HITACHI PSC-A32MN Touchscreen Central Controller Instruction Manual

HITACHI
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INSTALLATION AND OPERATION MANUAL
CENTRAL STATION
PSC-A32MN

Contents

PSC-A32MN Touchscreen Central Controller

Specifications in this manual are subject to change without notice in order that HITACHI may bring the latest innovations to their customers. Whilst every effort is made to ensure that all specifications are correct, printing errors are beyond Hitachi's control; Hitachi cannot be held responsible for these errors.

⚠ **CAUTION**

This product shall not be mixed with general house waste at the end of its life and it shall be retired according to the appropriated local or national regulations in a environmentally correct way.

Due to the refrigerant, oil and other components contained in Air Conditioner, its dismantling must be done by a professional installer according to the applicable regulations.

Contact to the corresponding authorities for more information.

⚠️ **DANGER** — Hazards or unsafe practices which COULD result in severe personal injuries or death.

⚠️ **CAUTION** — Hazards or unsafe practices which COULD result in minor personal injury or product or property damage.

ℹ️ **NOTE** – The text following this symbol contains information or instructions that may be of use or that require a more thorough explanation.

Central Station Block/Group Register Table

		Indoor Unit Address													
		00	01	02	03	04	05	06	07	08	09	10	11	12	13
	00														
	01														
	02														
	03														
	04														
	05														
Refrigerant System Address	06														
	07														
	08														
	09														
	10														
	11														
	12														
	13														
14															
15															

Fill in Block number (1 to 4), Group number (1 to 16) in the table. (Ex.: 3-5). Circle the filled number for registering as main unit.

Central Station Block/Group Register Table (2)

Block	Group	Remarks (Room Name, etc.)	Block	Group	Remarks (Room Name, etc.)

SAFETY SUMMARY

This product has been designed for air conditioning systems.

⚠ DANGER

- DO NOT pour water into the central station (hereafter called "controller"). This product is equipped with electrical parts. If water is poured, it will cause a serious electrical shock.
- Prior to the installation work, ensure that foundation is flat, level and sufficiently strong and then fix the unit securely. If the foundation is not strong enough, it may lead to injuries caused by falling of the product, electrical shock or fire.
- DO NOT install the unit in a place where generation, flow, accumulation or leakage of flammable gas is detected.
- DO NOT perform installation work and electrical wiring connection by yourself. Contact your distributor or dealer of HITACHI and ask them for installation work and electrical wiring by a trained service person.
- Perform electrical work according to the Installation Manual and all relevant regulation and standards. If the instructions are not followed, electrical shock and fire may occur due to insufficient capacity and inadequate performance.
- Use the specified cables for connection between indoor unit and central station. Selecting incorrect cables may lead to fire or electrical shock.
- Turn OFF the main power supply entirely before opening or closing the service cover of the indoor unit, since the power terminal or the power switch part may otherwise be still powered on and cause an electrical shock. Turn OFF the main power supply also when performing wiring works.
- When performing local wiring work, check whether the local wiring has been gnawed by animals like mice or

small rodents. Gnawed wiring could cause a fire.

⚠ CAUTION

- DO NOT install the indoor unit. outdoor unit. central station and cable in the following places:
    – Where oil vapour or oil is dispersed (It may cause a fire. deformation. corrosion or failure.)
    – In the vicinity of hot springs (in a sulphuric environment)
    – In the vicinity of the sea (in a salty environment. which may cause corrosion.) In an acid or alkaline environment
    – At the reach of children – Under direct blow of discharge air from the unit
    – In places with humid atmosphere – In places where the unit may get wet
    – In poorly ventilated places
- DO NOT install the indoor unit outdoor unit central station and cable within approximately 3 metres from strong electromagnetic wave radiators such as a radio.
- In case that the central station is installed in a place where electromagnetic wave radiation is generated. shield the central station and cables by covering the unit with a steel box and running the cable through a metal conduit tube.

⚠ CAUTION

- This appliance must be used only by adult and capable people. having received the technical information or instructions to handle this appliance properly and safely.
- Children should be supervised to ensure that they do not play with the appliance.

MAIN FEATURES

This central station (PSC-A32MN) is connected to H-LINK and used for the central control and monitoring of air conditioners
The following functions are available for all the indoor units which are connected to the central stations.
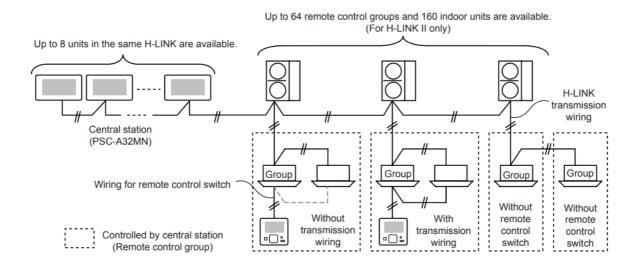
1. Run/Stop, Operation Mode Change, Fan Speed Control, Swing Louver Direction Control, Temperature Setting and Permitting/ Prohibiting Operation by Remote Control Switch
2. Monitoring of Operating Conditions for Block/Groups
3. Schedule Operation (Run/Stop and Temperature Setting) for Block/Groups
4. Run/Stop, Emergency Stop and Demand Function by External Input
5. Run and Alarm Output by External Output
6. Control to limit the capacity of the outdoor units to give a percentage, at specified times of the day, by means of external input settings.
7. Control Exception Function of All Run/Stop Command for Selected Groups
8. Control Exception Function of All Run/Stop Command for Selected Groups by External Input
9. Indication and Calculation of Unit Accumulated Operation Time of Each Group
10. Indication of Alarm History Record
11. Registration of Name of Blocks and Groups

12. Registration and Indication of Service Contact Information
13. Operation modes can be selected as follows:
    – Normal Mode
    – Control mode Only run/stop"
14. Press the icon guide button to display a description of the icons.

ⓘ NOTE

- Group: Remote Control Group
- Block: Collection of Remote Control Groups

An example of system configuration is shown below.

ⓘ NOTE
When an indoor unit without remote control switch is connected, the central station cannot be used simultaneously.

INSTALLATION

3.1 SELECTION OF INSTALLATION PLACE
Select a suitable place for handling and determine the installation place of the central station with the customer's acceptance.
Do not install the central station in places which are at the reach of children or where the air from the air conditioner is directly discharged.
Before installing the controller, prepare the following items.

Parts	Specification
Switch Box	JIS switch box for 2 switches (with cover) (JIS C 8340)
Power Supply Cable	Cable specification: 1.25 to 2 mm² Recommended cable: 600V CV, CCV, CEV
H-LINK Cable (For control)	Cable SPEC: 0.75 to 1.25 mm² Recommended cable: JKEPV-S, JKEV-S, CVV-S, CVV, 600V VCT

* The recommended cables are the model name of Hitachi Cable, Ltd.
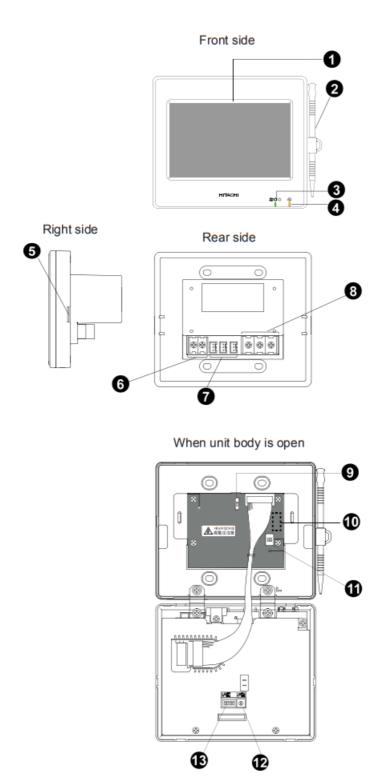
3.2 COMPONENTS LIST

Unpack the unit and check that:

- The package contains all the components (see next table).
- All components are in perfect condition.

Otherwise, contact the manufacturer.

Name		Quantity	Comments
Central station PSC-A32MN		1	For controlling system operation
M4x16L screws		4	For fixing the central station.
Touch pen		2	For activating/deactivating the touch options on the screen.
Touch pen holder		1	For holding the touch pen on the central station.
USB stick memory		1	With the detailed Installation and operation manual
Instruction manual		1	Basic instructions for the installation of the device.
Connector Cord		3	For using external input/output functions (CN1~3).
Closed End Connector		9	For closing the wire end of the connection cord.
Nylon Band		3	For fixing the cables.

3.3 DESCRIPTION OF THE PARTS

Front side

Right side

Rear side

When unit body is open

Model: PSC-A32MN

1. **Colour LCD with touchscreen**

   For operation and monitoring of the units through the touchscreen display. It is operated by using the touch pen (accessory). The touchscreen display will be automatically turned off when the touchscreen is not operated for a given length of time.

   Gesture controls such as multi touch (simultaneous press of several points of the screen) or swipe operation are not supported.

   • Tap 2 places simultaneously

   • Flick Operation

2. **Touch Pen**

Use the touch pen to operate the touchscreen of the central station

3. **Operation Indicator**

   Indicates the Run/Stop state of the units

   OFF: All the units are stopped.

   ON (Green): One or more units are in operation.

   Flashing (Red): In abnormal condition.

4. **Power Indicator**

   Indicates the power state of the central station.

   OFF (lamp): Power is turned OFF

   ON (lamp): Power is turned ON

5. **Hole for attachment of the touch pen holder (accessory).**

   Attaching holes are located on both sides. Attach the touch pen holder to one side.

6. **TB2**

   Terminals for connection of the H-LINK control wiring

7. **CN1 ~ CN3**

   Terminals for connection of connector cords (accessory) in case of using external input/output

8. **TB1**

   Terminals for connection of the power cable

9. **Power switch to turn OFF the power supply**

   Use this switch to prevent electrical shock when the case of the unit is opened.

10. **Fuse for H-LINK Transmission Line**

    H-LINK Transmission Line (Behind the PCB). For protection of H-LINK transmission line.

11. **DSW2**

    For terminating resistance. It is used for transmission line recovery.

12. **Rotary Switch for Address Setting**

    For address setting of controller

13. **DSW1**

    For optional function setting

ⓘ NOTE

Remove the protection sheet on the LCD (liquid crystal display) before using this product.
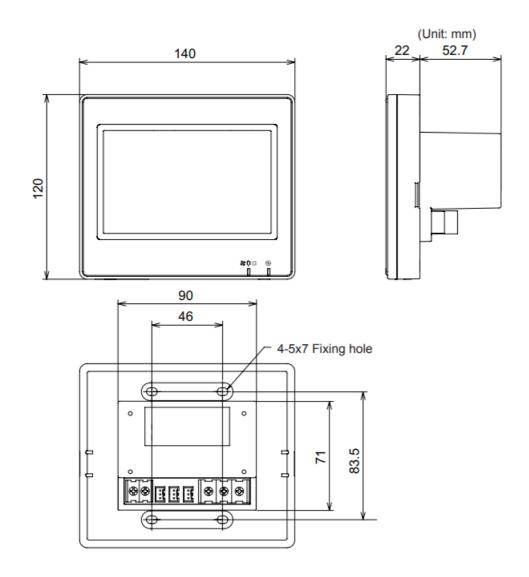
⚠ DANGER

DO NOT remove the covers of parts marked with " ▬▬▬ " for safety. If these covers are removed, contact with the inside components may cause a serious electrical shock.
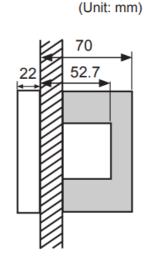
3.4 GENERAL DATA

Model	PSC-A32MN
Outer Dimension <W x H x D + (Built-in Part)>	140 × 120 × 22 + 52.7 (mm)
Net Weight	0.5 kg (approx.)
Installation Location	Indoor
Installation Method	Wall built-in with JIS switch box for 2 switches (with cover) (JIS C 8340)
Connected Indoor Units (Quantity)	160 (Max.)
Clock Accuracy	± 70 seconds/month (at normal temperature)
Ambient Temperature	5 ~ 35°C
Ambient Humidity	35 ~ 90% (No dew condensation)
Display	5.0" TFT colour liquid crystal display
Rated Power Supply	1~, 100~240V, 50/60Hz
Electrical Power Consumption	20W (Max.)

3.5 DIMENSIONAL DATA

3.6 INSTALLATION SPACE

Keep the installation space for the central station as shown below.

(Unit: mm)
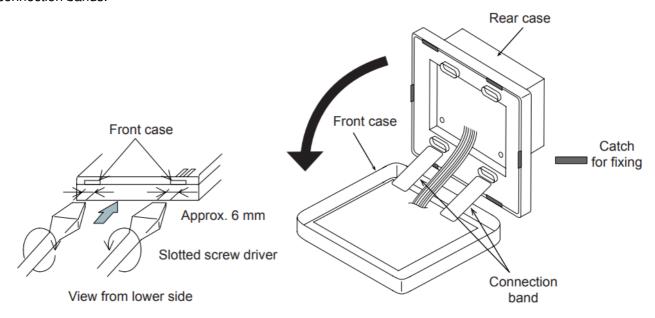
Do not place anything in the shaded area " ".

When installing two or more central stations side by side, keep the following separation between each of them.
* **Vertical space:** 50mm
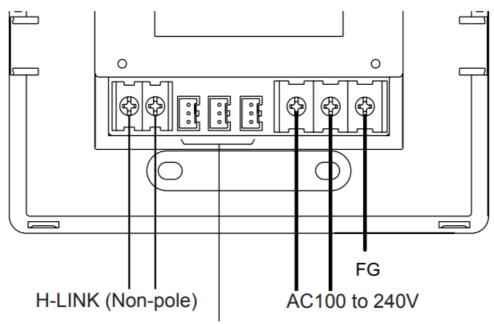* **Horizontal space:** 30mm

3.7 INSTALLATION PROCEDURE

1. Install the switch box into the wall. (Field supplied JIS switch box for 2 switches (with cover) (JIS C 8340)

2. Open the unit case, in case that it is closed. (It is shipped opened from the factory). Follow the procedure below to open the case.

   a. Remove the front side of the case by inserting and rotating a tool like the tip of a slotted screwdriver in the notches (2 notches on the lower side).

   b. To open the case, pull up the front side from the bottom and unhook the tabs at the upper and lateral sides. Do not apply an excessive force when opening the front and rear sides of the case, as they are joined with connection bands.

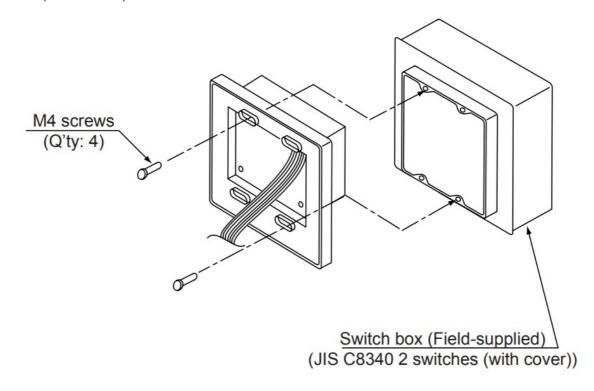3. Connect the wiring to the terminal board of the central station.

Terminal Board	Use	Connection procedure
TB1	For power supply	M3 screw-on terminal Round terminal connection
TB2	For H-LINK transmission	Tightening torque 0.5N·m
CN1 ~ 3	For external input/output	3-pin connector Insert connector cords (accessory) until hearing a click.

FG

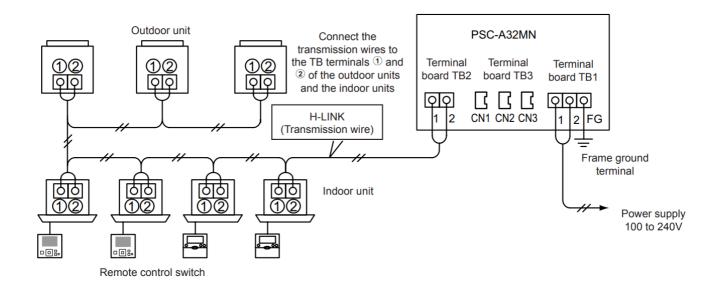H-LINK (Non-pole)   AC100 to 240V

Terminals for external input/output.
Refer to section "5.4.2 Optional Function Setting"

4. Fix the switch box (field-supplied JIS switch box for 2 switches (with cover) (JIS C 8340)) using the accessory fixing screw (M4 × 16 mm).

M4 screws
(Q'ty: 4)

Switch box (Field-supplied)
(JIS C8340 2 switches (with cover))

ELECTRICAL WIRING

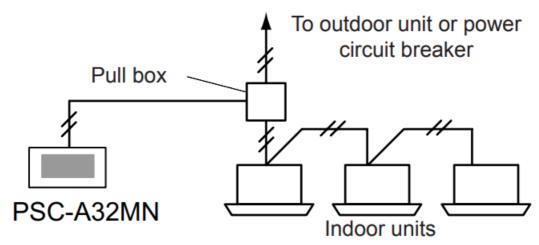The central station requires wiring work for the power supply, air conditioner and control wiring (H-LINK) cables.

Type of wiring	Specification	Length of wiring	Cable specification	Recommended cable model
Power supply cable	AC100 ~ 240V	–	1.25 to 2 mm2	600V CV, CCV, CEV (Hitachi Cable)
Earth wiring	–	–	–	–
H-LINK (Control wire)	DC5V	≤1000 m	0.75 to 1.25 mm2	JKPEV-S, JKEV-S, CVV-S, CVV, 600V VCT (Hitachi Cable)
Wiring for external input and output	Input: Non-voltage normal open Output: DC12V, 75mA≥	≤300 m	0.5 to 1.25 mm2	

ⓘ NOTE

- In case that a specified wire length is mentioned for the external input of transmission side, use either [1] the specified wire length of transmission side or [2] 300 m, whichever is shorter.
- The central station may be damaged because of incorrect wiring.
- The controller may be damaged in case of performing wiring work with the main power turned ON. Turn OFF the main power of the air conditioner and the controller before performing any wiring work.
- Transmission wires shall be separated from the power supply wiring and other electrical device wiring. Keep a separation of at least 30 cm between transmission wiring and the power supply wiring. If it is not possible to secure this space, then route the power supply wiring and transmission wiring through separate metal conduit tubes. One end of the metal conduit tubes shall be earthed for noise reduction.
- Do not connect the power supply wiring to the terminals for transmission of central station. However, if the power supply wires are connected incorrectly, the fuse of the printed circuit board will blow out for protection. In such a case, turn ON pin 2 of DSW2 on the printed circuit board to allow emergency operation without the fuse.
- Always remove the earth wiring of "FG" terminal when performing insulation capacity test or withstand voltage test. Failure to do so may result in damage to the central station.

⚠️ **CAUTION**

- When using an AC200V to 240V power supply.

- In case of using a 200V-240V power supply, diverge the main power supply cables by using a pull box as shown in the figure. (Refer to other documents such as the Technical Catalogue for the proper connection of power cables between indoor units).
- The electricity supply to the unit should be via an exclusive power control switch and protective circuit breaker, certified and installed in accordance with local or national safety regulations.
- Use an earth leakage breaker with medium sensitivity, and an activation speed of 0.1 or less. If this is not fitted, there is a risk of electric shock and/or fire.
- Install an earth leakage breaker, fuse and circuit breaker for each outdoor unit power line. Not fitting it may cause an electric shock or fire.
- This model is a single phase unit (1-, AC 100-240V, 50/60Hz). Do not connect a three-phase power source. It may cause a failure.

⚠️ **DANGER**

- Turn OFF the main power switch for the indoor units, outdoor units, and central stations before the electrical wiring work is performed. If not, it may cause a fire, electrical shock or device breaking down.
- Do not use cables that are lighter than the normal flexible coated polychloroprene cable (code HO5RN-F).

Switch setting procedure
The list for switch settings of central stations is shown in the following table.

1. Apply switch settings as appropriate.

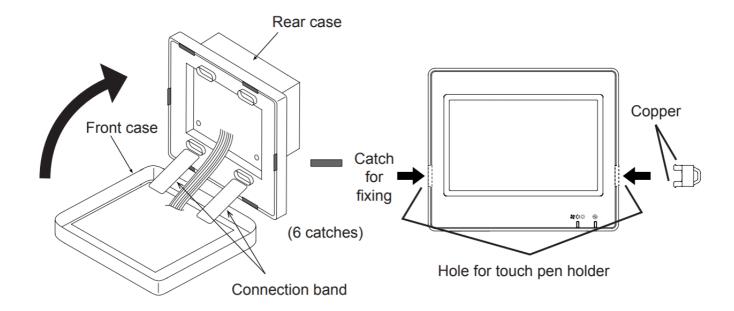| Switch	Switch number	Usage	Factory Setting	Remarks
RSW1 (16-pole Rotary Switch)	–	For address setting of central station	0	When using multiple central stations units. (*)
DSW1 (4-pole DIP switch)	1	ON: Setting for no H-LINK II support OFF: Setting for H-LINK II support	OFF	Refer to the chart in the next page.
	2	OFF (Fixed)	OFF	Not used
	3	OFF (Fixed)	OFF	Not used
	4	OFF (Fixed)	OFF	Not used
DSW2 (2-pole DIP switch)	1	ON: Terminating resistance enabled OFF: Terminating resistance disabled	OFF	Make sure that no other terminating resistance exists on the same H-LINK when enabling the terminating resistance from the central station.
	2	ON: Protection fuse for H-LINK…Disabled (Short- circuited) OFF: Protection fuse for H-LINK…Enabled (Normal)	OFF	
SW1		ON: Turn the central station ON OFF: Turn the central station OFF	ON	

ℹ️ **NOTE**

• Turn OFF the power supply when setting the DIP switches and the rotary switch. Do not touch the printed circuit board and metal parts directly to avoid malfunction of the central station.

• When switching the setting for H-LINK II support, perform a checking procedure following "5.4.9 Checking Connection".

• If DSW1-1 is misconfigured, alarm 63 (Central Device Combination Fault) will be emitted from a central control device with H-LINK support. In this case, tum OFF the power supply for all central control devices and correct the settings of each central control device. Then, restart the central control devices.

• (*): When using several central stations at the same time, set the values of each "RSW1" not to overlap.

DSW1 Setting

		Name	Model	DSW1	DSW2	DSW3	DSW4
Combination of PSC- A32MN with other central controllers	Other central controllers	Central Station EZ	PSC-A64GT	OFF	OFF	OFF	OFF
		Central Station mini	PSC-A32MN	OFF	OFF	OFF	OFF
		Central Station	PSC-A64S	OFF	OFF	OFF	OFF
		Centralised ON/OFF Controller	PSC-AI6RS	OFF	OFF	OFF	OFF
		BIAS Gateways	HC-A(8/64)MB	Not compatible			
			HC-A16KNX	Not compatible			
			KNX001	Not compatible			
			HARC-BX E (NB)	Not compatible			
		CSNET	CSNET Manager LT	Not compatible			
			CSNET Manager XT	Not compatible			
			CSNET WEB (1)	OFF	OFF	OFF	OFF
Without other central controllers				OFF	OFF	OFF	OFF

(1) Check compatibility limitations in CSNET Web PSC-A160WEB1 Manual.

2. Close the unit case until hearing a snapping sound, and make sure that the front and rear parts of the case close fully. At this time, check that connection bands are not trapped between the front and the rear parts of the case.

a. Hook the tabs into the front side of the case.

b. The front side of the case will close when hooking up the tabs of the lateral and lower sides.To attach the touch pen holder When attaching the touch pen holder to the controller, insert the chip into any of the attaching holes for the holder until hearing a click.

