



# User Guide

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#### **Product notice**

This guide describes features that are common to most models. Some features may not be available on your product. To access the latest user guide, go to <http://www.hp.com/support>, and follow the instructions to find your product. Then select **User Guides**.

First Edition: March 2019

Version: A, March 2019

Document part number: L50963-001

## About This Guide

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

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-  **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). An Important alert 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.
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**HDMI**™

HIGH-DEFINITION MULTIMEDIA INTERFACE

This product incorporates HDMI technology.



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# 1 Getting Started

## Important safety information

A power cord is 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 in your documentation kit.

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 **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.

The device must be operated within the operating conditions specified by HP only. Never place the device onto heat-emitting objects like radiators or heating ventilators. The environmental temperature must not exceed the maximum temperatures indicated in this guide. Never place the device into a closed surrounding housing unless it is ventilated enough to assure an operational temperature below the allowed maximum.

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 AC outlet, grasp the cord by the plug.

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:** 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 capability. Use a power strip whose manufacturer offers a damage replacement policy so you can replace the equipment if surge protection fails.

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

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 **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.

 **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.

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# Product features and components

## Features

The monitors features include the following:

- 54.6 cm (21.5 in) diagonal viewable area with 1920 x 1080 resolution, plus full-screen support for lower resolutions, includes custom scaling for maximum image size while preserving the original aspect ratio
- 60.5 cm (23.8 in) diagonal viewable area with 1920 x 1080 resolution, plus full-screen support for lower resolutions, includes custom scaling for maximum image size while preserving the original aspect ratio
- 68.6 cm (27 in) diagonal viewable area with 1920 x 1080 resolution, plus full-screen support for lower resolutions, includes custom scaling for maximum image size while preserving the original aspect ratio
- Wide color gamut to provide coverage of NTSC color spaces
- Nonglare screen with an LED backlight
- Wide viewing angle to allow viewing from a sitting or standing position, or moving from side to side
- Tilt capability
- Removable stand to accommodate additional mounting options
- HP Quick Release 2 to quickly install the monitor with a simple click and remove it with the convenient sliding tab release
- Optional DT mini mount that attaches to the rear of the monitor (purchased separately)
- DisplayPort, High-Definition Multimedia Interface (HDMI), and VGA video inputs
- Four Function buttons under the right side of the front bezel, three that can be reconfigured to quickly access the most commonly used operations
- Plug-and-play capability if supported by the operating system
- 100 mm integrated VESA mounting
- Security slot provision on rear of monitor for optional cable lock
- On-Screen Display (OSD) adjustments in several languages for easy setup and screen optimization
- HP Display Assistant software for adjusting monitor settings and enabling theft deterrence features
- HDCP (High Bandwidth Digital Content Protection) copy protection on all digital inputs
- Energy saver feature to meet requirements for reduced power consumption



**NOTE:** For safety and regulatory information, refer to the Product Notices provided in your documentation kit. To 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 **User Guides**.

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## Front panel controls



Control	Function
1	<b>Function buttons (1–4)</b> Use these buttons to navigate through the OSD based on the indicators next to the buttons, which are activated when the OSD is open.
	<b>Menu button</b> Opens the OSD menu, selects a menu item from the OSD, or closes the OSD menu.
	<b>Next Active Input button</b> Navigates through the OSD menu and selects a video input source.
	<b>Assignable Function button 1</b>
	<b>Viewing Modes button</b> Navigates through the <b>Viewing Modes</b> menu and selects a preset view mode.
	<b>Assignable Function button 2</b>
	<b>Information button</b> Opens the <b>Information</b> menu.
	<b>Assignable Function button 3</b>
2	<b>Power button</b> Turns the monitor on or off.

