



PE150M
User's Manual

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CHAPTER 1

The LCD Monitor

Unpacking

After you unpack your LCD monitor, make sure the following items are included in the box and in good condition:

Standard Items

- PE150M LCD monitor
- VGA Cable With 15-Pin D-Sub VGA Connector (Male)
- Power cord
- User's Manual
- CD Manual
- Landing Strip
- 1.5M Stereo Jack audio cable

If you find that any of these items are missing or appear damaged, contact your dealer immediately. Do not throw away the packing material or shipping carton in case you need to ship or store the LCD monitor in the future.

Identifying Components

The LCD Monitor — Front View

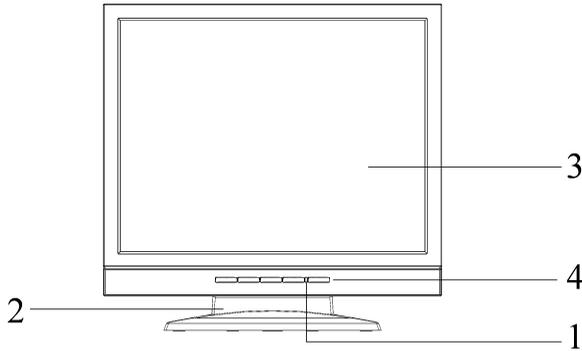


Figure 1-1: The LCD Monitor Front View

- 1. Power-On Indicator**
This LED indicator stays lit when the power is on and blinks when the LCD monitor is in power saving mode.
- 2. Monitor Stand**
- 3. LCD Screen**
The LCD monitor screen is a 15-inch TFT 1024 x 768 screen.
- 4. LCD Monitor Control Panel**
Refer to Chapter 2 for details.

The LCD Monitor — Rear View

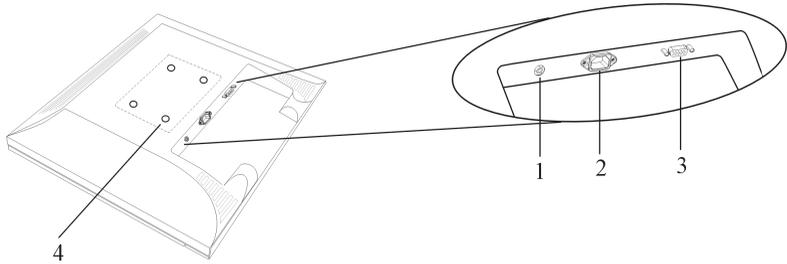


Figure 1-2: LCD Monitor Rear View

1. **Audio Line-in (optional)**
2. **AC Power Jack**
3. **VGA Cable With 15-Pin D-Sub VGA Connector (Male)**
4. **VESA interface:** It can be mounted to VESA arm. (75mm pitch)

Adjusting the Tilting Angle

The LCD monitor's angle settings range from -5° to 25° . See *Figure 1-3*.

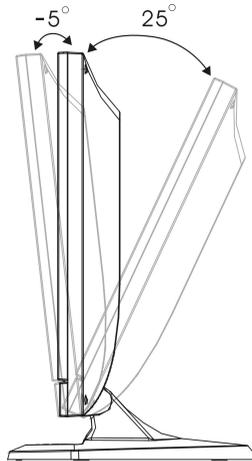


Figure 1-3: Tilting the Monitor

Raising Your Monitor to an Upright Position and Adjusting Monitor Angle

Raising Your Monitor to an Upright Position

Please When handling the monitor, take care to hold only the frame. Holding or applying pressure to the LCD panel may cause damage to your monitor.

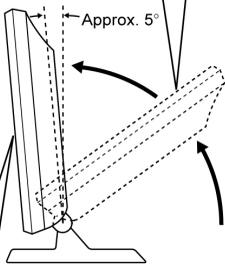
- 1 Firmly grip and hold down the monitor stand while you gently rotate your monitor upward.



Caution! Be careful not to catch your fingers or hand between the stand and the monitor.

- 2 Some parts of the apparatus will tighten in the process of adjusting your monitor. When this happens, apply greater force and continue to adjust until the screen is standing upright and can not be adjusted further.

Some parts of the apparatus will tighten in the process of adjusting your monitor. When this happens, apply greater force and continue to raise your monitor to an upright position.

