



User Guide

SUMMARY

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

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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 <http://www.hp.com/support>, and follow the instructions to find your product. Then select **Manuals**.






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About this guide

This guide provides technical specifications and information about monitor features, setting up the monitor, and using the software. Depending on the model, your monitor may not have all the features included in this guide.

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-  **WARNING!** Indicates a hazardous situation that, if not avoided, **could** result in serious injury or death.
 -  **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). Warns 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.
 -  **TIP:** Provides helpful hints for completing a task.
-



This product incorporates HDMI technology.

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1 Getting started

Read this chapter to learn about safety information and where to find additional HP resources.

Important safety information


An AC adapter and power cord might be included with the monitor. If you use another cord, use only a power source and connection appropriate for this monitor. For information about the correct power cord set to use with the monitor, see the *Product Notices* provided 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.
- If the power cord has a three-pin attachment plug, plug the cord into a grounded (earthed) three-pin outlet.
- Disconnect power from the computer by unplugging the power cord from the AC outlet. When unplugging the power cord from the AC outlet, grasp the cord by the plug.


For your safety, do not place anything on power cords or cables. Take care to route all cords and cables connected to the monitor so that they cannot be stepped on, pulled, grabbed, or tripped over.


To reduce the risk of serious injury, read the *Safety & Comfort Guide* provided with your user guides. 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 also available on the web at <http://www.hp.com/ergo>.


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

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

 **WARNING!** Monitors that are inappropriately situated on dressers, bookcases, shelves, desks, speakers, chests, or carts could fall over and cause personal injury.

 **WARNING! Stability hazard:** The device might fall, causing serious personal injury or death. To prevent injury, securely attach the monitor to the floor or wall in accordance with the installation instructions.

 **WARNING!** This equipment is not suitable for use in locations where children are likely to be present.

 **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 might cause disturbing reflections from the screen.

More HP resources

Use this table to locate resources that provide product details, how-to information, and more.

Table 1-1 Additional information

Resource	Contents
Setup Instructions	Overview of monitor setup and features
HP support	<p>For HP support or to resolve a hardware or software problem, go to http://www.hp.com/support, and follow the instructions to find your product.</p> <p>– or –</p> <p>Type support in the taskbar search box, and then select HP Support Assistant. Then select Support.</p> <p>– or –</p> <p>Select the question mark icon in the taskbar search box.</p> <p>Then select Support.</p>

NOTE: Contact customer support to replace the power cord, the AC adapter (select products only), or any other cables that shipped with your monitor.


Getting to know your monitor

Your monitor has top-rated features. This section provides details about your components, where they are located, and how they work.

Features

Depending on the model, your monitor might include the following features:

- 68.5 cm (27 in) diagonal viewable screen area with 1920 × 1080 resolution, plus full-screen support for lower resolutions
- 60.5 cm (23.8 in) diagonal viewable screen area with 1920 × 1080 resolution, plus full-screen support for lower resolutions
- Pop-up camera and microphone for online collaboration
- Nonglare panel with an LED backlight
- Wide viewing angle to allow viewing from a sitting or standing position, while moving from side to side
- On-screen display (OSD) adjustments in several languages for easy setup and screen optimization
- Plug and Play capability, if supported by your operating system
- Tilt, swivel, and height adjustment capabilities
- Pivot capability to rotate the monitor head from landscape to portrait orientation
- Removable stand (optional) for flexible monitor head mounting solutions
- USB Type-C® and USB Type-A docking for legacy and current HP notebooks
- One DisplayPort™ video output for daisy-chaining a second monitor
- HDMI (High-Definition Multimedia Interface) and VGA video inputs
- Audio-in microphone jack on rear and audio-out (headset) jack on side
- Up to 90 W DC power OUT port for charging your legacy HP notebook (USB Type-A notebooks only)

- USB Type-C upstream port for high-speed data and network, audio and video, and power delivery (up to 65 W)
 - Four USB Type-A (5 Gbps) downstream ports (two rear ports and two side ports)
 - RJ-45 (network) jack
 - Security cable slot on rear of monitor for optional security cable
 - HP Display Assistant software for adjusting monitor settings and enabling theft-deterrence features
 - HDCP (High-bandwidth Digital Content Protection) used on all digital inputs
 - Power Saver mode to meet requirements for reduced power consumption
 - Four on-screen display (OSD) buttons, three that you can reconfigure to quickly allow selection of the most commonly used operations
 - Energy saver feature to meet requirements for reduced power consumption
-  **NOTE:** For safety and regulatory information, see the Product Notices provided in your documentation kit. To access the latest user guides or manuals for your product, go to <http://www.hp.com/support> and follow the instructions to find your product. Then select **Manuals**.

Rear and side components

To identify the components on the rear and side of the monitor, use this illustration and table.

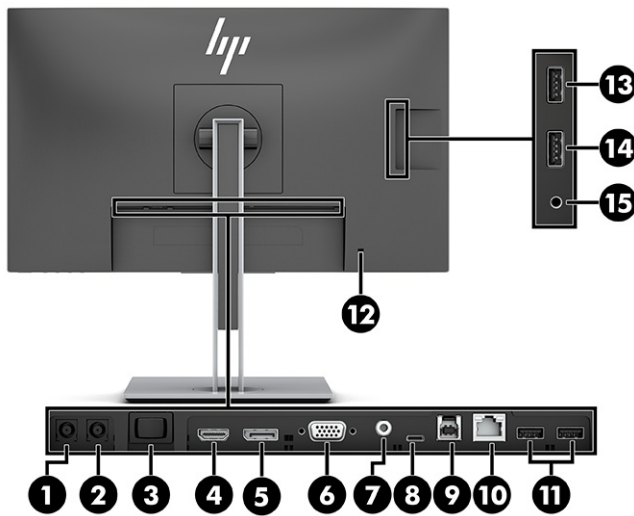


Table 1-2 Rear components and their descriptions

Component	Description
(1) DC Power IN connector	Connects an AC adapter.
(2) DC Power OUT connector	Connects the DC power cord to an HP notebook computer to supply power to the computer and, if needed, to charge the computer battery (up to 90 watts).
(3) Master power switch	Turns the monitor on and off.
(4) HDMI port	Connects the HDMI cable to a source device.
(5) DisplayPort OUT connector	Connects a DisplayPort cable to a secondary monitor for daisy-chaining.
(6) VGA port	Connects a VGA cable to a source device.

Table 1-2 Rear components and their descriptions (continued)

Component	Description
(7) Audio-in jack	Connects an audio cable (not included).
(8) USB Type-C port (upstream)	Connects a USB Type-C cable to an HP notebook or desktop computer. Serves as a single connection for video, data, and power delivery (up to 65 W). NOTE: Your computer USB Type-C port must be able to support USB Type-C Alt Mode and data and power delivery. Use only the HP USB Type-C cable provided. Supports DisplayPort Alt Mode (video, charging, and USB 3.1) over the USB Type-C connector. Also compatible with USB Type-C, Thunderbolt™-enabled ports.
(9) USB Type-B upstream port	Connects a USB Type-B cable to a source device.
(10) RJ-45 (network) jack	Connects a network cable.
(11) USB Type-A ports (2)	Connect USB devices.
(12) Security cable slot	Connects an optional security cable (for 23.8 in models only)
(13) USB port with HP Sleep and Charge	Connects USB devices. Charges most products such as a cell phone, camera, activity tracker, or smartwatch.
(14) USB Type-A port	Connects a USB device.
(15) Audio-out (headset) jack	Connects optional headphones, earbuds, a headset, or a television audio cable. WARNING! 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 in your documentation kit.

Front components

To identify the components on the front of the monitor, use this illustration and table.

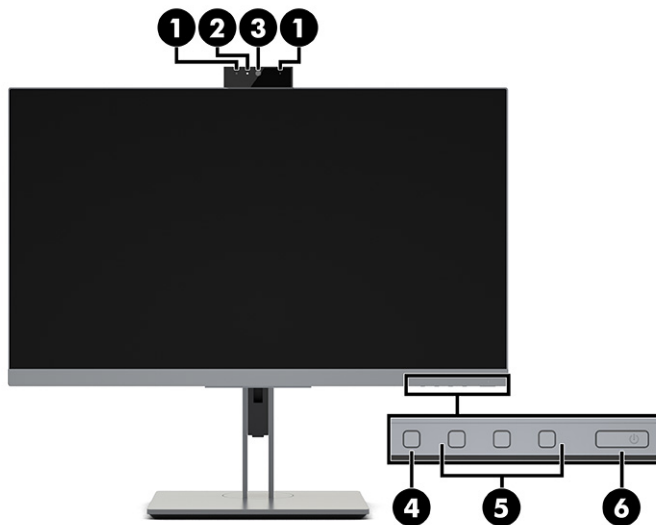


Table 1-3 Front components and their descriptions

Component	Description
(1) Camera microphones	Allow you to participate in a video conference.
(2) Camera light	On: Camera is in use.
(3) Camera	Transmits your image in a video conference.
(4) Menu button	Press to open the OSD menu, select a menu item from the OSD, or close the OSD menu. An indicator is activated above the Menu button when the OSD menu is open.
(5) Function buttons (assignable)	When the OSD menu is open, press the buttons to navigate through the menu. Lighted icons above the buttons indicate their functions. For a description of these functions, see Using the function buttons on page 22 .
(6) Power button (with power light)	Turns the monitor on or off.

* You can reconfigure reconfigure the function buttons in the OSD menu to quickly select the most commonly used operations. See [Using the function buttons on page 22](#).



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

Setting up the monitor

This section describes attaching the monitor stand or wall mount and the options for connecting your monitor to a PC, notebook, gaming console, or similar device.



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 <http://www.hp.com/ergo>.



IMPORTANT: To prevent damage to the monitor, do not touch the surface of the LCD panel. Pressure on the panel can cause nonuniformity of color or disorientation of the liquid crystals. If this occurs, the screen will not recover to its normal condition.

IMPORTANT: To prevent the screen from getting scratched, defaced, or broken and to prevent damage to the control buttons, position the monitor facedown on a flat surface covered with protective sheet foam or a nonabrasive cloth.

