HP EliteDisplay LED Backlit Monitors

User Guide

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.

CAUTION: 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.

Table of contents

1   Product Features

HP LCD Monitors

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

- E201 model, 50.8 cm (20-inch) diagonal viewable area display with 1600 x 900 resolution, plus full-screen support for lower resolutions: includes custom scaling for maximum image size while preserving original aspect ratio

- E221 model, 54.6 cm (21.5-inch) diagonal viewable area display with 1920 x 1080 resolution, plus full-screen support for lower resolutions; includes custom scaling for maximum image size while preserving original aspect ratio

- E221i model, 54.6 cm (21.5–inch) diagonal viewable area display with 1920 x 1080 resolution, plus full-screen support for lower resolutions; includes custom scaling for maximum image size while preserving original aspect ratio

- E231 model, 58.4 cm (23-inch) diagonal viewable area display with 1920 x 1080 resolution, plus full-screen support for lower resolutions; includes custom scaling for maximum image size while preserving original aspect ratio

- E231i model, 58.4 cm (23–inch) diagonal viewable area display with 1920 x 1080 resolution, plus full-screen support for lower resolutions; includes custom scaling for maximum image size while preserving original aspect ratio

- E241i model, 61 cm (24-inch) diagonal viewable area display with 1920 x 1200 resolution, plus full-screen support for lower resolutions; includes custom scaling for maximum image size while preserving original aspect ratio

- E271i, 68.6 cm (27-inch) diagonal viewable area display with 1920 x 1080 resolution, plus full-screen support for lower resolutions; includes custom scaling for maximum image size while preserving original aspect ratio

- Non-glare panel with an LED backlight

- Wide viewing angle to allow viewing from a sitting or standing position, or moving side-to-side

- Tilt capability

- Pivot capability to rotate display to portrait mode

- Swivel and height adjustment capabilities

- Removable stand for flexible monitor panel mounting solutions

- Video signal input to support VGA analog (cables are provided with select models)

- Video signal input to support DVI digital (cables are provided with select models)

- Video signal input to support DisplayPort digital (cables are provided with select models)

- USB 2.0 hub with one upstream port (connects to the computer) and two downstream ports (connects to USB devices)

- USB cable provided to connect the monitor's USB hub to the USB connector on the computer

- Supports an optional HP speaker bar

- Plug and play capability if supported by the computer system

- Privacy filter slots to insert filters (purchased separately) to block side screen viewing

- Security slot provision on rear of monitor for optional cable lock

- Cable management feature for placement of cables and cords

- On-Screen Display (OSD) adjustments in several languages for easy setup and screen optimization

- HP Display Assistant for adjusting monitor settings and enabling theft deterrence features

- HDCP copy protection on DVI and DisplayPort inputs

- Software and documentation disc that includes monitor drivers and product documentation

- Energy saver feature to meet requirements for reduced power consumption

- Intelligent Management AssetControl

- Compliant with the following regulated specifications (for additional certifications and agency notices, refer to the *HP LCD Monitors Reference Guide* on the disc included with this monitor):

  ◦ European Union CE Directives

  ◦ Swedish TCO Requirements

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.

Unfolding the Monitor

1. Lift the monitor from its box and place it face down on a flat surface.

2. Hold down the monitor stand with one hand (1) then grasp the top of the display with the other hand and unfold the display head 90 degrees (2).

⚠ **CAUTION:** Do not touch the surface of the LCD panel. Pressure on the panel may cause non-uniformity of color or disorientation of the liquid crystals. If this occurs the screen will not recover to its normal condition.
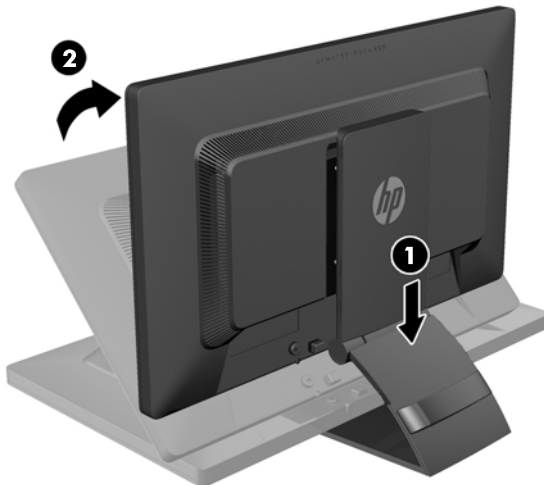
📝 **NOTE:** When the monitor is unfolded for the first time, the display head is locked from adjusting to a full-height position. To adjust the display head to full height, press down on the display head to unlock it then pull up on the display head to raise it to the full-height position. Refer to step 3 in Adjusting the Monitor on page 10.

⚠ **WARNING!** The handle on the rear of the monitor is used to help raise the display to the full-height position. To lower the display, do not grasp the handle. Doing so may cause you to pinch your fingers between the display and top of the stand. Press down on the top of the display head to lower the position of the monitor.

