

# User Guide

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#### **Product notice**

This guide describes features that are common to most models. Some features may not be available on your product. To access the latest user guide, go to <u>http://www.hp.com/support</u>. Select **Find your product**, and then follow the on-screen instructions.

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#### **About This Guide**

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

- MARNING! Indicates a hazardous situation that, if not avoided, **could** result in death or serious injury.
- **CAUTION:** Indicates a hazardous situation that, if not avoided, **could** result in minor or moderate injury.
- **IMPORTANT:** Indicates information considered important but not hazard-related (for example, messages related to property damage). A notice alerts the user that failure to follow a procedure exactly as described could result in loss of data or in damage to hardware or software. Also contains essential information to explain a concept or to complete a task.
- **NOTE:** Contains additional information to emphasize or supplement important points of the main text.
- $\frac{1}{2}$  TIP: Provides helpful hints for completing a task.



HIGH-DEFINITION MULTIMEDIA INTERFACE

This product incorporates HDMI technology.

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## **1** Getting started

## Important safety information

An AC power adapter and cord may be included with the monitor. If another cord is used, use only a power source and connection appropriate for this monitor. For information on the correct power cord set to use with the monitor, refer to the *Product Notices* provided on the optical disc or in your documentation kit.

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

- Plug the power cord into an AC outlet that is easily accessible at all times.
- Disconnect power from the computer by unplugging the power cord from the AC outlet.

• If provided with a 3-pin attachment plug on the power cord, plug the cord into a grounded (earthed) 3-pin outlet. Do not disable the power cord grounding pin, for example, by attaching a 2-pin adapter. The grounding pin is an important safety feature.

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.

To reduce the risk of serious injury, read the *Safety & Comfort Guide*. It describes proper workstation setup, and proper posture, health, and work habits for computer users. The *Safety & Comfort Guide* also provides important electrical and mechanical safety information. The *Safety & Comfort Guide* is available on the Web at <a href="http://www.hp.com/ergo">http://www.hp.com/ergo</a>.

**IMPORTANT:** For the protection of the monitor, as well as the computer, connect all power cords for the computer and its peripheral devices (such as a monitor, printer, scanner) to some form of surge protection device such as a power strip or uninterruptible power supply (UPS). Not all power strips provide surge protection; the power strips must be specifically labeled as having this ability. Use a power strip whose manufacturer offers a damage replacement policy so you can replace the equipment if surge protection fails.

Use the appropriate and correctly sized furniture designed to properly support your HP LCD monitor.

A WARNING! LCD monitors that are inappropriately situated on dressers, bookcases, shelves, desks, speakers, chests, or carts may fall over and cause personal injury.

Care should be taken to route all cords and cables connected to the LCD monitor so that they cannot be pulled, grabbed, or tripped over.

Be sure that the total ampere rating of the products connected to the AC outlet does not exceed the current rating of the outlet, and that the total ampere rating of the products connected to the cord does not exceed the rating of the cord. Look on the power label to determine the ampere rating (AMPS or A) for each device.

Install the monitor near an AC outlet that you can easily reach. Disconnect the monitor by grasping the plug firmly and pulling it from the AC outlet. Never disconnect the monitor by pulling the cord.

Do not drop the monitor or place it on an unstable surface.

**NOTE:** This product is suitable for entertainment purposes. Consider placing the monitor in a controlled luminous environment to avoid interference from surrounding light and bright surfaces that may cause disturbing reflections from the screen.

