PLANAR

PT1500MX / PT1550MX / PT1501MX / PT1505MU / PT1555MU

Touch Screen LCD Monitors

USER'S GUIDE

www.planar.com

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Important Recycle Instructions:

Lamp(s) inside this product contains mercury. This product may contain other electronic waste that can be hazardous if not disposed of properly. Recycle or dispose in accordance with local, state, or federal Laws. For more information, contact the Electronic Industries Alliance at WWW.EIAE.ORG. For lamp specific disposal information check WWW.LAMPRECYCLE.ORG.

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Usage Notice

⚠ **Warning-** To prevent the risk of fire or shock hazards, do not expose this product to rain or moisture.

⚠ **Warning-** Please do not open or disassemble the product as this may cause electric shock.

Precautions

Follow all warnings, precautions and maintenance as recommended in this user's manual to maximize the life of your unit.

Do:

- Turn off the product before cleaning.
- Touch screen surface may be cleaned using a soft clean cloth moistened with mild window glass commercial cleaners or 50/50 mixture of water and isopropyl alcohol.
- Use a soft cloth moistened with mild detergent to clean the display housing.
- Use only high quality and safety approved AC/DC adapter.
- Disconnect the power plug from AC outlet if the product is not going to be used for an extended period of time.

Don't:

- Do not touch the LCD Display screen surface with sharp or hard objects.
- Do not use abrasive cleaners, waxes or solvents for your cleaning.
- Do not operate the product under the following conditions:
  - Extremely hot, cold or humid environment.
  - Areas susceptible to excessive dust and dirt.
  - Near any appliance generating a strong magnetic field.
  - In direct sunlight.

Introduction

About PT1500MX / PT1550MX / PT1501MX / PT1505MU / PT1555MU

The PT1500MX / PT1550MX / PT1501MX / PT1505MU / PT1555MU is a 15” flat panel screen with an active matrix, thin-film transistor (TFT) liquid crystal display (LCD).

Features include:

- Direct Analog signal input
- Active matrix TFT LCD technology
- 1024x768 XGA resolution
- 15” viewable display area
- 31.5 ~ 60.2 kHz horizontal scan
- 56.3 ~ 75 Hz high refresh rate
- 0.297mm x 0.297mm pixel pitch
- Auto adjustment function
- Multilingual OSD user controls
- VESA DPMS power saving
- Kensington security slot
- 75 mm VESA mount
- Removable base for flexible mounting solutions.
- PT1500MX / PT1550MX - 5-wire resistive touch screen with dual RS-232 Serial/USB controllers
- PT1501MX – Capacitive touch screen with dual RS-232 Serial/USB controllers
- PT1505MU / PT1555MU - SAW touch screen with USB controller
- Built-in speakers-1W X 2

Touch Screen for PT1500MX / PT1550MX

- 5-wire resistive touch screen for finger and stylus input
- Surface: Anti-glare treatment
- Interface: Dual RS-232 Serial/USB controller
- Durability: 35 million touches at a single point
- Hardness of surface: 3H Typical
- Operating force: 40g~200g when using a silicon rubber tipped pen with a 1 mm diameter minimum and a hardness of 60 degree.
- Transmittance: 82%±5%
- Driver: Windows® VISTA, XP, 2000, ME, 98, CE, XP Embedded, Linux, Apple® Mac OS

Touch Screen for PT1501MX

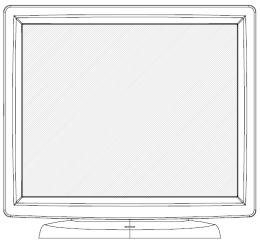
- Capacitive touch screen for finger input
- Surface: Anti-glare treatment
- Interface: Dual RS-232 Serial/USB controller
- Durability: 200 million touches at a single point
- Hardness of surface: 6H Typical
- Operating force: ± 15g
- Transmittance: 85%±5%
- Driver: Windows® VISTA, XP, 2000, ME, 98, CE, XP Embedded, Linux, Apple® Mac OS

Touch Screen for PT1505MU / PT1555MU

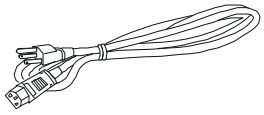
- Surface Acoustic Wave (SAW) touch screen for finger and stylus input
- Surface: Anti-glare treatment
- Interface: USB controller
- Durability: 30 million touches at a single point

