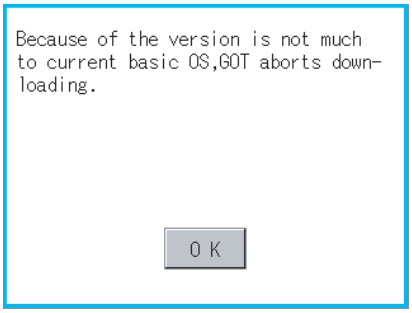
1 Point

When writing project data to a memory card, make sure to write the OS as well. Also, when downloading the project data, make sure to install the OS to the GOT.



2 Precautions

- When the OS major version of GT Designer2 used to create the project data in the memory card differs from the one installed in the GOT, the project data may not operate correctly.
  In this case, the GOT displays the following message, indicating that the project data cannot be downloaded.
  Therefore, it is recommended to install the OS simultaneously when downloading the project data to the memory card.
  Note that the OS is installed after older one is deleted once, make sure to install the OS as well, which has been installed in the GOT.



- The operation differs as described below when the OS major version of GT Designer2 used to create the project data in the memory card is the same as the one installed in the GOT and their minor versions are different.
  (a) When the OS minor version of GT Designer2 used to create the project data in the memory card is older
  The project data can be downloaded.
  (b) When the OS minor version of GT Designer2 used to create the project data in the memory card is newer
  The project data can be downloaded, but the functions and settings unsupported by the OS in the GOT are invalid.
  Therefore, it is recommended to install the OS simultaneously when downloading the project data to the memory card.
  However, since the OS is installed after older one is deleted once, the OS file types and the number of OSs in the GOT may change.
  (Unsupported OSs are deleted.)

App5. List of Functions Added by GT Designer2 Version Upgrade (For GOT1000 Series)

The following describes the functions added by version upgrade of the GT Designer2 Version2.96A (partially including 2.98C).
For function comparisons among GOTs, refer to the following.

☞ GT Designer2 Version □ Basic Operation/Data Transfer Manual
(App3-2 List of Differences between the GOT1000 series and GOT-900 series functions)

For using the following functions, use GT Designer2 or OS of the corresponding version or later.
(Applicable OS versions and communication drivers for GT16, GT15, GT SoftGOT1000, and GT11 are different from those for GT10. The added functions for GT10 are listed separately from those for GT16, GT15, GT SoftGOT1000, and GT11.)

Point How to use this table

1 provides the versions of GT Designer2 and OS required for each GOT or communication unit.

2 and the following provides description for the functions added with the version upgrade, and the versions of GT Designer2 and OS with which the function is compatible.

Regarding 2 and the following, there may be a case where the function is not supported by a particular type of GOT even when the function is compatible with the version.
In such a case, check the version for the function and the version of the GOT, and use GT Designer2 or OS of the later version.

App5-1 GT16, GT15, GT SoftGOT1000, and GT11

1 Added GOT main unit/Communication unit

Target Models	Version of GT Designer2	Version of OS
GT1695M-XTBA, GT1695M-XTBD	2.90U	Standard monitor OS [04.02.**]
GT1685M-STBA, GT1685M-STBD	2.90U	Standard monitor OS [04.02.**]
GT1675M-STBA, GT1675M-STBD, GT1675M-VTBA, GT1675M-VTBD	2.96A	Standard monitor OS [04.04.**]
GT1665M-STBA, GT1665M-STBD, GT1665M-VTBA, GT1665M-VTBD	2.96A	Standard monitor OS [04.04.**]
GT1595-XTBA	2.18U	Standard monitor OS [02.02.**]
GT1595-XTBD	2.32J	Standard monitor OS [03.00.**]
GT1585-STBD	2.18U	Standard monitor OS [02.02.**]
GT1585V-STBA, GT1585V-STBD	2.32J	Standard monitor OS [03.00.**]
GT1575-STBD	2.18U	Standard monitor OS [02.02.**]
GT1575V-STBA, GT1575V-STBD	2.32J	Standard monitor OS [03.00.**]
GT1575-VTBD	2.18U	Standard monitor OS [02.02.**]
GT1575-VNBA, GT1575-VNBD, GT1572-VNBA, GT1572-VNBD	2.18U	Standard monitor OS [02.02.**]
GT1565-VTBD	2.18U	Standard monitor OS [02.02.**]

(Continued to next page)

Target Models	Version of GT Designer2	Version of OS
GT1562-VNBA, GT1562-VNBD	2.18U	Standard monitor OS [02.02.**]
GT1555-VTBD	2.58L	Standard monitor OS [03.03.**]
GT1555-QTBD, GT1555-QSBD, GT1550-QLBD	2.32J	Standard monitor OS [03.00.**]
GT1155-QTBDQ, GT1155-QSBDQ, GT1155-QTBDA, GT1155-QSBDA GT1150-QLBDQ, GT1150-QLBDA	2.58L	Standard monitor OS [03.03.**]
GT1155-QTBD	2.73B	Standard monitor OS [03.09.**]
GT1155HS-QSBD to GT1150HS-QLBD	2.18U	Standard monitor OS [02.02.**]
GT SoftGOT1000	2.27D	-
GT15-QBUS(2), GT15-ABUS(2), GT15-RS2-9P, GT15-RS4-9S, GT15-RS4-TE	2.18U	Standard monitor OS [02.02.**] Communication driver For communication drivers used in each connection, use [02.02.**] or
GT15-J71GP23-SX	2.77F	Standard monitor OS [03.12.**]
GT01-RS4-M	2.96A	Standard monitor OS [04.03.**] Communication driver Multidrop(Host) [04.04.**] Multidrop(Slave) [04.04.**]
GT16M-V4, GT16M-R2, GT16M-V4R1, GT16M-ROUT	2.90U	Extended function OS Video/RGB [04.02.**]
GT16M-MMR	2.90U	Extended function OS Multimedia [04.02.**]
GT15-CFCD	2.43V	Standard monitor OS [03.01.**] BootOS [03.01.**.M]
GT15-CFEX-C08SET	2.45X	Standard monitor OS [03.02.**] BootOS [03.02.**.N]
GT15-SOUT	2.58L	Extended function OS Sound Output [03.03.**]
GT15-DIO	2.58L	Extended function OS External I/O / Operation Panel [03.03.**]
GT15-DIOR	2.90U	Extended function OS External I/O / Operation Panel [04.02.**]
GT15-80FPA	2.91V	Extended function OS Operator authentication [04.03.**] Fingerprint Authentication [04.03.**]

2 Added connection types

(1) For GT16

Item	Description	Version of GT Designer2	Version of OS
Bus connection	Supporting connection to BUS	2.90U	Communication driver Bus(Q)[04.02.**] Bus(A/QnA) [04.02.**]
	Supporting connection to Q00UJCPU, Q00UCPU, Q01UCPU, Q10UDHCPU, Q20UDHCPU, Q10UDEHCPU, and Q20UDEHCPU	2.91V	Communication driver Bus(Q)[04.03.**]

(Continued to next page)

Item	Description	Version of GT Designer2	Version of OS
Bus connection	Supporting connection to Q170MCPU	2.96A	Communication driver Bus(Q)[04.04.**]
Direct connection to CPU	Supporting the direct CPU connection	2.90U	Communication driver A/QnA/Q CPU, QJ71C24 [04.02.**] MELSEC-FX [04.02.**]
	Supporting connection to Q00UJCPU, Q00UCPU, Q01UCPU, Q10UDHCPU, Q20UDHCPU, Q10UDEHCPU, and Q20UDEHCPU	2.91V	Communication driver A/QnA/Q CPU, QJ71C24 [04.03.**]
	Supporting connection to Q170MCPU	2.96A	Communication driver A/QnA/Q CPU, QJ71C24 [04.04.**]
Computer link connection	Supporting the computer link connection	2.90U	Communication driver A/QnA/Q CPU, QJ71C24 [04.02.**] AJ71QC24, MELDAS C6* [04.02.**] AJ71C24/UC24 [04.02.**]
	Supporting connection to Q00UJCPU, Q00UCPU, Q01UCPU, Q10UDHCPU, Q20UDHCPU, Q10UDEHCPU, and Q20UDEHCPU	2.91V	Communication driver A/QnA/Q CPU, QJ71C24 [04.03.**]
	Supporting connection to Q170MCPU	2.96A	Communication driver A/QnA/Q CPU, QJ71C24 [04.04.**]
MELSECNET/H connection (PLC to PLC network)	Supporting connection to MELSECNET/H (PLC to PLC network)	2.90U	Communication driver MELSECNET/H [04.02.**]
	Supporting connection to Q00UJCPU, Q00UCPU, Q01UCPU, Q10UDHCPU, Q20UDHCPU, Q10UDEHCPU, and Q20UDEHCPU	2.91V	Communication driver MELSECNET/H [04.03.**]
	Supporting connection to Q170MCPU	2.96A	Communication driver MELSECNET/H [04.04.**]
MELSECNET/10 connection (PLC to PLC network)	Supporting connection to MELSECNET/10 PLC to PLC connection)	2.90U	Communication driver MELSECNET/H [04.02.**]
	Supporting connection to Q00UJCPU, Q00UCPU, Q01UCPU, Q10UDHCPU, Q20UDHCPU, Q10UDEHCPU, and Q20UDEHCPU	2.91V	Communication driver MELSECNET/H [04.03.**]
	Supporting connection to Q170MCPU	2.96A	Communication driver MELSECNET/H [04.04.**]
CC-Link IE controller network connection	Supporting connection to CC-Link IE controller network	2.90U	Communication driver CC-Link IE Controller Network [04.02.**]
	Supporting connection to Q00UJCPU, Q00UCPU, Q01UCPU, Q10UDHCPU, Q20UDHCPU, Q10UDEHCPU, and Q20UDEHCPU	2.91V	Communication driver CC-Link IE Controller Network [04.03.**]
	Supporting connection to Q170MCPU	2.96A	Communication driver CC-Link IE Controller Network [04.04.**]
CC-Link connection (Intelligent device station)	Supporting connection to CC-Link (Intelligence device station)	2.90U	Communication driver CC-Link Ver2 (ID) [04.02.**]
	Supporting connection to Q00UJCPU, Q00UCPU, Q01UCPU, Q10UDHCPU, Q20UDHCPU, Q10UDEHCPU, and Q20UDEHCPU	2.91V	Communication driver CC-Link Ver2 (ID) [04.03.**]
	Supporting connection to Q170MCPU	2.96A	Communication driver CC-Link Ver2 (ID) [04.04.**]

(Continued to next page)

Item	Description	Version of GT Designer2	Version of OS
CC-Link connection (Via G4)	Supporting connection to CC-Link (Via G4)	2.90U	Communication driver CC-Link(G4) [04.02.**]
	Supporting connection to Q00UJCPU, Q00UCPU, Q01UCPU, Q10UDHCPU, Q20UDHCPU, Q10UDEHCPU, and Q20UDEHCPU	2.91V	Communication driver CC-Link(G4) [04.03.**]
	Supporting connection to Q170MCPU	2.96A	Communication driver CC-Link(G4) [04.04.**]
Ethernet connection	Supporting connection to the Ethernet	2.90U	Communication driver Ethernet(MELSEC),Q17nNC, CRnD-700 [04.02.**]
	Supporting connection to Q00UJCPU, Q00UCPU, Q01UCPU, Q10UDHCPU, Q20UDHCPU, Q10UDEHCPU, and Q20UDEHCPU	2.91V	Communication driver Ethernet(MELSEC),Q17nNC, CRnD-700 [04.03.**]
	Supporting connection to Q170MCPU	2.96A	Communication driver Ethernet(MELSEC),Q17nNC, CRnD-700 [04.04.**]
OMRON PLC connection	Supporting connection to OMRON PLC	2.90U	Communication driver OMRON SYSMAC [04.02.**]
KEYENCE PLC connection	Supporting connection to KEYENCE PLC	2.90U	Communication driver KEYENCE KV700/1000 [04.02.**]
KOYO EI PLC connection	Supporting connection to KOYO EI PLC	2.90U	Communication driver KOYO KOSTAC/DL [04.02.**]
SHARP PLC connection	Supporting connection to SHARP PLC	2.90U	Communication driver SHARP JW [04.02.**]
TOSHIBA PLC connection	Supporting connection to TOSHIBA PLC	2.90U	Communication driver TOSHIBA PROSEC T/V [04.02.**]
TOSHIBA MACHINE PLC connection	Supporting connection to TOSHIBA MACHINE PLC	2.90U	Communication driver TOSHIBA MACHINE TCmini [04.02.**]
JTEKT PLC connection	Supporting connection to JTEKT PLC	2.90U	Communication driver JTEKT TOYOPUC-PC [04.02.**]
HITACHI IES PLC connection	Supporting connection to HITACHI IES PLC	2.90U	Communication driver HITACHI HIDIC H [04.02.**] HITACHI HIDIC H (Protocol 2) [04.02.**]
HITACHI PLC connection	Supporting connection to HITACHI PLC	2.90U	Communication driver HITACHI S10mini/S10V [04.02.**]
FUJI FA PLC connection	Supporting connection to FUJI FA PLC	2.90U	Communication driver FUJI MICREX-F [04.02.**]
PANASONIC PLC connection	Supporting connection to PANASONIC PLC	2.90U	Communication driver MATSUSHITA MEWNET-FP [04.02.**]
	Communication driver name has been changed.	2.96A	Communication driver Panasonic MEWNET-FP [04.04.**]
YASKAWA PLC connection	Supporting connection to YASKAWA PLC	2.90U	Communication driver YASKAWA GL/CP9200(SH/H)/ CP9300MS [04.02.**] Ethernet(YASKAWA) [04.02.**]

(Continued to next page)