Rear case

Front case

(6 catches)

Connection band

Copper

Catch
for
fixing

Hole for touch pen holder

OPERATION

5.1 TEST RUN
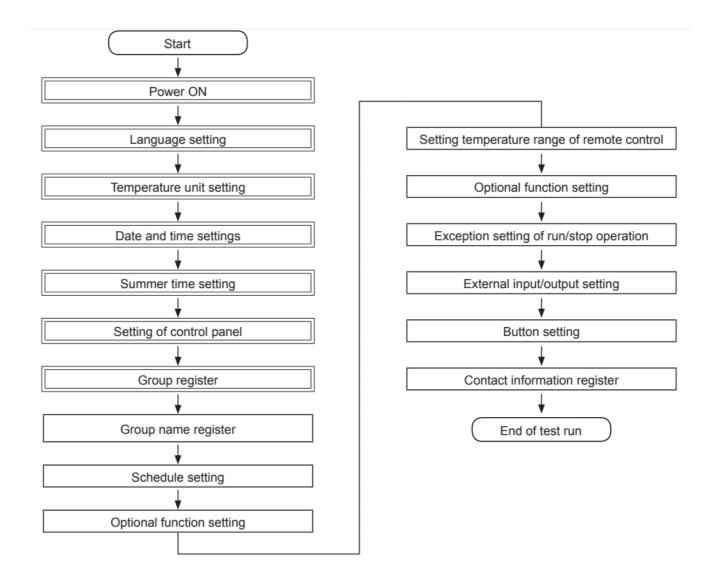
The outline of the test run procedure is indicated as shown in the figure. The items marked with the thick frame ( ) are required items. The rest of items, which are not specifically required for the test run procedure but they are optional, are explained in its specific section.

i **NOTE**

The actual design of the screens may vary, with respect to the screenshots shown in this chapter.

```
                    ┌─────────────┐
                    │    Start    │
                    └──────┬──────┘
                           ↓
              ┌────────────────────────┐
              │        Power ON        │
              └───────────┬────────────┘
                           ↓
              ┌────────────────────────┐          ┌──────────────────────────────────┐
              │    Language setting    │          │ Setting temperature range of      │
              └───────────┬────────────┘          │ remote control                    │
                           ↓                       └────────────────┬─────────────────┘
              ┌────────────────────────┐                            ↓
              │ Temperature unit setting│          ┌──────────────────────────────────┐
              └───────────┬────────────┘          │    Optional function setting      │
                           ↓                       └────────────────┬─────────────────┘
              ┌────────────────────────┐                            ↓
              │  Date and time settings │          ┌──────────────────────────────────┐
              └───────────┬────────────┘          │ Exception setting of run/stop     │
                           ↓                       │ operation                         │
              ┌────────────────────────┐          └────────────────┬─────────────────┘
              │   Summer time setting  │                            ↓
              └───────────┬────────────┘          ┌──────────────────────────────────┐
                           ↓                       │   External input/output setting   │
              ┌────────────────────────┐          └────────────────┬─────────────────┘
              │ Setting of control panel│                            ↓
              └───────────┬────────────┘          ┌──────────────────────────────────┐
                           ↓                       │         Button setting            │
              ┌────────────────────────┐          └────────────────┬─────────────────┘
              │     Group register     │                            ↓
              └───────────┬────────────┘          ┌──────────────────────────────────┐
                           ↓                       │  Contact information register     │
              ┌────────────────────────┐          └────────────────┬─────────────────┘
              │  Group name register   │                            ↓
              └───────────┬────────────┘          ┌──────────────────────────────────┐
                           ↓                       │        End of test run            │
              ┌────────────────────────┐          └──────────────────────────────────┘
              │    Schedule setting    │
              └───────────┬────────────┘
                           ↓
              ┌────────────────────────┐
              │ Optional function setting│
              └────────────────────────┘
```

List of Items

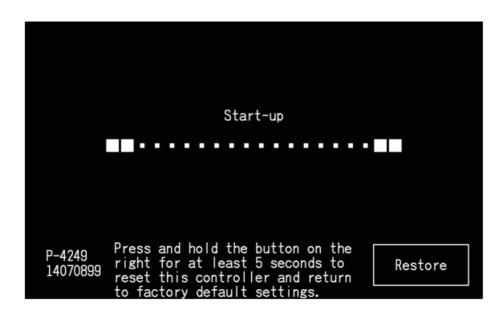| Item	Function
Language Setting	This function Is used for language selection.
Data and Time Settings	This function is used for adjusting the date and time.
Group Register	The function is used for the registration of groups or blocks of the indoor units connected to the same H-LINK, and which have been identified by the central station.
Main Unit Register	This function is used for the registration of the main unit in each remote control group. This unit represents the remote control group. Control orders for the entire remote control group are sent to this main unit from the central station.
Sub Unit Register	This function is used for the registration of units other than the main unit in each remote control group. In case of using the following remote control switches or receiver kits, the sub units are registered automatically by the central station after registration of the main unit · Remote control switches and receiver kits with model names beginning with PC-A⁻. · Remote control switches with model names beginning with PC-P".

	Group Name Register	This function is used for the registration of the names of groups and blocks. The name of each group or block may consist of up to 20 characters. It Is also possible to copy names. If the group or block is registered without a name, it is registered as 'Group 1° or Block 1° automatically.
Schedule Settings		**This function is used for the scheduling of timer operation available for each group or block.**
	Schedule Timer Setting	**This function** is used for setting the time (by the minute), "Run/Stop' and temperature (19-30°C). For weekly schedule setting, up to 10 schedule Items can be set per day. It Is also possible to copy setting contents.
	Holiday Setting	This function is used for suspending scheduled operation temporarily. Scheduled operation is not available when this function is set. This function is used for setting irregular holidays such as national holidays.
	Schedule Timer ON /OFF Setting	'Schedule Timer OFF Setting' is used for suspending scheduled operation for the target group. Scheduled operation Is not available when Schedule Timer Is OFF. This function Is used for long holidays, sudden holidays, national holidays, etc.
Optional Function Setting		This function is used for setting and changing the functions of air conditioners and central stations.
Exception Setting of Run/Stop Operation		This function is used for specifying the exception of All Run/Stop commands for particular groups or blocks. · All Run/Stop commands have no effect on the specified group or block.
	Selection of Excepted Operation	This function is used for selecting which of the following is affected by the exception. · Run · Stop · Run and Stop
	Selection of Excepted Groups	This function is used for selecting which of the following Is affected by the exception of All Run/Stop commands. · All Groups Run/Stop · Run/Stop by Block · All Groups Setting · Setting by Block
	External Input/Output Setting	The central station has two external input terminals and two external output terminals. These terminals are used for "All Groups Run/Stop" and "Demand Function" operations for the connected air conditioners. The external output terminals are used for the output of operation signals or alarm signals of the air conditioners connected to the central station.
	Exception of External Input	This function is used for **canceling operation** commands such as 'All Groups Run/Stop" by means of the external input signal. 'Exception of External Input' is available for each external Input (Input 1 and Input 2).
	^I Selection of Excepted Groups **for External Input I**	This function is used for selecting the groups whose operation **orders are canceled from external input I.**
	Selection of Excepted Groups for External **In 2**	This function is used for selecting the groups whose operation orders are cancelled from external input **2.**

Item	Function
Demand Function Setting	This function is used for setting of "Demand Function" to the terminal of "Input 1″. Operation state changes by demand signals such as operation stop, or thermo-OFF. 'Demand Function" is available under the following conditions. 1. Selecting "Demand Function" for "Input 1" at the "External Input/Output Setting" screen. ("Demand Function" is not available without this setting.) 2. Selecting one of 'Demand Function" No.1 to No.4 at "Demand Function Setting" screen.
Demand Function Setting	**This function is used for selecting the action for °Demand Function" control.**
Selection of Group for Demand Function	This function is used for selecting the target group for "Demand Function" control.
Button Setting	**This function is used for specifying whether each button shall be shown or hidden.** **This function also includes the specification of "one-tap" or 'press and hold" operation style of the touchscreen.**
Contact Information Register	**This function is used for editing the contents of contact information.**
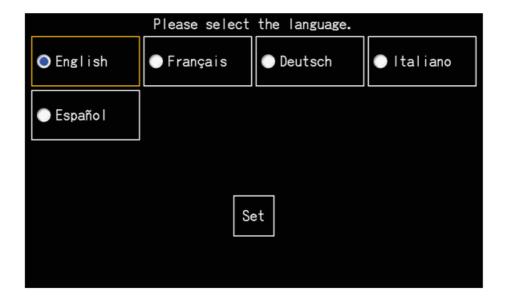
5.1.1 Power ON
Turn on the power supply of the air conditioners. To protect the compressor. the power supply should be turned on 12 hours before starting operation. Do not turn the pov. off during air conditioning seasons. Perform a test run of each air conditioner first to ensure normal operation. Turn on the power supply of the central station. -Start-up is displayed for a while during the boot process. after which the screen changes to 'Monitor (All Grows)".
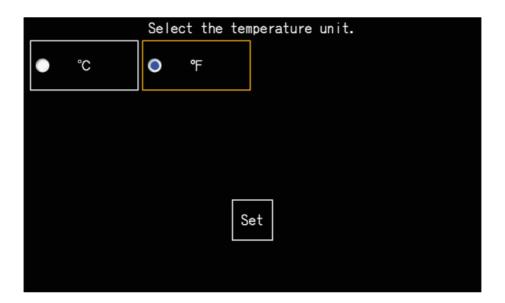
5.1.2 Language Setting
When turning the power supply ON for the first time. the language setting screen is displayed after a few minutes. Select the language for operation and tap "Set'.

5.1.3 Temperature unit Setting
After the language is set. the screen is displayed as shown. Select the appropriate temperature unit. then tap 'Ser.
Refer to the '5 3.9.3 Temperature unit setting"section in the 5.3 Menu 'chapter for detailed information.

5.1.4 Adjusting Date/Time
After setting the temperature unit, the screen for adjusting date and time screen is displayed on the touchscreen as shown in the figure. Tap "Set" on the touchscreen display, and set the date and time following the indicated procedure. Refer to the "5.3.5 Date and time settings" section in the "5.3 Menu" chapter for detailed information.

NOTE
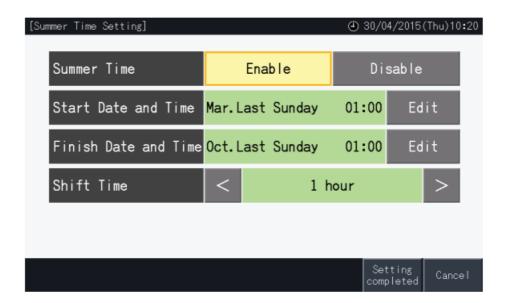
Setting the date and time may be required after a prolonged power failure. If "Set Date/Time" is displayed on the screen in such a case, then tap "Set" to adjust the date and time.

5.1.5 Summer Time Setting

After the Date/Time function is set, the screen is displayed as shown.

Set each item, then tap "Setting completed".

Refer to the "5.3.12 Summer time setting"section in the "5.3 Menu"chapter for detailed information.
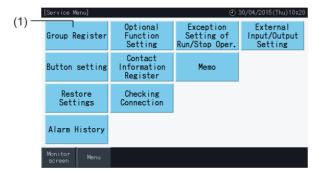
5.1.6 Setting of control patterns

After adjusting date and time settings, the control pattern screen is displayed. Tap "Set" on the touchscreen to proceed to the setting of control patterns.
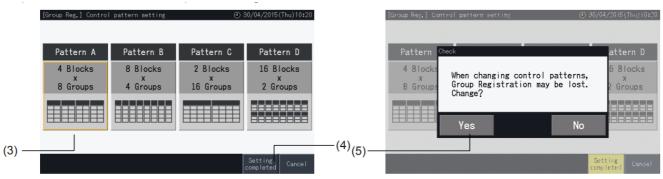
When tapping on a control pattern button, the selected button is highlighted with an orange outline. The procedure for the setting of control patterns is explained below.

1. Select "Group Register" on the Service Menu screen.

2. Select "Setting of control patterns" on the Group Register screen.
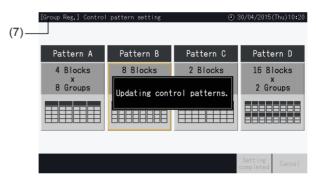
3. Set the Control Pattern. When tapping on the Control Pattern button, the selected button is highlighted with an orange outline.

4. Tap "Setting completed".

   * In case of tapping "No", the screen returns to the Group Register menu.

   * Group registration is deleted when changing to a different control pattern.

5. Tap "Yes" on the confirmation screen.

   * Tap "No" to return to the "Control pattern setting" screen.

6. Tap "No" on the confirmation screen to confirm the selected control pattern and to delete all group registers. * Tap "No" to confirm the selected control pattern. After modifying the control pattern, the assignment of main and sub units is maintained as much as the control range allows.

7. The Control Pattern update screen is displayed. After updating the Control Pattern, the Group Register screen is displayed for the selection of a Main Unit.
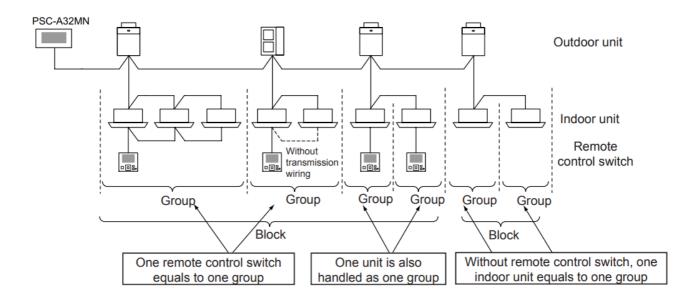
5.1.7 Group register

Register the connected indoor units to groups and blocks of the central station.

5.1.7.1 Definitions

- Group: The minimum operation unit controlled by one central station. 1 remote control group is considered as 1 group, and the same setting is applied to the entire group. A maximum of 32 groups (organized as 4 blocks with 8 groups each, 8 blocks with 4 groups each, 2 blocks with 16 groups each or 16 blocks with 2 groups each) can be controlled with one central station.
- Block: An operation unit composed of several groups. The central station organizes blocks in patterns of 4 blocks with 8 groups each, 8 blocks with 4 groups each, 2 blocks with 16 groups each or 16 blocks with 2 groups each.
- Remote Control Group: A group of multiple indoor units (max 16) connected by the transmission line of the remote control switch. The same settings are applied to all the indoor units in the same remote control group.
- Main Unit: The representative unit of the remote control group. The central station transmits control orders to this representative unit.
- Sub Unit: Indoor units other than the main unit of the remote control group.
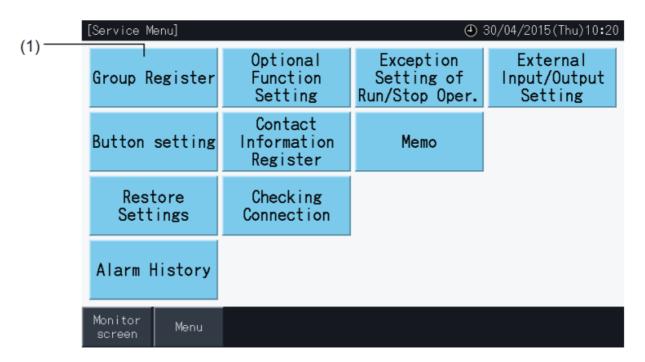

5.1.7.2 Main Unit Registration

- Only one unit can be registered as the main unit of a group. Thus, duplicate registration of the main unit is not possible inside a group. If the unit registered as the main unit has to be changed for some reason, then cancel the current register of main unit before registering the new main unit again.
- When indoor units with 3 and 4 available fan speeds are mixed in the same remote control group, register the indoor unit with 4 fan speeds as the main unit. If the indoor unit with 3 fan speeds is registered as the main unit, the fan speed setting number 4 cannot be selected for this group.
- When mixing indoor units with automatic swing louvre and indoor units without automatic swing louvre together in the same remote control group, an indoor unit with auto-louvre shall be registered as the main unit of the group. If an indoor unit without auto-louvre is registered as the main unit, then the auto-louvre setting cannot be applied for the entire group.
- When registering a group which has no transmission wiring, the indoor unit without a remote control switch cannot be registered as the main unit.

5.1.7.3 Sub Unit Registration

- A maximum of 15 sub units can be registered in the same remote group with the main unit (when applying the control pattern of 2 blocks with 16 groups each).
- Indoor units without a remote control switch cannot be registered as sub units.
- In case of changing the registration of an indoor unit which is already registered as a sub unit, cancel the register settings first, and then proceed to the new register.

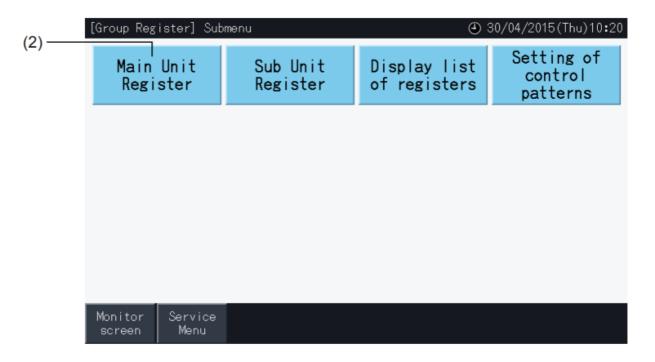### 5.1.7.4 Registration of a group (Main unit)

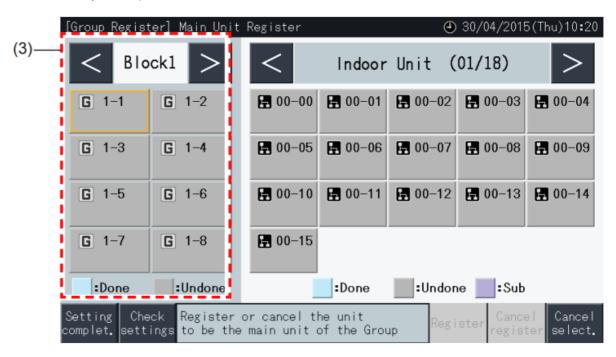1. Select "Group Register" on the "Service Menu" screen.

ⓘ NOTE

This function cannot be selected when the external input signal is input to the external input terminal 1 or 2.

2. Select "Main Unit Register" on the "Group Register".

(2)

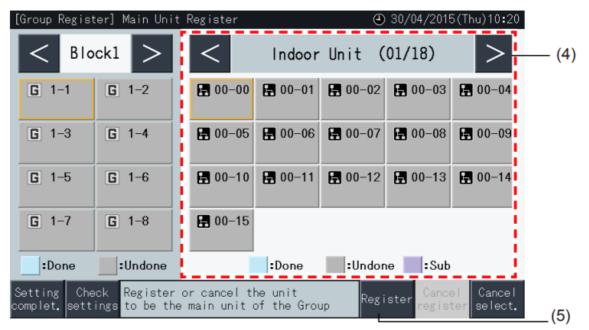| Main Unit Register | Sub Unit Register | Display list of registers | Setting of control patterns |

Monitor screen   Service Menu

3. Select the group for registration of the main unit.

• Tap buttons "<" and ">" on the upper left of the touchscreen to switch the block display.

• The numbers shown inside the buttons indicate block number and group number.

• Select a group button by tapping it. The selected button is highlighted with an orange outline. If the selected group button is tapped again. the group selection is cancelled. The main unit screen may be different depending on the control pattern. The screen below shows the setting of control patterns when Pattern A (4 Blocks with 8 Groups each) is selected.

[Group Register] Main Unit Register   🕐 30/04/2015(Thu)10:20

(3)

< Block1 >		< Indoor Unit (01/18) >				
G 1-1	G 1-2	🖪 00-00	🖪 00-01	🖪 00-02	🖪 00-03	🖪 00-04
G 1-3	G 1-4	🖪 00-05	🖪 00-06	🖪 00-07	🖪 00-08	🖪 00-09
G 1-5	G 1-6	🖪 00-10	🖪 00-11	🖪 00-12	🖪 00-13	🖪 00-14
G 1-7	G 1-8	🖪 00-15				
:Done :Undone			:Done	:Undone	:Sub	

Setting complet.   Check settings   Register or cancel the unit to be the main unit of the Group   Register   Cancel register   Cancel select.

4. Select the indoor unit for registration of the main unit.

• Tap buttons "<" and ">" on the upper right of the touchscreen to switch the display of indoor units.

• The numbers shown inside the buttons indicate refrigerant cycle number and indoor unit address.

• Select an indoor unit button by tapping it. The selected button is highlighted with an orange outline. If the selected indoor unit button is tapped again. the indoor unit selection is cancelled.

• An indoor unit which has been already selected as a main unit cannot be selected again (its button becomes blue). About the selection of indoor units
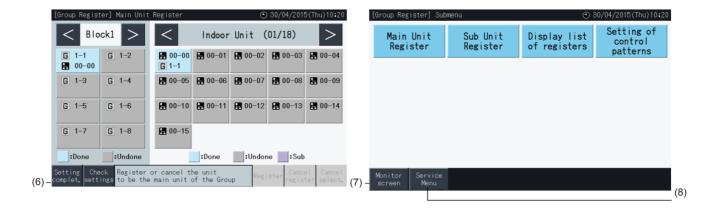
• It is not possible to register an indoor unit with red letters as a main unit. In this case the indoor unit is registered as a sub unit automatically.

• When indoor units with 3 and 4 available fan speeds are mixed in the same remote control group. register the indoor unit with 4 fan speeds as the main unit.

• When mixing indoor units with auto louvre function and indoor units without auto louvre function together in the same H-LINK. register one unit with auto louvre function as the main unit. Otherwise. the auto louvre function becomes disabled for the entire H-LINK. The same applies to other functions as well.

5. Tap Register" to register the main unit while the group and indoor unit are selected.

• If the group and indoor unit for the main unit are not selected. the "Register' indication is greyed out and therefore cannot be tapped.

• The colour of the buttons of the registered group and the indoor unit changes to blue. and the following information is displayed inside the buttons.

- "Group" Button

Block number   Group number

G 1-1
H 00-00

Main unit refrigerant / IU address
cycle number

- "Indoor Unit" Button

Refrigerant cycle   IU address
number

H 00-00
G 1-1

Block number   Group number

Tap buttons "<" and ">" on the upper left of the touchscreen to continue with the setting of another Block, or tap the "Setting complet." button to exit.
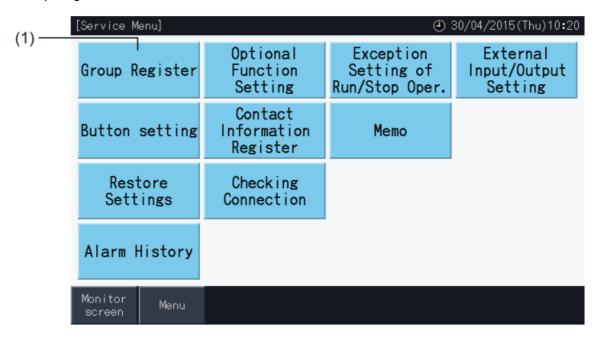

6. Tap "Setting Complet." to register the group and return to Group Register menu screen.

7. Tap "Monitor screen" to return to Monitor screen.

8. Tap "Service Menu" to return to Service Menu screen.

<	Block1	>	<	Indoor Unit (01/18)			>

G 1-1	G 1-2		00-00	00-01	00-02	00-03	00-04
00-00			G 1-1				
G 1-3	G 1-4		00-05	00-06	00-07	00-08	00-09
G 1-5	G 1-6		00-10	00-11	00-12	00-13	00-14
G 1-7	G 1-8		00-15				

☐ :Done ☐ :Undone ☐ :Done ☐ :Undone ☐ :Sub

| Main Unit Register | Sub Unit Register | Display list of registers | Setting of control patterns |

(6) — Setting complet. | Check settings | Register or cancel the unit to be the main unit of the Group | Register | Cancel register | Cancel select.   (7) — Monitor screen | Service Menu   (8)

5.1.7.5 Registration of a group (Sub unit)

1. Select "Group Register" on the screen of "Service Menu".
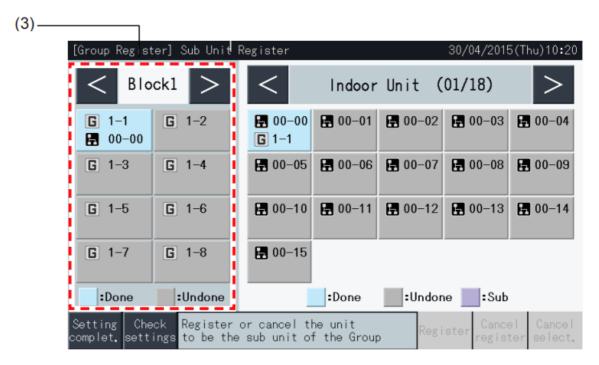
(1) —

	[Service Menu]		30/04/2015(Thu)10:20
Group Register	Optional Function Setting	Exception Setting of Run/Stop Oper.	External Input/Output Setting
Button setting	Contact Information Register	Memo	
Restore Settings	Checking Connection		
Alarm History			

Monitor screen | Menu

ℹ️ **NOTE**

This function cannot be selected when the external input signal is input to the external input terminal 1 or 2.