- Hardness of surface: Mohs' Hardness rating of 7
- Operating force: 80g (min.) when using a soft-tipped stylus with an 8mm diameter minimum.
- Operating force: Less than 100 gram
- Transmittance: 92%±5%
- Driver: Windows® VISTA, XP, 2000, 98

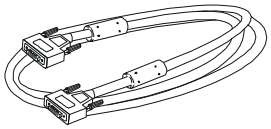
Package Overview



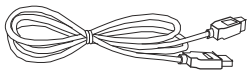
LCD Display



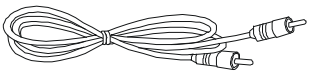
Power Cord



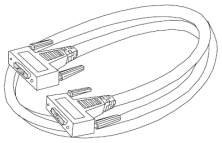
VGA Signal Cable



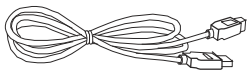
USB Cable (A to A)
(PT1550MX/PT1555MU)



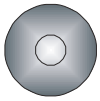
Audio-in Cable



RS-232 Cable
(PT1500MX/PT1501MX/
PT1550MX)



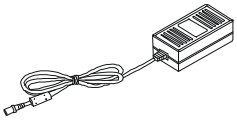
USB Cable (A to B)



Touch Screen Driver
Installation CD-ROM

User's Guide

Landing Strip

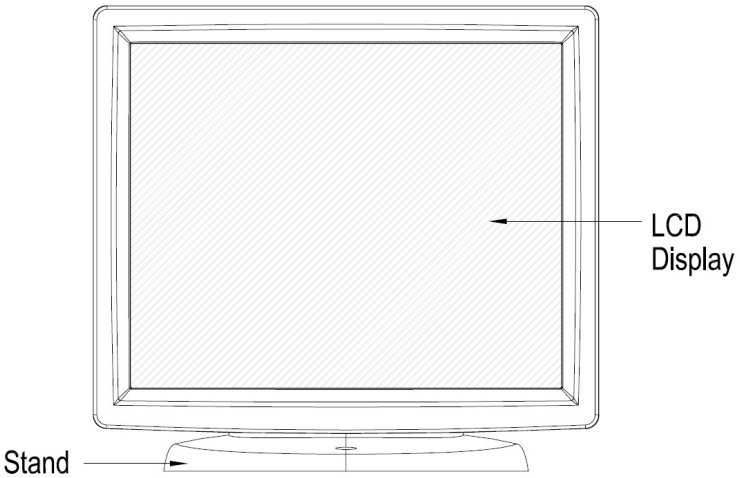


DC Power Supply
(sold separately)

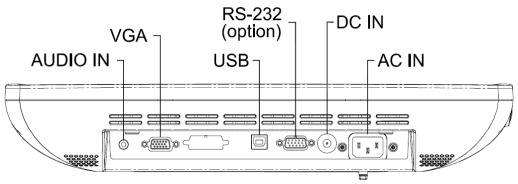
Installation

Product Overview

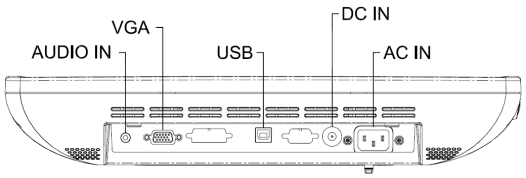
- Front View



- PT1500MX / PT1550MX / PT1501MX Bottom View (Without Stand)

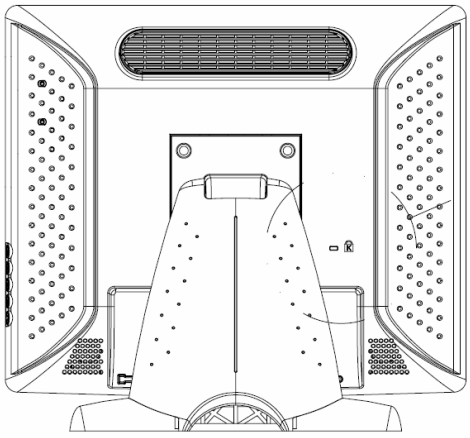


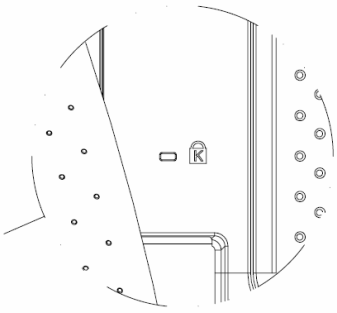
- PT1505MU / PT1555MU Bottom View (Without Stand)



Kensington Security Slot

The monitor can be secured to your desk or any other fixed object with Kensington lock security products. The Kensington lock is not included.



