



PT1700M(U)  
PT1701M(U)

USER'S GUIDE

[www.planar.com](http://www.planar.com)

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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 guide to maximize the life of your unit.*

### **Do:**

- Turn off the product before cleaning.
- Use only a dry soft cloth or clean room wiper when cleaning the LCD panel surface.
- Use only high quality and safety approved AC/DC power adapter.
- Disconnect the power plug from AC outlet if the product is not used for a long period of time.

### **Don't:**

- Do not touch the LCD panel surface with sharp or hard objects.
- Do not use abrasive cleaners, waxes or solvents for 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.
  - Place in direct sunlight.

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# Introduction

## About Planar's PT1700M(U) / PT1701M(U)

The PT17XXM(U) is a 17" flat panel screen with an active matrix, thin-film transistor (TFT), liquid crystal display (LCD).

### Features include:

- Analog VGA graphics signal input
- Active matrix TFT LCD technology
- 1280 x 1024 SXGA resolution
- 17" viewable display area
- 31.5 ~ 80 kHz horizontal scan
- 56 ~ 75 Hz refresh rate
- 0.264mm x 0.264mm pixel pitch
- 300 cd/m<sup>2</sup>(typ.) brightness
- 4 CCFT backlight lamps w/30,000 hrs life
- 500:1 (typ.) contrast ratio
- L/R=80°/80°, U/D=80°/80° viewing angle, CR=5:1
- Tr+Tf: 8ms(typ.) response time
- Auto-adjustment function
- Multilingual OSD user controls
- VESA DPMS power saving
- 3M® 5-wire resistive touchscreen (for PT1700M(U))
- 3M® Capacitive touchscreen (for PT1701M(U))
- Rear surface VESA mount (100mm x 100mm)

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## Touchscreen (for PT1700M(U) / PT1701M(U))

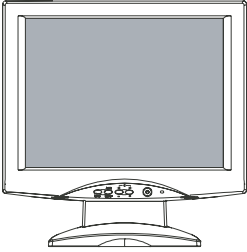
- ❑ Surface: Anti-glare treatment
- ❑ Interface: USB/Serial
- ❑ Durability:
  - Resistive: 35 million activations at a single point
  - Capacitive: 225 million activations
- ❑ Hardness of surface =
  - Resistive: 4H per ASTM D3363-92
  - Capacitive: 6.5 Mohs
- ❑ Operating force for resistive Touchscreen
  - Stylus: < 25g average
  - Finger: < 50g average

	<b>Resistive</b>	<b>Capacitive</b>
❑ Transmittance:	83% +/- 2% Typical	Up to 88% @ 550nm
❑ HAZE =	5% Typical	-
❑ Clarity =	5% Typical	-
❑ S/W Driver Compatibility: Windows® 95/98/Me/NT/2000/XP, *Linux (PT1701M(U) only)		

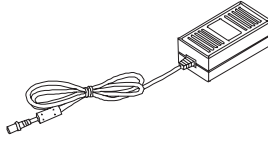
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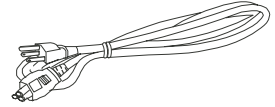
## Package Overview



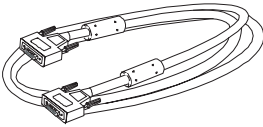
LCD Display



Power Adapter



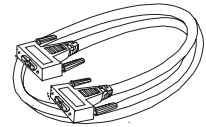
Power Cord



VGA Signal Cable



Audio-In Cable



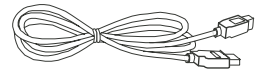
RS-232 Serial Cable  
(for PT1700M,  
PT1701M)



User's Guide



Landing Strip



USB Cable  
(for PT1700MU,  
PT1701MU)