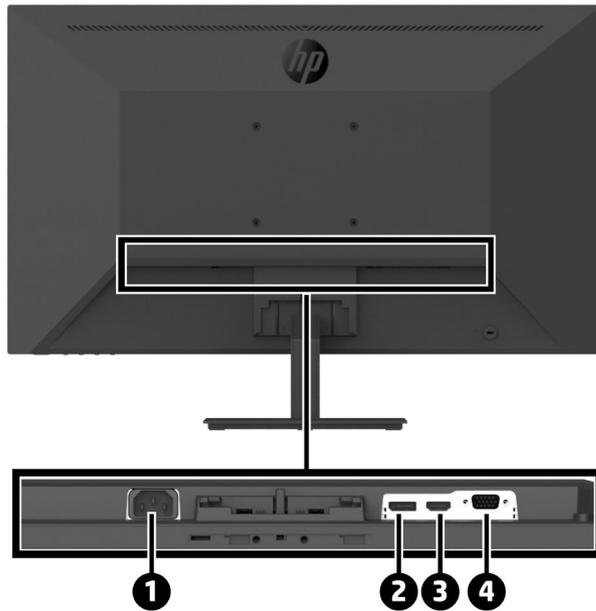
## Reassigning the function buttons

You can change the three assignable Function buttons from their default values, so when the buttons are **activated**, you can quickly access commonly used menu items. You can not reassign the **Menu** button.

To reconfigure Function buttons:

1. Press one of the four function buttons under the right side of the bezel to activate the buttons, and then press the **Menu** button to open the OSD.
2. In the OSD menu, select **Menu**, select **Assign Buttons**, and then select one of the available options for the button you want to reassign.

## Rear components



Component	Function
1 Power connector	Connects a power cord.
2 DisplayPort connector	Connects a DisplayPort cable to the source device.
3 HDMI connector	Connects an HDMI cable to the source device.
4 VGA connector	Connects a VGA cable to the source device.

# Setting up the monitor

## Use caution when setting up the monitor

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.

If installing a stand, position the monitor facedown on a flat surface covered with protective foam or a nonabrasive cloth. This prevents the screen from getting scratched, defaced, or broken and prevents damage to the control buttons.

## Attaching the monitor stand and base

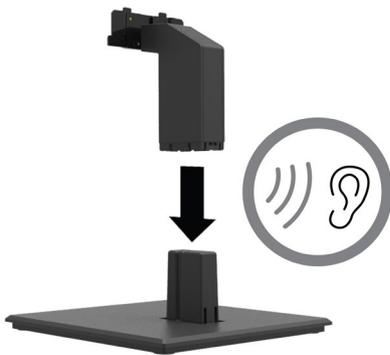
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**⚠ CAUTION:** The screen is fragile. Avoid touching or applying pressure to the screen; doing so can cause damage.

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

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1. Remove the stand/base assembly, and then lift the monitor from its box and place it facedown on a flat surface covered by a protective sheet, or foam, or a nonabrasive cloth.
2. Position the stand over the base, and press down firmly until you hear a clicking sound indicating the monitor is locked.



3. Insert the two tabs on the stand into the bracket on the back of the monitor head. You will hear a click when they are locked in place.



## Connecting the cables

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

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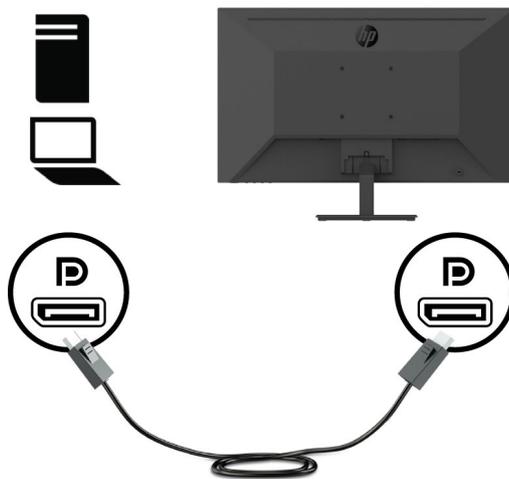
1. Place the monitor in a convenient, well-ventilated location near the computer.
2. Connect a video cable.

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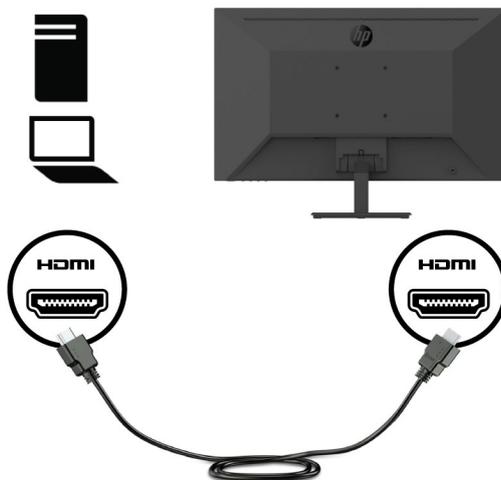
 **NOTE:** The monitor automatically determines which inputs have valid video signals. The inputs can be selected through the OSD by pressing the **Menu** button and selecting **Input**.