Item	Description	Version of GT Designer2	Version of OS
YOKOGAWA PLC connection	Supporting connection to YOKOGAWA PLC	2.90U	Communication driver YOKOGAWA FA500/FA-M3/ STARDOM [04.02.**] Ethernet(YOKOGAWA) [04.02.**] MODBUS/TCP [04.02.**]
ALLEN-BRADLEY PLC connection	Supporting connection to ALLEN-BRADLEY PLC	2.90U	Communication driver AB SLC500, AB 1:N [04.02.**] AB MicroLogix [04.02.**] AB Control/CompactLogix [04.02.**] EtherNet/IP(AB) [04.02.**]
GE FANUC PLC connection	Supporting connection to GE FANUC PLC	2.90U	Communication driver GE Fanuc Automation(SNP-X) [04.02.**]
LS IS PLC connection	Supporting connection to LS IS PLC	2.90U	Communication driver LS Industrial Systems MASTER-K[04.02.**]
SCHNEIDER PLC connection	Supporting connection to the MODBUS® /TCP	2.90U	Communication driver MODBUS/TCP [04.02.**]
SIEMENS PLC connection	Supporting connection to SIEMENS PLC	2.90U	Communication driver SIEMENS S7-300/400 [04.02.**] SIEMENS S7-200 [04.02.**]
Microcomputer connection	Supporting connection to a microcomputer	2.90U	Communication driver Computer [04.02.**]
MODBUS® /RTU connection	Supporting MODBUS® /RTU connection	2.96A	Communication driver MODBUS/RTU [04.04.**]
MODBUS® /TCP connection	Supporting connection to the MODBUS® /TCP	2.90U	Communication driver MODBUS/TCP [04.02.**]
OMRON temperature controller connection	Supporting connection to OMRON temperature controller	2.90U	Communication driver OMRON THERMAC / INPANEL NEO [04.02.**]
SHINKO indicating controller connection	Supporting connection to SHINKO indicating controller	2.90U	Communication driver SHINKO TECHNOS CONTROLLER [04.02.**]
CHINO controller connection	Supporting connection to CHINO controller	2.90U	Communication driver CHINO Controllers(MODBUS) [04.02.**]
FUJI SYS temperature controller connection	Supporting connection to FUJI SYS temperature controller	2.90U	Communication driver FUJI PXR/PXG/PXH [04.02.**]
YAMATAKE temperature controller connection	Supporting connection to YAMATAKE temperature controller	2.90U	Communication driver YAMATAKE SDC/DMC [04.02.**]
YOKOGAWA temperature controller connection	Supporting connection to YOKOGAWA temperature controller	2.90U	Communication driver YOKOGAWA GREEN/UT100/ UT2000 [04.02.**]
RKC temperature controller connection	Supporting connection to RKC temperature controller	2.90U	Communication driver RKC SR Mini HG(MODBUS) [04.02.**]
Inverter connection	Supporting connection to inverter	2.90U	Communication driver FREQROL 500/700 [04.02.**]
Robot controller connection	Supporting connection to robot controller	2.90U	Communication driver QJ71E71/AJ71(Q)E71,Q17nNC, CRnD-700 [04.02.**]

(Continued to next page)

Item	Description	Version of GT Designer2	Version of OS
Servo amplifier connection	Supporting connection to servo amplifier	2.90U	Communication driver MELSERVO-J3, J2S/M [04.02.**]
	Supporting connection to MR-J2S-*CL	2.96A	Communication driver MELSERVO-J3, J2S/M [04.04.**]
CNC connection (MELDAS C6/C64)	Supporting connection to CNC (MELDAS C6/C64 series)	2.90U	Communication driver AJ71QC24, MELDAS C6* [04.02.**] MELSECNET/H [04.02.**] CC-Link Ver2 (ID) [04.02.**] Ethernet(MELSEC), Q17nNC, CRnD-700 [04.02.**]
GOT multidrop connection	Supporting the GOT multidrop connection	*1	-
Barcode reader connection	Supporting connection to barcode reader	2.90U	Extended function OS Barcode [04.02.**]
Printer connection	Supporting connection to printer	2.90U	Extended function OS Printer [04.02.**]
FA transparent	Supporting the FA transparent function via USB	2.90U	Standard monitor OS [04.02.**]
	Supporting the Ethernet connection between the GOT and the PLC on GX Developer	2.96A	Standard monitor OS [04.04.**]
External I/O device connection	Supporting connection to external I/O devices	2.90U	Extended function OS External I/O / Operation Panel [04.02.**]
RFID connection	Supporting connection to the RFID controller	2.90U	Extended function OS RFID [04.02.**]

*1 This item is supported by GT Works3 Version1.14Q or later.

(2) For GT15, GT SoftGOT1000, and GT11

Item	Description	Version of GT Designer2	Version of OS	GT 15	GT Soft GOT1000	GT11 Bus	GT11 Serial
Bus connection	Supporting connection to BUS	2.04E	Communication driver Bus(Q)[01.00.**] Bus(A/QnA) [01.00.**]	○	×	×	×
		2.58L	GT15 Communication driver Bus(Q) [03.03.**] Bus(A/QnA) [03.03.**] GT11 BootOS [03.03.**.P] Standard monitor OS [03.03.**] Communication driver Bus(Q) [03.03.**] Bus(A/QnA) [03.03.**]	○	○	○	×
	Supporting connection to Q172HCPU, Q173HCPU	2.09K	Communication driver Bus(Q) [01.02.**]	○	×	○	×
	Priority order of data load can be set.	2.43V	Communication driver Bus connection Q [03.01.**]	○	×	○	×
	Supporting connection to Universal model QCPU	2.63R	Communication driver Bus connection Q [03.07.**]	○	○	○	×
	Supporting connection to Q17nDCPU						
	Supporting connection to CNC C70						

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Item	Description	Version of GT Designer2	Version of OS	GT 15	GT Soft GOT1000	GT11	
						Bus	Serial
Bus connection	Supporting connection to CRnQ-700	2.73B	Communication driver Bus connection Q [03.09.**]	○	○	○	×
	Supporting connection to Q13UDHCPU and Q26UDHCPU	2.77F	Communication driver Bus connection Q [03.12.**]	○	○	○	×
	Supporting connection to Q02PHCPU and Q06PHCPU	2.82L	Communication driver Bus connection Q [03.13.**]	○	○	○	×
	Supporting connection to Q03UDECPU, Q04UDEHCPU, Q06UDEHCPU, Q13UDEHCPU, and Q26UDEHCPU						
	Supporting connection to Q00UJCPU, Q00UCPU, Q01UCPU, Q10UDHCPU, Q20UDHCPU, Q10UDEHCPU, and Q20UDEHCPU	2.91V	Communication driver Bus connection Q [04.03.**]	○	○	○	×
	Supporting connection to Q170MCPU	2.96A	Communication driver Bus connection Q [04.04.**]	○	○	○	×
Direct connection to CPU	Supporting connection to Q172HCPU, Q173HCPU	2.09K	Communication driver A/QnA/QCPU,QJ71C24 [01.02.**]	○	×	×	○
	Supporting connection to FX3U series	2.18U	Communication driver MELSEC-FX[02.02.**]	○	○	×	○
	Supporting automatic system switching for QCPU redundant system	2.32J	Communication driver A/QnA/QCPU, QJ71C24, MELDAS C6* [03.00.**]	○	○	×	○
	Communication driver name has been changed.	2.43V	Communication driver A/QnA/QCPU, QJ71C24 [03.01.**]	○	×	×	○
	Supporting connection to Universal model QCPU	2.63R	Communication driver A/QnA/QCPU,QJ71C24, MELDASC6*[03.07.**]	○	○	×	○
	Supporting connection to Q17nDCPU						
	Supporting connection to CNC C70						
	Supporting connection to CRnQ-700	2.73B	Communication driver A/QnA/QCPU, QJ71C24 [03.09.**]	○	○	×	○
	Supporting settings for the number of retries, the timeout time, and delay time		Communication driver A/QnA/QCPU, QJ71C24 [03.09.**] MELSEC-FX[03.09.**]	○	×	×	○
	Supporting connection to Q13UDHCPU and Q26UDHCPU	2.77F	Communication driver A/QnA/QCPU, QJ71C24 [03.12.**]	○	○	×	○
	Supporting connection to Q02PHCPU and Q06PHCPU	2.82L	Communication driver A/QnA/QCPU, QJ71C24 [03.13.**]	○	○	×	○
	Supporting connection to Q03UDECPU, Q04UDEHCPU, Q06UDEHCPU, Q13UDEHCPU, and Q26UDEHCPU						
	Supporting connection to QS001CPU			×	○	×	×
	Supporting connection to FX3G series	2.90U	Communication driver MELSEC-FX[04.02.**]	○	○	×	○

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Item	Description	Version of GT Designer2	Version of OS	GT 15	GT Soft GOT1000	GT11	
						Bus	Serial
Direct connection to CPU	Supporting connection to Q00UJCPU, Q00UCPU, Q01UCPU, Q10UDHCPU, Q20UDHCPU, Q10UDEHCPU, and Q20UDEHCPU	2.91V	Communication driver A/QnA/QCPU, QJ71C24 [04.03.**]	○	○	×	○
	Supporting connection to Q170MCPU	2.96A	Communication driver A/QnA/QCPU, QJ71C24 [04.04.**]	○	○	×	○
Computer link connection	Supporting connection to Q172HCPU, Q173HCPU	2.09K	Communication driver A/QnA/QCPU,QJ71C24 [01.02.**]	○	×	×	○
	Communication driver name has been changed.	2.43V	Communication driver A/QnA/QCPU, QJ71C24 [03.01.**] AJ71QC24, MELDAS C6* [03.01.**]	○	×	×	○
	Supporting connection to Universal model QCPU	2.63R	Communication driver A/QnA/QCPU,QJ71C24, MELDASC6*[03.07.**]	○	○	×	○
	Supporting connection to Q17nDCPU						
	Supporting connection to CNC C70						
	Supporting the redundant system with the redundant type extension base unit						
	Supporting connection to CRnQ-700	2.73B	Communication driver A/QnA/QCPU, QJ71C24 [03.09.**]	○	○	×	○
	Supporting settings for the number of retries, the timeout time, and delay time		Communication driver A/QnA/QCPU, QJ71C24 [03.09.**] AJ71QC24, MELDAS C6* [03.09.**] AJ71C24/UC24[03.09.**]	○	×	×	○
	Supporting connection to Q13UDHCPU and Q26UDHCPU	2.77F	Communication driver A/QnA/QCPU, QJ71C24 [03.12.**]	○	○	×	○
	Supporting connection to QJ71CMON						
	Supporting connection to Q170MCPU	2.96A	Communication driver A/QnA/QCPU, QJ71C24 [04.04.**]	○	○	×	○
Computer link connection	Supporting connection to Q02PHCPU and Q06PHCPU	2.82L	Communication driver A/QnA/QCPU, QJ71C24 [03.13.**]	○	○	×	○
	Supporting connection to Q03UDECPU, Q04UDEHCPU, Q06UDEHCPU, Q13UDEHCPU, and Q26UDEHCPU						
	Supporting connection to Q00UJCPU, Q00UCPU, Q01UCPU, Q10UDHCPU, Q20UDHCPU, Q10UDEHCPU, and Q20UDEHCPU	2.91V	Communication driver A/QnA/QCPU, QJ71C24 [04.03.**]	○	○	×	○
MELSECNET/H connection (PLC to PLC network)	Supporting connection to MELSECNET/H (PLC to PLC network)	2.25B	-	×	○	×	×
		2.32J	Communication driver MELSECNET/H [03.00.**]	○	○	×	×
	Supporting routing parameter setting with GT Designer2.	2.43V	Communication driver MELSECNET/H [03.01.**]	○	×	×	×

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Item	Description	Version of GT Designer2	Version of OS	GT 15	GT Soft GOT1000	GT11	
						Bus	Serial
MELSECNET/H connection (PLC to PLC network)	Supporting connection to Universal model QCPU	2.63R	Communication driver MELSECNET/H[03.07.**]	○	○	×	×
	Supporting connection to Q17nDCPU						
	Supporting connection to CNC C70						
	Supporting connection to CRnQ-700	2.73B	Communication driver MELSECNET/H[03.09.**]	○	○	×	×
	Supporting connection to Q13UDHCPU and Q26UDHCPU	2.77F	Communication driver MELSECNET/H[03.12.**]	○	○	×	×
	Supporting connection to Q02PHCPU and Q06PHCPU	2.82L	Communication driver MELSECNET/H[03.13.**]	○	○	×	×
	Supporting connection to Q03UDECPU, Q04UDEHCPU, Q06UDEHCPU, Q13UDEHCPU, and Q26UDEHCPU						
	Supporting connection to QS001CPU			○	○	×	×
	Supporting connection to Q00UJCPU, Q00UCPU, Q01UCPU, Q10UDHCPU, Q20UDHCPU, Q10UDEHCPU, and Q20UDEHCPU	2.91V	Communication driver MELSECNET/H [04.03.**]	○	○	×	×
	Supporting connection to Q170MCPU	2.96A	Communication driver MELSECNET/H [04.04.**]	○	○	×	×
MELSECNET/10 connection (PLC to PLC network)	Supporting connection to MELSECNET/10 PLC to PLC connection)	2.09K	Communication driver MELSECNET/10 [01.02.**]	○	○	×	×
	Supporting connection to Q172HCPU, Q173HCPU				×		
	Supporting automatic system switching for QCPU redundant system	2.32J	Communication driver MELSECNET/10 [03.00.**]	○	○	×	×
	Supporting routing parameter setting with GT Designer2.	2.43V	Communication driver MELSECNET/H [03.01.**]	○	×	×	×
	Supporting connection to Universal model QCPU	2.63R	Communication driver MELSECNET/H[03.07.**]	○	○	×	×
	Supporting connection to Q17nDCPU			○	○	×	×
	Supporting connection to CNC C70			○	○	×	×
	Supporting connection to CRnQ-700	2.73B	Communication driver MELSECNET/H[03.09.**]	○	○	×	×
	Supporting connection to Q13UDHCPU and Q26UDHCPU	2.77F	Communication driver MELSECNET/H[03.12.**]	○	○	×	×
	Supporting connection to Q02PHCPU and Q06PHCPU	2.82L	Communication driver MELSECNET/H[03.13.**]	○	○	×	×
	Supporting connection to Q03UDECPU, Q04UDEHCPU, Q06UDEHCPU, Q13UDEHCPU, and Q26UDEHCPU			○	○	×	×
	Supporting connection to QS001CPU			○	○	×	×
	Supporting connection to Q00UJCPU, Q00UCPU, Q01UCPU, Q10UDHCPU, Q20UDHCPU, Q10UDEHCPU, and Q20UDEHCPU	2.91V	Communication driver MELSECNET/H [04.03.**]	○	○	×	×
	Supporting connection to Q170MCPU	2.96A	Communication driver MELSECNET/H [04.04.**]	○	○	×	×

