

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 select your country. Select **Get software and drivers**, and then follow the on-screen instructions.

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About This Guide

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

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.

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.

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1 Getting Started

Important safety information

An AC 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 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.

⚠ **CAUTION:** 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:

- 54.61 cm (21.5-inch) diagonal viewable screen area with 1920 x 1080 resolution, plus full-screen support for lower resolutions; includes custom scaling for maximum image size while preserving original aspect ratio
- 58.42 cm (23-inch) diagonal viewable screen area with 1920 x 1080 resolution, plus full-screen support for lower resolutions; includes custom scaling for maximum image size while preserving original aspect ratio
- 60.47 cm (23.8-inch) diagonal viewable screen area with 1920 x 1080 resolution, plus full-screen support for lower resolutions; includes custom scaling for maximum image size while preserving original aspect ratio
- 63.33 cm (25-inch) diagonal viewable screen area with 1920 x 1080 resolution, plus full-screen support for lower resolutions; includes custom scaling for maximum image size while preserving original aspect ratio
- 68.6 cm (27-inch) diagonal viewable screen area with 1920 x 1080 resolution, plus full-screen support for lower resolutions; includes custom scaling for maximum image size while preserving original aspect ratio
- Nonglare panel with an LED backlight – 54.61 cm (21.5–inch), 58.42 cm (23–inch), 60.47 cm (23.8–inch) models
- Low haze panel — 63.33 cm (25–inch), 68.6 cm (27–inch) models
- Wide viewing angle to allow viewing from a sitting or standing position, or when moving from side to side
- Tilt capability
- VGA video input
- HDMI (High-Definition Multimedia Interface) video input
- 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
- My Display software for adjusting monitor settings
- 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, and select your country. Select **Get software and drivers**, and then follow the on-screen instructions.

Rear components

Depending on your monitor model, the rear components will differ.

54.61 cm/21.5–inch model, 58.42 cm/23–inch model, and 60.47 cm/23.8–inch model



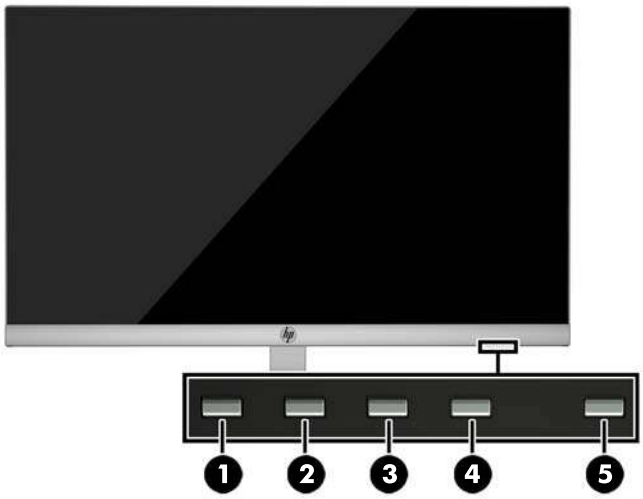
Component		Function
1	HDMI connector	Connects the HDMI cable to the monitor.
2	VGA connector	Connects the VGA cable to the monitor.
3	Power connector	Connects the power cable to the monitor.

63.33 cm/25–inch model and 68.6 cm/27–inch model



Component		Function
1	HDMI connectors (2)	Connects the HDMI cable to the monitor.
2	VGA connector	Connects the VGA cable to the monitor.
3	Power connector	Connects the power cable to the monitor.

Front bezel controls



Control		Function
1	Menu/OK	Opens the OSD menu or selects items on the OSD menu.
2	Information/Minus	Information: Shows Monitor Information window. Minus: If the OSD menu is on, press to navigate backward through the OSD menu and decrease adjustment levels.
3	Input/Plus	Input: If the OSD menu is inactive, press to switch the video signal input (VGA or HDMI). Plus: If the OSD menu is on, press to navigate forward through the OSD menu and increase adjustment levels.
4	Auto Adjustment/QuickView/Exit	Auto Adjustment: If the OSD menu is inactive, press to activate the auto-adjustment feature to optimize the screen image (for VGA). QuickView: If the OSD menu is inactive, press to activate the QuickView to choose different video settings (for HDMI). Exit: If the OSD menu is on, press to save any changes made, and exit the OSD menu.
5	Power	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