2. Select "Sub Unit Register" on the screen of "Group Register".
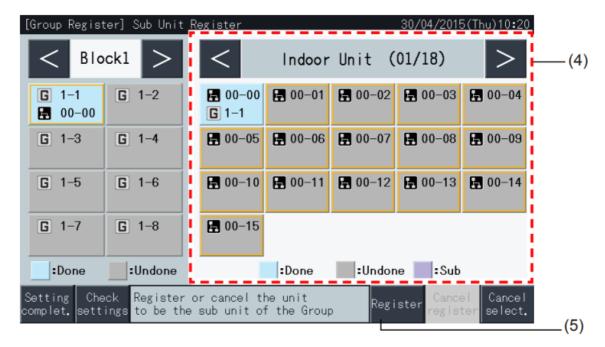
(2) —

	[Group Register] Submenu		30/04/2015(Thu)10:20
Main Unit Register	Sub Unit Register	Display list of registers	Setting of control patterns

Monitor screen | Service Menu

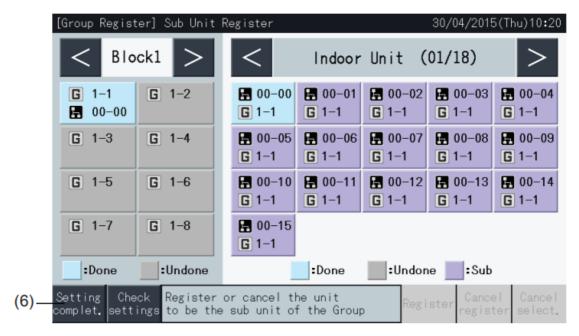3. Select the group for registration of the sub unit.

   • Tap buttons "<" and ">" on the upper left of the touchscreen to switch the block display.

   • Select a group by tapping it. The selected button is highlighted with an orange outline.

   • If the selected group button is tapped again, the selection is cancelled.

   • The main unit cannot be selected if the group is unregistered (shown in grey).

   • The sub unit register screen may be different depending on the control pattern. The screen below shows the setting of control patterns when pattern A (4 blocks with 8 groups each) is selected.

4. Select the indoor unit for registration of the sub unit.

   • Tap buttons "<" and ">" on the upper right of the touchscreen to switch the display of indoor units.

   • The numbers shown inside the buttons indicate refrigerant cycle number and indoor unit address.

   • Select an indoor unit button by tapping it. The selected button is highlighted with an orange outline. If the selected indoor unit button is tapped again, the indoor unit selection is cancelled.

   • An indoor unit which has been already registered as main unit cannot be selected (its button appears in blue).

5. Tap "Register" to register the sub units while the group and indoor units are selected.

   • If the group and indoor units for the sub units are not selected, the "Register" indication is greyed out and therefore cannot be tapped.

   • The colour of the buttons of the registered group and the indoor unit changes to purple.
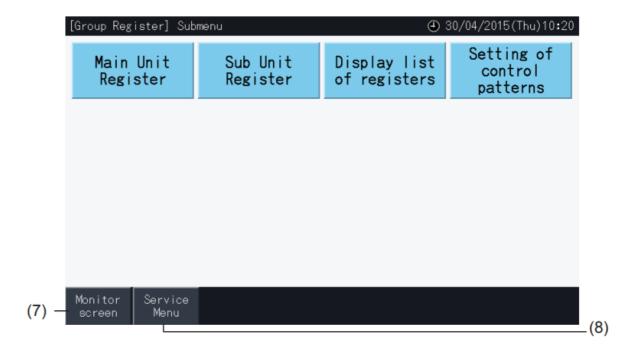
   Tap buttons "<" and ">" on the upper left of the touchscreen to continue with the setting of another Block, or tap the "Setting complet." button to exit.

Block1		Indoor Unit (01/18)					(4)

G 1-1
H 00-00   G 1-2

G 1-3   G 1-4

G 1-5   G 1-6

G 1-7   G 1-8

:Done   :Undone

H 00-00
G 1-1   H 00-01   H 00-02   H 00-03   H 00-04

H 00-05   H 00-06   H 00-07   H 00-08   H 00-09

H 00-10   H 00-11   H 00-12   H 00-13   H 00-14

H 00-15

:Done   :Undone   :Sub

Setting complet.	Check settings	Register or cancel the unit to be the sub unit of the Group	Register	Cancel register	Cancel select.

— (5)

6. Tap "Setting complet." on "Group Register (Sub Unit Register)" to return to the "Group Register" screen.

Block1   Indoor Unit (01/18)

G 1-1
H 00-00   G 1-2

G 1-3   G 1-4

G 1-5   G 1-6

G 1-7   G 1-8

:Done   :Undone

H 00-00
G 1-1   H 00-01
G 1-1   H 00-02
G 1-1   H 00-03
G 1-1   H 00-04
G 1-1

H 00-05
G 1-1   H 00-06
G 1-1   H 00-07
G 1-1   H 00-08
G 1-1   H 00-09
G 1-1

H 00-10
G 1-1   H 00-11
G 1-1   H 00-12
G 1-1   H 00-13
G 1-1   H 00-14
G 1-1

H 00-15
G 1-1

:Done   :Undone   :Sub

(6) —

Setting complet.	Check settings	Register or cancel the unit to be the sub unit of the Group	Register	Cancel register	Cancel select.

7. Tap "Monitor screen" to return to Monitor screen.
8. Tap "Service Menu" to return to Service Menu screen.

Main Unit
Register

Sub Unit
Register

Display list
of registers

Setting of
control
patterns

(7) — Monitor screen   Service Menu

(8)

ℹ **NOTE**

- It is possible to register a maximum of 15 sub units in the same remote control group.
- It is not possible to register an indoor unit without remote control switch as a sub unit (Refer to "5.1.7 Group register" section).
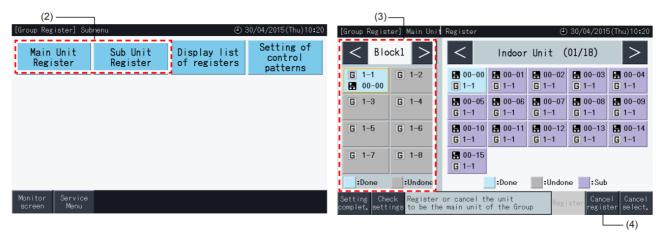
5.1.7.6 Cancellation of group registration

1. Select "Group Register" on the screen of "Service Menu". Refer to .
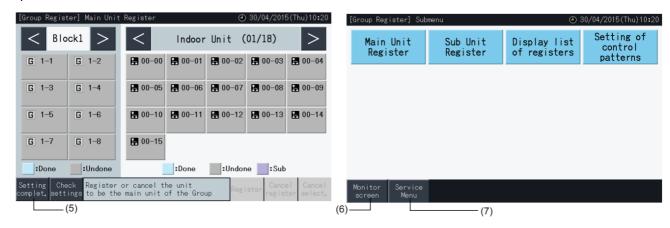
ℹ **NOTE**

This function cannot be selected when the external input signal is input to the external input terminal 1 or 2.

2. Select "Main Unit Register (or Sub Unit Register)" on the screen of "Group Register".

3. Select the group to cancel registration. Tap buttons "<" and ">" on the upper left of the touchscreen to switch the block display. Select a group button by tapping it. The selected button is highlighted with an orange outline. If the selected group button is tapped again, the group selection is cancelled.

4. Tap "Cancel register" to delete the register of the group. The group button and indoor unit button turn to grey. When tapping "Cancel register" on the "Main Unit Register" screen, the main unit and the sub units are unregistered. When tapping "Cancel register" on the "Sub Unit Register" screen, the sub units are unregistered. Tap buttons "<" and ">" on the upper left of the touchscreen to continue unregistering groups in other blocks, or tap the "Setting complet." button to exit.

5. Tap "Setting complet." to return to the "Group Register" screen.

6. Tap "Monitor screen" to return to Monitor screen.

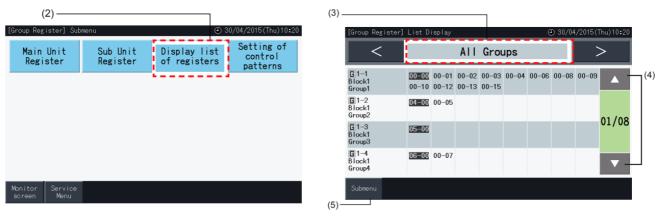7. Tap "Service Menu" to return to Service Menu screen.
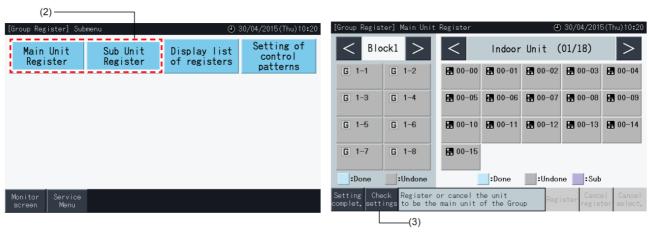
5.1.7.7 Checking of group registration (Checking of main unit register)

1. Select "Group Register" on the "Service Menu" screen. Refer to section "5.1.7.4 Registration of a group (Main unit)".

ℹ️ **NOTE**

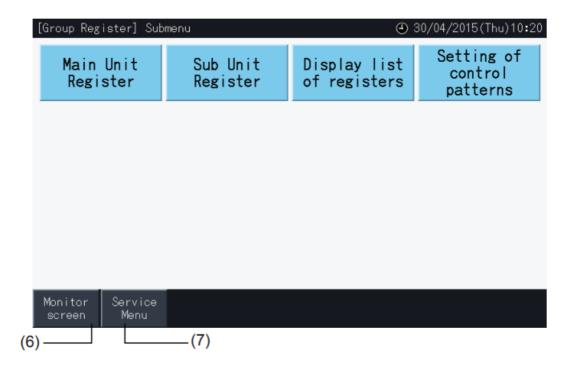This function cannot be selected when the external input signal is input to the external input terminal 1 or 2.

2. Select "Main Unit Register" (or "Sub Unit Register") on the "Group Register" screen.

3. Tap "Check Setting" on the lower left of the touchscreen.

4. The screen switches to the Group Register check screen then. Tap "To Main Unit Reg." to enter the Main Unit Register screen from there.

5. Tap "Setting completed" to return to the Group Register Menu screen.

6. Tap "Monitor screen" to return to Monitor screen.

7. Tap "Service Menu" to return to Service Menu screen.

(4)

| [Group Reg.] Check All Group settings | 30/04/2015(Thu)10:20 |

| Block1 | Block2 | Block3 | Block4 |

G1-1 00-00 | G1-2 04-00 | G2-1 01-00 | G2-2 11-00 | G3-1 02-00 | G3-2 24-50 | G4-1 03-00 | G4-2 39-00

G1-3 05-00 | G1-4 06-00 | G2-3 12-00 | G2-4 13-00 | G3-3 26-58 | G3-4 27-61 | G4-3 40-00 | G4-4 42-00

G1-5 07-00 | G1-6 08-00 | G2-5 14-00 | G2-6 15-14 | G3-5 28-00 | G3-6 20-34 | G4-5 63-58 | G4-6 62-00

G1-7 09-00 | G1-8 10-00 | G2-7 19-30 | G2-8 22-42 | G3-7 48-01 | G3-8 56-00 | G4-7 48-00 | G4-8 50-00

To Main Unit Reg. | Setting completed

[Group Register] Submenu | 30/04/2015(Thu)10:20

Main Unit Register | Sub Unit Register | Display list of registers | Setting of control patterns

Monitor screen | Service Menu

(5) (6) — (7)

5.1.7.8 Checking of group registration (checking register details)

1. Select "Group Register" on the "Service Menu" screen. Refer to section "5.1.7.4 Registration of a group (Main unit)".

   NOTE

   This function cannot be selected when the external input signal is input to the external input terminal 1 or 2.

2. Select "Display list of registers" on the Group Register screen.

3. Select the display target (All Groups / individual Blocks)

(2)

[Group Register] Submenu | 30/04/2015(Thu)10:20

Main Unit Register | Sub Unit Register | Display list of registers | Setting of control patterns

Monitor screen | Service Menu

(3)

[Group Register] List Display | 30/04/2015(Thu)10:20

< | All Groups | >

G1-1 Block1 Group1 | 00-00 00-01 00-02 00-03 00-04 00-06 00-08 00-09 00-10 00-12 00-13 00-15 | ▲ (4)

G1-2 Block1 Group2 | 04-00 00-05

G1-3 Block1 Group3 | 05-00 | 01/08

G1-4 Block1 Group4 | 06-00 00-07 | ▼

Submenu

(5)

4. The refrigerant system number and the address of all the units connected to each Group are displayed.

   • Black: Main Unit

   • Other: Sub Unit

   • Switch the page by tapping on "▲" or "▼".

5. Tap "Submenu" to return to Group Register screen.

6. Tap "Monitor screen" to return to Monitor screen.
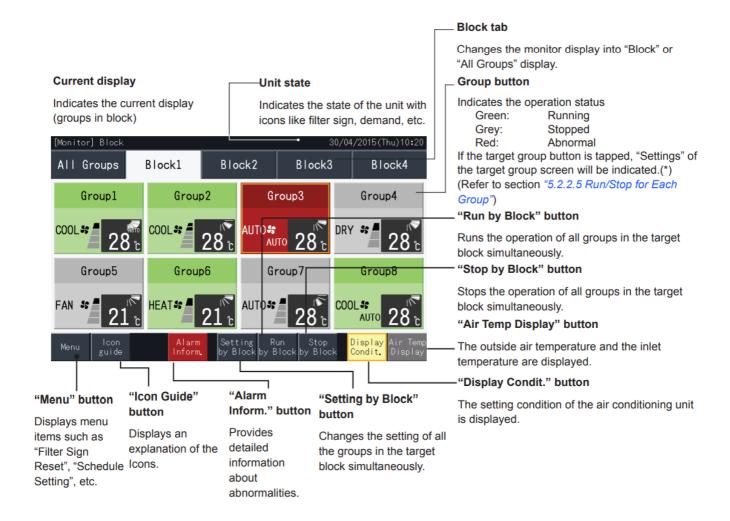
7. Tap "Service Menu" to return to Service Menu.

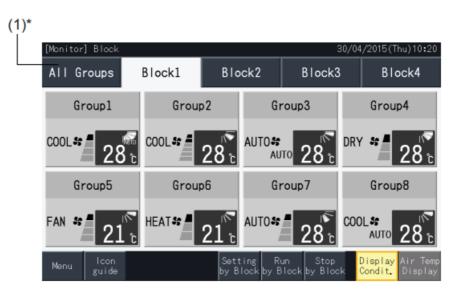## 5.2 MAIN SCREEN
5.2.1 Overall view

- **"Monitor (All Groups)"**

Current display

Indicates the current display (All Groups)

Unit state

Indicates the state of the unit with icons like filter sign, demand, etc.

Block button

The screen display changes into "Block" Monitor (Block) display by tapping this button.

Group button

Indicates the operation state of each group as follows:

Green:	Running
Grey:	Stopped
Red:	Abnormal

If the target group button is tapped, "Settings" of the target group screen will be indicated. (Refer to section *"5.2.2.5 Run/Stop for Each Group"*)

"Stop all gr." button

Stops all the units controlled by the central station at once.

"Run all gr." button

Runs all the units controlled by the central station at once.

"Setting of all" button

Changes the setting of all the units controlled by the central station at once.

"Alarm Inform." button

Provides detailed information about abnormalities.

"Menu" button

Displays menu items such as "Filter Sign Reset", "Schedule Setting", etc.

"Icon Guide" Button

Displays an explanation of the Icons.

- **"Monitor (Block)"**

Current display

Indicates the current display (groups in block)

Unit state

Indicates the state of the unit with icons like filter sign, demand, etc.

Block tab

Changes the monitor display into "Block" or "All Groups" display.

Group button

Indicates the operation status
Green: Running
Grey: Stopped
Red: Abnormal
If the target group button is tapped, "Settings" of the target group screen will be indicated.(*)
(Refer to section *"5.2.2.5 Run/Stop for Each Group"*)

"Run by Block" button

Runs the operation of all groups in the target block simultaneously.

"Stop by Block" button

Stops the operation of all groups in the target block simultaneously.

"Air Temp Display" button

The outside air temperature and the inlet temperature are displayed.

"Display Condit." button

The setting condition of the air conditioning unit is displayed.

[Monitor] Block   30/04/2015(Thu)10:20

| All Groups | Block1 | Block2 | Block3 | Block4 |

Group1	Group2	Group3	Group4
COOL 28℃	COOL 28℃	AUTO 28℃	DRY 28℃
Group5	Group6	Group7	Group8
FAN 21℃	HEAT 21℃	AUTO 28℃	COOL 28℃

| Menu | Icon guide | Alarm Inform. | Setting by Block | Run by Block | Stop by Block | Display Condit. | Air Temp Display |

"Menu" button

Displays menu items such as "Filter Sign Reset", "Schedule Setting", etc.

"Icon Guide" button

Displays an explanation of the Icons.

"Alarm Inform." button

Provides detailed information about abnormalities.

"Setting by Block" button

Changes the setting of all the groups in the target block simultaneously.

ⓘ **NOTE**

- (*) This function can be used when Control Mode (Run/Stop Only) is in Disable" mode. If Control Mode (Run/Stop Only) is in "Enable" mode, the Run/Stop operation will be switched by tapping the target
- The screen image may be different than the actual screen.

5.2.2 Group and block settings
5.2.2.1 Display of All Groups

1. Tap "All Groups" on the touchscreen display.

   The tab marked with (1), "All Groups", is not displayed if only one block has been registered.

(1)*

[Monitor] Block   30/04/2015(Thu)10:20

2. All groups are displayed on the touchscreen (all the indoor units connected to the central station are shown).

The operation status of each group is indicated by the colour of the group, as shown below:

(2)

[Monitor] All Groups   30/04/2015(Thu)10:20

Green:	Run
Grey:	Stop
Red:	Abnormal

ℹ️ NOTE
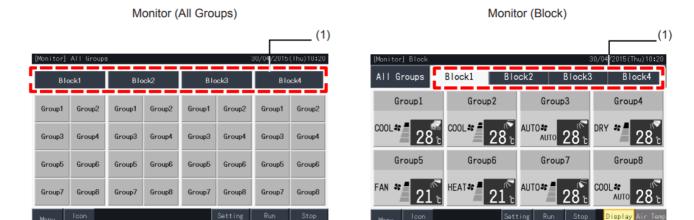
• All Groups" screen may be different depending on the Control Pattern. The screen on the left corresponds to the display of Pattern A (4 Blocks x 8 Groups), as set by Control Pattern.

• The touchscreen display is put to sleep mode automatically when the touchscreen is not operated for a given length of time. Tap the screen to wake up.

5.2.2.2 Display of Specified Block
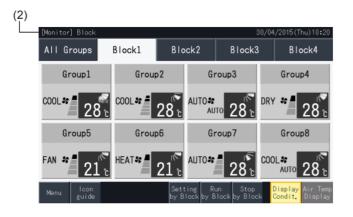
1. Select the target block from the screen of "Monitor (All Groups)" or "Monitor (Block)".

Monitor (All Groups)　　　　　　　　　Monitor (Block)
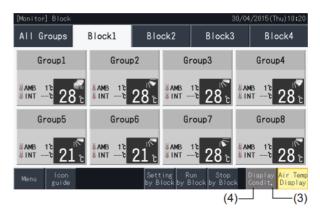
2. The groups in the selected block are displayed on the touchscreen. The operation status of each group is indicated by the colour of the group, as shown below:

Green:	Run
Grey:	Stop
Red:	Abnormal

3. Tap "Air Temp Display" to display the outside air temperature and the inlet temperature.
4. Tap "Display Condit." to display the condition of the operation.

ℹ **NOTE**
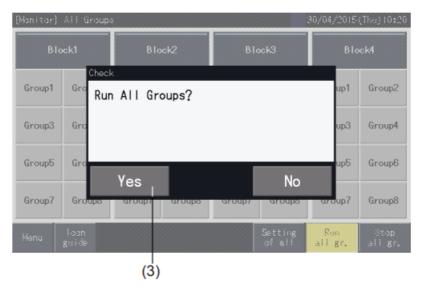
• "Block" screen may be different depending on the Control Pattern. The screen on the left corresponds to the display of Pattern A (4 Blocks x 8 Groups), as set by Control Pattern.

• The touchscreen display is put to sleep mode automatically when the touchscreen is not operated for a given length of time. Tap the screen to wake up.

• It may take time to display the temperature.

• The inlet temperature is displayed only while operating.

5.2.2.3 Simultaneous Run/Stop for All Groups

1. Tap "All Groups" on the touchscreen display.
2. Tap "Run all gr." to run all the groups simultaneously.
   Tap "Stop all gr." to stop all the groups simultaneously.

(1) [Monitor] Block   30/04/2015(Thu)10:20

| All Groups | Block1 | Block2 | Block3 | Block4 |

| Group1 | Group2 | Group3 | Group4 |
| COOL 28°C AUTO | COOL 28°C | AUTO 28°C AUTO | DRY 28°C |

| Group5 | Group6 | Group7 | Group8 |
| FAN 21°C | HEAT 21°C | AUTO 28°C | COOL 28°C AUTO |

| Menu | Icon guide | | | Setting by Block | Run by Block | Stop by Block | Display Condit. | Air Temp Display |

[Monitor] All Groups   30/04/2015(Thu)10:20

Block1	Block2	Block3	Block4
Group1	Group2	Group1	Group2	Group1	Group2	Group1	Group2
Group3	Group4	Group3	Group4	Group3	Group4	Group3	Group4
Group5	Group6	Group5	Group6	Group5	Group6	Group5	Group6
Group7	Group8	Group7	Group8	Group7	Group8	Group7	Group8

| Menu | Icon guide | | | Setting of all | Run all gr. | Stop all gr. |

(2)

3. The confirmation window is displayed. Tap "Yes" for simultaneous operation of all indoor units connected to the central station. Tap "No" to cancel this command.

[Monitor] All Groups   30/04/2015(Thu)10:20

Check
Run All Groups?

Yes   No

(3)

i **NOTE**
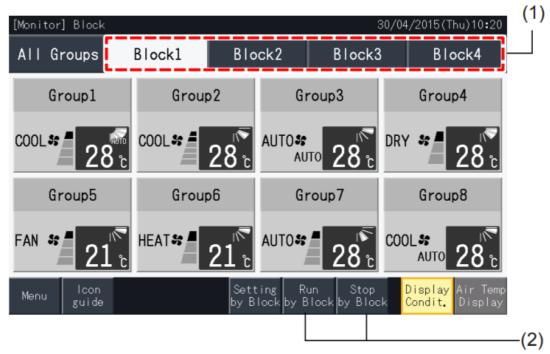
The commands to run all the groups and stop all the groups have no effect on the groups specified in "Exception Setting of Run/Stop Operation".