Installing the monitor stand

Correctly attaching your monitor stand is critical for safe use. This section describes how to safely attach a stand.

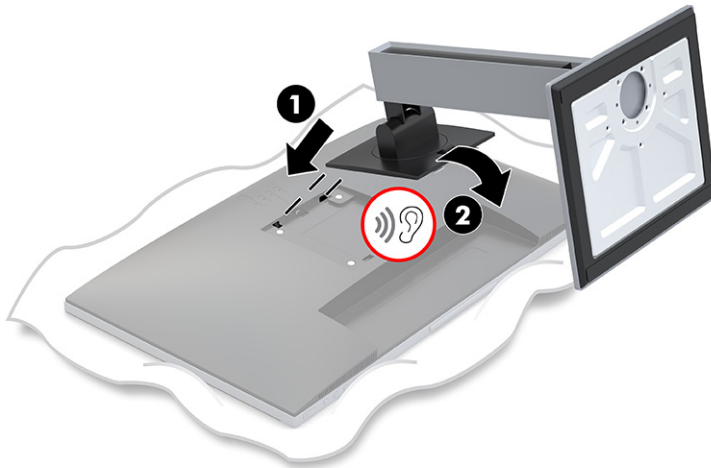


IMPORTANT: To prevent damage to the monitor, do not touch the surface of the LCD panel. Pressure on the panel may cause nonuniformity of color or disorientation of the liquid crystals. If this occurs, the screen will not recover to its normal condition.

The procedures for attaching a monitor stand might be different on other models.


1. Position the monitor head facedown on a flat surface covered by a protective sheet made of foam or a clean, dry cloth.
2. Slide the top of the mounting plate on the stand under the upper lip of the recess in the back of the panel **(1)**.

3. Lower the bottom of the stand's mounting plate into the recess until it snaps into place **(2)**.
The latch on the bottom of the mounting plate pops up when the stand is locked in place.




Mounting the monitor head

To attach your monitor to a wall using a swing arm or other mounting fixture, follow the steps in this section to safely and securely connect your monitor.

 **IMPORTANT:** This monitor supports the VESA® industry-standard 100 mm mounting holes. To attach a third-party mounting solution to the monitor head, use four 4 mm, 0.7 pitch, and 10 mm long screws. Longer screws might damage the monitor. Be sure 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, use the power and video cables provided with the monitor.

Removing the monitor stand

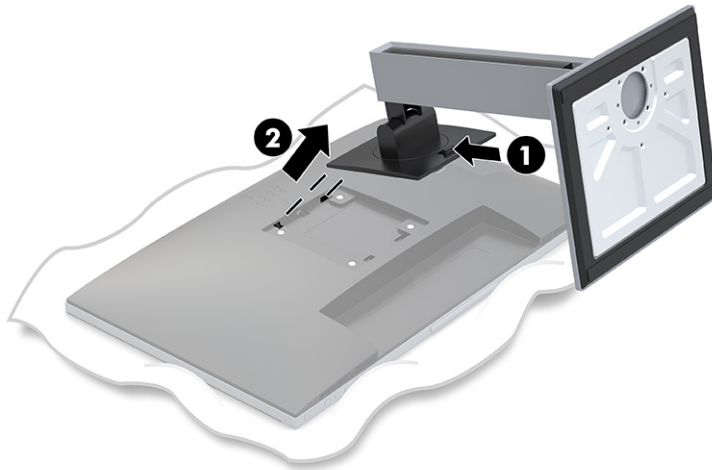
If you decide to use a wall mount instead of the monitor stand that you attached, first remove the stand.

 **IMPORTANT:** Before you disassemble the monitor, be sure that the monitor is turned off and all cables are disconnected.

IMPORTANT: HP recommends that two people position and stabilize the monitor.

1. Disconnect and remove all cables from the monitor.
2. Position the monitor facedown on a flat surface covered by protective sheet made of foam or a clean, dry cloth.
3. Push up the latch near the bottom center of the stand's mounting plate **(1)**.
4. Swing the bottom of the stand up until the mounting plate clears the recess in the monitor head **(2)**.

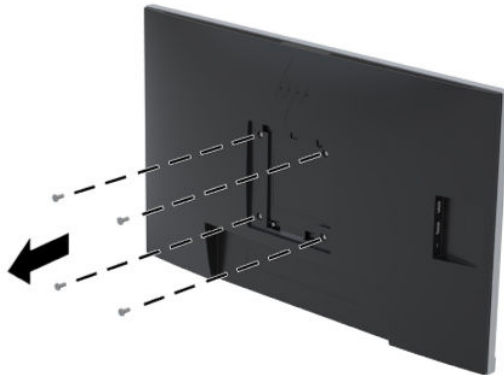
5. Slide the stand out of the recess.




Attaching the VESA mounting bracket

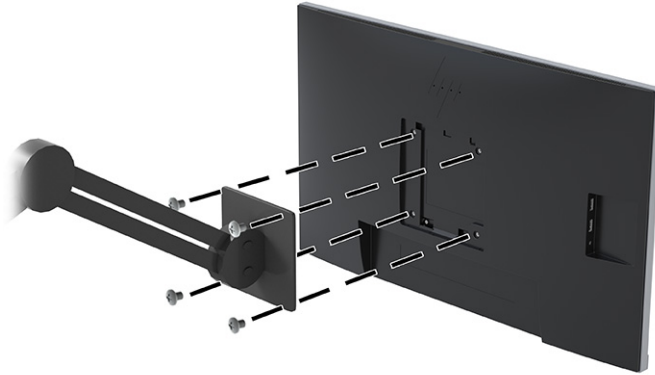
You might need additional tools such as a screwdriver (purchased separately) when you attach a mounting device. To avoid damage to your monitor, follow these instructions.

1. Remove the four screws from the VESA holes located on the rear of the monitor head.




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 back of the monitor head.

 **IMPORTANT:** If these instructions do not apply to your device, then follow the mounting device manufacturer's instructions when mounting the monitor to a wall or swing arm.

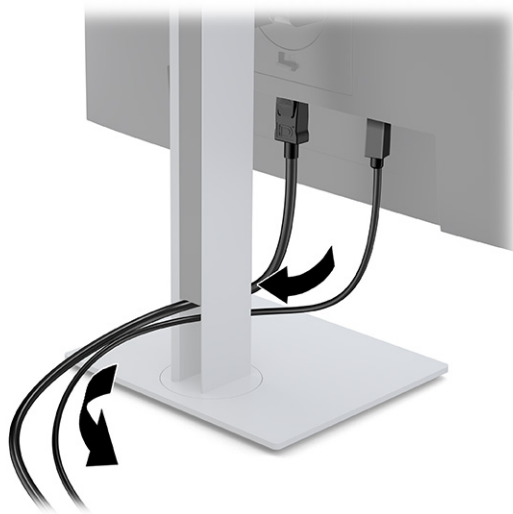


Connecting the cables


In addition to details about how to connect a cable, this section contains information about how your monitor functions when you connect certain cables.

 **NOTE:** Depending on the model, the monitor might be capable of supporting VGA, USB Type-C, HDMI, or DisplayPort inputs. The video mode is determined by the video cable used. The monitor automatically determines which inputs have valid video signals. You can select the inputs through the OSD menu. The monitor ships with select cables. Not all cables shown in this section are included with the monitor.

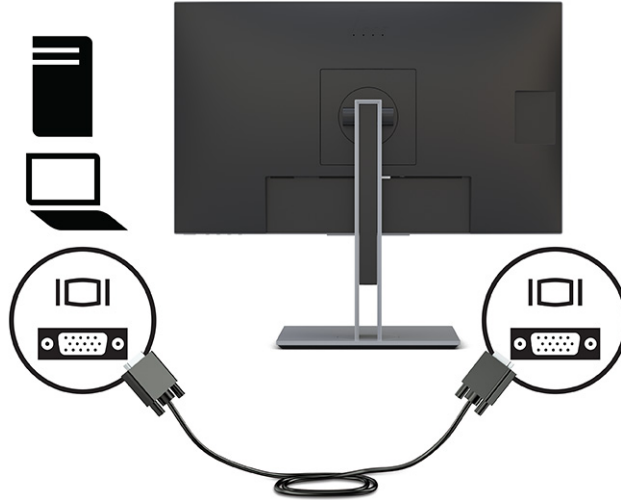
1. Place the monitor in a convenient, well-ventilated location near the computer.
2. Before connecting the cables, route the cables through the cable routing hole in the center of the stand.



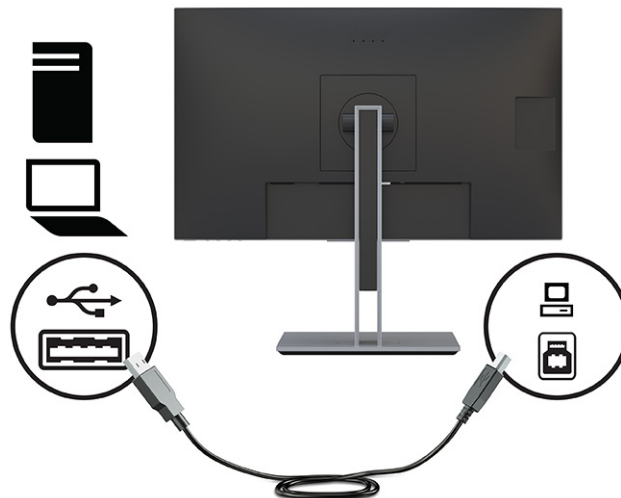
3. Connect a video cable.


 **NOTE:** The monitor automatically determines which inputs have valid video signals. You can select inputs by pressing the **Menu** button to access the on-screen display (OSD) menu and then selecting **Input control**.