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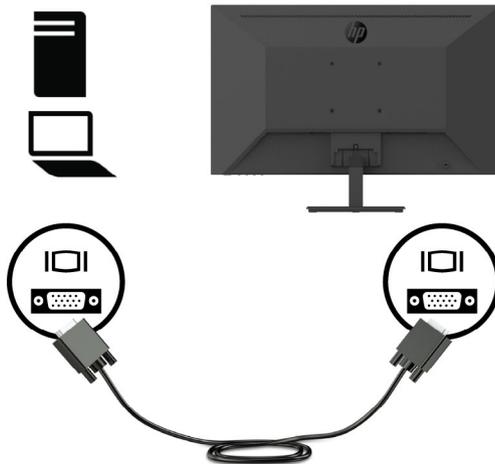
- Connect one end of a DisplayPort cable to the DisplayPort connector on the rear of the monitor and the other end to the DisplayPort connector on the source device.



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



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



3. Connect one end of the power cord to a grounded AC outlet, and then connect the other end to the monitor.



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**⚠ 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 the power cord from the AC outlet, grasp the cord by the plug.

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## Adjusting the monitor

Tilt the monitor's panel forward or backward to set it to a comfortable eye level. The monitor can be tilted from  $-5^{\circ}$  to  $+25^{\circ}$ .



## Installing a cable lock

You can secure the monitor to a fixed object with an optional cable lock (HP Business PC Security Lock Kit) available from HP.



## Turning on the monitor

Press the power button to turn it on.



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

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

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

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When the monitor is first turned on, a Monitor Status message is displayed for five seconds. The message shows which input is the current active signal, the current preset monitor resolution, and the recommended preset display resolution.

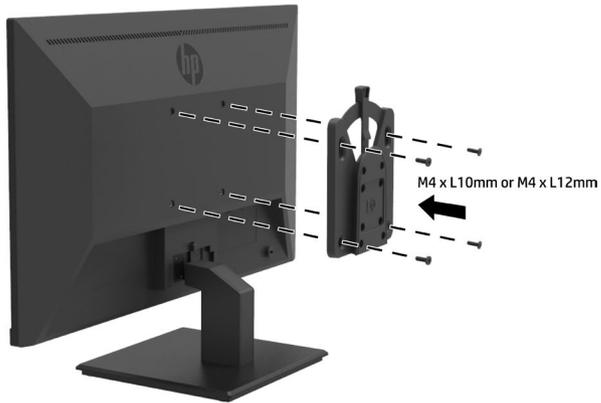
The monitor automatically scans the signal inputs for an active input and uses that input for the monitor.

## Mounting the DT Mini PC to monitor via HP Quick Release Kit

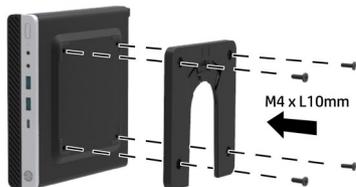
 **NOTE:** Remove the four preinstalled VESA screws from the rear of the monitor.

 **IMPORTANT:** The DT Mini PC must be upright in a horizontal position for this installation.

1. Install the Quick Release locking lever bracket to the rear of the monitor.



2. Install the other bracket of the Quick Release to the back of the DT Mini PC.



3. Mount the computer to the back of the monitor by inserting the Quick Release on the monitor into the Quick Release on the DT Mini PC.