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Item	Description	Version of GT Designer2	Version of OS	GT 15	GT Soft GOT1000	GT11	
						Bus	Serial
CC-Link IE controller network connection	Supporting connection to CC-Link IE controller network	2.77F	Communication driver CC-Link IE Controller Network[03.12.**]	○	○	×	×
	Supporting connection to Q02PHCPU and Q06PHCPU	2.82L	Communication driver CC-Link IE Controller Network[03.13.**]	○	○	×	×
	Supporting connection to Q03UDECPU, Q04UDEHCPU, Q06UDEHCPU, Q13UDEHCPU, and Q26UDEHCPU						
	Supporting connection to QS001CPU			○	○	×	×
	Supporting connection to Q00UJCPU, Q00UCPU, Q01UCPU, Q10UDHCPU, Q20UDHCPU, Q10UDEHCPU, and Q20UDEHCPU	2.91V	Communication driver CC-Link IE Controller Network[04.03.**]	○	○	×	×
	Supporting connection to Q170MCPU	2.96A	Communication driver CC-Link IE Controller Network[04.04.**]	○	○	×	×
CC-Link connection (Intelligent device station)	Supporting connection to CC-Link (Intelligence device station)	2.09K	Communication driver CC-LINK(ID) [01.02.**]	○	×	×	×
	Supporting connection to Q172HCPU, Q173HCPU						
	Supporting connection to CC-Link Ver.2	2.32J	Communication driver CC-Link Ver2 (ID) [03.00.**]	○	○	×	×
	Supporting connection to Universal model QCPU	2.63R	Communication driver CC-Link Ver2 (ID) [03.07.**]	○	×	×	×
	Supporting connection to Q17nDCPU						
	Supporting connection to CNC C70						
	Supporting the redundant system with the redundant type extension base unit						
	Supporting connection to CRnQ-700	2.73B	Communication driver CC-Link Ver2 (ID) [03.09.**]	○	×	×	×
	Supporting connection to Q13UDHCPU and Q26UDHCPU	2.77F	Communication driver CC-Link Ver2 (ID) [03.12.**]	○	×	×	×
	Supporting connection to Q02PHCPU and Q06PHCPU	2.82L	Communication driver CC-Link Ver2 (ID) [03.13.**]	○	×	×	×
	Supporting connection to Q03UDECPU, Q04UDEHCPU, Q06UDEHCPU, Q13UDEHCPU, and Q26UDEHCPU						
	Supporting connection to Q00UJCPU, Q00UCPU, Q01UCPU, Q10UDHCPU, Q20UDHCPU, Q10UDEHCPU, and Q20UDEHCPU	2.91V	Communication driver CC-Link Ver2 (ID) [04.03.**]	○	×	×	×
	Supporting connection to Q170MCPU	2.96A	Communication driver CC-Link Ver2 (ID) [04.04.**]	○	×	×	×
CC-Link connection (Via G4)	Supporting connection to CC-Link (Via G4)	2.09K	Communication driver CC-LINK(G4) [01.02.**]	○	×	×	○
	Supporting connection to Q172HCPU, Q173HCPU						

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Item	Description	Version of GT Designer2	Version of OS	GT 15	GT Soft GOT1000	GT11	
						Bus	Serial
CC-Link connection (Via G4)	Supporting connection to Universal model QCPU	2.63R	Communication driver CC-Link(G4)[03.07.**]	○	×	×	○
	Supporting connection to Q17nDCPU						
	Supporting connection to CNC C70						
	Supporting the redundant system with the redundant type extension base unit						
	Supporting connection to AJ65BT-R2N	2.73B	Communication driver CC-Link(G4)[03.09.**]	○	×	×	○
	Supporting connection to CRnQ-700						
	Supporting settings for the number of retries, the timeout time, and delay time						
	Supporting connection to Q13UDHCPU and Q26UDHCPU	2.77F	Communication driver CC-Link(G4)[03.12.**]	○	×	×	○
	Supporting connection to Q02PHCPU and Q06PHCPU	2.82L	Communication driver CC-Link(G4)[03.13.**]	○	×	×	×
	Supporting connection to Q03UDECPU, Q04UDEHCPU, Q06UDEHCPU, Q13UDEHCPU, and Q26UDEHCPU						
	Supporting connection to Q00UJCPU, Q00UCPU, Q01UCPU, Q10UDHCPU, Q20UDHCPU, Q10UDEHCPU, and Q20UDEHCPU	2.91V	Communication driver CC-Link(G4) [04.03.**]	○	×	×	×
	Supporting connection to Q170MCPU	2.96A	Communication driver CC-Link(G4) [04.04.**]	○	×	×	×
Ethernet connection	Supporting connection to the Ethernet	2.09K	Communication driver QJ71E71/AJ71(Q)E71 [01.02.**]	○	○	×	×
	Supporting connection to Q172HCPU, Q173HCPU				×		
	Supporting automatic system switching for QCPU redundant system	2.32J	Communication driver QJ71E71/AJ71(Q)E71 [03.00.**]	○	○	×	×
	Supporting routing parameter setting with GT Designer2.	2.43V	Communication driver QJ71E71/AJ71(Q)E71 [03.01.**]	○	○	×	×
	Supporting connection to Universal model QCPU	2.63R	Communication driver QJ71E71/AJ71(Q)E71, Q17nNC[03.07.**]	○	○	×	×
	Supporting connection to Q17nDCPU						
	Supporting connection to CNC C70						
	Supporting the redundant system with the redundant type extension base unit						
	Supporting the redundant system with the remote I/O station of the MELSECNET/H network system				×		
	The communication driver name is changed.	2.73B	Communication driver QJ71E71/AJ71(Q)E71,Q17nNC, CRnD-700 [03.09.**]	○	×	×	×
	Supporting connection to CRnQ-700 and CRnD-700			○	○	×	×
	Supporting connection to Q13UDHCPU and Q26UDHCPU	2.77F	Communication driver QJ71E71/AJ71(Q)E71,Q17nNC, CRnD-700 [03.12.**]	○	○	×	×

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Item	Description	Version of GT Designer2	Version of OS	GT 15	GT Soft GOT1000	GT11	
						Bus	Serial
Ethernet connection	The communication driver name is changed.	2.82L	Communication driver Ethernet(MELSEC),Q17nNC, CRnD-700 [03.13.**]	○	×	×	×
	Supporting connection to Q02PHCPU and Q06PHCPU			○	○	×	×
	Supporting connection to Q03UDECPU, Q04UDEHCPU, Q06UDEHCPU, Q13UDEHCPU, and Q26UDEHCPU				○	×	×
	Supporting connection to QS001CPU			○	○	×	×
	Supporting connection to Q00UJCPU, Q00UCPU, Q01UCPU, Q10UDHCPU, Q20UDHCPU, Q10UDEHCPU, and Q20UDEHCPU	2.91V	Communication driver Ethernet(MELSEC), Q17nNC, CRnD-700 [04.03.**]	○	○	×	×
	Supporting connection to Q170MCPU	2.96A	Communication driver Ethernet(MELSEC), Q17nNC, CRnD-700 [04.04.**]	○	○	×	×
OMRON PLC connection	Extended device range monitored (The setting of TIM or CNT up to 4095, etc.)	2.09K	Communication driver OMRON SYSMAC [01.02.**]	○	○	×	○
	Supporting delay time setting	2.27D	Communication driver OMRON SYSMAC [02.04.**]	○	×	×	○
	Supporting the settings of Retry and Timeout Time.	2.43V	Communication driver OMRON SYSMAC [03.01.**]	○	×	×	○
	Supporting connection to CP1L	2.82L	Communication driver OMRON SYSMAC [03.13.**]	○	×	×	○
KEYENCE PLC connection	Supporting connection to KEYENCE PLC	2.18U	Communication driver KEYENCE KV700/1000 [02.02.**]	○	×	×	○
	Supporting connection to KV-3000 and KV-5000	2.77F	Communication driver KEYENCE KV700/1000 [03.12.**]	○	×	×	○
KOYO EI PLC connection	Supporting connection to KOYO EI PLC	2.82L	Communication driver KOYO KOSTAC/DL [03.13.**]	○	×	×	○
SHARP PLC connection	Supporting connection to SHARP PLC	2.09K	Communication driver SHARP JW [01.02.**]	○	×	×	○
	Supporting settings for the number of retries and the timeout time	2.73B	Communication driver SHARP JW [03.09.**]	○	×	×	○
TOSHIBA PLC connection	Supporting connection to TOSHIBA PLC	2.09K	Communication driver TOSHIBA PROSEC T/V [01.02.**]	○	×	×	○
	Supporting settings for the number of retries, the timeout time, and delay time	2.73B	Communication driver TOSHIBA PROSEC T/V [03.09.**]	○	×	×	○
	Supporting connection to model2000(S2T)	2.77F	Communication driver TOSHIBA PROSEC T/V [03.12.**]	○	×	×	○
TOSHIBA MACHINE PLC connection	Supporting connection to TOSHIBA MACHINE PLC	2.77F	Communication driver TOSHIBA MACHINE TCmini [03.12.**]	○	×	×	○

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Item	Description	Version of GT Designer2	Version of OS	GT 15	GT Soft GOT1000	GT11	
						Bus	Serial
JTEKT PLC connection	Supporting connection to JTEKT PLC	2.32J	Communication driver JTEKT TOYOPUC-PC [03.00.**]	○	×	×	○
HITACHI IES PLC connection	Supporting connection to HITACHI IES PLC	2.09K	Communication driver HITACHI HIDIC H [01.02.**] HITACHI HIDIC H (Protocol 2) [01.02.**]	○	×	×	○
	Supporting settings for the number of retries, the timeout time, and delay time	2.73B	Communication driver HITACHI HIDIC H [03.09.**] HITACHI HIDIC H (Protocol 2) [03.09.**]	○	×	×	○
HITACHI PLC connection	Supporting connection to HITACHI PLC	2.43V	Communication driver HITACHI S10mini/S10V [03.01.**]	○	×	×	○
FUJI FA PLC connection	Supporting connection to FUJI FA PLC	2.43V	Communication driver FUJI MICREX-F [03.01.**]	○	×	×	○
PANASONIC PLC connection	Supporting connection to PANASONIC PLC	2.09K	Communication driver MATSUSHITA MEWNET-FP [01.02.**]	○	×	×	○
	Supporting connection to FP-Σ	2.18U	Communication driver MATSUSHITA MEWNET-FP [02.02.**]	○	×	×	○
	Supporting connection to FP-X	2.58L	Communication driver MATSUSHITA MEWNET-FP [03.03.**]	○	×	×	○
	The device range applicable to monitoring is extended. (Up to 991F for R and up to 911 for WR can be set.)			○	×	×	○
	Supporting settings for the timeout time and the delay time	2.73B	Communication driver MATSUSHITA MEWNET-FP [03.09.**]	○	×	×	○
	Communication driver name has been changed.	2.96A	Communication driver Panasonic MEWNET-FP [04.04.**]	○	×	×	○
YASKAWA PLC connection	Supporting connection to MP2000 and MP3000	2.47Z	Communication driver YASKAWA GL/CP9200(SH/H)/ CP9300MS [03.02.**]	○	×	×	○
	Supporting the Ethernet connection	2.47Z	Communication driver Ethernet(YASKAWA) [03.02.**]	○	○	×	×
	Supporting settings for the number of retries and the timeout time	2.73B	Communication driver YASKAWA GL/CP9200(SH/H)/ CP9300MS [03.09.**]	○	×	×	○
	Supporting connection to CP-312	2.77F	Communication driver Ethernet(YASKAWA) [03.12.**]	○	×	×	×
YOKOGAWA PLC connection	Supporting connection to STARDOM	2.32J	Communication driver YOKOGAWA FA500/FA-M3/ STARDOM [03.00.**]	○	×	×	○
	Supporting the Ethernet connection	2.47Z	Communication driver Ethernet(YOKOGAWA) [03.02.**]	○	○	×	×
	Supporting connection to the MODBUS® /TCP	2.73B	Communication driver MODBUS/TCP [03.09.**]	○	×	×	×