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

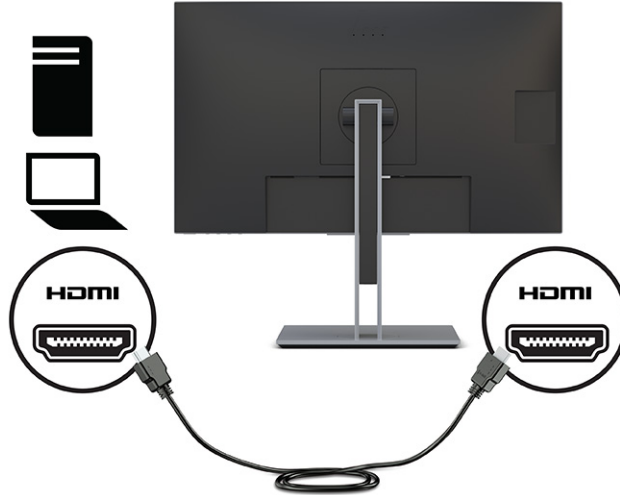


- Connect one end of a USB Type-B cable to the USB Type-B upstream port on the rear of the monitor and the other end to the USB Type-A port on the source device. This enables video and data pass-through.

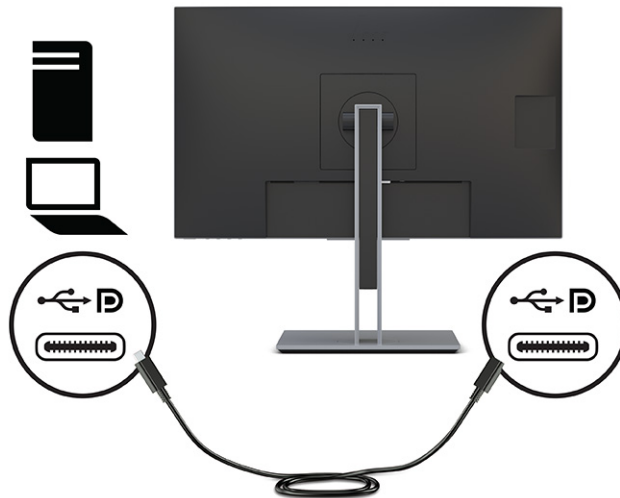



 **NOTE:** DisplayLink drivers are required for this setup. Drivers are available on the HP Support website.

- 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 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. Use only the HP-approved USB Type-C cable provided with the monitor.

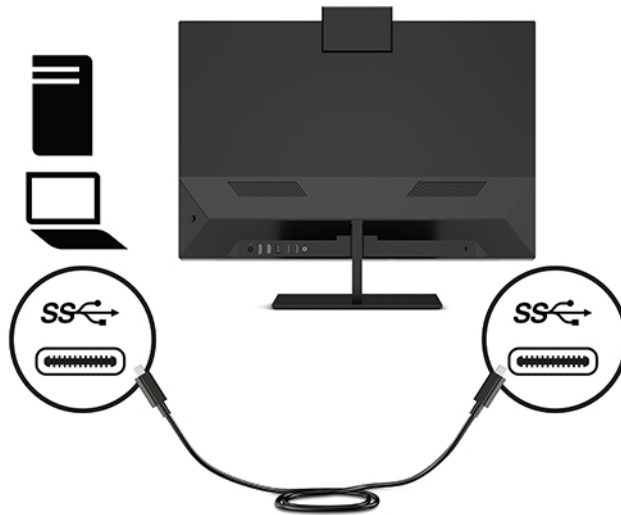



 **NOTE:** The monitor's USB Type-C port provides network, data, video, and power delivery (up to 65 W).

The host device must be able to support DisplayPort Alt Mode (video, charging, and USB 3.1) over the USB Type-C connector. The host device must also be compatible with USB Type-C-Thunderbolt™-enabled ports.

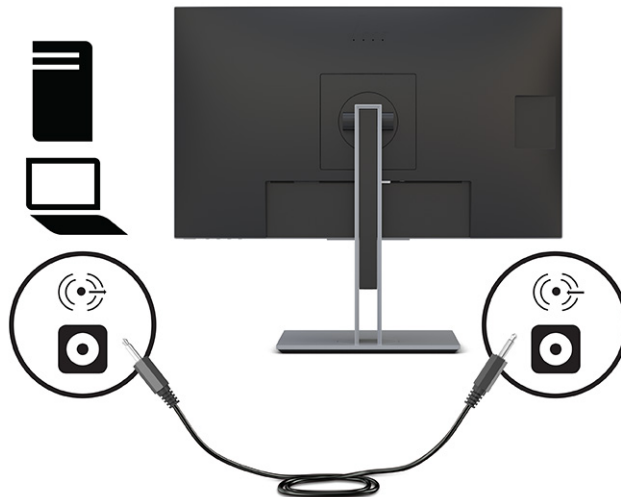
4. Connect a USB cable.


- Connect one end of the USB Type-C cable to a USB Type-C SuperSpeed port on the monitor and the other end to a USB Type-C SuperSpeed port on the source device. (Use only the HP-approved USB Type-C cable provided with the monitor.)



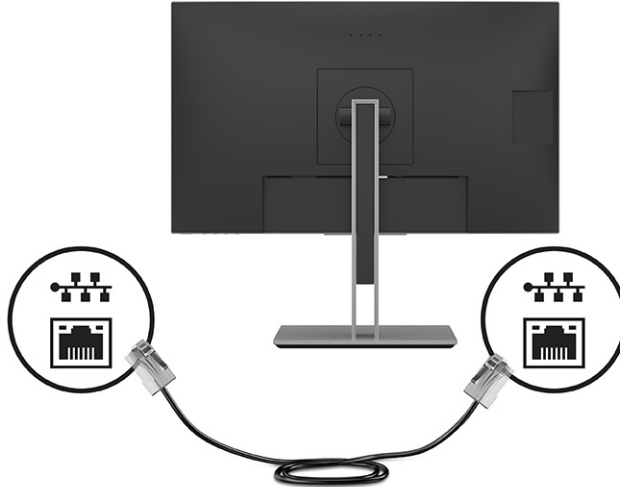
 **NOTE:** Some USB Type-C ports support display output. To determine if the USB Type-C port on your monitor can support DisplayPort output, see [Rear and side components on page 3](#).


5. Connect one end of an audio cable (not included) to the audio-in jack on the monitor and the other end to the audio-out jack on the source device.



 **NOTE:** The audio-in function only works when a VGA cable is connected.

6. Connect one end of a network cable to the network jack on the monitor and the other end to a network wall jack or router.



 **NOTE:** To enable the network function, be sure that the USB upstream port is connected.

7. Connect one end of the power cord to the AC adapter (1) and the other end to a grounded AC outlet (2). Then connect the AC adapter to the power connector on the monitor (3).

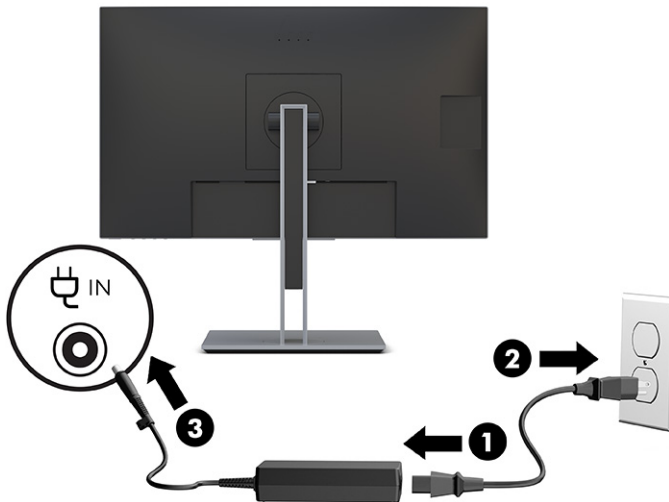
 **WARNING!** To reduce the risk of electric shock or damage to the equipment:

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

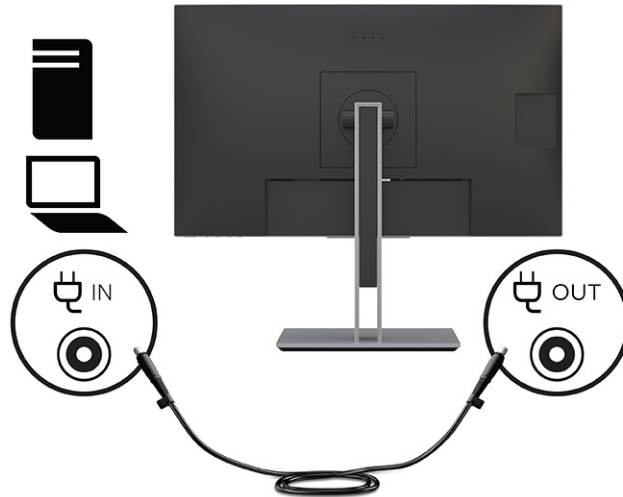
Plug the power cord into a grounded (earthed) AC outlet that is easily accessible at all times.

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 can 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.




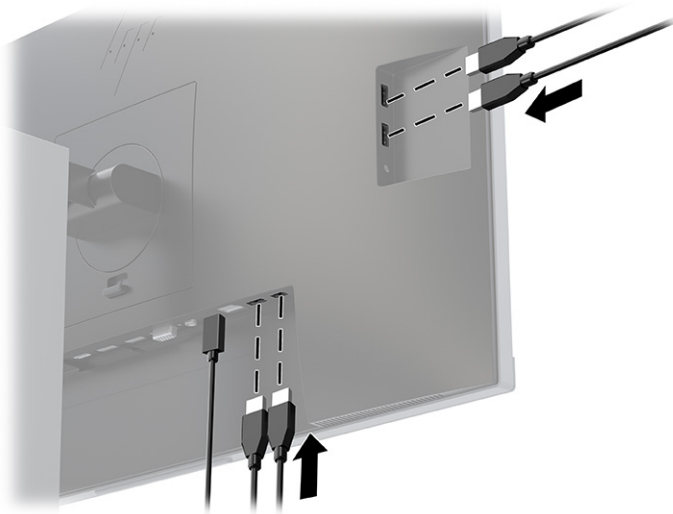
8. Connect the DC cable to the power OUT connector on the monitor and the other end to the power IN connector on a host computer. When using USB Type-B for video and data, use DC OUT (DC-to-DC cable). Only one host computer should be connected to either the USB Type-C or DC OUT port for power pass through. Connecting two host computers to the monitor can result in system shutdown, loss of power, and the need to turn off and restart the monitor.