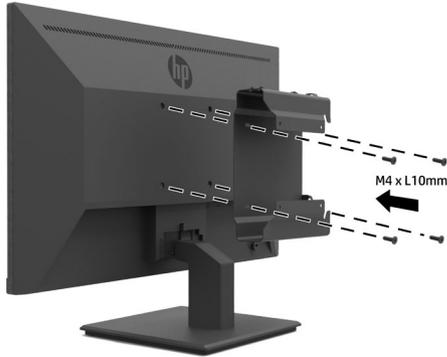


## Mounting the DT Mini PC to monitor via HP Desktop Mini Security Dual VESA Sleeve V2

 **NOTE:** Remove the four preinstalled VESA screws from the rear of the monitor.

 **IMPORTANT:** The DT Mini PC must be upright in a horizontal position for this installation.

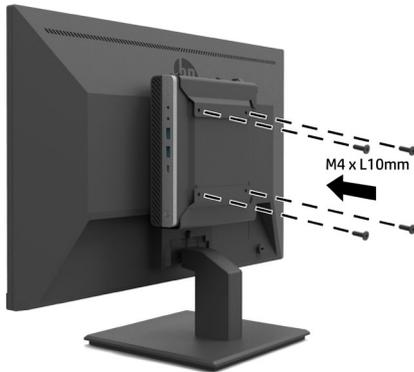
1. Install the Dual VESA Sleeve V2 to the rear of the monitor.



2. Slide DT Mini PC insert to Dual VESA Sleeve V2.



3. Install the DT Mini PC to the Dual VESA Sleeve V2.



## Mounting the monitor

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

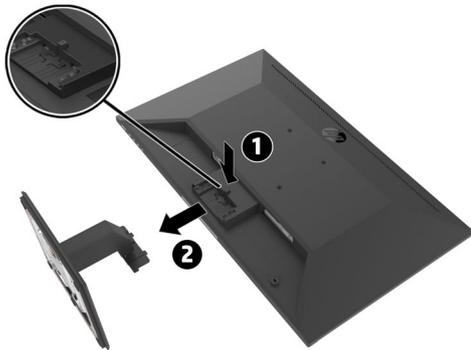
 **NOTE:** This monitor is intended to be supported by UL or CSA or GS Listed wall mount bracket.

 **CAUTION:** This monitor supports the VESA industry-standard 100 mm mounting holes. To attach a third-party mounting solution to the monitor, four 4 mm, 0.7 pitch, and 10 mm-long screws are required. Longer screws may damage the monitor. It is important to verify that the manufacturer's mounting solution is compliant with the VESA standard and is rated to support the weight of the monitor head. For best performance, use the power cord and video cables provided with the monitor.

## Removing the monitor stand

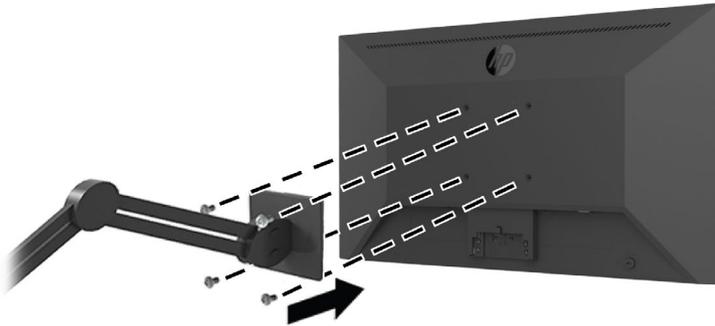
 **CAUTION:** Before beginning to disassemble the monitor, be sure the monitor is turned off and all cables are disconnected.

1. Disconnect and remove all cables from the monitor.
2. Position the monitor face down on a flat surface covered by a protective sheet, or foam, or a nonabrasive cloth.
3. Press down on the release latch (1), and slide the stand out of the slot on the monitor head (2).



## Attaching the monitor to HP Single Monitor Arm

1. Remove the monitor stand. Refer to [Removing the monitor stand on page 12](#).
2. Remove the four screws from the VESA holes located on the rear of the monitor head.
3. Use the four screws removed from the VESA holes on rear of the monitor head to attach the HP Single Monitor Arm to the monitor.

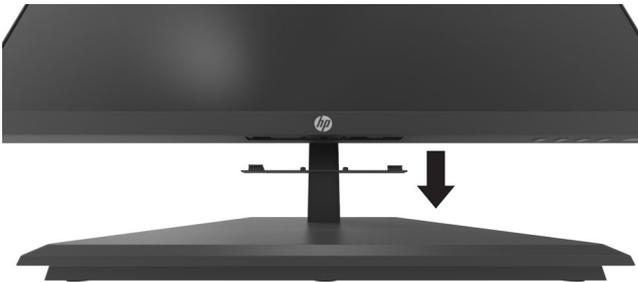


 **IMPORTANT:** Follow the HP Single Monitor Arm manufacturer's instructions when mounting the monitor.

 **IMPORTANT:** For optimal monitor performance and screen clarity, do not rotate the monitor 90 degrees to portrait orientation.