## **Product features and components**

#### **Features**

This guide describes features of the following monitors:

- 61.1 cm (24-inch) diagonal viewable screen area with 1920 × 1200 resolution, plus full-screen support for lower resolutions
- 68.5 cm (27-inch) diagonal viewable screen area with 2560 × 1440 resolution, plus full-screen support for lower resolutions

The monitor features include the following:

- Nonglare panel with an LED backlight
- Wide viewing angle to allow viewing from a sitting or standing position, or when moving from side to side
- Tilt, pivot, swivel, and height-adjustment capability
- Removable stand for flexible monitor head mounting solutions
- Supports an optional mounting bracket for an HP Desktop Mini, Chromebox, or thin client
- Supports an optional HP speaker bar
- Audio-out (headphone) jack
- One DisplayPort video input and one DisplayPort video output
- HDMI (High-Definition Multimedia Interface) video input
- DVI video input
- One USB Type-C input (upstream) port and one USB Type-C output (downstream) port
- DisplayPort and USB Type-C cables included
- Cable management feature for placement of cables and cords
- HDCP (High-Bandwidth Digital Content Protection) copy protection on all digital inputs
- Plug and Play capability if supported by your operating system
- Security cable slot provision on rear of monitor for optional security cable
- On-screen display (OSD) adjustments in several languages for easy setup and screen optimization
- HP Display Assistant software for adjusting monitor settings and enabling the theft deterrence features
- Energy saver feature to meet requirements for reduced power consumption
- NOTE: For safety and regulatory information, refer to the *Product Notices* provided in your documentation kit. To locate updates to the user guide for your product, go to <u>http://www.hp.com/support</u>. Select **Find your product**, and then follow the on-screen instructions.

#### Rear and side components



	Component	Description
(1)	Power button	Turns the monitor on or off.
(2)	Back/Exit button	If the OSD is open, press to go back or exit the OSD.
		If the OSD menu is closed, press to switch to the next active input.
(3)	Plus button	If the OSD menu is open, press to navigate forward through the OSD menu and increase adjustment levels.
		If the OSD menu is closed, press to open the Viewing Modes menu.
(4)	Minus button	If the OSD menu is open, press to navigate backward through the OSD menu and decrease adjustment levels.
		If the OSD menu is closed, press to open the Color menu.
(5)	Menu button	Press to open the OSD menu, select a menu item from the OSD, or close the OSD menu.
(6)	Master power switch	Turns off all power to the monitor.
		Putting the switch in the off position will yield the lowest power state for the monitor when it is not in use.
(7)	Power connector	Connects the AC power cord to the monitor.
(8)	Monitor release button	Disengages the monitor stand from the monitor head.
(9)	DVI port	Connects the DVI cable to the source device.
(10)	HDMI port	Connects an HDMI cable to the source device.
(11)	DisplayPort In port	Connects a DisplayPort cable to the source device.
(12)	DisplayPort Out port	Connects a DisplayPort cable to a secondary monitor.
(13)	USB Type-C port	Connects a USB Type-C cable to the source device.
		<b>NOTE:</b> The USB Type-C port functions as a video source and a USB hub.
(14)	USB 3.0 Type-A ports (2)	Connect USB Type-A devices.
(15)	Audio-out (headphone) iack	Connects headphones to the monitor.

	Component	Description
		<b>WARNING!</b> To reduce the risk of personal injury, reduce the volume before using headphones, earbuds, or a headset. For additional safety information, see the <i>Product Notices</i> provided on the optical disc, if one is included with your product.
(16)	Security cable slot	Connects an optional security cable.
(17)	USB Type-C downstream port	Connects USB Type-C devices.
(18)	USB 3.0 Type-A port	Connects USB Type-A devices.

## Setting up the monitor

#### Installing the monitor stand

- **IMPORTANT:** Do not touch the surface of the LCD panel. Pressure on the panel may cause nonuniformity of color or disorientation of the liquid crystals. If this occurs, the screen will not recover to its normal condition.
  - 1. Position the monitor facedown on a flat surface covered by a soft clean cloth.
  - 2. Slide the tabs on the top of the stand's mounting bracket into the slots on the monitor head (1), and then press the bottom of the bracket down (2). There will be an audible click when the stand is properly seated. Make sure that the stand is properly attached to the monitor head before use.



#### **Connecting the cables**

- NOTE: The monitor ships with select cables. Not all cables shown in this section are included with the monitor.
  - 1. Place the monitor in a convenient, well-ventilated location near the computer.
  - 2. Before connecting the cables, route the cables through the cable routing hole in the center of the stand.