Connecting USB devices

The rear of the monitor provides one USB Type-B and one USB Type-C port that function as an upstream hub for the monitor's USB Type-A downstream ports. There are two USB Type-A downstream ports on the rear of the monitor, and two USB Type-A downstream ports on the side of the monitor.

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

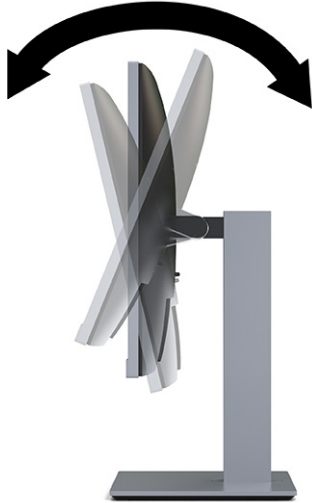


Adjusting the monitor (select products only)

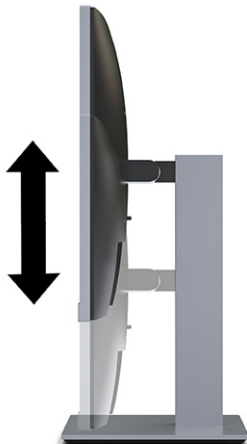
To support an ergonomic work space, your monitor offers the adjustment options outlined in this section.

⚠ 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 <http://www.hp.com/ergo>.

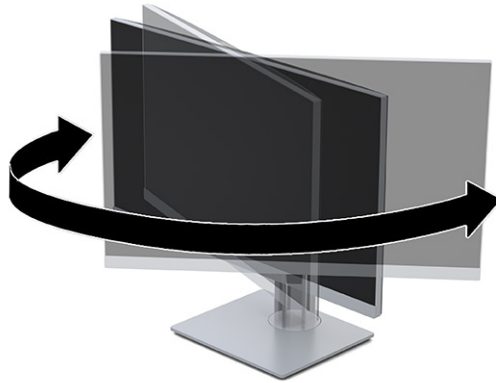
1. Tilt the monitor head forward or backward to set it to a comfortable eye level.




2. 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 might be more comfortable for users with corrective lenses. Reposition your monitor as you adjust your working posture throughout the work day.

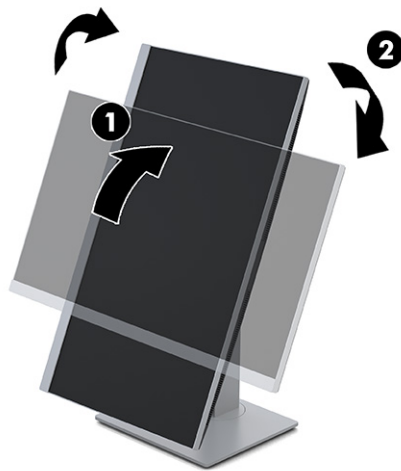



3. Swivel the monitor head to the left or right for the best viewing angle.



4. You can pivot the monitor head 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 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 damage to the monitor.





 **NOTE:** To view information about the screen in portrait mode, you can use the HP Display Assistant software by downloading it and installing on your computer from <http://www.hp.com/support>. The position of the OSD menu can also be rotated to portrait orientation. To rotate the OSD menu, press the **Menu** button to open the OSD, select **Menu Control** from the menu, and then select **Menu Rotation**.

Turning on the monitor

This section provides important information about preventing damage to your monitor, startup indicators, and troubleshooting information.

 **IMPORTANT:** Burn-in image damage might occur on monitors that display the same static image on the screen for 12 or more hours. To avoid burn-in image damage, you should always activate a screen saver application or turn off the monitor when it will not be in use for a prolonged period of time. Image retention is a condition that might occur on all LCD screens. Burn-in damage on the monitor is not covered under the HP warranty.

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

 **NOTE:** On select HP monitors, you can disable the power light in the OSD menu. Press the **Menu** button to open the OSD, select **Power**, select **Power LED**, and then select **Off**.

1. Press the power button on the computer to turn it on.
2. Press the power button on the bottom of the monitor to turn it on.



When you first turn on your monitor, a monitor status message is displayed for 5 seconds. The message shows which input is the current active signal, the status of the auto-switch source setting (On or Off; default setting is On), 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 screen.

HP watermark and image retention policy

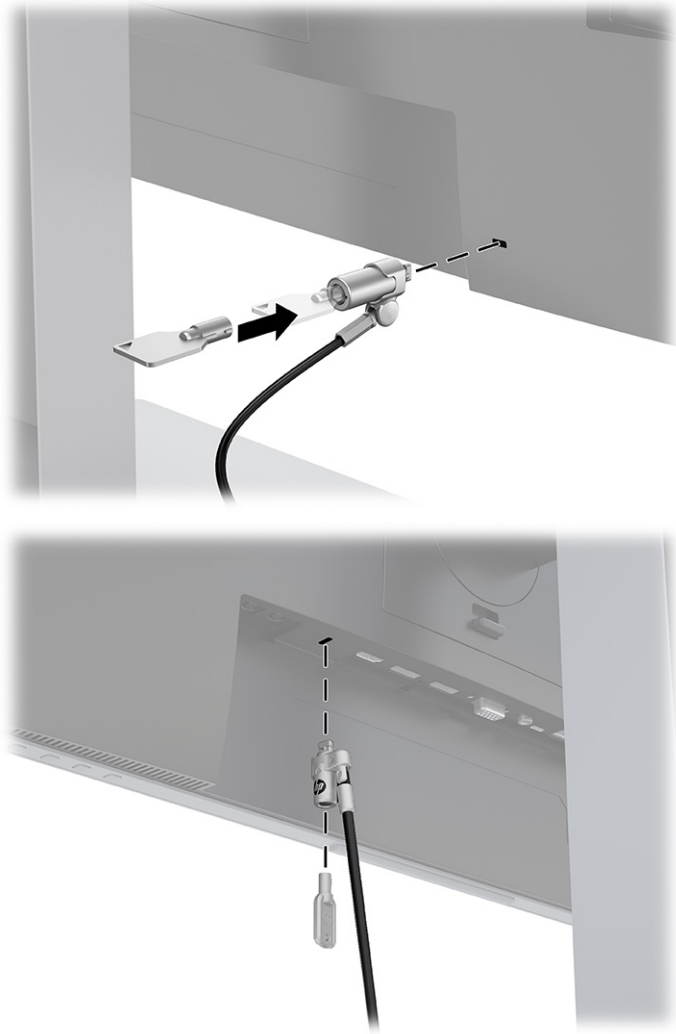
Some monitors are designed with In-Plane Switching (IPS) display technology, which provides ultrawide viewing angles and advanced image quality. Though suitable for many applications, this panel technology is not suitable for static, stationary, or fixed images for long periods of time, unless you use screen savers.

Applications with static images can include camera surveillance, video games, marketing logos, and templates. Static images can cause image retention damage that could look like stains or watermarks on the monitor's screen.

Image retention damage on monitors that are in use 24 hours per day is 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 computer, to turn off the monitor when the computer is idle.


Installing a security cable

As a security measure, you can secure the monitor to a fixed object with an optional security cable available from HP. Use the key provided to attach and remove the lock.



Docking an HP notebook or desktop computer

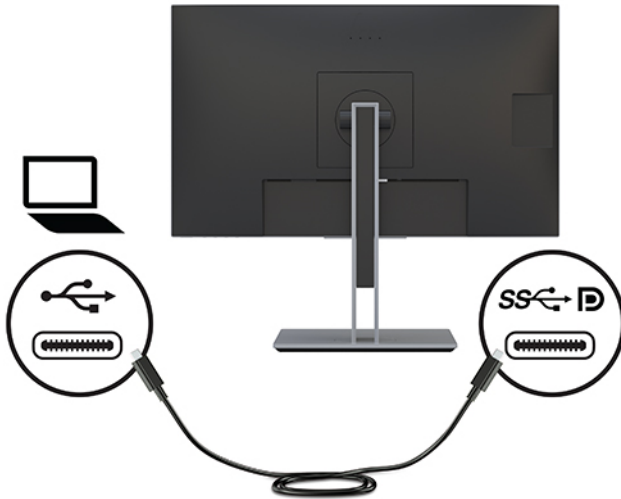
You can attach the computer, notebook, gaming console, or similar device to the monitor with a single USB Type-C connection. The USB Type-C port provides network, data, video, and power delivery when you dock the device.

 **NOTE:** Be sure that the network cable is connected from the network source jack to the monitor's network jack for a network connection through USB Type-C.

The host computer must be able to support DisplayPort Alt Mode (video, charging, and USB 3.1) over the USB Type-C connector and must also be compatible with USB Type-C, Thunderbolt-enabled ports.

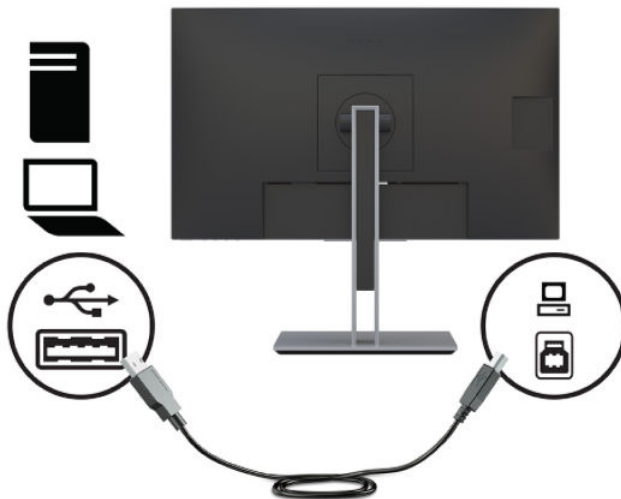
Connecting two host computers to the docking monitor might result in system shutdown, loss of power, and the need to turn off and restart the monitor.

To dock the computer, 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 computer. This USB Type-C cable provides single-cable connectivity for high-speed data, audio and video, and power delivery.



NOTE: The monitor delivers up to 65 W of power over a USB Type-C connection. When connecting the Host computer via USB Type-C, DC power out does not need to be connected. Do not connect two power sources (DC power in and USB Type-C) to the host computer. Connect DC power out only when you dock the host computer using a USB Type-A-to-USB Type-B cable.