5.2.2.4 Simultaneous Run/Stop for each Block
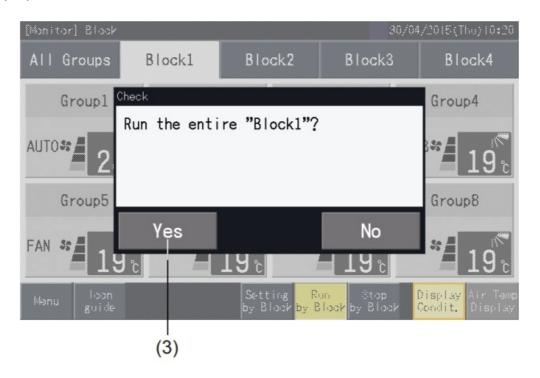
1. Select the target block from the touchscreen display to set simultaneous Run/Stop operation.
2. Tap "Run by Block" to run all the groups in the selected block simultaneously.
   Tap "Stop by Block" to stop all the groups in the selected block simultaneously.

(1)

(2)
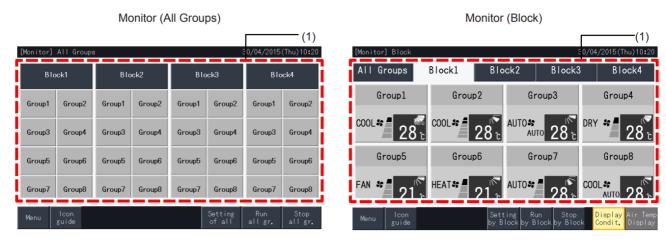
3. The confirmation window is displayed. Tap "Yes". for simultaneous operation of all the groups (all the indoor units) in the selected block connected to the central station. Tap "No" to cancel this command.

NOTE
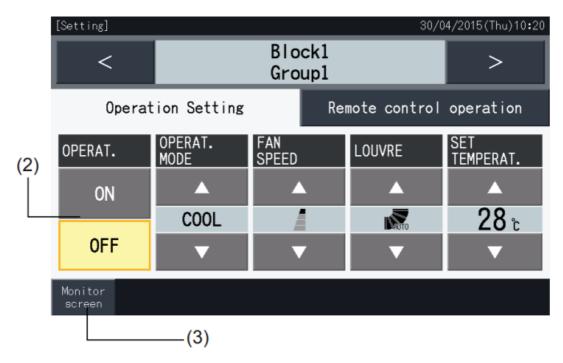
The commands to run by block and stop by block have no effect on the groups specified in "Exception Setting of Run/Stop Operation".

(3)

5.2.2.5 Run/Stop for Each Group Check the control mode before setting. The control method is different depending whether the control mode is set to "Normal" or "Run/Stop Only".

♦ **Run/Stop operation for each group (Control mode: Normal)**

1. Select the screen of "Monitor (All Groups)" or "Monitor (Block)". Select the group to set by tapping its group button.

Monitor (All Groups)   Monitor (Block)

2. The settings of the selected group appear displayed on the touchscreen display. Tap "ON" or "OFF" to change the operation state.

3. Tap "Monitor screen" to return to the "Monitor" screen.
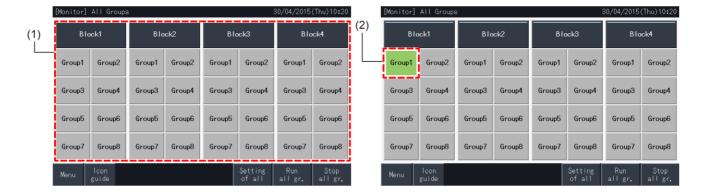
Run/Stop operation for each group (Control mode: Run/Stop only)
Monitor (All Groups)

1. Select the target group at the "Monitor (All Groups)" screen in "Run/Stop Only" mode.

2. The operation state of the selected group is switched alternatively between Run and Stop when tapping its button.
   In this mode, simultaneous Run/Stop operation for all groups is available with the "Run all gr." and "Stop all gr." buttons.
   Refer to section "5.3.3 Scheduled settings"for details.
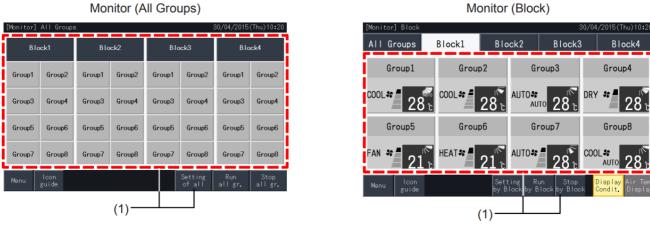
Monitor (Block)

1. Select the target group at the "Monitor (Block)" screen in "Run/Stop Only" mode.

2. The operation state of the selected group is switched alternatively between Run and Stop when tapping its button. In this mode, simultaneous Run/Stop operation by block is available with the "Run by Block" and "Stop by Block" buttons. Refer to section "5.2.2.4 Simultaneous Run/Stop for each Block".
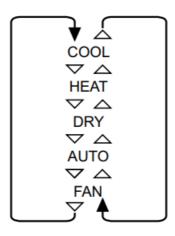
5.2.3 Main parameters setting
5.2.3.1 Operation Mode

1. Select the target group for the change of operation mode settings at the "Monitor (All Groups)" or "Monitor (Block)" screens. The screen with the settings for the selected group is displayed on the touchscreen.
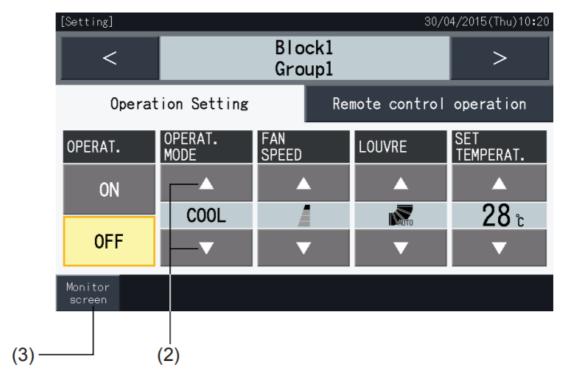
2. By tapping the "△" or "▽" buttons under "Operat Mode", operation mode changes alternatively as shown below:

```
    COOL
  ▽ △
    HEAT
  ▽ △
    DRY
  ▽ △
    AUTO
  ▽ △
    FAN
  ▽
```

The "AUTO" (Heating/Cooling Automatic Operation) is also included as an option when applicable.

3. Tap "Monitor screen" to return to Monitor screen.


```
[Setting]                                    30/04/2015(Thu)10:20
┌──────┐  ┌─────────────────────────┐  ┌──────┐
│  <   │  │        Block1           │  │  >   │
└──────┘  │        Group1           │  └──────┘
          └─────────────────────────┘
    Operation Setting            Remote control operation

 OPERAT.   OPERAT.    FAN                      SET
           MODE       SPEED     LOUVRE         TEMPERAT.

   ON        ▲          ▲          ▲             ▲

           COOL                                28 ℃

   OFF       ▼          ▼          ▼             ▼

 Monitor
 screen
```

(3) ─── (2)

ℹ️ **NOTE**
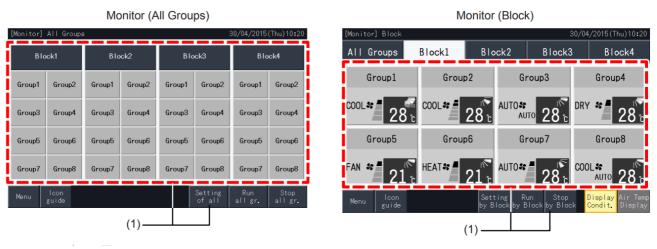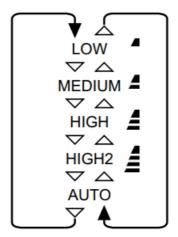
- By tapping "<" or ">" at the detailed setting screen, the operation mode is switched to another group in the same block.
- Control Restricted (Run/Stop Only): In case of "Enable", each Setting Change is for all Groups or Blocks. Setting Change is not possible for each Group.
- Some operation mode cannot be set depending on the type of Air Conditioner Unit. Contact your dealer or go to the inquiry counter of a designated maker for detailed information.
- If the settings are mixed when multiple groups are selected, the display remains blank.

5.2.3.2 Fan Speed
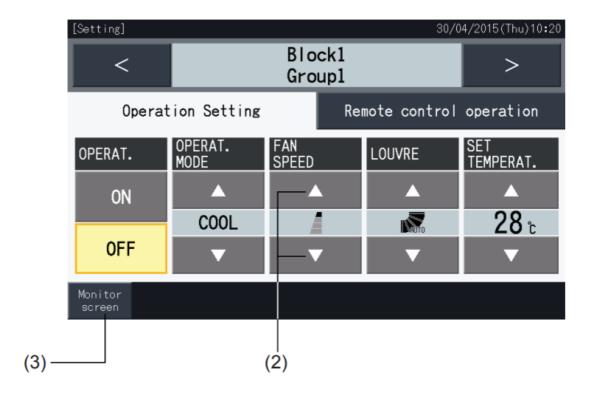
1. Select the target group for the change of fan speed setting at the "Monitor (All Groups)" or "Monitor (Block)" screens. The screen with the settings for the selected group is displayed on the touchscreen.

Monitor (All Groups)

| [Monitor] All Groups							30/04/2015(Thu)10:20
Block1		Block2		Block3		Block4	
Group1	Group2	Group1	Group2	Group1	Group2	Group1	Group2
Group3	Group4	Group3	Group4	Group3	Group4	Group3	Group4
Group5	Group6	Group5	Group6	Group5	Group6	Group5	Group6
Group7	Group8	Group7	Group8	Group7	Group8	Group7	Group8
Menu	Icon guide				Setting of all	Run all gr.	Stop all gr.

(1)

Monitor (Block)

[Monitor] Block				30/04/2015(Thu)10:20
All Groups	Block1	Block2	Block3	Block4
Group1 COOL 28℃	Group2 COOL 28℃	Group3 AUTO AUTO 28℃	Group4 DRY 28℃
Group5 FAN 21℃	Group6 HEAT 21℃	Group7 AUTO 28℃	Group8 COOL AUTO 28℃
Menu	Icon guide	Setting by Block	Run by Block	Stop by Block	Display Condit.	Air Temp Display

(1)

2. By tapping " △ " or " ▽ " buttons under "Fan Speed", the fan speed setting changes alternatively as shown below.

LOW
MEDIUM
HIGH
HIGH2
AUTO

* "HIGH2" or "AUTO" may not be indicated depending on the type of air conditioner.

3. Tap "Monitor screen" to return to the "Monitor" screen.

[Setting]				30/04/2015(Thu)10:20
<	Block1 Group1	>		

Operation Setting				Remote control operation	

OPERAT.	OPERAT. MODE	FAN SPEED	LOUVRE	SET TEMPERAT.
ON	▲	▲	▲	▲
	COOL		AUTO	28℃
OFF	▼	▼	▼	▼

Monitor screen

(3)   (2)

i NOTE
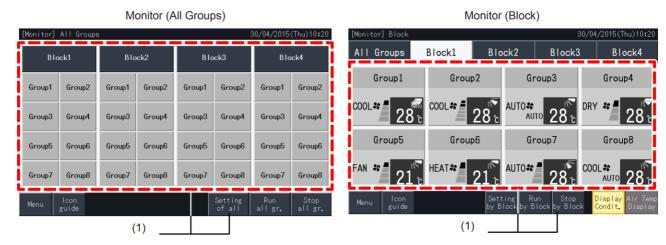
- By tapping "<" or ">" at the detailed setting screen, the Fan Speed is switched to another group in the same block.
- Control Restricted (Run/Stop Only) : In case of "Enable", each Setting Change is for all Groups or Blocks.
- Setting Change is not possible for each Group.
- Actual fan speed during the dry operation is "LOW' regardless of the fan speed setting.
- The figure above shows an example of a connected Air Conditioner Unit. The Fan Speed may not be indicated in certain case.
- If the settings are mixed when multiple groups are selected, the display remains blank.

5.2.3.3 Swing Louvre Direction

1. Select the target group for the change of swing louvre direction at the "Monitor (All Groups)" or "Monitor (Block)" screens. The screen with the settings for the selected group is displayed on the touchscreen.

Monitor (All Groups)   Monitor (Block)
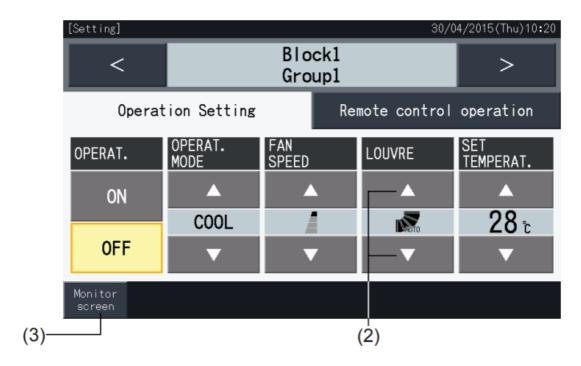
2. By tapping " " or " " of the "LOUVRE", the swing louvre direction changes alternatively as shown below.

CD indication										
COOL DRY	Auto		Angle	range						
				Swing						
HEAT FAN	Auto			Angle	range					
	Swing	.								

: Auto swing operation is started.

3. Tap "Monitor screen" to return to the "Monitor" screen.

| < | Block1
Group1 | > |

Operation Setting				Remote control operation
OPERAT.	OPERAT. MODE	FAN SPEED	LOUVRE	SET TEMPERAT.
ON	▲	▲	▲	▲
	COOL	∎	AUTO	28 ℃
OFF	▼	▼	▼	▼

Monitor screen

(3)   (2)

i NOTE
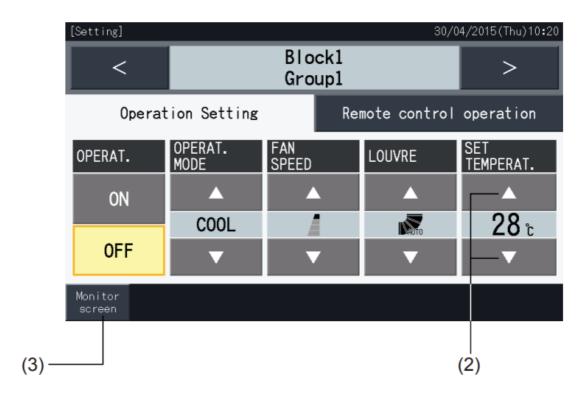
- By tapping "<" or ">" at the detailed setting screen, the Swing Louvre Direction is switched to another group in the same block.
- Control Restricted (Run/Stop Only) : In case of "Enable", each Setting Change is for all Groups or Blocks.
- Setting Change is not possible for each Group.
- Depending on the model of the Air Conditioner, the setting may not be possible or may be calibrated automatically.
- Louvre position on LCD and the actual louvre position do not always match during the auto swing operation.
- The actual Swing Louvre Direction may not stop immediately after the switch is pressed.
- If the settings are mixed when multiple groups are selected, the display remains blank.

5.2.3.4 Setting Temperature

1. Select the target group for the change of setting temperature at the "Monitor (All Groups)" or "Monitor (Block)" screens. The screen with the settings for the selected group is displayed on the touchscreen.

2. By tapping " △", the temperature is increased by 1ºC (Max 30ºC). By tapping "▽ ", the temperature is decreased by 1ºC (Min 19ºC in cooling, dry and fan operation; Min 17ºC in heating operation).

3. Tap "Monitor screen" to return to the "Monitor" screen.

NOTE

- By tapping "<" or ">" at the detailed setting screen, the Setting Temperature will be switched to another group in the same block.
- Control Restricted (Run/Stop Only) : In case of "Enable", each Setting Change is for all Groups or Blocks. Setting Change is not possible for each Group.
- The figure above shows an example of the setting temperature for a connected Air Conditioner Unit. The setting temperature range may not be indicated in certain case.
- If the settings are mixed when multiple groups are selected, the display will remain blank.

5.2.3.5 Permission/prohibition of operation from remote control switch
This function is used for prohibiting the operation from the remote control switch (RCS).
When the remote control switch is set as prohibited (by item / for all Items), the control of the selected item becomes unavailable.
The items that can be selected are: Run/Stop, operation mode, fan speed, swing louvre and temperature.
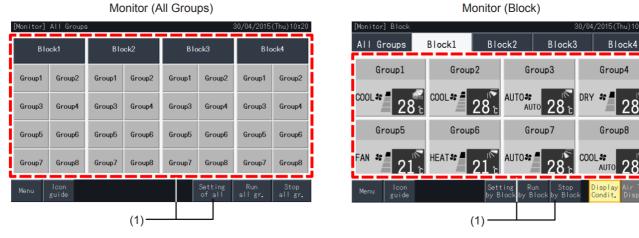
NOTE
Pay attention to the following when applying prohibition by Item to a group.
• When setting "Remote control operation," do not use the function control lock of the remote control switch.
– When using at the same time, "Remote control operation" and control lock functions, "Remote control operation" is prior and the control lock function cannot be set
– When changing setting from 'All prohib.' to 'All permitt.' at "Remote control operation", all the setting for the control lock of the remote control switch will be cancelled.
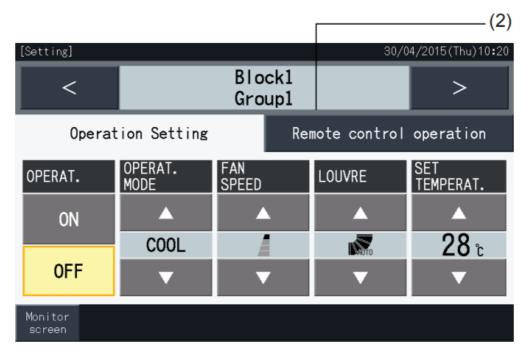
1. Select the target group for setting the prohibition of RCS operation at the "Monitor (All Groups)" or "Monitor (Block)" screens. The window for change of the settings of the selected group is then displayed on the touchscreen.

Monitor (All Groups)

Monitor (Block)

(1)   (1)
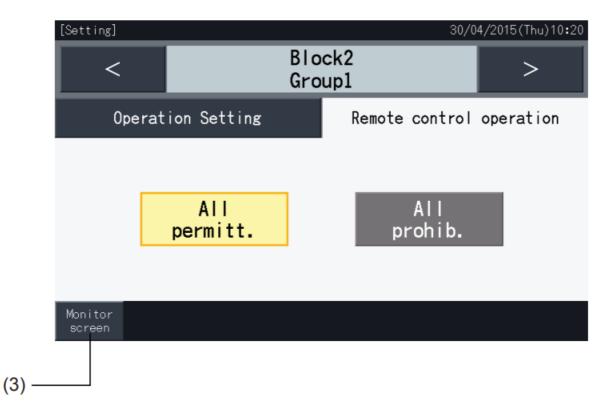
2. Select the "Remote control operation" by tapping on it.

(2)

3. Tap "Monitor screen" to return to the "Monitor" screen.

(3)

ⓘ NOTE

- By tapping "<" or ">" at the detailed setting screen, the remote control switch Permitted/ Prohibited will be switched to another group in the same

  block.
- Control Prohibited (Run/Stop Only) : In case of "Enable", each Setting Change is for all Groups or Blocks. Setting Change is not possible for each

  Group.
- Even if remote control switch is set as "Prohibit.", it is possible to stop operation with the remote control switch while running. It is also possible to restart operation using the remote control switch. However, the Stop operation will be only used in the case of an emergency. Do not use it in normal operation.
- If "Power Supply ON/OFF" (dl, d3) is set, do not set the remote control switch as "Prohibit ". If the remote control switch is restricted when using "Power Supply ON/OFF", the function "Control lock" for the remote control switch shall be used.
- If a communication error occurs, the remote control switch "STOP" (by item) may be cancelled. In this case, do the setting again.
- Do not set the prohibiting operation if multiple centralised controllers are used in the same H-LINK. Additionally, do not set this by other centralised controller or it may cause malfunction.

5.3 MENU

The table below shows the menu items and their functions.
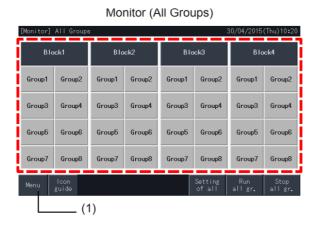
Item		Function
Filter Sign Reset		This function is used for turning off the filter sign display of indoor units in which filter sign has occurred.
		Regardless of the occurrence of the filter sign, it is also possible to reset the display time of the filter sign in the air conditioner units.
Schedule Setting		This function is used to start and stop the operation of air conditioners at the desired time. It Is possible to set the schedule in block and group units.
	Schedule Timer Setting	This function is used for setting the time (by the minute), 'Run/Stop" and temperature (19-30°C). For weekly schedule setting, up to 10 schedule items can be set per day It is also possible to copy the setting contents.
	Holiday Setting	This function is used for suspending the schedule operation temporarily. Scheduled operation remains suspended when the day is set as holiday. This function is used for setting irregular holidays such as national holidays.
	Schedule Timer ON/OFF Setting	'Schedule Timer OFF Setting° is used for suspending scheduled operation for the target group. Scheduled operation remains suspended when Schedule Timer is OFF. This function is used for long holidays, sudden holidays, national holidays, etc.
Adjusting Remote Contrd Switch Setting Temperature Range		This function Is used for limiting the setting temperature range of the remote control. It Is possible to define a minimum setting temperature for cooling and a maximum setting temperature for heating.
Date and time settings		This function is used for adjusting date and time.

Display of screen for cleaning	This function is used when cleaning the LCD screen of the central station. The screen returns to "Men/ when it is not tapped for 10 seconds.
Touchscreen Calibration	This function is used for calibrating (correcting) the recognition position of the touchscreen of the control. This function shall be used when there is a continued lack of response to the press of the buttons displayed on the screen.
Group Name Register	This function is used for registering the names of blocks and groups. The maximum length allowed for the name of each block or group is of 16 characters. It is also possible to copy names If a group or block is registered without a name, it is registered as 'Group 1" or 'Block 1° automatically.
Screen Display Setting	These functions are used for adjusting settings related with the screen display.
Brightness	This function is used for adjusting the brightness of the touchscreen display.
Language Setting	This function is used for changing the display language.
Temperature Unit	This function Is used for changing the temperature unit.
Accumulated Operation Time	This function is used for indicating the accumulated operation time of the air conditioner. · The value of accumulated operation time is displayed by month. · The operation time is displayed for 16 months, including the current month. · It is also possible to display 'Thermo ON time" by setting the appropriate controller option.
Contact Information	This function Is used for displaying the service contact address and the latest alarm code.
Summer Time Setting	This function is used for setting the summer time operation.
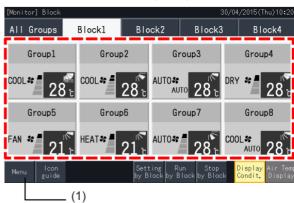
5.3.1 Display menu screen
The setting items for the indoor unit and central station are laid out in the menu.

