ELGENS Wide Temperature TDM Series P-CAP Touch LCD Monitor User Manual

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Warning!

This equipment generates, uses and can radiate radio frequency energy and if not installed and used in accordance with the instructions manual, it may cause interference to radio communications. It has been tested and found to comply with the limits for a Class A computing device pursuant to FCC Rules, which are designed to provide reasonable protection against such interference when operated in a commercial environment. Operation of this equipment in a residential area is likely to cause interference in whichcase the user at his own expense will be required to take whatever measures may be required to correct the interference.

Electric Shock Hazard – Do not operate the machine with its back cover removed. There are dangerous high voltages inside

Disclaimer

This information in this document is subject to change without notice. In no event shall ELGENS Co., Ltd. be liable for damages of any kind, whether incidental or consequential, arising from either the use or misuse of information in this document or in any related materials

Packing List

Accessories (as ticked) included in this package are:

- Panel Mounting Kits
- 3 Pin Male Terminal Block
- Optional Adapter
- Other._____(please specify)

Safety Precautions

Follow the messages below to avoid your systems from damage:

- Avoid your system from static electricity on all occasions.
- Prevent electric shock. Don't touch any components of this card when the card is power-on. Always disconnect power when the system is not in use.
- Disconnect power when you change any hardware devices. For instance, when you connect a jumper or install any cards, a surge of power may damage the electronic components or the whole system

ELGENS WEEE, ROHS and REACH Compliance Statement

When it comes to product design, the engineering team at ELGENS strives for energy efficiency and environmental friendliness–not only because it lowers monthly power costs for our customers, but also to ensure minimal energy consumption for a greener tomorrow.

Though our products (no including customer consigned materials) are not officially certified, they are in fact compliant with WEEE, RoHS and REACH standards. This means we take care to properly recycle all unused material and end-of-life products, as well as minimize the use of potentially hazardous substances.

It is not required by law that certain fixed industrial plant equipment and tools entirely omit the use of lead, mercury, cadmium, and hexavalent chromium and flame retardants such as polybrominated biphenyls (PBB) or polybrominated diphenyl ethers (PBDE). However, ELGENS assumes the responsibility to restrict the inclusion of these resources in all products, meeting the requirements of RoHS and WEEE standards.

ELGENS., Co Ltd
Chief Executive Officer

Santiago Li
Date 2017 /9 /21

Contents [hide]

General Descriptions

Datasheet

	Title	10.1"~24" Touch monitor with IP65 front bezel, Auto Light sensor(Option), DP/VGA/HDMI, Panel Mounting kits , DC 12V input by 3-pin terminal block
	Feature	**IP65 Compliant Front Bezel** **-40 ~ 80 °C Wide Temperature** **DP / VGA / HDMI Input Port** **Panel Mounting Kits** **IEC 60945 Compliance** **Auto Light Sensor (Option)** **1000 / 1600nits High Brightness Backlight (Option)** **Optical Bonding (Option)** **AR/AG (By Request)**
	Specification	
	Touch Screen	P-cap by USB interface (self-capacitance function include, Supports Win 10, 8, 7, XP / Linux / Android OS)

Power Input	3-Pin Power Input Terminal Block DC 12V Power Input, Optional DC9~36V Wide Voltage Power Input Fuse / Input reverse / Over current / Output short circuit protection	
Mounting	1. VESA Mount 75 x 75 / 100 x 100 , M4 Screw Hole 2. Panel Mounting	
Vibration	1.5 Grms @10~500Hz, IEC-60068-2-64	
Shock	Half-sine, 3G @ 11ms, IEC-60068-2-27	
Operating Temp	-40 ~ 80 °C IEC-60068-2-1/2/14	
Humidity	10~90% @40 °C, non-condensing	

