



HP ENVY 24 IPS Monitor

User Guide

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About This Guide

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

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1 Product Features

The light-emitting diode (LED) backlit monitor has an active matrix, In-Plane Switching (IPS) panel. The monitor features include:

- 60.5 cm (23.8-inch) diagonal viewable area display with 1920 x 1080 resolution, plus full-screen support for lower resolutions; includes custom scaling for maximum image size while preserving original aspect ratio
- Tilt capability and easy viewing from sitting or standing position, or while moving from one side of the monitor to the other
- IPS technology provides wide viewing angles with colors that maintain their integrity
- Video signal input to support high-definition multimedia interface (HDMI)
- Video signal input to support mobile high-definition link (MHL); limited to mobile device output resolution
- Video signal input to support analog VGA
- Plug and play capability if supported by your operating system
- On-Screen Display (OSD) adjustments in 10 languages for easy setup and screen optimization
- My Display software for adjusting monitor settings through Windows
- High-bandwidth digital content protection (HDCP) on HDMI
- Software and documentation disc that includes monitor drivers and product documentation
- Energy saver feature to meet requirements for reduced power consumption
- Safety guidelines, certifications, and regulatory notices for this product are available in the *HP LCD Monitors Reference Guide* on the disc included with this monitor
- Beats Audio for optimized sound quality
- Dynamic Contrast

2 Setting Up the Monitor

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

Attaching the Monitor Base

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

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

1. Lift the monitor from its box and place it face down on a flat surface.
2. Slide the stand into the slots in the base until it locks in place.



3. Insert the stand into the slot on the back of the display head until it clicks.



Rear and Side Components




Table 2-1 Monitor rear and side components

Component	Function
1 Headphone jack	Connects the headphone cable (not included) to the monitor.
2 DC Power connector	Connects the DC power adapter to the monitor.
3 HDMI	Connects the HDMI cable from the source device to the monitor.
4 MHL	Connects the MHL cable from the source device to the monitor.
5 VGA	Connects the VGA cable from the source device to the monitor.
6 Audio	Connects the audio cable from the source device to the monitor.

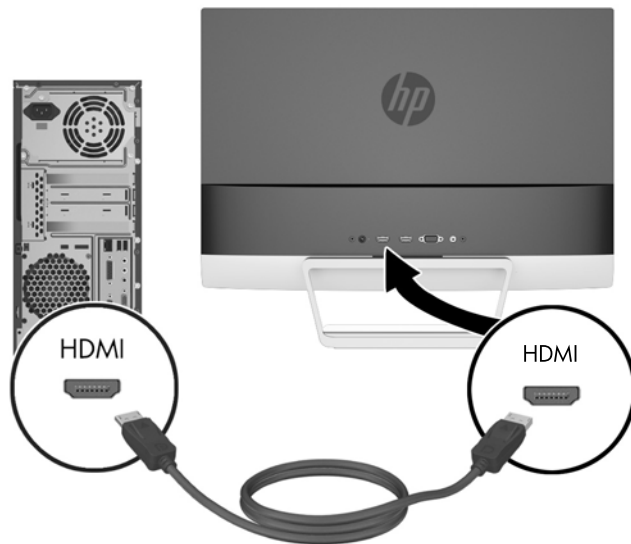
Connecting the Cables

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


 **NOTE:** The monitor is capable of supporting analog or HDMI input. The video mode is determined by the video cable used.

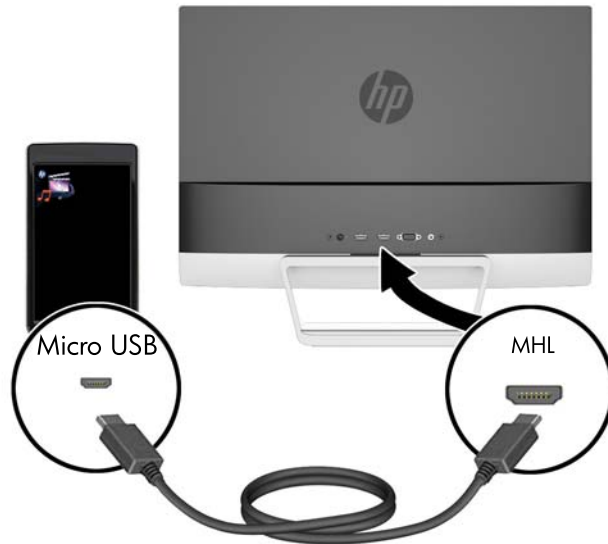
The monitor will automatically determine which inputs have valid video signals. The inputs can be selected by pressing the [Input Control/Plus](#) button on the front panel or through the On-Screen Display (OSD) feature by pressing the [Menu](#) button.

- An HDMI cable is provided. Connect the provided HDMI cable to the HDMI connector on the back of the monitor and the other end to the source device.