## Attaching the HP Speaker Bar to the monitor

1. Pull the speaker cover from the bottom of the monitor.



2. Insert the HP Speaker Bar into the speaker hole in the bottom of the monitor (1) and slide the HP Speaker Bar to the right (2).

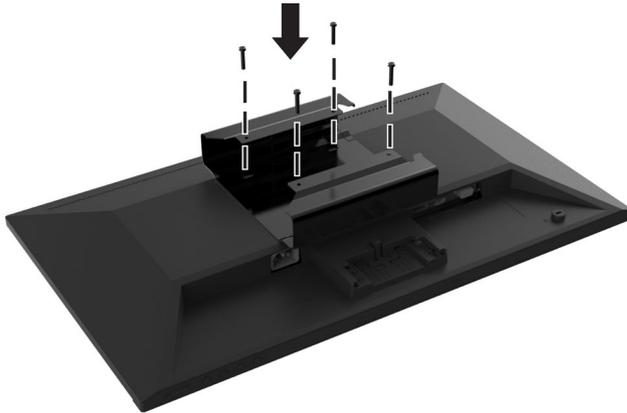


## Attaching the monitor to HP Desktop Mini Security Dual VESA Sleeve V2 and HP Single Monitor Arm

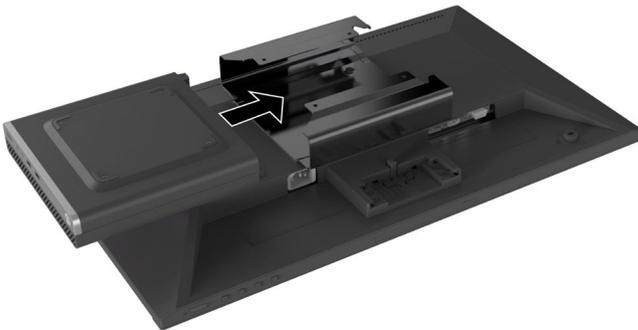
 **NOTE:** Remove the four preinstalled VESA screws from the rear of the monitor.

 **IMPORTANT:** The DT Mini PC must be upright in a horizontal position for this installation.

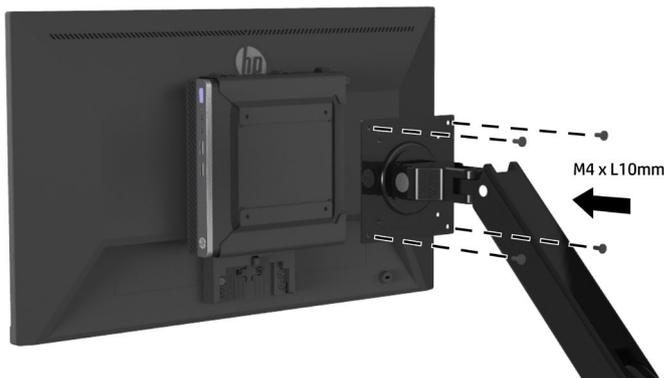
1. Remove the monitor stand. Refer to [Removing the monitor stand on page 12](#).
2. Install the Dual VESA Sleeve V2 to the rear of the monitor.



3. Slide DT Mini PC insert to Dual VESA Sleeve V2.



4. Attach the HP Single Monitor Arm to the Dual VESA Sleeve V2.



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## 2 Using the monitor

### Software and utilities

You can download and install the following files from <http://www.hp.com/support>.

- INF (Information) file
- ICM (Image Color Matching) files (one for each calibrated color space)
- HP Display Assistant—adjusts the monitor settings

#### 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 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 display screen to printer, or from scanner to display 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.

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### Using the On-Screen Display (OSD) menu

Use the OSD menu to adjust the monitor screen image based on your preferences. You can access and make adjustments in the OSD menu using the Function buttons under the right side of the bezel.

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

1. If the monitor is not already on, press the power button under the right side of the bezel to turn on the monitor.
2. To access the OSD menu, press one of the four Function buttons under the right side of the bezel to activate the buttons. Then press the Menu button to open the OSD.
3. Use the Function buttons to navigate, select, and adjust the menu choices. The on-screen button labels vary depending on which menu or submenu is active. The following table lists the menu selections in the OSD main menu.