- **3.** Connect a video cable.
  - NOTE: The monitor automatically determines which inputs have valid video signals. The inputs can be selected by pressing the Menu button to access the on-screen display (OSD) menu and then selecting **Input Control**.
    - Connect one end of a DisplayPort cable to the DisplayPort port on the rear of the monitor and the
      other end to the DisplayPort port on the source device.



• Connect one end of an HDMI cable to the HDMI port on the rear of the monitor and the other end to the HDMI port on the source device.



• Connect one end of a DVI cable to the DVI port on the rear of the monitor and the other end to the DVI port on the source device.



• Connect one end of a USB Type-C cable to the USB Type-C port on the rear of the monitor and the other end to the USB Type-C port on the source device. Provides up to 5 Gbits/second data transaction.



4. Connect one end of the power cord to the power connector on the rear of the monitor and the other end to a grounded AC 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) AC outlet that is easily accessible at all times.

Disconnect power from the equipment by unplugging the power cord from the AC 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 the power cord from the AC outlet, grasp the cord by the plug.

#### **Connecting USB devices**

The rear of the monitor provides one USB Type-C upstream port. There are two USB Type-A downstream ports on the rear of the monitor and one USB Type-A downstream port on the side of the monitor. There is also one USB-Type-C downstream port on the side of the monitor.

**NOTE:** You must connect the USB Type-C upstream cable from the source device to the rear of the monitor to enable the USB downstream ports on the monitor.



#### Adjusting the monitor

1. Tilt the monitor head forward or backward to set it to a comfortable eye level.



2. Swivel the monitor head to the left or right for the best viewing angle.



3. Adjust the monitor head up or down to set it to a comfortable eye level.



- 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° or counterclockwise 90° from landscape to portrait orientation (2).
  - **IMPORTANT:** 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.



NOTE: When the monitor is rotated, the image automatically rotates. To rotate the OSD menu, press the Menu button to open the OSD, and then select Menu Control. Select Menu Rotation, and then select the appropriate rotation choice for your application.

#### Turning on the monitor

- 1. Set the master power switch on the rear of the monitor to the On position.
- 2. Press the power button on the computer to turn it on.
- 3. Press the power button on the bottom of the monitor to turn it on.



- IMPORTANT: Burn-in image damage may occur on monitors that display the same static image on the screen for 12 or more consecutive hours of nonuse. 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. A burned-in image on the monitor is not covered under the HP warranty.
- 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 to open the OSD, and then select **Power Control**. Select **Power LED**, and then select **Off**.

The monitor automatically scans the signal inputs for an active input and uses that input for the screen.

#### HP watermark and image retention policy

The IPS monitor models are designed with IPS (In-Plane Switching) display technology which provides ultrawide 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 monitor when the system is idle.

#### **Removing the monitor stand**

You can remove the monitor head from the stand to install the monitor head on a wall, a swing arm, or other mounting fixture.

- **IMPORTANT:** Before beginning to disassemble the monitor, be sure the monitor is turned off and all cables are disconnected.
  - 1. Disconnect and remove all cables from the monitor.
  - 2. Position the monitor facedown on a flat surface covered by a soft clean cloth.
  - 3. Press the release button on the rear of the monitor head (1), and then lift the bottom of the stand up (2) and slide the stand back (3) to remove it.



#### Mounting the monitor head

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

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

**IMPORTANT:** This VESA mount kit supports the VESA industry-standard 100 mm mounting holes. To attach a third-party mounting solution to the VESA mount, use four 4 mm, 0.7 pitch, 10 mm–long screws. Longer screws must not be used because they may damage the monitor. It is important to verify that the manufacturer's mounting solution is compliant with the VESA standard and is rated to support the weight of the monitor head. For best performance, it is important to use the power and video cables provided with the monitor.

1. Remove the monitor stand if it is attached to the monitor head. Refer to <u>Removing the monitor stand</u> on page 12.

2. To attach the monitor head to a swing arm or other mounting device, insert four mounting screws through the holes on the mounting device and into the VESA screw holes on the monitor head.