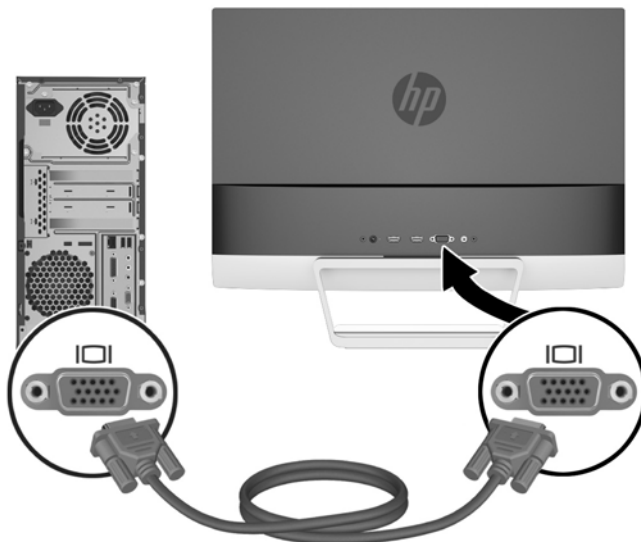


- Connect an MHL cable to the MHL connector on the rear of the monitor and to the micro USB connector on an MHL-enabled source device, such as a smart phone, to view content from the mobile device on your monitor screen.

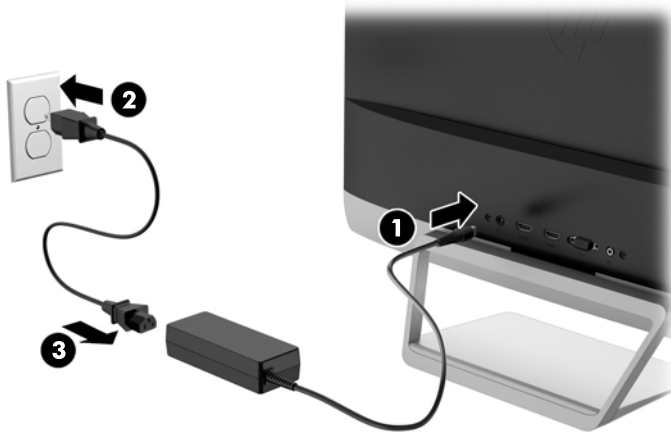
 **NOTE:** The MHL video is limited to the mobile device output resolution.



- A VGA cable is provided with the monitor for analog operation. Connect the provided 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 the round end of the power supply cord to the monitor, and then connect one end of the power cord to the power supply and the other end to a grounded electrical 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 electrical 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

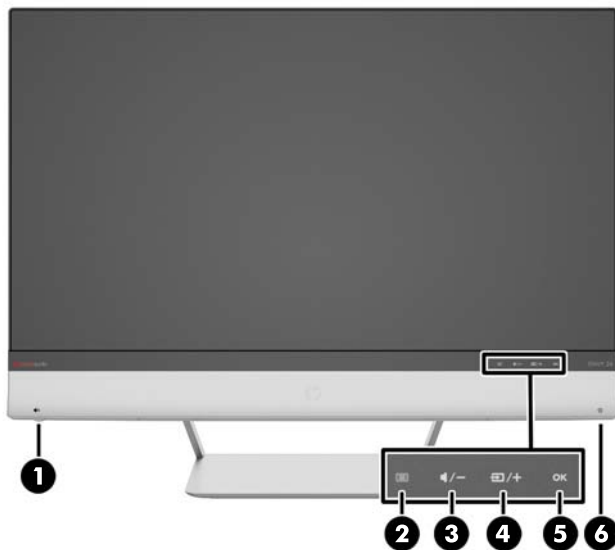








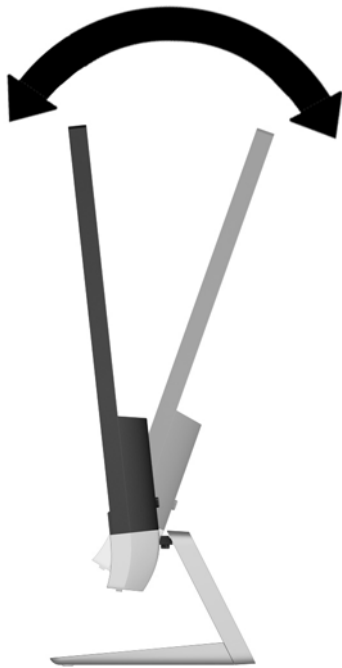
Table 2-2 Monitor front panel controls

Control		Function
1		Volume/Mute Rotate the dial control to adjust the volume. Press the dial upward to mute and unmute the audio.
2		Menu Opens, selects or exits the OSD menu.
3		Audio/Minus Opens the Audio menu to adjust the volume. If the OSD menu is on, press to navigate backward through the OSD menu and decrease adjustment levels.
4		Input Control/Plus If the OSD menu is inactive, press to activate the input control button that chooses the video signal input (VGA or HDMI). If the OSD menu is on, press to navigate forward through the OSD menu and increase adjustment levels.
5		OK If the OSD menu is on, press to select the highlighted menu item.
6		Power Turns the monitor on or off.