Touchscreen Driver  
Installation CD-ROM

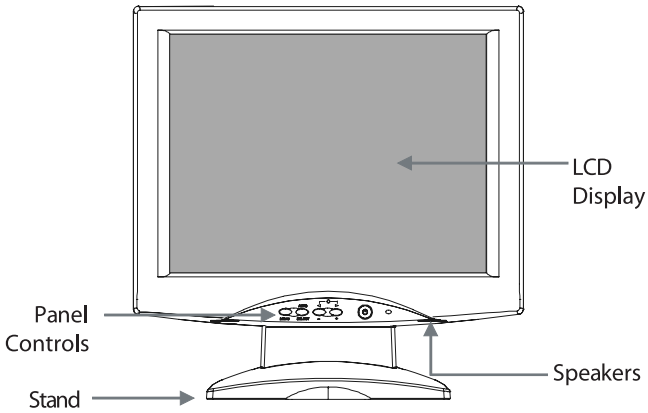
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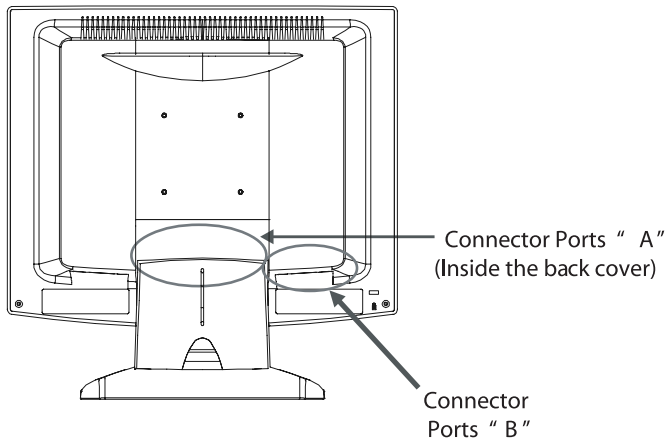
# Installation

## Product Overview

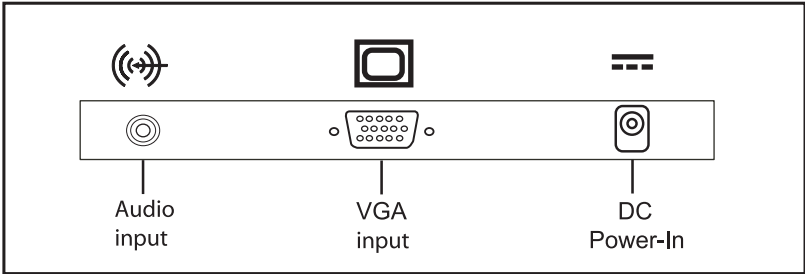
### • Front View



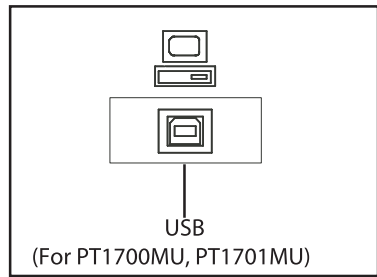
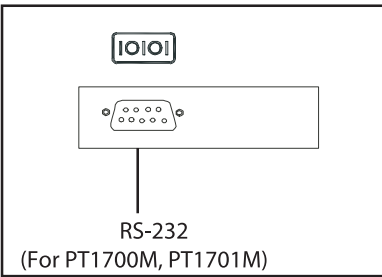
### • Rear View