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Item	Description	Version of GT Designer2	Version of OS	GT 15	GT Soft GOT1000	GT11	
						Bus	Serial
ALLEN-BRADLEY PLC connection	Can use L device by MicroLogix 1000/ 1200/1500 series	2.18U	Communication driver AB MicroLogix [02.02.**]	○	×	×	○
	Supporting connection to Control/ CompactLogix	2.58L	Communication driver AB Control/CompactLogix [03.03.**]	○	×	×	○
	Supporting the Ethernet connection	2.63R	Communication driver EtherNet/IP(AB)[03.07.**]	○	×	×	×
GE FANUC PLC connection	Supporting connection to GE FANUC PLC	2.82L	Communication driver GE Fanuc Automation(SNP-X) [03.13.**]	○	×	×	○
LS IS PLC connection	Supporting connection to LS IS PLC	2.90U	Communication driver LS Industrial Systems MASTER-K [04.02.**]	○	×	×	○
SCHNEIDER PLC connection	Supporting connection to the MODBUS® /TCP	2.73B	Communication driver MODBUS/TCP [03.09.**]	○	×	×	×
SIEMENS PLC connection	Supporting connection to SIEMENS S7-200 series	2.18U	Communication driver SIEMENS S7-200 [02.02.**]	○	×	×	○
Microcomputer connection	Supporting XON/XOFF control	2.32J	Communication driver Computer [03.00.**]	○	×	×	○
	Supporting interrupt extension						
MODBUS® /RTU connection	Supporting MODBUS® /RTU connection	2.96A	Communication driver MODBUS/RTU [04.04.**]	○	×	×	○
MODBUS® /TCP connection	Supporting MODBUS® /TCP connection	2.73B	Communication driver MODBUS/TCP [03.09.**]	○	×	×	×
OMRON temperature controller connection	Supporting connection to OMRON temperature controller	2.18U	Communication driver OMRON THERMAC / INPANEL NEO [02.02.**]	○	×	×	○
	The functions to automatically stop monitoring faulty stations and to disconnect communications with controllers are added.	2.58L	Communication driver OMRON THERMAC/INPANEL NEO [03.03.**]	○	×	×	○
SHINKO indicating controller connection	Supporting connection to SHINKO indicating controller	2.43V	Communication driver Shinko Technos Controller [03.01.**]	○	×	×	○
	The functions to automatically stop monitoring faulty stations and to disconnect communications with controllers are added	2.58L	Communication driver Shinko Technos Controller [03.03.**]	○	×	×	○
CHINO controller connection	Supporting connection to CHINO controller	2.58L	Communication driver CHINO Controllers(MODBUS) [03.03.**]	○	×	×	○
	The functions to automatically stop monitoring faulty stations and to disconnect communications with controllers are added						

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Item	Description	Version of GT Designer2	Version of OS	GT 15	GT Soft GOT1000	GT11	
						Bus	Serial
FUJI SYS temperature controller connection	Supporting connection to FUJI SYS temperature controller	2.32J	Communication driver FUJI PXR/PXG/PXH [03.00.**]	○	×	×	○
	The functions to automatically stop monitoring faulty stations and to disconnect communications with controllers are added	2.58L	Communication driver FUJI PXR/PXG/PXH [03.03.**]	○	×	×	○
YAMATAKE temperature controller connection	Supporting connection to YAMATAKE temperature controller	2.18U	Communication driver YAMATAKE SDC/DMC [02.02.**]	○	×	×	○
	The functions to automatically stop monitoring faulty stations and to disconnect communications with controllers are added	2.58L	Communication driver YAMATAKE SDC/DMC [03.03.**]	○	×	×	○
YOKOGAWA temperature controller connection	Supporting connection to YOKOGAWA temperature controller	2.43V	Communication driver YOKOGAWA GREEN/UT100/ UT2000 [03.01.**]	○	×	×	○
	The functions to automatically stop monitoring faulty stations and to disconnect communications with controllers are added	2.58L	Communication driver YOKOGAWA GREEN/UT100/ UT2000 [03.03.**]	○	×	×	○
RKC temperature controller connection	Supporting connection to RKC temperature controller	2.18U	Communication driver RKC SR Mini HG(MODBUS) [02.02.**]	○	×	×	○
	Supporting connection to SRZ	2.58L	Communication driver RKC SR Mini HG(MODBUS) [03.03.**]	○	×	×	○
	The functions to automatically stop monitoring faulty stations and to disconnect communications with controllers are added						
	Supporting connection to CB series	2.87R	Communication driver RKC SR Mini HG(MODBUS) [04.03.**]	○	×	×	○
Inverter connection	Supporting connection to inverter	2.18U	Communication driver FREQROL 500/700 [02.02.**]	○	×	×	○
	Setting range for Timeout Time has been changed. (3 to 30 seconds → 1 to 30 seconds)	2.43V	Communication driver FREQROL 500/700 [03.01.**]	○	×	×	○
	Supporting connection to E700 series and V500/V500L series	2.63R	Communication driver FREQROL 500/700[03.07.**]	○	×	×	○
	Supporting connection to D700 series	2.91V	Communication driver FREQROL 500/700 [04.03.**]	○	×	×	○
Servo amplifier connection	Supporting connection to servo amplifier	2.09K	Communication driver MELSERVO-J2S/M [01.02.**]	○	×	×	○
	Supporting connection to MELSERVO-J3 series	2.18U	Communication driver MELSERVO-J3,J2S/M [02.02.**]	○	×	×	○
	Supporting connection to MR-J3-*T series	2.63R	Communication driver MELSERVO-J3, J2S/M [03.07.**]	○	×	×	○
	Supporting writing to the E^2PROM area in parameter writing	2.32J	Communication driver MELSERVO-J3, J2S/M [03.00.**]	○	×	×	○

(Continued to next page)

Item	Description	Version of GT Designer2	Version of OS	GT 15	GT Soft GOT1000	GT11	
						Bus	Serial
Servo amplifier connection	Supporting the point table setting for MR-J2S-*CP	2.32J	Communication driver MELSERVO-J3, J2S/M [03.00.**]	○	×	×	○
	Supporting the test run mode	2.32J	Communication driver MELSERVO-J3, J2S/M [03.00.**]	○	×	×	○
	Supporting settings for the number of retries, the timeout time, and delay time	2.73B	Communication driver MELSERVO-J3, J2S/M [03.09.**]	○	×	×	○
	Enables setting the host station address.	2.90U	Communication driver MELSERVO-J3, J2S/M [04.02.**]	○	×	×	○
	Supporting connection to MR-J2S-*CL	2.96A	Communication driver MELSERVO-J3, J2S/M [04.04.**]	○	×	×	○
Robot controller connection	Supporting connection to robot controller	2.77F	Communication driver QJ71E71/AJ71(Q)E71,Q17nNC, CRnD-700 [03.12.**]	○	○	×	×
CNC connection (MELDAS C6/ C64)	Supporting connection to CNC (MELDAS C6/C64 series)	2.18U	Communication driver A/QnA/QCPU, QJ71C24, MELDAS C6* [02.02.**] A/QnAQJ71E71/AJ71(Q)E71 [02.02.**] MELSECNET/10 [02.02.**] CC-Link(ID) [02.02.**]	○	○	×	○
	Communication driver name has been changed.	2.43V	Communication driver AJ71QC24, MELDAS C6* [03.01.**]	○	×	×	○
	Supporting settings for the number of retries, the timeout time, and delay time	2.73B	Communication driver AJ71QC24, MELDAS C6* [03.09.**]	○	×	×	○
	Communication driver name has been changed.		Communication driver QJ71E71/AJ71(Q)E71,Q17nNC, CRnD-700 [03.09.**]	○	×	×	×
GOT multidrop connection	Supporting the GOT multidrop connection	2.96A	Communication driver Multidrop(Host) [04.04.**] Multidrop(Slave) [04.04.**]	× *1	×	×	○
Barcode reader connection	Supporting connection to barcode reader	2.09K	Extended function OS Barcode [01.02.**]	○	×	○	○
	Supporting connection to 2D-code reader	2.27D	Extended function OS Barcode [02.04.**]	○	×	○	○
Printer connection	Supporting connection to printer	2.27D	Extended function OS Printer [02.04.**]	○	×	×	×
FA transparent	Supporting the FA transparent function via USB	2.09K	GT15 Standard monitor OS [01.02.**] GT11 Standard monitor OS [01.02.**] Boot OS [01.02.**.C]	○	×	○	○
	MT Developer (via USB), MR Configurator and FR Configurator are added as compatible software.	2.27D	Standard monitor OS [02.04.**]	○	×	○	○
	GX Configuration and PX Developer are added as compatible software.	2.32J	Standard monitor OS [03.00.**]	○	×	○	○

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Item	Description	Version of GT Designer2	Version of OS	GT 15	GT Soft GOT1000	GT11	
						Bus	Serial
FA transparent	Supporting the computer link connection between the GOT and PLC on GX Developer	2.77F	Standard monitor OS [03.12.**]	○	×	○	○
	Supporting the computer link connection between the GOT and PLC on PX Developer FX Configurator-FP is added as compatible software.	2.82L	Standard monitor OS [03.13.**]	○	×	○	○
	Supporting the Ethernet connection between the GOT and the PLC on GX Developer	2.96A	Standard monitor OS [04.04.**]	○	×	×	×
Multiple-GT11 connection	Connection with multiple GT11s	2.09K	Standard monitor OS [01.02.**]	×	×	○	○
External I/O device connection	Supporting connection to external I/O devices	2.58L	Extended function OS External I/O / Operation Panel [03.03.**]	○	×	×	×
RFID connection	Supporting connection to the RFID controller	2.73B	Extended function OS RFID [03.09.**]	○	×	○	○

*1 This item is supported by GT Works3 Version1.14Q or later.

3 Added GT Designer2 functions

(1) For GT16

Item	Description	Version of GT Designer2	Version of OS
Function for GT Designer2	All GT15 functions added by GT Designer2 Version2.90U or earlier are available.	2.90U	Standard monitor OS [04.02.**]
Project data matching	Project data matching is available between data stored in the personal computer and data opened with GT Designer2.	2.96A	-
Screen preview	Enables switching screens in the Screen Preview window.	2.96A	-
Auxiliary setting	The setting to adjust the order of displaying objects on the GOT to that of the overlapped objects on GT Designer2 is added.	2.96A	-

(2) For GT15, GT SoftGOT1000, and GT11

Item	Description	Version of GT Designer2	Version of OS	GT 15	GT Soft GOT1000	GT 11
Ethernet download	Downloading the project data via Ethernet	2.09K	Standard monitor OS [01.02.**]	○	×	×
Basic comment, comment group	Copying comments in column unit on Basic Comment or Comment Group, etc.	2.09K	-	○	○	○
	Enables editing the comment group directly in settings for lamps and touch switches.	2.77F	-	○	○	○

(Continued to next page)

Item	Description	Version of GT Designer2	Version of OS	GT 15	GT Soft GOT1000	GT 11
Library workspace	Improved library structure and added import function	2.09K	-	○	○	○
	Improved user library structure, expanded the user library registration capacity, copying the figure data to the user library, etc.	2.18U	-	○	○	○
	Addition of fixed frame figure	2.18U	-	○	○	○
	Enables setting the background color of the figures in the Library Editor screen.	2.47Z	-	○	○	○
	Enables sorting the figure data by subject or function and displaying different-shaped figures in the same color in the image list.	2.58L	-	○	○	○
	Real type data are added to the subject in the library.	2.63R	-	○	○	○
Project data matching	Project data matching is available between data stored in the GOT and data opened with GT Designer2.	2.09K	Standard monitor OS [01.02.**]	○	○	○
	Project data matching is available between the GOT and GT Designer2 even if the minor versions are not matched.	2.82L	-	○	×	○
	Project data matching is available between data stored in the personal computer and data opened with GT Designer2.	2.96A	-	○	○	○
Copy ON → OFF Copy OFF → ON	Enables copying of only characters in lamp display, touch switch and comment display.	2.18U	-	○	○	○
	Enables copying of only comment No. in bit lamp, touch switch, and comment display(bit).	2.73B	-	○	○	○
Import, Export	Enables editing of the settings for advanced alarm observation (advanced user alarm), alarm history, advanced recipe function and recipe function in the CSV file format and other format.	2.18U	-	○	○	○
	Items that can be imported or exported with the advanced alarm observation and alarm history are added. (Device No., comment No., detail No., and others)	2.77F	-	○	○	×
Print	Enables printing of header and footer	2.18U	-	○	○	○
Edit	Enables duplicating and consecutive copying of figures and objects.	2.90U	-	○	○	○
Data View	Enables changing of the settings for the respective objects in grouped objects	2.18U	-	○	○	○
Batch Edit	Enables global replacement of channel No.	2.18U	-	○	○	×
Screen Preview	Enables checking for security level switching and language switching in image after switching	2.18U	-	○	○	○

(Continued to next page)

Item	Description	Version of GT Designer2	Version of OS	GT 15	GT Soft GOT1000	GT 11
Screen preview	Enables switching screens in the Screen Preview window.	2.96A	-	○	○	○
Wizard	Wizard for setting the GOT type, controller type and communication settings when creating a new project	2.18U	-	○	○	○
Screen script, project script	Settings on the Script Edit dialog are available for screen script and project script.	2.27D	-	○	○	×
Auxiliary setting	Setting of maintaining screen numbers of the screens being displayed (System Information) during screen switching is added.	2.27D	-	○	○	○
	The setting to adjust the order of displaying objects on the GOT to that of the overlapped objects on GT Designer2 is added.	2.96A	Standard monitor OS [04.04.**]	○	○	○
Expansion / Reduction	Supports expansion/reduction when multiple objects and shapes are selected.	2.32J	-	○	○	○
	Supports automatically zooming in and out objects and figures suitable for the screen size when the GOT type is changed to a GOT type with different resolution.	2.73B	-	○	○	○
Screen capture	Function for capturing the specified range and loading to GT Designer2	2.43V	-	○	○	○
Zoom	• Interval of magnification specification has been changed. • +/- buttons have been added. • Zoom in/zoom out operations using the " Ctrl key" and "Mouse wheel" have been added.	2.43V	-	○	○	○
Guidelines	Lines to align figures and objects are displayed when arranging a placed figure or object.	2.90U	-	○	○	○
Communication	Holds the previous downloaded drive.	2.47Z	-	○	×	○
	• Enables updating BootOS without the standard monitor OS updated when only BootOS is already installed on the GOT. • Enables installing the standard monitor OS, the communication driver, the extended OS or the option OS at once when only BootOS is already installed in the GOT.	2.58L	BootOS [03.03.**.P]	○	×	○
	Enables installing OSs on the A drive with the OS boot drive set to the A drive.	2.73B	-	○	×	×
Preferences	Enables setting the maximum number of screens to be displayed on GT Designer2.	2.63R	-	○	○	○
Device list	Functions of the collection target selection, jump, file output, and others are added.	2.73B	-	○	○	○

