User Guide

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. Select **Find your product**, and then follow the on-screen instructions.

About This Guide

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

⚠ WARNING!   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.

☼ TIP: Provides helpful hints for completing a task.

HDMI™
HIGH-DEFINITION MULTIMEDIA INTERFACE

This product incorporates HDMI technology.

Table of contents

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 and Comfort Guide*. It describes proper workstation, setup, posture, and health and work habits for computer users, and provides important electrical and mechanical safety information. This guide is located on the Web at http://www.hp.com/ergo.

📝 **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.

⚠ **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

The monitor features include the following:

- 60.5 cm (23.8-inch) diagonal viewable screen area with 2560 × 1440 resolution, plus full-screen support for lower resolutions; includes custom scaling for maximum image size while preserving original aspect ratio

- Anti-glare panel with WLED backlight

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

- Tilt capability

- DisplayPort video signal input

- HDMI (High-Definition Multimedia Interface) video signal input with MHL (Mobile High-Definition Link) support

- USB 3.0 Type-B upstream port and two USB 3.0 Type-A downstream ports

- USB Type-C port that supports power delivery up to 60 watts, DisplayPort 1.2, and USB 3.0

- Audio-out (headphone) jack

- Integrated speakers with premium audio

- DisplayPort, HDMI, HDMI/MHL, USB Type-C, and USB Type-B to Type-A cables included

- Wireless charging base that supports Qi and AirFuel inductive technology for mobile phones and tablets

- Picture-in-Picture/Picture-beside-Picture technology

- 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 (refer to the *HP Display Assistant User Guide* on the optical disc included with your monitor)

- HDCP (High-Bandwidth Digital Content Protection) copy protection on all digital inputs

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

- Energy saver feature to meet requirements for reduced power consumption

NOTE: For safety and regulatory information, refer to the *Product Notices* provided on your optical disc or in your documentation kit. To locate updates to the user guide for your product, go to http://www.hp.com/support to download the latest versions of HP programs and drivers. In addition, register to receive automatic notifications when updates become available.

Rear components
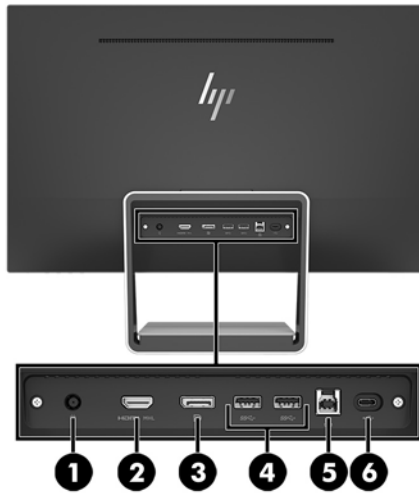
Component		Function
1	Power connector	Connects the AC adapter to the monitor.
2	HDMI MHL port	Connects the HDMI or HDMI/MHL cable from the source device to the monitor.
3	DisplayPort	Connects the DisplayPort cable from the source device to the monitor.
4	USB 3.0 Type-A ports	Connects USB devices to the monitor.
5	USB 3.0 Type-B port	Connects the USB hub cable from the source device to the monitor.
6	USB 3.0 Type-C port	Connects USB Type-C devices to the monitor.

NOTE: This guide describes features that are common to most display products. Some features, colors and icons may be different on your display.

Front and side components

Control		Function
1	Audio-out (headphone) jack	Connects headphones to the monitor.
2	Integrated speakers	Provide premium quality sound.
3	Audio controls	Adjusts the speaker volume up or down.
4	Wireless charging base	Charges a mobile phone or tablet.
5	Menu button	Opens and closes the OSD menu. **NOTE:** To activate the Menu and the Function buttons, press one of the OSD bezel buttons. The button icons will display on the screen.
6–8	Function buttons	Use these buttons to navigate through the OSD menu based on the indicators above the buttons that are activated while the OSD menu is open. **NOTE:** You can reconfigure the Function buttons in the OSD menu to quickly select the most commonly used operations. See Assigning the Function buttons on page 14 for more information.
9	Power button	Turns the monitor on or off.