**IMPORTANT:** Follow the mounting device manufacturer's instructions when mounting the monitor to a wall or swing arm.

#### **Installing a security cable**

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



## **2** Using the monitor

## **Software and utilities**

You can download and install the following files to your computer from <a href="http://www.hp.com/support">http://www.hp.com/support</a>.

- INF (Information) file
- ICM (Image Color Matching) files (one for each calibrated color space)
- User Guide

#### **The Information file**

The INF file defines monitor resources used by Windows<sup>®</sup> operating systems to ensure monitor compatibility with the computer's graphics adapter.

This monitor is Windows Plug and Play–compatible and the monitor will work correctly without installing the INF file. Monitor Plug and Play compatibility requires that the computer's graphic card is VESA DDC2- compliant and that the monitor connects directly to the graphics card. Plug and Play does not work through separate BNC type connectors or through distribution buffers/boxes.

#### The Image Color Matching file

The ICM files are data files that are used in conjunction with graphics programs to provide consistent color matching from monitor screen to printer, or from scanner to monitor screen. This file is activated from within graphics programs that support this feature.

NOTE: The ICM color profile is written in accordance with the International Color Consortium (ICC) Profile Format specification.

## Using the on-screen display (OSD) menu

Use the on-screen display (OSD) menu to adjust the screen image based on your viewing preferences. You can access and make adjustments in the OSD using the buttons on the bottom of the monitor.

To access the OSD and make adjustments, do the following:

- 1. If the monitor is not already on, press the power button to turn on the monitor.
- 2. To access the OSD menu, press the Menu button on the bottom of the monitor.
- **3.** To navigate through the OSD menu, press the Plus button on the bottom of the monitor to scroll up, or the Minus button to scroll down.
- 4. To select an item from the OSD menu, use the Plus or Minus buttons to scroll to and highlight your selection, and then press the Menu button to select that function.
- 5. Adjust the item using the Plus or Minus buttons to adjust the scale.
- 6. After adjusting the function, select **OK** to save the setting, and then select **Exit** from the main menu.

Main menu	Description
Brightness	Adjusts the brightness level of the screen.
Contrast	Adjusts the screen contrast.
Color Control	Selects and adjusts the screen color and viewing modes.
Input Control	Selects the video input signal (DisplayPort, DVI, HDMI, or USB Type-C).
Image Control	Adjusts the screen image and response time.
PIP Control	Selects and adjusts the PIP image.
Power Control	Adjusts the power settings.
Menu Control	Adjusts the on-screen display (OSD) controls.
Management	Returns all OSD menu settings to the factory default settings and selects the language in which the OSD menu is displayed.
Information	Selects and displays important information about the monitor.
Exit	Exits the OSD menu screen.

#### **Assigning the Function buttons**

Pressing one of the four OSD bezel buttons activates the buttons and displays icons above the buttons. The default button icons and functions are shown below.



Button		Function
1	Menu	Opens the OSD main menu.
2	Color Control	Opens the Color menu.

Button		Function
	(Function button 3 - assignable)	
3	Viewing Modes	Opens the Viewing Modes menu.
	(Function button 2 - assignable)	
4	Next Active Input	Switches the monitor's input source to the next active input.
	(Function button 1 - assignable)	

You can change the Function buttons from their default values so that when the buttons are activated you can quickly access commonly used menu items.

To assign the Function buttons:

- 1. Press the Menu button to open the OSD.
- In the OSD menu, select Menu Control, select Assign Buttons, and then select one of the available options for the button you want to assign.

**NOTE:** You can only assign the three Function buttons. You can not reassign the Menu button or the power button.

#### Selecting a faster response time

- 1. Press the Menu button to open the OSD.
- 2. In the OSD menu, select **Image Control** and then select **Response Time**.
- 3. Select one of the following levels from the **Response Time** menu:
  - Level 1 (Default) Level 2 (Fast) Level 3

Level 4

Level 5 (Fastest)

**NOTE:** The default response time is 14.0 ms. The response time can be adjusted to as fast as 5.4 ms in the display menu. All performance specifications represent the typical specifications provided by HP's component manufacturers; actual performance may vary either higher or lower.