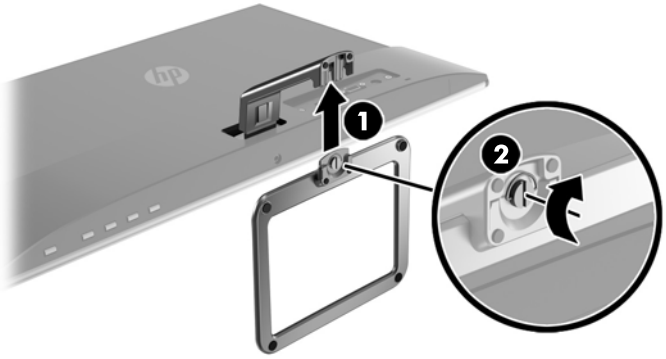
Installing the monitor stand

⚠ **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.

1. Lay the display head face down on a flat surface covered by a clean, dry cloth.
2. Attach the top of the stand arm (1) to the connector (2) on the back of the display panel. The stand arm will click into place.



3. Slide the base (1) into the bottom of the stand arm until the center holes are aligned. Then tighten the screw (2) on the underside of the base.



Connecting the cables

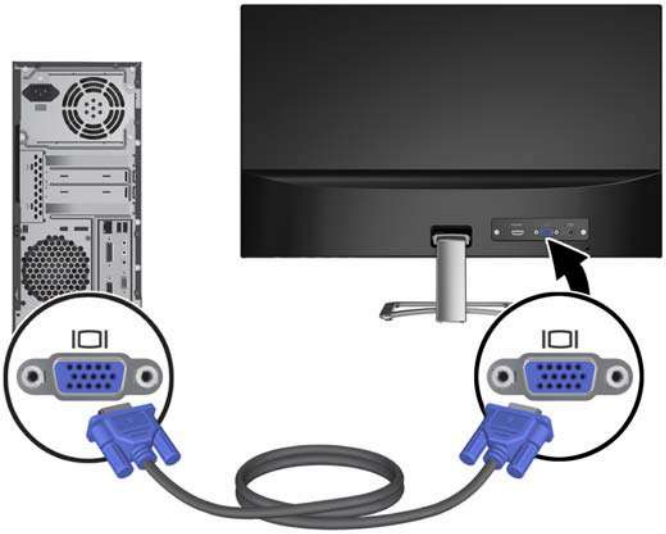
NOTE: The monitor ships with select cables. Not all cables shown in this section are included with the monitor.

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

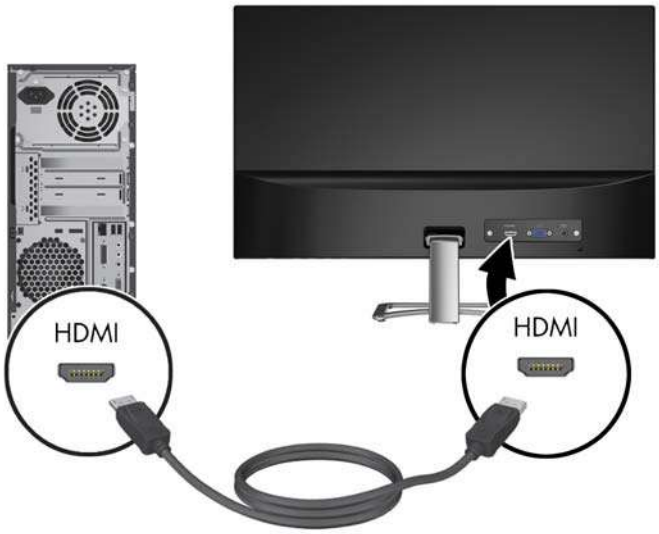
2. Connect a video cable.

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**.

