PLANAR

Touchboards

PT191MU
Touchscreen Monitor

USER'S GUIDE

www.planar.com

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Important Recycle Instruction:

LCD Lamp(s) inside this product contain 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 HYPERLINK "http://WWW.EIAE.ORG" WWW.EIAE.OR For lamp specific disposal information check WWW.LAMPRECYCLE.ORG.

Table of Contents

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.
- ❏ Use only a dry soft cloth or clean room wiper when cleaning the LCD panel surface.
- ❏ Use a soft cloth moistened with mild detergent to clean the display housing.
- ❏ 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.

Introduction

About Planar's PT191MU

The PT191MU is a 19" flat panel screen with an active matrix, thin-film transistor (TFT), liquid crystal display (LCD).

Features include:

❑ Analog and Digital dual signal input

❑ 19" diagonal screen size

❑ 1280 x 1024 high resolution

❑ 16.7 million displayable colors

❑ 31.5~80kHz horizontal scan

❑ 56~75 Hz high refresh rate

❑ 0.294 mm x 0.294 mm pixel pitch

❑ 300 cd/m^2 (typ.) brightness

❑ 4 CCFT backlight lamps w/ 50,000 hrs life

❑ 1000:1(typ.) contrast ratio

❑ L/R=89°/89°, U/D =89°/89° viewing angle, CR=10:1

❑ Tr + Tf: 8 ms (typ.) response time

❑ Auto-adjustment function

❑ Integrated multimedia audio function

❑ Multilingual OSD user controls

❑ VESA DPMS power saving

❑ USB hub with 1 upstream and 2 downstream ports on the stand base

❑ Stand with tilt and swivel functions

❑ 3M® ClearTek™ II Capacitive touchscreen

Touchscreen for PT191MU

❑ Surface: Anti-glare treatment

❑ Interface: USB

❑ Durability:

Capacitive: 225 million activations

❑ Hardness of surface =

Capacitive: 6.5 Mohs

❑ Transmittance: Up to 91.5% typical

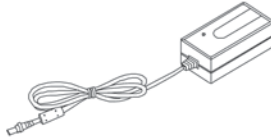❑ S/W Driver Compatibility: Windows® 95/98/Me/NT/2000/XP, Linux
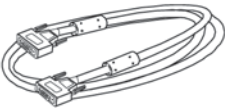
Package Overview

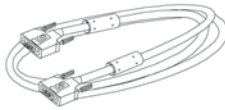LCD Display

Power Adapter

Power Cord

VGA Signal Cable

DVI-D Cable

Audio-In Cable

USB Upstream Cable

User's Guide

Landing Strip

Touchscreen Driver
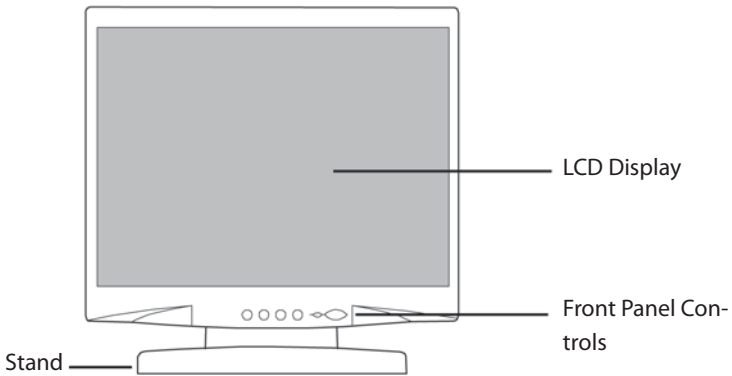Installation CD-ROM

Installation

Product Overview

• Front View

LCD Display

Front Panel Controls

Stand

• Rear View

Connector Ports

Kensington Security Lock

DC Power-In

USB(for Touch Screen)