1. Tap "Menu" at the "Monitor (All Groups)" or "Monitor (Block)" screens.

Monitor (All Groups)

Monitor (Block)
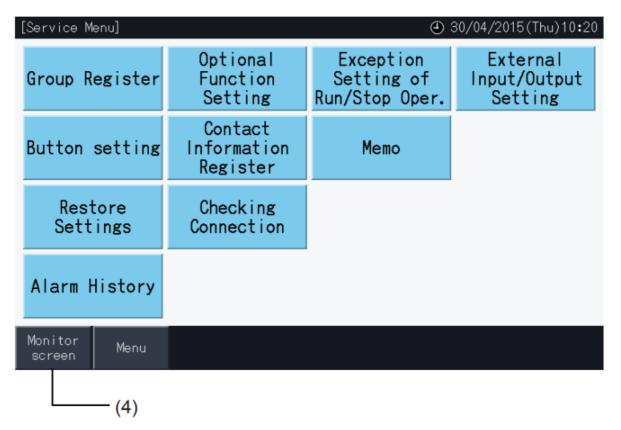
2. The "Menu" screen is displayed.
3. Select the item from the "Menu" screen.
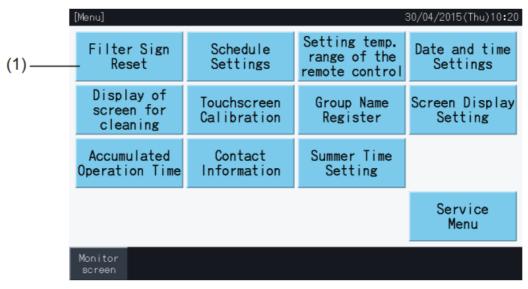
(2)

Filter Sign Reset	Schedule Settings	Setting temp. range of the remote control	Date and time Settings
Display of screen for cleaning	Touchscreen Calibration	Group Name Register	Screen Display Setting
Accumulated Operation Time	Contact Information	Summer Time Setting	

(3)

Service Menu

Monitor screen

4. Tap "Monitor screen" on the screen to return to the "Monitor" screen.

[Service Menu]   🕐 30/04/2015(Thu)10:20

Group Register	Optional Function Setting	Exception Setting of Run/Stop Oper.	External Input/Output Setting
Button setting	Contact Information Register	Memo	
Restore Settings	Checking Connection		
Alarm History			

Monitor screen   Menu

(4)
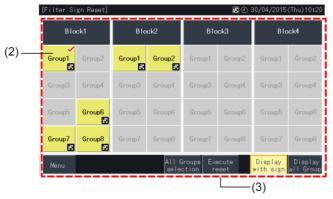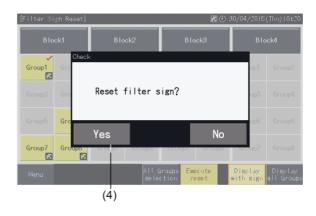
5.3.2 Filter Sign Reset
5.3.2.1 Reset Filter Sign

1. Select "Filter Sign Reset" at the "Menu" screen. (This is available only when the filter sign is indicated)

2. Select the target to reset the filter sign.

   • Tap "Display with Sign" to indicate only the groups with filter sign.

   • The target groups are indicated in yellow.

   • When selected, a " ✔ " sign appears on the group button.

3. Tap "Execute reset".

4. Tap "Yes" on the confirmation window, to reset the display of the filter sign and the operation time.

   Tap "No" to return to the "Filter Sign Reset" screen.

After reselling filter sign, the button becomes inactive.

5. Tap "Menu" to return to the "Menu" screen.
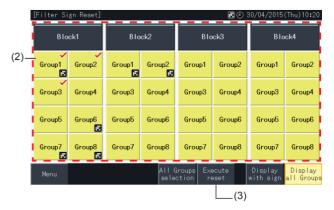
• This screen may be different depending on the Control pattern. The screen above displays the pattern A (4 blocks x 8 groups) set by the Control pattern.

• Filter Sign is indicated if the operating time of the Filter reaches the time set
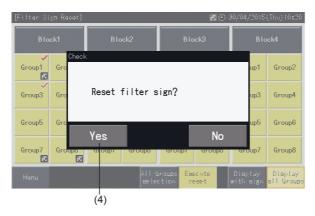
5.3.2.2 Reset Filter Operating Time
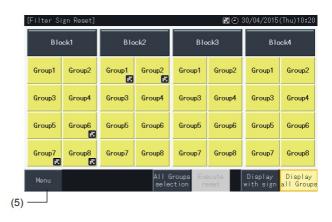
1. Select "Filter Sign Reset" at the "Menu" screen. (This is available only when the filter sign is indicated)
2. Select the target to reset the Filter operating time.
   • Tap "Display All Groups" to target all groups.
   • The target Groups are indicated in Yellow.
   • When selected, the group button will be indicated with a "✔" sign.
3. Tap "Execute reset".

4. Tap "Yes" on the confirmation screen.
   • The group that indicated Filter Sign will reset Filter Sign and Filter operating time.
   • The group that did not indicate Filter Sign will reset Filter operating time.
   • Tap "No" to return to Filter Sign Reset screen.
5. Tap "Menu" to return to Menu screen.

NOTE

- This screen may be different depending on the Control pattern. The screen above displays the pattern A (4 blocks x 8 groups) set by the Control pattern.
- Filter Sign is indicated if the operating time of the Filter reaches the time set

5.3.3 Scheduled settings
This function is used for timer operation.
It is possible to set a schedule for a block and for each group.
A holiday setting independent of the schedule is also available.
5.3.3.1 Schedule timer settings
Timer setting for weekly schedule
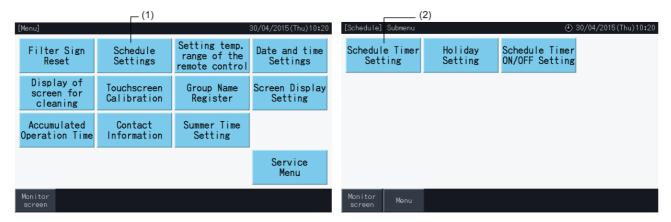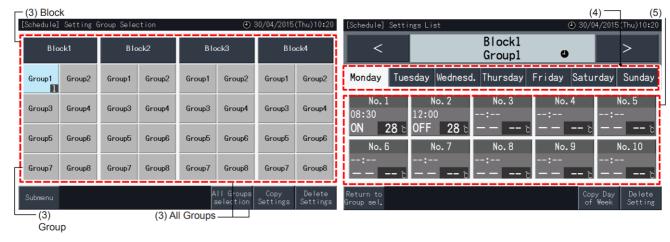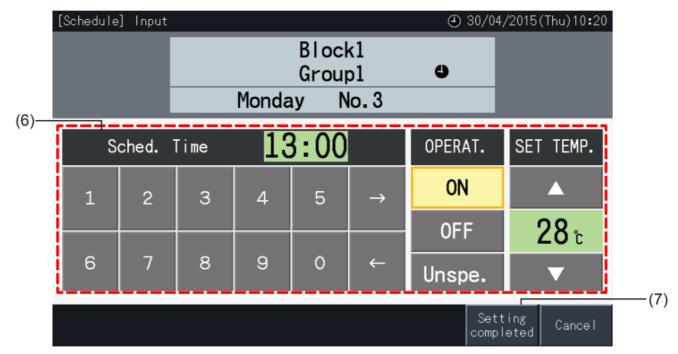

1. Select "Schedule Settings" at the "Menu" screen.

2. Select "Schedule Timer Setting" at the "Schedule Settings" screen.

3. Select the target (all groups, block or group).

   • The buttons of the groups with schedule setup are shown in blue.

   • The buttons of the groups with no schedule setup are shown in grey.

4. Select the target day of the week (from Monday to Sunday).

5. Select the schedule item number (from 1 to 10).

6. Set the schedule time, run/stop operation and temperature parameters.

   • Select the schedule item No. (1-10) and set the time.

   • Select "ON" , "OFF" or "Unspe".

   • Set the temperature by tapping "△" or "▽".

   • "- -" is shown in case that there are no settings for the change of a particular parameter, such as operation

   mode or temperature.

7. Tap "Selling completed" to confirm the setting. If "No" is tapped, the displayed selling contents are discarded,

   and the screen returns to the schedule setting screen.

   • Go back to step (5) to continue adding settings for the same day of the week.

   • Go back to step (4) to continue adding settings for other days of the week.

Block1
Group1　　⏱
Monday　　No.3

(6)

Sched. Time	13:00					OPERAT.	SET TEMP.
1	2	3	4	5	→	ON	▲
6	7	8	9	0	←	OFF	28℃
						Unspe.	▼

Setting completed　　Cancel

(7)
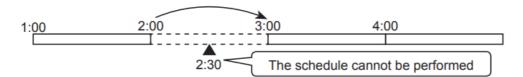
8. Tap "Return to Group Sel." to set the schedule timer for other groups. The screen returns to "Setting Group Selection" screen.

　• After setting the schedule, the registered schedule number (WE) appears indicated in the group button. (The colour of the buttons with schedule changes to blue)

　• In case that multiple groups share the same setting is the same, the same registered schedule numbers appears in all of them.

9. Tap "Sub Menu" to return to the "Schedule Settings" screen.

(8)

(9)
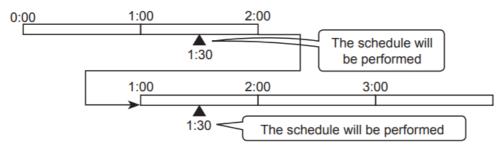
ℹ️ **NOTE**

- Make sure that the time and run/stop are set for the timer setting. (It is not necessary to set the temperature).
- The schedule control selection screen may be different depending on the control pattern.
- Schedule process when Summer Time is operating.

1 Starting Time

- When starting at 2:00 with a 1 hour shifting time, the schedule set at 2:30 cannot be performed.
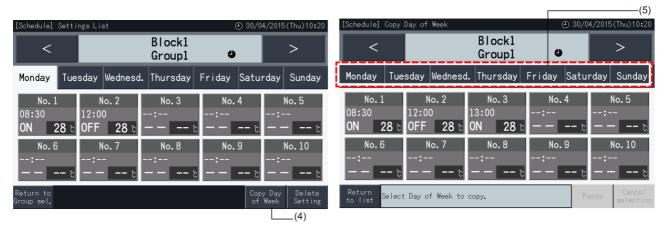
2 Finishing Time
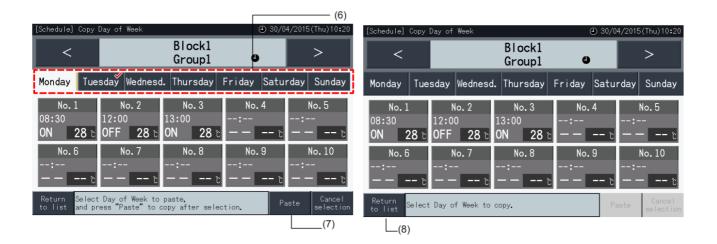
– When finishing at 2:00 with a 1 hour shifting time, the schedule set at 0:30 will be performed twice

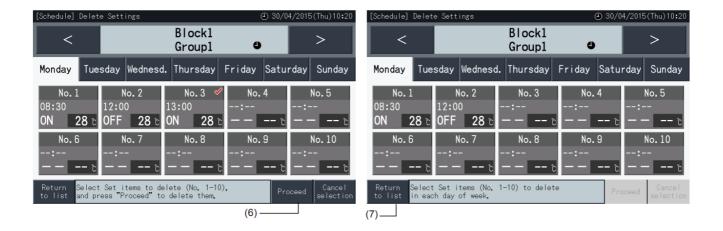**Copying schedule setting by days of the week**

1. Select "Schedule Settings" at the "Menu" screen.
2. Select "Schedule Timer Setting" at the "Schedule Settings" screen.
3. Select the target (all groups, block or group).
4. Tap "Copy Day of Week".
5. Select the day of the week to copy. The selected day appears highlighted with an orange frame.
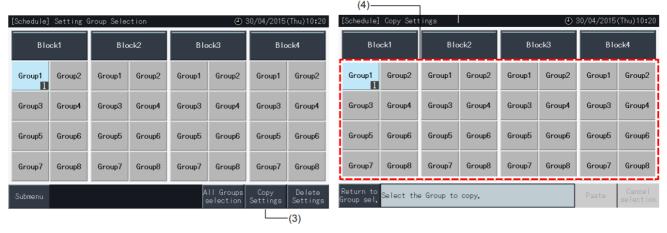
6. Select the tab of the day of the week to paste.

   • A check mark "✔" is displayed in the selected tabs.

   • It is possible to select multiple tabs.

   • Tap on a selected tab to switch its selection status back to unselected.

7. Tap "Paste" to copy the schedule settings.

   • Go back to step (5) to copy the schedule of other days of the week.

   • Proceed to step (8) to finish the settings.

8. Tap "Return to list" to return to the "Settings List" screen.
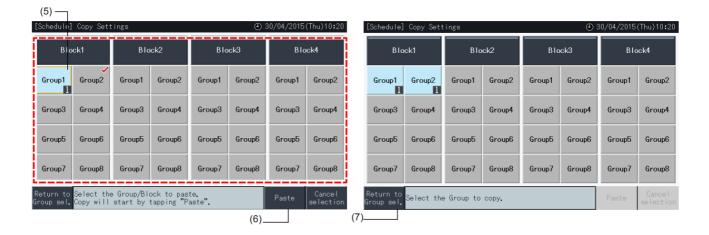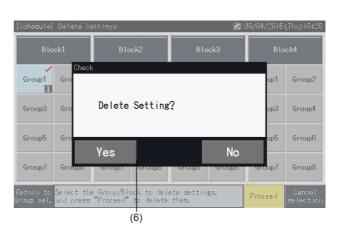
♦ **Copying schedule setting by each group**

1. Select "Schedule Settings" at the "Menu" screen.
2. Select "Schedule Timer Setting" at the "Schedule Settings" screen.
3. Tap "Copy Settings".
4. Select the group to copy. (A block cannot be selected as a source for copy).
   - The button of the selected group is highlighted in orange.
   - Tap the selected group again to cancel the selection. The orange frame disappears then.
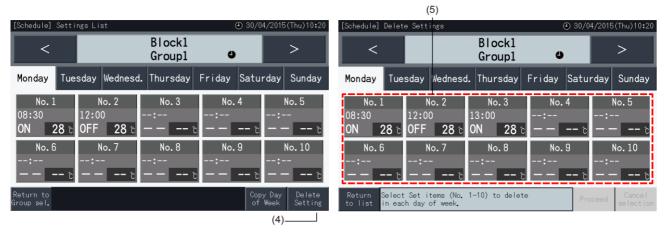
5. Select the destination group (or block) to paste.
   - A check mark "✔" is displayed in the selected buttons.
   - It is possible to select multiple groups (including blocks) as paste destination.

   - To cancel the selection, press the selected group again. The check mark "✔" disappears then.
6. Tap "Paste" to copy the schedule settings.
   - Go back to step (4) to copy the schedule of other groups.
   - Proceed to step (7) to finish. 7 Tap "Return to Group sel." to return to the "Group Selection" screen.

(5)

Block1		Block2		Block3		Block4	
Group1 1	Group2 ✓	Group1	Group2	Group1	Group2	Group1	Group2
Group3	Group4	Group3	Group4	Group3	Group4	Group3	Group4
Group5	Group6	Group5	Group6	Group5	Group6	Group5	Group6
Group7	Group8	Group7	Group8	Group7	Group8	Group7	Group8

Return to Group sel. | Select the Group/Block to paste. Copy will start by tapping "Paste". | Paste | Cancel selection

(6)

Block1		Block2		Block3		Block4	
Group1 1	Group2 1	Group1	Group2	Group1	Group2	Group1	Group2
Group3	Group4	Group3	Group4	Group3	Group4	Group3	Group4
Group5	Group6	Group5	Group6	Group5	Group6	Group5	Group6
Group7	Group8	Group7	Group8	Group7	Group8	Group7	Group8

Return to Group sel. | Select the Group to copy. | Paste | Cancel selection

(7)

♦ Deleting schedule setting by individual item

1. Select "Schedule Settings" at the "Menu" screen.
2. Select "Schedule Timer Setting" at the "Schedule Setting" screen.
3. Select the target (all groups, block or group).
4. Tap "Delete Settings".
5. Select a schedule item number to delete that schedule item.

   • It is possible to select multiple item number, even for different days of the week, when switching the display to each day b tapping its tab.

   • A check mark " ✔ " is displayed in the selected item numbers.

<	Block1 Group1	>

Monday | Tuesday | Wednesd. | Thursday | Friday | Saturday | Sunday

| No. 1 08:30 ON 28℃ | No. 2 12:00 OFF 28℃ | No. 3 --:-- -- --℃ | No. 4 --:-- -- --℃ | No. 5 --:-- -- --℃ |
| No. 6 --:-- -- --℃ | No. 7 --:-- -- --℃ | No. 8 --:-- -- --℃ | No. 9 --:-- -- --℃ | No. 10 --:-- -- --℃ |

Return to Group sel. | Copy Day of Week | Delete Setting

(4)

(5)

<	Block1 Group1	>

Monday | Tuesday | Wednesd. | Thursday | Friday | Saturday | Sunday

| No. 1 08:30 ON 28℃ | No. 2 12:00 OFF 28℃ | No. 3 13:00 ON 28℃ | No. 4 --:-- -- --℃ | No. 5 --:-- -- --℃ |
| No. 6 --:-- -- --℃ | No. 7 --:-- -- --℃ | No. 8 --:-- -- --℃ | No. 9 --:-- -- --℃ | No. 10 --:-- -- --℃ |

Return to list | Select Set items (No. 1-10) to delete in each day of week. | Proceed | Cancel selection

6. Tap "Proceed" to delete the selected schedule item number

   • Go to step (5) to delete other schedule numbers.

   • Proceed to step (7) to finish the setting.

7. Tap "Return to list" to return to the "Settings List" screen.

(6)   (7)

♦ **Deleting schedule setting by each group**

1. Select "Schedule Settings" at the "Menu" screen.

2. Select "Schedule Timer Setting" at the "Schedule Settings" menu.

3. Tap "Delete Settings".

4. Select the groups or blocks to delete their settings.

    • A check mark " ✔ " is displayed in the selected groups and blocks.

    • It is possible to select multiple groups and blocks for deletion.

    • Tap the selected group again to cancel the selection. The check mark " ✔ " disappears then.

(3)   (4)
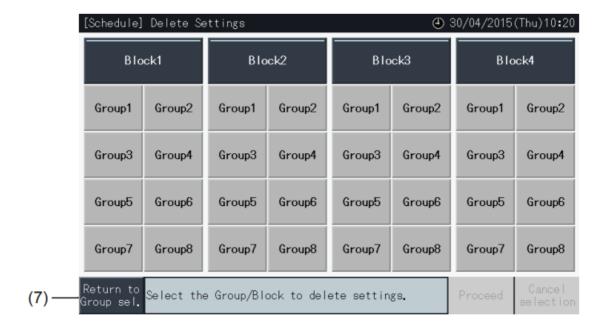
5. Tap "Proceed" to continue to the confirmation window.

6. Tap "Yes" at the confirmation window to delete the schedule settings.

    • Go back to step (4) to delete the schedule of other groups.

    • Proceed to step (7) to finish.

(5)   (6)

7. Tap "Return to Group sel." to return to the "Group Selection" screen.

Block1		Block2		Block3		Block4	
Group1	Group2	Group1	Group2	Group1	Group2	Group1	Group2
Group3	Group4	Group3	Group4	Group3	Group4	Group3	Group4
Group5	Group6	Group5	Group6	Group5	Group6	Group5	Group6
Group7	Group8	Group7	Group8	Group7	Group8	Group7	Group8

(7) — Return to Group sel. | Select the Group/Block to delete settings. | Proceed | Cancel selection

5.3.3.2 Holiday setting for suspending operation

1. Select "Schedule Settings" at the "Menu" screen.
2. Select "Holiday Setting" at the "Schedule Settings" screen.

(2)

[Schedule] Submenu   ⏱ 30/04/2015(Thu)10:20

| Schedule Timer Setting | Holiday Setting | Schedule Timer ON/OFF Setting |

Monitor screen | Menu

[Schedule] Select. Holiday Setting Group   ⏱ 30/04/2015(Thu)10:20

Block1		Block2		Block3		Block4	
Group1	Group2	Group1	Group2	Group1	Group2	Group1	Group2
Group3	Group4	Group3	Group4	Group3	Group4	Group3	Group4
Group5	Group6	Group5	Group6	Group5	Group6	Group5	Group6
Group7	Group8	Group7	Group8	Group7	Group8	Group7	Group8

Submenu | All Groups selection

(3)

3. Select the target (all groups, block or group). The calendar for the selection is shown.
   • The buttons of the groups with holiday setup are shown in blue.
   • The buttons of the groups with no holiday setup are shown in grey.

ℹ️ **NOTE**
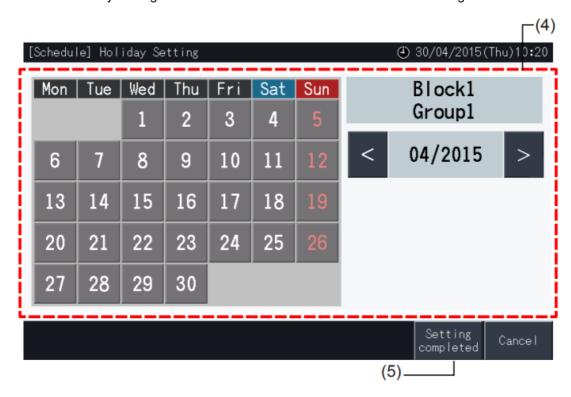
"Holiday" means that operation is suspended for the entire day.

4. Set the date to suspend the scheduled operation.
   • Browse the calendar forth and back by tapping "<" or ">".
   • By tapping on a date in the calendar, it is set as "Holiday" and marked with "◻". The "Holiday" setting is cancelled by tapping on the same date again.
   • Holiday setting is disabled for days before the current day.
   • The days with holiday setting are marked with ◻.
   • When "All Groups" or "Block" have been selected, the "◢" mark indicates those days when there are groups with holiday settings mixed with groups with no holiday settings.
5. Tap "Setting Completed" to confirm the contents of settings and return to the "Select Holiday Setting group"
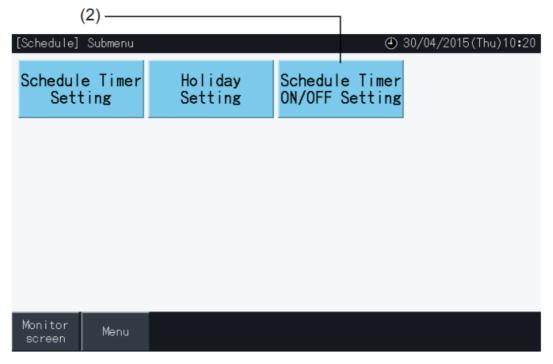
selection screen.

6. Tap "Submenu" at "Holiday setting" selection screen to return to the "Schedule settings" screen.
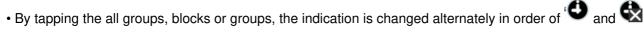
5.3.3.3 Schedule timer ON/OFF setting

1. Select "Schedule Settings" at the "Menu" screen.

2. Select "Schedule Timer ON/OFF Setting" at the "Schedule Settings" screen. The screen changes to "Schedule Timer ON/OFF Setting". The initial setting is "ON", as indicated with the " ⏱ " mark.
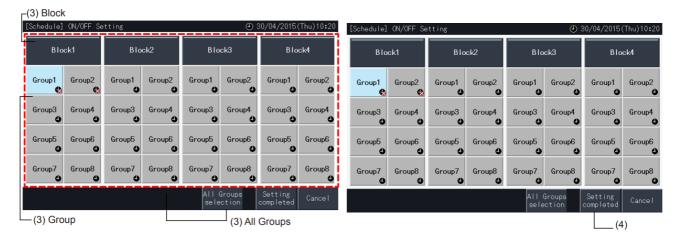
3. Select the target (all groups, blocks or groups).

   • By tapping the button of all groups, blocks or groups, the setting changes to "OFF", as indicated with the ⊗ " mark.

- By tapping the all groups, blocks or groups, the indication is changed alternately in order of ⏱ and ⊗
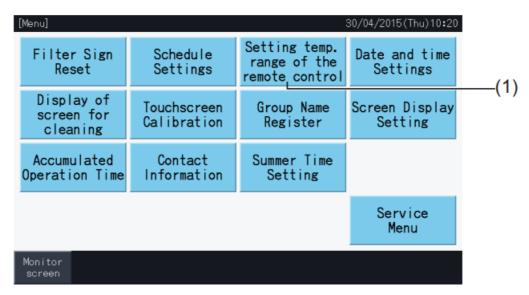
- The buttons of the groups with schedule timer settings are shown in blue.

