

# LM/TM-30xx, 31xx Series LCD Monitor User's Manual Rev. A0

**POSIFLEX**



## FCC NOTICE

This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions manual, may cause interference to radio communications. It has been tested and found to comply with limits for a Class A digital device pursuant to subpart J of Part 15 of FCC Rules, which are designed to provide reasonable protection against interference when operated in a commercial environment. Operation of this equipment in a residential area is likely to cause interference in which case the user at his own expense will be required to take whatever measures to correct the interference.

## WARRANTY LIMITS

Warranty will terminate automatically when the machine is opened by any person other than the authorized technicians. The user should consult his/her dealer for the problem happened. Warranty voids if the user does not follow the instructions in application of this merchandise. The manufacturer is by no means responsible for any damage or hazard caused by improper application.

## ABOUT THIS MANUAL

This manual assists the user to utilize the (Touch) Monitor TM(LM)30xx/31xx series. This product provides exquisite touch control capability over a stable and adjustable LCD monitor with minimal footprint.

The manufacturer of the LM/TM30xx /31xx series monitor heartily apologizes to the user for reserving the right to change or to modify this manual without notice due to the rapid and constant progress and improvement on science and technology. The user may always obtain the most up to date information through any of our web sites: <http://www.posiflex.com>, <http://www.posiflex.com.tw>, <http://www.posiflexusa.com>.

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## I. PRODUCT MODEL NUMBER

| Model Name             | Screen Size | Touch Function | Stand Alone | Rear Cover Mount | Max Resolution Supported | MEMO          |
|------------------------|-------------|----------------|-------------|------------------|--------------------------|---------------|
| LM-3010F/HS            | 9.7"        | N/A            |             | ✓                | 1024x768 pixels          | For HS series |
| LM-3010F-B/HS          | 9.7"        | N/A            |             | ✓                | 1024x768 pixels          | For HS series |
| LM-3010F/KS            | 9.7"        | N/A            |             | ✓                | 1024x768 pixels          | For KS series |
| LM-3010F-B /KS         | 9.7"        | N/A            |             | ✓                | 1024x768 pixels          | For KS series |
| LM-3010F<br>LM-3010F-B | 9.7"        | N/A            |             | ✓                | 1024x768 pixels          | For XT series |
| TM-3010F<br>TM-3010F-B | 9.7"        | Yes            |             | ✓                | 1024x768 pixels          | For XT series |

|                        |      |     |   |   |                 |               |
|------------------------|------|-----|---|---|-----------------|---------------|
| TM-3010F/HS            | 9.7" | Yes |   | √ | 1024x768 pixels | For HS series |
| TM-3010F-B/HS          | 9.7" | Yes |   | √ | 1024x768 pixels | For HS series |
| TM-3010F/KS            | 9.7" | Yes |   | √ | 1024x768 pixels | For KS series |
| TM-3010F-B/KS          | 9.7" | Yes |   | √ | 1024x768 pixels | For KS series |
| LM-3014F<br>LM-3014F-B | 14"  | N/A |   | √ | 1366x768 pixels | For XT series |
| LM-3014F-B/KS          | 14"  | N/A |   | √ | 1024x768 pixels | For KS series |
| TM-3014F<br>TM-3014F-B | 14"  | Yes |   | √ | 1024x768 pixels | For XT series |
| TM-3014F/KS            | 14"  | Yes |   | √ | 1024x768 pixels | For KS series |
| TM-3014F-B/KS          | 14"  | Yes |   | √ | 1024x768 pixels | For KS series |
| LM-3015F/KS            | 15"  | N/A |   | √ | 1024x768 pixels | For KS series |
| LM-3015F-B/KS          | 15"  | N/A |   | √ | 1024x768 pixels | For KS series |
| LM-3015F<br>LM-3015F-B | 15"  | N/A |   | √ | 1024x768 pixels | For XT series |
| LM-3110<br>LM-3110-B   | 9.7" | N/A | √ |   | 1024x768 pixels |               |
| TM-3110<br>TM-3110-B   | 9.7" | Yes | √ |   | 1024x768 pixels |               |
| LM-3114<br>LM-3114-B   | 14"  | N/A | √ |   | 1366x768 pixels |               |
| TM-3114<br>TM-3114-B   | 14"  | Yes | √ |   | 1366x768 pixels |               |
| LM-3115<br>LM-3115-B   | 15"  | N/A | √ |   | 1024x768 pixels |               |
| TM-3115<br>TM-3115-B   | 15"  | Yes | √ |   | 1024x768 pixels |               |

## II. FEATURES

- Bezel free monitor.
- High quality TFT LCD panel.
- Easy maintenance structure allowing easy cleaning and tilt adjustment.
- VESA mounting supported for all series.