Rear Components
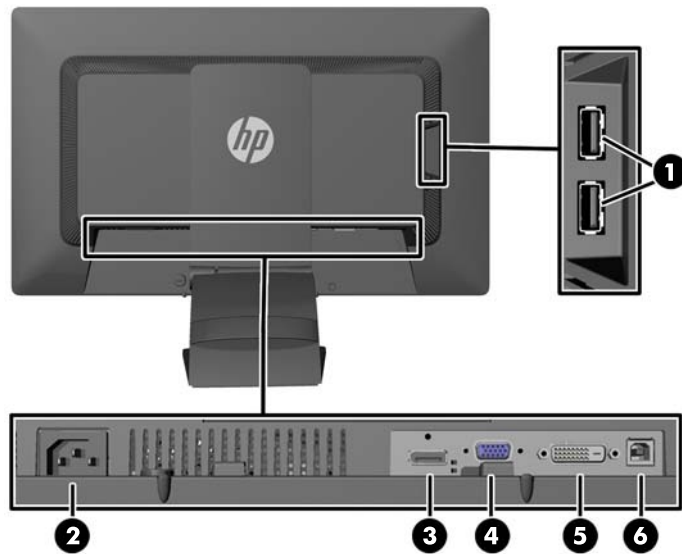
Component		Function
1	USB 2.0 Downstream Connectors (2)	Connects optional USB devices to the monitor.
2	AC Power Connector	Connects the AC power cord to the monitor.
3	DisplayPort	Connects the DisplayPort cable to the monitor.
4	VGA	Connects the VGA cable to the monitor.
5	DVI-D	Connects the DVI-D cable to the monitor.
6	USB 2.0 Upstream Connector	Connects the USB hub cable to the monitor's USB hub connector and to a host USB port/hub.

Connecting the Cables

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

2. Remove the cable management clip from the back of the stand by pressing inward on one side of the clip (1) and pulling outward on the other side of the clip (2)
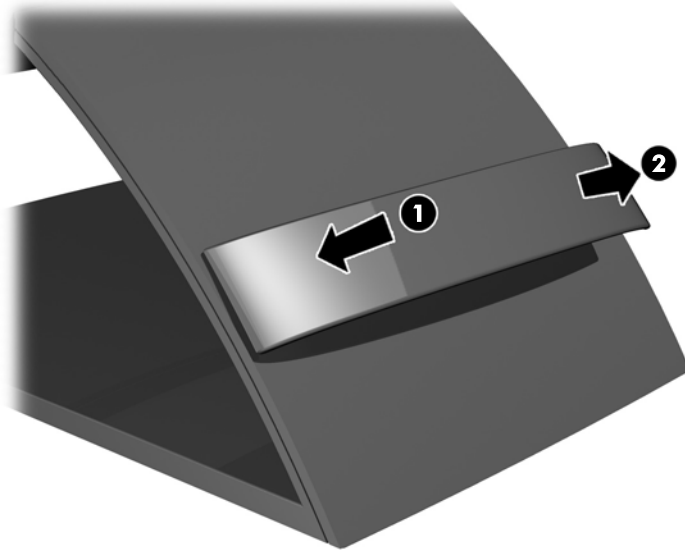
3. Depending on your configuration, connect either the DisplayPort, DVI, or VGA video cable between the PC and the monitor.

    NOTE: The monitor is capable of supporting either analog or digital input. The video mode is determined by the video cable used. The monitor will automatically determine which inputs have valid video signals. The inputs can be selected by pressing the Input button on the front panel or through the On-Screen Display (OSD) feature by pressing the Menu button.

