

HP L6010 Retail Monitor

User Guide

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First Edition (June 2012)

Document Part Number: 688916-001

About This Guide

This guide provides information on monitor features, setting up the monitor, and technical specifications.

WARNING! Text set off in this manner indicates that failure to follow directions could result in bodily harm or loss of life.

<u>CAUTION</u>: Text set off in this manner indicates that failure to follow directions could result in damage to equipment or loss of information.

NOTE: Text set off in this manner provides important supplemental information.

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1 Product Features

HP L6010 Retail Monitor

The LCD (liquid crystal display) monitor has an active matrix, thin-film transistor (TFT) panel. The monitor features include:

- 26.4 cm (10.4-inch) diagonal viewable area display with 1024 x 768 resolution, plus full support for lower resolutions, includes custom scaling for maximum image size while preserving original aspect ratio
- Industrial LCD panel with WLED backlight that provides better clarity and consumes less energy
- USB 2.0 hub with one external USB port
- 75mm VESA mounting support
- Video input supports VGA analog signal input plus DisplayPort and DVI digital signal inputs
- Audio In port and built-in 1-watt speakers
- Security provision to enable locking the monitor to a fixed object
- Plug and play capability if supported by the system
- High-Bandwidth Digital Content Protection (HDCP) copy protection on DVI and DisplayPort inputs
- On-Screen Display (OSD) adjustments in several languages for easy setup and screen optimization
- Software and documentation CD that includes driver software and product documentation
- Energy Star® qualified (for additional certifications and regulatory notices, refer to the HP LCD Monitors Reference Guide provided on the CD included with this product):

Optional Accessories

The following can be purchased separately from HP:

- Dual position adjustable stand
- Cable lock

2 Setting Up the Monitor

To set up the monitor, ensure that the power is turned off to the monitor, computer system, and other attached devices, then follow the instructions below.

Identifying Rear Connectors

Figure 2-1 Rear Connectors

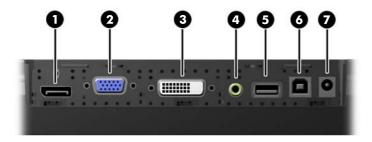


Table 2-1 Rear Connectors

Connector		Function
1	DisplayPort	Connects a DisplayPort video cable from the PC to the monitor.
2	VGA	Connects a VGA video cable from the PC to the monitor.
3	DVI	Connects a DVI video cable from the PC to the monitor.
4	Audio In	Connects an audio cable from the PC to the monitor.
5	USB Downstream	Connects external USB devices to the monitor.
6	USB Upstream	Connects a USB cable from the PC to the monitor (required for USB downstream functionality).
7	DC Power	Connects the external power adapter to the monitor.

Attaching an Optional Monitor Stand

The optional monitor stand is available from HP (sold separately). The stand attaches to the 75mm VESA mounting holes on the rear panel.

The monitor can be attached to the stand in a low-mount or high-mount position. Before attaching the stand, decide which position is best for your configuration.

Figure 2-2 Monitor Stand Low-Mount and High-Mount Configurations



NOTE: The stand is shipped in the low-mount configuration.

Attaching the Optional Monitor Stand in the Low-Mount Position

1. Remove the stand's rear cover by pressing on the two pressure points near the bottom of the cover (1), then sliding the cover up (2) and pulling it off the stand (3).

Figure 2-3 Removing the Rear Cover



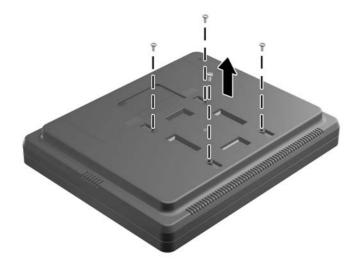
2. To allow access to the mounting screws, remove the two plugs in the center of the stand by pinching together the tabs on the back of the plugs (1) then pulling the plugs out of the front of the stand (2).

Figure 2-4 Removing the Access Plugs



3. Place the monitor face down on a flat surface covered with a clean, dry cloth and remove the four Phillips mounting screws from the rear of the monitor.