- Support power supply through VGA cable from Posiflex POS Terminal.

### Power Setup Notice

√ For rear mount device, it is designed for use with a Posiflex system. In such application, it can utilize power support from the Posiflex system. Standalone device is equipped with its power adaptor.

### III. CARTON CONTENTS

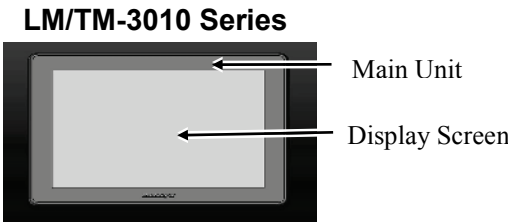
1. Monitor/Touch Monitor
2. User’s Manual
3. VGA cable
4. USB signal cable (for TM series only)
5. A Posiflex information CD (for all TM series)
6. Optional +DC 12V power adaptor & power cord

### IV. PARTS IDENTIFICATION

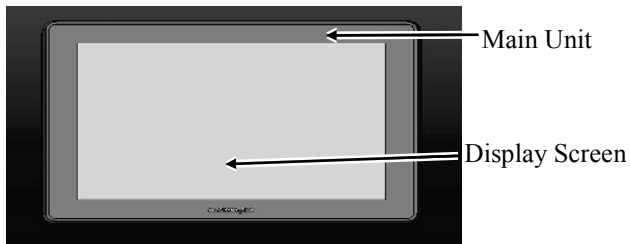
#### \* LED INDICATOR STATUS

| Color<br>Status   | Working | Stand-by | Off  |
|-------------------|---------|----------|------|
| Model             |         |          |      |
| LM/TM-3010 Series | Green   | Orange   | None |
| LM/TM-3014 Series | Green   | Orange   | None |
| LM/TM-3015 Series | Blue    | Green    | None |
| LM/TM-3110 Series | Green   | Orange   | None |
| LM/TM-3114 Series | Green   | Orange   | None |
| LM/TM-3115 Series | Blue    | Green    | None |