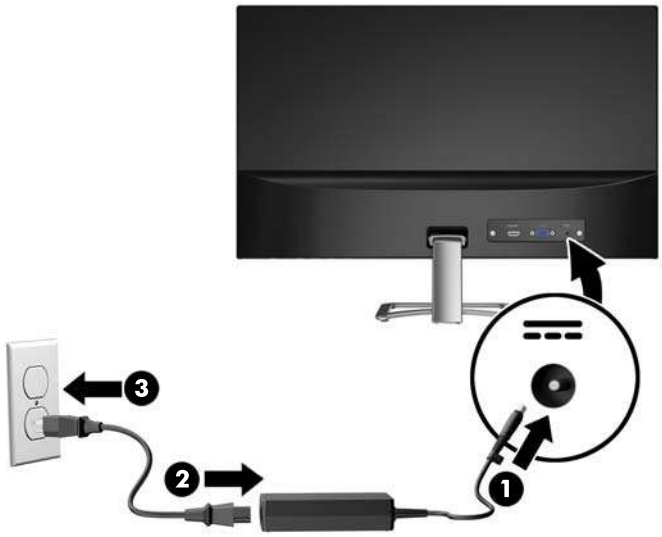
- Connect a VGA cable to the VGA connector on the rear of the monitor and the other end to the VGA connector on the source device.



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



3. Connect the round end of the power supply cord to the monitor (1), and then connect one end of the power cord to the power supply (2) and the other end to a grounded AC outlet (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.

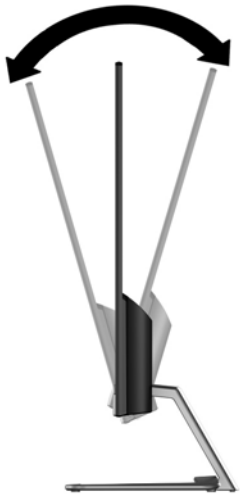
Plug the power cord into a grounded (earthed) AC outlet that is easily accessible at all times.

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.

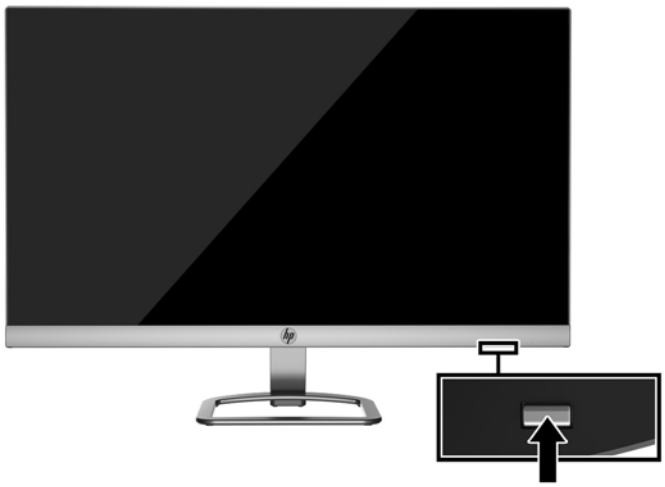
Adjusting the monitor

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 of the monitor to turn it on.



CAUTION: 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 bottom of the monitor, and then select **Power Control** > **Power LED** > **Off**.

When the monitor is powered on, a Monitor 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; default setting is On), the current preset screen resolution, and the recommended preset screen resolution.

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

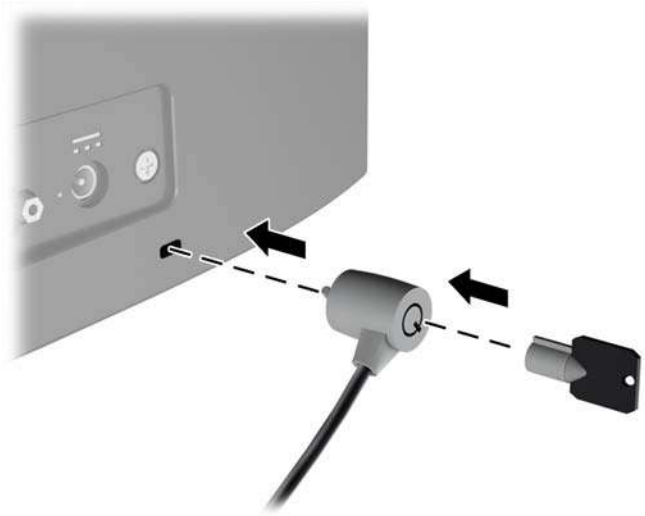
HP Watermark and Image Retention Policy

The IPS monitor models are designed with IPS (In-Plane Switching) display technology which provides ultra-wide viewing angles and advanced image quality. IPS monitors are suitable for a wide variety of advanced image quality applications. This panel technology, however, is not suitable for applications that exhibit static, stationary or fixed images for long periods of time without the use of screen savers. These types of applications may include camera surveillance, video games, marketing logos, and templates that are displayed on the screen for a prolonged period of time. Static images may cause image retention damage that could look like stains or watermarks on the monitor's screen.