Figure 2-5 Removing the Mounting Screws



4. Insert the hooks on the stand mounting bracket into the slots on the rear of the monitor and slide the stand toward the top of the monitor so that the hooks catch inside the slots.

Figure 2-6 Attaching the Stand



5. Install the two Phillips mounting screws that secure the mounting bracket to the monitor. Use a Phillips screwdriver long enough to go through the access holes on the stand.

Figure 2-7 Securing the Stand



6. With the monitor in the upright position, reinsert the access plugs in the stand.

Figure 2-8 Replacing the Access Plugs



- 7. Route the cables through the upper cable access hole at the top of the stand, behind the cable security brackets, and out the cable access hole at the bottom of the stand.
- NOTE: Refer to Connecting the Cables on page 12 for information on cable connections.

Figure 2-9 Routing the Cables



8. Place the rear cover on the back of the stand with the top of the cover slightly above the top of the stand then slide the cover down to lock it in place.

Figure 2-10 Replacing the Rear Cover



Attaching the Optional Monitor Stand in the High-Mount Position

 Remove the four Phillips screws that attach the mounting bracket to the stand and remove the bracket.

Figure 2-11 Removing the Mounting Bracket



2. Rotate the mounting bracket 180°.

Figure 2-12 Rotating the Mounting Bracket 180°



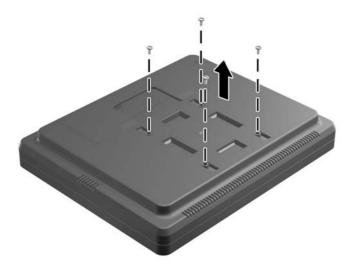
3. Replace the four Phillips screws that attach the mounting bracket to the stand to secure the bracket to the stand.

Figure 2-13 Attaching the Mounting Bracket



4. Place the monitor face down on a flat surface covered with a clean, dry cloth and remove the four Phillips mounting screws from the rear of the monitor.

Figure 2-14 Removing the Mounting Screws



5. Insert the hooks on the stand mounting bracket into the slots on the rear of the monitor and slide the stand toward the bottom of the monitor so that the hooks catch inside the slots.

Figure 2-15 Attaching the Stand



6. Install the two Phillips mounting screws that secure the mounting bracket to the monitor.

Figure 2-16 Securing the Mounting Bracket



7. Position the monitor and stand in the upright position, and then remove the stand rear cover by pressing on the two pressure points near the bottom of the cover (1), then sliding the cover up (2) and pulling it off the stand (3).

Figure 2-17 Removing the Rear Cover



- 8. Route the cables through the upper cable access hole at the top of the stand, behind the cable security brackets, and out the cable access hole at the bottom of the stand.
- NOTE: Refer to Connecting the Cables on page 12 for information on cable connections.

Figure 2-18 Routing the Cables



9. Place the rear cover on the back of the stand so with the top of the cover slightly above the top of the stand then slide the cover down to lock it in place.

Figure 2-19 Replacing the Rear Cover



Adjusting the Optional Monitor Stand

For viewing clarity, adjust the monitor forward (up to -5 degrees) or backward (up to +35 degrees).

Figure 2-20 Adjusting the Tilt



Mounting the Monitor

The monitor panel can be attached to a wall, swing arm, or other mounting fixture.

NOTE: This apparatus is intended to be supported by UL or CSA Listed wall mount bracket.

- 1. Remove the four screws from the VESA mounting holes on the back of the monitor.
- To attach the monitor to a mounting fixture, insert the four screws that were previously removed through the holes on the mounting fixture and into the mounting screw holes on the monitor.
 Follow the manufacturer's documentation provided with the mounting fixture for additional assembly instructions.
- 3. Connect the required cables to the monitor panel and PC.

Connecting the Cables

NOTE: If the monitor is attached to the optional stand, route the cables through the stand as described in Attaching the Optional Monitor Stand in the Low-Mount Position on page 3 or Attaching the Optional Monitor Stand in the High-Mount Position on page 7.