Ordering Code

Model Number	Description	

TDM-P101 WT	10.1″ touch monitor with IP65 front bezel, DP / VGA / HDMI, Panel mounting kits, 3-pin terminal block DC 12V adapter
TDM-P104 ST	10.4″ touch monitor with IP65 front bezel, DP / VGA / HDMI, Panel mounting kits, 3-pin terminal block DC 12V adapter
TDM-P121 ST	12.1″ touch monitor with IP65 front bezel, DP / VGA / HDMI, Panel mounting kits, 3-pin terminal block DC 12V adapter
TDM-P150 ST	15.0″ touch monitor with IP65 front bezel, DP / VGA / HDMI, Panel mounting kits, 3-pin terminal block DC 12V adapter
TDM-P156 WT	15.6″ touch monitor with IP65 front bezel, DP / VGA / HDMI, Panel mounting kits, 3-pin terminal block DC 12V adapter
TDM-P170 ST	17.0″ touch monitor with IP65 front bezel, DP / VGA / HDMI, Panel mounting kits, 3-pin terminal block DC 12V adapter
TDM-P173 WT	17.3″ touch monitor with IP65 front bezel, DP / VGA / HDMI, Panel mounting kits, 3-pin terminal block DC 12V adapter
TDM-P185 WT	18.5″ touch monitor with IP65 front bezel, DP / VGA / HDMI, Panel mounting kits, 3-pin terminal block DC 12V adapter
TDM-P190 ST	19.0″ touch monitor with IP65 front bezel, DP / VGA / HDMI, Panel mounting kits, 3-pin terminal block DC 12V adapter
TDM-P215 WT	21.5″ touch monitor with IP65 front bezel, DP / VGA / HDMI, Panel mounting kits, 3-pin terminal block DC 12V adapter
TDM-P240 WT	24.0″ touch monitor with IP65 front bezel, DP / VGA / HDMI, Panel mounting kits, 3-pin terminal block DC 12V adapter

General instructions

1. Support Vertical refresh rate up to 75Hz for VGA~SXGA+(1400×1050) and 60Hz for higher resolution of VESA Standard Timing.
2. Support VGA analog standard input (15-pin D-Sub connectors).
3. Automatic detection of separate synchronize and composite synchronizes of VGA.
4. Support Display Port input (DP)
5. Support High-Definition Multimedia Interface (HDMI) input .
6. RoHS compliant .
7. Support Timing Table O

Mode	Resolution	H Freq.(KHz)	V Freq.(Hz)
1	640*350@70	31.469	70.087
2	640*480@60	31.469	59.940
3	640*480@72	37.861	72.809
4	640*480@75	37.500	75.000
5	720*400@70	31.469	70.087
6	800*600@56	35.156	56.250
7	800*600@60	37.879	60.317
8	800*600@72	48.077	72.188
9	800*600@75	46.875	75.00
10	1024*768@60	48.363	60.004
11	1024*768@70	56.476	70.069
12	1024*768@72	58.038	71.918
13	1024*768@75	60.023	75.029
14	1280*70@50	36.91	49.82
15	1280*720@60	44.62	59.81
16	1280*1024@60	63.980	60.000
17	1280*1024@70	74.882	69.853
18	1280*1024@75	79.976	75.025
19	1360*768@60	47.72	59.799
20	1440*900@60	55.935	59.887
21	1680*1050@60	65.3	60
22	1920*1080@50	56.25	50.00
23	1920*1080@60	66.6	60