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

Setting up the monitor

Connecting the cables

> **NOTE:** The monitor ships with select cables.

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

2. Connect a video cable for audio/video input.

> **NOTE:** The monitor will automatically determine 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 selecting **Input Control**.

- Connect a DisplayPort cable to the DisplayPort connector on the rear of the monitor and the other end to the DisplayPort connector on the source device.
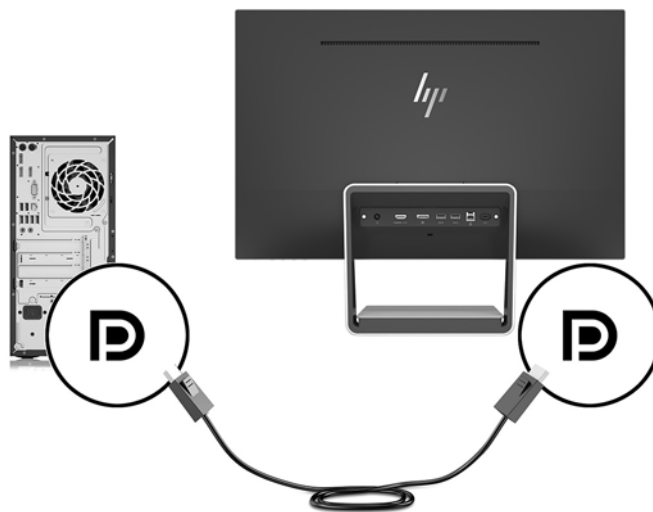
- Connect an HDMI/HDMI cable to the HDMI connector on the rear of the monitor and the other end to an HDMI connector on the source device. Or, connect an HDMI/ MHL cable to the HDMI connector on the rear of the monitor and the other end to the MHL connector on the source device.

NOTE: There are two HDMI cables included with the monitor, one that connects an HDMI device and one that connects an MHL device.
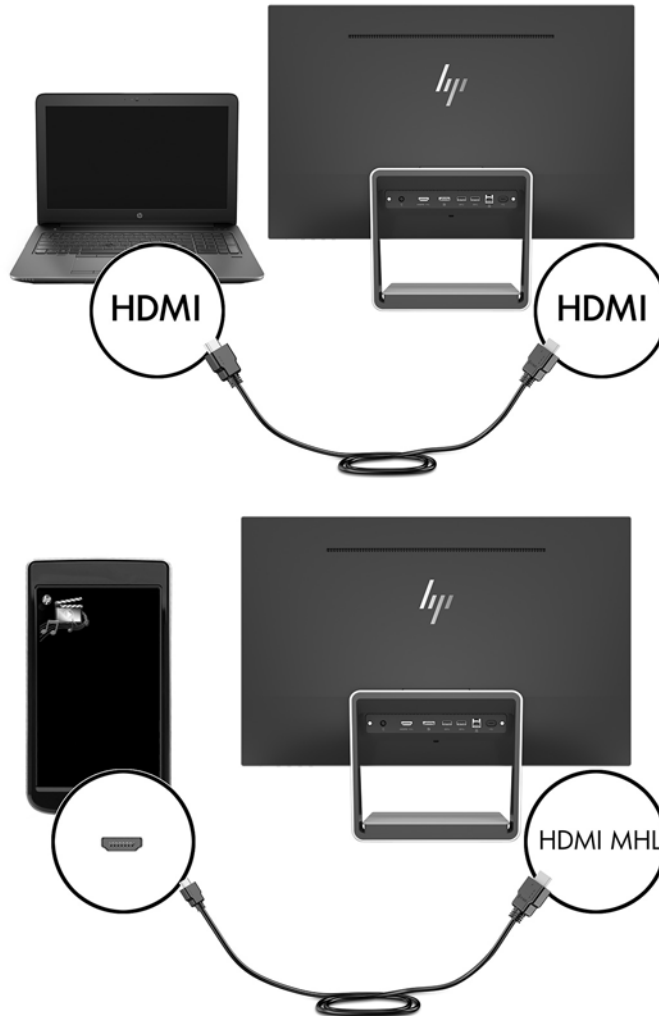
NOTE: The monitor's USB Type-C port can also function as a DisplayPort audio/video input when connected to a USB Type-C source device.