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Item	Description	Version of GT Designer2	Version of OS	GT 15	GT Soft GOT1000	GT 11
Text list	Enables displaying the direct input texts in a list.	2.90U	-	○	○	○
Reading BMP or JPEG image data	Enables displaying BMP or JPEG image data reduced to a resolution of 2000 × 1600 or less on GT Designer2.	2.77F	-	○	○	○

4 Added common settings/object functions

(1) For GT16

Item	Description	Version of GT Designer2	Version of OS
Common setting	All GT15 functions added by GT Designer2 Version2.90U or earlier are available.	2.90U	Standard monitor OS [04.02.**]
Figure	Supporting logo text	2.96A	Standard monitor OS [04.04.**]
Standard font	Supporting Chinese(Traditional)(supporting Europe)	2.91V	Standard monitor OS [04.03.**]
Window screen	Supporting the overlap windows 3, 4, and 5	2.90U	Standard monitor OS [04.02.**]
GOT internal device	The settable range of GS is extended to the range from GS0 to GS2047.	2.90U	Standard monitor OS [04.02.**]
	For the GOT multidrop connection, the device to store the GOT station number is added.	*1	-
	The device to notify the RGB signal input status is added.	2.96A	Standard monitor OS [04.04.**]
	Devices for the MODBUS® /RTU connection are added.		Standard monitor OS [04.04.**]
Screen switching function	Enables setting the screen switching devices for the overlap windows 3, 4, and 5.	2.90U	Standard monitor OS [04.02.**]
Station No. Switching Function	Enables setting the station No. switching devices for the overlap windows 3, 4, and 5.	2.90U	Standard monitor OS [04.02.**]
System information	System information regarding the overlap windows 3, 4, and 5 is added.	2.90U	Standard monitor OS [04.02.**]
	System information regarding the E drive is added.		
	The system signal 2-3 is added.	2.96A	Standard monitor OS [04.04.**]
Security	Supporting the external authentication (RFID) for the operator authentication	2.91V	Extended function OS Operator authentication [04.03.**] RFID [04.03.**]
	Supporting the fingerprint authentication for the operator authentication		Extended function OS Operator authentication [04.03.**] Fingerprint Authentication [04.03.**]
	Enables notifying the login operator name.	2.96A	Extended function OS Operator authentication [04.04.**]
	Supporting the GOT operator management information conversion tool		-
Device setting	Enables reading or writing a device when the 32K-block unit is splitted.	2.91V	Standard monitor OS [04.03.**]
Communication settings	Enables setting the multi-channel Ethernet connection.	2.90U	Standard monitor OS [04.02.**]
	Enables setting multiple drivers for external devices, including a bar code reader. (One driver can be set for one type of external device.)	2.96A	Standard monitor OS [04.04.**]

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Item	Description	Version of GT Designer2	Version of OS
RGB display	Enables using up to two channels when the GT16M-R2 is used for the RGB input unit.	2.90U	Standard monitor OS [04.02.**] Extended function OS Video/RGB [04.02.**]
Multimedia function	Function to display or record video images taken by a video camera connected to the multimedia unit and to play video files stored in a CF card.	2.90U	Standard monitor OS [04.02.**] Extended function OS Multimedia [04.02.**]
	Enables sending video files to the personal computer by using the Ethernet interface of the multimedia unit.	2.96A	Standard monitor OS [04.04.**] Extended function OS Multimedia [04.04.**]
	Enables recording a video image for approximately 1500 minutes (200 video files).		
	Enables fast-forwarding and playing videos in slow motion.		
	Enables recording or playing video files with sound.	2.98C	
Object function	All GT15 functions added by GT Designer2 Version2.90U or earlier are available.*2	2.90U	Standard monitor OS [04.02.**]
Touch switch	[Batch Self Check], [USB Device Display], and [Multimedia] are added to [Switch Action] of the special function switch.	2.90U	Standard monitor OS [04.02.**]
	The go to screen switch is applicable to the overlap windows 3, 4, and 5.		
	[Ladder Editor] and [Operator Management] are added to [Switch Action] of the special function switch.	2.96A	Standard monitor OS [04.04.**]
Numerical display/ Numerical input	Enables setting the asterisk display.	2.96A	Standard monitor OS [04.04.**]
ASCII display / ASCII input	Enables setting the asterisk display.	2.96A	Standard monitor OS [04.04.**]
Historical Trend Graph	Enables displaying logging data at the specified time on a trend graph.	2.96A	Standard monitor OS [04.04.**]
RFID function	Supporting the dedicated protocol (ICU-60S and ICU-215(Mifare) manufactured by MARS TECHNO SCIENCE Corp.)	2.91V	Extended function OS RFID [04.03.**]
Project Script	The file operation functions (file_copy, file_xcopy) are added.	2.96A	Standard monitor OS [04.04.**]
Screen Script	Supporting the overlap windows 3, 4, and 5	2.90U	Standard monitor OS [04.02.**]
	The file operation functions (file_copy, file_xcopy) are added.	2.96A	Standard monitor OS [04.04.**]
Key Code	The key code for the historical trend graph (Display position time specification jump) is added.	2.96A	Standard monitor OS [04.04.**]

*1 This item is supported by GT Works3 Version1.14Q or later.

*2 For the ASCII display or ASCII input, the Kana-kanji conversion is not available.
Only the Kana-kanji conversion (enhanced version) is available.

(2) For GT15, GT SoftGOT1000, and GT11

Item	Description	Version of GT Designer2	Version of OS	GT 15	GT Soft GOT1000	GT 11
Figure	JPEG file reading enabled	2.09K	Standard monitor OS [01.02.**]	○	○	×
	Function to import IGES format data.	2.43V	-	○	○	○
	Enables adjusting image qualities for reading JPEG files.	2.47Z	-	○	○	×
	Supporting piping	2.73B	Standard monitor OS [03.00.**]	○	○	○
	Enables setting the coordinates and the size using values.	2.90U	-	○	○	○

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Item	Description	Version of GT Designer2	Version of OS	GT 15	GT Soft GOT1000	GT 11
Figure	Supporting logo text	2.96A	Standard monitor OS [04.04.**]	○	○	○
Object	Enables setting the coordinates and the size using values.	2.90U	-	○	○	○
Text	Windows® fonts applicable	2.09K	Standard monitor OS [01.02.**]	○	○	○
	Stroke font applicable	2.43V	Standard monitor OS [03.01.**]	○	○	×
	Enables specifyng of background color.	2.32J	Standard monitor OS [03.00.**]	○	○	○
Standard font	The following fonts are supported. • Japanese 12dot • Japanese 16dot Gothic • Japanese 16dot Mincho	2.04E	Standard monitor OS [01.01**]	○	○	○
	The following fonts are supported. • Japanese (supporting Europe) 12dot • Japanese (supporting Europe) 16dot Gothic • Japanese (supporting Europe) 16dot Mincho • Chinese (Simplified) 12dot • Chinese (Simplified) 16dot Mincho • Chinese (Simplified) (supporting Europe) 12dot • Chinese (Simplified) (supporting Europe) 16dot Mincho	2.27D	Standard monitor OS [02.04.**] Boot OS [G]	○	○	○
Standard font	Supporting Chinese (Traditional) (supporting Europe)	2.91V	Standard monitor OS [04.03.**]	○	○	○
TrueType font	Supporting the TrueType numerical font (7-segment)	2.90U	Standard monitor OS [04.02.**] Boot OS [04.02.**U]	○	○	○
Stroke font	Enables setting the KANJI region.	2.47Z	Standard monitor OS [03.02.**]	○	○	×
	Supporting Thai	2.47Z	Standard monitor OS [03.02.**]	○	○	×
	The following font name is changed. • Stroke Standard Font(JPN) • The following fonts are added. • Stroke Standard Font(China GB) • Stroke Standard Font(China GB)(supporting Hangul)	2.58L	Extended function OS Stroke Standard Font [03.03.**]	○	×	×
	The following font is added. • Stroke Font(JPN)	2.58L	Option OS Stroke Font(JPN) [03.03.**]	○	×	×
KANJI Region	Supporting Chinese (Traditional)	2.18U	Standard monitor OS [02.02.**] Option OS Standard Font (China Big5) [02.02.**]	○	○	×
Window screen	Supporting the overlap windows 3, 4, and 5	2.96A	-	×	○	×
GOT internal device	System alarm information, printer status information, and GT SoftGOT1000 end device are added.	2.27D	Standard monitor OS [02.04.**]	○	○	○
	The devices for the trigger buffer of the MES interface are added.	2.47Z	Standard monitor OS [03.02.**] Option OS MES Interface [03.02.**]	○	×	×

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Item	Description	Version of GT Designer2	Version of OS	GT 15	GT Soft GOT1000	GT 11
GOT internal device	The settable range of GS is extended to the range from GS0 to GS2047.	2.96A	-	×	○	×
	For the GOT multidrop connection, the device to store the GOT station number is added.	2.96A	Standard monitor OS [04.04.**]	×*1	×	○
	Devices for the MODBUS® /RTU connection are added.	2.96A		○	×	○
GOT Type	Supporting vertical installation type display	2.18U	Standard monitor OS [02.02.**]	×	×	○
Screen switching function	"ON" and "OFF" can be set.	2.43V	Standard monitor OS [03.01.**]	○	○	○
	Enables setting the screen switching devices for the overlap windows 3, 4, and 5.	2.96A	-	×	○	×
Station No. Switching Function	Designation of the channel No. for which station No. is switched is possible.	2.18U	Standard monitor OS [02.02.**]	○	×	×
	Enables setting the station No. switching devices for the overlap windows 3, 4, and 5.	2.96A	-	×	○	×
Language Switching Device	Language switching device can be used.	2.00A	Standard monitor OS [01.00.**]	○	○	×
		2.18U	Standard monitor OS [02.02.**]	○	○	○
	Enables setting the column No. of the comments to be displayed when the device value is out of range.	2.90U	Standard monitor OS [04.02.**]	○	○	○
Password Setting	Password can be set for the connection of motion controller and servo amplifier.	2.18U	Standard monitor OS [02.02.**]	○	×	○
System information	System information of report function and print are added.	2.27D	Standard monitor OS [02.04.**]	×	×	○
	D drive automatic recovery status notification signal is added.	2.32J	Standard monitor OS [03.00.**]	×	×	○
	System information regarding B drive has been added.	2.43V	Standard monitor OS [03.01.**]	○	○	×
	The system signal 2-3 is added.	2.96A	Standard monitor OS [04.04.**]	○	×	×
Security	The name [Password] is changed to [Security] in the system environment.	2.58L	Standard monitor OS [03.03.**]	○	○	×
	Enables setting the operator authentication.	2.58L	Extended function OS Operator authentication [03.03.**]	○	○	×
	Supporting the external authentication (RFID) for the operator authentication	2.91V	Extended function OS Operator authentication [04.03.**] RFID [04.03.**]	○	×	×
	Supporting the fingerprint authentication for the operator authentication		Extended function OS Operator authentication [04.03.**] Fingerprint Authentication [04.03.**]	○	×	×
	Enables notifying the login operator name.	2.96A	Extended function OS Operator authentication [04.04.**]	○	○	×
	Supporting the GOT operator management information conversion tool		-	○	○	×
GOT Setup	In clock management, both adjust and broadcast can be set.	2.18U	Standard monitor OS [02.02.**]	○	×	○

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Item	Description	Version of GT Designer2	Version of OS	GT 15	GT Soft GOT1000	GT 11
GOT Setup	Data save device of MELSEC-Q / QnA ladder monitor data can be set at GT Designer2.	2.18U	-	○	×	×
	Automatic program read at the start of ladder monitor for MELSEC-Q/QnA/ Priority Level Comment can be set.	2.43V	-	○	×	×
	Time setting for call key ON until the start up of utility can be set (for 1-point pressing).	2.18U	Standard monitor OS [02.02.**]	○	×	×
	Alarm can be set to be displayed in system language switching or battery drops.	2.27D	Standard monitor OS [02.04.**]	○	○	○
	Enables the backup/restore setting.	2.58L	-	○	×	×
	Enables the setting for monitoring local devices.			○	×	×
	Enables setting the drive for collectively reading comment data.			○	×	×
	Enables settings for the backup trigger setting and the maximum number of backup data.	2.73B	-	○	×	×
Clock Setting	Designation of the channel No. used for adjusting and broadcasting is possible.	2.18U	Standard monitor OS [02.02.**]	○	×	×
Startup Logo	Function for setting any screen for the GOT startup screen	2.09K	Standard monitor OS [01.02.**] Boot OS [01.02.**.C]	○	○	○
	Enables displaying a BMP data stored in the A drive as the startup logo when the OS boot drive is set to the A drive.	2.73B	Boot OS [03.09.**.S]	○	×	×
GT11 Handy GOT Setting	Setting of the grip switch LED of GT11 Handy GOT	2.18U	Standard monitor OS [02.02.**]	×	×	○
Dialog window	System messages to be displayed on GOT can be customized or created by the user.	2.27D	Standard monitor OS [02.04.**]	○	×	○
Operation log	Function to save the GOT operation performed by the user as a history	2.32J	Standard monitor OS [03.00.**] Option OS Operation Log [03.00.**]	○	○	×
	Function for converting multiple files	2.43V	-	○	○	×
	The binary format file output can be converted to CSV/Unicode format file by external control.	2.43V	Standard monitor OS [03.01.**]	○	○	×
	Enables saving the operation log for the operator authentication.	2.58L	Standard monitor OS [03.03.**] Option OS Operation Log [03.03.**] Extended function OS Operator authentication [03.03.**]	○	○	×
Comment	Comment group can be used.	2.00A	Standard monitor OS [02.02.**]	○	○	×
		2.18U	Standard monitor OS [02.02.**]	○	○	○
Part	Enables setting the background color of the figures in the Parts Editor screen.	2.47Z	-	○	○	○