---

Main Menu	Description
Brightness+	Adjusts the brightness and contrast levels of the screen.
Color	Selects and adjusts the screen color.

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Main Menu	Description
Image	Adjusts the screen image.
Input	Adjusts the video input signal.
Power	Adjusts the power settings.
Menu	Adjusts the OSD controls.
Management	Adjusts the DDC/CI settings, language settings, and returns all OSD menu settings to the factory default settings.
Information	Selects and displays important information about the monitor.
Exit	Exits the OSD menu screen.

## Adjusting Low Blue Light Mode

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 reading content on the screen.

To adjust the blue light output from the monitor:

1. Press one of the four function buttons under the right side of the bezel to activate the buttons, and then press the **Menu** button to open the OSD. Select **Color** and **Viewing Modes**.
2. Select your desired setting:
  - **Low Blue Light:** TUV 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 Exit from the Main menu.

**⚠ 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>.

## Using Auto-Sleep Mode

The monitor supports an OSD option called **Auto-Sleep Mode** that allows you to enable or disable a reduced power state for the monitor. When Auto-Sleep Mode is enabled (enabled by default), the monitor 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 (sleep mode), the display 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 wakes from sleep mode when the computer sends an active signal to the monitor (for example, if you activate the mouse or keyboard).

You can disable the Auto-Sleep Mode in the OSD. Press the **Menu** button under the right side of the bezel to open the OSD. In the OSD select **Power**, select **Auto-Sleep Mode**, and then select **Off**.

# 3 Support and troubleshooting

## Solving common problems

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

Problem	Possible Cause	Solution
Screen is blank or video is flashing.	Power cord is disconnected.	Connect the power cord.
	Monitor is turned off.	Press the front panel power button.  <b>NOTE:</b> If pressing the power button has no effect, press and hold the power button for 10 seconds to disable the Power Button Lockout feature.
	Video cable is improperly connected.	Connect the video cable properly. Refer to <a href="#">Connecting the cables on page 6</a> for more information.
	System is in sleep mode.	Press any key on the keyboard or move the mouse to inactivate the screen blanking utility.
Image appears blurred, indistinct, or too dark.	Video card is incompatible.	Open the OSD menu and select the <b>Input</b> menu. Set <b>Auto-Switch Input</b> to <b>Off</b> and manually select the input.
	Brightness setting is too low.	Open the OSD menu and select <b>Brightness+</b> to adjust the brightness scale as needed.
<b>Check Video Cable</b> is displayed on screen.	Monitor video cable is disconnected.	Connect the appropriate video signal cable between the computer and monitor. Be sure that the computer power is off while connecting the video cable.
<b>Input Signal Out of Range</b> is displayed on screen.	Video resolution and/or refresh rate are set higher than what the monitor supports.	Change the settings to a supported setting. Refer to <a href="#">Preset display resolutions on page 22</a> .
The monitor is off but it did not seem to enter into a low-power sleep mode.	The monitor's power saving control is disabled.	Open the OSD menu and select <b>Power</b> , select <b>Auto-Sleep Mode</b> , and then set auto-sleep to <b>On</b> .
<b>OSD Lockout</b> is displayed.	The monitor's OSD Lockout function is enabled.	Press and hold the <b>Menu</b> button on the front panel for 10 seconds to disable the OSD Lockout function.
<b>Power Button Lockout</b> is displayed.	The monitor's Power Button Lockout function is enabled.	Press and hold the power button on the front panel for 10 seconds to unlock the power button 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 ten seconds. This functionality is only available when the monitor is powered on, displaying an active signal, and the OSD is not active.

## Contacting support

To resolve a hardware or software problem, go to <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 on how to contact HP and open a support case.

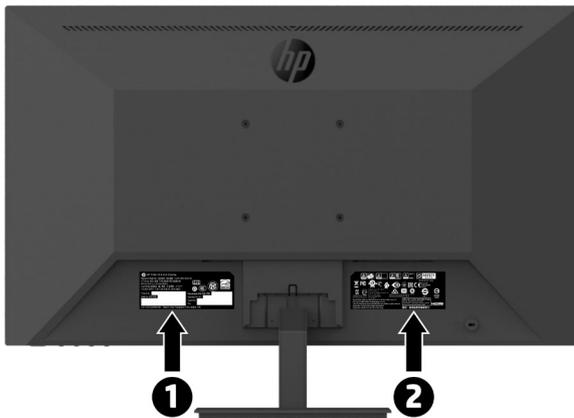
## Preparing to call technical support

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

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

## Locating the serial number and product number

The Rating label (1) and Safety label (2) are located on the rear of the monitor. The serial number and product number are located on a Rating label. You may need these numbers when contacting HP about the monitor model.