    ● For analog operation, connect the VGA signal cable to the VGA connector on the rear of the monitor and the other end to the VGA connector on the computer (cable provided with select models).
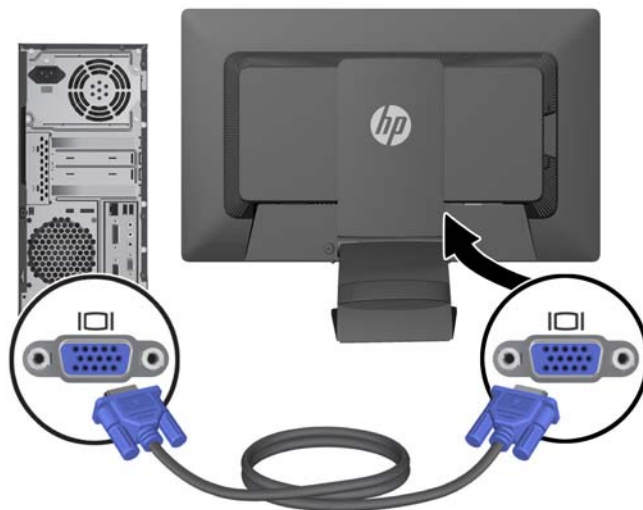
● For DVI digital operation, connect the DVI-D signal cable to the DVI connector on the rear of the monitor and the other end to the DVI connector on the computer (cable provided with select models).
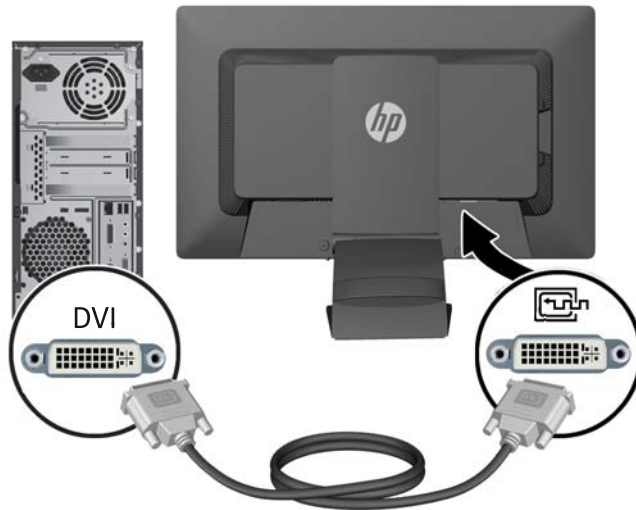
● For DisplayPort digital operation, connect the DisplayPort signal cable to the DisplayPort connector on the rear of the monitor and the other end to the DisplayPort connector on the computer (cable provided with select models).
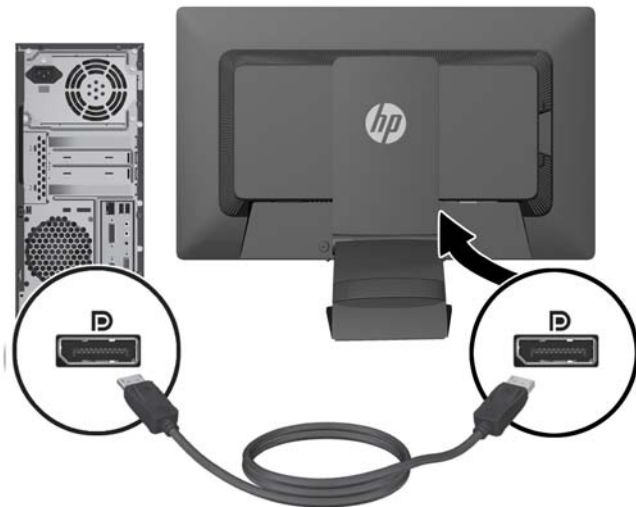
4. Connect one end of the provided USB cable to the USB hub connector on the rear panel of the computer, and the other end to the upstream USB connector on the monitor.
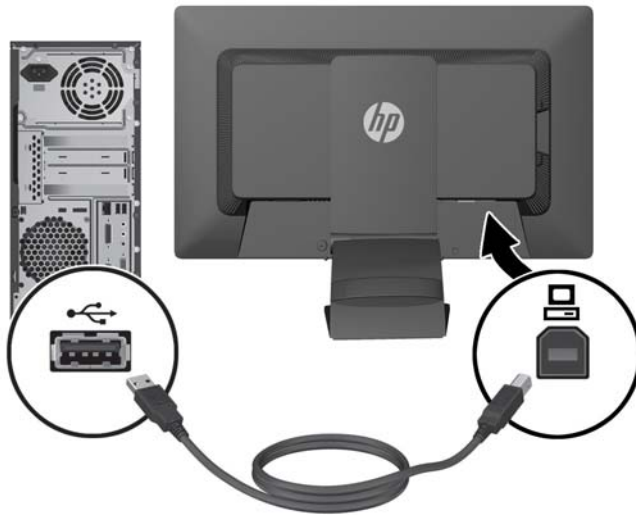
5. Connect one end of the power cord to the AC power connector on the back of the monitor, and the other end to an electrical wall outlet.
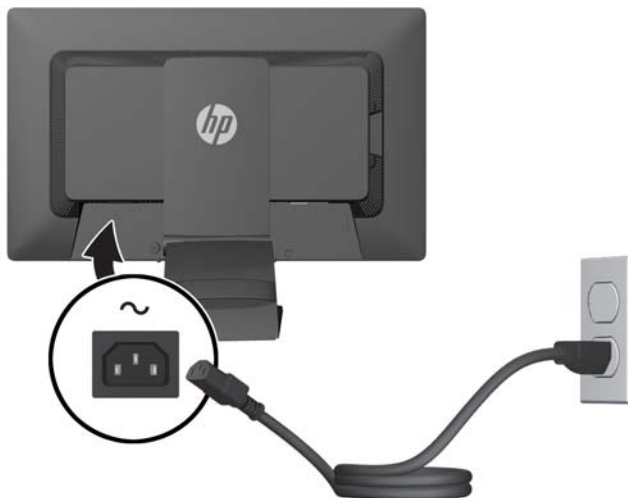
⚠ **WARNING!** To reduce the risk of electric shock or damage to the equipment:

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.

6. Secure the cables in place with the cable management clip. Press the clip straight down into the slots on the back of the stand ensuring that the tabs on the sides of the clip snap into the slots on the stand.
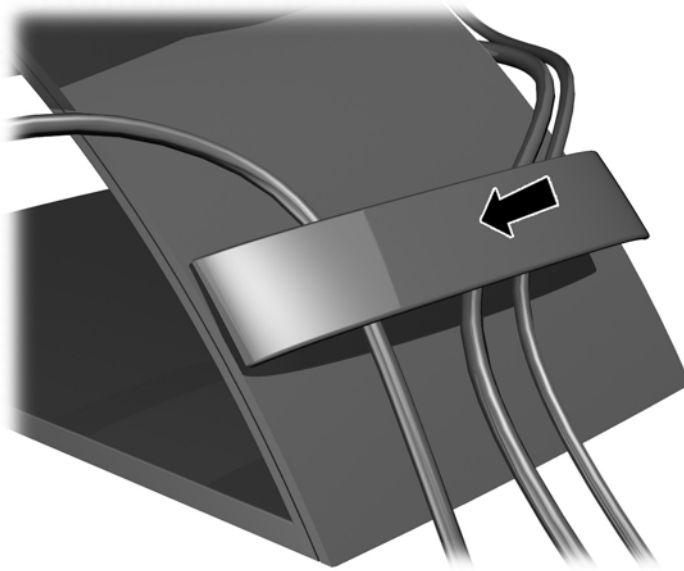
Front Panel Controls
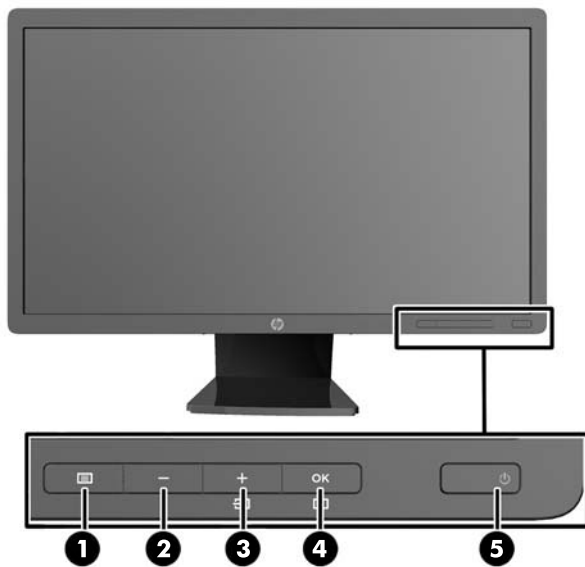
Control			Function
1	▦	Menu	Opens, selects or exits the OSD menu.
2	▬	Minus	If the OSD menu is on, press to navigate backward through the OSD menu and decrease adjustment levels.
3	+ ⊡	Plus/Input	If the OSD menu is on, press to navigate forward through the OSD menu and increase adjustment levels.
			If the OSD menu is inactive, press to activate the input button that chooses the video signal input (VGA, DVI, or DisplayPort)
4	OK ⊡	OK/Auto Adjust	If the OSD menu is on, press to select the highlighted menu item.
			If the OSD menu is inactive, press to activate the auto adjustment feature to optimize the screen image.
5	⏻	Power	Turns the monitor on or off.