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Item	Description	Version of GT Designer2	Version of OS	GT 15	GT Soft GOT1000	GT 11
Key Window	User defined key window display can be switched in synchronization with the language switching device.	2.18U	Standard monitor OS [02.02.**]	○	○	○
	In the user defined key window, input range (maximum value) and input range (minimum value) are displayed.	2.18U	Standard monitor OS [02.02.**]	○	○	○
	The current value is displayed in the key window.	2.82L	Standard monitor OS [03.13.**]	○	○	○
Device setting	65 or later station numbers in the MELSECNET/G network system can be set with using Universal model QCPU as a relay station.	2.63R	Standard monitor OS [03.07.**]	○	○	×
	Enables reading or writing a device when the 32K-block unit is splitted.	2.91V	Standard monitor OS [04.03.**]	○	○	○
Communication settings	Enables setting multiple drivers for external devices, including a bar code reader. (One driver can be set for one type of external device.)	2.96A	Standard monitor OS [04.04.**]	○	×	×
Object rename	Function to allow setting of object name	2.32J	Standard monitor OS [03.00.**]	○	○	○
Lamp	Windows® fonts applicable	2.09K	Standard monitor OS [01.02.**]	○	○	○
	Stroke font applicable	2.43V	Standard monitor OS [03.01.**]	○	○	×
	Figure created as a part can be used to a lamp.	2.43V	Standard monitor OS [03.01.**]	○	○	○
	[Comment Group] can be used.	2.43V	Standard monitor OS [03.01.**]	○	○	○
	Enables specifying the transparent color of a figure when using an image file as a figure.	2.47Z	Standard monitor OS [03.02.**]	○	○	×
Touch switch	Windows® fonts applicable	2.09K	Standard monitor OS [01.02.**]	○	○	○
	Stroke font applicable	2.43V	Standard monitor OS [03.01.**]	○	○	○
	Figure created as a part can be used to a touch switch.	2.43V	Standard monitor OS [03.01.**]	○	○	×
	Data change switch can be used.	2.32J	Standard monitor OS [03.00.**]	○	○	○
	[Comment Group] can be used.	2.43V	Standard monitor OS [03.01.**]	○	○	○
	[Adjust Text Size] setting is possible.	2.43V	Standard monitor OS [03.01.**]	○	○	○
Touch switch	Auto repeat can be used.	2.43V	Standard monitor OS [03.01.**]	○	○	○
	The toutch switch on the ladder monitor with device search function can be used.	2.43V	Standard monitor OS [03.01.**]	○	○	○
	[PX Developer Function call] is added to [Switch Action] of the special function switch.	2.47Z	Standard monitor OS [03.02.**]	×	○	×
	Enables specifying the transparent color of a figure when using an image file as a figure.	2.47Z	Standard monitor OS [03.02.**]	○	○	×

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Item	Description	Version of GT Designer2	Version of OS	GT 15	GT Soft GOT1000	GT 11
Touch switch	[FX List Monitor], [Operator Information Management], [Log-in/Log-out (Operator Authentication)], [Password Change (Operator Authentication)], and [Backup/ Restore] are added to [Switch Action] of the special function switch.	2.58L	Standard monitor OS[03.03.**]	○	○	×
	The name [Password] is changed to [Password (Security Level)] in [Switch Action] of the special function switch.			○	○	○
	[CNC Data Input/Output] is added to [Switch Action] of the special function switch.	2.63R	Standard monitor OS [03.07.**]	○	×	○
	[SFC Monitor] is added to [Switch Action] of the special function switch.	2.77F	Standard monitor OS [03.12.**]	○	×	○
	[Ladder Editor] and [Operator Management] are added to [Switch Action] of the special function switch.	2.96A	Standard monitor OS [04.04.**]	○	×	×
Numerical display/ Numerical input	Setting to display input value when entering the value at input target object position is possible.	2.32J	Standard monitor OS [03.00.**]	○	×	×
	Format String setting is possible.	2.43V	Standard monitor OS [03.01.**]	○	○	○
	When Bit Trigger is not met, whether to enable "Hold Display" can be selected.	2.43V	Standard monitor OS [03.01.**]	○	○	○
	Enables setting the TrueType Numerical for the font.	2.90U	Standard monitor OS [04.02.**]	○	○	○
	Enables setting the asterisk display.	2.96A	Standard monitor OS [04.04.**]	○	×	×
ASCII display / ASCII input	Function to store NULL (0x00) at the end of input characters	2.18U	Standard monitor OS [02.02.**]	○	○	○
	Function to convert characters input in Kana into Kanji	2.18U	Standard monitor OS [02.02.**] Option OS KANA KANJI (JP) [02.02.**]	○	○	×
	Alignment setting is added.	2.27D	Standard monitor OS [02.04.**]	○	○	○
	Setting for displaying an input value at the input target object position is possible.	2.32J	Standard monitor OS [03.00.**]	○	○	○
	When Bit Trigger is not met, whether to enable "Hold Display" can be selected.	2.43V	Standard monitor OS [03.01.**]	○	○	○
	The character display position during the ASCII input can be set to [Left] or [Right].	2.82L	Standard monitor OS [03.13.**]	○	○	○
	Supporting the Kana-kanji conversion (enhanced version)	2.90U	Standard monitor OS [04.02.**] Option OS KANA KANJI (JPN) (Enhanced Version) [04.02.**]	○	○	×
	Enables setting the asterisk display.	2.96A	Standard monitor OS [04.04.**]	○	○	○
Clock display	Enables setting the TrueType Numerical for the font.	2.90U	Standard monitor OS [04.02.**]	○	○	○
Data List	When Bit Trigger is not met, whether to enable "Hold Display" can be selected.	2.43V	Standard monitor OS [03.01.**]	○	○	○
Comment Display	When Bit Trigger is not met, whether to enable "Hold Display" can be selected.	2.43V	Standard monitor OS [03.01.**]	○	○	○
	The simple comment is added.	2.77F	Standard monitor OS [03.12.**]	○	○	○

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Item	Description	Version of GT Designer2	Version of OS	GT 15	GT Soft GOT1000	GT 11
Advanced alarm popup display	Enables setting whether to enable or disable the display position switching.	2.90U	Standard monitor OS [04.02.**]	○	○	○
User alarm	Number of alarms settable for GT11 is extended to the same as GT15 (Up to 8192 alarms).	2.27D	Standard monitor OS [02.04.**]	○	○	○
	When Bit Trigger is not met, whether to enable "Hold Display" can be selected.	2.43V	Standard monitor OS [03.01.**]	○	○	○
Alarm history	Number of alarms settable for GT11 is extended to the same as GT15 (Up to 3072 alarms).	2.27D	Standard monitor OS [02.04.**]	○	○	○
	Function to save alarm history data to the A drive (standard CF card) for GT11	2.27D	Standard monitor OS [02.04.**]	○	○	○
	Function to display the cursor by touching an alarm, and function to output the corresponding comment No. to a device	2.32J	Standard monitor OS [03.00.**]	○	○	○
	The comment group application	2.73B	Standard monitor OS [03.09.**]	○	○	○
Scrolling alarm display	The scrolling alarm display applicable	2.73B	Standard monitor OS [03.09.**]	×	×	○
Advanced Alarm	Function for detecting alarm even at the fall of bit device with Advanced User Alarm	2.09K	Standard monitor OS [01.02.**]	○	○	×
	Function to display a cursor by touching an alarm and to output the corresponding comment No. to a device.	2.43V	Standard monitor OS [03.01.**]	○	○	×
	The binary format file output can be converted to CSV/Unicode format file by external control.	2.43V	Standard monitor OS [03.01.**]	○	○	×
	For the advanced alarm display, the title row can be set to be hidden.	2.82L	Standard monitor OS [03.13.**]	○	○	×
	For the advanced alarm display, the alarm information in the top row is output if the external output trigger is on when the cursor is hidden.	2.82L	Standard monitor OS [03.13.**]	○	○	×
Parts Display/ Parts Movement	Function for using BMP/JPEG data in memory card as parts	2.09K	Standard monitor OS [01.02.**]	○	○	×
	Settings for BMP/JPEG file parts can be made on each object.	2.43V	Standard monitor OS [03.01.**]	○	○	×
Parts Display/ Parts Movement	When Bit Trigger is not met, whether to enable "Hold Display" can be selected.	2.43V	Standard monitor OS [03.01.**]	○	○	○
	Enables specifying the transparent color of a figure when using an image file as a figure.	2.47Z	Standard monitor OS [03.02.**]	○	○	×
Panelmeter	Windows® fonts applicable	2.09K	Standard monitor OS [01.02.**]	○	○	○
	Stroke font applicable	2.43V	Standard monitor OS [03.01.**]	○	○	×
	Up to 101 points can be set for scale, value number.	2.27D	Standard monitor OS [02.04.**]	○	○	○
	Meter Attribute and Core can be set.	2.43V	Standard monitor OS [03.01.**]	○	○	○
Level	When Bit Trigger is not met, whether to enable "Hold Display" can be selected.	2.43V	Standard monitor OS [03.01.**]	○	○	○

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Item	Description	Version of GT Designer2	Version of OS	GT 15	GT Soft GOT1000	GT 11
Trend graph	Up to 101 points can be set for scale, value number.	2.27D	Standard monitor OS [02.04.**]	○	○	○
	Function to collect data only when display trigger is met is added.	2.32J	Standard monitor OS [03.00.**]	○	○	○
Line graph	Up to 101 points can be set for scale, value number.	2.27D	Standard monitor OS [02.04.**]	○	○	○
	Function to collect data only when display trigger is met is added.	2.32J	Standard monitor OS [03.00.**]	○	○	○
	When Bit Trigger is not met, whether to enable "Hold Display" can be selected.	2.43V	Standard monitor OS [03.01.**]	○	○	○
Bar graph	Up to 101 points can be set for scale, value number.	2.27D	Standard monitor OS [02.04.**]	○	○	○
	Function to collect data only when display trigger is met is added.	2.32J	Standard monitor OS [03.00.**]	○	○	○
	When Bit Trigger is not met, whether to enable "Hold Display" can be selected.	2.43V	Standard monitor OS [03.01.**]	○	○	○
Statistics graph	Up to 101 points can be set for scale, value number.	2.27D	Standard monitor OS [02.04.**]	○	○	○
	Function to collect data only when display trigger is met is added.	2.32J	Standard monitor OS [03.00.**]	○	○	○
	When Bit Trigger is not met, whether to enable "Hold Display" can be selected.	2.43V	Standard monitor OS [03.01.**]	○	○	○
Scatter graph	Up to 101 points can be set for scale, value number.	2.27D	Standard monitor OS [02.04.**]	○	○	○
	Function to collect data only when display trigger is met is added.	2.32J	Standard monitor OS [03.00.**]	○	○	○
Historical Trend Graph	Function to display the data collected by the logging function in trend graph format	2.18U	Standard monitor OS [02.01.**]	○	○	×
	Enables displaying logging data at the specified time on a trend graph.	2.96A	Standard monitor OS [04.04.**]	○	○	×
Time Action	Second specification and external control are possible.	2.43V	Standard monitor OS [03.01.**]	○	○	○
Logging Function	Function to collect and accumulate device values	2.18U	Standard monitor OS [02.02.**] Option OS Logging [02.02.**]	○	○	×
	Function for converting multiple files	2.43V	-	○	○	×
	The binary/CSV/Unicode format files output can be stored to another folder by external control.	2.43V	Standard monitor OS [03.01.**]	○	○	×
Device data transfer function	Function to read the device value and write in the other device when the trigger condition is satisfied.	2.73B	Extended function OS Device data transfer [03.09.**]	○	×	×
Recipe function	Number of devices settable for one recipe in GT11 is extended to the same as GT15 (Up to 8192 devices).	2.27D	Standard monitor OS [02.04.**] Option OS Recipe [02.04.**]	○	○	○
	Function to save recipe data of GT11 in CSV file format	2.27D	Standard monitor OS [02.04.**] Option OS Recipe [02.04.**]	○	○	○