**• Connector Ports "A"**



**• Connector Ports "B"**

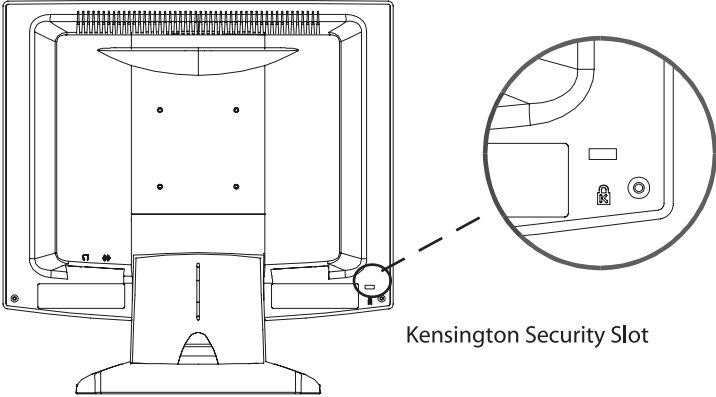


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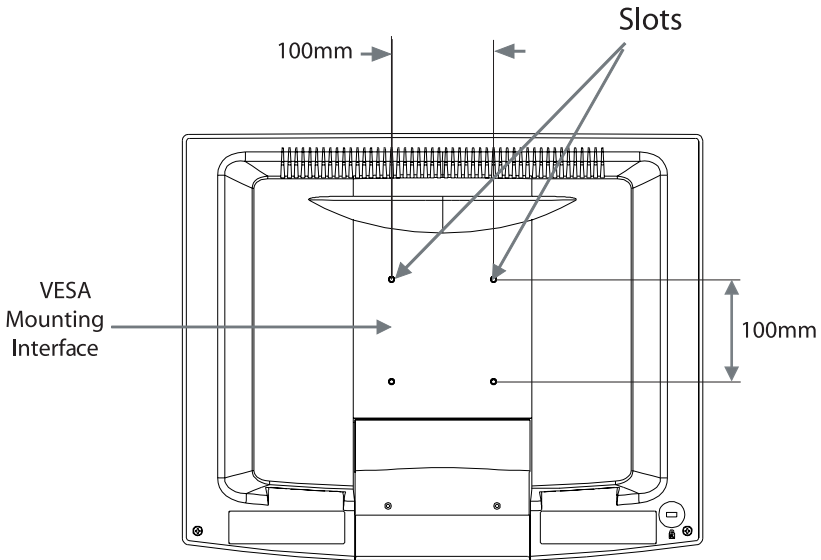
- **Kensington Security Slot**

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



## • 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 instruction included with the mounting fixture to be used.



### **Note!**

*Please select the proper screws!*

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

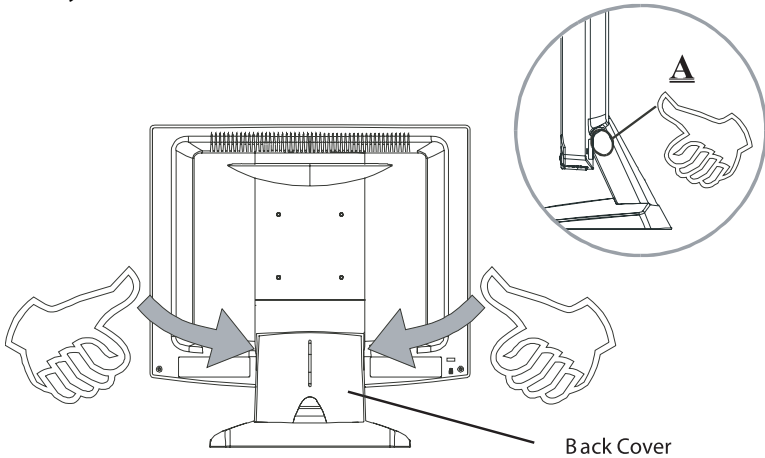
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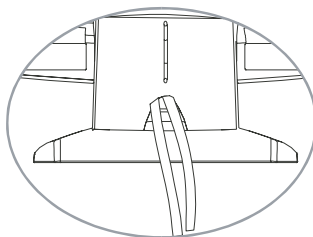
## Start your Installation

### • Remove the Back Cover

Please follow these instructions to remove the cover on the back panel of the LCD so that you can connect the cables in "Connector Ports B."



1. To remove the back cover, follow the arrows in Figure A and press with both your thumbs. The cover should be removed by pressing firmly.
2. Follow the instruction on P.12 (Figure 11.1) to connect the cables in "Connector Ports B."
3. Fix the cover back to the LCD. You may also keep the cables in order with the included 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.*

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## Connecting the display (Figure 1.1 and Figure 1.2)

To configure this monitor, please refer to the following figure and procedures.

1. Be sure all equipment is off.
2. Connect the DC power cord to the power connector. Plug one end of the AC power cord into the power adapter, and the other end into an electrical outlet(1).
3. For the PC with Analog graphics output: connect the VGA signal cable from display VGA input connector to the 15-pin connector of your host computer and tighten the screws(2).
4. **WARNING** For PT1700(1)MU Monitor: Do not connect the USB cable from USB port of your display to the USB port of your computer until the touch screen software driver has been installed.
5. After driver installation for PT1700(1)MU : Re-connect the USB cable from USB port of your display to the USB port of your computer.
6. Turn on your computer, display and video source.