If your computer does not have a USB Type-C port, you can use a USB Type-A-to-USB Type-B cable for docking. Connect the USB Type-B end of the cable to the docking monitor and the USB Type-A end to the computer.




Connecting an HP notebook computer and installing drivers to enable USB Type-A docking

This section provides important information about connecting an HP notebook computer and installing drivers to enable USB Type-A docking.


To use the monitor with a computer, connect a USB Type-B-to-Type-A cable or a USB Type-C-to-Type-A cable between the computer and monitor and install the DisplayLink USB drivers. The video signal is sent over the USB cable. The USB cable also enables all of the port replicator functions.

IMPORTANT: Do not install more than one set of USB graphics drivers. Doing so can cause software incompatibility issues between drivers and result in no picture on one of the monitors.

 **NOTE:** DisplayLink drivers version 8.0 or later will be installed by Windows Update onto the Windows 10 OS host computer. Please check your Windows update policy if drivers are not downloaded automatically.

After connecting the computer to the monitor, go to <http://www.hp.com/support> and follow the instructions to obtain the drivers.

To install the drivers:

 **NOTE:** For optimal performance, when using a USB Type-A connector, connect the USB cable to a Super Speed USB or USB 3.0 port on the notebook. These ports have a SS-USB icon. The monitor will also function when connected to a USB 2.0 port but will run at lower overall data rates.

1. Turn on power to the monitor and the computer.
2. Connect one end of a USB Type-A cable to a USB port on the notebook computer and the other end to the USB Type-B upstream port on the monitor.
3. After the USB cable is connected, an AutoPlay dialog box appears on the notebook's screen. Select **Open folder to view files**. If the AutoPlay dialog box does not appear, open Windows Explorer, navigate to and select the monitor drive, and then proceed to the next step.
4. Double-click the SETUP file.
5. Select your language, and then select the arrow button.
6. Install the DisplayLink USB driver software.

Disabling the AutoPlay Window

This section provides important information about disabling the AutoPlay window.

When connecting a notebook to the monitor, the AutoPlay dialog box might reopen after the initial software installation is completed. Because you do not need to reinstall the driver software each time you connect to the monitor, close the AutoPlay window.

To disable the AutoPlay window:

1. In Windows, open **Control Panel**, select **Hardware and Sound**, and then select **AutoPlay**.
2. Clear the check box for **Use AutoPlay for all/some devices**, and then select **Save**.

For updates to the driver software, go to <http://www.hp.com/support>.

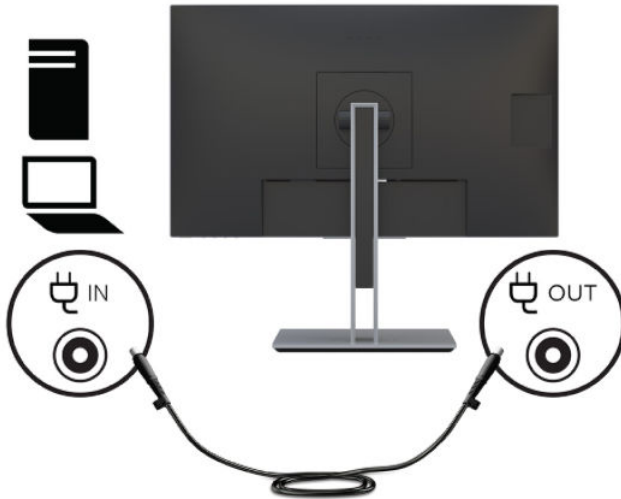
Charging a non-USB Type-C HP computer (select products only)


Select monitors include a DC power-out port that can deliver up to 90 W of power to charge your HP notebook or desktop computer.

 **NOTE:** Only HP notebooks and desktops are supported for the DC power out connection.

To power or charge your computer, connect one end of the supplied DC power cable to the power out connector on the monitor and the other end to the power input connector on the computer.

Use DC power out only when using a USB Type-A to USB Type-B cable to connect to the host computer.



 **NOTE:** The monitor ships with 4.5 mm and 7.4 mm AC adapter barrel connectors.

Only one host computer should be connected to either the USB Type-C port or the DC OUT port for power.

Do not connect two host computers to the docking monitor. Doing so might result in system shutdown, loss of power, and the need to turn off and restart the monitor.

2 Using the monitor

This chapter describes how to use your monitor and its features, including software and utilities, the OSD menu, the function buttons, power modes, and Windows Hello.

Downloading software and utilities

You can download and install these files from HP Support.

- INF (Information) file
- ICM (Image Color Matching) files
- HP Display Assistant: Adjusts the monitor settings and enables theft-deterrence features

To download the files:

1. Go to <http://www.hp.com/support>.
2. Select **Software and Drivers**.
3. Select your product type.
4. Enter your HP monitor model in the search field and follow the on-screen instructions.

The Information file

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

This monitor is 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 graphics 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, or both.

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. These files are 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 OSD menu

You can adjust your HP monitor to suit your tastes. Use the OSD menu to customize the viewing features of your monitor.

To access and make adjustments in the OSD, use the buttons at the bottom of the monitor's front bezel.

To access the OSD menu and make adjustments:

1. If the monitor is not already on, press the power button to turn on the monitor.
2. Press the **Menu** button or, if you are using the OSD controller, press the center of the OSD controller.
3. Use the three function buttons to navigate, select, and adjust the menu choices. The on-screen button labels vary, depending on which menu or submenu is active.

-or-

Move the controller up, down, left, or right to navigate menu choices. Press the center of the controller to make a selection.

The following table lists possible menu selections in the OSD main menu. It includes descriptions for each setting and its impacts on your monitor's appearance or performance.

Table 2-1 OSD menu options and descriptions for using a button or a controller (select products only)

Main menu	Description
Gaming	Button or controller—Selects and adjusts gaming preferences, such as Adaptive-Sync, response time, frame rate, message timers, crosshair, ambient lighting, and multiple-monitor alignment.
Brightness	Button—Adjusts the brightness level of the screen. The factory default is 90.
Contrast	Button—Adjusts the contrast level of the screen. The factory default is 80.
Color	Button—Selects and adjusts the screen color. Controller—Provides a variety of color presets that configure the monitor for different viewing situations.
Input	Selects the video input signal (DisplayPort or HDMI).
Image	Button—Adjusts the screen image. Controller—Adjusts the screen image, including brightness, contrast, dynamic contrast, gamma, sharpness, and image scaling.
Power	Adjusts the power settings.
Menu	Adjusts the OSD menu and function button controls.
Management	Button—Adjusts the DDC/CI settings, selects the language in which the OSD menu is displayed (the factory default is English), and returns all OSD menu settings to the factory default settings. Controller—Returns all OSD menu settings to the factory default settings.
USB Host Selection	Selects the USB host (button only).
Exit	Exits the OSD menu screen.

Using the function buttons

The function buttons offer useful actions, and you can customize all but one of them to make them even more useful.



NOTE: The actions of the function buttons vary among monitor models.

For information about changing the function of the buttons, see [Reassigning the function buttons on page 23](#).

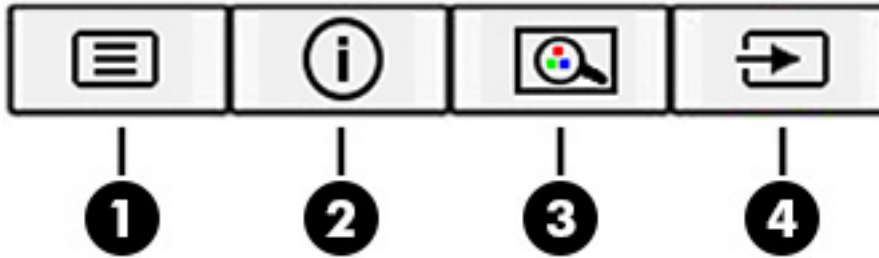


Table 2-2 Button names and descriptions

Button	Description
(1) Menu button	Opens the OSD main menu, selects a menu item from the OSD, or closes the OSD menu.
(2) Information button Assignable function button	For digital input, opens the Information menu.
(3) Viewing Modes button Assignable function button	Opens the Viewing Modes menu where you can adjust the monitor screen to a comfortable viewing light or select a preset view mode.
(4) Next Active Input button Assignable function button	Switches the monitor's input source to the next active input.

Reassigning the function buttons

Except for the **Menu** button, you can change the action associated with a function button from the default action that you can quickly access your most commonly used menu items.

To reassign the function buttons:

1. Press the [Menu](#) button to open the OSD menu.
2. Select **Menu**, select **Assign Buttons**, and then select one of the available options for the button that you want to assign.

Using the camera

You can use the camera on the monitor to stream online video conferences, send and receive instant messages, schedule meetings, and maintain security over conversations.

Using Auto-Sleep Mode

Your monitor has an energy-saving feature called Auto-Sleep Mode, a reduced power state. This section describes how to activate or adjust Auto-Sleep Mode on your monitor.

When Auto-Sleep Mode is enabled (enabled by default), the monitor enters a reduced power state when the computer signals low power mode (absence of either horizontal or vertical sync signal).

Upon entering this reduced power state (Auto-Sleep mode), the monitor screen is blanked, the backlight turns off, and the power light turns amber. The monitor draws less than 0.5 W of power when in this reduced power

state. The monitor wakes from Auto-Sleep mode when the computer sends an active signal to the monitor (for example, when you activate the mouse or keyboard).

To disable Auto-Sleep Mode in the OSD:

1. Press the **Menu** button to open the OSD, or press the center of the OSD controller to open the OSD.
2. In the OSD, select **Power**.
3. Select **Auto-Sleep Mode**, and then select **Off**.

Changing the Power Mode setting

This section describes how to activate Performance mode. Certain features on your monitor might require Performance mode to be active.

When in sleep mode, to comply with international power standards, the monitor default setting is Power Saver mode.

If your monitor supports Performance mode, then to keep the USB ports enabled when the monitor is in Auto-Sleep Mode, change the Power Mode setting from **Power Saver** to **Performance**.



