

# LM-2008 / TM-2008 LCD / Touch Monitor User's Manual

Rev. Original



## I. FEATURES

- 8" LCD monitor with tilt adjust for industrial and commercial use
- Application covers POS, POI (Kiosk), Factory Automation etc.
- High quality TFT LCD panel
- · Spill proof and easy maintenance structure allowing easy cleaning
- Super VGA interface super resolution up to 800 x 600 pixels
- Support power supply through VGA cable from Posiflex POS systems to operate without power adaptor
- Resistive type extra long life touch panel in USB interface (for TM-2008)
- Touch functions include left/right button, double click, drag & drop (for TM-2008)
- Touch beep can be pitch adjusted/enabled/disabled by software control (for TM-2008)

#### 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 LCD Monitor LM-2008 and the Touch Monitor TM-2008. These series provide adjustable robust construction for 8" LCD display with maximum resolution of 800 x 600. TM-2008 provides also a durable touch screen over the LCD panel.

The manufacturer of the LM-2008 and TM-2008 series 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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P/N: 18320900010

## II. MODEL NUMBERS

LM-2008:8" LCD Monitor on base standTM-2008:8" LCD Touch Monitor on base stand

# **III. CARTON CONTENTS**

- 1. LCD or Touch Monitor (Main unit assembled with Stand)
- 2. User's Manual
- 3. Power Adaptor: 12V 18W, (21972018120 for USA)
- 4. VGA Cable: 21863241750
- 5. USB Cable: 21863250800 (for TM-2008 only)
- 6. Posiflex Product Information CD or DVD (for TM-2008 only)

# **IV. PARTS IDENTIFICATION**

### A. FRONT VIEW





# V. HARDWARE INSTALLATION A. CABLE CONNECTIONS

- 1. Connect the VGA cable that has both 3 x 5 D sub male ends to VGA port in connector area of the monitor and the VGA port of host system. Screw in the cable to connectors at both ends.
- 2. (For TM-2008 only) Connect the USB cable that has one flat 4 pin connector (USB type A) and one square 4 pin connector (USB type B) to the USB port of host system and USB port in connector area of the monitor.
- 3. Check the power adaptor against local power supply specifications. Connect the cable from the power adaptor to the DC jack in connector area of the monitor. Insert the power adaptor to a clean power socket.
- 4. If the host system used is the Posiflex POS system that supports DC power supply through VGA cable, the above step 3 (power adaptor) can be eliminated. Instead, the DC power supply in VGA port of the host system must be enabled according to the technical information of the relevant host system in beforehand.

# **VI. DRIVER INSTALLATION**

## A. INSTALLATION

The USB interface touch controller operates as an USB mouse without need for any special driver in Windows. However, there is a program supported for its calibration and touch function manipulation. Please find it in the attached Posiflex product information CD-ROM under subdirectory  $DriversTM_LMUSB$ .

For Linux environment, please find the setup program for the suitable kernel in the same directory and install the required driver and calibration program as the setup program proceeds.

## B. SETUP/CALIBRATION

### a. USB touch manager

Once the USB control program is installed, the user can utilize it to calibrate the touch screen, define mouse button emulation parameters, enable right button emulation or define the click sound's tone and duration. Please go to "Program Files" and select "Posiflex USB Touch Tools" and then select "Posiflex USB Touch Manager" within the tools to engage this utility. Most

items in this utility should be easily understandable to average user. Followings are just some reminders on some items.

- **Calibrate** This button engages the "Posiflex USB Touch Calibrator".
- Edge Acceleration This function engages the "Posiflex USB Touch Edge Acceleration Tool" and helps to find the hidden taskbar or thin scroll bar through touch.
- Hide Cursor / Show Cursor This button hides or shows the mouse cursor on screen display. Please never hide cursor before the touch is enabled and calibrated.
- **Buzz On** This check box together with the 2 list buttons below it determines the frequency and duration of the internal buzzer beep as response to touch on touch panel.
- **Touch Point Dots** This list button selects the size of touch point on touch panel. A too small touch size makes the mouse cursor jumpy or even bouncing. A too large touch size results in unsatisfactory touch accuracy.
- Reset To Default This button resets all touch parameters.
- Enable PIR This check box is not applicable to the monitor. Please keep it unchecked.
- **Enable Touch** This check box must be checked to have the touch panel working.
- **Touch as Right Button Click** This check box defines each touch on touch panel as clicking the right button of mouse at that point. When it is unchecked, each touch will work as clicking the left button of mouse. (Ref. to the right hand version of mouse)
- **Mouse Emulation/Click on Touch/Click on Release** Only one of the three radio buttons can be selected. The mouse emulation refers to the drag and drop function.
- **OK** This button accepts all parameters set and closes the utility window.
- **Apply** This button accepts all parameters set and remains in the utility window.
- **Cancel** This button discards all changes to the parameters and closes the utility window.