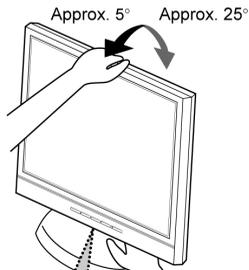


Continue to adjust the position of your monitor until it can not move any further forward. (Adjust until the monitor is tilted approximately 5° toward you.

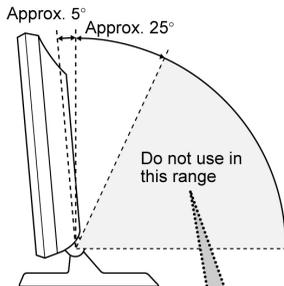
- 3 At this point you may freely adjust to a comfortable position.

Adjusting the Angle of Your Monitor

Firmly grip and hold down the monitor stand while you gently adjust your monitor to a desired angle.



Caution! Be careful not to catch your fingers or hand between the stand and the monitor.



Caution! Do not use your monitor pushed back more than 25°. Doing so may cause your monitor to fall over and lead to your injury or malfunction of the monitor.

Connecting AC Power, Video and Audio Cable

Turn off your PC and the LCD monitor before connecting your LCD monitor to the computer.

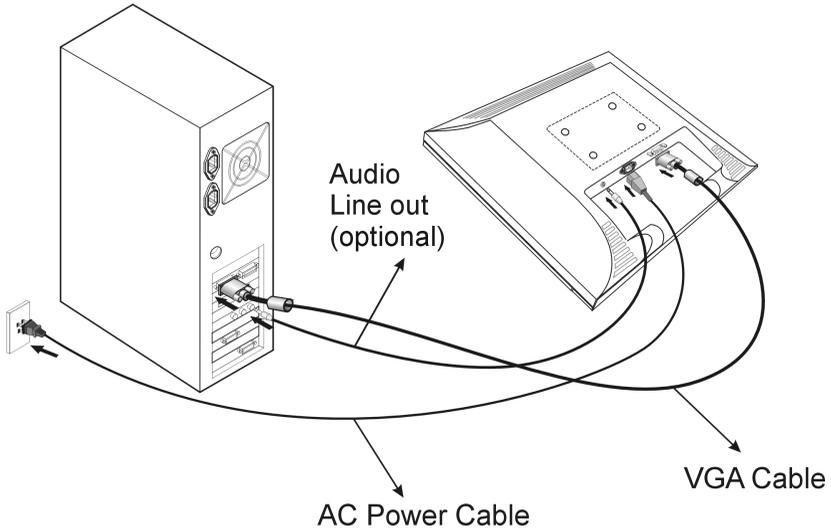


Figure 1-4: The AC Adapter

Power Management System

The LCD monitor complies with the VESA DPMS power management proposal.

When the LCD monitor is in power saving mode or detects an incorrect timing, the monitor screen will be blank and the power LED indicator starts blinking.

CHAPTER 2

The Display Controls

LCD Monitor Control Panel

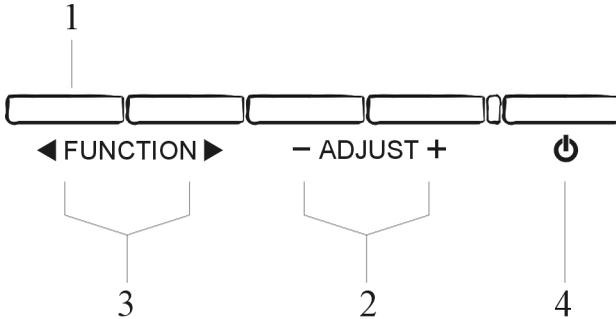


Figure 2-1: The LCD Monitor Panel

- 1. OSD Menu Button**
Press this button to pop up the OSD (On-Screen Display) menu. This button is also a Function Select button.
- 2. Adjustment Control Buttons**
These two buttons allow you to adjust the selected control functions in the OSD.
- 3. Function Select Buttons**
These two buttons allow you to select the control functions in the OSD. Press either button to scroll through the main menu and submenu items.
- 4. Power Switch**
Push the power switch to turn the monitor on and off. This switch is also a hot-key button to close the OSD menu.

Adjusting the Monitor's Display

OSD Main Menu

To access the OSD main menu, press the OSD Menu button. Use the Function Select buttons to scroll between the OSD main menu options. The option that is currently selected is highlighted.