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

Adjusting the Monitor

NOTE: Your monitor model may look different than the model in the following illustrations.

1. Tilt the monitor's panel forward or backward to set it to a comfortable eye level.

2. Swivel the monitor to the left or right for the best viewing angle.
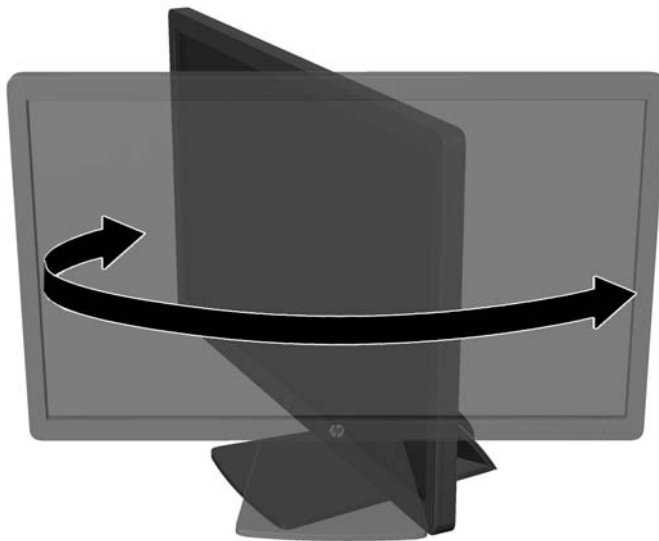
3. Adjust the monitor's height to a comfortable position for your individual workstation. The monitor's top bezel edge should not exceed a height that is parallel to your eye height. A monitor that is positioned low and reclined may be more comfortable for users with corrective lenses. The monitor should be repositioned as you adjust your working posture throughout the work day.

NOTE: When the monitor is unfolded for the first time, the display head is locked from adjusting to a full-height position. To adjust the display head to full height, press down on the display head to unlock it then pull up on the display head to raise it to the full-height position.
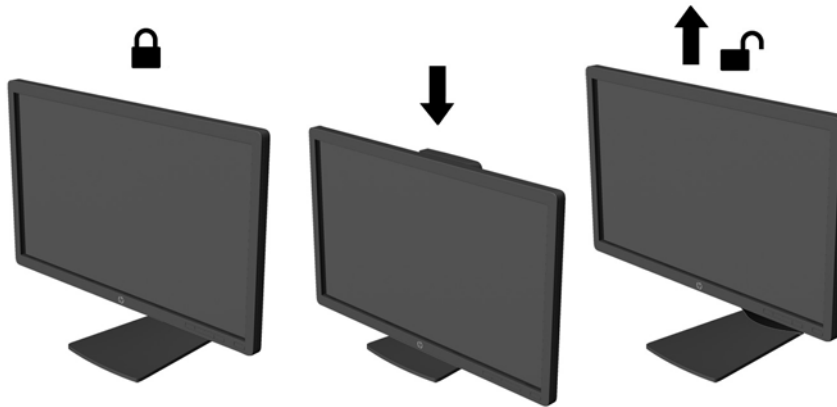
4. You can pivot the monitor from landscape to portrait orientation viewing to adapt to your application.

    a. Adjust the monitor to full height position and tilt the monitor back to full tilt position (1).

    b. Pivot the monitor clockwise 90° from landscape to portrait orientation (2).

CAUTION: If the monitor is not in full height and full tilt position when pivoting, the bottom right corner of the monitor panel will come in contact with the base and potentially cause damage to the monitor.

If you are adding an optional speaker bar to the monitor, install it after pivoting the monitor. The speaker bar will come in contact with the base when pivoting and potentially cause damage to the monitor or speaker bar.
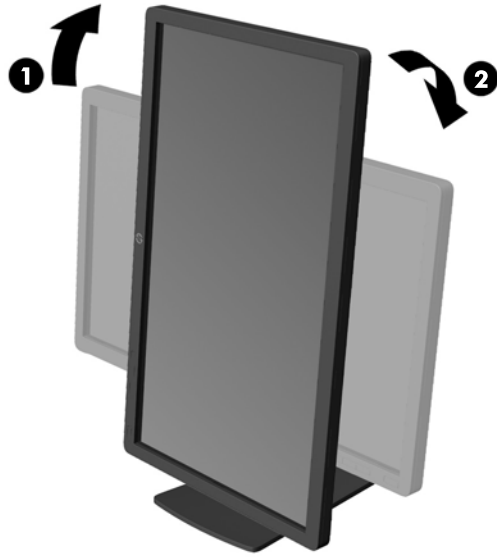
NOTE: To view information on the screen in portrait mode, you can install the HP Display Assistant software included on the software and documentation disc. The position of the OSD menu can also be rotated to portrait mode. To rotate the OSD menu, access the OSD menu by pressing the Menu button on the front panel, select **OSD Control** from the menu, then select **Rotate OSD**.