The Auto-Switch Input function switches between the HDMI input and the DisplayPort input. To switch to the USB Type-C input, press one of the OSD bezel buttons to open the OSD menu, and then select **Input Control** > **USB-C Video**.

3. Connect the Type-B connector on the USB upstream cable to the USB upstream port on the rear of the monitor. Then connect the cable's Type-A connector to the USB downstream port on the source device.
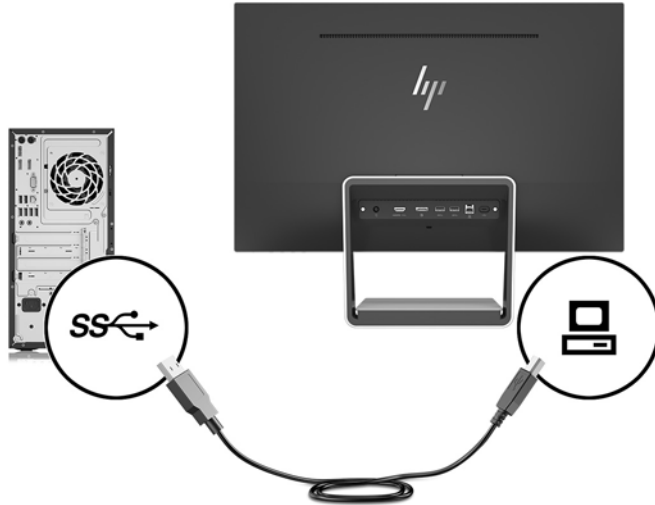
📝 **NOTE:** The monitor's USB Type-C port can also function as a USB upstream port when connected to a USB Type-C source device.

4. Connect one end of the 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 USB Type-C device.
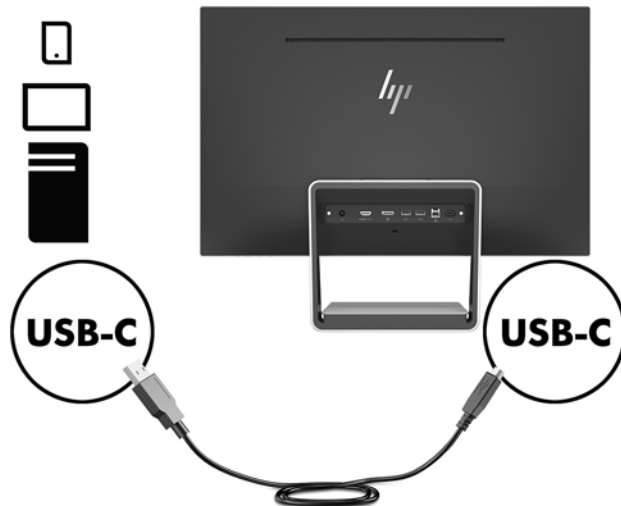
The monitor's USB Type-C port can function as a DisplayPort audio/video input, as a USB 3.0 upstream connection, or it can be used to deliver up to 60 watts of power to a device. Power outputs are 5 V / 5.25 V / 9 V / 12 V / 15 V / 20 V, 3 A (60 W Max).

📝 **NOTE:** This guide describes features that are common to most display products. Some features, colors and icons may be different on your display.