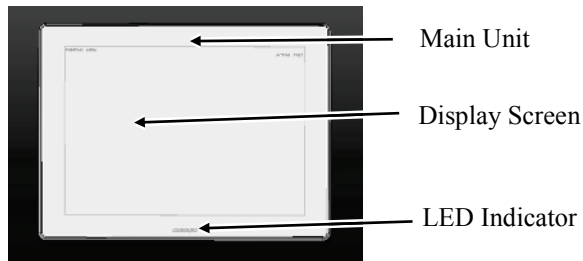
#### A. FRONT VIEW



### LM/TM-3014/3114/3114 Series

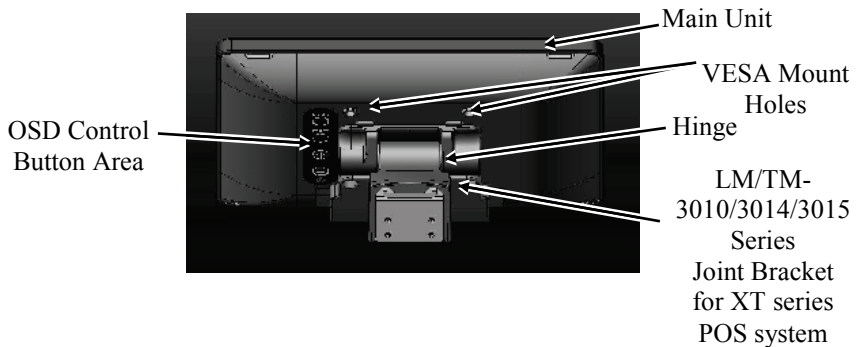


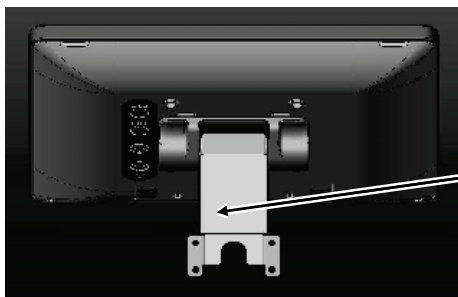
### LM/TM-3015/3115 Series



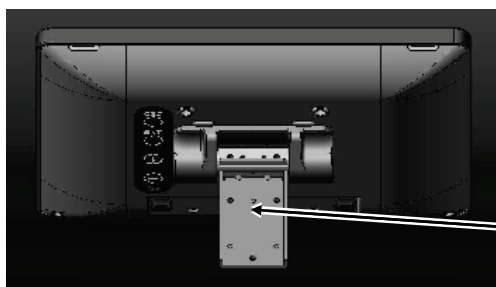
## B. REAR VIEW

### LM/TM-3010/3014/3015 Series



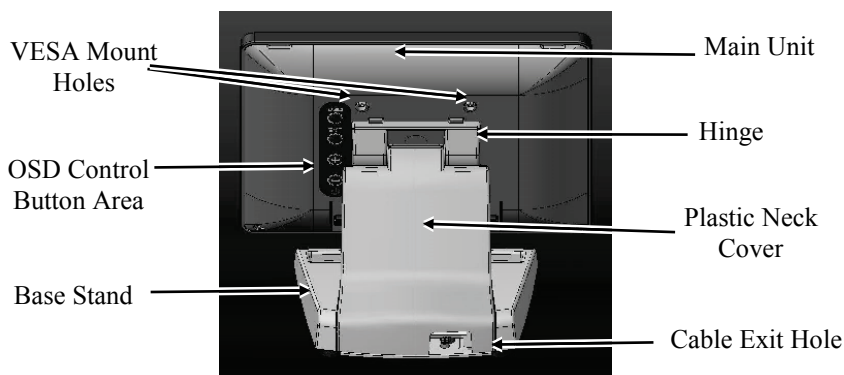


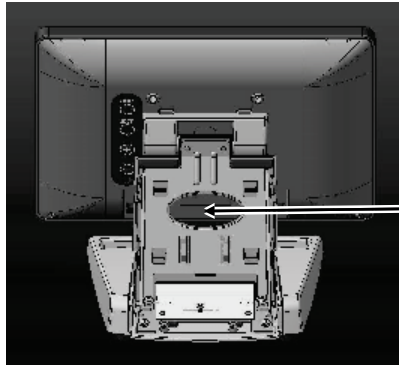
LM/TM-3010/HS  
Joint Bracket  
for HS series  
POS system



LM/TM-3010/KS Joint  
Bracket for KS

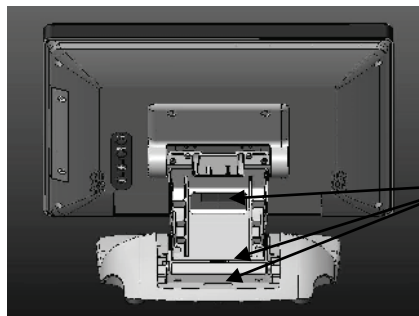
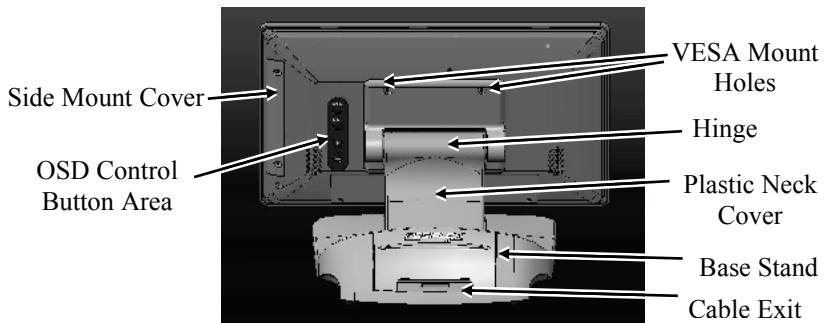
### Stand alone LM/TM-3110/3110-B





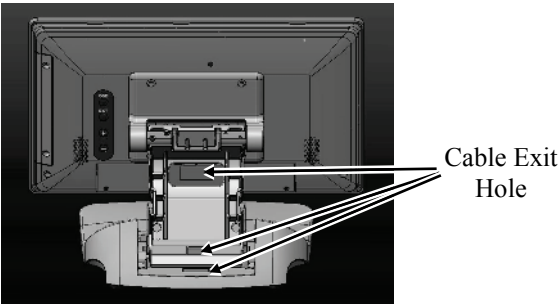
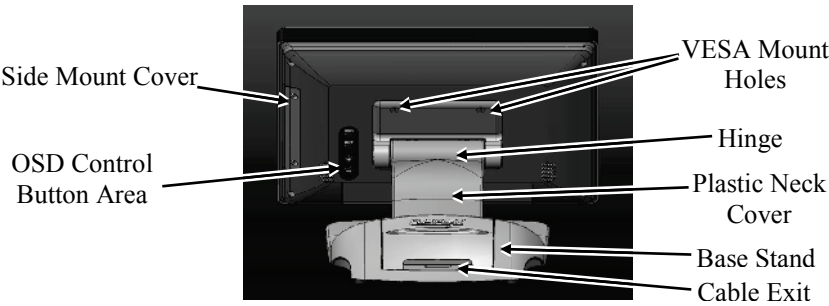
Cable Exit Hole