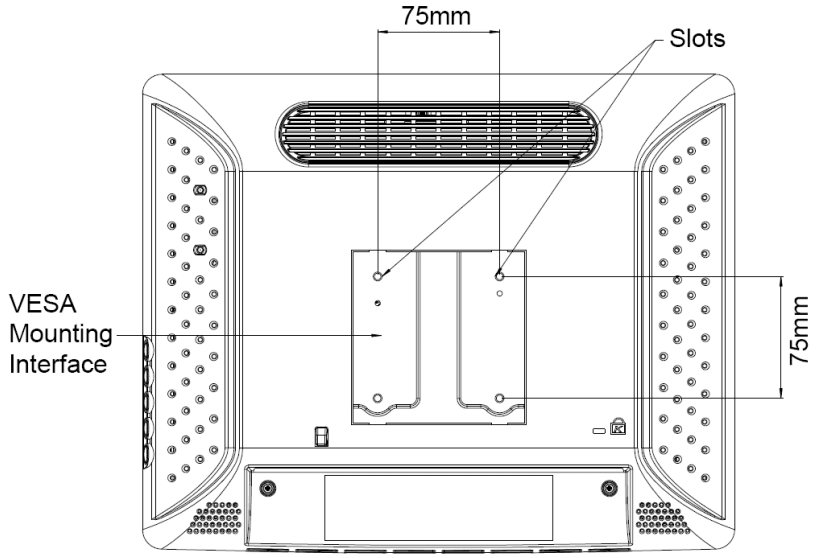


Kensington Security Slot

VESA Mount your monitor

This monitor conforms to the VESA Flat Panel Mounting Physical Mounting Interface Standard which defines a physical mounting interface for flat panel monitors, and corresponding standards for flat panel monitor mounting devices, such as wall and table arms. The VESA mounting interface is located on the back of your monitor.

To mount the monitor on a swing arm or other mounting fixture, follow the instructions included with the mounting fixture to be used.

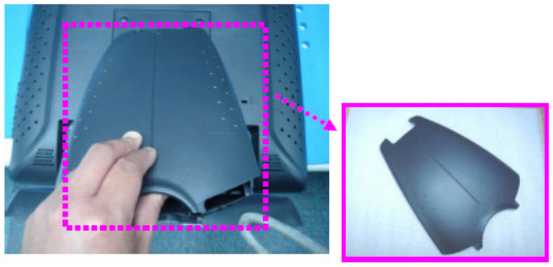


⚠ ***Warning!***

Please select the proper screws!

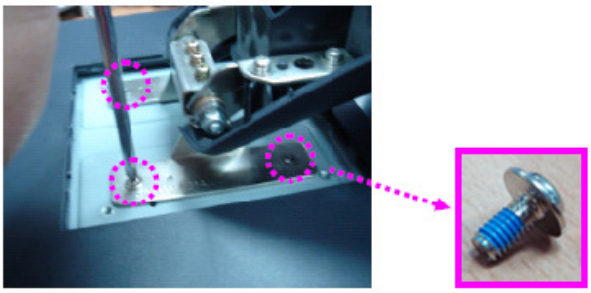
The distance between the back cover surface and the bottom of the screw hole is 8mm Please use M4 screw diameter with a maximum length of 8 mm.

◆ Remove the Deskstand



1. Remove stand back cover.

2. Remove hinge cover



3. Remove 4 screws and then remove hinge.

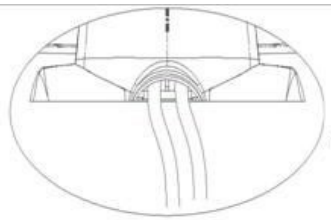
Start Your Installation

◆ Remove the Back Cover

Please follow these instructions to remove the cover on the back panel of the LCD so that you can hookup the cables to associated connector.