NOTE: If you are connecting a computer that is not battery powered, the Power Mode setting must be changed to Performance mode.

To change the power mode setting:

1. Press the **Menu** button to open the OSD menu.
2. Select **Power**, select **Power Mode**, and then select **Performance**.
3. Select **Back** and close the OSD.

Adjusting blue light output

Decreasing the blue light emitted by the monitor reduces the blue light exposure to your eyes. This monitor allows you to select a setting to reduce blue light output and create a more relaxing and less stimulating image while you read content on the screen.

To adjust the blue light output from the monitor:

1. Press one of the OSD buttons to activate the buttons, and then press the **Menu** button to open the OSD. Select **Color**.

If you are using a controller, press the center of the OSD controller to open the OSD.

2. Select **Low Blue Light** from the setting options.
 - **Low Blue Light:** (TÜV certified) Reduces blue light for improved eye comfort.
 - **Reading:** Optimizes blue light and brightness for indoor viewing.
 - **Night:** Adjusts to the lowest blue light and reduces the impact on sleep.
3. Select **Save and Return** to save your setting and close the menu. Select **Cancel** if you do not want to save the setting.
4. In the Main menu, select **Exit**.

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 these steps.



NOTE: 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 <http://www.hp.com/ergo>

To adjust the blue light output from your monitor:

1. Press one of the four OSD bezel buttons on the bottom of the monitor, to display the OSD icons on the screen.
2. Press the **Viewing Modes** button to open the Viewing Modes menu, or press the **Menu** button, select **Color Control**, and then select **Viewing Modes**.
 - **Low Blue Light** (TÜV certified) (select products only): Reduces blue light for improved eye comfort.
 - **Night**: Adjusts to the lowest blue light and reduces the impact on sleep.
 - **Reading** (select products only): Optimizes blue light and brightness for indoor viewing.
3. Select **Save and Return** to save your setting and close the menu. Select **Cancel** if you don't want to save the setting.
4. In the Main Menu, select **Exit**.

DisplayPort multistreaming over USB Type-C


If you are using USB Type-C 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 the graphics card in your computer supports this configuration.

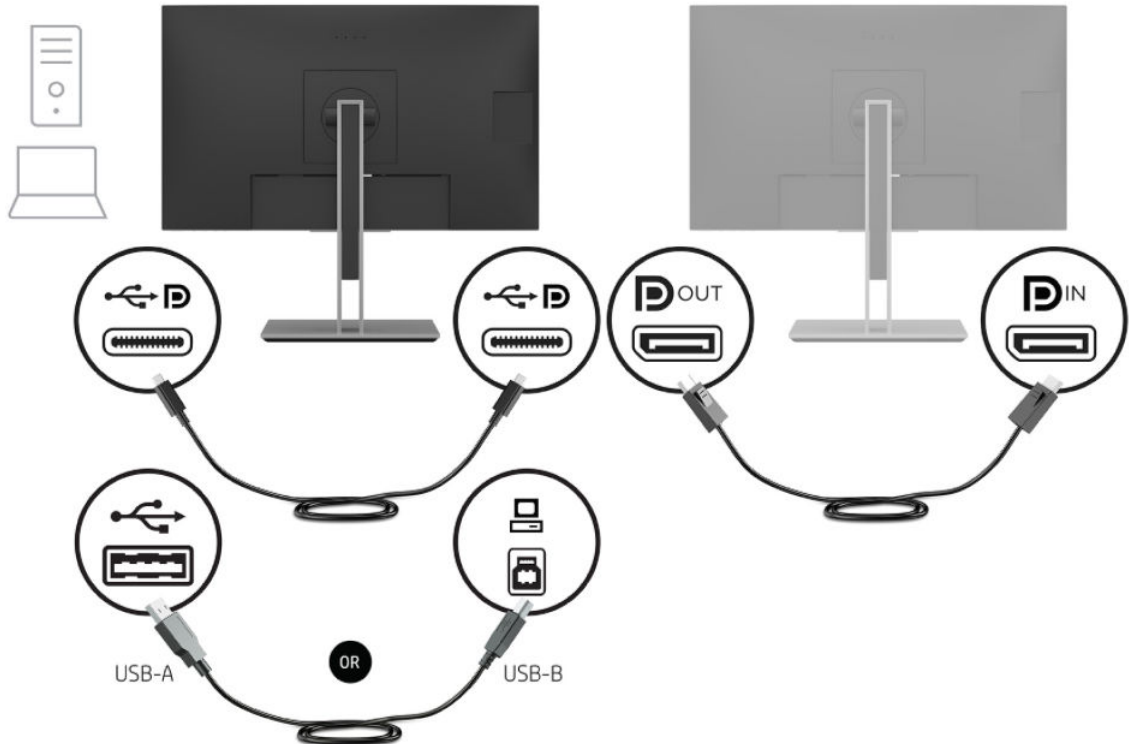
The number of monitors you can connect through DisplayPort multistreaming depends on a number of factors, including the resolutions and scan rates used for each monitor and the capabilities of your GPU or embedded graphics system. If you have purchased a new graphics card for your computer, check the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

To multistream:

1. Be sure that USB Type-C is your primary video input.

2. Add a second monitor by connecting a DisplayPort cable between the DisplayPort OUT port on the primary monitor and the DisplayPort IN port on a secondary monitor. The secondary monitor should not be the same model as the primary monitor.

 **NOTE:** Three of the four daisy-chained monitors need to have DisplayPort IN and OUT video ports. The last monitor in the chain needs only a DisplayPort IN video port.



3. Set a connected monitor to display the same image as the primary monitor or a different image.

DisplayPort 1.1 is the default setting, but the setting automatically changes to DisplayPort 1.2 when DisplayPort OUT is connected to the secondary monitor.

4. To connect additional monitors (up to four maximum), press the **Menu** button to open the OSD menu. Navigate to the USB Type-C configuration and select **USB-C Video+USB2.0**.

 **NOTE:** All but the final monitor in the chain must support DisplayPort multistreaming.

5. Connect the DisplayPort cable from the DisplayPort OUT port of one monitor to the DisplayPort IN port of the next monitor.
6. If you want different information on each screen, be sure that all upstream monitors are configured to DisplayPort 1.2 mode, as described previously.

3 Support and troubleshooting

If your monitor is not working as expected, you might be able to resolve the issue by following the instructions in this section.

Solving common issues

The following table lists possible issues, the possible cause of each issue, and the recommended solutions.

Table 3-1 Common issues and solutions

Issues	Possible cause	Solution
Screen is blank or video is flashing.	Power cord is disconnected.	Connect the power cord.
	Monitor is off.	Press the monitor power button. NOTE: If pressing the power button has no effect, press and hold the power button for 10 seconds to disable the Power Button Lockout feature.
	Master power switch is set to off.	Set the master power switch on the rear of the monitor to the On position.
	Video cable is improperly connected.	Connect the video cable properly. For more information, see Connecting the cables on page 8 .
	System is in Auto-Sleep Mode.	Press any key on the keyboard or move the mouse to inactivate the screen blanking utility.
	Video card is incompatible.	Open the OSD menu and select the Input menu. Set Auto-Switch Input to Off and manually select the input. or Replace the video card or connect the video cable to one of the computer's on-board video sources.
Image appears blurred, indistinct, or too dark.	Brightness setting is too low.	Open the OSD menu, and select Brightness to adjust the brightness scale as needed.
"Check Video Cable" is displayed on the 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.
"Input Signal Out of Range" 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 68.5 cm (27 in) monitor on page 34).
The monitor does not enter into a low-power sleep state.	The monitor's power saving control is disabled.	Open the OSD menu and select Power , select Auto-Sleep Mode , and then set auto-sleep to On .
"OSD Lockout" 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.
"Power Button Lockout" is displayed.	The monitor's Power Button Lockout feature is enabled.	Press and hold the Power button for 10 seconds to unlock the power button function.

Button lockouts

The button lockout function is available only when the monitor is on, an active signal is displayed, and the OSD menu is closed. Holding down the power button or **Menu** button for 10 seconds disables that button. You can re-enable the button by holding it down again for 10 seconds.

Using the auto-adjustment function (analog input)

The auto-adjustment feature automatically engages and attempts to optimize your screen under several conditions.

- Monitor setup
- Factory reset of the computer
- Changing monitor resolution

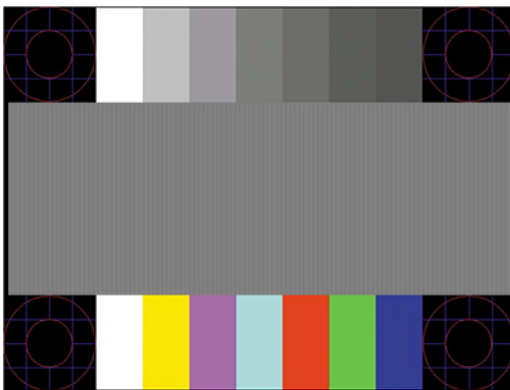
You can manually optimize the screen performance for the VGA (analog) input at any time from the Auto Adjustment menu in the OSD. You can download the auto-adjustment pattern software utility from <http://www.hp.com/support>.

Do not use this procedure if the monitor is using an input other than VGA. If the monitor is using a VGA (analog) input, this procedure can correct the following image quality conditions:

- Fuzzy or unclear focus
- Ghosting, streaking, or shadowing effects
- Faint vertical bars
- Thin, horizontal scrolling lines
- An off-center picture

To use the auto-adjustment feature:

1. Turn the monitor on, and then wait for 20 minutes before adjusting.
2. Press the **Menu** button to open the OSD menu, select **Image**, and then select **Auto Adjustment**. If the result is not satisfactory, continue with the procedure.
3. Open the auto-adjustment utility. (You can download this utility from <http://www.hp.com/support>.) The setup test pattern is displayed.




4. Press the **esc** key or any other key on the keyboard to exit the test pattern.

Optimizing image performance (analog input)


If you would like to customize your settings, this section describes how to manually optimize your monitor's image.

You can adjust two controls in the on-screen display to improve image performance: Clock and Phase (available in the OSD menu). Use these controls only when the auto-adjustment function does not provide a satisfactory image.