I/O Connect

Block Diagram
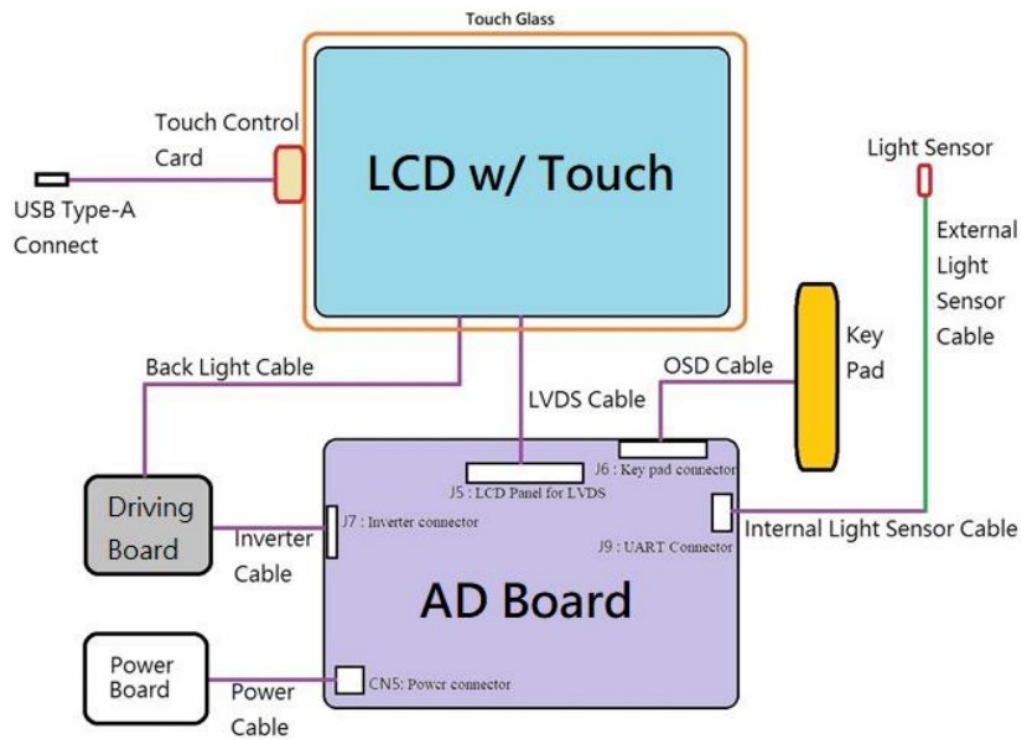
Cable	Notes
LVDS Cable	LVDS signal transfer
Inverter Cable	Back Light Power and Control signal
Backlight Cable	Back Light Power
Touch Cable	Touch USB control signal
OSD Cable	Key pad control signal
Internal Light Sensor Cable	Internal Light Sensor signal
External Light Sensor Cable	Internal Light Sensor signal
Power Cable	DC 12V power

OSD Setting
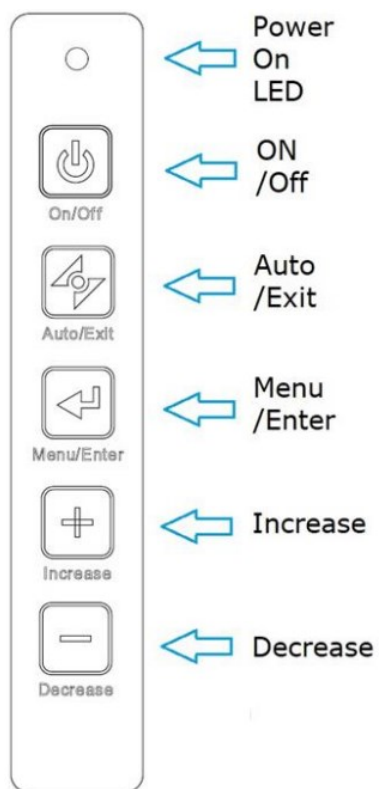
Power on LED : Off /Orange , On/Green
On/Off : Power On/Off Monitor
Menu/Enter : Open OSD , Enter , Save
Increase : Select item , Increase value
Decrease : Select item , Decrease value

OSD MAP

Main	Second	Select Items	Defaul
Color	Contras t	0%~ 100%	50%
	Brightnes s	0%~ 100%	100%
	Color Adjust	Red 0%~ 100%	50%
		Green 0%~ 100%	50%
		Blue 0%~ 100%	50%
	Color Temp	9300/6500/5800/US ER	US ER
	Auto Color	Color Adjust	
Image Setting	Clock	0%~ 100%	50%
	Phase	0%~ 100%	29%
	Sharpness	0/1/2/3/4	2
	H.Position	0%~ 100%	50%
	V.Position	0%~ 100%	50%
OSD Menu	OS D H.P os .	0%~ 100%	50%
	OS D V.P os .	0%~ 100%	50%
	OS D Timer	5 – 60 s ec	10 Sec
	Language	Englis h/Franqais /Deuts ch/Es pano l/ / /	English
Signal Source	D-S UB/HDMI/DVI/Aut o S earch		Auto Search
Reset			