Figure A.

1. To remove the back cover, follow the arrows in Figure A and pull out with your fingers and the cover should be removed from the stand. Refer to the Remove the Deskstand section on page 10 for a picture.
2. Follow the instructions on **page 14** (Figure 11.1) to connect the cables to the appropriate connectors.
3. Attach the cover back to the LCD stand by pressing firmly until the tabs snap into place. You may also keep the cables in order by using the cable organizer.



⚠ ***Note!***

You can place the LCD flat horizontally to make it easier to connect the cables. Please make sure that you place it on an even surface lest the LCD should be damaged by scratches or collision.

◆ Connecting the Display (Figure 11.1)

To setup this display, please refer to the following figure and procedures.

1. Be sure all equipment is turned off.
2. Connect the AC power cord to the power connector on the monitor and the other end into an electrical outlet (11.1).
3. Connect the D-SUB cable from the display's VGA input connector to the D-SUB connector of your host computer and tighten the screws (11.1).
4. Connect the Audio-In cable from the audio input port of your display to the Audio-out port of your computer (11.1).
5. Connect the RS-232 or USB cable from the RS-232 or USB port of your display to the RS-232 port (11.1) or USB port (11.1) of your computer.
6. Configure the touch screen. Refer to the "Touch Screen Driver Installation section on **page 22.**
7. Once the touch screen is configured, the monitor is ready for use.

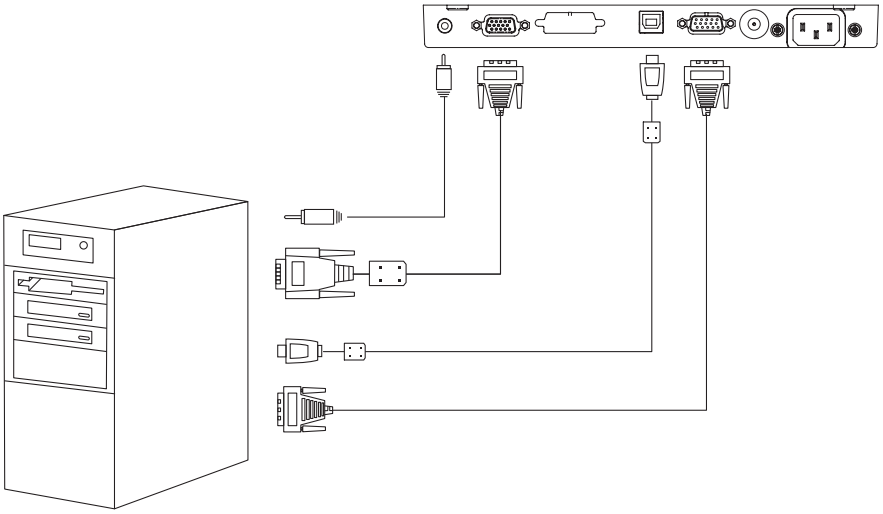
Instructions to attach the magnetic stripe reader to the PC (PT1550MX model)

1. Attach the USB Type A to A cable to the magnetic stripe reader.
2. Route the cable through the cable management opening in the desk stand with the other monitor cables.
3. Plug the cable into the PC.
4. No driver is necessary.

⚠ ***Notice!***

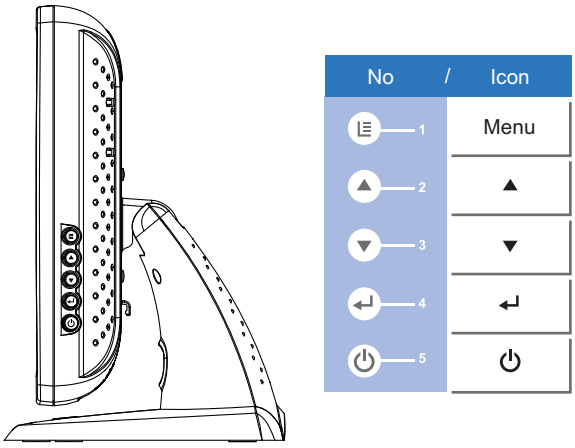
To ensure the LCD display works well with your computer, please configure the display mode of your graphics card to make it less than or equal to
1024 x768 resolution and make sure the timing of the display mode is compatible with the LCD display.
We have listed the compatible “Video Modes” of your LCD display in the appendix for your reference.