Pressing the OSD Menu button causes the following screen to appear:



Figure 2-2: The OSD Main Menu

The Auto Adjust Option

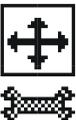
Choosing the Auto Adjust option lets the monitor determine and select the settings that are most appropriate for your system requirements.



With the Auto Adjust icon selected, press the Adjustment control button to apply the monitor settings automatically.

The Monitor-Control Option

The Monitor-Control option allows you to adjust the LCD monitor's display settings.



Press Adjustment control button to display the submenu.



H-Position: To move the LCD monitor's display left or right on a horizontal plane.



V-Position: To move the LCD monitor's display up or down on a vertical plane.



Phase: To adjust the focus and clarity of the display.



Clock: To adjust the display pixel alignment.



Reset: To reset all of the Monitor-Control submenu settings.



Exit: To exit the Monitor-Control submenu.

OSD-Control Option

The OSD-Control menu option lets you adjust the position of the OSD on the screen.



Press the Adjustment control button to display the submenu.

Use the Function Select buttons to select one of the following submenu options:



OSD-H-Position: To change the position of the OSD on a horizontal plane.



OSD-V-Position: To change the position of the OSD on a vertical plane.



Exit: To exit the OSD-Control submenu.

Misc-Control Option

The Misc-Control menu option lets you select the OSD display language, adjust the volume setting and view system information.



Press the Adjustment control button to display the submenu.



Language: The supported languages include German, English, French, Spanish, Italian and Japanese.



Audio Volume (optional): To increase or decrease the volume of the LCD monitor's sound system.



Information: To indicate display mode and firmware version.



Exit: To exit the Misc-Control submenu.

Graphic-Control Option

The Graphic-Control option lets you make adjustments that effect the contrast, brightness and color of the LCD monitor's display.



Press the Adjustment control button to display the submenu.



Contrast: To adjust the contrast level of the display screen.



Brightness: To adjust the light level on the display screen.



Color: To select the LCD monitor's color display. The available options are 9300, 6500 and User. Selecting the user option lets you make individual adjustments to the R, G and B items.



R, G and B: To make individual adjustments to the Red, Blue, Green (RGB) gain for the color temperature.



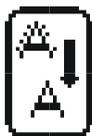
Auto Level: To automatically adjust the white balance of the display.



Exit: To exit the Graphic-Control submenu.

Graphic/Text Option

The Graphic/Text option lets you switch between text and graphic display modes.



Press the Adjustment button to switch between the text and graphic options.

OSD Exit Option

Use the OSD Exit item to close the OSD menu.



The OSD will close by itself if left inactive.



Note:

1. No Video

When the monitor is ON and there is no Video signal received, the following message will be displayed.



NO SIGNAL

2. Signal out of monitor's supported range

Then the frequency range of the signal is out of the monitor's specifications, the display will show messages in the following manner:

Case 1:

The incoming frame rate is higher than 75Hz.

In this case, the screen display may not be centered and a warning message appears.



Case 2:

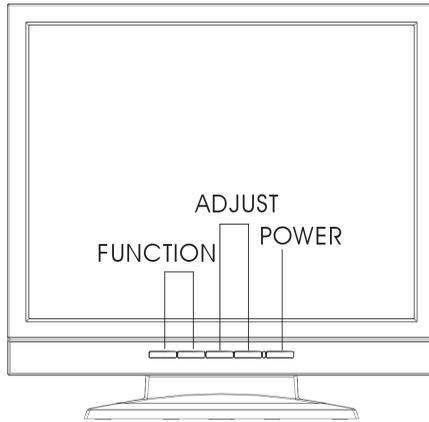
The incoming resolution is higher than 1024x768.

In this case, the video data will be turned off and a warning message appears at center.



OVER RANGE

Hot-Key Buttons for Quick Adjustment of Monitor Settings.



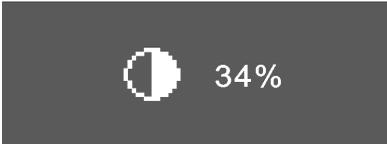
1. “Auto-adjust” hot-key button:

Press the 2nd function button to apply the monitor setting automatically. A small “Auto Adjust” OSD is also displayed.