OSD Operation

How to reconfigure

1. Press the "MENU/Enter" button to activate the OSD menu.
2. Press the "+" / "–" button to navigate through the functions. Select the highlight and desired function and press the "MENU/Enter" button to activate it. If the function selected has a sub-menu, also press the "+" / "–" button to navigate through the sub-menu functions and select the highlight and desired sub-menu function and press the "MENU/Enter" button to activate it.
3. Press the "+" / "–" button to change the settings of the selected function.
4. To save the OSD menu, press the "MENU/Enter" button and press the Auto/Exit until OSD menu disappears.
5. Repeat steps 1-3 to adjust other settings.

OSD function introduction
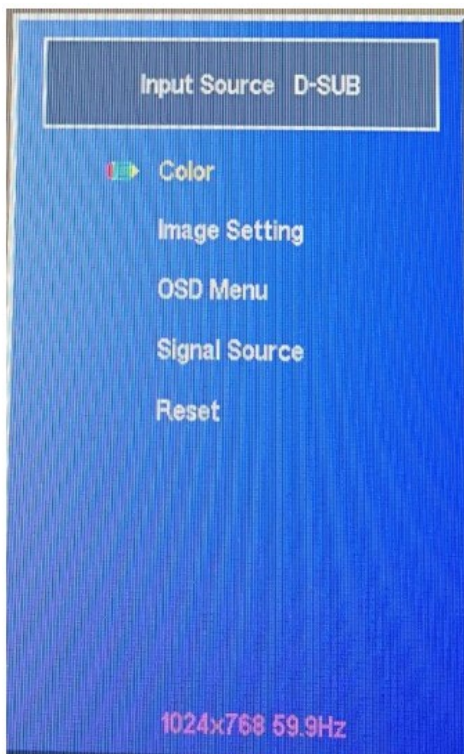
A. Color
Set a desired color setting from this menu.

- **Contrast** : the adjusting range is from 0 to 100.

- **Brightness** : the adjusting range is from 0 to 100.

- **Color Adjust :**

  Red: the adjusting range is from 0 to 100.
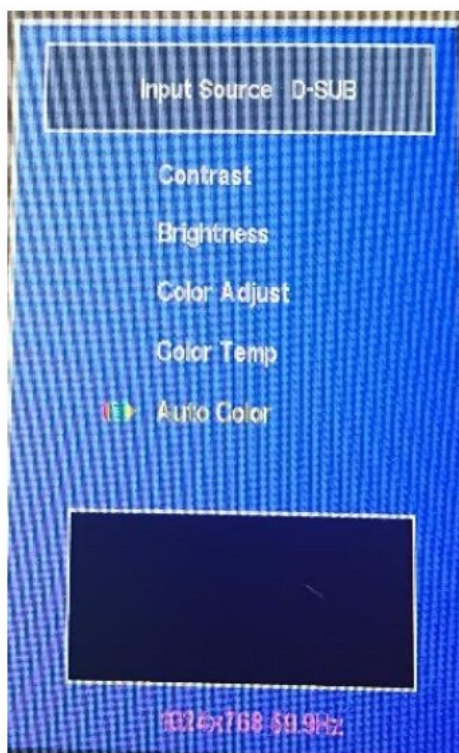

Green: the adjusting range is from 0 to 100.

Blue: the adjusting range is from 0 to 100.