Figure 11.1



User Controls

Front Panel Controls



No / Icon	Control	Function
❶ **MENU**	Menu button	Display the OSD menus
❷ ▲	Brightness Plus/Plus	1. Increases the brightness of the display image. 2. Increases value of the adjustment items
❸ ▼	Brightness Minus/Minus	1. Decreases the brightness of the display image. 2. Decreases value of the adjustment items.
❹ ↵	Select Auto	Select – To select the adjustment items from OSD menus. Auto – To activate the “Auto Adjustment” function to obtain an optimum image.
❺ ⏻	Power Switch	Switches on/off the power of the LCD display.

How to Use the OSD Menus

1. Press the "MENU" button to pop up the “on-screen menu” and to select among the four Main Menus.

2. Choose the adjustment items by pressing the “Select/Auto” button.

3. Adjust the value of the adjustment items by pressing the “▲”or “▼ “ button.

1. The OSD menu will automatically close, if you have left it idle for a pre-set time.

2. To disable the OSD menu buttons, please follow the instructions below:

   (**Please note:** the monitor has to be ON with a valid signal preset)

   a. Press and hold the “Power“ and “Menu” key simultaneously for 4 seconds.

   b. The wording “OSD Locked” will appear for 4 seconds on the monitor. This indicates that all the buttons, with the exception of the power button, are now disabled.

3. To enable the OSD menu buttons, please follow the instructions below. (**Please note:** the monitor has to be ON with a valid signal present.)

   a. Press and hold the “Power“ and “Menu” key simultaneously for 4 seconds.

   b. The wording “OSD Unlocked” will appear for 4 seconds on the monitor. This indicates that all the buttons are now enabled.

On-Screen Display Menus

Main OSD Menu:

ITEM	SUB MENU	CONTENT
Contrast	0-100	Adjusts the maximum luminance level of the monitor
Brightness	0-100	Adjusts the backlight of the monitor
Auto Adjust	NO/YES	Automatically adjusts the system clock
Left/Right	0-100	The screen is moved horizontally right and left (1 pixel pitch increment)
Down/Up	0-100	The screen is moved vertically up and down (1 line increment)
Horizontal size	0-100	The ratio of dividing frequency of the dot clock is adjusted.
Fine tune	0-100	The phase of the dot clock is adjusted.
OSD Left/Right	0-100	Adjusts the OSD menu screen position left or right.
OSD Up/Down	0-100	Adjusts the OSD menu screen position up or down
OSD Time out	0-100	Adjusts the amount of the OSD menu is displayed
OSD Language		Select the language used for the OSD menu from among English, French, Japanese, Deutsch, Spanish, Italian, Traditional Chinese, and Simplified Chinese
Volume	0-100	Controls the sound volume.
Mute	No/Yes	Disables the sound immediately.

Appendix

Troubleshooting

If you are experiencing trouble with the LCD display, refer to the following. If the problem persists, please contact your local dealer or our service center.

Problem: No image appears on screen.

- Check that all the I/O and power connectors are correctly and well connected as described in the “Installation” section.
- Make sure the pins of the connectors are not crooked or broken.

Problem: Partial Image or incorrectly displayed image.

- Check to see if the resolution of your computer is higher than that of the LCD display.
- Reconfigure the resolution of your computer to make it less than or equal to 1024 x 768.

Problem: Image has vertical flickering line bars.

- Use "Clock" to make an adjustment.
- Check and reconfigure the display mode of the vertical refresh rate of your graphic card to make it compatible with the LCD display.

Problem: Image is unstable and flickering

- Use "Phase" to make an adjustment.

Problem: Image is scrolling

- Check and make sure the VGA signal cable (or adapter) is securely connected.
- Check and reconfigure the display mode of the vertical refresh rate of your graphics card to make it compatible with the LCD Display.

Problem: Vague image (characters and graphics)

- Use "Clock" to make an adjustment. If this problem still exists, use “Phase” to make an adjustment.

Warning Signal

If you see warning messages on your LCD screen, this means that the LCD display cannot receive a clean signal from the computer graphics card.