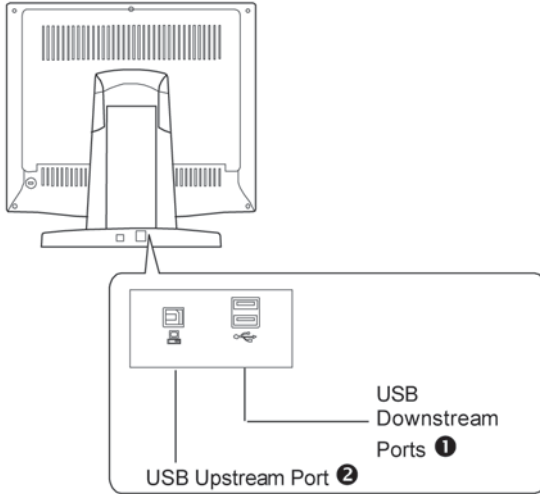DVI-D input

VGA input

Audio In
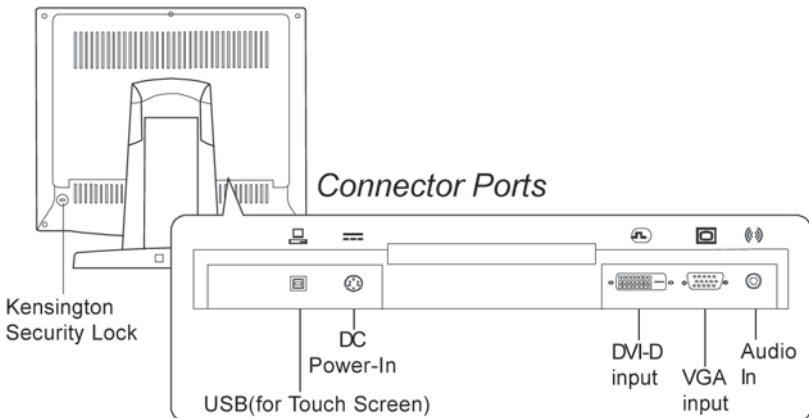
• USB Hub Ports

1. USB Downstream Ports
   These two USB ports are available for connecting USB type peripheral
   devices such as keyboard, mouse, printer and so on.

2. USB Upstream Port
   This Port is for connecting the USB Upstream cable to computer's or other
   hub's USB port.

• 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.
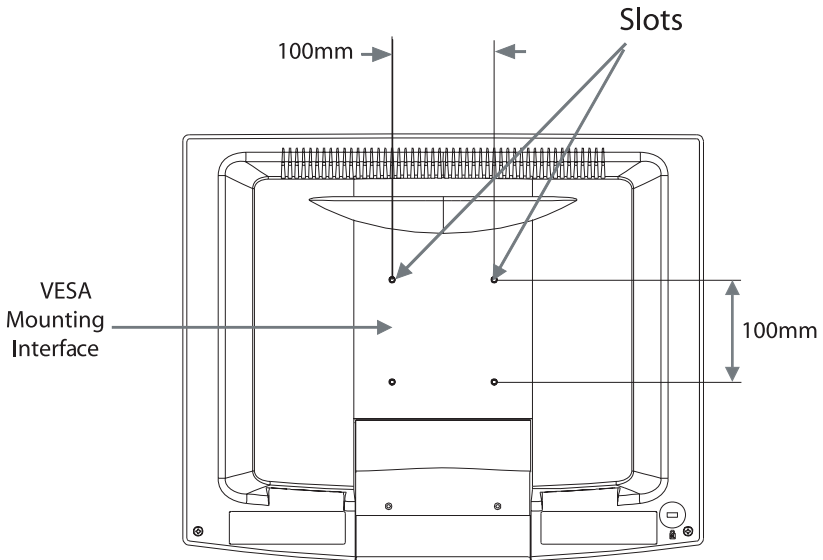
⚠️ *Note!*
Please select the proper screws!
The distance between the back cover surface and the bottom of the screw hole is 8mm. Please use a M4 screw.

Start Your Installation
• Connecting the display (Figure 1.1)

To setup this display, 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 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. For the PC with DVI digital output: Connect the DVI signal cable to the connector of the display card in your computer; connect the other side to the DVI-D input port of your display. Tighten the screws(3).

