

GTM Series

Touch LCD Monitor



User Manual

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Attention

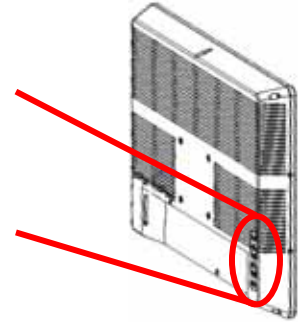
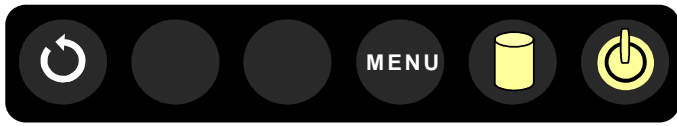
1. This manual contains important information for the proper maintenance and setup of the products. Before setup and use of the products, please read through this manual carefully.
2. This manual shall apply only to the product(s) coming along with it inside.
3. If there is any problem found on products, please ask a qualified service technician to check. Please do NOT try to repair by yourself. The damage caused by incorrect operation and repair is NOT included in warranty.
4. The specification may be modified without any notice in advance. Please inquire your supplier for latest specification, driver, or manual.

1. Specification

MODEL SPEC	TM-170	TM-190
Display Type	Active Matrix TFT LCD	
LCD Size	17"	19"
Display Area (mm)	338(W) x 270(H)	376(W) x 301(H)
Max. Resolution	1280 x 1024	
Colors	16.7 million	
Brightness	250~ cd/m ² (Typ.)	250~ cd/m ² (Typ.)
Contrast Ratio	450 : 1	400 : 1
Input Connector	D-SUB 15 PIN Female x 1 24 PIN DVI Connector x 1	
Power Supply	12V / 3A External Power Adapter	
Color	Whole Black Color or Black Color with Silver Front Panel	
Dimension (W x H x D)	418 x 378 x 226 mm	418 x 410 x 226 mm
Temperature	Operation : 0°C to 40°C	
Humidity	10% to 90%	
Touch Panel	TW 5-wrie or ELO Resistive Touch Panel (USB or RS-232)	
Optional Integrated Device	VFD Customer Display, MSR Card Reader, Second 12"/15"/17" LCD Screen with or without Touch Panel	

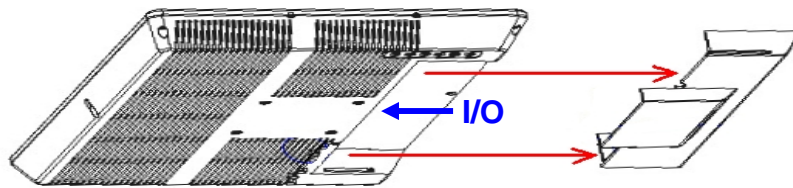
Brightness is measured under the touch panel is not equipped. Please note that different touch panel will have different influence on brightness. Option #1 will have additional charge.

2. Control Panel

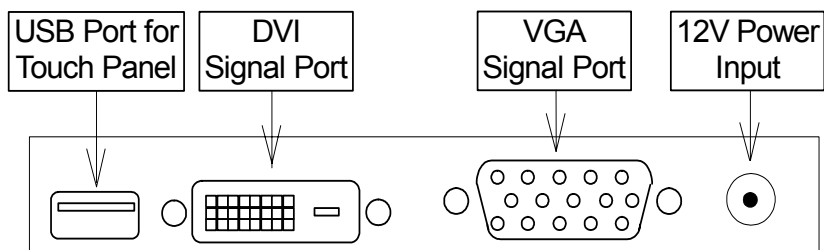


Push Button	Description of Function
	Power On/Off
MENU	OSD Menu & Confirmation
	Change and Selection for Detail of Each Setting
	Reserved

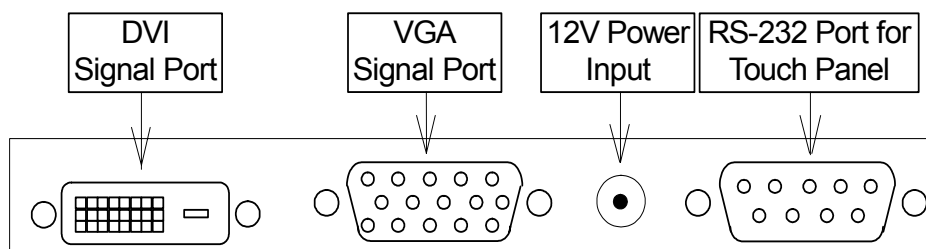
3. I/O Connector



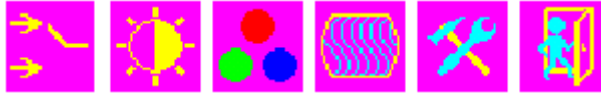
3.1 USB Interface for Touch Panel



3.2 RS-232 Interface for Touch Panel






4. OSD Function



- (1) Press “ ” button to start OSD menu shown above and press “ + ” button to go to each function described in following paragraphs.
- (2) After you select the function, press “ ” button to enter submenu and press “ + ” & “ - ” button to select function you would like to adjust. Then, press “ ” button to enter to adjust details.





