



User Guide

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About This Guide

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

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

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

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

 **TIP:** Text set off in this manner provides helpful hints.



This product incorporates HDMI technology.

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1 Product features

HP Healthcare Edition Displays

The display features include the following:

- 60.96 cm (24-inch) diagonal viewable area display with 1920 x 1200 resolution, plus full-screen support for lower resolutions; includes custom scaling for maximum image size while preserving original aspect ratio
- –or–
- 68.47 cm (27-inch) diagonal viewable area display with 2560 x 1440 resolution, plus full-screen support for lower resolutions; includes custom scaling for maximum image size while preserving original aspect ratio
- DICOM-compliant for use in healthcare clinical reviews by healthcare professionals in peer consultation, patient consultation, and surgical planning
- Non-glare panel with an LED backlight
- Wide viewing angle to allow viewing from a sitting or standing position, or moving from side to side
- Tilt capability
- Pivot capability to rotate the display from landscape to portrait
- Swivel and height adjustment capabilities
- Removable stand for flexible display panel mounting solutions
- White color for chassis and stand to help keep the display clean
- HP Quick Release 2 device to quickly install the display panel to the stand with a simple click, and then remove it with the convenient sliding tab release
- DVI-D, DisplayPort, and Mini-DisplayPort video inputs
- One HDMI (High-Definition Multimedia Interface) video input with MHL (Mobile High-Definition Link)
- PIP (picture-in-picture) functionality to enable the DVI, DisplayPort, MHL, and HDMI inputs to be viewed in a small secondary window or side-by-side on the main window
- Audio-out (headphone) jack
- USB 3.0 hub with one upstream port (connects to the computer) and four downstream ports (connect to USB devices)
- USB cable provided to connect the display's USB hub to the USB connector on the computer
- Six front bezel Touch Key buttons
- Supports an optional HP speaker bar
- Plug and Play capability if supported by your operating system
- Security slot provision on rear of display for optional cable lock
- Cable management feature for placement of cables and cords

- On-screen display (OSD) adjustments in several languages for easy setup and screen optimization
- HP Display Assistant for adjusting display settings and enabling theft deterrence features (refer to the *HP Display Assistant User Guide* included on the disc which may be included with your display)
- HDCP (High-Bandwidth Digital Content Protection) copy protection on all digital inputs
- Software and documentation disc that includes display 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* on your optical disc, if provided, 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.

2 Safety and maintenance guidelines

Important safety information


A power cord is included with the display. If another cord is used, use only a power source and connection appropriate for this display. For information on the correct power cord set to use with the display, refer to the *Product Notices* provided on your optical disc, if provided, 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. Do not pull on a cord or cable. When unplugging from the electrical outlet, grasp the cord by the plug.


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>.

 **CAUTION:** For the protection of the display, as well as the computer, connect all power cords for the computer and its peripheral devices (such as a display, 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 display.

 **WARNING!** LCD displays 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 display so that they cannot be pulled, grabbed, or tripped over.

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

Maintenance guidelines

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

- Do not open the display cabinet or attempt to service this product yourself. Adjust only those controls that are covered in the operating instructions. If the display 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 display, as indicated on the label/back plate of the display.
- Be sure the total ampere rating of the products connected to the outlet does not exceed the current rating of the electrical outlet, and the total ampere rating of the products connected to the cord does not exceed the rating of the cord. Look on the power label to determine the ampere rating (AMPS or A) for each device.
- Install the display near an outlet that you can easily reach. Disconnect the display by grasping the plug firmly and pulling it from the outlet. Never disconnect the display by pulling the cord.
- Turn the display off when not in use. You can substantially increase the life expectancy of the display by using a screen saver program and turning off the display when not in use.



NOTE: Displays with a “burned-in image” are not covered under the HP warranty.

- Slots and openings in the cabinet are provided for ventilation. These openings must not be blocked or covered. Never push objects of any kind into cabinet slots or other openings.
- Do not drop the display 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 display in a well-ventilated area, away from excessive light, heat or moisture.
- When removing the display stand, you must lay the display facedown on a soft area to prevent it from getting scratched, defaced, or broken.

Cleaning the display

1. Turn off the display and unplug the power cord from the back of the unit.
2. Dust the display 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.



CAUTION: 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.


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

Shipping the display

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

3 Setting up the display

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


 **NOTE:** Be sure the master power switch, located on the rear panel of the display, is in the off position. The master power switch turns off all power to the display.

Use caution when setting up the display

To prevent damage to the display, 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.

If installing a stand, lay the display facedown on a flat surface covered with a protective sheet foam or a non-abrasive cloth. This prevents the screen from getting scratched, defaced, or broken and prevents damage to the front panel buttons.



 **NOTE:** Your display may look different from the display in this illustration.

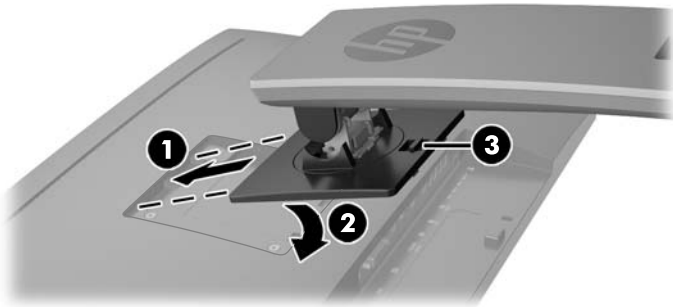
Installing the stand

CAUTION: Do not touch the surface of the LCD panel. Pressure on the panel may cause non-uniformity of color or disorientation of the liquid crystals. If this occurs the screen will not recover to its normal condition.