### Stand alone LM/TM-3114 Series



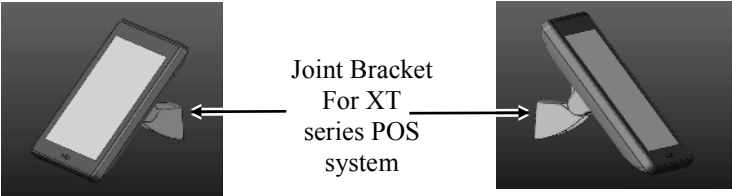
Cable Exit Hole

**Stand alone LM/TM-3115 Series**

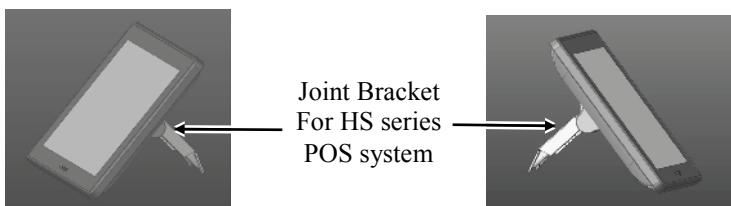


**C. SIDE VIEW**

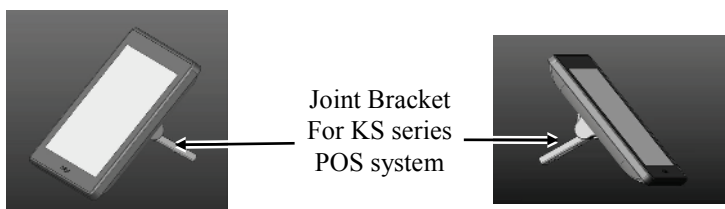
**Rear Cover Mount LM/TM 3010/3014/3015**



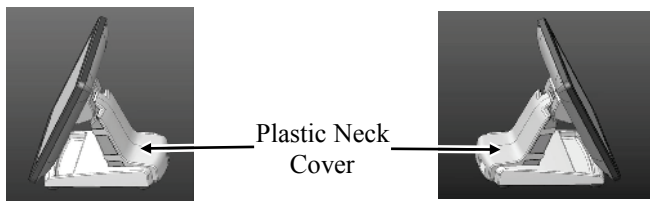
### Rear Cover Mount LM/TM-3010/HS



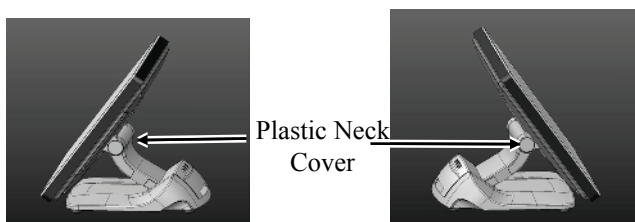
### Rear Cover Mount LM/TM-3010/KS



### Stand alone LM/TM-3110/3110-B



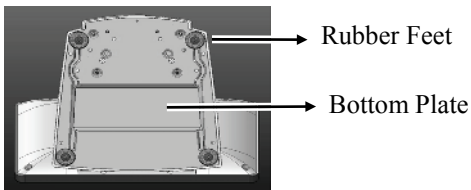
### Stand alone LM/TM-3115/3115-B/3114/3114-B