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Item	Description	Version of GT Designer2	Version of OS	GT 15	GT Soft GOT1000	GT 11
Recipe function	Function to save recipe data to the A drive (standard CF card) for GT11	2.27D	Standard monitor OS [02.04.**] Option OS Recipe [02.04.**]	○	○	○
Advanced Recipe	The extended function of the existing recipe function	2.09K	Standard monitor OS [01.02.**] Option OS Advanced recipe [01.02.**]	○	○	×
	Function for converting multiple files	2.43V	-	○	○	×
	The binary format file output can be converted to CSV/Unicode format file by external control.	2.43V	Standard monitor OS [03.01.**]	○	○	×
	The number of records that can be set is changed to 2000.	2.58L	Standard monitor OS [03.03.**] Option OS Advanced Recipe [03.03.**]	○	○	×
Report function	Function to print the colleted data	2.27D	Standard monitor OS [02.04.**] Extended function OS Report [02.04.**]	○	○	×
Hard copy function	Compatible with the printer output	2.27D	Standard monitor OS [02.04.**] Extended function OS Printer [02.04.**]	○	×	×
	Thumbnail Output can be set.	2.43V	Standard monitor OS [03.01.**]	○	○	×
Operation panel function	Enables setting the operation panel.	2.58L	Extended function OS External I/O / Operation Panel [03.03.**]	○	×	×
Sound output function	Enables setting the sound output.	2.58L	Extended function OS Sound Output [03.03.**]	○	○	×
Barcode	Function for loading the data read with bar cord reader to PLC CPU	2.09K	Standard monitor OS [01.00.**]	○	×	○
	Number of settable devices is extended from 32 to 1024 points.	2.27D	Standard monitor OS [02.04.**]	○	×	○
	Space (0x20) or NULL (0x00) can be selected for blank device.	2.27D	Standard monitor OS [02.04.**]	○	×	○
RFID function	Function to write in the devices which data are read by the RFID reader/writer.	2.73B	Extended function OS RFID [03.09.**]	○	×	○
	Supporting the dedicated protocol (ICU-60S and ICU-215(Mifare) manufactured by MARS TECHNO SCIENCE Corp.)	2.91V	Extended function OS RFID [04.03.**]	○	×	○
Video display	Function to display an image taken by a video camera on the GOT	2.32J	Standard monitor OS [03.00.**] Extended function OS Video/RGB [03.00.**]	○	×	×
RGB display	Function to display the personal computer screen on the GOT	2.32J	Standard monitor OS [03.00.**] Extended function OS Video/RGB [03.00.**]	○	×	×
Remote personal computer operation function	Function to operate the mouse pointer on the personal computer by touching the personal computer screen displayed on the GOT using the RGB display function.	2.82L	Standard monitor OS [03.13.**] Extended function OS PC Remote Operation [03.13.**]	○	×	×
Set overlay screen	Number of screens that can be called on GT11 is extended to the same as GT15 (Up to 2047 screens).	2.27D	Standard monitor OS [02.04.**]	○	○	○

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Item	Description	Version of GT Designer2	Version of OS	GT 15	GT Soft GOT1000	GT 11
Set overlay screen	Screen calling setting with dragging is possible.	2.43V	-	○	○	○
	Specifying of placement position (Front/ Back) for the basic and called screens is possible.	2.43V	Standard monitor OS [03.01.**]	○	○	○
	[Disable background colors of overlay screen when setting an overlay screen] can be set.	2.58L	Standard monitor OS [03.03.**]	○	○	○
Test function	Function for changing device value with displaying test window.	2.09K	Standard monitor OS [02.02.**]	○	×	○
Project Script	Function to execute scripts in unit of project file	2.00A	Standard monitor OS [01.00.**]	○	○	×
		2.18U	Standard monitor OS [02.02.**]	○	○	○
	Word device values can be converted into data in the specified data type, and the GOT can read or write the data. (Data type conversion function)	2.73B	Standard monitor OS [03.09.**]	○	○	○
	The file operation functions are added.	2.77F	Standard monitor OS [03.12.**]	○	○	○
	The file operation functions (file_copy, file_xcopy) are added.	2.96A	Standard monitor OS [04.04.**]	○	○	○
Screen Script	Function to execute scripts in unit of screen	2.00A	Standard monitor OS [01.00.**]	○	○	×
		2.18U	Standard monitor OS [02.02.**]	○	○	○
	Word device values can be converted into data in the specified data type, and the GOT can read or write the data. (Data type conversion function)	2.73B	Standard monitor OS [03.09.**]	○	○	○
	The file operation functions are added.	2.77F	Standard monitor OS [03.12.**]	○	○	○
	The file operation functions (file_copy, file_xcopy) are added.	2.96A	Standard monitor OS [04.04.**]	○	○	○
Object Script	Function to execute scripts in unit of object	2.18U	Option OS Object Script [02.02.**]	○	○	×
	"width", "height", and "decimal_point" are added to the object property.	2.90U	Option OS Object Script [04.02.**]	○	○	×
Key Code	Key codes for increment key and decrement key are added.	2.18U	Standard monitor OS [02.02.**]	○	○	○
	Key code for historical trend graph is added.	2.18U	Standard monitor OS [02.02.**]	○	○	×
	Key code used for Kana Kanji conversion is added.	2.18U	Standard monitor OS [02.02.**]	○	○	×
	Key codes for user ID ascending/ descending order movement of cursor are added.	2.27D	Standard monitor OS [02.04.**]	○	○	○
	Key codes used for the Kana-kanji conversion (enhanced version) are added.	2.90U	Standard monitor OS [04.02.**]	○	○	×
	The key code for the historical trend graph (Display position time specification jump) is added.	2.96A	Standard monitor OS [04.04.**]	○	○	×

*1 This item is supported by GT Works3 Version1.14Q or later.

5 Other functions added

(1) For GT16

Item	Description	Version of GT Designer2	Version of OS
Other function	All GT15 functions added by GT Designer2 Version2.90U or earlier are available.	2.90U	Standard monitor OS [04.02.**]
Q motion monitor function	Supporting Q170MCPU	2.96A	Option OS Q motion monitor [04.04.**]
Backup/restore function	Enables setting the E drive for the storage location for the backup data or backup setting.	2.90U	Extended function OS Backup/Restore [04.02.**]
	Supporting Q170MCPU	2.96A	Extended function OS Backup/Restore [04.04.**]
CNC data I/O function	Enables specifying the E drive for the target to input or output the CNC data.	2.90U	Extended function OS CNC Data I/O [04.02.**]
	Cycle monitor data can be input and output	2.96A	Extended function OS CNC Data I/O [04.04.**]
Ladder editor	Function to edit the sequence program stored in the controller by using the GOT	2.96A	Extended function OS GOT Platform Library [04.04.**] Option OS Ladder editor [04.04.**] GOT Function Expansion Library [04.04.**]
Multi-channel function	Supporting connection to multiple controllers on the Ethernet network	2.90U	Standard monitor OS [04.02.**] Communication driver Use the communication driver, [04.02.**] or later for each connection.
Tag import function	Function to import a tag file created by the third party programming software to GT Designer2, and set a tag as a device.	2.91V	Standard monitor OS [04.03.**]
OS installation	The A drive and E drive are available for installing the OS at power-on.	2.91V	Standard monitor OS [04.03.**] BootOS [04.03.**]

(2) For GT15, GT SoftGOT1000, and GT11

Item	Description	Version of GT Designer2	Version of OS	GT 15	GT Soft GOT1000	GT 11
Utility	Displays details in OS information, project information, alarm information, hard copy information and advance recipe information properties.	2.18U	Standard monitor OS [02.02.**]	○	×	○
Network unit status display	Function to display the status of MELSECNET/H communication unit and CC-Link communication unit	2.32J	Standard monitor OS [03.00.**]	○	○	×
GOT data package acquisition	Function for copying the installed OS or data in the GOT main unit to the memory card	2.43V	Standard monitor OS [03.01.**] BootOS [03.01.**.M]	○	×	○

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Item	Description	Version of GT Designer2	Version of OS	GT 15	GT Soft GOT1000	GT 11
Unlimited installation of extended function OSs and option OSs	Extended function OS and option OS can be installed unlimitedly. Extended function OS and option OS can be operated up to 21. (Conventionally, both of above OSs can be installed and operated up to 9. The extended function OS data size is twice as large as other OS data. The logging OS data size is three times as large as other OS data.)	2.18U	BootOS [02.02.**.E]	○	×	×
Unlimited installation of extended function OSs and option OSs	Extended function OS and option OS can be operated up to 32. (The extended function OS data size is twice as large as other OS data. The logging OS data size is three times as large as other OS data.)	2.73B	BootOS [03.09.**.S]	○	×	×
Built-in option function board	GT15-FNB built in the GOT is enabled.	2.58L	BootOS [03.03.**.P] Standard monitor OS [03.03.**]	○	×	×
System monitoring function	Function for monitoring/testing device of PLC CPU or buffer memory of intelligent function module	2.09K	Extended function OS System monitor [01.02.**]	○	×	○
	Supporting display of Chinese (Simplified/ Traditional), German, Korean	2.27D	Extended function OS System monitor [02.04.**]	○	×	○
	Supporting connection to Universal model QCPU	2.63R	Extended function OS System monitor [03.07.**]	○	×	○
	Supporting connection to CC-Link IE controller network	2.77F	Extended function OS System monitor [03.12.**]	○	×	×
Network monitor function	Function to monitor the network status of MELSECNET/H, MELSECNET/10, etc.	2.18U	Option OS Network monitor [02.02.**]	○	×	×
	Supporting display of Chinese (Simplified/ Traditional), German, Korean	2.27D	Option OS Network monitor [02.04.**]	○	×	×
	Enables monitoring the status of the CC-Link IE controller network.	2.77F	Option OS Network monitor [03.12.**]	○	×	×
Ladder monitoring function	Function for displaying sequence program loaded to CPU on GOT	2.09K	Option OS Ladder monitor for MELSEC-A [01.02.**] Ladder monitor for MELSEC-Q /QnA [01.02.**] Ladder monitor for MELSEC-FX [01.02.**]	○	×	×
	Supporting display of Chinese (Simplified/ Traditional), German, Korean	2.27D	Option OS Ladder monitor for MELSEC-Q /QnA [02.04.**] Ladder monitor for MELSEC-FX [02.04.**]	○	×	×
	Supporting language switching (Japanese/Korean) for displaying file name and title of the sequence program	2.27D	Option OS Ladder monitor for MELSEC-Q/QnA [02.04.**]	○	×	×
	Supporting the read of programs/ comments	2.43V	Option OS Ladder monitor for MELSEC-Q/QnA [03.01.**]	○	×	×

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Item	Description	Version of GT Designer2	Version of OS	GT 15	GT Soft GOT1000	GT 11
Ladder monitoring function	Supporting reading comments from CF cards	2.58L	Option OS Ladder monitor for MELSEC-Q/QnA [03.03.**]	○	×	×
	Supporting monitoring local devices	2.58L		○	×	×
	Supporting connection to Universal model QCPU	2.63R	Option OS Ladder monitor for MELSEC-Q/QnA [03.07.**]	○	×	×
Ladder monitoring function	In searching multiple file programs, the backward search display is possible.	2.73B	Option OS Ladder monitor for MELSEC-Q/QnA [03.09.**]	○	×	×
	With MELSEC-QnA ladder monitor, the currently displayed program automatically reflect the set value of TC changed in the test function.					
	Supporting connection to CC-Link IE controller network	2.77F	Option OS Ladder monitor for MELSEC-Q/QnA [03.12.**]	○	×	×
	Supporting the safety function block display when using the QS001CPU (Only the FB definition name is displayed in the application instruction format.)	2.82L	Option OS Ladder monitor for MELSEC-Q/QnA [03.13.**]	○	×	×
	The ranges of M and B devices that can be monitored are expanded.	2.82L	Option OS Ladder monitor for MELSEC-Q/QnA [03.13.**]	○	×	×
Intelligent module monitor function	Function to monitor and change the data of intelligent function module buffer memory using a dedicated screen	2.18U	Option OS Intelligent module monitor [02.02.**]	○	×	×
	Supporting connection to CC-Link IE controller network	2.77F	Option OS Intelligent module monitor [03.12.**]	○	×	×
	When using the QS001CPU, the PC information monitor screen (Operation details screen, Error details screen) is displayed.	2.82L	Option OS Intelligent module monitor [03.13.**]	○	×	×
List editor for MELSEC-A	Function for displaying/editing sequence program saved from ACPU with list mode	2.09K	Option OS List editor for MELSEC-A [01.02.**]	○	×	○
List editor for MELSEC-FX	Function to display / edit the sequence program read out from the FXCPU in the list mode	2.18U	Option OS List editor for MELSEC-FX [02.02.**]	○	×	○
	Supporting display of Chinese (Simplified)	2.27D	Extended function OS List editor for MELSEC-FX [02.04.**]	○	×	○
	Supporting display of Chinese (Simplified/ Traditional), German and Korean (GT11 supports display of Chinese (Simplified/Traditional) and Korean)	2.27D	Extended function OS List editor for MELSEC-FX [02.04.**]	○	×	○