5. Connect the Audio-In cable from audio input port of your display to the Audio-out port of your computer(4).

6. Connect the USB cable from USB port of your display to the USB port of your computer(5).

7. Configure the touchscreen. Refer to the "Touch Screen Driver Installation" section on page 23.

8. Once the touchscreen is configured, turn on your computer, display and video source.

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

Figure 1.1

⑤ USB Cable

③ DVI-D Cable

② VGA Cable

④ Audio-In Cable

❶ Power Adapter & Power Cord
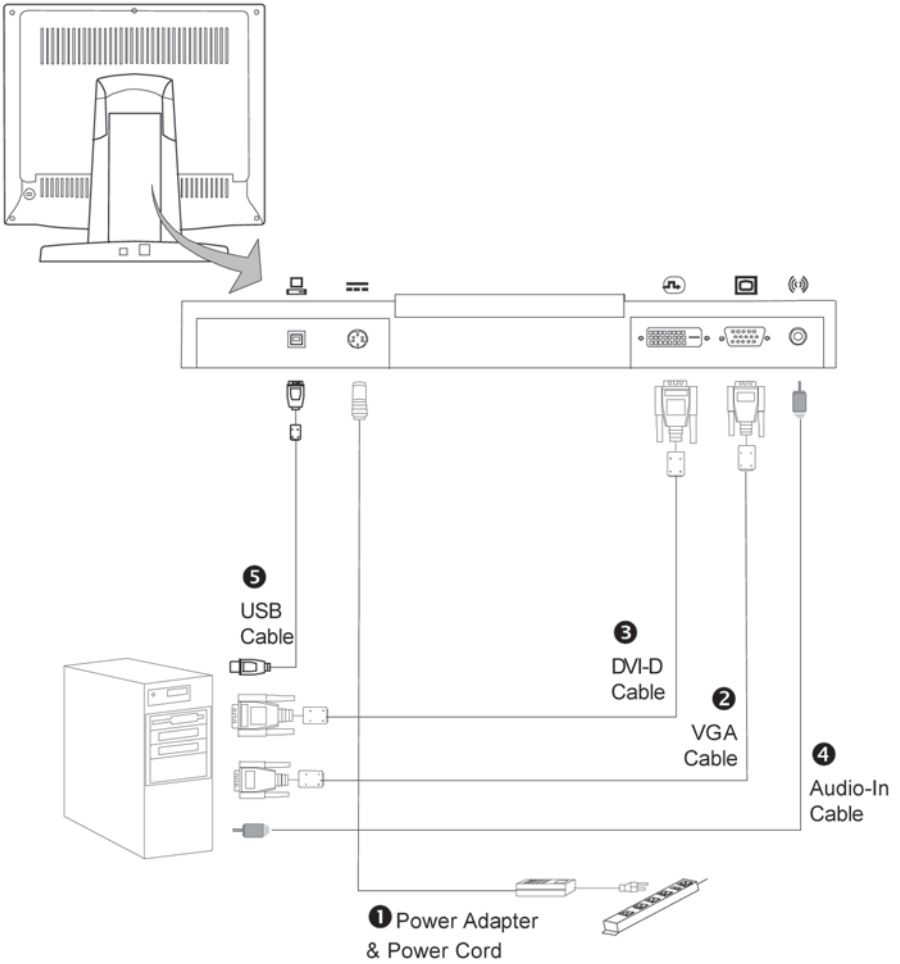
User Controls
Front Panel Controls
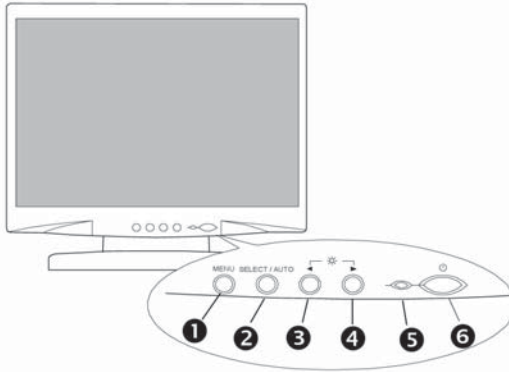
No./ Icon	Control	Function
❶ MENU	Menu button	To pop up the OSD menus.
❷ SELECT/AUTO	Select/Auto	Select- To select the adjustment items from OSD menus. Auto- To activate the "Auto Adjustment" function to obtain an optimum image.
❸ ◀	Brightness Minus/Minus	1. Decreases the brightness of the display image. 2. Decreases value of the adjustment items.
❹ ▶	Brightness Plus/Plus	1. Increases the brightness of the display image. 2. Increases value of the adjustment items.
❺	Power LED	1. Green indicates the display is turned on. 2. Amber indicates the display in power-saving mode.
❻ ⏻	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 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. Once you don't operate the OSD menus after a pre-set time, the OSD menus will automatically disappear.