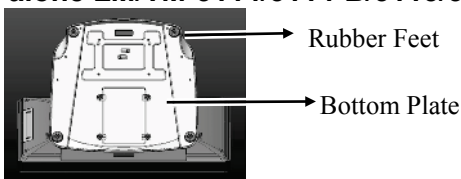


## D. BOTTOM VIEW

### Stand alone LM/TM-3110/3110-B

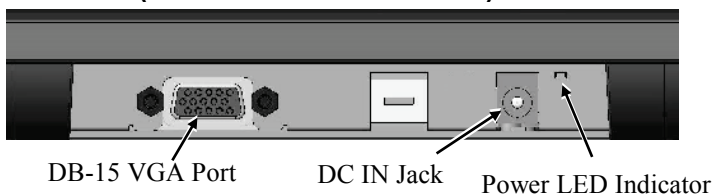


### Stand alone LM/TM-3114/3114-B/3115/3115-B

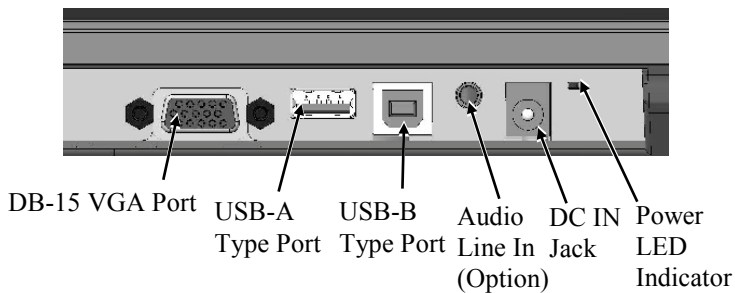


## E. I/O PORT VIEW

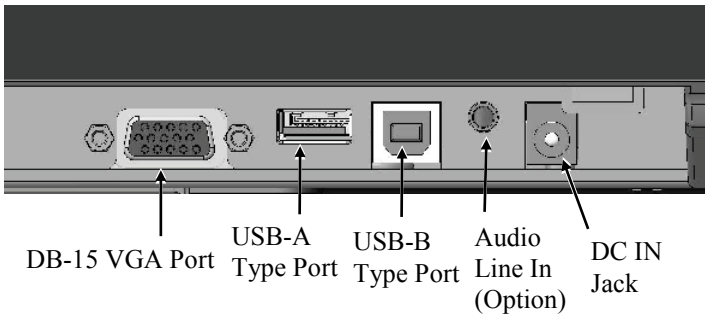
### (LM/TM-3010/3110 Series)



### (LM/TM-3114/3014 Series)



### (LM/TM-3015/3115 Series)

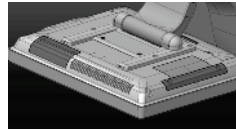


## V. Hardware Installation

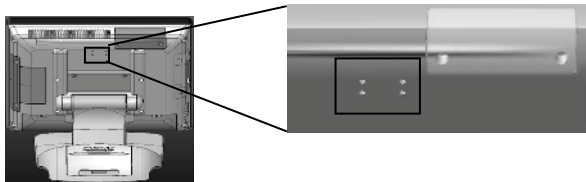
### LM/TM-3010/3014/3015 Series for XT Series

Please do the following steps to install LM/TM-3010/3014/3015 series:

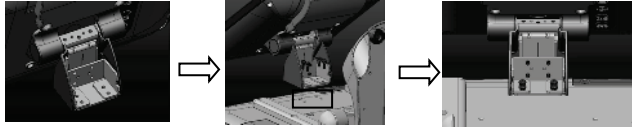
**Step A):** Place the XT system on a soft pad and align the main unit along table to easily adjust the bracket of 2<sup>nd</sup> LM LCD panel unit to the suitable angle for installation.



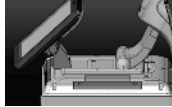
**Step B):** Please locate the 4 holes on the rear side of the host system.



**Step C):** Adjusting the bracket to the suitable angle, please take the 2<sup>nd</sup> LM LCD display bracket, aim its 4 holes and tighten the indicated screws to the system.



**Step D):** The assembly is completed below.



## LM/TM-3110/3110-B Series

### A. TILTING LCD PANEL

Please do the following steps to tilt LCD panel:

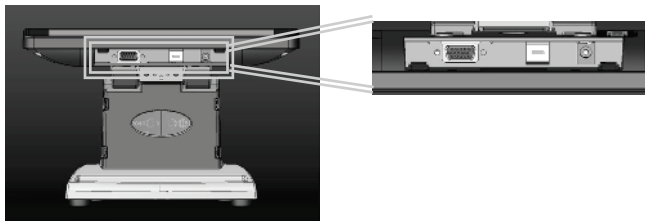
**Step A):** Hold and push downward the main unit.



**Step B):** Tilt the neck at its right position for most suitable angle for best view effect and convenience in cable connection/disconnection.

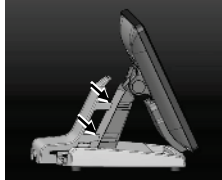
### B. CONNECTING ALL CABLES

With the LCD monitor/touch monitor panel turned to most backward position, the main I/O connector area will be easily accessible at bottom side of the main unit. **Please first note orientations of every existing cable connection** and then connect every cable properly before any further reconfiguration of cable connections.