Monitors in use for 24 hours per day that result in image retention damage are not covered under the HP warranty. To avoid image retention damage, always turn off the monitor when it is not in use or use the power management setting, if supported on your system, to turn off the display when the system is idle.

Installing a security cable

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



2 Using the Monitor

Downloading the monitor drivers

Installing from the optical disc

To install the .INF and .ICM files on the computer from the optical disc:

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.

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 and select the appropriate country and language.
2. Select **Get software and drivers**.
3. Enter your HP monitor model in the search field and select **Find my product**.
4. If necessary, select your monitor from the list.
5. Select your operating system, and then click **Next**.
6. Click **Driver - Display/Monitor** to open the list of drivers.
7. Click on the driver name.
8. Click **Download** and follow the on-screen instructions to download the software.

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 bottom side of the monitor's front 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 Function buttons on the bottom side of the monitor's front bezel 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 button labels are variable depending on the menu or submenu that is active.

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

Main Menu	Description
Brightness	Adjusts the brightness level of the screen.
Contrast	Adjusts the screen contrast.
Color Control	Selects and adjusts the screen color.
Input Control	Selects the video input signal.
Image Control	Adjusts the screen 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 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 monitor.
Exit	Exits the OSD menu screen.

Using Auto-Sleep Mode

The monitor supports an OSD (On-Screen Display) menu option called **Auto-Sleep Mode** that allows you to enable or disable a reduced power state for the monitor. When Auto-Sleep Mode is enabled (enabled by default), the monitor will enter a reduced power state when the host PC 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 PC sends an active signal to the monitor (for example, if you activate the mouse or keyboard).

You can disable Auto-Sleep Mode in the OSD. Press one of the four Function buttons on the bottom side of the front bezel 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**.

3 Using *My Display* software

The disc provided with the monitor includes *My Display* software. Use *My Display* software to choose preferences for optimum viewing. You can select settings for gaming, movies, photo editing or just working on documents and spreadsheets. You can also easily adjust settings such as brightness, color, and contrast using *My Display* software.

Installing the software

To install the software:

1. Insert the disc in your computer disc drive. The disc menu is displayed.
2. Select the language.

   NOTE: This choice selects the language you will see while installing the software. The language of the software itself will be determined by the operating system language.

3. Click **Install My Display Software**.
4. Follow the on-screen instructions.
5. Restart the computer.

Using the software

To open the *My Display* software:

1. Click the **HP My Display** icon on the taskbar.

   Or

   Click **Windows Start** ™ on the taskbar.
2. Click **All Programs**.
3. Click **HP My Display**.
4. Select **HP My Display**.

   For additional information, refer to the on-screen **Help** within the software.

Downloading the software

If you prefer to download the *My Display* software, follow the instructions below.

1. Go to http://www.hp.com/support and select the appropriate country and language.
2. Select **Get software and drivers**, type your monitor model in the search field, and click **Find my product**.
3. If necessary, select your monitor from the list.
4. Select your operating system, and then click **Next**.
5. Click **Utility - Tools** to open the list of utilities and tools.
6. Click **HP My Display**.
7. Click the **System Requirements** tab, and then verify that your system meets the program minimum requirements.
8. Click **Download** and follow the on-screen instructions to download *My Display*.

4 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 off.	Press the 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 5 for more information.
	System is in sleep mode.	Press any key on the keyboard or move the mouse to exit sleep mode.
	Video card is incompatible.	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 monitor. Be sure that the computer power is off while you connect the video cable.
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 23 for more information.
The monitor is off but it did not seem to enter into sleep mode.	The monitor'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 monitor's OSD Lockout function is enabled.	Press and hold the Menu button on the bottom side of the front 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 Power button for 10 seconds to disable the Power Button Lockout function.

Using the auto-adjustment function (analog input)

When you first set up the monitor, conduct a Factory Reset of the computer, or change the resolution of the monitor, the Auto-Adjustment feature automatically engages, and attempts to optimize your screen for you.