- **Color Temp** : contains 4 modes including 9300K, 6500K, 5800K and user

- **Auto Color** : Automatically adjusts the image to its optimized position, clock, and phase. (Only run on D-Sub input Mode)

B. **Image Setting** (Only run on D-Sub input Mode)
Set the image related setting from this menu.

- **Clock** : the adjusting range is from 0 to 100

- **Phase** : the adjusting range is from 0 to 100

- **Sharpness** : the adjusting range is from 0 to 4
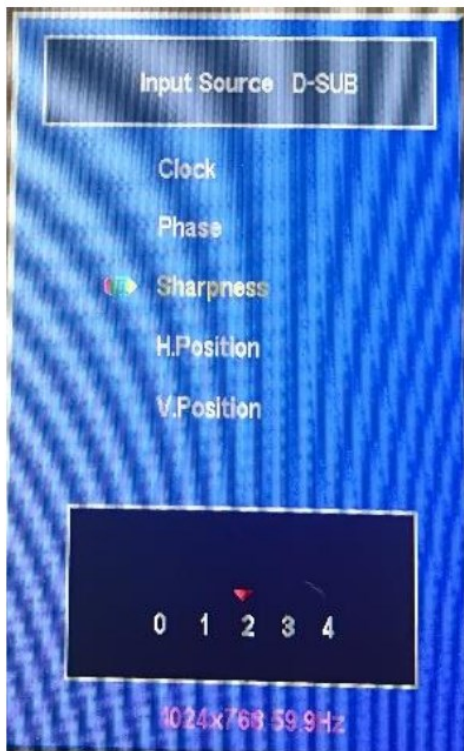
- **H.Position** : the adjusting range is from 0 to 100
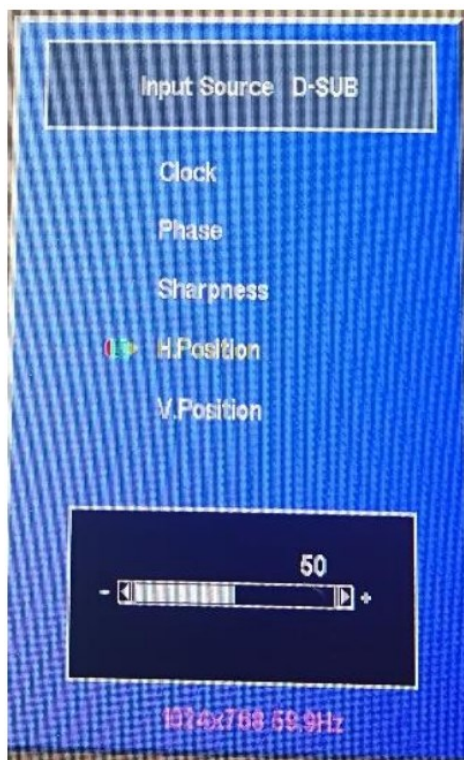
- **V.Position** : the adjusting range is from 0 to 100
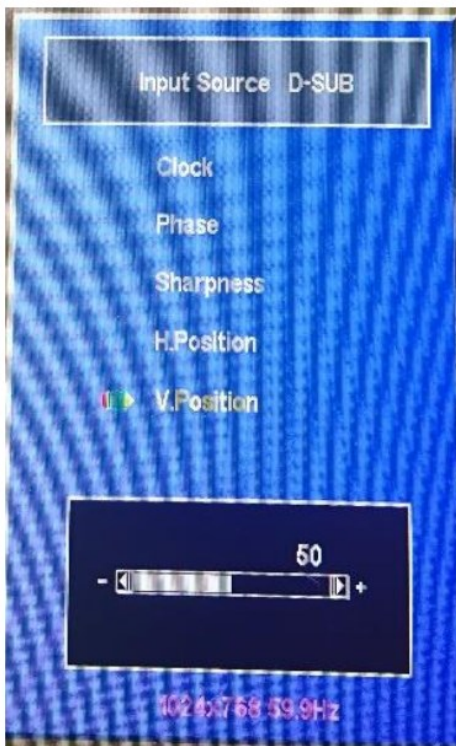
C. OSD Menu
Adjusts the OSD location and language

- **OSD H.Pos.:** Adjusts the horizontal position (H-Position) of the OSD from 0 to 100.

- **OSD V.Pos.:** Adjusts the vertical position(V-Position) of the OSD from 0 to 100

- **OSD Timer:** Adjusts the OSD timeout from 5 to 60 seconds.