5. Connect one end of the AC power cord to the power supply (1) and the other end to a grounded electrical outlet (2), and then connect the DC end of the power supply cord to the monitor (3).
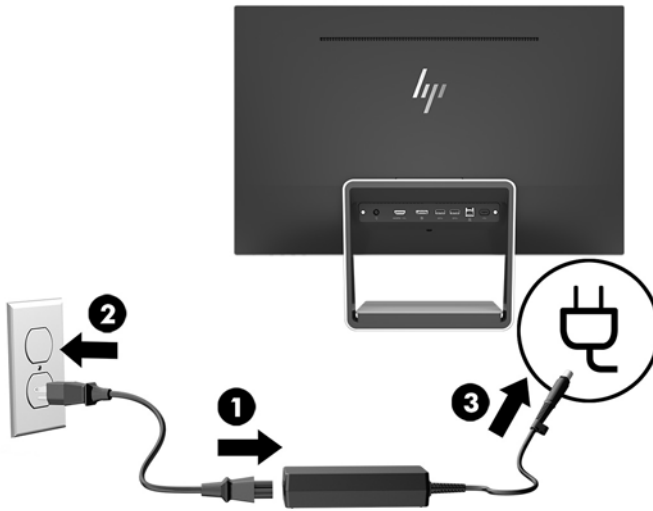
⚠ WARNING! To reduce the risk of electric shock or damage to the equipment:

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 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.

Adjusting the monitor

Tilt the display head forward or backward to set it to a comfortable eye level.
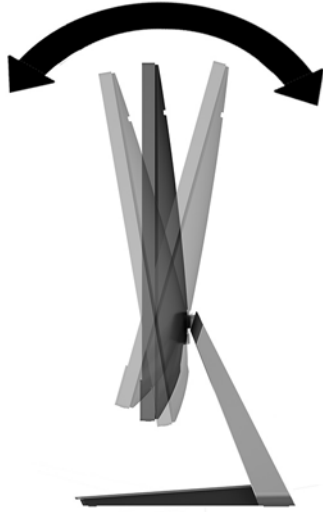
Turning on the monitor

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

2. Press the power button on the bottom right edge of the monitor to turn it on.
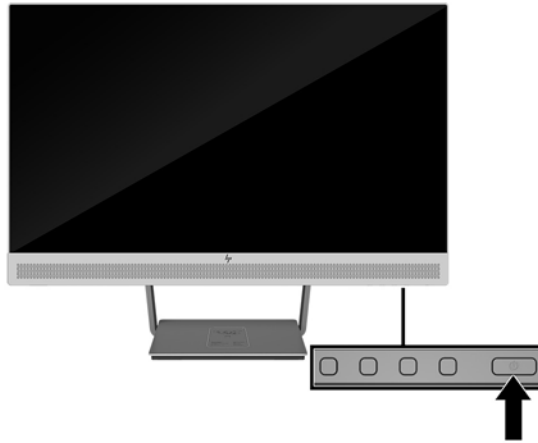
📝 **IMPORTANT:** Burn-in image damage may occur on monitors that display the same static image on the screen for 12 or more consecutive hours of nonuse. To avoid burn-in image damage on the monitor screen, you should always activate a screen saver application or turn off the monitor when it is not in use for a prolonged period of time. Image retention is a condition that may occur on all LCD screens. Monitors with a "burned-in image" are 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 on the front of the monitor, and then select **Power Control** > **Power LED** > **Off**.

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

Installing a security cable

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

2 Using the monitor

Software and utilities

The optical disc that comes with the monitor contains files you can install on the computer:

- .inf (Setup information file)
- .icm (Image Color Matching file), one for each calibrated color space

The Setup 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 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.

Installing the .inf and .icm files

After you determine that you need to update, you can install the .inf and .icm files from the optical disc or download them.

Installing from the optical disc

To install the .inf and .icm files from the optical disc to the computer:

1. Insert the optical disc into the computer optical drive. The optical disc menu is displayed.
2. View the **HP Monitor Software Information** file.
3. Select **Install Monitor Driver Software**.
4. Follow the on-screen instructions.
5. Ensure that the proper resolution and refresh rates appear in the Windows Display control panel.

NOTE: You may need to install the digitally signed monitor .inf and .icm files manually from the optical disc in the event of an installation error. Refer to the HP Monitor Software Information file on the optical disc.

Downloading from the web

If you do not have a computer or source device with an optical drive, you can download the latest version of .inf and .icm files from the HP monitors support web site.

1. Go to http://www.hp.com/support.

2. Select **Get software and drivers**.

3. Follow the on-screen instructions to select your monitor and download the software.

Using the wireless charger

The monitor's base includes a wireless charging pad that can be used to charge a mobile phone or tablet. The charger supports Qi and AirFuel inductive technology (5 W).