**Notice:** *To ensure the LCD display works well with your computer, configure the display mode of your graphic card, less than or equal to 1280 x 1024 resolution and make sure the timing of the display mode is compatible with the LCD panel. "Compatibility Modes" of this LCD panel are listed in the appendices for your reference.*

**Figure 1.1**

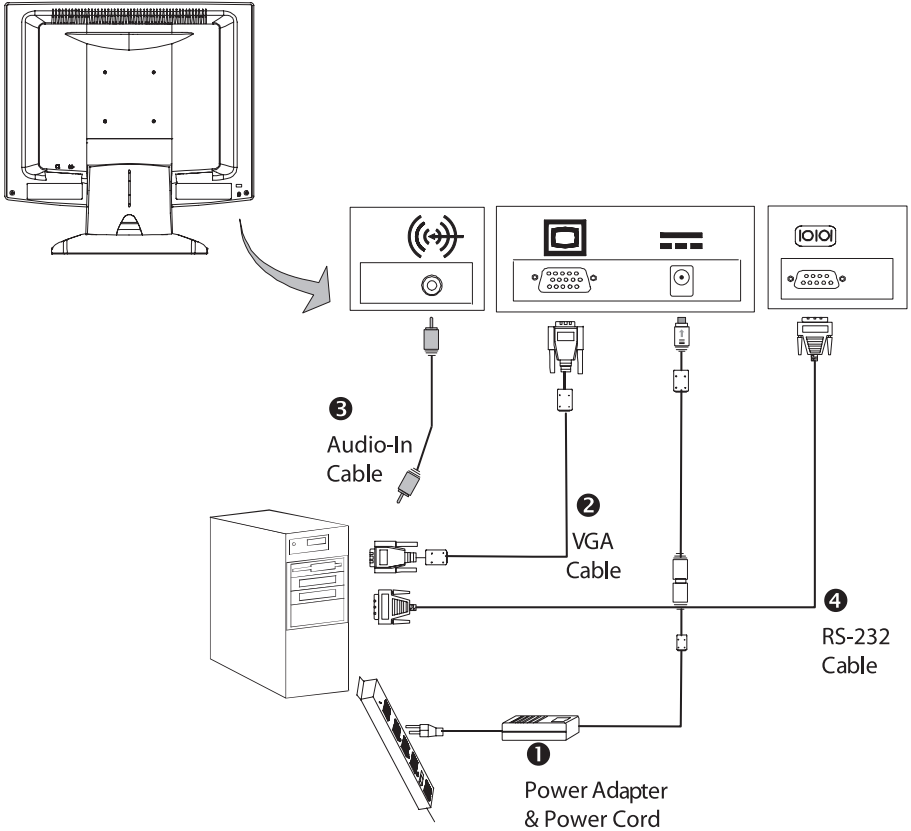
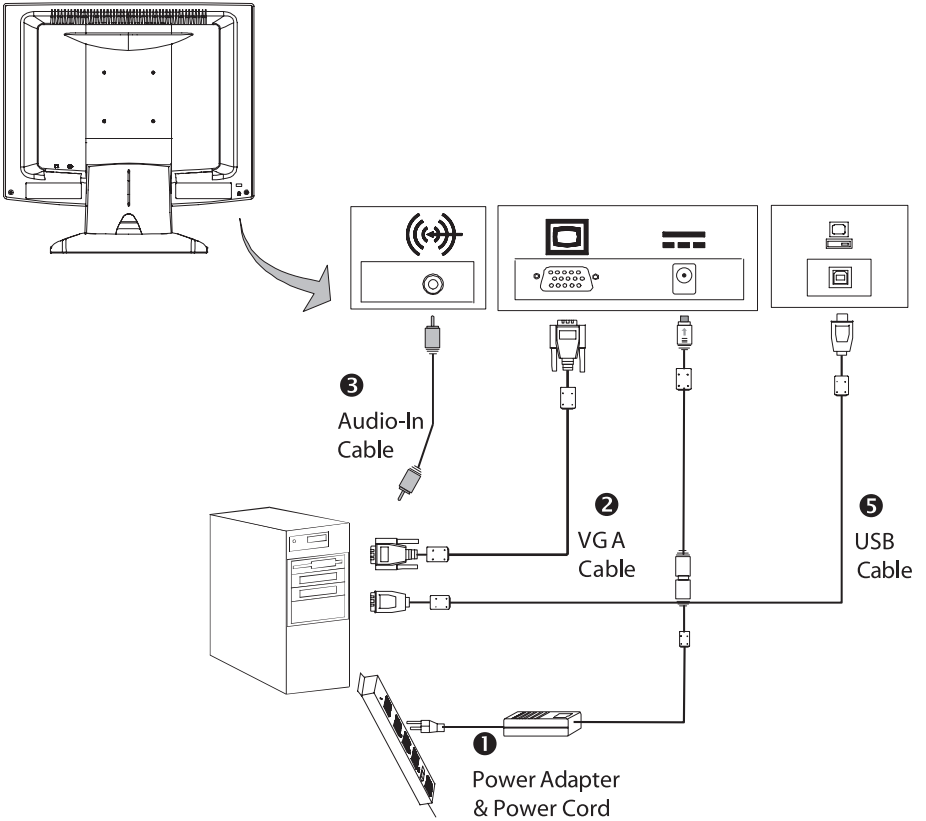
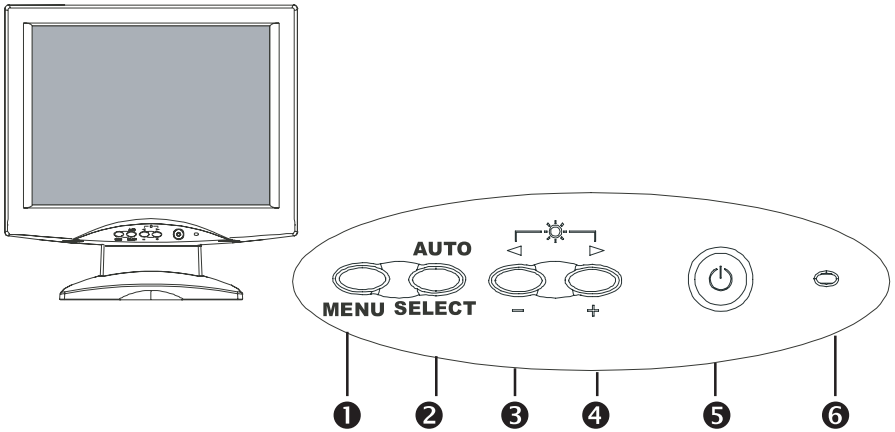