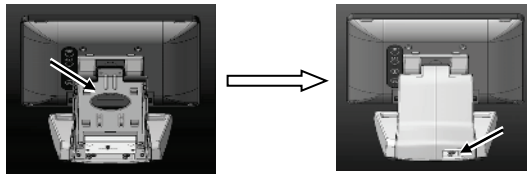
### C. OPENING PLASTIC NECK COVER

To route through base, please observe the below side view pictures of the base trunk and release the triangle marked hooks to remove the plastic neck cover.



### D. CABLE ROUTING IN BASE

For cable routing in the mini slim base, please refer to the picture below. Have all cables pass through the oval hole on the trunk as triangle marked to come out of the arrowed cable exit hole on the base rear side of trunk. Then connect all the cables ends to main unit.

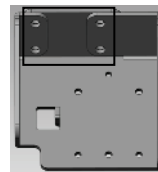


## LM/TM-3010/KS for KS Series

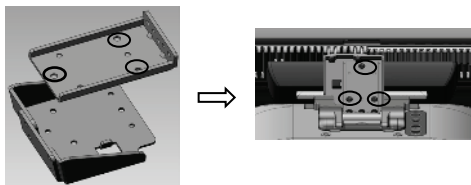
Please do the following steps to install LM/TM-3010/KS:

Please do the following steps to install LM-3210/KS:

**Step A):** Fasten the 4 screws onto the upper rear bracket of KS series machine.



**Step B):** Hold the LM-3210/KS monitor with bracket, aim to join the upper rear bracket then fasten the 3 screws onto the indicated holes.



**Step C):** Connect the VGA Cable to the LM VGA port and route the VGA cable through the cable exit hole of KS base stand to the system VGA port on the I/O plate.

**Step B):** Connect the VGA Cable to the LM VGA port and route the VGA cable through the cable exit hole of KS base stand to the system VGA port on the I/O plate.

## LM/TM-3010/HS for HS Series

To mount LM-3010/HS on the back of the terminal, please do the following steps to tilt LCD panel:

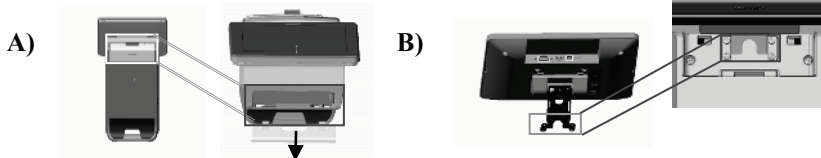
**Step A):** Release the top cover on the HS system top I/O plate.

**Step B):** Adjust the rear bracket of 2<sup>nd</sup> display to its adequate angle and join the rear bracket by aiming to the 4 indicated screw holes on the rear side of HS terminal.

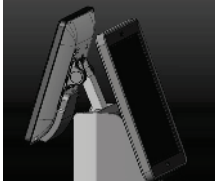
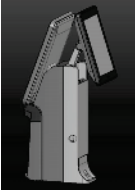
**Step C):** Apply carefully the 4 small screws that come along with the 2<sup>nd</sup> display series to the back of this terminal at the screw hole circled in the below picture.

**Step D):** Connect one VGA cable end at the 2<sup>nd</sup> display VGA port, the other at the VGA port on the top I/O plate.

**Step E):** Close the rear bracket cable cover as illustrated.



C)



**Note:** Do not overdo the tightening or unrecoverable thread damage will occur.

## LM/TM-3114/3114-B/3115/3115-B Series

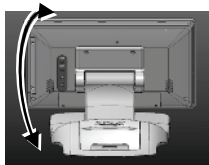
### A. TILTING LCD PANEL

Please do the following steps to tilt LCD panel:

**Step A):** Hold and push downward the main unit indicated

**Step B):** Tilt the neck at its right position for most suitable angle for best view effect and convenience in cable connection/disconnection.

A



B



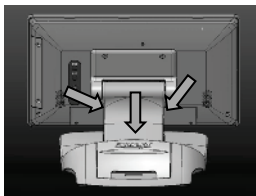
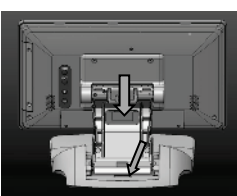
### B. CABLE ROUTING

Please do the following steps to remove the cable cover for Gen 7 slim base model.

**Step A):** Release the base cover.

**Step B):** Release the base stand neck cover.

**Step C):** Route the cable to the circled holes.

**A****B****C**

## VI. OSD Menu Introduction

### Power & OSD buttons

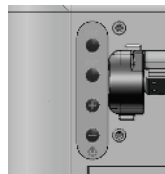
The buttons at the right side of LCD monitor are for the OSD (On Screen Display) control operations and LCD screen power control as in the below picture and are explained below.