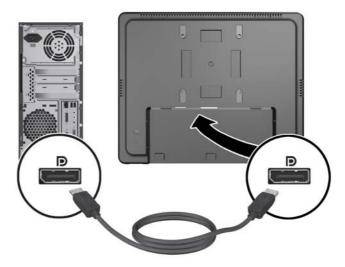
1. Place the monitor in a convenient, well-ventilated location near the computer.

2. Remove the cable connection cover on the rear of the monitor by pressing the two ribbed areas at the top of the cover (1) and pulling the cover straight down and off the monitor (2).

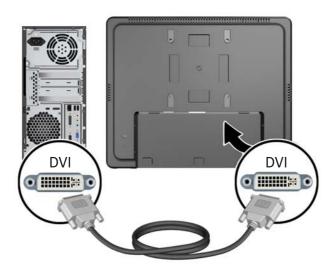
Figure 2-21 Removing the Cable Connection Cover Plate



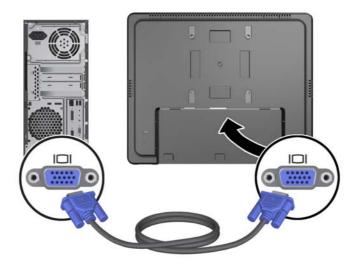
- 3. Depending on your configuration, connect either the DisplayPort, DVI, or VGA video cable between the PC and the monitor.
 - Figure 2-22 Connecting the DisplayPort Video Cable



• Figure 2-23 Connecting the DVI Video Cable

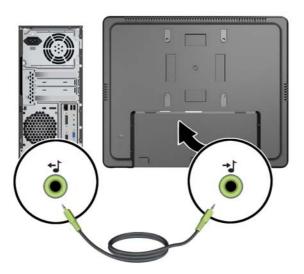


• Figure 2-24 Connecting the VGA Video Cable



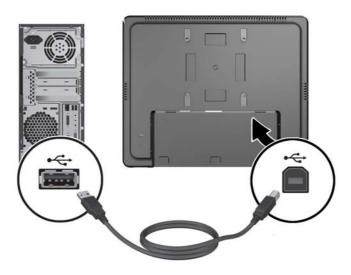
- 4. Connect the audio cable between the PC audio out port and the monitor audio in port.
 - NOTE: The audio cable is required for the monitor speakers to function.

Figure 2-25 Connecting the Audio Cable



- 5. Connect the USB upstream cable between the PC and the monitor.
- NOTE: The USB cable is required for the USB downstream port to function.

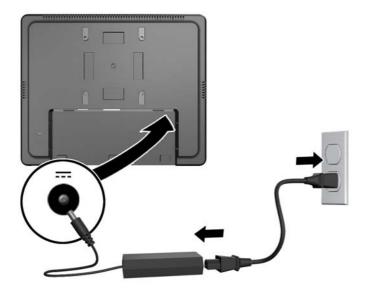
Figure 2-26 Connecting the USB Cable



- 6. Connect the DC cable to the monitor and connect the AC power cord to an electrical wall outlet.
 - MARNING! For use only with the attached power adapter (output 12V DC) which has a UL.CSA listed license (only for monitors with a power adapter).

Manufacturer: TPV ELECTRONICS(FUJIAN) CO., LTD model ADPC1236-

Figure 2-27 Connecting the Power Cord



WARNING! To reduce the risk of electric shock or damage to the equipment:

Do not disable the power cord grounding plug. The grounding plug is an important safety feature.

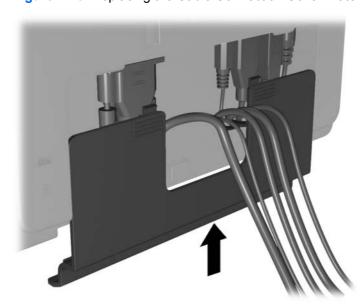
Plug the power cord into a grounded (earthed) electrical outlet that is easily accessible at all times.

Disconnect power from the equipment by unplugging the power cord from the electrical outlet.

For your safety, do not place anything on power cords or cables. Arrange them so that no one may accidentally step on or trip over them. Do not pull on a cord or cable. When unplugging from the electrical outlet, grasp the cord by the plug.