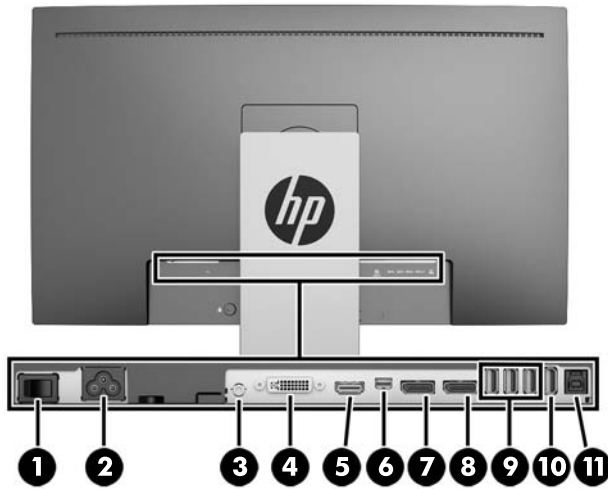
TIP: Consider the placement of the display, because the bezel might cause interfering reflections from surrounding light and bright surfaces.











The display uses the HP Quick Release 2 for easy mounting of the display. To mount the panel onto the stand:

1. Lay the display panel facedown on a flat surface covered by a clean, dry cloth.
2. Slide the top of the mounting plate (1) on the stand under the upper lip of the recess in the back of the panel.
3. Lower the bottom of the stand's mounting plate (2) into the recess until it snaps into place.
4. The HP Quick Release 2 latch (3) pops up when the stand is locked in place.




Rear components

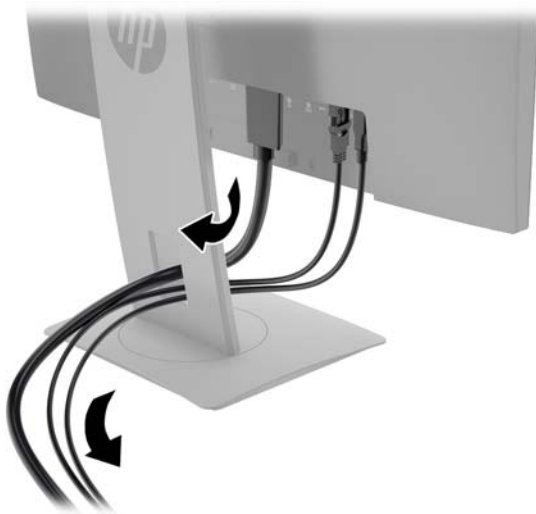


| Component | Icon | Function |
|---------------------------------------|---|---|
| 1 Master power switch | | Turns off all power to the display. NOTE: Putting the switch in the Off position will yield the lowest power state for the display when not in use. |
| 2 Power connector |  | Connects the AC power cord to the display. |
| 3 Audio-out |  | Connects headphones or an optional HP Speaker Bar to the display. |
| 4 DVI-D |  | Connects the DVI-D cable to the display. |
| 5 HDMI (MHL) |  | Connects an HDMI or MHL cable from the source device to the display. |
| 6 Mini-DisplayPort |  | Connects the Mini-DisplayPort cable from the source device to the display. |
| 7 DisplayPort IN |  | Connects the DisplayPort cable from the source device to the display. |
| 8 DisplayPort OUT |  | Connects the DisplayPort cable from the primary display to the secondary display. |
| 9 USB 3.0 standard downstream (3) |  | Connects optional USB devices to the display. |
| 10 USB 3.0 downstream fast charge (1) |  | Connects and charges optional USB battery-powered devices. |
| 11 USB 3.0 upstream |  | Connects the USB hub cable from the source device to the display. |


Connecting the cables

 **NOTE:** The display ships with select cables. Not all cables shown in this section are included with the display.

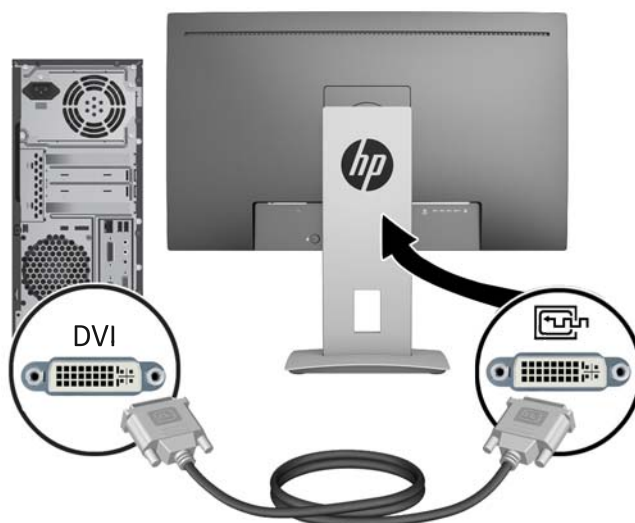
1. Place the display in a convenient, well-ventilated location near the computer.
2. Before connecting the cables, route the cables through the cable routing hole in the center of the stand.