**“OSD” button:** To enter OSD menu

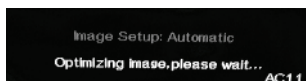
**“EXT” button:** To Exit the option functions

**“ + ” button:** To increase setting; auto tune feature.

**–  button:** To decrease setting; To turn the monitor power ON/OFF.



Note: “+” button indicates an Auto Tune feature to automatically optimize image below:



### OSD functions

**“MAIN MENU”:** There are a total of 6 icons in this menu:



Once one icon is selected, it will be displayed in inverted color to indicate its relationship with the submenu below. On the physical panel side bar of LCD monitor display, pressing “EXT” button will shift the selected icon one by one from left to right and then wrap around to the leftmost part. Press “OSD” button to enter the selected sub menu. Items in sub menu are illustrated below. Press “+”/”-“ to adjust.





**“BRIGHTNESS / CONTRAST ADJUST SUBMENU”**: There are 2 icons in this submenu:



**“BRIGHTNESS ADJUST”**: When this item is selected, there will be only the brightness icon with an adjustment indication bar under it between the main menu area and the video signal mode. Press “+” button to increase brightness intensity. Press “-” button to decrease brightness intensity. Press OSD/EXT to save/exit.



**“CONTRAST ADJUST”**: When this item is selected, there will be only the contrast icon with an adjustment indication bar under it between the main menu area and the video signal mode. Press “+” button to increase contrast intensity. Press “-” button to decrease contrast intensity. Press OSD/EXT to save/exit.



**“IMAGE POSITION”**: There are 2 icons in this submenu:



**“Horizontal Position”**: When this item is selected, there will be only the position icon with an adjustment indication bar for user to adjust. Press “+” button to move image rightward for horizontally rightward positioning. Press “-” button to move image leftward for horizontally leftward positioning. Press OSD/EXT to save/exit.



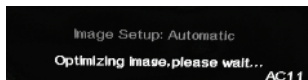
**“Vertical Position”**: When this item is selected, there will be only the position icon with an adjustment indication bar for user to adjust. Press “+” button to move image upward for vertically upward positioning. Press “-” button to move image downward for vertically downward positioning. Press OSD/EXT to save/exit.



**“IMAGE SETUP”**: There are 2 icons in this submenu:



**“Image Setup”**: When this item is selected, there will show an automatic image setup screen to automatically optimize this image.



**“Manual Image Setting”**: When this item is selected, there will show a manual image settings display for user to manually configure “Clock” and “Phase”. Phase and clock settings tweak how the VGA (analog) input of your LCD monitor receives the information coming from your terminal graphics



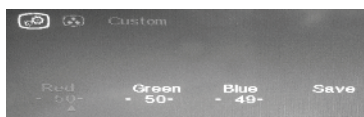
card and optimize screen resolution.



**"IMAGE PROPERTY":** There are 2 icons in this submenu:



**"Image RGB intensity":** When this item is selected, there will show a customized window display for user to adjust RGB intensity. Press "+" button to increase color intensity. Press "-" button to decrease color intensity. Press OSD/EXT to save/exit.



**"OPTIONS":** There are 5 icons in this submenu:



**"Information: Show Resolution, Refresh Rate & Product Details":** When this item is selected, there will show a compact product detail about resolution and refresh rate for demonstration.



**"Menu Language : Change Language of Menu":** When this item is selected, there will show a multilingual menu for user to opt for desired language option.



**"Menu Position" (reserved)**



Note: This "Menu Position" is reserved.

**"Factory Default":** When this item is selected, there will show a Factory Default menu for user to restore to original monitor settings below.





“Accessibility”: When this item is selected, there will show an Accessibility menu for user to change menu time-out setting.



**“EXIT”**: Exit OSD setup with all adjustment saved.

## SUPPORTED DISPLAY MODES

For VGA signals beyond the supported display modes, there will be a message “Out Of Range” on the middle of screen. Maximum supported color depth for 10” and 14” monitor model is 18 bits or 262,144 colors. Color depth 15” is 24 bits or Supported display modes are illustrated in the table:

| Display Resolution | Refresh Rate (Hz) | Horizontal Frequency (KHz) |
|--------------------|-------------------|----------------------------|
| 640*400            | 70                | 37.9                       |
| 640*480            | 60                | 31.5                       |
|                    | 72                | 37.9                       |
|                    | 75                | 37.5                       |
| 720*400            | 70                | 37.9                       |
| 800*600            | 56                | 35.1                       |
|                    | 60                | 37.9                       |
|                    | 72                | 48.1                       |
|                    | 75                | 46.9                       |
| 1024*768           | 60                | 48.4                       |
|                    | 70                | 56.5                       |
|                    | 75                | 60                         |
| 1366*768           | 60                | 47.7                       |