4.1 Input Interface Setting



-  Analog Input
-  Digital Input (Reserved)
-  Exit









4.2 Adjustment of Brightness / Contrast / Back Level









-  Brightness : Press “ + ” & “ - ” button to adjust.
-  Contrast : Press “ + ” & “ - ” button to adjust.
-  Black Level : Press “ + ” & “ - ” button to adjust.
-  Exit

4.3 Adjustment of Color











-  Auto Color Setup : Press “ ” button to do auto color setup for optimal setting of color.
-  sRGB : Press “ ” button to adjust standard color.
-  Color Temperature : Press “ + ” & “ - ” button to select color temperature or adjust R.G.B. color depth.
-  CMY : Press “ + ” & “ - ” button to adjust RGB color and press “ ” button to select R,G,B. If you want to leave, press “ ” button to go back to prior menu.
-  Skin Tone : Press “ + ” & “ - ” button to adjust. When finish, press “ ” button to go back to prior menu.
-  Hue : Press “ + ” & “ - ” button to adjust hue of R,G,B. When finish, press “ ” button to go back to prior menu.
-  Saturation : Press “ + ” & “ - ” button to adjust saturation of R,G,B. Press “ ” button to go to prior menu.
-  Exit

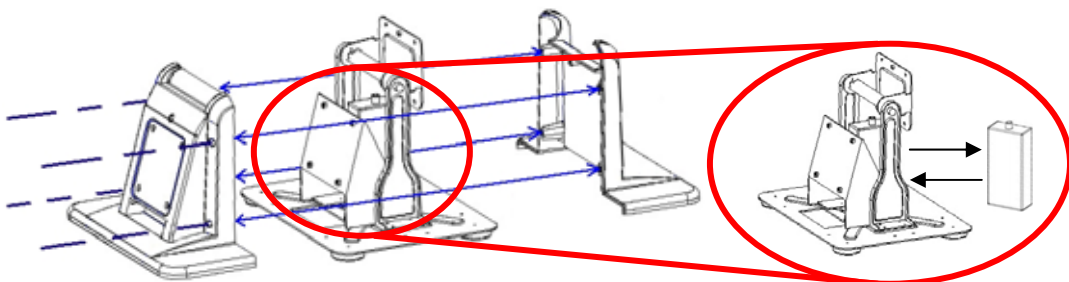
4.4 Adjustment of Image

-  Auto-Configure : Please press “ ” button to automatically configure an optimal display setting.
-  Image Width : Press “ + ” & “ - ” button to adjust width of display.
-  Phase : Press “ + ” & “ - ” button to adjust the signal phase in the analog to digital converter.
-  Horizontal Position : Press “ + ” & “ - ” button to adjust horizontal position of display.
-  Vertical Position : Press “ + ” & “ - ” button to adjust vertical position of display.
-  Exit

4.5 Tools

-  OSD : Press “ + ” & “ - ” button to select a function you would like to adjust and press “ ” button to enter.
 - ✧  OSD Timeout (Time of automatic close of OSD menu)
 - ✧  OSD Horizontal (Horizontal position of OSD menu)
 - ✧  OSD Vertical (Vertical position of OSD menu)
 - ✧  OSD Size (Size of OSD menu)
-  Factory Reset : When selection, it will recover to default.
- **A**  Sharpness : Press “ ” button to enter and press “ + ” & “ - ” button to adjust sharpness of character.
-  Exit

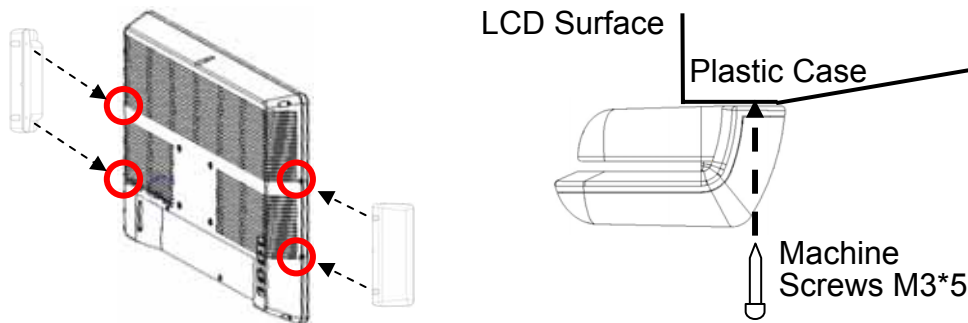
5. Maintenance of Power Supply



Power supply also can be put along externally but not in stand.