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Item	Description	Version of GT Designer2	Version of OS	GT 15	GT Soft GOT1000	GT 11
Q motion monitor function	Function to execute servo monitor and parameter setting for motion controller CPU (Q series)	2.18U	Option OS Q motion monitor [02.02.**]	○	×	×
	Parameter setting is enabled for Q172HCPU/Q173HCPU.	2.32J	Standard monitor OS [03.00.**]	○	×	×
	Supporting connection to Q17nDCPU	2.63R	Option OS Q motion monitor [03.07.**]	○	×	×
	Enables clearing the SFC error history. (Universal model QCPU only)	2.63R	Option OS Q motion monitor [03.07.**]	○	×	×
	Supporting connection to CC-Link IE controller network	2.77F	Option OS Q motion monitor [03.12.**]	○	×	×
	Supporting Q170MCPU	2.96A	Option OS Q motion monitor [04.04.**]	○	×	×
Servo amplifier monitor function	Function to monitor the servo amplifier and also to change parameters, execute test run, etc.	2.18U	Option OS Servo amplifier monitor [02.02.**]	○	×	×
CNC monitor function	Function to monitor the MELDAS that is connected to the GOT	2.18U	Option OS CNC monitor [02.02.**]	○	×	×
	Supporting connection to CNC C70	2.63R	Option OS CNC monitor [03.07.**]	○	×	×
Backup/restore function	Function to back up setting data for controllers and to restore the data to the controllers	2.58L	Extended function OS Backup/Restore [03.07.**]	○	×	×
	Supporting Backup Data Conversion Tool	2.63R	-	○	×	×
	Supporting the trigger backup	2.73B	Extended function OS Backup/Restore [03.09.**]	○	×	×
	Supporting Q170MCPU	2.96A	Extended function OS Backup/Restore [04.04.**]	○	×	×
CNC data I/O function	Function to copy or delete data of the CNC that is connected to the GOT	2.63R	Extended function OS CNC Data I/O [03.07.**]	○	×	×
	Cycle monitor data can be input and output	2.96A	Extended function OS CNC Data I/O [04.04.**]	○	×	×
SFC monitor function	Function to display sequence programs written in the PLC CPU in the SFC diagram format on the GOT	2.77F	Extended function OS GOT Platform Library [03.12.**] Option OS SFC Monitor [03.12.**] GOT Function Expansion Library [03.12.**]	○	×	×
Ladder editor	Function to edit the sequence program stored in the controller by using the GOT	2.96A	Extended function OS GOT Platform Library [04.04.**] Option OS Ladder editor [04.04.**] GOT Function Expansion Library [04.04.**]	○	×	×
Multi-channel function	Function to monitor multiple controllers with a single unit of GOT	2.18U	Standard monitor OS [02.02.**] Communication driver Use the communication driver, [02.02.**] or later for each connection.	○	×	×

(Continued to next page)

Item	Description	Version of GT Designer2	Version of OS	GT 15	GT Soft GOT1000	GT 11
Gateway function	Function for monitoring each controller from one GOT/PC or sending a mail from GOT	2.09K	Option OS Gateway function (Mail) [01.02.**] Gateway function (Server, Client) [01.02.**]	○	×	×
	Supporting the FTP server function	2.18U	Option OS Gateway functionFTP [02.02.**]	○	×	×
	Enables transfer of binary data by the FTP server function.	2.32J	Option OS Gateway (FTP) [03.00.**]	○	×	×
Document display function	Function to display document on the GOT	2.32J	Standard monitor OS [03.00.**] Option OS Document Display [03.00.**]	○	○	×
	Image quality adjustment for documents is possible.	2.43V	Standard monitor OS [03.01.**]	○	○	×
MES interface function	Function to execute data linkage between the control and information systems	2.43V	Standard monitor OS [03.01.**] Option OS MES Interface [03.01.**]	○	×	×
	Oracle 8i, ACCESS2000, ACCESS2003, and MSDE2000 are added to the applicable database.	2.47Z	Standard monitor OS [03.02.**] Option OS MES Interface [03.02.**]	○	×	×
	The trigger buffering function is added. Enables setting [Do not sample] for the sampling setting in the device tag settings.					
	Industrial SQL Server 9.0 and Microsoft SQL Server 2005 are added as an applicable database.	2.58L	Standard monitor OS [03.03.**] Option OS MES Interface [03.03.**]	○	×	×
	Access 2007 is added as an applicable database.	2.82L	Standard monitor OS [03.13.**] Option OS MES Interface [03.13.**]	○	×	×
	Function to send resource data stored in the GOT to the database					
Tag import function	Function to import a tag file created by the third party programming software to GT Designer2, and set a tag as a device.	2.91V	Standard monitor OS [04.03.**]	○	×	○

App5-2 For GT10

GT Designer2 Version 2.43V or later is applicable to GT1020.
GT Designer2 Version 2.58L or later is applicable to GT1030.
GT Designer2 Version 2.90U or later is applicable to GT105□ .
GT Designer2 Version 2.90U or later is applicable to GT104□ .

1 Added GOT main unit

Target Models	Version of GT Designer2	Version of OS
GT1020-LBD, GT1020-LBD2, GT1020-LBL	2.43V	-
GT1020-LBDW, GT1020-LBDW2, GT1020-LBLW	2.58L	-
GT1030-LBD, GT1030-LBD2 , GT1030-LBDW, GT1030-LBDW2	2.58L	-
GT1055-QSBD, GT1050-QBBD	2.90U	-
GT1045-QSBD, GT1040-QBBD	2.90U	-

2 Added connection types

○ : Applicable × : N/A - : Applicable (from the first version)

Item	Description	Version of GT Designer2	Version of OS	GT 105□/ 104□	GT 1030	GT 1020
Direct connection to CPU	Supporting connection to FX3G series	2.90U	Standard monitor OS [01.10.**] Communication driver MELSEC-FX[01.06.**]	○	○	○
Computer link connection	Supporting connection to A series PLC	2.82L	Standard monitor OS [01.09.**] Communication driver AJ71C24/UC24[01.04.**]	-	○	○
CC-Link connection (Via G4)	Supporting connection to CC-Link (Via G4)	2.73B	Standard monitor OS [01.07.**] Communication driver CC-Link(G4)[01.00.**]	-	○	○
GOT multidrop connection	Supporting the GOT multidrop connection	2.96A	Standard monitor OS [01.11.**] Communication driver Multidrop(Host) [01.11.**] Multidrop(Slave) [01.11.**]	○	○	○
Microcomputer connection	Supporting the data formats of Format 1 and Format 2.	2.47Z	Standard monitor OS [01.02.**] Communication driver Computer[01.02.**]	-	-	○
MODBUS® / RTU connection	Supporting MODBUS® /RTU connection	2.96A	Standard monitor OS [01.12.**] MODBUS/ RTU [01.07.**]	○	○	○
OMRON PLC connection	Supporting connection to OMRON PLC	2.47Z	Standard monitor OS [01.02.**] Communication driver OMRON SYSMAC [01.02.**]	-	-	○
KEYENCE PLC connection	Supporting connection to KEYENCE PLC	2.73B	Standard monitor OS [01.07.**] Communication driver KEYENCE KV-700/1000[01.00.**]	-	○	○
	Supporting connection to KV-3000 and KV-5000	2.77F	Communication driver KEYENCE KV700/1000 [01.03.**]	-	○	○

(Continued to next page)

Item	Description	Version of GT Designer2	Version of OS	GT 105□/ 104□	GT 1030	GT 1020
TOSHIBA MACHINE PLC connection	Supporting connection to TOSHIBA MACHINE PLC	2.77F	Communication driver TOSHIBA MACHINE TCmini [01.03.**]	-	○	○
PANASONIC PLC connection	Supporting connection to PANASONIC PLC	2.73B	Standard monitor OS [01.07.**] Communication driver MATSUSHITA MEWNET-FP [01.00.**]	-	○	○
	Communication driver name has been changed.	2.96A	Standard monitor OS [01.12.**] Communication driver Panasonic MEWNET-FP [01.07.**]	○	○	○
YASKAWA PLC connection	Supporting connection to CP9200SH/MP900 series	2.73B	Standard monitor OS [01.07.**] Communication driver YASKAWA MP [01.00.**]	-	○	○
	Supporting connection to MP2000/MP900 series	2.73B		-	○	○
LS IS PLC connection	Supporting connection to LS IS PLC	2.90U	Standard monitor OS [01.07.**] Communication driver LS Industrial Systems MASTER-K [01.05.**]	○	○	○
ALLEN-BRADLEY PLC connection	Supporting connection to MicroLogix 1000/1200/ 1500 series.	2.58L	Standard monitor OS [01.04.**] Communication driver AB MicroLogix [01.00.**]	-	○	○
	Supporting connection to SLC500 series.	2.58L	Standard monitor OS [01.04.**] Communication driver AB SLC 500 [01.00.**]	-	○	○
SIEMENS PLC connection	Supporting connection to SIEMENS S7-200 series.	2.58L	Standard monitor OS [01.04.**] Communication driver SIEMENS S7-200 [01.00.**]	-	○	○
	Supporting connection to SIEMENS S7-300/400 series	2.90U	Standard monitor OS [01.10.**] Communication driver SIEMENS S7-300/400 [01.05.**]	○	○	○
Inverter connection	Supporting connection to inverter	2.73B	Standard monitor OS [01.07.**] Communication driver FREQROL 500/700 [01.00.**]	-	○	○
Servo amplifier connection	Supporting connection to MR-J2S-*CL	2.96A	Standard monitor OS [01.12.**] Communication driver MELSERVO-J3, J2S/M [01.07.**]	○	○	○
Bar code reader connection	Supporting connection to barcode reader	2.77F	Standard monitor OS [01.08.**]	-	○	○

3 Added GT Designer2 functions

Item	Description	Version of GT Designer2	Version of OS	GT 105□/ 104□	GT 1030	GT 1020
Library workspace	Enables setting the background color of the figures in the Library Editor screen.	2.47Z	-	-	-	○
Project data matching	Project data matching is available between data stored in the personal computer and data opened with GT Designer2.	2.96A	-	○	○	○
Screen preview	Enables switching screens in the Screen Preview window.	2.96A	-	○	○	○
Auxiliary setting	Enables setting [Specify the touch area.].	2.77F	-	-	○	×
	For the set overlay screen function, the setting to place the called screen under the basic screen is added.	2.96A	-	○	○	○
	For the set overlay screen function, the setting to disable the background color of the called screen is added.			○	○	○
Reading BMP or JPEG image data	Enables displaying BMP or JPEG image data reduced to a resolution of 2000 × 1600 or less on GT Designer2.	2.77F	-	-	○	○
Directly editing comment group	Enables editing the comment group directly in settings for the lamps and touch switches.	2.77F	-	-	○	○

4 Added common settings/object functions

Item	Description	Version of GT Designer2	Version of OS	GT 105□/ 104□	GT 1030	GT 1020
Figure	Supporting piping	2.73B	Standard monitor OS [01.00.**]	-	○	○
	Enables displaying BMP or JPEG image data reduced to a resolution of 2000 × 1600 or less on GT Designer2.	2.77F	Standard monitor OS [01.08.**]	-	○	○
	Supporting logo text	2.96A	Standard monitor OS [01.12.**]	○	○	○
Standard font	Supporting Japanese Supporting Japanese (supporting Europe) Supporting Chinese (Simplified)(supporting Europe) Supporting Chinese (Traditional)(supporting Europe)	2.91V	Standard monitor OS [01.11.**]	○	○	○
TrueType font	Supporting the TrueType numerical font (Gothic)	2.91V	Standard monitor OS [01.11.**]	○	○	○
	Supporting the TrueType numerical font (7-segment)		BootOS [01.11.**.G] Standard monitor OS [01.11.**]	○	○	○
Window screen	Corresponding to the overlap window display and the superimpose display.	2.73B	Standard monitor OS [01.07.**]	-	○	○
GOT internal device	Devices from GS0 to GS1023 are available.	2.96A	Standard monitor OS [01.12.**]	○	○	○
GOT Setup	The key reaction speed can be set.	2.82L	Standard monitor OS [01.09.**]	-	○	○

(Continued to next page)

Item	Description	Version of GT Designer2	Version of OS	GT 105□/ 104□	GT 1030	GT 1020
Clock function	The clock data storage to the GD device is possible.	2.73B	Standard monitor OS [01.07.**]	-	○	○
Numerical Display/ Numerical input	Format String setting is possible.	2.77F	Standard monitor OS [01.08.**]	-	○	○
	Enables setting the asterisk display.	2.96A	Standard monitor OS [01.12.**]	○	○	○
ASCII input	The ASCII input can be set.	2.58L	Standard monitor OS [01.03.**]	-	○	○
	Enables setting the asterisk display.	2.96A	Standard monitor OS [01.12.**]	○	○	○
Comment Display	The simple comment is added.	2.77F	Standard monitor OS [01.08.**]	-	○	○
Lamp Display	[Comment Group] can be used.	2.77F	Standard monitor OS [01.08.**]	-	○	○
Touch switch	Auto repeat can be used.	2.73B	Standard monitor OS [01.07.**]	-	○	○
	[Comment Group] can be used.	2.77F	Standard monitor OS [01.08.**]	-	○	○
	The device monitor and debug function can be set for the action setting of the special function switch and the multi action switch.	2.82L	Standard monitor OS [01.09.**]	-	○	○
Graph	The statistics bar graph can be set.	2.58L	Standard monitor OS [01.03.**]	-	-	○
	The statistics pie graph can be set.	2.58L	Standard monitor OS [01.03.**]	-	-	○
Alarm history display	Enables selecting whether to set the scrolling comment display suitable for the message display area.	2.63R	Standard monitor OS [01.06.**]	-	○	○
	Comment group can be used.	2.73B	Standard monitor OS [01.07.**]	-	○	○
Scrolling alarm display	The scrolling alarm display applicable	2.73B	Standard monitor OS [01.07.**]	-	○	○

5 Other functions added

Item	Description	Version of GT Designer2	Version of OS	GT 105□/ 104□	GT 1030	GT 1020
Installing OS	Enables installing the OS without the OS installation screen of the GOT.	2.77F	Standard monitor OS [01.08.**]	-	○	○
Installing/ uploading with GT10-LDR	Enables installing or uploading the OS, communication drivers, project data, and others with the GT10-LDR.	2.77F	-	×	○	○
	Enables installing the OS for the GT10-LDR. Supporting the following fonts when the OS is installed. Japanese Chinese (Simplified)(supporting Europe) Chinese (Traditional)(supporting Europe) TrueType numerical font (7-segment) TrueType numerical font (Gothic)	2.91V	Standard monitor OS [01.11.**]	×	○	○
MELSEC-FX list editor function	Function to display or edit a sequence program read from the FXCPU in the list mode	2.90U	-	○	×	×

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MEMO

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SH(NA)-080529ENG-T

Integrated FA Software

GT Designer2

Version 2

Basic Operation/Data Transfer Manual

(For GOT1000 Series)

MODEL	SW2-GT1000-O-E
MODEL CODE	1D7M24
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