Turning on the Monitor

1. Press the power button on the computer to turn it on.

2. Press the power button on the front of the monitor to turn it on.

⚠ CAUTION: Burn-in image damage may occur on monitors that display the same static image on screen for a prolonged period of time.* To avoid burn-in image damage on the monitor screen, you should always activate a screen saver application or turn off the monitor when it is not in use for a prolonged period of time. Image retention is a condition that may occur on all LCD screens. Monitors with a "burned-in image" are not covered under the HP warranty.

* A prolonged period of time is 12 consecutive hours of a static image.

NOTE: If pressing the power button has no effect, the Power Button Lockout feature may be enabled. To disable this feature, press and hold the monitor power button for 10 seconds.

NOTE: You can disable the power LED in the OSD menu. Press the Menu button on the front of the monitor, then select **Management** > **Bezel Power LED** > **Off**.

When the monitor is powered on, a Monitor Status message is displayed for five seconds. The message shows which input (DisplayPort, DVI, or VGA) is the current active signal, the status of the auto-switch source setting (On or Off; factory default is On), the default source signal (factory default is DisplayPort), the current preset display resolution, and the recommended preset display resolution.

The monitor automatically scans the signal inputs for an active input and uses that input for the display. If two or more inputs are active, the monitor will display the default input source. If the default source is not one of the active inputs, then the monitor will display the highest ranking priority input in the following order: DisplayPort, DVI, then VGA. You can change the default source in the OSD by pressing the front panel Menu button and selecting **Input Control** > **Default Input**.

HP Watermark and Image Retention Policy

The IPS monitor models are designed with IPS (In-Plane Switching) display technology which provides ultra-wide viewing angles and advanced image quality. IPS monitors are suitable for a wide variety of advanced image quality applications. This panel technology, however, is not suitable for applications that exhibit static, stationary or fixed images for long periods of time without the use of screen savers. These types of applications may include camera surveillance, video games, marketing logos, and templates that are displayed on the screen for a prolonged period of time. Static images may cause image retention damage that could look like stains or watermarks on the monitor's screen.

Monitors in use for 24 hours per day that result in image retention damage are not covered under the HP warranty. To avoid image retention damage, always turn off the monitor when it is not in use or use the power management setting, if supported on your system, to turn off the display when the system is idle.

Connecting USB Devices

USB connectors are used to connect devices such as a digital camera, USB keyboard, or USB mouse. Two USB connectors are located on the side panel of the monitor.

NOTE: You must connect the USB hub cable from the monitor to the computer to enable the USB 2.0 ports on the monitor. Refer to Step 4 in .
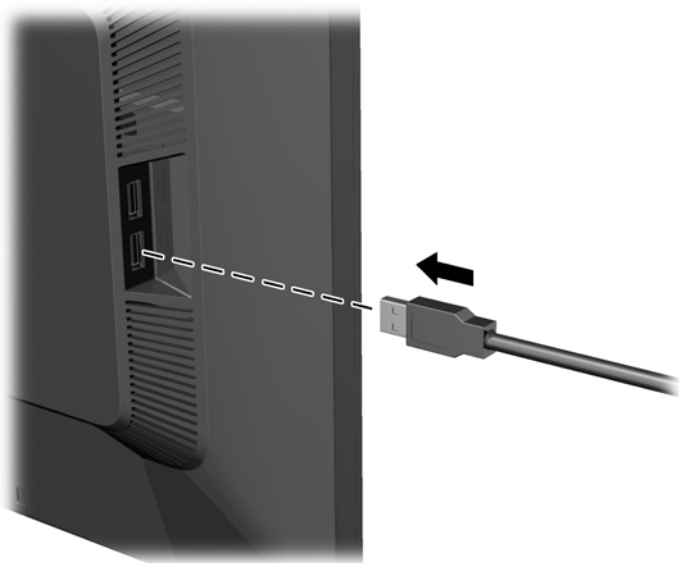
Locating the Rating Labels

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.
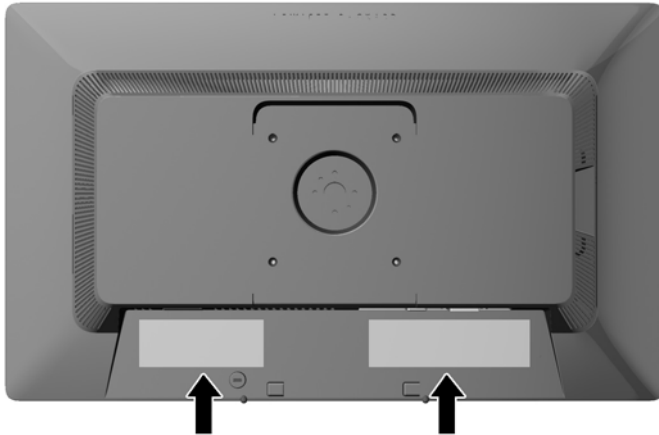
Installing a Cable Lock