**Note:** Only the LM/TM-3014/3114 series is supported for the optimal 1366\*768 resolution.

## SPECIFICATION

| Display          | LM 3014/3114 series       | TM 3014/3314 series |
|------------------|---------------------------|---------------------|
| LCD Panel        | 14" TFT LCD               |                     |
| Resolution       | 1366 (H) x 768 (V)        |                     |
| Active Area (mm) | 309.399 (H) x 173.952 (V) |                     |

|                              |                                     |                  |
|------------------------------|-------------------------------------|------------------|
| Pixel Pitch (mm)             | 0.2265 (H) x 0.2265 (V)             |                  |
| Pixel Arrangement            | RGB Vertical Stripe                 |                  |
| Viewing Angle (Typical)      | 20/45/45/45 degree (U/D/L/R)        |                  |
| Contrast Ratio (Typical)     | 650 : 1                             |                  |
| Response Time (Typical)      | 4 ms (Rising) / 6 ms (Falling)      |                  |
| Brightness (Typical)         | 200 cd/m <sup>2</sup>               |                  |
| <b>Touch</b>                 |                                     |                  |
| Touch Type                   | N/A                                 | Bezel-free P-CAP |
| Interface                    | N/A                                 | USB              |
| <b>General Specification</b> |                                     |                  |
| Display Interface            | VGA                                 |                  |
| Power Supply                 | 12V from Posiflex terminal VGA port |                  |

| <b>Display</b>               | <b>LM 3015/3115 series</b>     | <b>TM 3015/3115 series</b> |
|------------------------------|--------------------------------|----------------------------|
| LCD Panel                    | 15.0" TFT LCD                  |                            |
| Resolution                   | 1024 (H) x 768 (V)             |                            |
| Active Area (mm)             | 304.128 (H) x 228.096 (V)      |                            |
| Pixel Pitch (mm)             | 0.297 (H) x 0.297 (V)          |                            |
| Pixel Arrangement            | RGB Vertical Stripe            |                            |
| Viewing Angle (Typical)      | 80/80/80/80 degree (U/D/L/R)   |                            |
| Contrast Ratio (Typical)     | 600 : 1                        |                            |
| Response Time (Typical)      | 3 ms (Rising) / 5 ms (Falling) |                            |
| Brightness (Typical)         | 250cd/m <sup>2</sup>           |                            |
| <b>Touch</b>                 |                                |                            |
| Touch Type                   | N/A                            | Bezel-free P-CAP           |
| Interface                    | N/A                            | USB                        |
| <b>General Specification</b> |                                |                            |

|                   |                                         |
|-------------------|-----------------------------------------|
| Display Interface | VGA                                     |
| Power Supply      | 12V/50W from Posiflex terminal VGA port |

| <b>Display</b>               | <b>LM 3010/3110 series</b>              | <b>TM 3010/3110 series</b> |
|------------------------------|-----------------------------------------|----------------------------|
| LCD Panel                    | 9.7" TFT LCD                            |                            |
| Resolution                   | 1024 (H) x 768 (V)                      |                            |
| Active Area (mm)             | 196.61 (H) x 147.46 (V)                 |                            |
| Pixel Pitch (mm)             | 0.192 (H) x 0.192 (V)                   |                            |
| Pixel Arrangement            | RGB Vertical Stripe                     |                            |
| Viewing Angle (Typical)      | 70/70/70/60 (U/D/L/R)                   |                            |
| Contrast Ratio (Typical)     | 500 : 1                                 |                            |
| Response Time (Typical)      | 20 ms (Rising plus Falling)             |                            |
| Brightness (Typical)         | 270 cd/m <sup>2</sup>                   |                            |
| <b>Touch</b>                 |                                         |                            |
| Touch Type                   | N/A                                     | Bezel-free P-CAP           |
| Interface                    | N/A                                     | USB                        |
| <b>General Specification</b> |                                         |                            |
| Display Interface            | VGA                                     |                            |
| Power Supply                 | 12V/18W from Posiflex terminal VGA port |                            |

### USB Touch Manager

USB Touch Manager for each type of touchscreen is available for user to set up touchscreen functions. If your system is preloaded with the OS of your choice, the Manager will be installed on your system. Nevertheless, you can also download the Manager from our website:

1. Visit us at <http://www.posiflex.com>, and click **Support** on the main menu bar.