#### Selecting the Low Blue Light mode

Decreasing the blue light emitted by the monitor reduces the blue light exposure to your eyes. HP monitors provide settings to reduce the blue light output and create a more relaxing and less stimulating image while you view content on the screen. To adjust your monitor to a comfortable viewing light, follow the steps below.

- 1. Press one of the four OSD bezel buttons on the bottom of the monitor to display the OSD icons on the screen.
- Press the Viewing Modes button to open the Viewing Modes menu, or press the Menu button, select Color Control, and then select Viewing Modes.
- 3. Choose one of the following settings:

- Low Blue Light (TUV certified): Reduces blue light for improved eye comfort
- Reading: Optimizes both blue light and brightness for indoor viewing
- Night: Adjusts the monitor to the lowest blue light output

✓ WARNING! To reduce the risk of serious injury, read the Safety & Comfort Guide. It describes proper workstation setup, and proper posture, health, and work habits for computer users. The Safety & Comfort Guide also provides important electrical and mechanical safety information. The Safety & Comfort Guide is available on the Web at <a href="http://www.hp.com/ergo">http://www.hp.com/ergo</a>.

## Using Picture-in-Picture (PIP) and Picture-beside-Picture (PBP)

The monitor supports both PIP, where one source is overlaid over another, and PBP, where one source is positioned adjacent to another either horizontally (for landscape orientation) or vertically (for portrait orientation).

**NOTE:** Using HDMI and USB-C inputs at the same time for PIP or PBP is not supported.

To use PIP or PBP:

- 1. Connect a secondary input source to the monitor.
- 2. Press the Menu button to open the OSD.
- 3. In the OSD, select Enable PIP and then select either Picture-in-Picture or 2x1 Dual Split (PBP).
- 4. The monitor will scan the secondary inputs for a valid input and use that input for the PIP/PBP picture. If you want to change the PIP/PBP input, select Assign Inputs in the OSD and select the desired input.
- 5. If you want to change the size of the PIP, select **PIP Size** in the OSD then select the desired size.
- 6. If you want to adjust the position of the PIP, select **PIP Position** in the OSD, then select the desired position.

#### **DisplayPort multistreaming**

If you are using DisplayPort as the primary video input source, you can multistream to other DisplayPort monitors connected in a daisy chain configuration. You can connect up to four monitors in this configuration if supported by the graphics card.

To use DisplayPort multistreaming:

1. Make sure that DisplayPort is used for your primary video input.

2. Add a second monitor by connecting a DisplayPort cable between the DisplayPort OUT connector on the primary monitor and the DisplayPort input connector on a secondary multistream monitor or the DisplayPort input connector on a secondary non-multistream monitor.



- 3. You can set the connected monitor to display the same image as the primary monitor or a different image. In the OSD for the connected monitor, select Input Control, select DisplayPort Mode, and then select one of the following:
  - a. **DisplayPort 1.1**: allows the same video image to be sent to all monitors downstream of the monitor you are configuring
  - **b. DisplayPort 1.2** (default): allows a different image to be sent to all monitors downstream of the monitor you are configuring
- 4. After setting the DisplayPort Mode in the OSD, use the computer operating system's display settings to set the display mode for the secondary monitor to either mirror the image of the primary monitor or extend the second monitor for a different image from the primary monitor.

If you wish to connect additional monitors downstream (up to four maximum), all but the final monitor in the chain must support DisplayPort multistreaming.

Connect from the DisplayPort OUT of one monitor to the DisplayPort input of the next monitor, until you have the desired number of monitors.

If you want different information on each screen be sure that all upstream monitors are configured to DisplayPort 1.2 mode, as described above.

The number of monitors you can connect through DisplayPort multistreaming depends on a number of factors, including the resolutions and scan rates used for each monitor and the capabilities of your GPU or embedded graphics system. Check the manual that came with your graphics card for further information on its capabilities.