Figure 1.2



# User Controls

## Front Panel Controls



No./Icon	Control	Function
①	MEN Menu button	Display the OSD menu
②	SELECT/AUTO Select/Auto	Select - To select the adjustment items from OSD menu. Auto- To activate the "Auto Adjustment" function to obtain an optimum image.
③	◀ Brightness Minus/ Minus	1. Decreases the brightness of the display image. 2. Decreases value of the adjustment items.
④	▶ Brightness Plus/ Plus	1. Increases the brightness of the display image. 2. Increases value of the adjustment items.
⑤	⏻ Power Switch	Switches on/off the power of the LCD display.
⑥	Power LED	1. Green indicates the display is turned on. 2. Amber indicates the display is in power-saving mode.

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## How to Use the OSD Menu

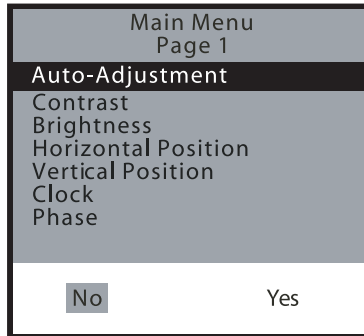
1. Press the "Menu" button to pop up the on-screen menu and to select between the four Main Menus.
2. Choose the adjustment items by pressing the "Select/Auto" button.
3. Adjust the value of the adjustment items by pressing the "◀" or "▶" button.
4. The OSD menu will automatically close, if you have left it idle for a pre-set time.

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## On-Screen Display Menus

*Main OSD Menu:*



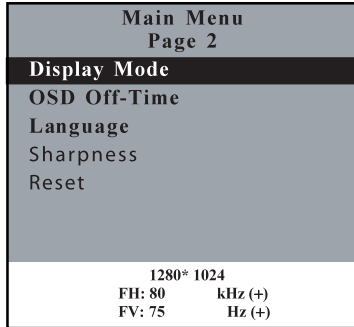
- ▶ **Auto-Adjustment**  
Choose this function to obtain an optimum image.
- ▶ **Contrast**  
Adjust the contrast of the display image.
- ▶ **Brightness**  
Adjusts the brightness of the image.
- ▶ **Horizontal Position**  
Changes the horizontal position of the image.
- ▶ **Vertical Position**  
Changes the vertical position of the image.
- ▶ **Clock**  
Changes the display data frequency to match the frequency of your graphic card. When you are experiencing vertical flickering bar, use this function to make an adjustment.
- ▶ **Phase**  
Synchronizes the signal timing of the display to that of the graphic card. When you are experiencing vertical flickering image, use this function to make an adjustment.