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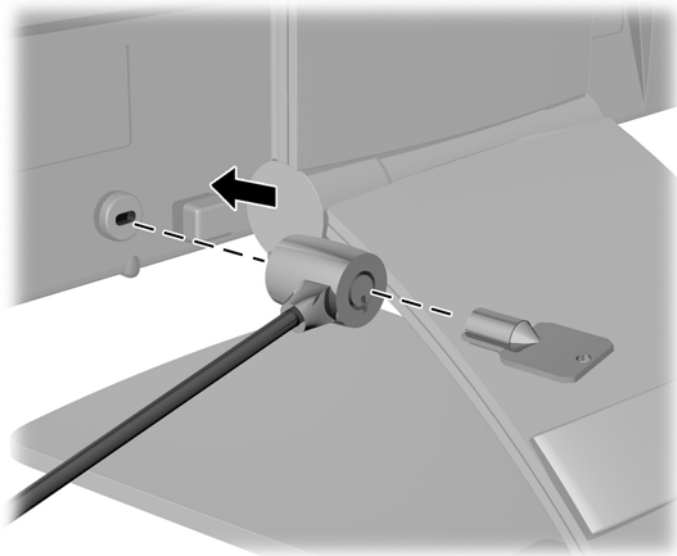
3   Finding More Information

Reference Guides

Refer to the *HP LCD Monitors Reference Guide* included on the disc with your monitor for additional information on:

- Optimizing monitor performance

- Safety and maintenance guidelines

- Installing software from the disc

- Using the OSD menu

- Downloading software from the Web

- Agency regulatory information

- Troubleshooting and recommended solutions to common problems

For information on theft deterrence, refer to the *HP Display Assistant User Guide* included on the disc with your monitor.

Product Support

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

  NOTE: When support chat is not available in a particular language, it is available in English.

- E-mail support

- Find support telephone numbers

- Locate an HP service center

A Technical Specifications

NOTE: All specifications represent the typical specifications provided by HP's component manufacturers; actual performance may vary either higher or lower.

E201 Model

Display	50.8 cm wide screen	20 inches wide screen
Type	TFT LCD	
Viewable Image Size	50.8 cm diagonal	20–inch diagonal
Tilt	-5 to 30°	
Swivel	360°	
Maximum Weight (Unpacked)	5.00±0.25 kg	11.01±0.55 lbs
Dimensions (include base)		
Height (highest position)	43.47 cm	17.11 inches
Height (lowest position)	31.87 cm	12.54 inches
Depth	22.89 cm	9.01 inches
Width	47.28 cm	18.61 inches
Maximum Graphic Resolution	1600 x 900 (60 Hz) analog input	
	1600 x 900 (60 Hz) digital input	
Optimum Graphic Resolution	1600 x 900 (60 Hz) analog input	
	1600 x 900 (60 Hz) digital input	
Text Mode	720 × 400	
Horizontal Frequency	24 to 83 kHz	
Vertical Refresh Rate	50 to 76 Hz	
Environmental Requirements Temperature		
Operating Temperature	5 to 35° C	41 to 95° F
Storage Temperature	-20 to 60° C	-4 to 140° F
Relative Humidity	20 to 80%	
Power Source	100 – 240 VAC 50/60 Hz	
Altitude:		
Operating	0 to 5000 m	0 to 16,400 feet
Storage	0 to 12192 m	0 to 40,000 feet

Measured Power Consumption:		
Full Power	30 watts	
Typical Settings	25 watts	
Sleep	0.5 watts	
Switch Off	0.5 watts	
Input Terminal	One VGA connector; one DVI connector; one DisplayPort connector (cable inclusion varies by region)	

E221 Model

Display	54.61 cm wide screen	21.5 inches wide screen
Type	TFT LCD	
Viewable Image Size	54.61 cm diagonal	21.5-inch diagonal
Tilt	-5 to 30°	
Swivel	360°	
Maximum Weight (Unpacked)	5.30±0.25 kg	11.67±0.55 lbs
Dimensions (include base)		
Height (highest position)	46.00 cm	18.11 inches
Height (lowest position)	33.37 cm	13.13 inches
Depth	23.65 cm	9.31 inches
Width	50.88 cm	20.03 inches
Maximum Graphic Resolution	1920 x 1080 (60 Hz) analog input	
	1920 x 1080 (60 Hz) digital input	
Optimum Graphic Resolution	1920 x 1080 (60 Hz) analog input	
	1920 x 1080 (60 Hz) digital input	
Text Mode	720 x 400	
Horizontal Frequency	24 to 94 kHz	
Vertical Refresh Rate	50 to 76 Hz	
Environmental Requirements Temperature		
Operating Temperature	5 to 35° C	41 to 95° F
Storage Temperature	-20 to 60° C	-4 to 140° F
Relative Humidity	20 to 80%	
Power Source	100 – 240 VAC 50/60 Hz	
Altitude:		
Operating	0 to 5000 m	0 to 16,400 feet
Storage	0 to 12192 m	0 to 40,000 feet

Measured Power Consumption:		
Full Power	33 watts	
Typical Settings	29 watts	
Sleep	0.5 watts	
Switch Off	0.5 watts	
Input Terminal	One VGA connector; one DVI connector; one DisplayPort connector (cable inclusion varies by region)	

E221i Model

Display	54.61 cm wide screen	21.5 inches wide screen
Type	IPS LCD	
Viewable Image Size	54.61 cm diagonal	21.5-inch diagonal
Maximum Weight (Unpacked)	5.7 ± 0.25 kg	12.54 ± 0.55 lbs
Dimensions (include base)		
Height (highest position)	46.00 cm	18.12 inches
Height (lowest position)	33.37 cm	13.13 inches
Depth	23.7 cm	9.34 inches
Width	50.9 cm	20.05 inches
Maximum Graphic Resolution	1920 x 1080 (60 Hz) analog input	
	1920 x 1080 (60 Hz) digital input	
Optimum Graphic Resolution	1920 x 1080 (60 Hz) analog input	
	1920 x 1080 (60 Hz) digital input	
Environmental Requirements Temperature		
Operating Temperature	5 to 35° C	41 to 95° F
Storage Temperature	-20 to 60° C	-4 to 140° F
Power Source	100 – 240 VAC at 50/60 Hz	
Input Terminal	One VGA connector; one DVI connector; one DisplayPort connector (cable inclusion varies by region)	

NOTE: For the latest specifications or additional specifications on this product, go to http://www.hp.com/go/productbulletin and search for your specific display model to find the model-specific QuickSpecs.