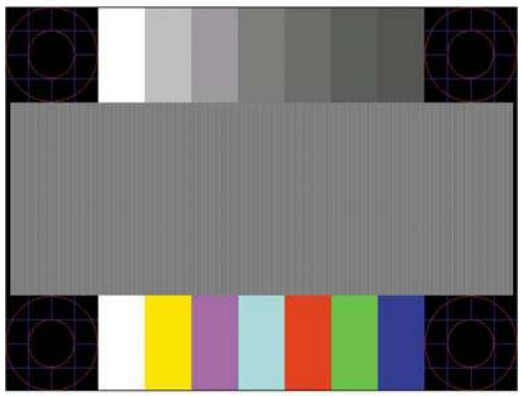
You may also optimize the screen performance for the VGA (analog) input at any time by using the auto button on the monitor (see your model's user guide for the specific button name) and the auto-adjustment pattern software utility on the optical disc provided (select models only).

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

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

To use the auto-adjustment feature:

1. Allow the monitor to warm up for 20 minutes before adjusting.
2. Press the auto button on the bottom side of the front bezel.
    - You can also press the Menu button, and then select **Image Control > Auto-Adjustment** from the OSD menu.
    - If the result is not satisfactory, continue with the procedure.
3. Insert the optical disc into the optical drive. The optical disc menu is displayed.
4. Select **Open Auto-Adjustment Utility**. The setup test pattern is displayed.
5. Press the auto button on the bottom side of the front bezel to produce a stable, centered image.
6. Press the ESC key or any other key on the keyboard to exit the test pattern.



NOTE: The auto-adjustment test pattern utility can be downloaded from http://www.hp.com/support.

Optimizing image performance (analog input)

Two controls in the on-screen display can be adjusted to improve image performance: Clock and Phase (available in the OSD menu).

NOTE: The Clock and Phase controls are adjustable only when using an analog (VGA) input. These controls are not adjustable for digital inputs.

The Clock must first be set correctly since the Phase settings are dependent on the main Clock setting. Use these controls only when the auto-adjustment function does not provide a satisfactory image.

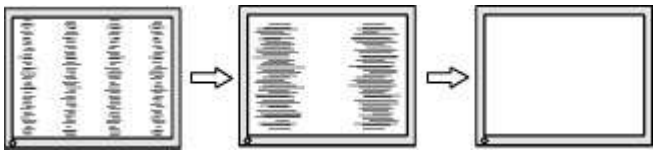
- **Clock**—Increases/decreases the value to minimize any vertical bars or stripes visible on the screen background.
- **Phase**—Increases/decreases the value to minimize video flickering or blurring.

NOTE: When using the controls, you will obtain the best results by using the auto-adjustment pattern software utility provided on the optical disc.

When adjusting the Clock and Phase values, if the monitor images become distorted, continue adjusting the values until the distortion disappears. To restore the factory settings, select **Yes** from the **Factory Reset** menu in the on-screen display.

To eliminate vertical bars (Clock):

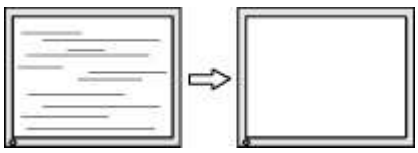
1. Press the Menu button on the bottom of the front bezel to open the OSD menu, and then select **Image Control** > **Clock and Phase**.
2. Use the Function buttons on the bottom of the monitor front bezel that display up and down arrow icons to eliminate vertical bars. Press the buttons slowly so that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



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

To remove flickering or blurring (Phase):

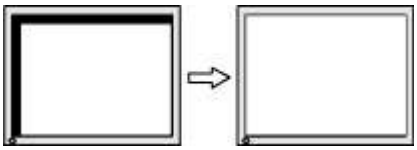
1. Press the Menu button on the bottom of the monitor front bezel to open the OSD menu, and then select **Image Control** > **Clock and Phase**.
2. Press the Function buttons on the bottom of the monitor front bezel that display up and down arrow icons to eliminate flickering or blurring. Flickering or blurring may not be eliminated, depending on the computer or graphics controller card installed.



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

1. Press the Menu button on the bottom of the front bezel to open the OSD menu, and then select **Image Position**.

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



Button lockouts

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

Product support

For additional information on using your monitor, go to http://www.hp.com/support. Select your country or region, select **Troubleshooting**, and then enter your model in the search window and click the **Go** button.