To charge a device, place the device face up in the center of the charging pad and position the device so the charging coils align and the LED is solid amber color.

NOTE: The charging Z height distance is 4 mm; make sure the smart phone or tablet is matched to the charging coil and remove the case to get the best charging performance.
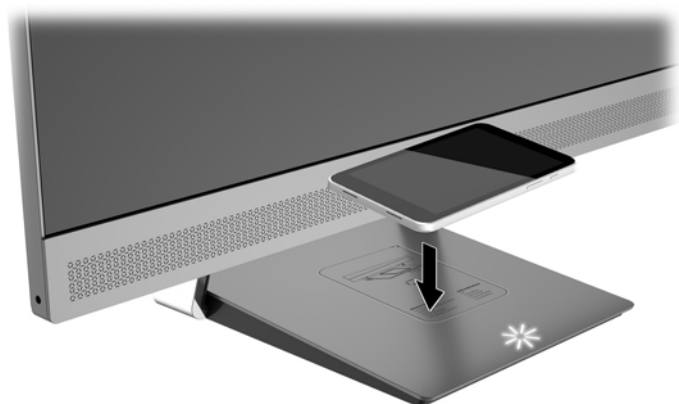
The LED on the charging pad provides indicators about the status of the device being charged:

Device Status	LED Indication
Unplugged/Off	Off
On/Ready/Charge complete	Solid white
Charging	Solid amber
Error condition	Flashing amber
Firmware update in progress	Pulsing white

Using the on-screen display (OSD) menu

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

To access the OSD menu 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 one of the four bezel buttons to activate the buttons, and then press the Menu button to open the OSD.

3. Use the three Function buttons to navigate, select, and adjust the menu choices. The on-screen button labels are variable depending on the menu or submenu that is active.

The following table lists the menu selections in the OSD main menu.

Main Menu	Description
Brightness	Adjusts the brightness and contrast level of the screen.
Color Control	Selects and adjusts the screen color.
Input Control	Selects the video input signal.
Image Control	Adjusts the screen image.
Audio Control	Selects and adjusts the audio.
PIP Control	Selects and adjusts the PIP image.
Power Control	Adjusts the power settings.
Menu Control	Adjusts the on-screen display (OSD) and Function button controls.
Management	Enables/disables DDC/CI support, selects the language, and returns all OSD menu settings to the default settings.
USB Host Selection	Selects USB 3.0 or USB-C as the USB host.
Exit	Exits the OSD menu screen.

Assigning the Function buttons

Pressing one of the four OSD bezel buttons activates the buttons and displays the button icons on the screen. The default button icons and functions are shown below.
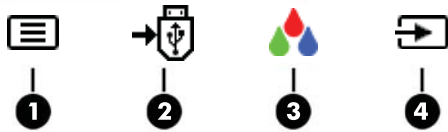
Button		Function
1	Menu	Opens the OSD (on-screen display) menu.
2	USB Host (Function button 3 – assignable)	Opens the USB Host Selection menu to select the USB upstream host that communicates with the USB downstream ports. **NOTE:** The USB Host icon is the same whether USB Type C or USB 3.0 is detected as the active USB host.
3	Color Control (Function button 2 – assignable)	Opens the Color menu to adjust the screen color.
4	Next Input (Function button 1 – assignable)	Switches to the next video input source (USB-C video, DisplayPort, MHL / HDMI).

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 one of the four front bezel buttons to activate the buttons, and then press the Menu button to open the OSD.

2. In the OSD menu, select **Menu Control** > **Assign Buttons** and then select one of the available options for the button you want to assign.

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

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).

To use PIP or PBP:

1. Connect a secondary input source to the monitor.

2. Press one of the four OSD bezel buttons to activate the buttons, and then press the **Menu** button to open the OSD.

3. In the OSD, select **PIP Control** > **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 signal 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.

   NOTE: The two PIP/PBP inputs must be either DisplayPort and HDMI, or USB Type-C and HDMI. The monitor does not support PIP/PBP when the two inputs are USB Type-C and DisplayPort.