Resolution	Multistreaming maximum displays quantity
1280 x 720	4
1600 x 900	4
1920 x 1080	4
1920 x 1200	3
2560 x 1440	2

## **Using Auto-Sleep Mode**

The monitor supports an OSD (on-screen display) menu option called Auto-Sleep Mode that allows you to enable or disable a reduced power state for the monitor. When Auto-Sleep Mode is enabled (enabled by default), the monitor will enter a reduced power state when the host computer signals low power mode (absence of either horizontal or vertical sync signal).

Upon entering this reduced power state (sleep mode), the monitor screen is blanked, the backlight is turned off, and the power LED indicator turns amber. The monitor draws less than 0.5 W of power when in this reduced power state. The monitor will wake from the sleep mode when the host device sends an active signal to the monitor (for example, if you activate the mouse or keyboard).

You can disable Auto-Sleep Mode in the OSD. Press the Menu button to open the OSD, and then select **Power Control**, select **Auto-Sleep Mode**, and then select **Off**.

## 3 Support and troubleshooting

## Solving common problems

The following table lists possible problems, the possible cause of each problem, and the recommended solutions.

Problem	Possible cause	Solution
Screen is blank or video is flashing.	Power cord is disconnected.	Connect the monitor power cord.
	Monitor is off.	Set the master power switch to the On position.
		Press the monitor power button.
		<b>NOTE:</b> If pressing the power button has no effect, press and hold the power button for 10 seconds to disable the Power Button Lockout feature.
	Video cable is not connected.	Connect the video cable between the source device and monitor. Be sure the computer power is off while you connect the video cable. Refer to <u>Connecting the cables on page 5</u> for more information.
	System is in sleep mode.	Press any key on the keyboard or move the mouse to exit sleep mode.
	Video card is incompatible.	Replace the video card or connect the video cable to one of the computer's onboard video sources.
Image appears too dark.	Brightness setting is too low.	Open the OSD menu and select <b>Brightness</b> to adjust the brightness scale as needed.
Input Signal Not Found is displayed on screen.	Monitor video cable is disconnected.	Connect the appropriate video signal cable between the computer and monitor. Be sure that the computer power is off while connecting the video cable.
<b>Input Signal Out of Range</b> is displayed on screen.	Video resolution and/or refresh rate are set higher than the monitor supports.	Change the settings to a supported setting (see <u>Preset display</u> resolutions on page 24).
The monitor is off but it did not seem to enter a low- power sleep mode.	The monitor's sleep mode is disabled.	Open the OSD menu and select <b>Power Control</b> , select <b>Auto-Sleep Mode</b> , and then set auto-sleep to <b>On</b> .
<b>OSD Lockout</b> is displayed.	The monitor's OSD Lockout function is enabled.	Press and hold the Menu button for 10 seconds to disable the OSD Lockout function.
<b>Power Button Lockout</b> is displayed.	The monitor's Power Button Lockout function is enabled.	Press and hold the power button for 10 seconds to disable the Power Button Locket function.

### **Button lockouts**

Holding down the power button or Menu button for ten seconds will lock out the functionality of that button. You can restore the functionality by holding the button down again for ten seconds. This functionality is only available when the monitor is powered on, displaying an active signal, and the OSD is not active.

## **Contacting support**

To resolve a hardware or software problem, go to <u>http://www.hp.com/support</u>. Use this site to get more information about your product, including links to discussion forums and instructions on troubleshooting. You can also find information on how to contact HP and open a support case.

## **Preparing to call technical support**

If you cannot solve a problem using the troubleshooting tips in this section, you may need to call technical support. Have the following information available when you call:

- Monitor model number
- Monitor serial number
- Purchase date on invoice
- Conditions under which the problem occurred
- Error messages received
- Hardware configuration
- Name and version of the hardware and software you are using

#### Locating the serial number and product number

The serial number and product number are located on a label on the bottom edge of the monitor head. You may need these numbers when contacting HP about the monitor model.