 **NOTE:** You can adjust the Clock and Phase controls only when you use an analog (VGA) input. These controls are not adjustable for digital inputs.

The Clock must first be set correctly because the Phase settings are dependent on the main Clock setting.

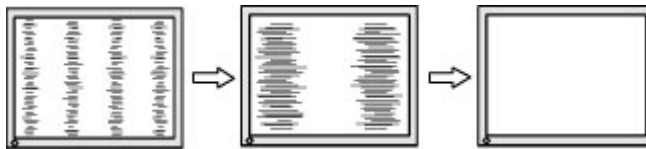
- **Clock**—Increases or decreases the value to minimize any vertical bars or stripes visible on the screen background.
- **Phase**—Increases or decreases the value to minimize video flickering or blurring.

 **NOTE:** When you use the controls, you will obtain the best results by using the auto-adjustment pattern software utility. You can download this utility from <http://www.hp.com/support>.

When adjusting the Clock and Phase values, if the monitor images become distorted, continue adjusting the values until the distortion disappears. To restore the factory settings, press the **Menu** button to open the OSD menu, then select **Management**, select **Factory Reset**, and select **Yes**.

To eliminate vertical bars (Clock):

1. Press the **Menu** button to open the OSD menu, select **Image**, and then select **Clock and Phase**.
2. Select **Clock**, and then use the OSD buttons on the monitor that display up and down arrow icons to eliminate vertical bars. Press the buttons slowly so that you do not miss the optimum adjustment point.



3. After adjusting the Clock, if flickering, blurring, or bars appear on the screen, proceed to adjust the Phase.

To remove flickering or blurring (Phase):

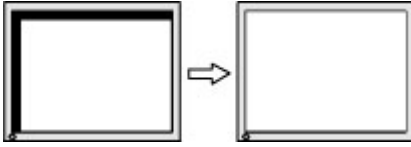
1. Press the **Menu** button to open the OSD menu, select **Image**, and then select **Clock and Phase**.
2. Select **Phase**, and then use the OSD buttons on the monitor that display up and down arrow icons to eliminate flickering or blurring. Flickering or blurring might not be eliminated, depending on the computer or graphics controller card installed.



To correct screen position (Horizontal Position or Vertical Position):

1. Press the **Menu** button to open the OSD menu, select **Image**, and then select **Image Position**.

2. Press the OSD buttons on the monitor that display up and down arrow icons to properly adjust the position of the image in the display area of the monitor. The **Horizontal Position** shifts the image left or right; the **Vertical Position** shifts the image up or down.



Contacting support

To resolve a hardware or software problem, go to the HP support website.



NOTE: Contact customer support to replace the power cord, the AC adapter (select products only), or any other cables that shipped with your monitor.

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

Preparing to call technical support

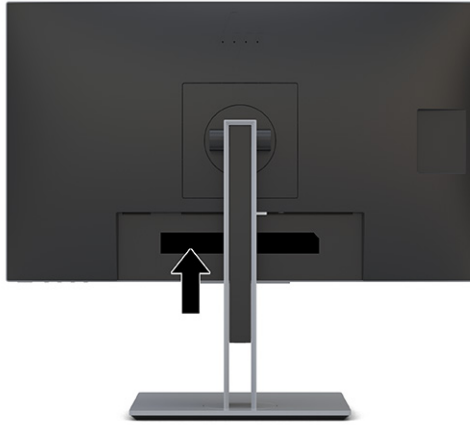
Here are some guidelines about calling technical support.

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

1. Monitor model number
2. Monitor serial number
3. Purchase date on invoice
4. Conditions under which the problem occurred
5. Error messages received
6. Hardware configuration
7. Name and version of the hardware and software you are using

Locating the serial number and product number

Depending on the product, the serial number and product number are located on a label on the rear of the monitor or on a label under the front bezel of the monitor head. You might need these numbers when contacting HP for support.



4 Maintaining the monitor

Properly maintained, your monitor can run for many years. These instructions provide steps you can perform to keep your monitor in the best condition.

Maintenance guidelines

Follow these instructions 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 or back plate of the monitor.
- Be sure that the total ampere rating of the products connected to the outlet does not exceed the current rating of the AC 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 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 it is not in use, and use a screen saver program. Doing this can substantially increase the life expectancy of the monitor.



NOTE: A burned-in image on the monitor is not covered under the HP warranty.

- Never block the slots and openings of the cabinet or push objects into them. These openings provide ventilation.
- 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

Use these instructions to clean your monitor when necessary.

1. Turn off the monitor and unplug the power cord from the AC outlet.
2. Disconnect any external devices.
3. Dust the monitor by wiping the screen and the cabinet with a soft, clean antistatic cloth.
4. For more difficult cleaning situations, use a 50/50 mix of water and isopropyl alcohol.



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

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 can run behind the bezel and damage the electronics. The cloth should be moist, but not wet. Water dripping into the ventilation openings or other points of entry can cause damage to the monitor. Allow the monitor to air-dry before use.

5. After you remove the dirt and debris, you can also clean the surfaces with a disinfectant. The World Health Organization (WHO) recommends cleaning surfaces, followed by disinfection, as a best practice for preventing the spread of viral respiratory illnesses and harmful bacteria. A disinfectant that is within HP's cleaning guidelines is an alcohol solution consisting of 70% isopropyl alcohol and 30% water. This solution is also known as rubbing alcohol and is sold in most stores.

Shipping the monitor

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

A Technical specifications

This section contains technical specifications for the physical aspects of your monitor, such as the weight and viewing dimensions, as well as required environmental operating conditions and power source ranges.

All specifications represent the typical specifications provided by HP component manufacturers; actual performance can vary either higher or lower.



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

68.5 cm (27 in) monitor

This section provides specifications for your monitor.

Table A-1 Technical specifications

Specification	Measurement	
Display, wide-screen	68.5 cm wide screen	27 in
Type	IPS LCD	
Viewable image size	68.5 cm diagonal	27 in diagonal
Maximum weight (unpacked)	7.52 kg	16.58 lb
Dimensions (include base)		
Height (highest position)	52.17 cm	20.54 in
Height (lowest position)	37.17 cm	14.63 in
Depth	21.4 cm	8.43 in
Width	61.09 cm	24.05 in
Height adjustment range	15.0 cm	5.9 in
Tilt adjustment range	-5° to 23°	
Swivel adjustment range	35	
Maximum graphic resolution	1920 × 1080	
Optimum graphic resolution	1920 × 1080	
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
Storage humidity	5% to 95% (noncondensing)	
Operating humidity	20% to 80% (noncondensing)	
Altitude		

Table A-1 Technical specifications (continued)

Specification	Measurement	
Operating	0 m to 5,000 m	0 ft to 16,400 ft
Storage	0 m to 12,192 m	0 ft to 40,000 ft
Power source	100 Vac to 240 Vac 50/60 Hz	
Power adapter	Manufacturer: Delta, Lite-on Model number: TPN-DA12, TPN-LA10 Output rating: 19.5 V / 11.8 A	
Measured power consumption		
Full power	170 W (without DC power out, with power delivery)	
Typical settings	40 W	
USB Type-C power supply output	5 V DC, 3.0 A 9 V DC, 3.0 A 10 V DC, 5.0 A 12 V DC, 5.0 A 15 V DC, 4.3 A 20 V DC, 3.25 A	
Input terminal	One USB Type-C port, one HDMI port, one VGA port	

60.5 cm (22.8 in) monitor

This section provides specifications for your monitor.

Table A-2 Technical specifications

Specification	Measurement	
Display, wide-screen	60.5 cm wide screen	23.8 in
Type	IPS LCD	
Viewable image size	60.5 cm diagonal	23.8 in diagonal
Maximum weight (unpacked)	6.2 kg	113.67 lbs
Dimensions (include base)		
Height (highest position)	47.71 cm	18.78 in
Height (lowest position)	32.71 cm	12.88 in
Depth	20.50 cm	8.07 in
Width	53.88 cm	21.21 in
Height adjustment range	15.0 cm	5.9 in
Tilt adjustment range	-5° to 23°	
Swivel adjustment range	45	

Table A-2 Technical specifications (continued)

Specification	Measurement	
Maximum graphic resolution	1920 × 1080	
Optimum graphic resolution	1920 × 1080	
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
Storage humidity	5% to 95% (noncondensing)	
Operating humidity	20% to 80% (noncondensing)	
Altitude		
Operating	0 m to 5,000 m	0 ft to 16,400 ft
Storage	0 m to 12,192 m	0 ft to 40,000 ft
Power source	100 Vac to 240 Vac 50/60 Hz	
Power adapter	Manufacturer: AcBel Polytech Inc. Model number: TPC-AA501 Output rating: 19.5 V / 9.23 A	
Measured power consumption		
Full power	155 W (without DC power out, with power delivery)	
Typical settings	38 W	
Sleep	0.5 W	
Off	0.5 W	
USB Type-C power supply output	5 V DC, 3.0 A 9 V DC, 3.0 A 10 V DC, 5.0 A 12 V DC, 5.0 A 15 V DC, 4.3 A 20 V DC, 3.25 A	
Input terminal	One USB Type-C port, one HDMI port, one VGA port	

Preset display resolutions

The following display resolutions 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.

80 cm (31.5 in) model

This section provides preset display resolutions and preset timing resolutions.

Table A-3 Preset display resolutions

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	45.000	60.000
6	1280 × 800	49.702	59.810
7	1280 × 1024	63.981	60.020
8	1440 × 900	55.935	59.887
9	1600 × 900	60.000	60.000
10	1680 × 1050	65.290	59.954
11	1920 × 1080	67.500	60.000

Table A-4 Preset timing resolutions

Preset	Timing name	Pixel format	Horz freq (kHz)	Vert freq (Hz)
1	480p	640 × 480	31,469	59,940
2	480p	720 × 480	31.469	59,940
3	480i	720 × 480	15.734	59,940
4	576p	720 × 576	31.250	50,000
5	576i	720 × 576	15.625	50,000
6	720p50	1280 × 720	45.000	50,000
7	720p60	1920 × 1080	45,000	60,000
8	1080p60	1920 × 1080	67.500	60,000
9	1080p50	1920 × 1080	56.250	50.000
10	1080i50	1920 × 1080	28,125	50,000
11	1080i60	1920 × 1080	33.750	60.000

Entering user modes

Your video controller signal might call for a mode that is not preset.