5. If you want to change the size of the PIP, select **PIP Size** in the OSD, and then select the desired size.

6. If you want to adjust the position of the PIP, select **PIP Position** in the OSD, and then select the desired position.

Adjusting to Low Blue Light mode

Decreasing the blue light emitting from the display reduces the blue light exposure to your eyes. The monitor provides a setting to reduce blue light output and create a more relaxing and less stimulating image while reading content on the screen. To make the adjustment:

- Press one of the four OSD bezel buttons to activate the buttons, and then press the Color Control button and select **Low Blue Light**.

  OR

- Press one of the four OSD bezel buttons to activate the buttons, and then press the Menu button to open the OSD. In the OSD menu select **Color Control** > **Low Blue Light**.

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, 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 computer sends an active signal to the monitor (for example, if you activate the mouse or keyboard).

Auto-Sleep Mode is disabled if the Power Mode is set to Power Saver. You must change the Power Mode to Performance to enable it. Press one of the four OSD bezel buttons to activate the buttons, and then press the Menu button to open the OSD. In the OSD menu select **Power Control** > **Power Mode** > **Performance**.

You can also disable Auto-Sleep Mode when the Power Mode is set to Performance. Press one of the four OSD bezel buttons to activate the buttons, and then press the Menu button to open the OSD. In the OSD menu select **Power Control** > **Auto-Sleep Mode** > **Off**.

Changing the Power Mode setting

By default, the Power Mode setting in the OSD is set to Power Saver. When Power Saver is on, the monitor USB hub/ports, wireless charging, and power delivery functions are disabled during low power sleep and power off modes. The functions remain enabled when the monitor is in the power on mode.

You can enable the USB hub/ports, wireless charging, and power delivery functions during low power sleep and power off modes by changing the Power Mode setting from Power Saver to Performance in the OSD. Press one of the four OSD bezel buttons to activate the buttons, and then press the Menu button to open the OSD. In the OSD menu select **Power Control** > **Power Mode** > **Performance**.

3   Support and troubleshooting

Solving common problems

The following table lists 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.
	Power button is turned 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.
	Computer power is turned off.	Turn on power to the computer.
	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.
	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.
System does not wake from sleep mode when the mouse is moved or keyboard is pressed.	The monitor Power Saver feature is enabled.	Change the Power Mode setting from Power Saver to Performance in the OSD. Open the OSD menu and select **Power Control** > **Power Mode** > **Performance**.
Image appears blurred, indistinct, or too dark.	Brightness is too low.	Open the OSD menu and select **Brightness** to adjust the brightness scale as needed.
Input Signal Not Found is displayed on screen.	Monitor video cable is disconnected.	Connect the video cable between the computer and monitor. Be sure that the computer power is off while you connect the video cable.
	No video signal.	Be sure the computer has sent out a video signal.
Input Signal Out of Range is displayed on screen.	Video resolution and/or refresh rate are set higher than what the monitor supports.	Change the settings to a supported setting. See Preset display resolutions on page 22 for more information.
The monitor is off but it did not seem to enter into sleep mode.	The monitor's Auto-Sleep Mode is disabled.	Open the OSD menu and select **Power Control** > **Power Mode** > **Performance**. If the Power Mode is set to Performance and auto-sleep still does not function, open the OSD menu and select **Power Control** > **Auto-Sleep Mode** and set auto-sleep to **On**.
OSD Lockout is displayed.	The monitor's OSD Lockout function is enabled.	Press and hold the Menu button on the monitor bezel for 10 seconds to disable the OSD Lockout function.
Power Button Lockout is displayed.	The monitor's power button lockout function is enabled.	Press and hold the monitor power button for 10 seconds to disable the power button lockout function.

Button lockouts

Holding down the power button or menu button for 10 seconds will lock out the functionality of that button. You can restore the functionality by holding the button down again for 10 seconds. This functionality is only available when the monitor is powered on, displaying an active signal, and the OSD is not active.