- The buttons of the groups with no schedule timer settings are shown in grey.

- Schedule is turned ON: ⏱

- Schedule is turned OFF: ⊗

4. Tap "Setting Completed" to confirm the content of the settings and return to the "Schedule settings" screen.

(3) Block
(3) Group
(3) All Groups
(4)

5.3.4 Adjustment of the setting temperature range of the remote control

1. Select "Setting temp range of the remote control" at the "Menu" screen.*

   * Selection is not possible in case that the connected air conditioners do not support this function.

(1)
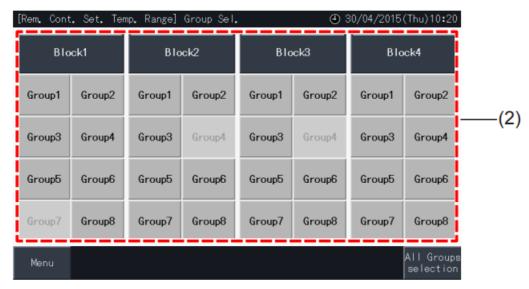
2. Select the target for setting of temperature range. (All Groups/Blocic/Group)*

   - The buttons of the groups with temperature range settings are shown in blue.

   - The buttons of the groups in which temperature range setting is not available are shown in grey.

   - The buttons of the groups with no temperature range settings remain inactive.

3. • Do not apply settings in groups using a wireless receive kit, since it is possible to set temperatures outside of the setting range from a wireless remote control switch.
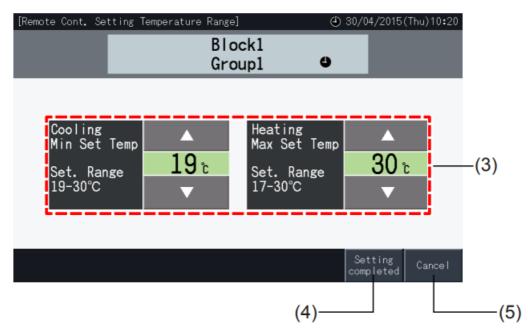
   The following cannot be selected:

   – Groups without a remote control switch

   – Groups in which the representative remote control switch group is not a standard unit supporting H-LINK II

(setting temperature range is from 19 to 30 degrees for cooling, and from 17 to 30 degrees for heating).
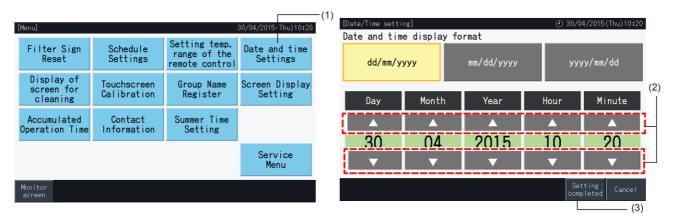
3 Tap "△" or "▽" to set the minimum setting temperature for cooling and/or the maximum temperature for heating.

4 Tap "Setting completed" to confirm the content of settings and to return to the selection screen.

5 Tap "Cancel" to discard the displayed settings and return to the selection screen.

5.3.5 Date and time settings

1. Select "Date and time Settings" at the "Menu" screen.
2. Set the display in order of "Year", "Month" and "Day".
3. Tap or press-and-hold the "△" or "▽" buttons for each field to adjust the date and time.
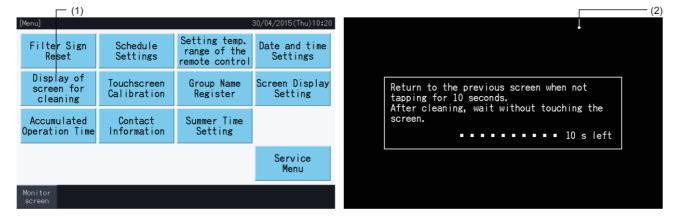
4. Tap "Setting completed" to return to the "Menu" screen.

ⓘ NOTE

• The clock can keep working for approximately 10 days after an electric power failure thanks to the backup function of the central station. It may be necessary to set the date and time again after a longer electric power failure.

• It is recommended to adjust the clock periodically. (Clock accuracy: -70 s/month).

5.3.6 Display of screen for cleaning

1. Select "Display of screen for cleaning" at the "Menu" screen.
2. The display is changed to the screen shown in figure (2). The screen becomes deactivated for cleaning. The display returns to the "Menu" screen when the touchscreen is not touched for 10 seconds.

ⓘ NOTE

• Clean and wipe the LCD screen with a dry soft cloth.
• Use diluted neutral detergent to remove oil and fat such as fingerprint marks from the touchscreen. Wring water out to dry the cloth before cleaning. After that, wipe the LCD screen again with a dry soft cloth.
• Do not use benzine, thinner or surface active agents in order to protect the touchscreen and its case from deformation or deterioration.
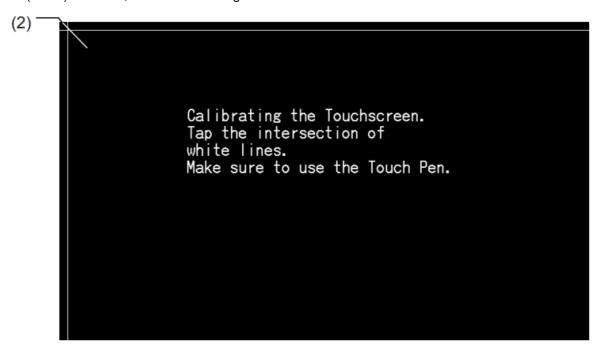
5.3.7 Touchscreen Calibration

1. Select "Touchscreen Calibration" at the "Menu" screen.

Filter Sign Reset	Schedule Settings	Setting temp. range of the remote control	Date and time Settings
(1) — Display of screen for cleaning	Touchscreen Calibration	Group Name Register	Screen Display Setting
Accumulated Operation Time	Contact Information	Summer Time Setting	
			Service Menu

Monitor screen
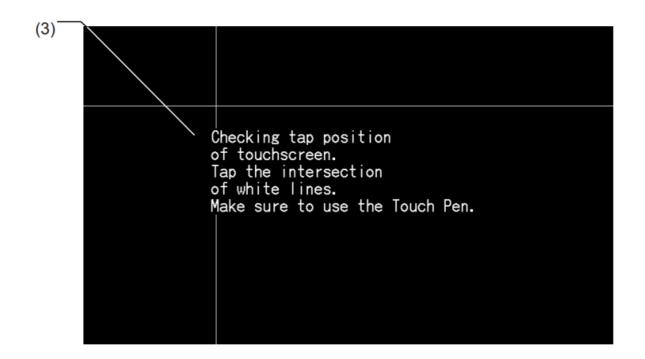
2. Calibrating touchscreen

   • Tap the intersections of white lines in order, as prompted on the screen.

   • After that, the display changes to the screen shown in figure (3).

   • If the intersections of white lines are not recognized normally, the message "Calibration is cancelled" is displayed on the screen. And then, and the display returns automatically to the "Monitor (All Groups)" or "Monitor (Block)" screens, without calibrating.

(2)

Calibrating the Touchscreen.
Tap the intersection of
white lines.
Make sure to use the Touch Pen.
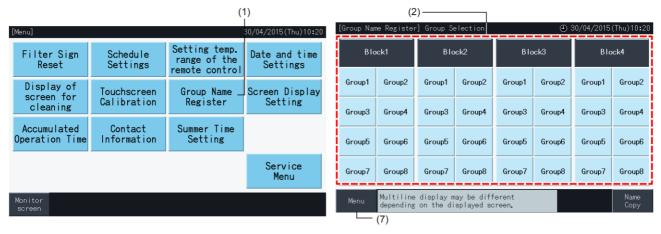
3. "Checking tap position of touchscreen"

   • Touch the intersections of white lines in order, as prompted on the screen.

   • White dots appear on the screen when tapping in positions other than the intersections of white lines.

   • When every intersection of white lines has been recognized normally, the display returns automatically to the "Monitor (All Groups)" or "Monitor (Block)" screens.

(3)

Checking tap position
of touchscreen.
Tap the intersection
of white lines.
Make sure to use the Touch Pen.
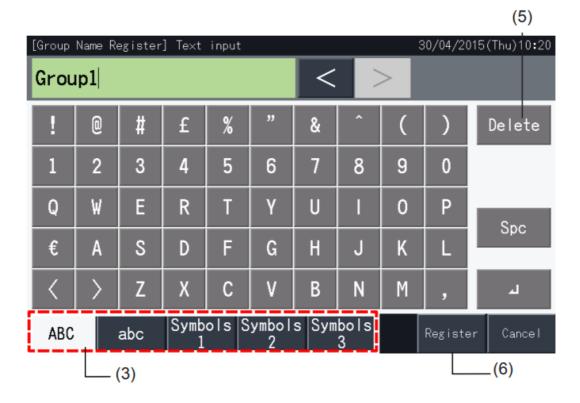
5.3.8 Registration of names of Groups and Blocks
5.3.8.1 Group name register

1. Select "Group Name Register" at the "Menu" screen.
2. Select the target (block or group) to register its name.

3. The display changes to the text input screen. It is possible to choose between upper case, lower case and symbol keyboards.
4. Enter the name of the group or block.
5. Tap "Delete" to delete the character to the left of the current position of the cursor.
6. Tap "Register" to confirm the introduced name and return to the selection screen (2).
7. Tap "Menu" at the selection screen (2) to return to the "Menu" screen, after having registered all the group and block names.

NOTE
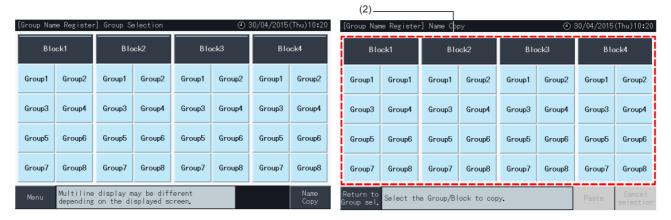
- The names of groups and blocks may consist of a maximum of 16 characters. When the display of group and block names is restricted to 8 characters per line, the 9th character appears at the beginning of the second line.
- The layout of the "Name Register" selection screen may be different depending on the control pattern.
- The heading is only displayed in 1 line, even if a new line is entered to display the title of the Group (Block).
- The title of the Group (Block) cannot be registered as blank. If it is left blank and "Register" is selected, the title of the factory default is displayed.
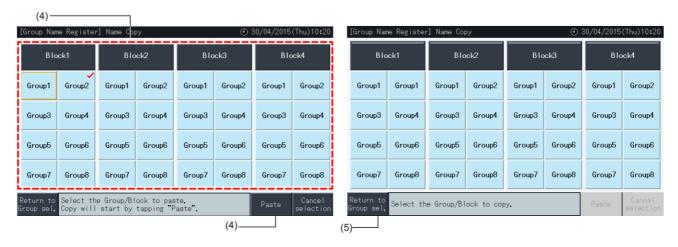
5.3.8.2 Copy of group or block name

1. Select "Group Name Register" at the "Menu" screen.
2. Select the source group or block to copy.
   • The button of the selected group or block appears highlighted with an orange frame.
   • Press the button of the selected group or block again to cancel the selection. The orange frame disappears then.

(2)

Select the destination group or block to paste.

• It is possible to select multiple groups or blocks for destination.

• The buttons of the selected groups or blocks are indicated with a " ✔ " check mark.

• To cancel the selection, press the button of the selected group or block again. The " ✔ " check mark disappears then.

3. Tap "Paste" to copy the name of the group or block to the selected destination.

• Go back to step (3) to copy the name of other groups or blocks.

• Proceed to step (6) to finish.

4. Tap "Return to Group sel." to return to the "Group Name Register" selection screen.

(4)

(4) (5)
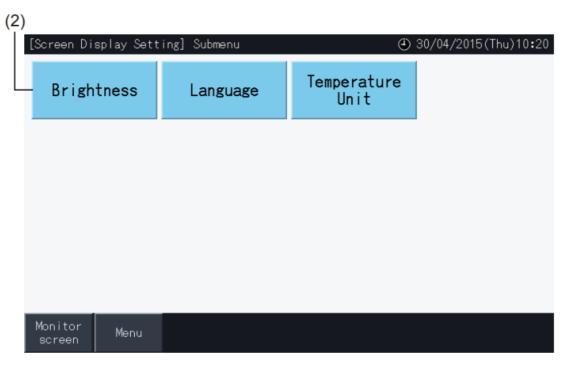
5.3.9 Screen Display Setting
5.3.9.1 Adjustment of backlight brightness of the touchscreen display
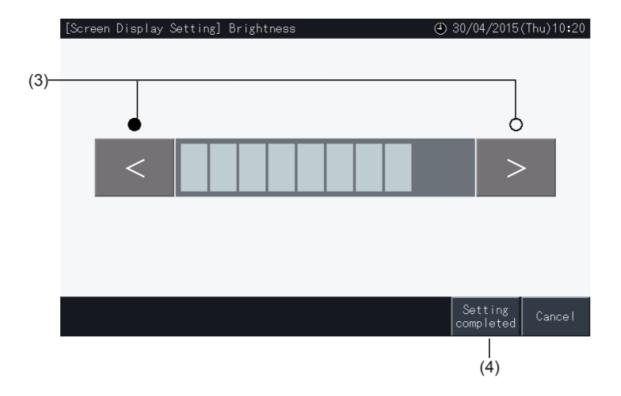
1. Select "Screen Display Setting" at the "Menu" screen.

(1)

[Menu]			30/04/2015(Thu)10:20
Filter Sign Reset	Schedule Settings	Setting temp. range of the remote control	Date and time Settings
Display of screen for cleaning	Touchscreen Calibration	Group Name Register	Screen Display Setting
Accumulated Operation Time	Contact Information	Summer Time Setting	
			Service Menu

Monitor screen

2. Select "Brightness" at the "Screen Display Setting" screen.

(2)

[Screen Display Setting] Submenu		🕐 30/04/2015(Thu)10:20
Brightness	Language	Temperature Unit

Monitor screen | Menu
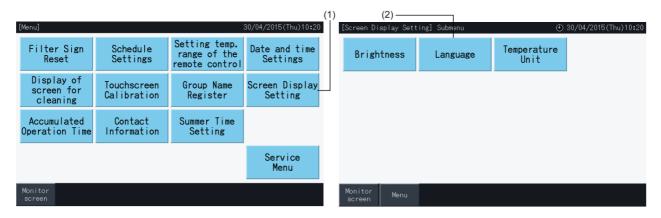
3. Tap "<" or ">" to adjust the brightness of the backlight.
4. Tap "Setting Completed" (4) to return to the "Menu" screen.
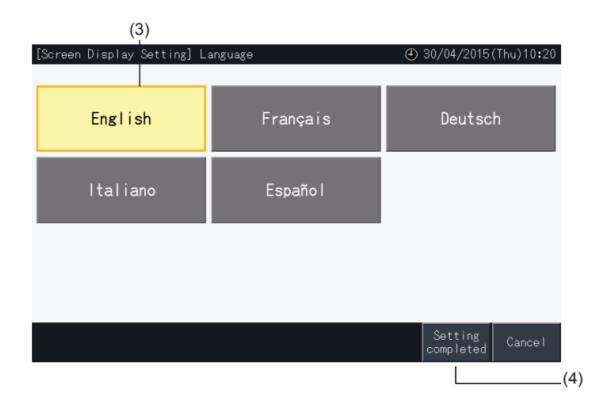
5.3.9.2 Language setting

1. Select "Screen Display Setting" at the "Menu" screen.
2. Select "Language" at the "Screen Display Setting" screen.
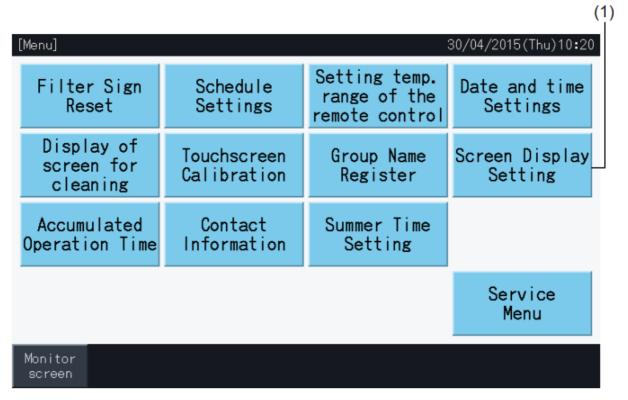
3. A confirmation window is displayed when selecting the language button.
4. Tap "Setting completed" to return to the "Screen Display Setting" screen.

(3)

[Screen Display Setting] Language ⏲ 30/04/2015(Thu)10:20

English	Français	Deutsch
Italiano	Español	

Setting completed | Cancel

(4)
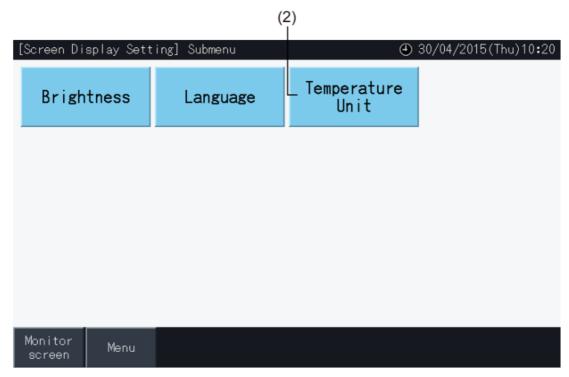
5.3.9.3 Temperature unit setting

1. Select "Screen Display Setting" at the "Menu" screen.

(1)

[Menu] 30/04/2015(Thu)10:20

Filter Sign Reset	Schedule Settings	Setting temp. range of the remote control	Date and time Settings
Display of screen for cleaning	Touchscreen Calibration	Group Name Register	Screen Display Setting
Accumulated Operation Time	Contact Information	Summer Time Setting	
			Service Menu
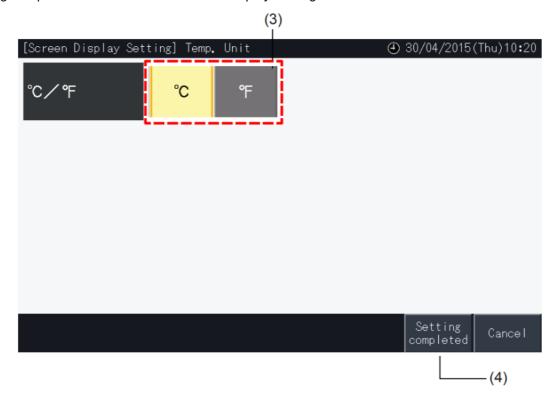
Monitor screen

2. Select "Temperature Unit" at the "Screen Display Setting" screen.

[Screen Display Setting] Submenu   ⊕ 30/04/2015(Thu)10:20

Brightness	Language	Temperature Unit

Monitor screen | Menu
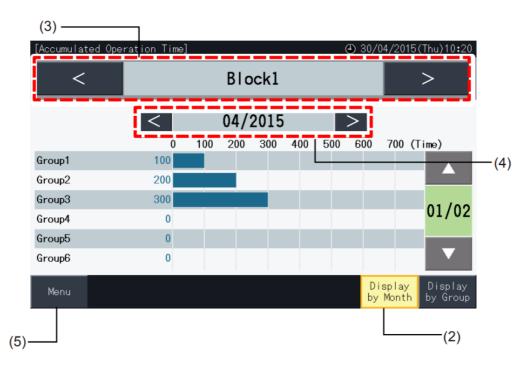
3. Select Celsius degrees or Fahrenheit degrees with the corresponding button. The selected button is highlighted in yellow.

4. Tap "Setting completed" to return to the "Screen Display Setting" screen.

(3)

[Screen Display Setting] Temp. Unit   ⊕ 30/04/2015(Thu)10:20

℃／℉	℃	℉

Setting completed | Cancel

(4)

5.3.10 Accumulated Operation Time
5.3.10.1 Display by month

1. Select "Accumulated Operation Time" at the "Menu" screen.
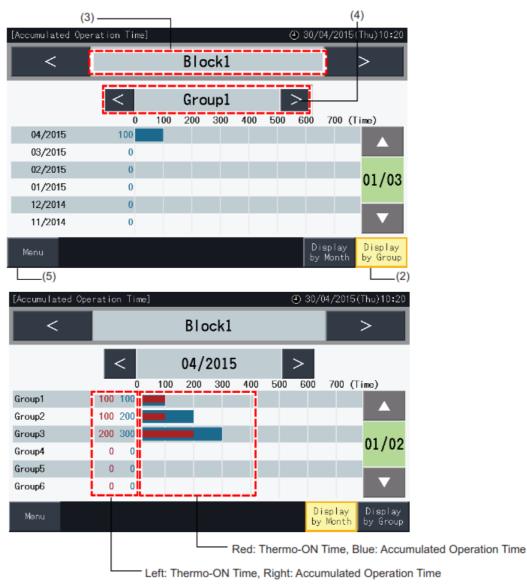
2. Tap "Display by Month".

3. Tap the "<" or ">" buttons to select the target block.

4. Tap the "<" or ">" buttons to select the target year and month.

5. Tap "Menu" to return to the "Menu" screen.

5.3.10.2 Display by group

1. Select "Accumulated Operation Time" at the "Menu" screen.

[Menu]   30/04/2015(Thu)10:20

Filter Sign Reset	Schedule Settings	Setting temp. range of the remote control	Date and time Settings
Display of screen for cleaning	Touchscreen Calibration	Group Name Register	Screen Display Setting
Accumulated Operation Time	Contact Information	Summer Time Setting	
			Service Menu

Monitor screen

2. Tap "Display by Group".

3. Tap the "<" or ">" buttons to select the target Block.

4. Tap the "<" or ">" buttons to select the target Group.

5. Tap "Menu " to return to the "Menu" screen.

(3) ——————   (4)

[Accumulated Operation Time]   ⏲ 30/04/2015(Thu)10:20

| < | Block1 | > |

| < | Group1 | > |

        0   100 200 300 400 500 600 700 (Time)
04/2015   100
03/2015   0
02/2015   0
01/2015   0
12/2014   0
11/2014   0

▲

01/03

▼

Menu   Display by Month | Display by Group

——(5)   ——(2)

[Accumulated Operation Time]   ⏲ 30/04/2015(Thu)10:20

| < | Block1 | > |

| < | 04/2015 | > |

        0   100 200 300 400 500 600 700 (Time)
Group1   100 100
Group2   100 200
Group3   200 300
Group4   0   0
Group5   0   0
Group6   0   0

▲

01/02

▼

Menu   Display by Month | Display by Group

Red: Thermo-ON Time, Blue: Accumulated Operation Time

Left: Thermo-ON Time, Right: Accumulated Operation Time

$\boxed{i}$ NOTE

- Accumulated operation time of this central station is displayed for reference purposes only. Hitachi does not ensure the precise accuracy of the aforementioned accumulated operation time for reference.
- "Thermo ON Time" can also be displayed additionally, if the corresponding option is selected in "Optional Function Setting" via the option for function selection setting. Contact your dealer or a Hitachi customer service centre for detailed information.

5.3.11 Contact Information

1. Select "Contact Information" at the "Menu" screen. The following information is displayed:
   – Contact information (2 independent items)
   – Name of block and group of the latest alarm occurrence
   – Latest alarm code

(1)

[Menu]			30/04/2015(Thu)10:20
Filter Sign Reset	Schedule Settings	Setting temp. range of the remote control	Date and time Settings
Display of screen for cleaning	Touchscreen Calibration	Group Name Register	Screen Display Setting
Accumulated Operation Time	Contact Information	Summer Time Setting	
			Service Menu

Monitor screen

2. Tap "Menu" to return to the "Menu" screen.

[Contact Information]   🕐 30/04/2015(Thu)10:20

■Contact Information
···· Electric Corp.