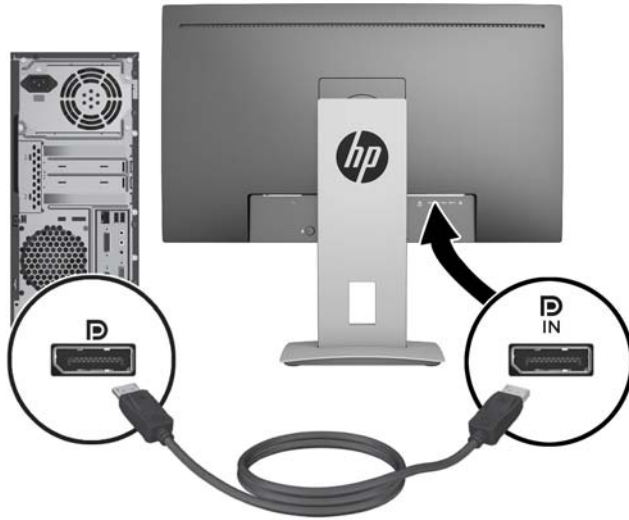
3. Connect a video cable.

 **NOTE:** The display will automatically determine which inputs have valid video signals. The inputs can be selected by pressing the **Next Input** button on the front panel or through the On-screen display (OSD) by pressing the **Menu** button and selecting **Input Control**.

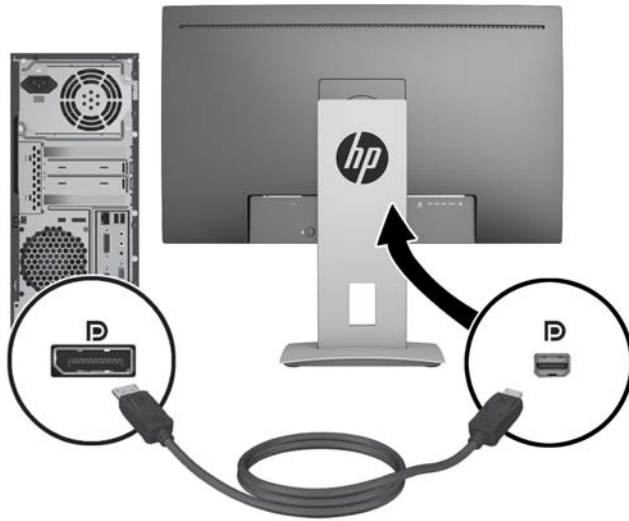
- Connect one end of a DVI-D cable to the DVI-D connector on the rear of the display and the other end to the DVI-D connector on the source device.



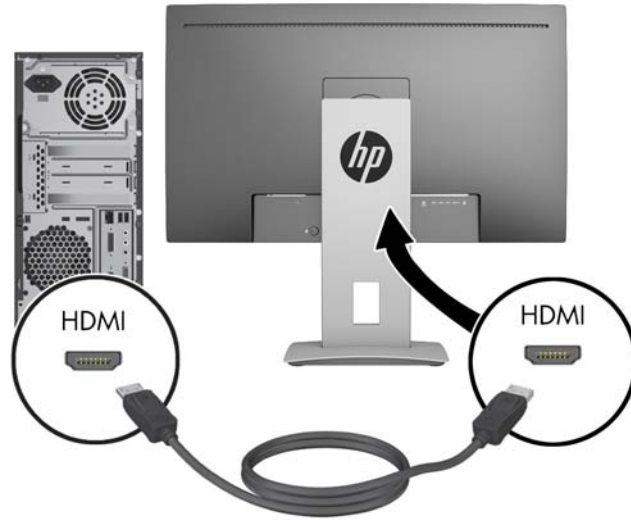
- Connect one end of a DisplayPort cable to the DisplayPort IN connector on the rear of the display and the other end to the DisplayPort connector on the source device.



- Connect one end of a Mini-DisplayPort cable to the Mini-DisplayPort connector on the rear of the display and the other end to the DisplayPort connector on the source device.



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



- Connect one end of an MHL cable to the HDMI (MHL) port on the rear of the display and the other end to the micro USB port on an MHL-enabled source device, such as a smart phone or tablet, to stream content from the mobile device to your display screen.



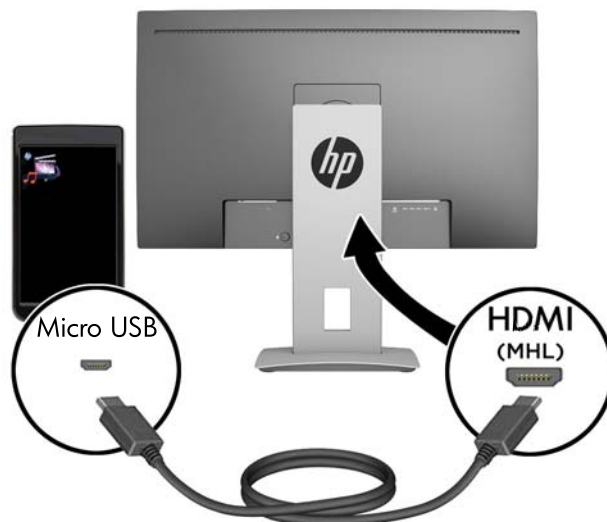
NOTE: The MHL video is limited to the mobile device output resolution.



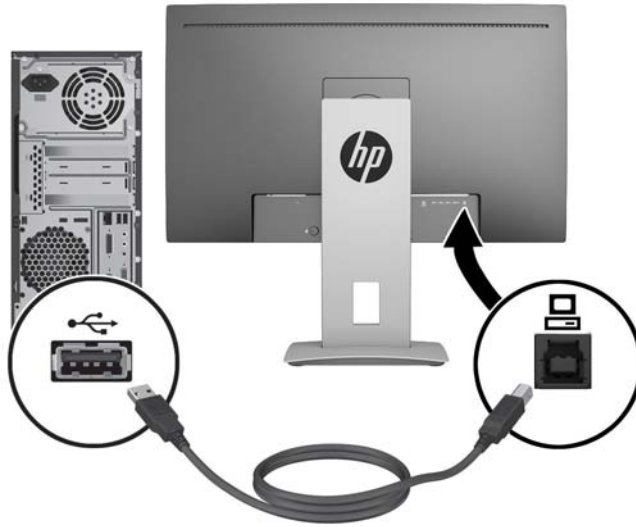
NOTE: The MHL connector also charges your MHL mobile device while connected and streaming.