### b. USB touch calibrator

This program helps re-calibrating the touch position with the USB mouse emulation. Please touch the calibration boxes and a confirmation box that appear sequentially.

### c. USB touch edge acceleration tool

Helps to find the hidden taskbar or thin scroll bar through touch

- **Enable** ... Each check box determines whether or not to engage edge acceleration against which edge of screen.
- Margin This list button selects the range to engage edge acceleration toward the edge before the edge is reached.
- **Compensation** This list button selects the distance to advance the mouse toward edge from touch point.

### d. USB touch right button tool

This tool differs slightly from the "Touch as Right Button Click" check box in the USB touch manager. When executed, there will be a small window of "One Shot Right Button" appearing on desktop. Any touch on the panel right after touching this small window will work like clicking the right button of mouse at that point. However, the next touch will resume the left button of mouse unless the small window is touched again.

# **VII. APPLICATION**

## A. TILT ANGLE ADJUST

The main unit and the stand are joined with a hinge structure that allows the LCD panel tilt angle adjustment between  $20^{\circ}$  and  $90^{\circ}$  for best viewing effect in application.



### B. APPLICATION LIMITATION

The USB touch is not applicable for OS other than Windows as USB mouse is not supported in DOS environment.

## C. POWER ON/OFF CONTROL

The power button located beneath the 4 OSD buttons at left side of the main unit controls the power ON/OFF status of the monitor when external power is supplied. The external power can be either the DC power supplied by the attached power adaptor through the DC jack or the DC support in the VGA cable from a Posiflex POS system with DC support enabled beforehand. However, whenever the external power switches from OFF to ON, the monitor starts in power ON mode and the power LED lights up in blue. Whenever the

VGA signal is missing with the power status at ON, the monitor displays a blue message box "No Signal" at center area for about 4 seconds and then turns the screen off and enter standby mode and the power LED changes to orange. In this state, resume of the video signal brings back the monitor screen and the power LED.

## D. OSD CONTROL

The 4 buttons above the power button are for the OSD (On Screen Display) control operations with the monitor at ON state (with both power and VGA signal supported). The basic functions of these buttons are explained in Parts Identification in earlier part of this manual. Mentioned below are reminder points of the OSD function applied in this monitor.

- 1. When entering the OSD function by pressing the "OSD" button with the monitor in ON mode, an OSD box pops up with OSD main menu and OSD firmware version and display mode features. The main menu contains: Color; Image Setting; Position; OSD menu; Language; Misc. and Exit.
- 2. Use "+" and "-" button to select an item and press "OSD" button at that item, the content of the OSD box changes to the select OSD submenu, empty setting info box and the display mode features. Further press of "OSD button on the sub-item in the submenu, setting info appears in the setting info box and use "+" / "-" button to adjust the setting.
- 3. The OSD function supports 7 languages: English; French; Germany; Spanish; Traditional Chinese; Simplified Chinese and Japanese.
- 4. Pressing "EXT" button or pressing "OSD" button at "Exit" or "Back" exits the OSD function or submenu (return to main menu).
- 5. Selecting "OSD Menu" then "OSD Timer" can define the duration to automatically exit the OSD function when idle. The values from 1 to 27 stand for durations from about 4.5 seconds to about 30.5 seconds. However the value 0 means disabling the automatic exit function, in other words manual exit must be engaged.
- 6. Selecting "Misc." then "Reset", there will be a message "Auto Adjust..." on middle of screen and all parameters are automatically adjusted or return to default setting.
- 7. The "-" button is also used as an instant auto adjust button with the monitor in ON mode without entering the OSD function. There will also be the "Auto Adjust..." message, however it adjusts only the screen position.

# VIII. SUPPORTED DISPLAY MODES

For video signals beyond the supported display modes, there will be a message "Out Of Range" on middle of screen. Maximum supported color depth is 18 bits or 262,144 colors. Supported display modes are as in the table:

Display Resolution	Refresh Rate (Hz)	Horizontal Frequency (KHz)
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

Part 9



Part 10