6. Installation of Optional Devices

6.1 MSR



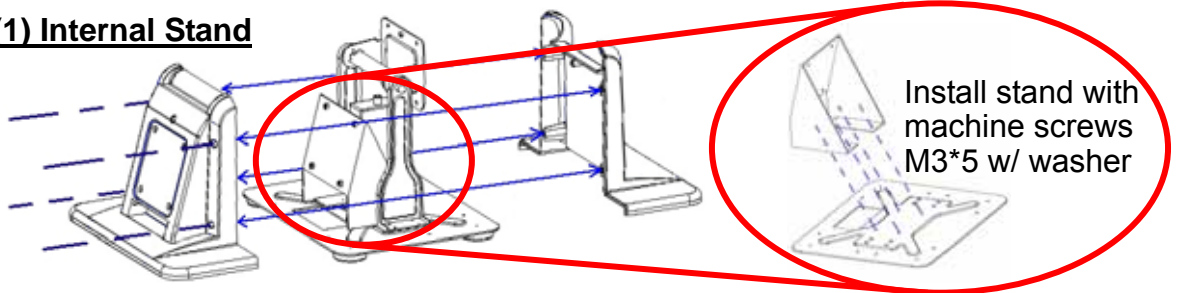
Both right and left side of screen can be screwed with MSR separately.

6.2 VFD Display

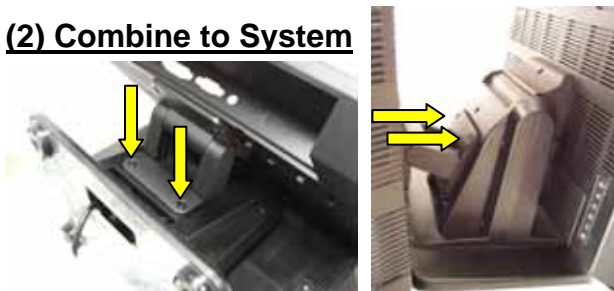
*New stand kit for VFD display integrated on IT series is still under development.
We will update installing method with new pictures when it is available soon.*

6.3 Second Monitor

(1) Internal Stand



(2) Combine to System



Machine Screws M4*8
(Round Head & Black Color)

Please use short screw driver on this process.

7. Cleaning and Safety

7.1 Cleaning

Before cleaning, please power off and disconnect cables from system and AC outlet. After finish of cleaning, please make sure that the monitor is completely dry before you reconnect cables and power it on. Please do not use any liquid or spray cleaners directly on surface of screen or cabinet. Please use a soft, clean, lint-free cloth with cleaners to clear your monitor.

7.2 Screen

Please use a soft, clean, lint-free cloth to remove dust and dirt from the monitor. For fingerprints & smudges, please use a soft cloth with cleaners.

7.3 Case

Please clean cabinet of monitor with a soft cloth slightly moistened with a mild detergent solution. Please rinse the cloth with clear water, wring it dry, and wipe the cabinet to remove any detergent residue.

7.4 Safety

- (1) To reduce risk of electric shock, please follow all safety notices, never open case of products by yourself, and turn off power before cleaning.
- (2) The products are equipped with a power cord. (The type of power cord may be different according to different countries.) The power cord plug only fit into a safety ground outlet. Do not attempt to fit the plug into an outlet that has not been configured for this purpose. Please only use power cord that comes with the products. Using an unauthorized power cord may invalidate the warranty of the products.
- (3) Please do not insert or block any object inside four edges of the screen.
- (4) Please do not pour liquid into or onto products and wash with a wet cloth. If the products become wet, please do not turn on or attempt to repair by yourself. Please ask a qualified service technician to check it for you before you turn on the power again.
- (5) Please use products under suitable environment written in specification and protect products working away from extremely bad environment.
- (6) Please keep the products away from bumps and drops.
- (7) Please keep the products away from dust, sand, and dirt.