5. To disable 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 "-" key.
   b. With the "-" key held down, press and hold the "Menu" key for 3 seconds.
   c. The wording "OSD Locked" will appear for 3 seconds on the monitor. This indicates that all the front buttons, with the exception of the power button, are now disabled.

6. 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 "-" key.
   b. With the "-" key held down, press and hold the "Menu" key for 3 seconds.
   c. The wording "OSD Unlocked" will appear for 3 seconds on the monitor. This indicates that all the front buttons are now enabled.

On-Screen Display Menus

First OSD Menu:

▶ Auto-Adjustment*
  Choose this function to obtain an optimum image.

▶ Contrast
  Adjusts the contrast of the display 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 graphics card. When you are experiencing vertical flickering bar, use this function to make an adjustment.

▶ Phase*
  Synchronizes the signal timing of the display with the graphic card. When you are experiencing unstable to flickering image, use this function to make an adjustment.

P.S. The symbol (*) indicates that function will be disabled under Digital mode

On-Screen Display Menus

Second OSD Menu:

▶ Display Mode
Selects this function to demonstrate the display resolution, vertical refresh, and horizontal scan of the current mode.

▶ OSD Off-Time
Adjusts the time period for OSD menu disappear.

▶ Language
Chooses 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.

On-Screen Display Menus

Third OSD Menu:

▶ Volume
It allows you to control the volume sound.

▶ Mute
It allows you to disable the sound immediately.

▶ Input Select
It allows you to change the video mode between multiple connections.

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.

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 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 vertical flickering 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 "Tracking" 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: Vague image (characters and graphics)
▶ Use "Clock" to make an adjustment. If the problem persists, use "Phase" to make an adjustment.

Warning Signal

Sometimes you probably will see the warning messages from this LCD screen. This means that the LCD display cannot exactly receive the signal from the computer graphic card.

There are three kind of situations may happen. Please check with the connected cables or contact your local dealer 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 graphic card. Check all the power switches, power cables, and VGA signal cable.

▶ Going to Sleep
   This message means that the LCD display is under the power saving mode. In addition, the LCD display will go to this sleeping mode when experiencing a sudden signal disconnecting problem.

▶ Unsupport Mode
   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 compatibility mode we have listed in the Appendices of this manual, the LCD display will appear this message.
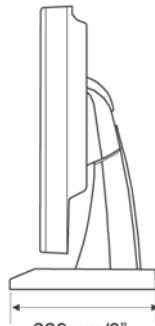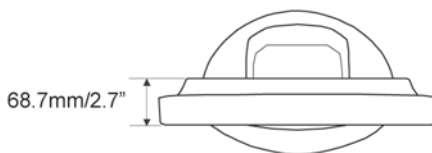
Product Dimensions

442.9mm/17.4"

437.8mm/17.2"

Front View

229mm/9"

Side View

68.7mm/2.7"
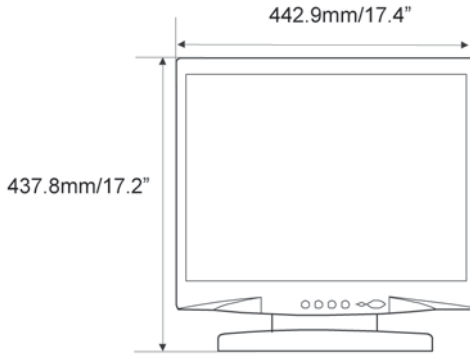
Top View

Compatibility Modes

Mode	Resolution	V.Frequency (Hz)	H.Frequency (kHz)
IBM VGA	640 x 350	70	31.5
IBM VGA	640 x 400	70	31.5
IBM VGA	720 x 400	70	31.5
IBM VGA	640 x 480	60	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 SXGA	1024 x 768	75	60.0
VESA SXGA	1280 X 1024	60	64.0
VESA SXGA	1280 X 1024	75	80.0
Apple Macintosh LC	640 x 480	67	34.9
Apple Macintosh II	640 x 480	67	35.0
Apple Macintosh	832 x 624	75	49.7
Apple Macintosh	1024 x 768	75	60.2

Touchscreen Driver Installation

Driver Installation for PT191MU: Capacitive Touchscreen with USB 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 touchscreen 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.

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