## 4 Maintaining the monitor

### **Maintenance guidelines**

To enhance the performance and extend the life of the monitor:

- Do not open the monitor cabinet or attempt to service this product yourself. Adjust only those controls that are covered in the operating instructions. If the monitor is not operating properly or has been dropped or damaged, contact an authorized HP dealer, reseller, or service provider.
- Use only a power source and connection appropriate for this monitor, as indicated on the label/back plate of the monitor.
- Be sure the total ampere rating of the products connected to the outlet does not exceed the current rating of the electrical outlet, and the total ampere rating of the products connected to the cord does not exceed the rating of the cord. Look on the power label to determine the ampere rating (AMPS or A) for each device.
- Install the monitor near an outlet that you can easily reach. Disconnect the monitor by grasping the plug firmly and pulling it from the outlet. Never disconnect the monitor by pulling the cord.
- Turn the monitor off when not in use. You can substantially increase the life expectancy of the monitor by using a screen saver program and turning off the monitor when not in use.
- **NOTE:** Monitors with a "burned-in image" are not covered under the HP warranty.
- Slots and openings in the cabinet are provided for ventilation. These openings must not be blocked or covered. Never push objects of any kind into cabinet slots or other openings.
- Do not drop the monitor or place it on an unstable surface.
- Do not allow anything to rest on the power cord. Do not walk on the cord.
- Keep the monitor in a well-ventilated area, away from excessive light, heat or moisture.

#### **Cleaning the monitor**

- **1.** Turn off the monitor and unplug the power cord from the AC outlet.
- 2. Dust the monitor by wiping the screen and the cabinet with a soft, clean antistatic cloth.
- 3. For more difficult cleaning situations, use a 50/50 mix of water and Isopropyl alcohol.
- IMPORTANT: Spray the cleaner onto a cloth and use the damp cloth to gently wipe the screen surface. Never spray the cleaner directly on the screen surface. It may run behind the bezel and damage the electronics.

**IMPORTANT:** Do not use cleaners that contain any petroleum-based materials such as benzene, thinner, or any volatile substance to clean the monitor screen or cabinet. These chemicals may damage the monitor.

#### **Shipping the monitor**

Keep the original packing box in a storage area. You may need it later if you move or ship the monitor.

## **A** Technical specifications

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

For the latest specifications or additional specifications on this product, go to <a href="http://www.hp.com/go/guickspecs/">http://www.hp.com/go/guickspecs/</a> and search for your specific monitor model to find the model-specific QuickSpecs.

## 61.1 cm/24-inch model

Specification	Measurement		
Display	<b>61.1 cm</b> wide screen	24-inch wide	
Туре	IPS LCD	screen	
Viewable image size	<b>61.1 cm</b> diagonal	24-inch diagonal	
Maximum weight (unpacked)	7.2 kg	15.9 lb	
Dimensions (include base)			
Height	50.3 cm	19.8 inches	
Depth	21.4 cm	8.4 inches	
Width	53.2 cm	20.9 inches	
Tilt	-5° to +22°		
Swivel	-45° to +45°		
Maximum graphic resolution	1920 × 1200 @ 75 Hz		
Optimum graphic resolution	1920 × 1200 @ 60 Hz		
Environmental requirements temperature			
Operating temperature	5°C to 35°C	41°F to 95°F	
Storage temperature	-20°C to 60°C	-4°F to 140°F	
Operating humidity	20% to 80% RH (non-condensing)		
Non-operating humidity	5% to 95% RH (non-condensing)		
Power source	100–240 V ac 50/60 Hz		
Input current	1.6 A		
Input terminal	One DisplayPort port, one HDMI port, one DVI port, and one USB Type-C port		