E231 Model

Display	58.42 cm wide screen	23 inches wide screen
Type	TFT LCD	
Viewable Image Size	58.42 cm diagonal	23–inch diagonal
Tilt	-5 to 30°	
Swivel	360°	
Maximum Weight (Unpacked)	5.90±0.25 kg	13.00±0.55 lbs
Dimensions (include base)		
Height (highest position)	47.00 cm	18.50 inches
Height (lowest position)	34.33 cm	13.51 inches
Depth	24.24 cm	9.54 inches
Width	54.40 cm	21.41 inches
Maximum Graphic Resolution	1920 x 1080 (60 Hz) analog input	
	1920 x 1080 (60 Hz) digital input	
Optimum Graphic Resolution	1920 x 1080 (60 Hz) analog input	
	1920 x 1080 (60 Hz) digital input	
Text Mode	720 × 400	
Horizontal Frequency	24 to 94 kHz	
Vertical Refresh Rate	50 to 76 Hz	
Environmental Requirements Temperature		
Operating Temperature	5 to 35° C	41 to 95° F
Storage Temperature	-20 to 60° C	-4 to 140° F
Relative Humidity	20 to 80%	
Power Source	100 – 240 VAC 50/60 Hz	
Altitude:		
Operating	0 to 5000 m	0 to 16,400 feet
Storage	0 to 12192 m	0 to 40,000 feet
Measured Power Consumption:		
Full Power	36 watts	
Typical Settings	33 watts	
Sleep	0.5 watts	
Switch Off	0.5 watts	
Input Terminal	One VGA connector; one DVI connector; one DisplayPort connector (cable inclusion varies by region)	

E231i Model

Display	58.42 cm wide screen	23 inches wide screen
Type	IPS LCD	
Viewable Image Size	58.42 cm diagonal	23–inch diagonal
Maximum Weight (Unpacked)	6.4 ± 0.25 kg	14.10 ± 0.55 lbs
Dimensions (include base)		
Height (highest position)	47.00 cm	18.50 inches
Height (lowest position)	34.33 cm	13.51 inches
Depth	24.24 cm	9.54 inches
Width	54.40 cm	21.42 inches
Maximum Graphic Resolution	1920 x 1080 (60 Hz) analog input	
	1920 x 1080 (60 Hz) digital input	
Optimum Graphic Resolution	1920 x 1080 (60 Hz) analog input	
	1920 x 1080 (60 Hz) digital input	
Environmental Requirements Temperature		
Operating Temperature	5 to 35° C	41 to 95° F
Storage Temperature	-20 to 60° C	-4 to 140° F
Power Source	100– 240 VAC at 50/60 Hz	
Input Terminal	One VGA connector; one DVI connector; one DisplayPort connector (cable inclusion varies by region)	

NOTE: For the latest specifications or additional specifications on this product, go to http://www.hp.com/go/productbulletin and search for your specific display model to find the model-specific QuickSpecs.

E241i Model

Display	61 cm wide screen	24 inches wide screen
Type	TFT LCD	
Viewable Image Size	61 cm diagonal	24–inch diagonal
Tilt	-5 to 30°	
Swivel	180°–180°	
Maximum Weight (Unpacked)	6.9 kg	15.2 lbs
Dimensions (include base)		
Height (highest position)	51.7 cm	20.35 inches
Height (lowest position)	37.9 cm	14.9 inches
Depth	27.6 cm	10.87 inches
Width	55.6 cm	21.89 inches

Maximum Graphic Resolution	1920 x 1200 (60 Hz) analog input	
	1920 x 1200 (60 Hz) digital input	
Optimum Graphic Resolution	1920 x 1200 (60 Hz) analog input	
	1920 x 1200 (60 Hz) digital input	
Text Mode	720 × 400	
Horizontal Frequency	24 to 94 kHz	
Vertical Refresh Rate	50 to 76 Hz	
Environmental Requirements Temperature		
Operating Temperature	5 to 35° C	41 to 95° F
Storage Temperature	-20 to 60° C	-4 to 140° F
Relative Humidity	20 to 80%	
Power Source	100 – 240 VAC 50/60 Hz	
Altitude:		
Operating	0 to 5000 m	0 to 16,400 feet
Storage	0 to 12192 m	0 to 40,000 feet
Measured Power Consumption:		
Full Power	40 watts	
Typical Settings	35 watts	
Sleep	0.5 watts	
Switch Off	0.5 watts	
Input Terminal	One VGA connector; one DVI connector; one DisplayPort connector (cable inclusion varies by region)	

E271i Model

Display	68.6 cm wide screen	27 inches wide screen
Type	TFT LCD	
Viewable Image Size	68.6 cm diagonal	27–inch diagonal
Tilt	-5 to 30°	
Swivel	360°	
Maximum Weight (Unpacked)	8.00 kg	17.64 lbs
Dimensions (include base)		
Height (highest position)	53.20 cm	20.94 inches
Height (lowest position)	40.20 cm	15.83 inches
Depth	27.85 cm	10.96 inches
Width	64.20 cm	25.27 inches