There may be three sources for this problem. Please check the cable connections or contact Planar for more information.

▶No Signal

This message means that the LCD Display has been powered on but it cannot receive any signal from the computer graphics card. Check all the power switches, power cables, and VGA signal cable.

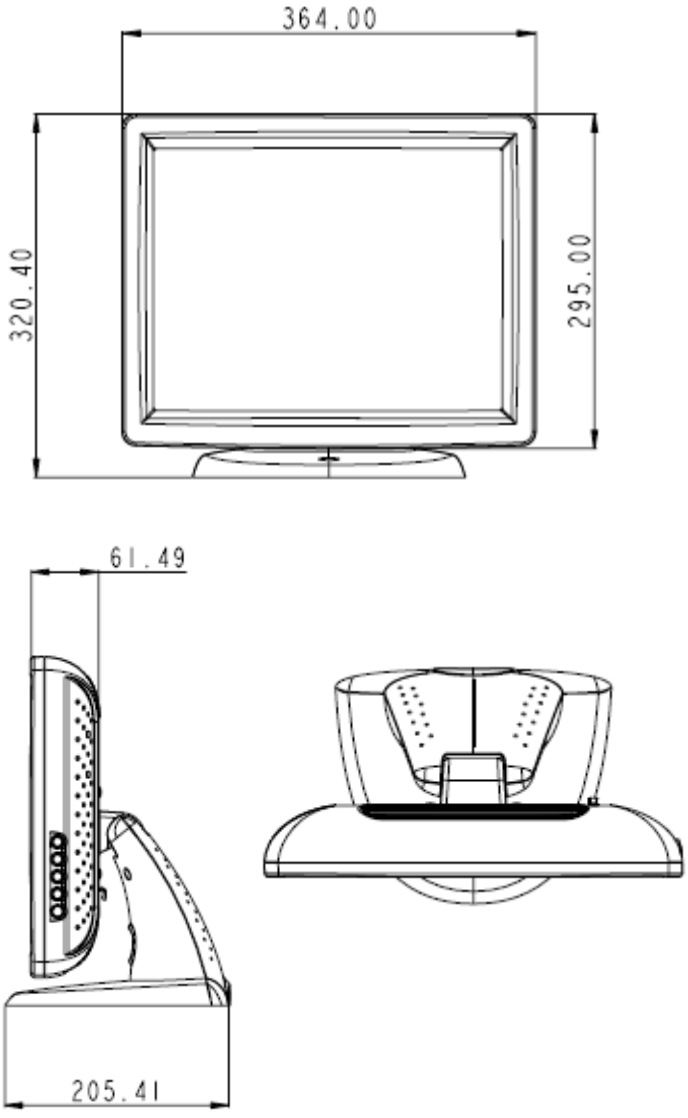
▶Going to sleep

The LCD is under the power saving mode, in addition, the LCD will go into this sleep mode when experiencing a sudden signal disconnecting problem.

▶Out of Range

This message means that the signal of the computer graphic card is not compatible with the LCD display. When the signal is not included in the “Video Modes” list we have listed in the Appendices of this manual, the LCD display will display this message.

Product Dimensions



Compatibility Modes

Mode	Resolution	H-Frequency (KHz)	V-Frequency (Hz)
VGA	720x350	31.47	70
VGA	720x400	31.47	70
VGA	640x480	31.47	60
VESA	640x480	37.86	72
VESA	640X480	37.5	75
VESA	800x600	35.16	56
VESA	800x600	37.88	60
VESA	800x600	46.88	75
VESA	800x600	48.08	72
VESA	1024x768	48.36	60
SUN	1024x768	52.45	65
VESA	1024x768	56.48	70
VESA	1024x768	60.02	75
Apple Mac II (PT1500MX /PT1550MX/PT1501MX only)	640x480	67	35.0
Apple Mac (PT1500MX /PT1550MX/PT1501MX only)	832x624	75	49.7

Touch Screen Driver Installation

Driver Installation Process:

1. Before you start to install the touch driver, please be sure the USB or the RS-232 Serial cable is connected from the PC or the LCD display.
2. Uninstall any touch screen driver that may be on your system.
3. Click on the driver link found on the CD-ROM.
4. Follow instructions as found below.
5. After installation is complete, click “Finish” and restart your computer to complete installation.