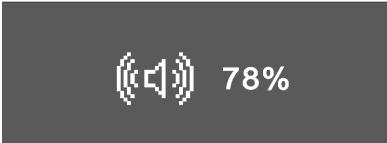
2. “Contrast-adjust” hot-key button:

Press the 1st adjustment control button to allow you to adjust the contrast of the display directly. A small “Contrast” OSD is also displayed.



3. “Adjust-volume” hot-key button:

Press 2nd adjustment control button to allow you to adjust the audio volume directly. A small “Audio Volume” OSD is also displayed.



* To close the small OSD windows, press the power switch.

APPENDIX A

Technical Information

TFT LCD Monitor Specifications

LCD Panel	15" XGA	
Control Functions Power	Software Power switch with LED indicator (ON/OFF)	
On-Screen Display (OSD)	Main Menu	Submenu
	Auto Adjust	
	Monitor Control	Horizontal Position/Vertical Position/Phase/Clock/Reset/Exit
	OSD Control	OSD Horizontal Position/OSD Vertical Position/Exit
	Misc. Control	Language/Audio Volume/Information/Exit
	Graphic Control	Contrast/Brightness/Color/R/G/B Auto Level/Exit
	Graph/Text	640 x 400/720 x 400
	OSD Exit	
Display Area (mm)	304.1 x 228.1 (15" diagonal)	
Display Colors	16.7M	
Video Interface	VGA Compatible Analog RGB Composite Sync.	
Scanning Frequency H/V, Hz	24-62K 50-75Hz	
Response Time (TR/TF) (typ.)	20ms / 5ms	
Contrast Ratio	500:1	
Brightness	300 cd/m ²	
Viewing Angle (H/V)	140° /130°	
Power Management	Meets VESA DPMS	
Power Consumption (ON/OFF, W)	30/2.5Max.	
Dimensions WxHxD mm	344x332x200	
Net Weight (Kg) Approx.	3.2	
Power Supply	Built-In Universal Input Off-Line Power Supply	
Environment	Operating Temperature: 0 to 40° C Relative Humidity: 10% to 90%	
Audio (Two 1 Watt speakers with amplifier)	Yes	
Regulatory	CUL, TÜV-GS, CE, FCC B, DoC, TCO'99 (optional), Energy star, TÜV-Ergonomics	

APPENDIX B

Supported Timing

Item	Standards	Resolution	Dot Clock (MHz)	Vertical Scanning Frequency (Hz)	Horizontal Scanning Frequency (kHz)
1	NEC PC98	640x400	25.20	70.15	31.50
2	NEC PC98	640x400	21.05	56.42	24.83
3	MAC 13" mode	640x480	30.24	66.67	35.00
4	MAC 16" mode	832x624	57.28	74.55	49.73
5	MAC 17" mode	1024x768	80.00	75.02	60.24
6	VGA	640x350	25.18	70.09	31.47
7	VGA	640x400	25.18	70.09	31.47
8	VGA	640x480	25.18	59.94	31.47
9	VESA	640x480	31.50	72.81	37.86
10	VESA	640x480	31.50	75.00	37.50
11	VESA	800x600	36.00	56.25	35.16
12	SVGA	800x600	40.00	60.32	37.88
13	VESA	800x600	50.00	72.19	48.08
14	VESA	800x600	49.50	75.00	46.88
15	VGA	720x400	28.32	70.09	31.47
16	XGA	1024x768	65.00	60.00	48.36
17	VESA	1024x768	75.00	70.07	56.48
18	VESA	1024x768	78.75	75.03	60.02
19		1024x768	71.64	66.13	53.96
20	SUN	1024x768	64.13	59.98	48.29
21	SUN	1024x768	74.25	70.04	56.59
22	SUN	1024x768	84.38	77.07	62.04

*Once a mode is optimized, there is no need to make any further adjustment as long as the VGA card remains unchanged.

*Specifications are subject to change without notice.

APPENDIX C

Troubleshooting

Troubleshooting Procedures

This LCD monitor comes pre-adjusted with standard VGA timing. Due to output timing differences among various VGA cards, you may initially experience an unstable or unclear display when a new display mode or new VGA card is selected.

Before applying any of the following troubleshooting procedures, you should first apply the Auto Adjust option in the OSD menu.

PROBLEM: Display is Unclear and Unstable

To stabilize and clarify your display, follow this procedure:

1. In Windows, enter the windows shut down screen.
2. Open the OSD and select the Clock function. Press one of the Adjustment Control buttons until the dark vertical bands disappear.
3. Select the Phase function and press one of the Adjustment Control buttons until horizontal dark and light lines appear. The number of lines increases as you press the button. Press the other Adjustment Control button until the lines disappear and you have a clear display.