- **Language:** There are 7 languages for your selection, including English, French, Deutsch, Espanol Traditional Chinese, Simplified Chinese, Japanese

D. Signal Source:
In this function, you can select your desired input source

E. Signal Source:
In this function, you can reset all setting to default value

Panel Mounting Installation

Side View
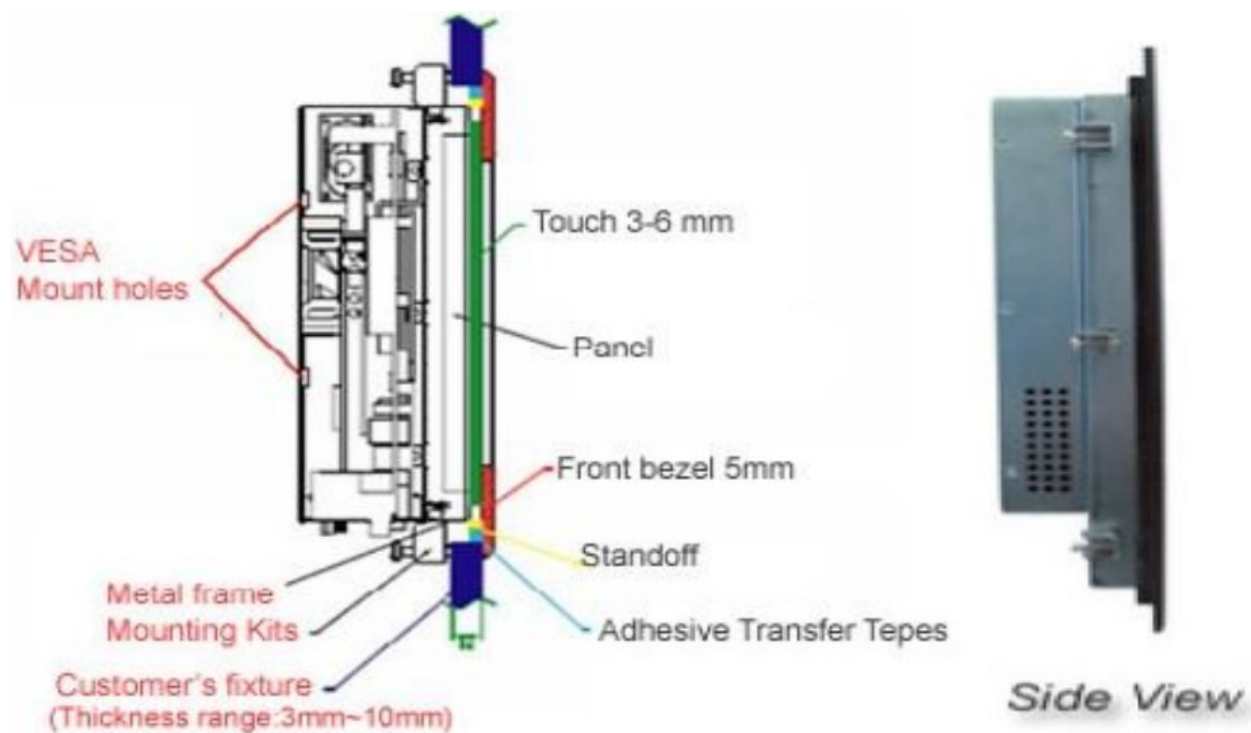
Panel Mounting Kits Information