Product support

For additional information on using your monitor, go to http://www.hp.com/support. Select the appropriate support category from the **Search all support** list, and then enter your model in the search window and click the search button.

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

Here you can:

● Chat online with an HP technician

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

● Locate an HP service center

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 display head and the bottom of the stand's base. You may need these numbers when contacting HP about the monitor model.
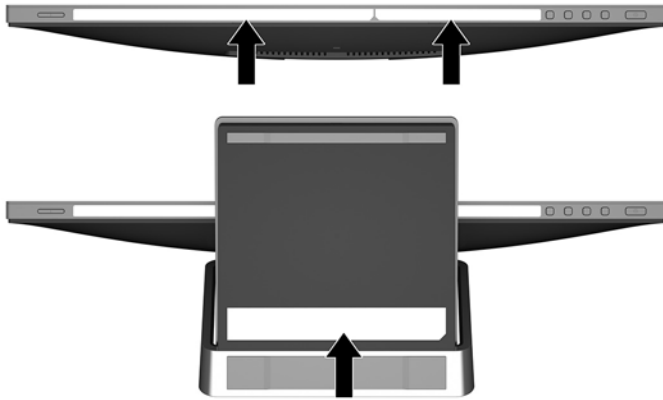
4   Maintaining the monitor

Maintenance guidelines

- 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.

- 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.

- Keep the monitor in a well-ventilated area, away from excessive light, heat, or moisture.

Cleaning the monitor

1. Turn off the monitor and disconnect power from the computer by unplugging 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: The product specifications provided in the user guide might have changed between the time of manufacturing and delivery of your product.

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

60.5 cm/23.8-inch model

Technical specifications		
Display	60.5 cm wide screen	23.8-inch wide screen
Type	TFT-LCD	
Viewable image size	60.5 cm diagonal	23.8-inch diagonal
Maximum weight (unpacked)	5.5 kg	12.1 lbs
Dimensions (include base)		
Height	42.91 cm	16.89 inches
Depth	21.342 cm	8.4 inches
Width	54.06 cm	21.283 inches
Maximum graphics resolution	2560 × 1440	
Optimum graphics resolution	2560 × 1440	
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
Power source	100–240 VAC 50–60 Hz	
Power adapter	Manufacturer: AcBel Polytech Inc.	
	Vendor P/N: APB002-025H2	
	HP P/N: 901571-4	
	Model number: TPC-AA501	
	Output rating: 19.5V/9.23A	
Input terminals	HDMI MHL, DisplayPort, USB Type-C	

Preset display resolutions

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

60.5 cm/23.8-inch model

Preset	Pixel Format	Horz Freq (kHz)	Vert Freq (Hz)
1	640 × 480	31.469	59.940
2	720 × 400	31.469	70.087
3	720 × 480	31.469	59.940
4	800 × 600	37.879	60.317
5	1024 × 768	48.363	60.004
6	1280 × 720	45.000	60.000
7	1280 × 768	47.396	59.995
8	1280 × 800	49.702	59.810
9	1280 × 960	60.000	60.000
10	1280 × 1024	63.981	60.020
11	1366 × 768	47.712	59.790
12	1440 × 900	55.935	59.887
13	1440 × 900	55.469	59.901
14	1600 × 900	60.000	60.000
15	1600 × 1200	75.000	60.000
16	1680 × 1050	65.290	59.954
17	1920 × 1080	67.500	60.000
18	1920 × 1200	74.038	59.950
19	1920 × 1200	74.556	59.885
20	2560 × 1440	88.787	59.951

Entering user modes

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

- You are not using a standard graphics adapter.

- You are not using a preset mode.

It this occurs, you may need to readjust the parameters of the monitor screen by using the on-screen display. Your changes can be made to any or all of these modes and saved in memory. The monitor automatically stores the new setting, 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 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 blanked, the backlight is turned off, and the power light changes to amber. When the monitor is in the reduced power state, it 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 above power 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 enter into the reduced power state at a predetermined time. When the monitor's Energy Saver utility causes the monitor to enter the reduced power state, the power light blinks amber.

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.