If you are not using a standard graphics adapter or you are not using preset mode, by using the on-screen display menu, you can make changes to any or all of these modes and save them 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, you can enter and store at least 10 user modes.

Energy saver feature

This monitor supports a reduced power state.

The reduced power state is 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 blank, the backlight is turned off, and the power light turns amber. In the reduced power state, the monitor uses < 0.5 W of power. There is a brief warm-up period before the monitor returns to its normal operating state.

See the computer manual for instructions on setting the energy saver mode (sometimes called “power management feature”).



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

By selecting the settings in the monitor Sleep Timer utility, you can also program the monitor to initiate the reduced power state at a predetermined time. When the monitor Sleep Timer utility initiates the reduced power state, the power light blinks amber.

B Accessibility

HP's goal is to design, produce, and market products, services, and information that everyone everywhere can use, either on a stand-alone basis or with appropriate third-party assistive technology (AT) devices or applications.

HP and accessibility

Because HP works to weave diversity, inclusion, and work/life into the fabric of the company, it is reflected in everything HP does. HP strives to create an inclusive environment focused on connecting people to the power of technology throughout the world.

Finding the technology tools you need

Technology can unleash your human potential. Assistive technology removes barriers and helps you create independence at home, at work, and in the community. Assistive technology helps increase, maintain, and improve the functional capabilities of electronic and information technology.

For more information, see [Finding the best assistive technology on page 40](#).

The HP commitment

HP is committed to providing products and services that are accessible for people with disabilities. This commitment supports the company's diversity objectives and helps ensure that the benefits of technology are available to all.

The HP accessibility goal is to design, produce, and market products and services that can be effectively used by everyone, including people with disabilities, either on a stand-alone basis or with appropriate assistive devices.

To achieve that goal, this Accessibility Policy establishes seven key objectives to guide HP actions. All HP managers and employees are expected to support these objectives and their implementation in accordance with their roles and responsibilities:

- Raise the level of awareness of accessibility issues within HP, and provide employees with the training they need to design, produce, market, and deliver accessible products and services.
- Develop accessibility guidelines for products and services, and hold product development groups accountable for implementing these guidelines where competitively, technically, and economically feasible.
- Involve people with disabilities in the development of accessibility guidelines and in the design and testing of products and services.
- Document accessibility features, and make information about HP products and services publicly available in an accessible form.
- Establish relationships with leading assistive technology and solution providers.
- Support internal and external research and development that improves assistive technology relevant to HP products and services.
- Support and contribute to industry standards and guidelines for accessibility.

International Association of Accessibility Professionals (IAAP)

IAAP is a not-for-profit association focused on advancing the accessibility profession through networking, education, and certification. The objective is to help accessibility professionals develop and advance their careers and to better enable organizations to integrate accessibility into their products and infrastructure.

As a founding member, HP joined to participate with other organizations to advance the field of accessibility. This commitment supports HP's accessibility goal of designing, producing, and marketing products and services that people with disabilities can effectively use.

IAAP will make the profession strong by globally connecting individuals, students, and organizations to learn from one another. If you are interested in learning more, go to <http://www.accessibilityassociation.org> to join the online community, sign up for newsletters, and learn about membership options.

Finding the best assistive technology

Everyone, including people with disabilities or age-related limitations, should be able to communicate, express themselves, and connect with the world using technology. HP is committed to increasing accessibility awareness within HP and with our customers and partners.

Whether it's large fonts that are easy on the eyes, voice recognition that lets you give your hands a rest, or any other assistive technology to help with your specific situation—a variety of assistive technologies make HP products easier to use. How do you choose?

Assessing your needs

Technology can unleash your potential. Assistive technology removes barriers and helps you create independence at home, at work, and in the community. Assistive technology (AT) helps increase, maintain, and improve the functional capabilities of electronic and information technology.

You can choose from many AT products. Your AT assessment should allow you to evaluate several products, answer your questions, and facilitate your selection of the best solution for your situation. You will find that professionals qualified to do AT assessments come from many fields, including those licensed or certified in physical therapy, occupational therapy, speech/language pathology, and other areas of expertise. Others, while not certified or licensed, can also provide evaluation information. You will want to ask about the individual's experience, expertise, and fees to determine if they are appropriate for your needs.

Accessibility for HP products

These links provide information about accessibility features and assistive technology, if applicable, included in various HP products. These resources will help you select the specific assistive technology features and products most appropriate for your situation.

- [HP Elite x3–Accessibility Options \(Windows 10 Mobile\)](#)
- [HP PCs–Windows 7 Accessibility Options](#)
- [HP PCs–Windows 8 Accessibility Options](#)
- [HP PC's–Windows 10 Accessibility Options](#)
- [HP Slate 7 Tablets–Enabling Accessibility Features on Your HP Tablet \(Android 4.1/Jelly Bean\)](#)
- [HP SlateBook PCs–Enabling Accessibility Features \(Android 4.3,4.2/Jelly Bean\)](#)
- [HP Chromebook PCs–Enabling Accessibility Features on Your HP Chromebook or Chromebox \(Chrome OS\)](#)
- [HP Shopping–peripherals for HP products](#)

If you need additional support with the accessibility features on your HP product, see [Contacting support on page 43](#).

Additional links to external partners and suppliers that may provide additional assistance:

- [Microsoft Accessibility information \(Windows 7, Windows 8, Windows 10, Microsoft Office\)](#)
- [Google Products accessibility information \(Android, Chrome, Google Apps\)](#)
- [Assistive Technologies sorted by impairment type](#)
- [Assistive Technology Industry Association \(ATIA\)](#)

Standards and legislation

Countries worldwide are enacting regulations to improve access to products and services for persons with disabilities. These regulations are historically applicable to telecommunications products and services, PCs and printers with certain communications and video playback features, their associated user documentation, and their customer support.

Standards

The US Access Board created Section 508 of the Federal Acquisition Regulation (FAR) standards to address access to information and communication technology (ICT) for people with physical, sensory, or cognitive disabilities.

The standards contain technical criteria specific to various types of technologies, as well as performance-based requirements which focus on functional capabilities of covered products. Specific criteria cover software applications and operating systems, web-based information and applications, computers, telecommunications products, video and multimedia, and self-contained closed products.

Mandate 376 – EN 301 549

The European Union created the EN 301 549 standard within Mandate 376 as an online toolkit for public procurement of ICT products. The standard specifies the accessibility requirements applicable to ICT products and services, with a description of the test procedures and evaluation methodology for each requirement.

Web Content Accessibility Guidelines (WCAG)

Web Content Accessibility Guidelines (WCAG) from the W3C's Web Accessibility Initiative (WAI) helps web designers and developers create sites that better meet the needs of people with disabilities or age-related limitations.

WCAG advances accessibility across the full range of web content (text, images, audio, and video) and web applications. WCAG can be precisely tested, is easy to understand and use, and allows web developers flexibility for innovation. WCAG 2.0 has also been approved as [ISO/IEC 40500:2012](#).

WCAG specifically addresses barriers to accessing the web experienced by people with visual, auditory, physical, cognitive, and neurological disabilities, and by older web users with accessibility needs. WCAG 2.0 provides characteristics of accessible content:

- **Perceivable** (for instance, by addressing text alternatives for images, captions for audio, adaptability of presentation, and color contrast)
- **Operable** (by addressing keyboard access, color contrast, timing of input, seizure avoidance, and navigability)

- **Understandable** (by addressing readability, predictability, and input assistance)
- **Robust** (for instance, by addressing compatibility with assistive technologies)

Legislation and regulations

Accessibility of IT and information has become an area of increasing legislative importance. These links provide information about key legislation, regulations, and standards.

- [United States](#)
- [Canada](#)
- [Europe](#)
- [Australia](#)
- [Worldwide](#)

Useful accessibility resources and links

These organizations, institutions, and resources might be good sources of information about disabilities and age-related limitations.



NOTE: This is not an exhaustive list. These organizations are provided for informational purposes only. HP assumes no responsibility for information or contacts you encounter on the Internet. Listing on this page does not imply endorsement by HP.

Organizations

These organizations are a few of the many that provide information about disabilities and age-related limitations.

- American Association of People with Disabilities (AAPD)
- The Association of Assistive Technology Act Programs (ATAP)
- Hearing Loss Association of America (HLAA)
- Information Technology Technical Assistance and Training Center (ITTATC)
- Lighthouse International
- National Association of the Deaf
- National Federation of the Blind
- Rehabilitation Engineering & Assistive Technology Society of North America (RESNA)
- Telecommunications for the Deaf and Hard of Hearing, Inc. (TDI)
- W3C Web Accessibility Initiative (WAI)

Educational institutions

Many educational institutions, including these examples, provide information about disabilities and age-related limitations.

- California State University, Northridge, Center on Disabilities (CSUN)
- University of Wisconsin - Madison, Trace Center
- University of Minnesota computer accommodations program

Other disability resources

Many resources, including these examples, provide information about disabilities and age-related limitations.

- ADA (Americans with Disabilities Act) Technical Assistance Program
- ILO Global Business and Disability network
- EnableMart
- European Disability Forum
- Job Accommodation Network
- Microsoft Enable

HP links

These HP-specific links provide information that relates to disabilities and age-related limitations.

[Our contact webform](#)

[HP comfort and safety guide](#)

[HP public sector sales](#)

Contacting support

HP offers technical support and assistance with accessibility options for customers with disabilities.



NOTE: Support is in English only.

- Customers who are deaf or hard of hearing who have questions about technical support or accessibility of HP products:
 - Use TRS/VRS/WebCapTel to call (877) 656-7058 Monday through Friday, 6 a.m. to 9 p.m. Mountain Time.
- Customers with other disabilities or age-related limitations who have questions about technical support or accessibility of HP products, choose one of the following options:
 - Call (888) 259-5707 Monday through Friday, 6 a.m. to 9 p.m. Mountain Time.
 - Complete the [Contact form for people with disabilities or age-related limitations](#).

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