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## 4 Maintaining the monitor

### Maintenance guidelines

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

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



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

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- Slots and openings in the cabinet are provided for ventilation. These openings must not be blocked or covered. Never push objects of any kind into cabinet slots or other openings.
- Do not drop the monitor or place it on an unstable surface.
- Do not allow anything to rest on the power cord. Do not walk on the cord.
- Keep the monitor in a well-ventilated area, away from excessive light, heat, or moisture.
- When removing the monitor stand, you must position the monitor facedown on a soft area to prevent it from getting scratched, defaced, or broken.

### Cleaning the monitor

1. Turn off the monitor and unplug the power cord from the back of the unit.
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.

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 **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 monitor screen or cabinet. These chemicals may damage the monitor.

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### Shipping the monitor

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

# A Technical specifications

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

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

## 21.5-inch Full HD Model

<b>Display</b>	<b>54.6 cm</b> wide screen	21.5 inches wide screen
<b>Type</b>	LCD	
<b>Viewable Image Size</b>	<b>54.6 cm</b> diagonal	21.5-inch diagonal
<b>Tilt</b>	-5° to 25°	
<b>Weight</b>		
Without stand	<b>2.5 kg</b>	5.4 lbs
With stand	<b>3.0 kg</b>	6.6 lbs
<b>Dimensions (include stand)</b>		
Height	<b>37.10 cm</b>	14.61 inches
Depth	<b>18.10 cm</b>	7.13 inches
Width	<b>48.85 cm</b>	19.23 inches
<b>Maximum graphic resolution</b>	1920 x 1080 (60 Hz)	
<b>Optimum graphic resolution</b>	1920 x 1080 (60 Hz)	
<b>Dot pitch</b>	0.74385 (H) x 0.24795 (V) mm	
<b>Horizontal frequency</b>	30 kHz to 80 kHz	
<b>Vertical refresh rate</b>	50 Hz to 60 Hz	
<b>Environmental Requirements Temperature</b>		
Operating Temperature	5 to 35° C	41 to 95° F
Storage Temperature	-20 to 60° C	-4 to 140° F
<b>Relative humidity</b>	20% to 80%	
<b>Power Source</b>	100 – 240 VAC 50/60 Hz	
<b>Altitude:</b>		
Operating	<b>0 m to 5,000 m</b>	0 to 16,400 ft
Storage	<b>0 m to 12,192 m</b>	0 to 40,000 ft
<b>Measured power consumption:</b>		
Full power	25 W	
Typical settings	17 W	
Sleep	<0.3 W	
Off	<0.3 W	
Input Terminal	One VGA connector, one HDMI connector ,one DP connector (cable inclusion varies by region)	

## 23.8–inch Full HD Model

<b>Display</b>	<b>60.5 cm wide screen</b>	23.8 inches wide screen
<b>Type</b>	LCD	
<b>Viewable Image Size</b>	<b>60.5 cm diagonal</b>	23.8-inch diagonal
<b>Tilt</b>	-5° to 25°	
<b>Weight</b>		
Without stand	<b>3.1 kg</b>	6.8 lbs
With stand	<b>3.8 kg</b>	8.4 lbs
<b>Dimensions (include stand)</b>		
Height	<b>39.75 cm</b>	15.65 inches
Depth	<b>20.00 cm</b>	8.87 inches
Width	<b>53.91 cm</b>	21.22 inches
<b>Maximum graphic resolution</b>	1920 x 1080 (60 Hz)	
<b>Optimum graphic resolution</b>	1920 x 1080 (60 Hz)	
<b>Dot pitch</b>	0.2745 (H) x 0.2745 (V) mm	
<b>Horizontal frequency</b>	30 kHz to 80 kHz	
<b>Vertical refresh rate</b>	50 Hz to 60 Hz	
<b>Environmental Requirements Temperature</b>		
Operating Temperature	5 to 35° C	41 to 95° F
Storage Temperature	-20 to 60° C	-4 to 140° F
<b>Relative humidity</b>	20% to 80%	
<b>Power Source</b>	100 – 240 VAC 50/60 Hz	
<b>Altitude:</b>		
Operating	<b>0 m to 5,000 m</b>	0 to 16,400 ft
Storage	<b>0 m to 12,192 m</b>	0 to 40,000 ft
<b>Measured power consumption:</b>		
Full power	21 W	
Typical settings	17 W	
Sleep	<0.3 W	
Off	<0.3 W	
Input Terminal	One VGA connector, one HDMI connector ,one DP connector (cable inclusion varies by region)	