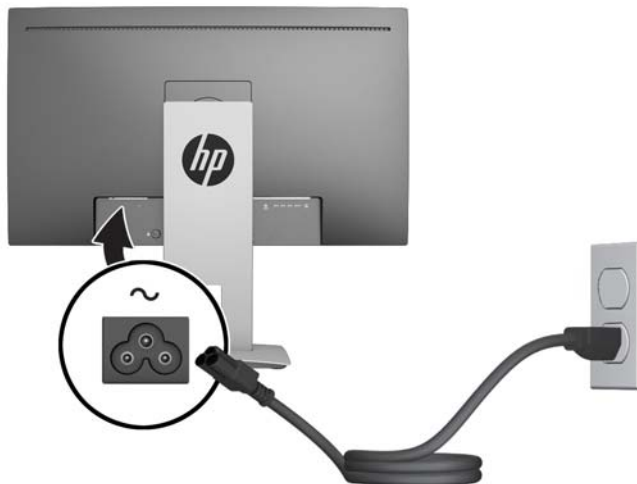
NOTE: You can also connect an HDMI cable between the HDMI (MHL) port on the display and an HDMI source device.



4. Connect one end of the USB upstream cable's Type B connector to the USB upstream port on the rear of the display and the cable's Type A connector to the USB downstream port on the source device.



5. Connect one end of the provided audio cable to the audio connector on the display and connect the other end of the cable to an audio output connector on the rear panel of the source device.
6. Connect one end of the AC power cord to the power connector on the rear of the display, and the other end to an AC outlet.

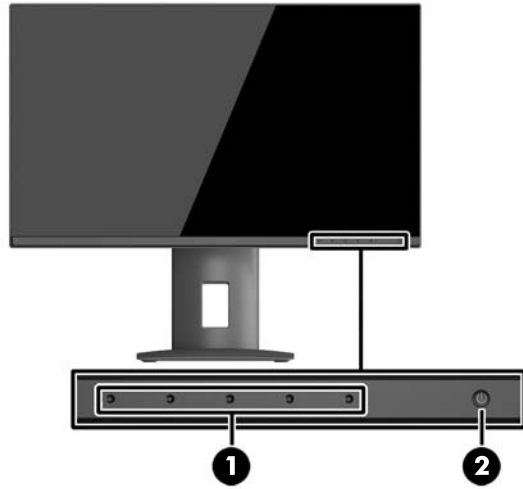


⚠ WARNING! To reduce the risk of electric shock or damage to the equipment:

Do not disable the power cord grounding plug. The grounding plug is an important safety feature.
Plug the power cord into a grounded (earthed) electrical 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 from the electrical outlet, grasp the cord by the plug.

Front panel controls



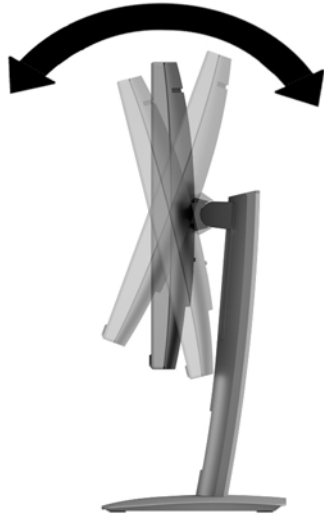
| Control | Function |
|---------|---|
| 1 | Menu and function buttons Use these buttons to navigate through the OSD based on the indicators next to the buttons that are activated while the OSD is open. |
| 2 | Power button Turns the monitor on or off. NOTE: Be sure the master power switch on the rear of the display is in the ON position to turn on the display. |



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

Adjusting the display

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



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



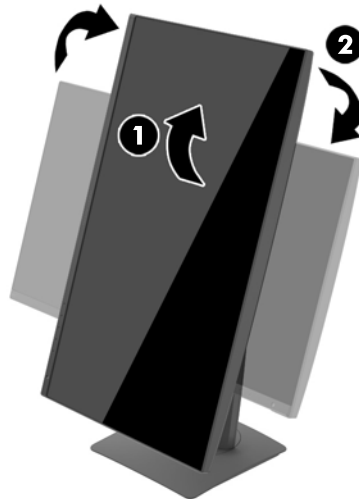
3. Adjust the display's height to a comfortable position for your individual workstation. The display's top bezel edge should not exceed a height that is parallel to your eye height. A display that is positioned low and reclined may be more comfortable for users with corrective lenses. The display should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




4. You can pivot the display from landscape to portrait orientation viewing to adapt to your application.
 - a. Adjust the display to full height position and tilt the display back to full tilt position (1).
 - b. Pivot the display clockwise 90° or counterclockwise 90° from landscape to portrait orientation (2).