- **a.** Item 1 : Monunting Kits
- **b.** Item 2 : Panel Mount PPC

5mm Panel Monunt Panel PC

- Customers can fix Panel PC with their fixture by M3 screws.
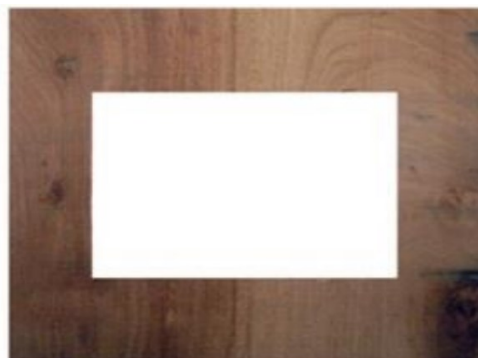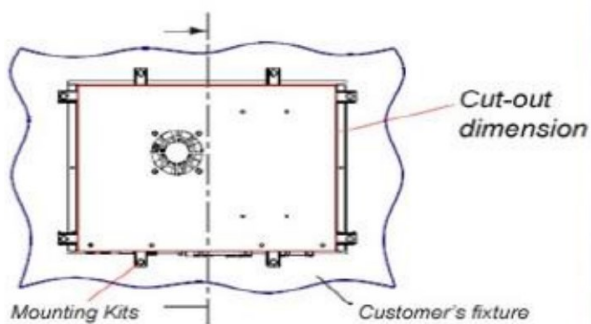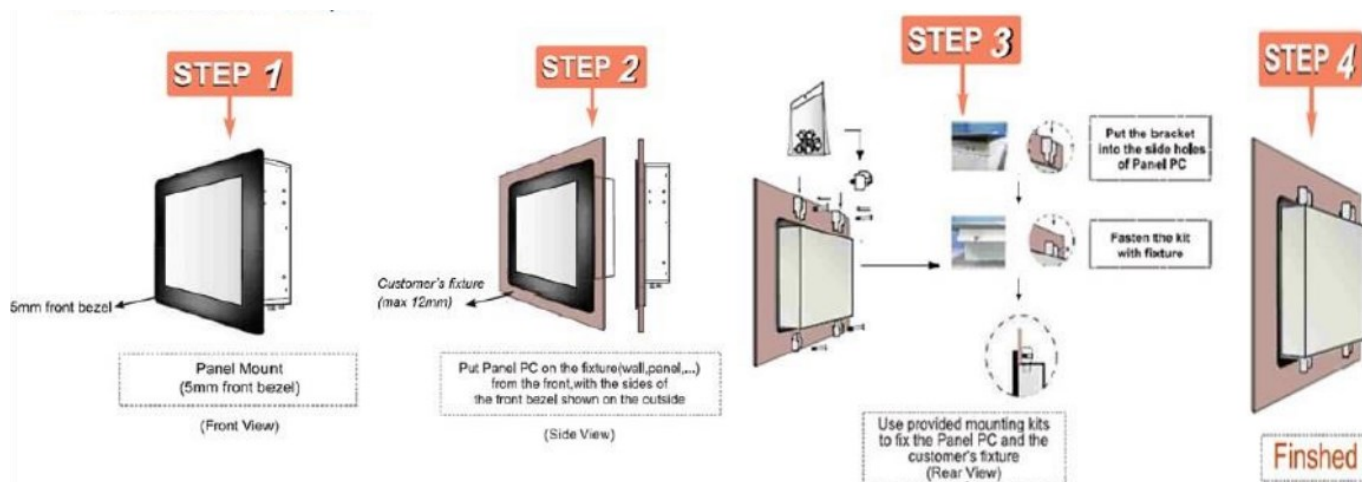- VESA mount holes are also available for mounting from back side
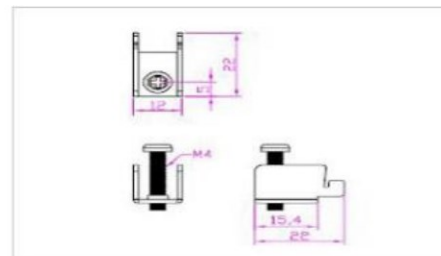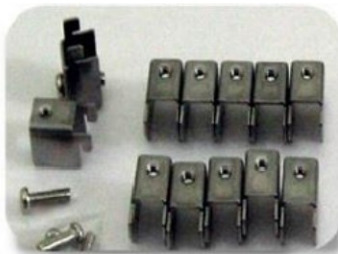
The Dimension of mounting kits

Preparation

- **a.** Item 1 : Screwdriver
- **b.** Item 2 : Cut out Area

Installation Steps

Documents / Resources

ELGENS Wide Temperature TDM Series P-CAP Touch LCD Monitor [pdf] User Manual
Wide Temperature TDM Series P-CAP Touch LCD Monitor, Wide Temperature, TDM Series P-CAP, Touch LCD Monitor, LCD Monitor, Monitor