## 68.5 cm/27-inch model

Specification	Measurement	
Display	68.5 cm wide screen	27-inch wide screen
Туре	IPS LCD	
Viewable image size	68.5 cm diagonal	27-inch diagonal
Maximum weight (unpacked)	8.0 kg	17.6 lb
Dimensions (include base)		
Height	50.9 cm	20.0 inches
Depth	21.4 cm	8.4 inches
Width	61.3 cm	24.1 inches
Tilt	-5° to +22°	
Swivel	-45° to +45°	
Maximum graphic resolution	2560 × 1440 @ 75 Hz	
Optimum graphic resolution	2560 × 1440 @ 60 Hz	
Environmental requirements temperature		
Operating temperature	5°C to 35°C	41°F to 95°F
Storage temperature	-20°C to 60°C	-4°F to 140°F
Operating humidity	20% to 80% RH (non-condensing)	
Non-operating humidity	5% to 95% RH (non-condensing)	
Power source	100–240 V ac 50/60 Hz	
Input current	1.6 A	
Input terminal	One DisplayPort port, one HDMI port, one DVI port, and one USB Type-C port	

### **Preset display resolutions**

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

#### 61.1 cm/24-inch model

IMPORTANT: The monitor can support up to 75 Hz refresh for some video modes. However, the video card of the connected source device must be capable of supporting 75 Hz. The preferred mode is 1920 x 1200 @ 60 Hz.

**Preset display resolutions** 

640 × 480 @ 60 Hz, 75 Hz

720 × 400 @ 70 Hz

Preset display resolutions
800 × 600 @ 60 Hz, 75 Hz
1024 × 768 @ 60 Hz, 75 Hz
1280 × 720 @ 60 Hz
1280 × 800 @ 60 Hz
1280 × 1024 @ 60 Hz, 75 Hz
1440 × 900 @ 60 Hz
1600 × 900 @ 60 Hz
1680 × 1050 @ 60 Hz
1920 × 1080 @ 60 Hz
1920 × 1200 @ 60 Hz, 75 Hz

#### 68.5 cm/27-inch model

**IMPORTANT:** The monitor can support up to 75 Hz refresh for some video modes. However, the video card of the connected source device must be capable of supporting 75 Hz. The preferred mode is 2560 x 1440 @ 60 Hz.

Preset display resolutions
640 × 480 @ 60 Hz, 75 Hz
720 × 400 @ 70 Hz
800 × 600 @ 60 Hz, 75 Hz
1024 × 768 @ 60 Hz, 75 Hz
1280 × 720 @ 60 Hz
1280 × 800 @ 60 Hz
1280 × 1024 @ 60 Hz, 75 Hz
1440 × 900 @ 60 Hz
1600 × 900 @ 60 Hz
1680 × 1050 @ 60 Hz
1920 × 1080 @ 60 Hz
1920 × 1200 @ 60 Hz
2560 × 1440 @ 60 Hz, 75 Hz

### **Entering user modes**

Under the following conditions, the video controller signal may occasionally call for a mode that is not preset:

- 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 and 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.

#### **Energy saver feature**

The monitors support a reduced power state. The reduced power state will be initiated if the monitor detects the absence of either the horizontal sync signal 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 turns amber. When the monitor is in the reduced power state, the monitor will utilize 0.5 watts of power. There is a brief warm-up period before the monitor returns to its normal operating mode.

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

NOTE: The energy saver feature only works when the monitor is connected to a computer that has energy saver features.

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

## **B** Accessibility

HP designs, produces, and markets products and services that can be used by everyone, including people with disabilities, either on a stand-alone basis or with appropriate assistive devices.

## Supported assistive technologies

HP products support a wide variety of operating system assistive technologies and can be configured to work with additional assistive technologies. Use the Search feature on your source device that is connected to the monitor to locate more information about assistive features.

NOTE: For additional information about a particular assistive technology product, contact customer support for that product.

#### **Contacting support**

We are constantly refining the accessibility of our products and services and welcome feedback from users. If you have an issue with a product or would like to tell us about accessibility features that have helped you, please contact us at (888) 259-5707, Monday through Friday, 6 a.m. to 9 p.m. Mountain Time. If you are deaf or hard-of-hearing and use TRS/VRS/WebCapTel, contact us if you require technical support or have accessibility questions by calling (877) 656-7058, Monday through Friday, 6 a.m. to 9 p.m. Mountain Time.