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## On-Screen Display Menus

*Second OSD Menu:*



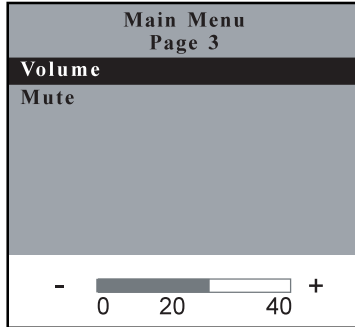
- ▶ **Display Mode**  
Select this function to view the display resolution, vertical refresh, and horizontal scan of the current mode.
- ▶ **OSD Off-Time**  
Adjusts the time period for OSD menu to disappear.
- ▶ **Language**  
Choose the language you need.
- ▶ **Sharpness**  
Adjust the sharpness of the image.
- ▶ **Reset**  
Returns the display parameters of the current mode to its factory default settings.

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## On-Screen Display Menus

*Third OSD Menu:*



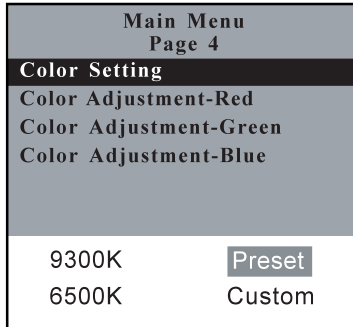
- ▶ **Volume**  
Controls the sound volume.
- ▶ **Mute**  
Disables the sound immediately.

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## On-Screen Display Menus

*Fourth OSD Menu:*



- ▶ **Color Setting**  
Adjusts the color temperature.
- ▶ **Color Adjustment-Red**  
It allows you to adjust the red color of the display.
- ▶ **Color Adjustment-Green**  
It allows you to adjust the green color of the display.
- ▶ **Color Adjustment-Blue**  
It allows you to adjust the blue color of the display.

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# 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 visit Planar Support at [www.planar.com/support](http://www.planar.com/support). See support contact information on rear cover.*

### **Problem: No image appears on screen.**

- ▶ Check that all the I/O and power connectors are installed 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 1280 x 1024.

### **Problem: Image has flickering vertical line bars.**

- ▶ Use "Frequency" 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 well connected.
- ▶ 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 ghosting (characters and graphics)**

- ▶ Use "Phase" to make an adjustment. If the problem persists, use "Clock" to make an adjustment.

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## Warning Signal

*There are instances when you will see warning messages from the LCD screen. This occurs when the LCD is unable to receive the exact signal from the computer graphic card.*

*There are three instances when this may happen. Please check the cable connections or contact your local dealer or Planar Support for more information.*

▶ **No Signal**

The LCD has been powered on but it isn't receiving a signal from the computer graphic 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.

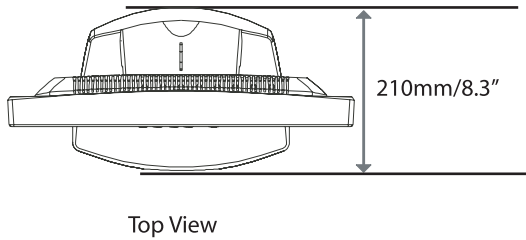
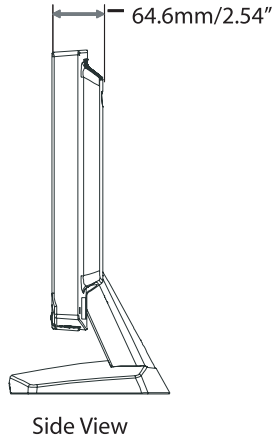
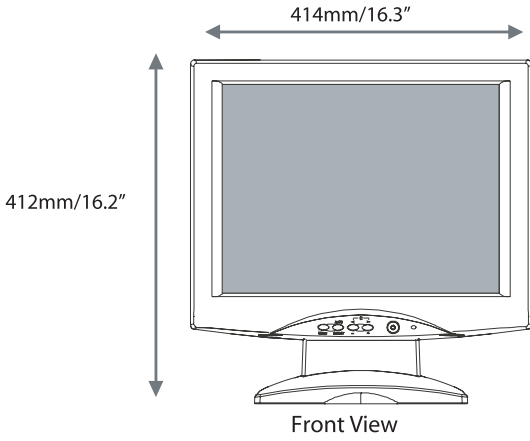
▶ **Out of Range**

The signal of the computer graphic card is incompatible with the LCD. This occurs when the graphic card signal is not one of the compatibility modes listed in the Appendices of this manual.