0000-000-0000

⚠️

🅱 :Block1
🅖 :Group1
🏠 :00-00   Model Code: F
Latest Alarm Code   **01**

Menu

(2)

NOTE

- This function is not available if there is no contact address registered.
- There is no indication of target blocks and groups and alarm codes if there is no alarm occurrence.

5.3.12 Summer time setting

1. Select "Summer Time Setting" at the "Menu" screen. The following information is displayed:

2. Select the function concerning each item. Then, the colour of the selected function changes.
3. Tap "Setting completed" to confirm the content and return to Menu screen.

5.3. SERVICE MENU

NOTE
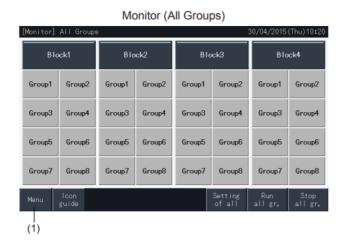
- This switch is for the serviceman Therefore do not use it.
- If this switch is used and the service menu is indicated on the screen, tap "Back". The screen will return to the

menu.
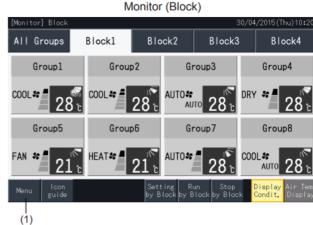
Items	Contents
Group Register	The connected indoor units are checked by the central station in the same H-LINK. This function is used for the group or block registration of them.
Setting of control patterns	Set the control pattern.
Main Unit Register	This function is used for the main unit registration in the each remote control group. (The main unit is the only one (1) in the one (1) remote control group.) The control command is sent from the central station to the main unit for the remote control group.
Sub Unit Register	This function is used for registration of the sub units except the main unit in the same remote control group. In the case of using the remote control switches or the receiver kits as follows, the sub units are registered automatically by the central station after the main unit registration. • The remote control switches and the receiver kits which model names start from PC-A**. • The remote control switches which model names start from PC-P**.
Display list of registers	Display the address of the Indoor Units which were registered in each group
Optional Function Setting	This function is used for setting and changing of the optional functions for the air conditioners and the central stations.
Air Conditioner, Remote Control Switch Setting	Set or change the optional function of the air conditioner and remote control switch.
Controller Setting	Set or change the operation mode or the color of the operation indicator of the central station.
Exception Setting of Run/ Stop Operation	This function is used to specify exceptional Groups/Blocks for All Run/Stop command. The All Run/Stop command will not be affected by the specified group/block.
External Input/Output Setting	There are 4 inputs and 2 outputs for external Input/Output function in the central station.
Button Setting	This function specifies each button to be shown/hidden. This function also includes specification/setting for "one-tap operation" or "press and hold" operation.
Contact Information Register	This function is used for editing the contents of contact information registration.
Memo	Record and Browse the Test Run and Maintenance Informations
Restore Setting	This function is used for restoring all the settings such as registered Groups (Blocks) and schedules.
Checking Connection	This function is used for checking of the connected indoor unit numbers in the same H-LINK. When this function is used, the confirmation for the keeping of registered information such as the group names, schedules, etc. will be indicated. If "OK" is tapped, the connected indoor unit numbers are updated with keeping the registered information. If "Cancel" is tapped, the setting of the central station is all restored.

Alarm History	This function is used for displaying the list of alarm history that occurred in the air conditioner and the controller. (Maximum 100 records)
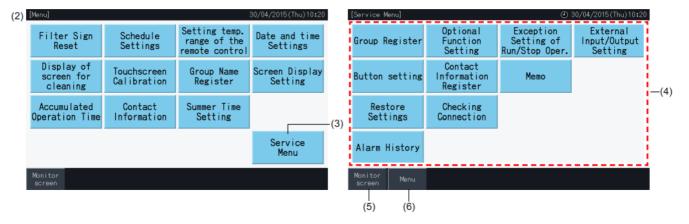
1. Tap "Menu" on the "Monitor (All Groups)" or "Monitor (Block)" screens.

Monitor (All Groups)

Monitor (Block)

2. "Menu" screen is displayed.

3. Press and hold "Service Menu" for at least 3 seconds. "Service Menu" is displayed.

4. Select the service menu item by tapping each item button. The setting screen of the tapped item will be displayed.

5. Tap "Menu" on the "Service Menu" to return to the "Menu" screen.

6. Tap "Monitor screen" to return to Monitor screen.

ℹ️ **NOTE**

Depending on the conditions of the air conditioner unit and the central station, the following items may not be selected:

- Group Register (*1)
- A/C unit and Remote Control Switch setting (Optional Function Setting) (*2)
- External Input/Output Setting (*1) (*2)
- Restore Settings (*1) (*3) (*4)
- Checking Connection (*1) (*2)

(*1): When the external input signal is ON.
(*2): When one air conditioner unit is operating.
(*3): When one air conditioner unit has the remote control switch restricted ("Without Remote Control Switch" not included) (*4): When one outdoor unit is operating in capacity control.

5.3.1. Group register

ⓘ NOTE

This function is detailed in section "5.1 Test run" since it is a required item when performing the Test run procedure.

5.3.2. Optional Function Setting

This function is used for setting and changing the selection of air conditioner and central station functions listed in the following table. Set by Monitor → Menu → Service Menu → Optional Function Setting.

Function	Description
Fixing Operation Mode	Set "Fixing Operation Mode" to "Enable" to fix the present operation mode. The operation mode is fixed to the present settings, which cannot be changed from the remote control switch or from the central station.
Fixing Setting Temperature	Set "Fixing Setting Temperature" to "Enable" to fix the present set temperature. The setting temperature is fixed to the present settings, which cannot be changed from the remote control switch or from the central station.
Cooling Only	Set "Cooling Only" to "Enable" to fix the operation mode to cooling. This function is used when setting heat pump models to restricted operation in cooling only. Operation modes "HEAT" and "AUTO" cannot be selected from the remote control switch or from the central station.
Auto	Set "Auto" to "Enable" to use the cooling/heating automatic operation. It is possible to set this mode from the remote control switch and from the central station. However, "AUTO" cannot be selected in the following cases: * When connected to a cooling-only model. * When the "Cooling Only" function is enabled.
Fixing Fan Speed	Set "Fixing Fan Speed" to "Enable" to fix the fan speed. The fan speed is fixed to the present settings, which cannot be changed from the remote control switch or from the central station.
Control mode	This function is used for switching the control mode of the central station between "Normal" and "Run/Stop Only" * Normal: The settings of each group are displayed when tapping its button. This is the control mode by default. * Run/Stop Only: The control mode at "Monitor 1" and "Monitor 2" is changed to "Run and Stop" for each group only. Tapping the button of each groups has the effect of switching its operation on and off, without changing any of the settings.
RUN Indicator	This function allows to switch the colour of the RUN lamp between green and red. When an error occurs, the indicator flashes on and off regardless of the colour setting.
All Groups Automatic Switching	Set to "Enable" in order to begin operation from All Groups display. If a central station is not operated for a given time, the screen returns automatically from Block display to All Groups display.
OFF time Remote control prohibition	Set to "Enable" in order to set the prohibition of all remote control operation (all the items) together with a stop order to the remote control at the OFF time of the schedule function of the controller. In this case, the prohibition of all remote control operation (all the items) is cancelled at the ON time, but there is no operation order. This function cannot be set when there is a prohibition of remote control operation (for individual items). Set this function to "Disab." in such cases.
Display graph values	Set to "Disable" in order to display the graphs for operation time or Thermo ON time without numeric values.
Thermo ON time display	Set to "Enable" in order to display Thermo ON time in the operation time display.

ⓘ **NOTE**
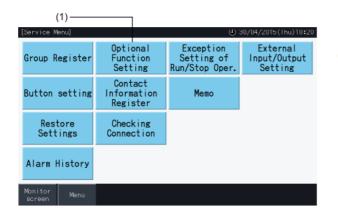
- When setting optional functions (Air conditioner or remote control settings), please set the same optional
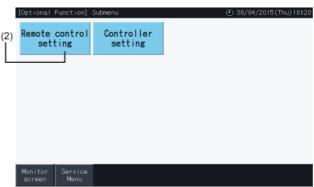
functions at the remote control of the group which has been Also, in case of setting optional functions at the remote control which can also be set from the controller (fixed, automatic cooling/heating), please set the same optional functions from the controller as well.

- For groups in which operation mode has been fixed by optional function settings and the demand of external input/output settings has been set to operation mode shift, demand signal ON results in stop regardless of the operation mode.
- When the Power ON/OFF (d1, d3) of the optional function is set, DO NOT set the prohibition of the remote control operation. In the case that the operation of the local remote control is not restricted when using the Power ON/OFF, DO NOT use the lock function of the local remote
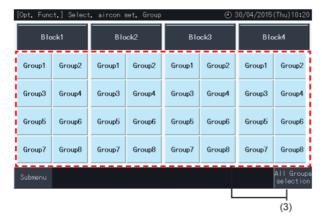
5.4.2.1 Air Conditioner Remote Control Settings

1. Select "Optional Function Setting" on the "Service Menu" screen when the air conditioners are not in operation.
2. Select "Remote control setting" on the Menu screen.
   Selection is not possible when one or more air conditioners are in operation.

3. Select the target of Optional Function (All Groups/Block/Group).
4. Select the function concerning each The function button selected changes the colour.
5. Tap "Setting completed" to confirm the set contents and return to the Menu screen of the target
6. Tap "Cancel" to cancel the set contents and return to the Optional Function target selection
   * Depending on the unit, the set contents may not apply. Please check the Installation and Operation Manual and the Instruction Manual of each indoor unit or remote control for more details.
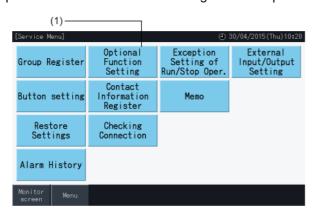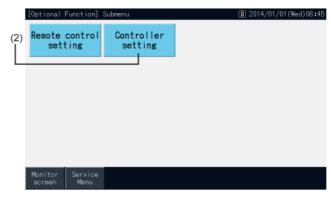
5.4.2.2 Controller Setting
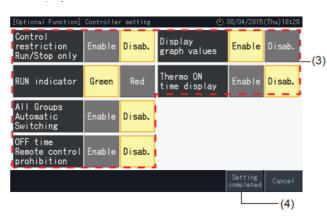
1. Select "Optional Function Setting" on the "Service Menu" screen when the air conditioners are not in
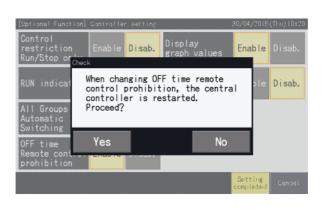
operation.Select "Controller setting" on the "Optional Function Setting" screen.
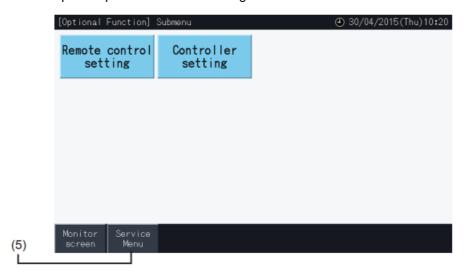
2. Select the setting of each of the function items as The selected setting appears highlighted in yellow. About OFF time Remote control prohibition

   – When it is enabled, it is not possible to set remote operation prohibition (for individual items). The Remote Operation Prohibited (by item) can do setting but, if operating simultaneously with other controllers then do not do

   – When All groups have Remote Operation permitted (all items) only, It is possible to switch "Enable" ↔ "Disable".

3. Tap "Setting completed" to confirm the content set and return to Optional Function Setting Menu *

   When switch "Enable" ↔ "Disable" of OFF Time Remote prohibited setting and tap "Setting completed", the confirmation screen is displayed as below.

4. Tap "Service Menu" to complete Optional Function Setting and return to Service Menu screen.

5.4.3 Exception Setting of Run/Stop Operation
"RUN" and "STOP" orders are not accepted when the group is set to operation in "All groups" or "All blocks".
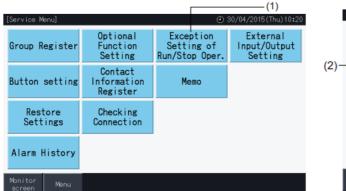
However, it is possible to set an exception rule for any of the following orders or combinations of orders, affecting specific groups:

- None
- Run + Stop
- Stop
- Run

NOTE
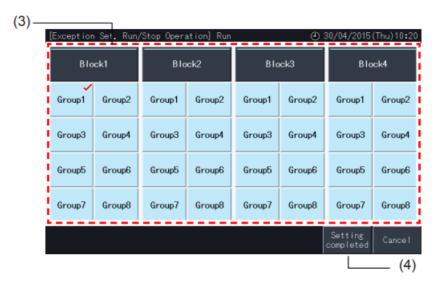
- The following commands are affected when this function is set.
    - Scheduled Timer Operation.
    - All Run/Stop-and "Run/Stop by Block" by External Input command.
- "Run/Stop-operation is available when the group is selected individually

1. Select "Exception Setting of Run/Stop Operation" on the "Service Menu" screen.
2. Select the operation to exclude. The selected operation is highlighted in yellow.

3. Select the target for the rule of exception for the selected operation (group/block)
    - Tap on a Group button to switch the selection state of that group.
    - Tap on a Block button to switch the selection state of all the groups in that block.
    - The selected groups are indicated with a check mark.
4. Tap "Setting completed" to confirm the set contents and to return to the "Exception setting of Run/Stop Operation" screen.

(3) — [Exception Set. Run/Stop Operation] Run   🕐 30/04/2015(Thu)10:20

Block1		Block2		Block3		Block4	
✓ Group1	Group2	Group1	Group2	Group1	Group2	Group1	Group2
Group3	Group4	Group3	Group4	Group3	Group4	Group3	Group4
Group5	Group6	Group5	Group6	Group5	Group6	Group5	Group6
Group7	Group8	Group7	Group8	Group7	Group8	Group7	Group8

Setting completed   Cancel

(4)

5.4.4 External Input/Output Setting

The External Input/Output function of the central station provides the capacity to control 4 inputs and 2 outputs. Select "External Input/Output Setting" on the "Optional Function Setting" screen to access the setting menu.

Input and Output	Connection	Function
Input 1	CN1 Pins 1-2	All Run/Stop (Level) Emergency Stop (Level) All Run (Pulse) Demand (Shift of Run/Stop mode / Outdoor Unit Capacity Control) All Stop (Pulse) No Setting (Factory Setting)
Input 2	CN1 Pins 2-3	
Input 3	CN2 Pins 1-2	
Input 4	CN2 Pins 2-3	
Output 1	CN3 Pins 1-2	All Run No Setting (Factory Setting) All Alarm
Output 2	CN3 Pins 1-3	

5.4.4.1 External Input Function

1. All Run/Stop (Level)

    Performs run/stop operation of all groups simultaneously by means of the external input signal.

2. All Run (Pulse)

    Performs run operation of all groups simultaneously by means of the external input signal.

3. All Stop (Pulse)

    Performs stop operation of all groups by means of the external pulse signal input.

4. Emergency Stop (Level)

    The operation of all groups is stopped simultaneously by means of the external emergency stop signal.

    While "Emergency Stop" is being carried out, "Central Control" is displayed in the LCD of the remote control switch, and operation from the remote control switch becomes disabled.

    In case of using other central stations together, "Run/Stop" operation is available from the other central stations even during the emergency stop.

5. Demand Control Function

    The external demand control signal allows to cut a peak demand of electrical consumption. The external demand signal can only be input through input terminal 1. The operation mode of the selected group is

changed by the demand signal as shown below.

	Demand Signal ON	Demand Signal OFF
Stop (*2)	Indoor Unit Operation Stop with RCS Operation Prohibited Mode	The operation condition returns to the previous state. (*3)
Run Mode Shift (*2) (*4)	COOL or DRY switch to FAN (Remote Control Operation Prohibited) HEAT switch to STOP (Remote Control Operation Prohibited)	
Operation Unit Capacity Control (*5) (*6) (*7)	Control the value of outdoor unit capacity in the setting value. (Setting Value: 100/90/80/70/60/50/40/0%)	Cancel the capacity control.

(*1): Do not set "OFF" or "Run Mode Shift" when using other central stations at the same time. When setting outdoor unit capacity control, set one of the central station and do not set the others.
(*2): Setting is only possible for Stop or Run Mode Shift. And it is not possible to set multiple contact points.
(*3): When operating in "AUTO" mode, or when "Fixing Operation Mode" is enabled at "Optional Function Setting".
(*4): Operation stops even if it is in Auto mode, or if the operation mode is fixed in the optional function settings.
(*5): Outdoor unit capacity control can be set to multiple contact points. When there is a signal input in multiple contact points, the priority for the execution of the controls is established according to the input number (Input 1 > Input 2 > Input 3 > Input 4).
(*6): There are cases in which the outdoor unit may not support certain settings, or in which available settings may differ according to its capacity value. Please contact with your dealer or with the designated customer service centre for detailed information.
(*7): It is possible to control via schedule without using demand control.

5.4.4.2 External Output Function

1. All Run Output

   External output of indoor unit operation signal to the target group. The operation signal is output even if one indoor unit in the target group is in operation.

2. External Output Alarm
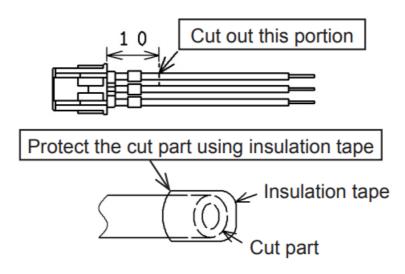
   External output alarm signal of indoor units to the target group. The alarm signal is output even if one indoor unit abnormality occurs in the target group.

5.4.4.3 Specifications of the External Input/Output Terminals

- **Input Terminal:** Non-voltage contact (normal open) for demand signal Input DC12V, 10mA. The contact can be switched. Pulse width is 300 ms or more for pulse signal input.
- **Output Terminal:** Contact (voltage is applied) for signal Output DC12V. Recommended Relay: MY Relay manufactured by Omron Corporation (Do not use a diode built-in type).
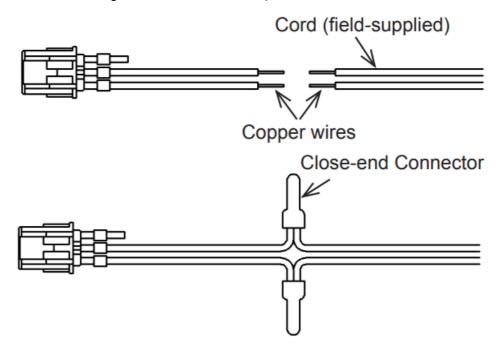- **Input/Output connection:** using accessory connector cord.

Connection procedure

1. In case that there is a section of cord which is not going to be used, please confirm the connector number, cut the cord as shown in the figure on the right, and protect the cut section with locally supplied insulation tape.
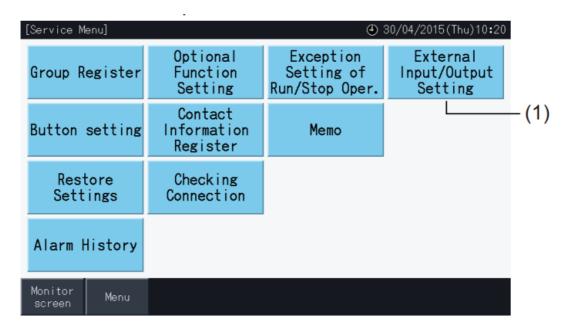
1 0
Cut out this portion

Protect the cut part using insulation tape

Insulation tape

Cut part

2. Follow one of the procedures below in order to connect a relay or a timer with a locally supplied cord.

   a. Soldering Twist and solder copper wires together and insulate them by winding plastic tape around.

   b. Caulking with closed-end connector accessory

   Insert the closed-end connector after twisting and soldering copper wires together, then caulk with a clamping tool.(pull the cord to check the tightness of the connection)

Cord (field-supplied)

Copper wires

Close-end Connector

5.4.4.4 External Input setting

1. Select "External Input/Output setting" on the Service Menu screen.

   Selection is not possible when air conditioners are in operation, or when the contact for external input signal is ON.

Group Register	Optional Function Setting	Exception Setting of Run/Stop Oper.	External Input/Output Setting
Button setting	Contact Information Register	Memo	
Restore Settings	Checking Connection		
Alarm History			

Monitor screen   Menu

——— (1)

2. Select the input target (From input 1 to 4) of the external input

[External I/O Setting] Settings List   30/04/2015(Thu)10:20

——— (2)

Input 1 No Settings	Input 2 No Settings
Input 3 No Settings	Input 4 No Settings
Output 1 No Settings	Output 2 No Settings

Service Menu
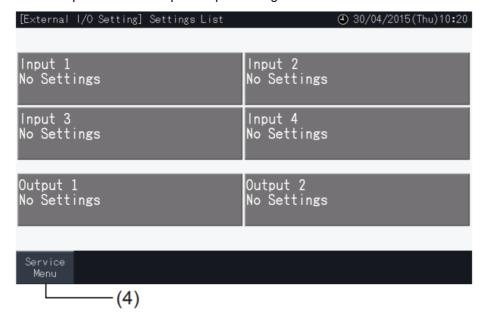
3. Select the function to be used with the external
   • The button for the selected function is highlighted in After selecting a function, proceed to the following point in the process as indicated below:
   • If "No Settings" is selected, go to section "No Settings".
   • If "Outdoor unit capacity control" is selected, go to section "Outdoor unit capacity control".
   • If any other function is selected, go to section"Other settings".

[External Input/Output Setting] Input 1   30/04/2015(Thu)10:20

(3)———

No Settings	All Run (Pulse)	Emergency Stop
All Run/Stop (Level)	All Stop (Pulse)	
Demand Stop	Demand Outdoor unit Capacity Control	Demand Operation Mode Shift*

* Cooling·Dry->Fan speed switching, Heating->Stop

Cancel

No Settings

4. Tap "Service Menu" to complete External Input/Output setting and return to the Service Menu screen.

```
[External I/O Setting] Settings List        ⊕ 30/04/2015(Thu)10:20

 Input 1                        Input 2
 No Settings                    No Settings

 Input 3                        Input 4
 No Settings                    No Settings

 Output 1                       Output 2
 No Settings                    No Settings


   Service
   Menu
```
———(4)

Outdoor unit capacity control

5. Select the value for Outdoor Unit Capacity. The selected capacity value button is highlighted in yellow.

6. Use the buttons on the right side of the screen in order to schedule outdoor unit capacity control when there is no external input contact being applied for this purpose.

• Select "Enable" or "Disable".

• Tap "A" or "V" to set the applicable starting time and ending time, in 30 minute steps.

• When the ending time falls earlier than the starting time, ending time becomes effective on the next day.
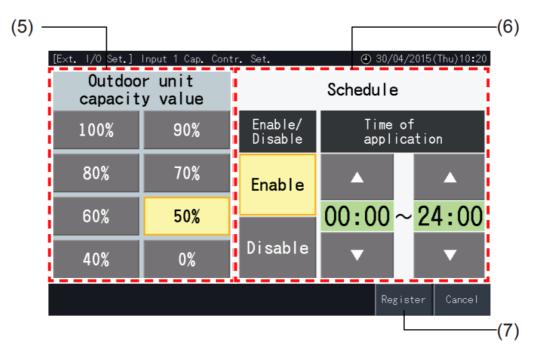
For example:

Starting Time 15:00

Ending Time 08:00,
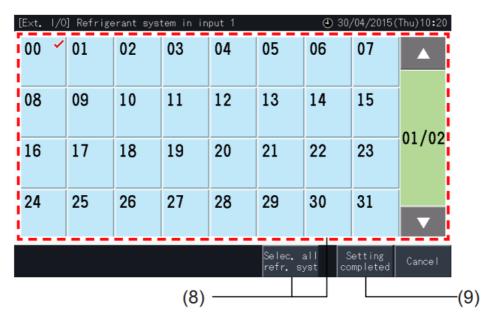
Capacity control starts at 15:00 and ends at 08:00 on the following day.