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

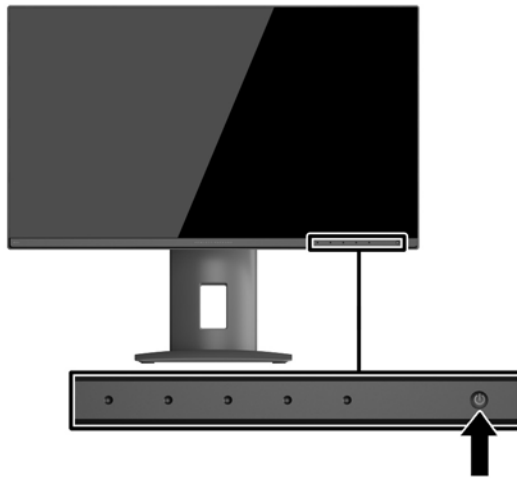
If you are adding an optional speaker bar to the display, install it after pivoting the display. The speaker bar will come in contact with the base when pivoting and potentially cause damage to the display or speaker bar.




 **NOTE:** To view information on the screen in portrait mode, you can install the HP Display Assistant software. The software can be downloaded from <http://www.hp.com/support> or from the software and documentation optical disc, if one is provided. The position of the OSD menu can also be rotated to portrait mode. To rotate the OSD menu, access the OSD menu by pressing the **Menu** button on the front panel, select **OSD Control** from the menu, and then select **OSD Rotation**.


Turning on the display


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



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

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

 **NOTE:** If pressing the power button has no effect, the Power Button Lockout feature may be enabled. To disable this feature, press and hold the display 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 display, and then select **Power Control > Power LED > Off**.


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

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

Connecting USB devices

USB ports are used to connect devices such as a digital camera, USB keyboard, or USB mouse. There are four downstream USB ports on the display. Three of the downstream USB ports provide standard USB connections. One of the downstream USB ports provides USB connection and fast charging for any USB battery-powered device.

| Component | Icon | Function |
|--|---|--|
| USB 3.0 standard downstream connectors (3) |  | Connects optional USB devices to the display. |
| USB 3.0 downstream fast charge connector (1) |  | Connects and charges optional USB battery-powered devices. |

 **NOTE:** You must connect the USB upstream cable from the computer to the display to enable the USB downstream ports on the display. See step 4 in [Connecting the cables on page 8](#).

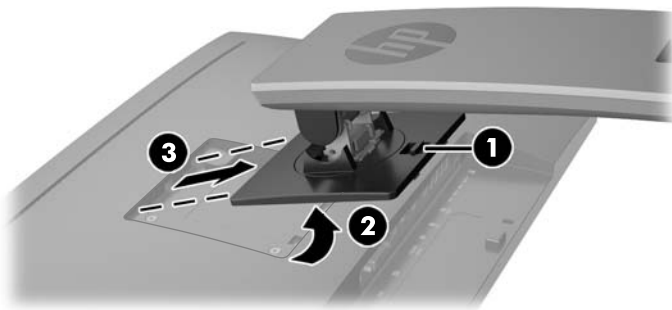


Removing the display stand

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

⚠ CAUTION: Before beginning to disassemble the display, be sure the display is turned off and all cables are disconnected.

1. Disconnect and remove all cables from the display.
2. Lay the display face down on a flat surface covered by a clean, dry cloth.
3. Push up on the latch near the bottom center of the display to unlock the HP Quick Release 2 (1).
4. Swing the bottom of the stand up until the mounting plate clears the recess in the panel (2).
5. Slide the stand out of the recess (3).



Mounting the display

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

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

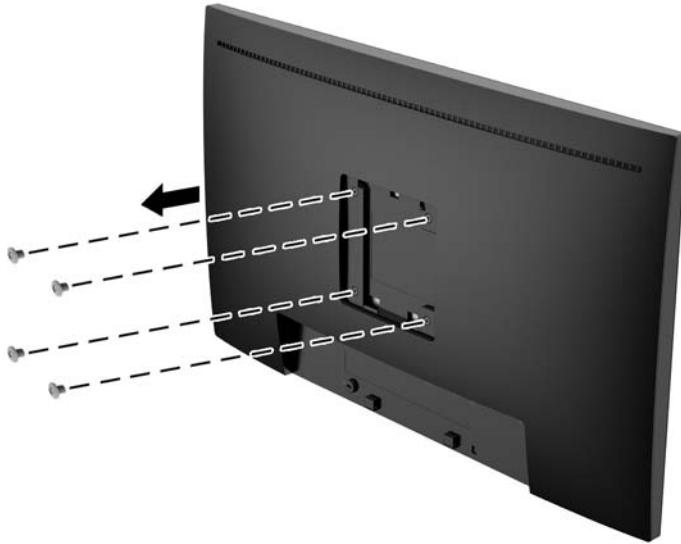
⚠ CAUTION: This display supports the VESA industry standard 100 mm mounting holes. To attach a third-party mounting solution to the display, four 4 mm, 0.7 pitch, and 10 mm long screws are required. Longer screws must not be used because they may damage the display. It is important to verify that the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

Mounting the display to a fixture

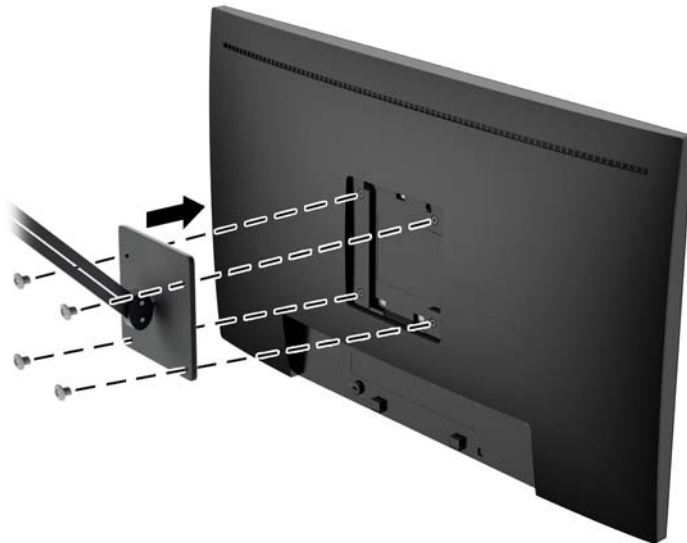
To mount the display panel to a mounting fixture:

1. Remove the display from the stand. [Removing the display stand on page 17.](#)

2. Remove the four screws from the VESA holes located on the rear of the display panel.




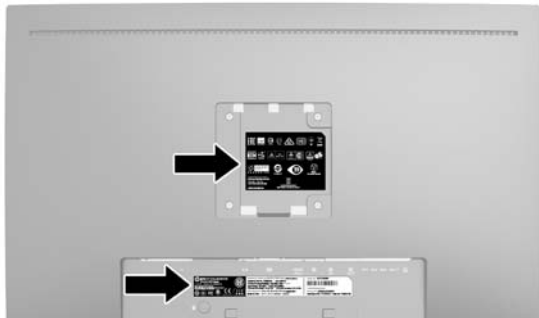
3. Install the mounting plate to the wall or swing arm of your choice using the four screws that were removed from the VESA holes on the rear of the display panel.



Locating the serial number and product number

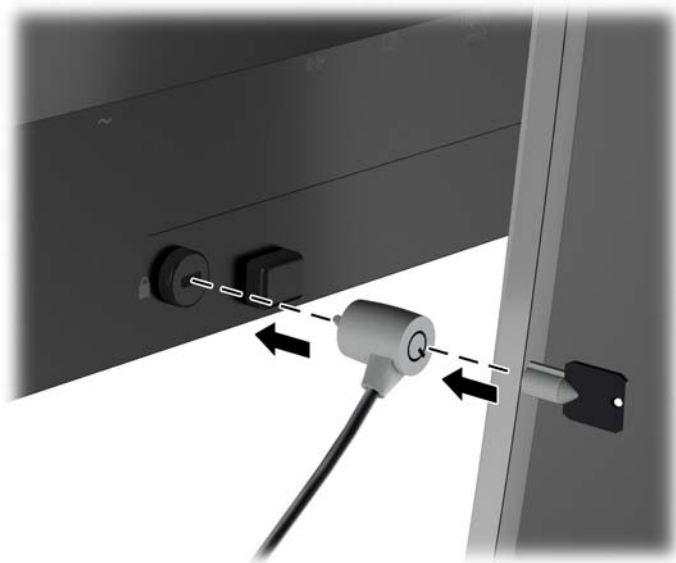
The serial number and product number are located on a label on the rear panel of the display head. You may need these numbers when contacting HP about the display model.

 **NOTE:** You may need to partially pivot the display head to read the label.



Installing a cable lock

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



4 Operating the display

Downloading the display drivers

Installing from the optical disc (available in select regions)

To install the .INF and .ICM files on the computer from the optical disc, if one is provided:

1. Insert the optical disc in 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.

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> and select the appropriate country and language.
2. Select **Get software and drivers**.
3. Enter your HP display model in the search field and select **Find my product**.

Using the On-screen display (OSD) menu

Use the On-screen display (OSD) to adjust the display settings screen image based on your preferences. You can access and make adjustments in the OSD using the buttons on the display's front panel.

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

1. If the display is not already on, press the power button to turn on the display.
2. To access the OSD menu, press one of the five front bezel Functional buttons (except Power button) to activate the buttons, and then press the **Menu** button to open the OSD.
3. Use the five Function buttons to navigate, select, and adjust the menu choices. The button labels are variable depending on the menu or sub-menu that is active.

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

| Main Menu | Description |
|---------------|---|
| Luminance | Adjusts the brightness 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. |
| PIP Control | Selects and adjusts the PIP image. |


| Main Menu | Description |
|---------------|--|
| Power Control | Adjusts the power settings. |
| OSD Control | Adjusts the on-screen display (OSD) and Function button controls. |
| Management | Enables/disables DDC/CI support and returns all OSD menu settings to the factory default settings. |
| Language | Selects the language in which the OSD menu is displayed. The factory default is English. |
| Information | Displays important information about the display. |
| Exit | Exits the OSD menu screen. |


Using Color Options

This display has been certified as a DICOM (Digital Imaging and Communication in Medicine) Part 14 compliant product. The display can be used to view medical images by healthcare professionals during healthcare clinical reviews, or peer consultation, patient consultation and surgical planning.

The display is factory-calibrated, and the default color setting is DICOM. To change the color setting to another preset or custom setting:

1. Press the **Menu** button on the front panel of the display to open the on-screen display menu.
2. Navigate to and highlight the **Color** menu, and then select the desired color setting.
3. Click the check mark button (okay) to select, and then click **Save and Return**.