PROBLEM: There is no LCD Display

If there is no display on the LCD, refer to the following:

1. Make sure that the power indicator on the LCD monitor is lit, all connections are secure, and the system is running on the correct timing. Refer to the Addendum for information on timing.
2. Turn off the LCD monitor and then turn it back on again. Press the OSD Menu button (refer to Chapter 2) once and then press either Adjustment Control button several times. If there is still no display, press the other Adjustment Control button several times.
3. If step 2 doesn't work, connect your PC system to another external CRT. If your PC system functions properly with a CRT monitor but it does not function with the LCD monitor, and the LCD monitor's power LED is blinking, the output timing of the PC's VGA card may be out of the LCD's synchronous range. Change to one of the alternate modes, listed in the Addendum, or replace the VGA card and repeat steps 1 and 2.
4. If the power LED is not lit, check that the AC power connector is securely connected. Verify that the AC adapter LED is lit. If the AC adapter LED is not lit, please contact your dealer or Planar for assistance.

FCC Compliance Statement

This device complies with part 15 of the FCC Rules. Operation is subjected to the following two conditions:

1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesired operation.

FCC WARNING

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- Connect the equipment into an outlet different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Caution:

To comply with the limits for an FCC Class B computing device, always use the shielded signal cord supplied with this unit.

The Federal Communications Commission warns that changes or modifications of the unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

CE mark for Class B ITE (Following European standard EN55022/1998; EN61000-3-2/1995; EN61000-3-3/1995, EN55024/1998, EN60950/1992+A1+A2+A3+A4+A11)

Radio Frequency Interference Statement

Warning:

This is a Class B product. In a domestic environment, this product may cause radio interference in which case the user may be required to take adequate measures.

Canadian Doc Notice

For Class B Computing Devices

This digital apparatus does not exceed the Class B limits for radio noise emissions from digital apparatus as set out in the Radio Interference Regulation of the Canadian Department of Communications.

“Le présent appareil numérique n'émet pas de bruits radioélectriques dépassant les limites applicables aux appareils numériques de la class B prescrites dans le Règlement sur le brouillage radioélectrique édicté par le ministère des Communications du Canada”

Important Operating Instructions

Please read the following instructions carefully. This manual should be retained for future use.

1. To clean the LCD monitor screen, first, make sure the monitor is in the power off mode. Unplug the monitor from its power source before cleaning it. Do not spray liquid cleaners directly onto the unit. Without applying excessive pressure, clean the screen with a slightly dampened rag.
2. Do not place your LCD monitor near a window. Exposing the monitor to rain, water, moisture, or sunlight can severely damage it.
3. Do not place anything on top of the monitor-to-PC signal cord. Make sure the cord is placed in an area where it will not be stepped on.
4. Do not apply pressure to the LCD screen. Excessive pressure may cause permanent damage to the display.
5. Do not remove the cover or attempt to service this unit by yourself. You may void the warranty. Servicing of any nature should be performed only by an authorized technician.
6. Safe storage of the LCD monitor is in a range of minus 20 to plus 60 degrees Celsius. Storing your LCD monitor outside this range could result in permanent damage.
7. Immediately unplug your monitor and call an authorized technician when:
 - The power or monitor-to-PC signal cord is frayed or damaged.
 - Liquid has been spilled into the monitor, or it has been exposed to rain.
 - The monitor has been dropped or the case has been damaged.
8. Only with use of supplied adaptor, in case of loss or replacement contact the retailer or service center.
9. If you have lost the included power cord, you can purchase a same configuration/type power cord (with ground connection) with the following specifications:
 - ❖ U.S. : VW-1; 18AWG X 3C; SVT with national approval as UL and/or CSA approval/number(s)
 - ❖ Japan : VCTF type, 3 wires or with ground-wire, T-mark approval is required.
 - ❖ Europe : VDE/ÖVE and/or KEMA approval; H05VV-F, 3G, 0.75mm², or equivalent.

Planar Systems, Inc

Customer Service

Online Support : <http://planar.custhelp.com>

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Tel : 1-886-PLANAR-1 (1-866-752-6271)

Hours : m-f, 8am-9pm Eastern Time

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