PT1500MX / PT1550MX / PT1501MX Install Instructions

The PT1500MX / PT1550MX / PT1501MX is available with both RS232 and USB connections. The touch driver is located on the enclosed CD-ROM for these operating systems: Windows® VISTA 64/32 bits, XP, 2000, ME, 98, XP Embedded, Linux, WinCE.NET.

Please Note: The PT1501MX with Capacitive Touch Screen is Microsoft® Windows® HID (Human Interface Device) compatible if you use the **USB touch screen interface**. No additional software driver is required for general operation of the touch screen. A calibration tool can be installed for improved touch position accuracy. See “Optional Capacitive Calibration Tool Install” section for more information.

PT1501MX Optional Capacitive Calibration Tool Install:

If you would like to use the Optional Capacitive Calibration Tool, follow the instructions below:

1. Open the CD-Rom.
2. Select the Monitor Size and then Model Number.
3. Click on the “Load Utility” button that appears to the right of the Model Number.
4. The HID calibration tool will automatically open. From here the user can choose to do the following:
    a. 4 Points Calibration
    b. 9 Points Linearization
    c. 25 Points Linearization
    d. Clear
    e. Draw Test
    f. Advanced. In the Advanced settings area the user may do the following:
        i. Adjust the Double Click Area
        ii. Enable auto right click and adjust the auto right click time
        iii. Choose to be either in the HID Mouse Mode or HID Digitizer Mode (Windows® Vista only)
        iv. Simply click the “Apply” button once the settings are finalized.

If you are using a PC running Windows® XP, 2000, ME, 98, or Linux operating systems, follow the instructions below.

Using the RS232 connection:

1. Be sure that RS232 cable is connected from the computer.
2. Power on the computer.
3. Load the touch screen driver CD.
4. Follow the step-by-step instructions as shown on pop-up windows.

Using the USB connection:

1. Be sure that USB cable is connected from the computer.
2. Power on the computer.
3. Load the touch screen driver CD.
4. Follow the step-by-step instructions as shown on pop-up windows.

If you are using a PC running Windows® VISTA, follow the instructions below:

Using the RS232 connection:

1. Be sure that RS232 cable is connected from the computer.
2. Power on the computer.
3. Load the touch screen driver CD.
4. Follow the step-by-step instructions as shown on pop-up windows.

Using the USB connection:

1. Be sure that USB cable is connected to the computer.

2. Power on the computer.
3. No need to install USB driver from the CD as it is a HID device. The system will recognize the HID device and load the driver automatically. If the touchscreen is out of calibration, double click on the HID calibration utility* and do the 4 points calibration.
4. Install Windows® VISTA driver and follow the step-by-step instructions to get the full touchscreen features.

***** A special calibration tool can be installed for improved touch position accuracy. See “Optional Capacitive Calibration Tool Install” section for more information.

If you are using a PC running Windows®,XP Embedded, follow the instructions below:

Express:

1. Power on the computer.
2. Make sure that the RS232 or USB cable is connected to the computer.
3. Be sure that your EWF is **disabled**. If your EWF is enabled, please disable the EWF by using the EWF Manager command or the EWF API; for example: **ewfmgr c:-disable**
4. Once the EWF is disabled click on the XP driver on the CD and follow the step-by-step instructions as shown on the pop-up windows.

Custom:

1. Power on the computer.
2. Make sure that the RS232 or USB cable is connected to the computer.
3. Follow the step-by-step instructions found in the zipped file on the CD.

If you are using a PC running Windows®,CE, follow the instructions

below:

1. Power on the computer.
2. Make sure that the RS232 or USB cable is connected to the computer.
3. Using Platform Builder, build an image file by following the step-by-step instructions found in the zipped file on the CD.

Please note: Do not plug in both RS232 and USB cables. Doing so may cause a driver conflict, making your touch screen idle.

PT1505MU / PT1555MU Driver Install:

The touch driver is located on the enclosed CD-ROM for these

OS: Windows® VISTA, XP, 2000, 98.

1. Be sure that USB cable is connected from the computer.
2. Power on the computer.
3. Load the touch screen driver CD.
4. Follow the step-by-step instructions as shown on pop-up windows.

Product Registration and Technical Support

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Technical Support

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