Replace the cable connection cover on the rear of the monitor.

Figure 2-28 Replacing the Cable Connection Cover Plate



Turn on the computer, then press the power button on the underside of the monitor to power it on.

Figure 2-29 Pressing the Power Button



Installing a Cable Lock

You can secure the monitor to a fixed object with an optional cable lock available from HP.

Figure 2-30 Installing a Cable Lock



Locating the Rating Labels

The rating labels on the monitor provide the spare part number, product number, and serial number. You may need these numbers when contacting HP about the monitor model. The rating labels are located on the rear panel of the monitor display head.

3 Operating the Monitor

Front Panel Controls

Figure 3-1 Monitor Front Panel Controls



NOTE: The front panel controls are inactive unless they are illuminated. To activate the controls, tap on the area where the icons are located. All icons will become illuminated and active. The backlight for the icons will turn off upon exit from the OSD or when the OSD times out.

Table 3-1 Monitor Front Panel Controls

Control			Function	
1	₽	Menu	Opens the On-Screen Display (OSD) main menu.	
2	_	- (Minus)	If the OSD menu is on, tap to navigate backward through the OSD menu and decrease adjustment levels.	
			If the OSD menu is inactive and the icons are illuminated, tap to open the OSD volume control menu and adjust the volume level.	
3	+	+ (Plus)	If the OSD menu is on, tap to navigate forward through the OSD menu and increase adjustment levels.	
			If the OSD menu is inactive and the icons are illuminated, tap to activate the Source button that chooses the video signal input.	

Table 3-1 Monitor Front Panel Controls (continued)

Control			Function	
4	ОК	OK	If the OSD menu is on, tap to select a menu item.	
			If the OSD menu is inactive and the icons are illuminated, tap to activate the auto adjustment feature to optimize the screen image.	
5	- <u>;</u> ;;-	Power LED	Green = Fully powered.	
			Amber = Sleep mode.	
			Flashing Amber = Sleep Timer mode.	
			Off = Power is off or the LED has been suppressed in the OSD	

NOTE: To view an OSD menu simulator, visit the HP Customer Self Repair Services Media Library at http://www.hp.com/go/sml.

Power Management System

The monitor is equipped with the power management function which automatically reduces the power consumption when not in use.

Table 3-2 Power Management

Mode	Power Consumption
Full Power	18 W
Typical Power	11 W
Sleep	1 W
Off	0.5 W

It is recommended that you switch the monitor off when it is not in use for a long period of time.



NOTE: The monitor automatically goes through the power management system steps when it is idle. To release the monitor from the power management system, press any key on the keyboard or move the mouse.

OSD Lock/Unlock

The OSD feature can be locked and unlocked. The monitor is shipped with the OSD menu in the unlocked position.

To lock the OSD menu and disable the OSD controls, tap on the area where the OSD icons are located so that the icons become illuminated and active, then press the Menu icon for 10 seconds. To unlock the OSD menu and enable the OSD controls, press the Menu icon again for 10 seconds.

Power Button Lock/Unlock

The power button can be locked and unlocked. The monitor is shipped with the power button in the unlocked position.

To lock the power button, press the power button for 10 seconds. To unlock the power button, press the power button again for 10 seconds. Unlocking the power button will power off the monitor. To power it back on, press the power button.

4 Locating Additional Information

Refer to the *HP LCD Monitors Reference Guide* at http://www.hp.com/support for additional information on:

- Optimizing monitor performance
- Safety and maintenance guidelines
- Agency regulatory and environmental notices
- Using the OSD menu
- Downloading additional software from the Web for PC mode.

For additional information on using and adjusting your monitor, go to http://www.hp.com/support. Select your country or region, select Product Support & Troubleshooting, and then enter your monitor model in the SEARCH window.

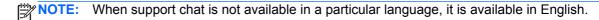


NOTE: The monitor user guide, reference guide, and drivers are available at http://www.hp.com/support.

If the information provided in the guide or in the *HP LCD Monitors Reference Guide* do not address your questions, you can contact support. For U.S. support, go to http://www.hp.com/go/contactHP. For worldwide support, go to http://welcome.hp.com/country/us/en/wwcontact_us.html.