Maximum Graphic Resolution	1920 x 1080 (60 Hz) analog input	
	1920 x 1080 (60 Hz) digital input	
Optimum Graphic Resolution	1920 x 1080 (60 Hz) analog input	
	1920 x 1080 (60 Hz) digital input	
Text Mode	720 × 400	
Horizontal Frequency	24 to 94 kHz	
Vertical Refresh Rate	50 to 76 Hz	
Environmental Requirements Temperature		
Operating Temperature	0 to 35° C	32 to 95° F
Storage Temperature	-20 to 60° C	-4 to 140° F
Relative Humidity	20 to 80%	
Power Source	100 – 240 VAC 50/60 Hz	
Altitude:		
Operating	0 to 5000 m	0 to 16,400 feet
Storage	0 to 12192 m	0 to 40,000 feet
Measured Power Consumption:		
Full Power	40 watts	
Typical Settings	35 watts	
Sleep	0.5 watts	
Switch Off	0.5 watts	
Input Terminal	One VGA connector; one DVI connector; one DisplayPort connector (cable inclusion varies by region)	

Recognizing Preset Display Resolutions

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

E201 Model

Preset	Pixel Format	Horz Freq (kHz)	Vert Freq (Hz)
1	640 × 480	31.469	59.94
2	720 × 400	31.469	70.087
3	800 × 600	37.879	60.317
4	1024 × 768	48.363	60.004
5	1280 × 720	45.0	60.0
6	1280 × 1024	63.981	60.02
7	1440 × 900	55.935	59.887
8	1600 × 900	60.0	60.0

Preset	Timing Name	Pixel Format	Horz Freq (kHz)	Vert Freq (Hz)
1	480p	720 × 480	31.469	60
2	576p	720 × 576	31.25	50
3	720p50	1280 × 720	37.5	50
4	720p60	1280 × 720	45	60

E221 Model

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
5	1280 × 720	45.00	59.94
6	1280 × 1024	63.981	60.02
7	1440 × 900	55.935	59.887
8	1600 × 900	60.00	60.00
9	1680 × 1050	65.29	59.954
10	1920 × 1080	67.50	60.00

Preset	Timing Name	Pixel Format	Horz Freq (kHz)	Vert Freq (Hz)
1	480p	720 × 480	31.469	60
2	576p	720 × 576	31.25	50
3	720p50	1280 × 720	37.5	50
4	720p60	1280 × 720	45	60
5	1080p50	1920 × 1080	56.25	50
6	1080p60	1920 × 1080	67.5	60

E221i Model

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
5	1280 × 720	45.00	59.94
6	1280 × 1024	63.981	60.02
7	1440 × 900	55.935	59.887
8	1600 × 900	60.00	60.00
9	1680 × 1050	65.29	59.954
10	1920 × 1080	67.50	60.00

Preset	Timing Name	Pixel Format	Horz Freq (kHz)	Vert Freq (Hz)
1	480p	720 × 480	31.469	60
2	576p	720 × 576	31.25	50
3	720p50	1280 × 720	37.5	50
4	720p60	1280 × 720	45	60
5	1080p50	1920 × 1080	56.25	50
6	1080p60	1920 × 1080	67.5	60

E231 Model

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
5	1280 × 720	45.00	60.00
6	1280 × 1024	63.981	60.02
7	1440 × 900	55.935	59.887
8	1600 × 900	60.00	60.00
9	1680 × 1050	65.29	59.954
10	1920 × 1080	67.5	60.00

Preset	Timing Name	Pixel Format	Horz Freq (kHz)	Vert Freq (Hz)
1	480p	720 × 480	31.469	60
2	576p	720 × 576	31.25	50
3	720p50	1280 × 720	37.5	50
4	720p60	1280 × 720	45	60
5	1080p50	1920 × 1080	56.25	50
6	1080p60	1920 × 1080	67.5	60

E231i Model

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
5	1280 × 720	45.00	60.00
6	1280 × 1024	63.981	60.02
7	1440 × 900	55.935	59.887
8	1600 × 900	60.00	60.00
9	1680 × 1050	65.29	59.954
10	1920 × 1080	67.5	60.00

Preset	Timing Name	Pixel Format	Horz Freq (kHz)	Vert Freq (Hz)
1	480p	720 × 480	31.469	60
2	576p	720 × 576	31.25	50
3	720p50	1280 × 720	37.5	50
4	720p60	1280 × 720	45	60
5	1080p50	1920 × 1080	56.25	50
6	1080p60	1920 × 1080	67.5	60

E241i Model

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
5	1280 × 1024	63.981	60.02
6	1440 × 900	55.935	59.887
7	1680 × 1050	65.29	59.954
8	1920 × 1080	67.5	60.00
9	1920 x 1200	74.038	59.95
10	1920 x 1200	74.556	59.885 (DP and VGA)

Preset	Timing Name	Pixel Format	Horz Freq (kHz)	Vert Freq (Hz)
1	480p	720 × 480	31.469	60
2	576p	720 × 576	31.25	50
3	720p50	1280 × 720	37.5	50
4	720p60	1280 × 720	45	60
5	1080p50	1920 × 1080	56.25	50
6	1080p60	1920 × 1080	67.5	60

E271i Model

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
5	1280 × 720	45.00	59.94
6	1280 × 800	49.702	59.81
7	1280 × 1024	63.981	60.02
8	1366 × 768	47.712	59.79
9	1440 × 900	55.935	59.887
10	1600 × 900	55.935	59.887
11	1680 × 1050	65.29	59.954
12	1920 × 1080	67.5	60.00

Preset	Timing Name	Pixel Format	Horz Freq (kHz)	Vert Freq (Hz)
1	480p	720 × 480	31.469	60
2	576p	720 × 576	31.25	50
3	720p50	1280 × 720	37.5	50
4	720p60	1280 × 720	45	60
5	1080p50	1920 × 1080	56.25	50
6	1080p60	1920 × 1080	67.5	60

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.

It 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 factory preset modes, there are at least 10 user modes that can be entered and stored.