## 27-inch Full HD Model

<b>Display</b>	<b>68.6 cm wide screen</b>	27 inches wide screen
<b>Type</b>	LCD	
<b>Viewable Image Size</b>	<b>68.6 cm diagonal</b>	27-inch diagonal
<b>Tilt</b>	-5° to 25°	
<b>Weight</b>		
Without stand	<b>3.9 kg</b>	8.6 lbs
With stand	<b>4.7 kg</b>	10.4 lbs
<b>Dimensions (include stand)</b>		
Height	<b>43.90 cm</b>	17.30 inches
Depth	<b>20.00 cm</b>	7.90 inches
Width	<b>61.11 cm</b>	24.00 inches
<b>Maximum graphic resolution</b>	1920 x 1080 (60 Hz)	
<b>Optimum graphic resolution</b>	1920 x 1080 (60 Hz)	
<b>Dot pitch</b>	0.3114 (H) x 0.3114 (V) mm	
<b>Horizontal frequency</b>	30 kHz to 80 kHz	
<b>Vertical refresh rate</b>	50 Hz to 60 Hz	
<b>Environmental Requirements Temperature</b>		
Operating Temperature	5 to 35° C	41 to 95° F
Storage Temperature	-20 to 60° C	-4 to 140° F
<b>Relative humidity</b>	20% to 80%	
<b>Power Source</b>	100 – 240 VAC 50/60 Hz	
<b>Altitude:</b>		
Operating	<b>0 m to 5,000 m</b>	0 to 16,400 ft
Storage	<b>0 m to 12,192 m</b>	0 to 40,000 ft
<b>Measured power consumption:</b>		
Full power	28 W	
Typical settings	24 W	
Sleep	<0.3 W	
Off	<0.3 W	
Input Terminal	One VGA connector, one HDMI connector ,one DP connector (cable inclusion varies by region)	

## Preset display resolutions

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

Preset	Pixel Format	Horz Freq (kHz)	Vert Freq (Hz)
1	640 x 480	31.469	59.94
2	720 x 400	31.469	70.087
3	800 x 600	37.879	60.317
4	1024 x 768	48.363	60.004
5	1280 x 720	45.00	60.00
6	1280 x 800	49.702	59.81
7	1280 x 1024	63.981	60.02
8	1440 x 900	55.935	59.887
9	1600 x 900	60.00	60.00
10	1680 x 1050	65.29	59.954
11	1920 x 1080	67.50	60.00

Preset	Timing Name	Pixel Format	Horz Freq (kHz)	Vert Freq (Hz)
1	480p	720 x 480	31.469	59.94
2	720p60	1280 x 720	45.00	60.00
3	576p	720 x 576	31.25	50.00
4	720p50	1280 x 720	37.50	50.00
5	1080p60	1920 x 1080	67.50	60.00
6	1080p50	1920 x 1080	56.250	50.00

## Energy saver feature

The monitor supports a reduced power state. The reduced power state is entered into if the monitor detects the absence of either the horizontal sync signal or the vertical sync signal. Upon detecting the absence of these signals, the monitor screen is blanked, the backlight is turned off, and the power light turns amber. When the monitor is in the reduced power state, the monitor utilizes <0.5 watts of power. There is a brief warm-up period before the monitor returns to its normal operating state.

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

 **NOTE:** The above 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's Sleep Timer utility, you can also program the monitor to enter into the reduced power state at a predetermined time. When the monitor's Sleep Timer utility causes the monitor to enter the reduced power state, the power light blinks amber.

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## 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.

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

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### 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.