 **NOTE:** When viewing medical images, make sure the display color setting is set to DICOM.

 **NOTE:** DICOM color selection will disable Dynamic Contrast Ratio (DCR).

The following table lists the selections of the color control menu:

| Main Menu | Description |
|------------|---|
| sRGB | Sets your screen colors to adapt to the color standards used in the image technology industry. |
| DICOM | Sets the screen colors to Digital Imagine and Communication in Medicine Part 14 compliant standards. |
| Warm | Sets the color scheme to a point in the 5000K color temperature range |
| Neutral | Sets the color scheme to a point the 6500K color temperature range. |
| Cool | Sets the color scheme to a point in in the 9300K color temperature range. |
| Native | Sets the display to the default color scheme. The default color scheme differs between display models. |
| Custom RGB | Allows you to select and adjust your own color levels. <ul style="list-style-type: none"> • R — Set the red color levels. • G — Set the green color levels. • B — Set the blue color levels. |

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

The display 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:

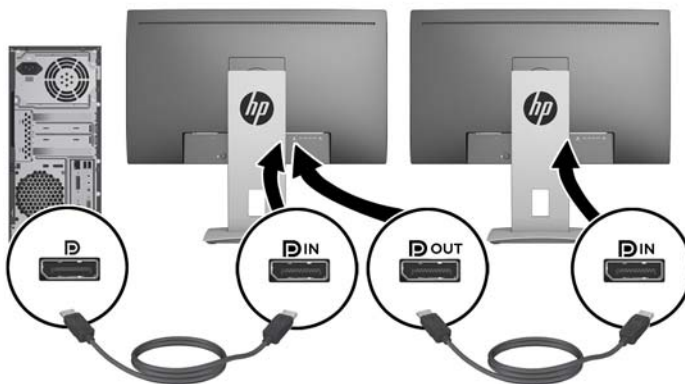
1. Connect a secondary input source to the display.
2. Press one of the five front bezel Functional buttons to activate the buttons, and then press the **Menu** button to open the OSD.
3. In the OSD, select **PIP Control > PIP On/Off** and then select either **Picture-in-Picture** or **Picture-beside-Picture**.
4. The display will scan the secondary inputs for a valid input and use that input for the PIP/PBP picture. If you want to change the PIP/PBP input, select **PIP Input** in the OSD and select the desired input.
5. If you want to change the size of the PIP, select **PIP Size** in the OSD then select the desired size.
6. If you want to adjust the position of the PIP, select **PIP Position** in the OSD, then select the desired position.

DisplayPort Multistreaming

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

To use DisplayPort multistreaming:

1. Make sure that DisplayPort is used for your primary video input.
2. Add a second display by connecting a DisplayPort cable between the DisplayPort OUT connector on the primary display and the DisplayPort IN connector on a secondary multistream display or the DisplayPort input connector on a secondary non-multistream display.

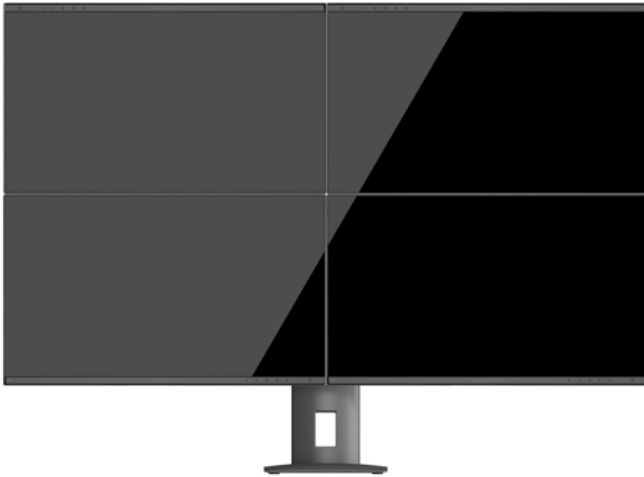


3. You can set the connected display to display the same image as the primary display or a different image. In the OSD for the connected display, select **Management > DisplayPort Output** and select one of the following:

- a. **DisplayPort 1.1 Compatibility Mode** (default) - allows the same video image to be sent to all displays downstream of the display you are configuring
 - b. **DisplayPort 1.2** - allows a different image to be sent to all displays downstream of the display you are configuring
4. After setting the DisplayPort Compatibility Mode in the OSD, use the computer operating system's display settings to set the display mode for the secondary display to either mirror the image of the primary display or extend the second display for a different image from the primary display.

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

Connect from the DisplayPort OUT of one display to the DisplayPort IN of the next, until you have the desired number of displays.



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

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

| Resolution | Multistreaming Maximum Displays Quantity |
|-------------|--|
| 1280 x 720 | 4 |
| 1600 x 900 | 4 |
| 1920 x 1080 | 4 |
| 1920 x 1200 | 3 |
| 2560 x 1440 | 2 |

Using Auto-Sleep Mode

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

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

You can disable the Auto-Sleep Mode in the OSD. Press one of the five front bezel Functional buttons to activate the buttons, and then press the **Menu** button to open the OSD. In the OSD press **Power Control > Auto-Sleep Mode > Disable**.

A Technical specifications



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

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

60.96 cm/24-inch Model

| | | |
|--|---|-----------------------|
| Display | 60.96 cm wide screen | 24 inches wide screen |
| Type | IPS | |
| Viewable Image Size | 60.96 cm diagonal | 24-inch diagonal |
| Maximum Weight (Unpacked) | 5.78 ± 0.25 kg | 12.74 ± 0.55 lbs |
| Dimensions (include base) | | |
| Height (highest position) | 52.02 cm | 20.48 inches |
| Height (lowest position) | 39.02 cm | 15.36 inches |
| Depth | 21.02 cm | 8.28 inches |
| Width | 53.38 cm | 21.02 inches |
| Maximum Graphic Resolution | 1920 x 1200 (60 Hz) | |
| Optimum Graphic Resolution | 1920 x 1200 (60 Hz) | |
| Environmental Requirements Temperature | | |
| Operating Temperature | 5 to 35° C | 41 to 95° F |
| Storage Temperature | -20 to 60° C | -4 to 140° F |
| Power Source | 100 – 240 VAC 50/60 Hz | |
| Input Terminal | One HDMI/MHL connector, one DisplayPort connector, one Mini-DisplayPort connector, one DVI connector (cable inclusion varies by region) | |