Here you can:

Chat online with an HP technician



- E-mail support
- Find support telephone numbers
- Locate an HP service center

5 **Technical Specifications**

NOTE: All performance specifications are provided by the component manufacturers. Performance specifications represent the highest specification of all HP's component manufacturers' typical level specifications for performance and actual performance may vary either higher or lower.

HP L6010 Retail Monitor

Table 5-1 Specifications

LCD Display	26.4 cm	10.4 inches	
Туре	TFT LCD		
Pixel Pitch	0.0685 (H) x 0.2055 (V) mm	0.0027 (H) x 0.0081 (V) in	
Horizontal Frequency	24 to 83 kHz		
Vertical Frequency	50 to 76 Hz		
Maximum Resolution	1024 x 768 at 75Hz		
Aspect Ratio	4:3		
Contrast Ratio	1000:1 (typical)		
Brightness	300 nits (typical)		
Response Time	25 ms (typical)		
Color Gamut	57%		
Viewing Angle (V/H at CR>10)	176 / 176		
Video Sources	VGA + DVI + DP		
Front Controls	Menu, Minus, Plus, OK, Power		
OSD Main Menu	Brightness, Contrast, Color, Image Control, OSD Control, Management Language, Information, Factory Res Source Control, Exit		
Power	Input DC 12V, 2A, 24W		
Operating Conditions			
Temperature (Operating)	5° C to 40° C (41° F to 104° F)		
Temperature (Storage)	-20°C to 60°C (-4°F to 140°F)		
Humidity	20% ~ 80% (No Condensation)		
Altitude	0 to 5000 meters (16,400 feet)		

Table 5-1 Specifications (continued)

Dimensions		
Width	254.4 mm	10.0 in
Height (with stand)	235.9 mm	9.3 in
Height (without stand)	208.3 mm	8.2 in
Depth (with stand)	167.9 mm	6.6 in
Depth (without stand)	40.6 mm	1.6 in
Weight		
Actual (unpacked with stand)	2.6 kg	5.73 lb
Actual (unpacked without stand)	1.6 kg	3.53 lb
Shipping (packed without stand)	4.3 kg	9.48 lb

Recognizing Preset Display Resolutions

The display resolutions listed below are the most commonly used modes and are set as factory defaults. This monitor automatically recognized these preset modes and they will appear properly sized and centered on the screen.

HP L6010 Retail Monitor

Table 5-2 Factory Preset Modes

Preset	Pixel Format	Horz Freq (kHz)	Vert Freq (Hz)
1	640 × 480	31.469	59.940
2	720 × 400	31.469	70.087
3	800 × 600	37.879	60.317
4	1024 × 768	48.363	60.004

Entering User Modes

The video controller signal may occasionally call for a mode that is not preset if:

- You are not using a standard graphics adapter.
- You are not using a preset mode.

If this occurs, you may need to readjust the parameters of the monitor screen by using the on-screen display. Your changes can be made to any or all of these modes and saved in memory. The monitor automatically stores the new setting, then recognizes the new mode just as it does a preset mode. In addition to the 4 factory preset, there are 10 user modes that can be entered and stored.

Energy Saver Feature

When the monitor is in its normal operating mode, the monitor uses less than 18 watts and the Power light is green.

The monitor also supports a reduced power state. The reduced power state will be entered into if the monitor detects the absence of either the horizontal sync signal and/or the vertical sync signal. Upon detecting the absence of these signals, the monitor screen is blanked, the backlight is turned off, and the power light is turned amber. When the monitor is in the reduced power state, the monitor will utilize less than 1 watt of power. There is a brief warm up period before the monitor will return to its normal operating mode.

Refer to the computer manual for instructions on setting energy saver features (sometimes called power management features).



NOTE: The above power saver feature only works when connected to computers that have energy saver features.

By selecting the settings in the monitor's Energy Saver utility, you can also program the monitor to enter into the reduced power state at a predetermined time. When the monitor's Energy Saver utility causes the monitor to enter the reduced power state, the power light blinks amber.