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

If the information provided in the guide does not address your questions, you can contact support. For U.S. support, go to http://www.hp.com/go/contactHP. For worldwide support, go to http://welcome.hp.com/country/us/en/wwcontact_us.html.

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.

- Find support telephone numbers
- 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 of the display head. You may need these numbers when contacting HP about the monitor model.

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



5 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.
- When removing the monitor stand, you must lay 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 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.

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.

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.

54.61 cm/21.5–inch model

Display	54.61 cm wide screen	21.5-inch wide screen
Type	IPS	
Viewable Image Size	54.61 cm diagonal	21.5-inch diagonal
Maximum Weight (Unpacked)	2.44 kg	5.38 lb
Dimensions (include base)		
Height	38.46 cm	15.14 inches
Depth	18.36 cm	7.23 inches
Width	49.79 cm	19.60 inches
Maximum Graphic Resolution	1920 x 1080	
Optimum Graphic Resolution	1920 x 1080	
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 connector, one VGA connector	

58.42 cm/23–inch model

Display	58.42 cm wide screen	23-inch wide screen
Type	IPS	
Viewable Image Size	58.42 cm diagonal	23-inch diagonal
Maximum Weight (Unpacked)	2.72 kg	5.99 lb
Dimensions (include base)		
Height	40.32 cm	15.87 inches
Depth	18.36 cm	7.22 inches
Width	53.10 cm	20.90 inches

Maximum Graphic Resolution	1920 x 1080	
Optimum Graphic Resolution	1920 x 1080	
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 connector, one VGA connector	

60.47 cm/23.8–inch model

Display	60.47 cm wide screen	23.8-inch wide screen
Type	IPS	
Viewable Image Size	60.47 cm diagonal	23.8-inch diagonal
Maximum Weight (Unpacked)	3.04 kg	6.7 lb
Dimensions (include base)		
Height	40.89 cm	16.09 inches
Depth	18.36 cm	7.23 inches
Width	53.99 cm	21.25 inches
Maximum Graphic Resolution	1920 x 1080	
Optimum Graphic Resolution	1920 x 1080	
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 connector, one VGA connector	

63.33 cm/25–inch model

Display	63.33 cm wide screen	25-inch wide screen
Type	IPS	
Viewable Image Size	63.33 cm diagonal	25-inch diagonal
Maximum Weight (Unpacked)	3.37 kg	7.43 lb
Dimensions (include base)		
Height	42.56 cm	16.76 inches
Depth	19.46 cm	7.66 inches

Width	57.61 cm	22.68 inches
Maximum Graphic Resolution	1920 x 1080	
Optimum Graphic Resolution	1920 x 1080	
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	Two HDMI connectors, one VGA connector	

68.6 cm/27–inch model

Display	68.6 cm wide screen	27-inch wide screen
Type	IPS	
Viewable Image Size	68.6 cm diagonal	27-inch diagonal
Maximum Weight (Unpacked)	3.79 kg	8.35 lb
Dimensions (include base)		
Height	45.57 cm	17.93 inches
Depth	19.46 cm	7.66 inches
Width	62.10 cm	24.44 inches
Maximum Graphic Resolution	1920 × 1080	
Optimum Graphic Resolution	1920 x 1080	
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	Two HDMI connectors, one VGA connector	

Preset display resolutions

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

54.61 cm/21.5-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	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	1680 × 1050	65.290	59.954
12	1920 × 1080	67.500	60.000

58.42 cm/23-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	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	1680 × 1050	65.290	59.954
12	1920 × 1080	67.500	60.000

60.47 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	800 × 600	37.879	60.317
4	1024 × 768	48.363	60.004
5	1280 × 720	45.000	60.000

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63.33 cm/25-inch model

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9	1440 × 900	55.935	59.887
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11	1680 × 1050	65.290	59.954
12	1920 × 1080	67.500	60.000

68.6 cm/27-inch model

Preset	Pixel Format	Horz Freq (kHz)	Vert Freq (Hz)
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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	1680 × 1050	65.290	59.954
12	1920 × 1080	67.500	60.000

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 monitors support a reduced power state. The reduced power state will be 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 is turned amber. When the monitor is in the reduced power state, the monitor will utilize 0.3 watts of power. There is a brief warm-up period before the monitor will return 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.