68.47 cm/27-inch QHD Model

| | | |
|---------------------------|----------------------|-----------------------|
| Display | 68.47 cm wide screen | 27 inches wide screen |
| Type | IPS | |
| Viewable Image Size | 59.67 x 33.57 cm | 23.49 x 13.22 inches |
| Maximum Weight (Unpacked) | 7.66 kg | 16.89 lbs |
| Dimensions (include base) | | |
| | 53.37 cm | 21.01 inches |

| | | |
|--|---|--------------|
| Height (highest position) | 40.37 cm | 15.89 inches |
| Height (lowest position) | 21.82 cm | 8.59 inches |
| Depth | 61.43 cm | 24.16 inches |
| Width | | |
| Maximum Graphic Resolution | 2560 x 1440 (60 Hz) | |
| Optimum Graphic Resolution | 2560 x 1440 (60 Hz) | |
| Environmental Requirements Temperature | | |
| Operating Temperature | 5 to 35° C | 41 to 95° F |
| Storage Temperature | -20 to 60° C | -4 to 140° F |
| Power Source | 100 – 240 VAC 50/60 Hz | |
| Input Terminal | One HDMI/MHL connector, one DisplayPort connector, one Mini-DisplayPort connector, one DVI connector (cable inclusion varies by region) | |

Recognizing Preset Display Resolutions

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

60.96 cm/24–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 | 800 × 600 | 37.879 | 60.317 |
| 4 | 1024 × 768 | 48.363 | 60.004 |
| 5 | 1280 × 720 | 45.000 | 59.940 |
| 6 | 1280 × 800 | 49.702 | 59.810 |
| 7 | 1280 × 1024 | 63.981 | 60.020 |
| 8 | 1366 × 768 | 47.712 | 59.790 |
| 9 | 1440 × 900 | 55.935 | 59.887 |
| 10 | 1600 × 900 | 60.000 | 60.000 |
| 11 | 1600 × 1200 | 75.000 | 60.000 |
| 12 | 1680 × 1050 | 65.290 | 59.954 |
| 13 | 1920 × 1080 | 67.500 | 60.000 |
| 14 | 1920 × 1200 | 74.038 | 59.950 |

68.47 cm/27-inch Models

| 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 | 1366 × 768 | 48.000 | 60.000 |
| 9 | 1440 × 900 | 55.935 | 59.887 |
| 10 | 1600 × 900 | 60.000 | 60.000 |
| 11 | 1600 × 1200 | 75.000 | 60.000 |
| 12 | 1680 × 1050 | 65.290 | 59.954 |
| 13 | 1920 × 1080 | 67.500 | 60.000 |
| 14 | 1920 × 1200 | 74.038 | 59.950 |
| 15 | 1920 × 1200 | 74.556 | 59.885 |
| 16 | 2560 × 1440 | 88.787 | 59.951 |

High Definition Video Formats

| 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 | 720p60 | 1280 × 720 | 45.000 | 60.000 |
| 4 | 576p | 720 × 576 | 31.250 | 50.000 |
| 5 | 720p50 | 1280 × 720 | 37.500 | 50.000 |
| 6* | 1080i60 | 1920 × 1080 | 33.750 | 60.000 |
| 7* | 1080i50 | 1920 × 1080 | 28.125 | 50.000 |
| 8 | 1080p60 | 1920 × 1080 | 67.500 | 60.000 |
| 9 | 1080p50 | 1920 × 1080 | 56.250 | 50.000 |
| 10** | 1080p30 | 1920 × 1080 | 33.750 | 30.000 |

* For HDMI input only

** For MHL input only

B Support and troubleshooting

Solving common problems

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

| Problem | Possible Cause | Solution |
|--|---|---|
| Screen is blank or video is flashing. | Power cord is disconnected. | Connect the power cord. |
| | Power button is turned off. | Press the front panel 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. |
| | Video cable is improperly connected. | Connect the video cable properly. See Connecting the cables on page 8 for more information. |
| | System is in sleep mode. | Press any key on the keyboard or move the mouse to inactivate the screen blanking utility. |
| | Video card compatibility. | Open the OSD menu and select the Input Control menu. Set Auto-Switch Input to Off and manually select the input. |
| 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. |
| Check Video Cable is displayed on screen. | Monitor video cable is disconnected. | Connect the appropriate video signal cable between the computer and display. 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 what the display supports. | Change the settings to a supported setting (see Recognizing Preset Display Resolutions on page 26). |
| The display is off but it did not seem to enter into a low-power sleep mode. | The display's power saving control is disabled. | Open the OSD menu and select Power Control > Auto-Sleep Mode and set auto-sleep to On . |
| OSD Lockout is displayed. | The display's OSD Lockout function is enabled. | Press and hold the Menu button on the front panel for 10 seconds to disable the OSD Lockout function. |
| Power Button Lockout is displayed. | The display's Power Button Lockout function is enabled. | Press and hold the power button for 10 seconds to unlock the power button function. |

Button lockouts

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

Product support

For additional information on using your display, go to <http://www.hp.com/support>. Select **Find your product**, and then follow the on-screen instructions.



NOTE: The display 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

C 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 device 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.