7. Tap "Register"

(5) ———   ———(6)

```
[Ext. I/O Set.] Input 1 Cap. Contr. Set.    ⊕ 30/04/2015(Thu)10:20

   Outdoor unit                     Schedule
   capacity value

   100%      90%         Enable/        Time of
                         Disable        application

    80%      70%         Enable     ▲            ▲

    60%      50%                    00:00 ~ 24:00

    40%       0%         Disable    ▼            ▼


                                        Register   Cancel
```
———(7)
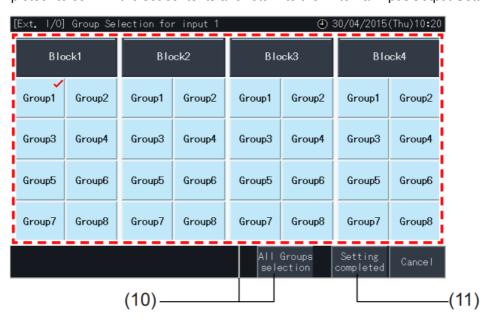
8. Select the target of capacity control (Refrigerant system).

• The buttons of the numbers of refrigerant systems of registered outdoor units are indicated in blue.

- The buttons of the numbers of refrigerant systems of unregistered outdoor units are indicated in grey. These refrigerant systems cannot be selected.
- Tap the button of a refrigerant system number in order to switch its selection state.
- Tap "Selec.all refr.syst" to switch the selection state of all refrigerant systems.
- The selected refrigerant systems are indicated with a check mark.

9. Tap "Setting completed" to confirm the setting contents and return to the External Input/Output Setting screen.

Other settings

10. Select the target of External Input Control. (All Groups/BlockiGroup).
    - Tap the button of a Group to switch its selection state.
    - Tap the button of a Block to switch the selection state of all the Groups in the Block.
    - Tap the "All Groups selection" button to switch the selection state of all the Groups.
    - The selected groups are indicated with a check mark.

11. Tap "Setting completed" to confirm the set contents and return to the External Input/Output Setting screen.
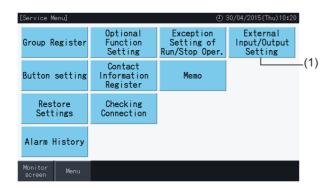
5.4.4.5 External Output Setting

1. Select "External Input/Output Setting" on the Service Menu screen.

Selection is not possible when air conditioners are in operation, or when the contact for external input signal is ON.

2. Select the Output target of the External Output (Output 1, Output 2).

3. Select the function to be used with the external output.

   The button for the selected function is highlighted in yellow.

4. Tap "Service Menu" to complete the external Input/Output Setting and return to Service Menu screen.
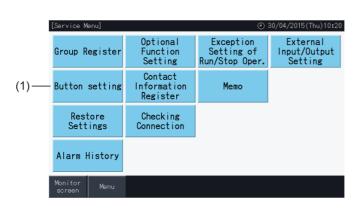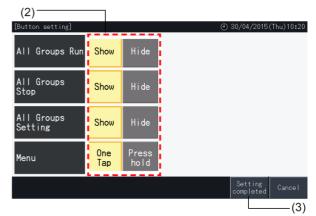
5.4.5 Button Setting
Button setting is used to select whether to show or hide certain operation buttons, thus restricting operation.
Set by Monitor → Menu → Service Menu → Button Setting.

1. Select "Button Setting" on the screen of "Service Menu".

2. Select the function concerning each items. The selected function appears highlighted in yellow.

3. Tap "Setting completed" to confirm the set contents and return to Service Menu screen.
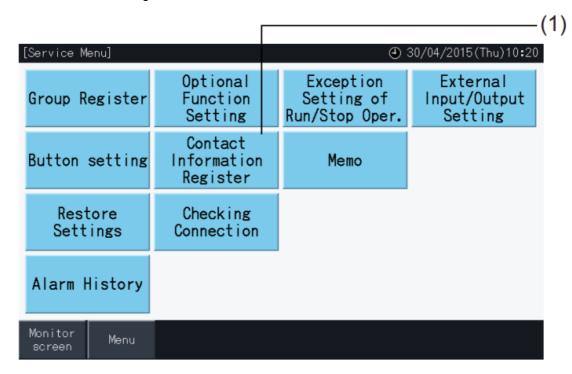
5.4.6 Contact Information Register
This function is used to edit or register the displayed contact information.
Set by Monitor → Menu → Service Menu → Contact Information Register.
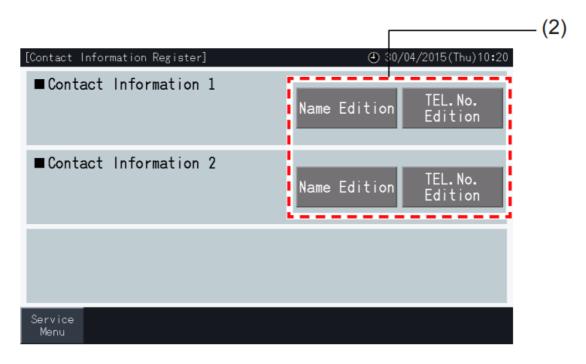
1. Select "Contact Information Register on the "Service Menu" screen.

(1)

2. Tap "Name Edition" or "TEL.No.Edition" buttons (2) to register the information corresponding to each field of "Contact Information 1" and "Contact Information 2".

(2)
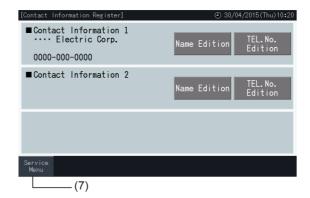
3. Enter the desired text at the keyboard screen.

ⓘ **NOTE**

Only numbers and symbols are available at the keyboard when inserting telephone numbers.

4. The number of characters possible to input is 60 characters maximum for the name the company and 30 characters maximum for the phone number.

5. Tap "Register" or "Cancel" to finish the edition, and return to the "Contact Information Register" screen.

6. Proceed to step 2 again to continue registering other fields or to step 7 to finish the setting.

7. Tap "Menu" to finish the setting and return to "Service Menu".

(5)

(7)
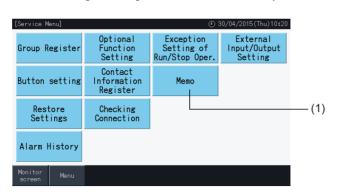
5.4.7 Memo
5.4.7.1 Register memo

1. Select "Memo" on the "Service Menu" screen.
2. Select the target to register. The character input screen is displayed.

(1)

(2)
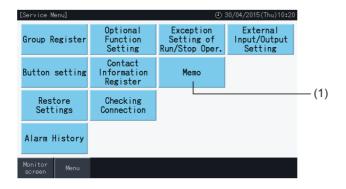
3. Select a registered character from the character list.
4. Input characters. Tap "Delete" to erase the character on the left side of the cursor. The memo can have a maximum length of 52 characters.
5. Tap "Register" or "Cancel" to finish the edition, and return to the "Memo" screen.
6. Tap "Service Menu" to return to the "Service Menu" screen.

(4)
(3)
(5)

(6)
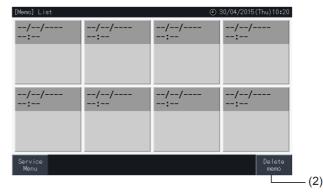
5.4.7.2 Delete memo

1. Select "Memo" on the "Service Menu screen.
2. Tap "Delete Memo".

(1)

(2)
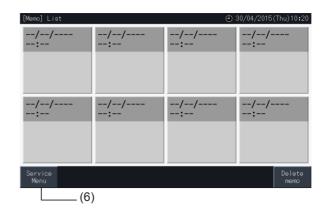
3. Select the memo to delete.

   • Tap a memo button to switch its selection state.

   • It is possible to select multiple memos.

   • A check mark is displayed on the selected memos.

4. Tap "Proceed" to clear the selected memos.

(3)

(4)

5. Tap "Return to list" to return to the "Memo" screen.

6. Tap "Service Menu" to return to the "Service Menu" screen.

(5)

(6)
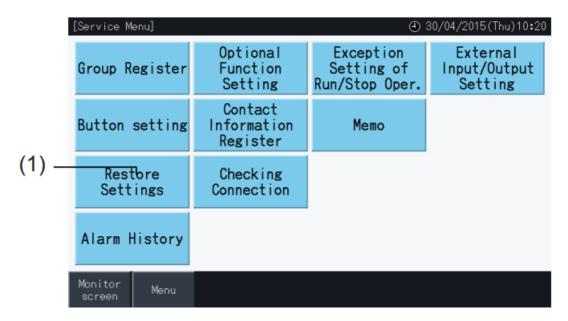
5.4.8 Restore Settings

1. Select "Restore Settings" on the "Service Menu" screen.

ℹ️ **NOTE**

This function cannot be selected when remote control switch operation is prohibited, an external input contact is ON, or outdoor unit capacity control is not cancelled. Cancel these parameters before performing "Restore settings".

Group Register	Optional Function Setting	Exception Setting of Run/Stop Oper.	External Input/Output Setting
Button setting	Contact Information Register	Memo	
Restore Settings	Checking Connection		
Alarm History			

(1)

| Monitor screen | Menu |

2. Tap "Yes" at the confirmation screen.

ⓘ **NOTE**
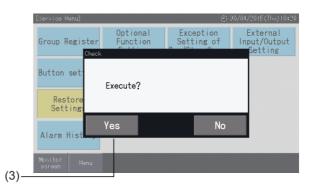
If "No-is tapped. the screen returns to "Service Menu".

3. A second confirmation screen is displayed. Tap "Yes" here to restore the settings. The screen changes after several seconds, and a check of the connections of the system starts.

ⓘ **NOTE**

If "No" is tapped. the screen returns to "Service Menu".

(2)

(3)
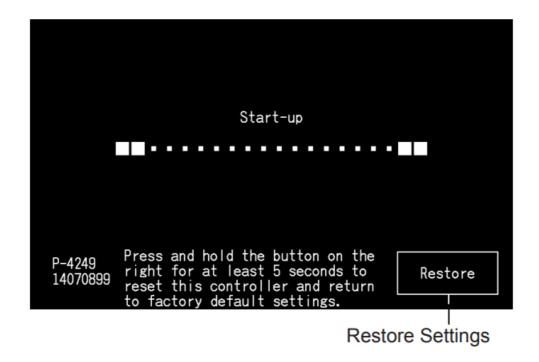
Information
It is also possible to restore the settings when the "Start-up" screen is being displayed.

1. Tap the "Restore" at the lower right corner of the "Start-up" screen for more than 5 seconds.
   Restore settings is not displayed when remote control switch operation is prohibited, an external input contact is ON, or outdoor unit capacity control is not cancelled.

2. Connection check process starts after a few seconds.

3. When the process for connection check is finished, the "Date and Time Settings" screen is displayed. (Refer to "5.3.5 Date and time settings.).
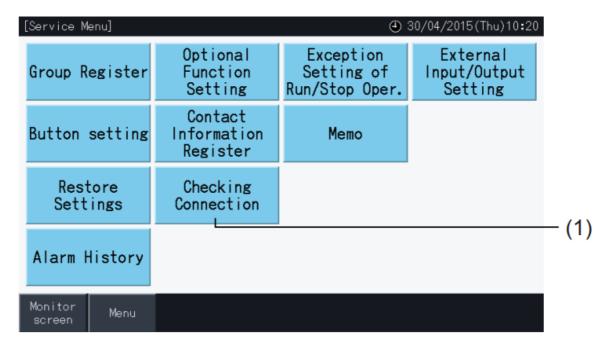
Restore Settings

5.4.9 Checking Connection

1. Select "Checking Connection" on the "Service Menu" screen.

ⓘ **NOTE**

This function cannot be selected when Mere is one ore more air conditioners in operation, or if Mere is an external input signal input to external input terminals 1 or 2.
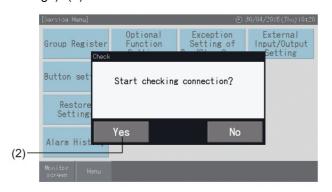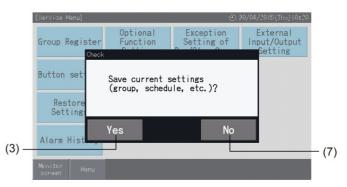

2. Tap "Yes" at the confirmation screen.

ⓘ **NOTE**

If tapping No the screen returns to 'Service Menu". The type of update of connection information depends on the following setting:

• Proceed to step 3 to update connection information while keeping Group register and settings such as schedule setting, etc. (3)

• Proceed to step 7 to perform connection checking initializing each setting. (It is same as restoring the
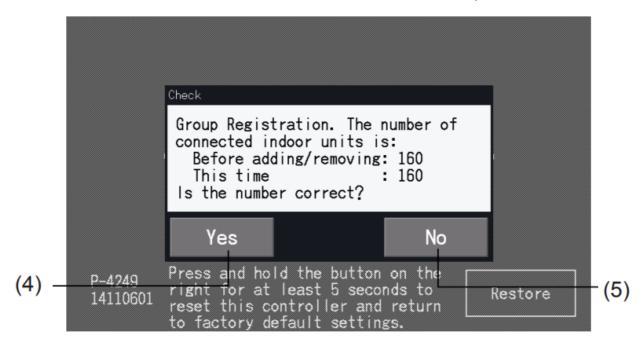
settings). (7)

Keeping settings

3. Tap "Yes" at the confirmation screen for keeping settings.

4. When the process of checking connection is finished, the number of connected units is indicated on the confirmation screen.
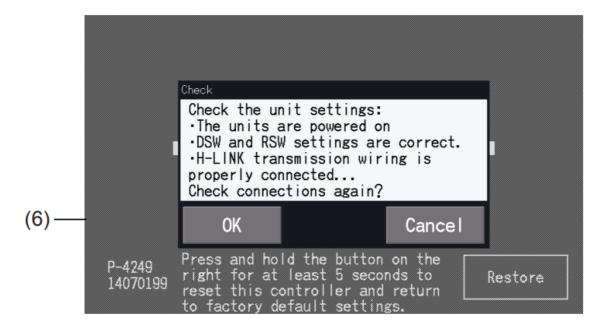
   If the number of connected units is indicated correctly, tap "Yes".

   The screen of "Main Unit Register" will be displayed. Refer to section "5.1.7.4 Registration of a group (Main unit)".

5. If the indicated number of connected units is different from the actual number, tap "No".

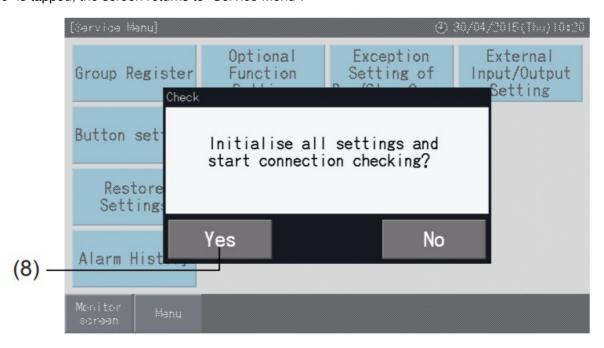6. A further confirmation screen is displayed. Check the air conditioners and tap "Yes".

(6)

Check

Check the unit settings:
·The units are powered on
·DSW and RSW settings are correct.
·H-LINK transmission wiring is
properly connected...
Check connections again?

OK   Cancel

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Press and hold the button on the
right for at least 5 seconds to
reset this controller and return
to factory default settings.

Restore

ℹ️ **NOTE**

• If "No- is tapped, the screen returns to "Service Menu".

• This function cannot be selected when remote control switch operation is prohibited, an external input contact is ON, or outdoor unit capacity control is not cancelled. Cancel these parameters before restoring the settings.

Not keeping settings

7. Tap "No" at the confirmation window.

8. The confirmation window of initialisation is displayed. Tap "Yes" to initialise all the settings and to start checking connection. "Yes" cannot be selected when there are units with remote control switch operation prohibition settings. All remote control switch operation prohibitions shall be cancelled beforehand.

ℹ️ **NOTE**

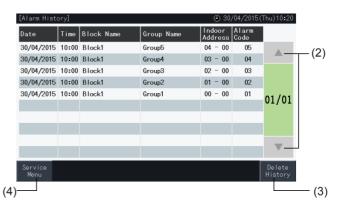If "No" is tapped, the screen returns to "Service Menu".

5.4.10 Alarm History

This function is used to record the time of alarm occurrence, the unit in which the abnormality has occurred and the relevant alarm code. The deletion of the alarm history record is also performed by this function.

Set by Monitor → Menu → Service Menu → Alarm History.

1. Select "Alarm History" on the "Service Menu" screen.
2. "Alarm History" screen is shown. Tap "△" or "▽" to scroll down the page in case that there are more than 11 alarm records.
   • It is not possible to scroll down the page if there are less than 10 alarm records.
   • Up to 100 records can be stored in the memory.
3. Tap "Delete History" to delete the alarm history. When tapping "Yes" at the confirmation screen, all alarm history records are deleted.
   If tapping "No", the screen returns to "Alarm History".
4. Tap "Service Menu" to close the Alarm History display and return to Service Menu Screen.

5.5 OTHER INDICATIONS ON THE LCD
5.5.1 In Normal Condition

|	Schedule	Displayed in case that the schedule is set.
	Filter Sign	Displayed when it is necessary to clean the indoor unit filter or the dust box for automatic cleaning filter needs cleaning. After cleaning, it is possible to suppress this indication with filter sign reset at the menu.
	Filter Automatic Cleaning Error	Displayed in abnormal stop in a unit with auto-cleaning. Please contact the shop where the product was purchased.
	Demand	Displayed when demand input is set by optional external input function. The icon blinks during the demand control. Contact your dealer or a Hitachi customer service centre for detailed information.
	Demand (Schedule)	Displayed when optional outdoor unit capacity control schedule is enabled, blinks during the control. Apart from the schedule, the icon blinks also during normal demand control when the demand input of the external input function is set.
	Inspection (Gas Heat Pump only)	In case of using a gas heat pump air conditioner, the blinking indicates the time for periodic inspection of the outdoor unit. • When it blinks slowly (in a cycle of 2 seconds ON / 2 seconds OFF) It indicates that the periodic inspection of the outdoor unit is near. • When it blinks faster (in a cycle of 0.5 seconds ON / 0.5 seconds OFF) It indicates that the time for the periodic inspection has passed. An engine failure may occur is the outdoor unit continues to be used without performing the periodic inspection. Request a periodic inspection to your dealer as soon as possible. **NOTE** The periodic inspection shall be performed every 5 years or 10,000 operation hours, whatever comes first. The accumulated operation time is indicated on the controller as mentioned above.
	Heat Storage Operating	Indicates that the heat storage is operating. At this time, the air conditioner cannot operate.
	Emergency Stop	Indicates when emergency stop signal is set by optional external input function. During the emergency stop, the indoor unit is stopped and operation by remote control switch is not available. Contact your dealer or a Hitachi customer service centre for detailed information.
	Remote Control Switch prohibited	Indicates the group in which operation from the remote control switch is prohibited. The set items cannot be operated from the remote control switch.
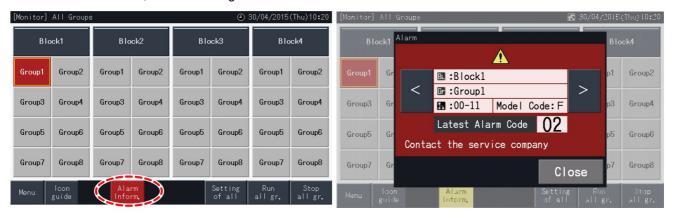
5.5.2 In Abnormal Condition
Abnormality

- The operation lamp flashes in red when an abnormal condition of the air conditioners occurs.
- When there is a group in abnormal condition, the colour of its button changes to red.
- The "Alarm Inform." button also appears at the lower side of the screen.

    If "Alarm Inform." is tapped, the following items are displayed:

- Refrigerant cycle number, address and model code of the indoor unit in abnormal condition.
- Alarm code

ℹ NOTE

(*) The model code may not be shown depending on the type of air conditioner unit.

- In case that multiple indoor units are in abnormal condition, the detailed information of abnormality for each unit is shown alternatively. In such cases, it is also possible to select the group in abnormal condition to display by tapping the "<" or ">" buttons at the "Alarm" window. Contact your dealer or a Hitachi customer service centre for detailed information, after checking the indications of the LCD.

Power Failure

- The display turns OFF in the event of a power failure.
- Once the devices stops due to a power failure, it does not start again after the power is recovered. Starting procedure shall be performed again.
- In case of a momentary power failure which lasts less than 2 seconds, the device starts up automatically again.

Noise

- There may be cases in which the display turns OFF and the device stops due to the activation of the micro controller for protection from electric noise. When the device stops due to this reason, perform the starting procedures again.

Freezing of display at the "Start-up" screen

- There is the possibility that a communication error occurred. Contact your dealer or a Hitachi customer service centre for detailed information.

TROUBLESHOOTING

Check the following table before contacting a dealer for assistance.

Condition	Cause
Indications on the touchscreen are not displayed.	• Check that the wiring for the power supply is connected to the wall plug. • Check that the power supply is turned ON.
The touchscreen display is in sleep mode.	• The touchscreen enters in sleep mode automatically when the touchscreen is not operated for a given length of time. Tap the screen to wake it up.
A part of the touchscreen does not turn ON or is always turned ON.	• There may be dead pixels on the LCD. This is not faulty.
There is no response when tapping a button on the touchscreen. However, the button next to the tapped one is responding.	• When the central station is used for a long time, the touchscreen may not match the position of display indication. Refer to section "5.3.7 Touchscreen Calibration" for the calibration of the touchscreen.
The air conditioner unit does not run.	• Check if the air conditioner unit is in heat storage mode. The air conditioner cannot operate while the heat storage unit is operating (with the exception of heat storage units which explicitly allow simultaneous operation).
The setting of louvre direction returns to previous setting.	• When the operation mode is "AUTO", the direction of the louvre is automatically corrected depending on the indoor unit model.
Scheduled operation does not work.	• Check if the holiday setting is turned ON. If so, cancel the holiday setting following the instructions of section "5.3.3.2 Holiday setting for suspending operation". • Check if the setting of scheduled operation is turned OFF. If so, the scheduled operation should be turned ON following the instructions of section "5.3.3.3 Schedule timer ON/OFF setting".
Date and time appear as "- -".	• Date and time appear as "- -" when the electrical power is suspended for a prolonged period. Set date and time again following the instructions of section "5.3.5 Date and time settings".
The selected settings are not applied.	• It may happen that the air conditioners do not respond to the orders of the central station immediately after power ON, because the starting process of the air conditioners has priority. Wait for a brief time before attempting operation again.
Simultaneous Run/Stop of all the units does not work.	• Check if exception settings for Run/Stop operation are being selected. If so, cancel the settings.
The state of the remote control switch does not match with the state of this controller when the indoor unit is recovering from a power failure.	• There is the possibility that the power supply was not stable when recovering from a power failure. Perform control operation from this controller to make the state of the remote control switch to match.

MAINTENANCE

- Clean and wipe the LCD screen with a dry soft cloth.
- Use diluted neutral detergent to remove oil and fat such as fingerprint marks from the touchscreen. Wring water out to dry the cloth before cleaning. After that, wipe the LCD screen again with a dry soft cloth.
- Do not use benzine, thinner or surface active agents in order to protect the touchscreen and its case from deformation or deterioration or tarnishing.

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Documents / Resources

HITACHI PSC-A32MN Touchscreen Central Controller [pdf] Instruction Manual
PSC-A32MN Touchscreen Central Controller, PSC-A32MN, Touchscreen Central Controller, Central Controller, Controller