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# Product Dimensions



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## Compatibility Modes

<b>Mode</b>	<b>Resolution</b>	<b>V.Frequency (Hz)</b>	<b>H.Frequency (kHz)</b>
IBM VGA	640 x 350	70	31.5
IBM VGA	640 x 400	70	31.5
IBM VGA	640 x 480	60	31.5
IBM VGA	720 x 400	70	31.5
VESA VGA	640 x 480	72	37.9
VESA VGA	640 x 480	75	37.5
VESA SVGA	800 x 600	56	35.2
VESA SVGA	800 x 600	60	37.9
VESA SVGA	800 x 600	72	48.1
VESA SVGA	800 x 600	75	46.9
VESA XGA	1024 x 768	60	48.4
VESA XGA	1024 x 768	70	56.5
VESA XGA	1024 x 768	75	60.0
VESA SXGA	1280 X 1024	60	64.0
VESA SXGA	1280 X 1024	75	80.0
Apple Mac	640 x 480	67	34.9
Apple Mac	640 x 480	67	35.0
Apple Mac	832 x 624	75	49.7
Apple Mac	1024 x 768	75	60.2

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# Touchscreen Driver Installation

## Driver Installation for PT1700MU: Resistive Touchscreen with USB Connection

*Please note: These monitors are Microsoft Windows® HID (Human Interface Device) compatible. No additional software driver is required for general operation of the touchscreen.*

*A special calibration tool can be installed for improved touch position accuracy. See **Optional MicroTouch™ USB HID Calibration Tool version 7.00 Installation Process.***

## Optional Driver MicroTouch™ USB HID Calibration Tool Version 7.00 Installation Process for PT1700MU: Resistive Touchscreen with USB Connection

*Please note: These monitors are Microsoft HID (Human Interface Device) compatible. The calibration driver is not required for general operation of the touchscreen.*

*This calibration tool is for optimization of touch performance for the touchscreen to meet the 1% TPE accuracy specification.*

*The following Microsoft Windows® operating systems are supported by this software driver: **Microsoft Windows® 98SE, Me, 2000, and XP.***

1. **WARNING** Disconnect the USB cable between the display and PC before installing optional USB HID Calibration Driver.
2. Open the CD-Rom.
3. Select the LA1500RTR, LA1710RTR, PT1500MU/1700MU Calibration Option link.
4. The driver file will automatically open.
5. Follow the installation instructions for the MicroTouch HID Calibration procedure.

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## Driver Installation for PT1700M: Resistive Touchscreen with RS-232 Serial Connection.

*Touch driver information is located on the enclosed CD-ROM for the following operating systems: **Microsoft Windows® XP, Windows 2000, Windows NT 4.0, Windows Me, and Windows 9X.***

1. Open the CD-Rom.
2. Select the link for your monitor model PT1700M.
3. The driver will automatically open.
4. Select the "TW564SR4.exe" file.
5. Select "unzip".
6. Double click the "setup.exe" file.
7. Follow the installation instructions.
8. If the touch screen driver does not automatically load, restart the computer operating system.

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## Driver Installation for PT1701M(U): Capacitive Touch screen with USB Connection or RS-232 Serial Connection.

*Touch driver information is located on the enclosed CD-ROM for the following operating systems: **Microsoft Windows® XP, Windows 2000, Windows NT 4.0, Windows Me, and Windows 9X and Linux.***

**Disconnect the USB Cable between the display and PC before installing the Driver.**

1. Open the CD-Rom.
2. Select the link for your monitor model and PC operating system you are using for either Windows or Linux.
3. The driver will automatically open.
4. Follow the installation instructions.
5. When driver installation is complete, reconnect the USB cable.
6. Open the 3M Touchware icon located on your PC's desktop.
7. Select the "Calibrate" tab and follow the calibration instructions.
8. If the touch screen driver does not automatically load, restart the computer operating system.

**For Linux users open the "TWLinux 5.62.1" director and open the "readme.txt" file for installation instructions.**

**Planar Systems, Inc.**

Customer Service

**24x7 Online Technical Support:** <http://www.planar.com/support>

**Tel:** 1-866-PLANAR1 (866) 752-6271 Option #2

**Email:** [PlanarSupport@planar.com](mailto:PlanarSupport@planar.com)

**Hours:** M-F, 5am - 5pm Pacific Time

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