 **NOTE:** The front panel controls are inactive unless they are illuminated. Tap the Menu icon to illuminate and activate all other icons on the front panel. The backlight for the those icons turns off upon exit from the OSD or when the OSD times out.

Adjusting the Monitor

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



Turning on the Monitor

1. Press the power button on the front of the monitor to turn it on.
2. Press the power button on the source device 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 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.

* A prolonged period of time is 12 consecutive hours of non-use.

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

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

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

The monitor automatically scans the signal inputs for an active input and uses that input for the display. If two or more inputs are active, the monitor will display the default input source. If the default source is not one of the active inputs, and then the monitor will display the highest ranking priority

input in the following order: HDMI, and then VGA. You can change the default source in the OSD by pressing the front panel **Menu** button and selecting **Input Control > Default Input**.

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.

Locating the Rating Label

The rating label on the monitor provides the product number and serial number. You may need these numbers when contacting HP about the monitor model. The rating label is located on the bottom of the monitor.



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. My Display also provides an easy way to adjust settings such as brightness, color, and contrast.

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 the HP Technical Support website at <http://www.hp.com/support> and select your country/region.
2. Select **Drivers & Downloads**, type your monitor model in the **Find by product** search field, and click **Go**.
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 HP My Display.

4 Finding More Information


Reference Guides

Refer to the *HP LCD Monitors Reference Guide* included on the disc with your monitor for additional information on:

- Optimizing monitor performance
- Safety and maintenance guidelines
- Installing software from the disc
- Using the OSD menu
- Downloading software from the Web
- Agency regulatory information
- Troubleshooting and recommended solutions to common problems

Product Support


For additional information on using and adjusting your monitor, go to <http://www.hp.com/support>. Select your country or region, select **Troubleshooting**, and then type your monitor model in the **Find by product** search field. Click **Go**.

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

If the information provided in the guide or in the *HP LCD Monitors Reference Guide* do 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.

- E-mail support
- Find support telephone numbers
- Locate an HP service center

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.

Table A-1 HP ENVY 24 specifications

Display	60.5 cm wide screen	23.8 inches wide screen
Type	IPS	
Viewable image size	60.5 cm diagonal	23.8 inch diagonal
Tilt	-5° to 25°	
Weight		
Without stand	4.05 kg	6.9 lbs
With stand	5.07 kg	11.2 lbs
Dimensions (including base)		
Height	42.9 cm	16.87 in
Depth	16.1 cm	6.32 in
Width	54 cm	21.24 in
Maximum graphic resolution	1920 x 1080 (60 Hz)	
Optimum graphic resolution	1920 x 1080 (60 Hz)	
Text mode	720 x 400	
Dot pitch	0.2745 mm	
Pixels per inch	93 PPI	
Horizontal frequency	24 Hz to 80 kHz	
Vertical refresh rate	50 Hz to 76 Hz	
Environmental requirements temperature		
Operating temperature	5°C to 35°C	41°F to 95°F
Storage temperature	-20°C to 60°C	-4°F to 140°F
Relative humidity	20% to 70%	
Power source	100 VAC to 240 VAC 50/60 Hz	
Altitude:		
Operating	0 m to 5000 m	0 to 16,400 ft
Storage	0 m to 12192 m	0 to 40,000 ft

Table A-1 HP ENVY 24 specifications (continued)

Measured power consumption:	
Full power	54 W
Typical settings	26 W
Sleep	<0.5 W
Switch off	<0.5 W
Input terminal	One HDMI connector, one HDMI/MHL connector, one VGA connector

Recognizing 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 will appear properly sized and centered on the screen.

Table A-2 Factory preset modes

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	60
6	1280 x 1024	63.981	60.02
7	1440 x 900	55.935	59.887
8	1600 x 900	60	60
9	1680 x 1050	65.29	59.954
10	1920 x 1080	67.5	60

Table A-3 High-definition video formats

Preset	Timing name	Pixel format	Horz freq (kHz)	Vert freq (Hz)
1	480p	720 x 480	31.469	60
2	576p	720 x 576	31.25	50
3	720p50	1280 x 720	37.5	50
4	720p60	1280 x 720	45	60
5	1080p60	1920 x 1080	67.5	60
6	1080p50	1920 x 1080	56.25	50

Power Adapter

Table A-4 Power adapters/model

Manufacturer	Model number	Power supply rating
TPV	ADPC1965	65 W/19 V

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.

If this occurs, you may need to readjust the parameters of the monitor screen by using the on-screen display. Your changes can be made to any or all of these modes and saved in memory. The monitor automatically stores the new setting, and then recognizes the new mode just as it does a preset mode. In addition to the factory preset modes, there are at least 10 user modes that can be entered and stored.

Energy Saver Feature

The monitor supports a reduced power state. The reduced power state will be entered into if the monitor detects the absence of either the horizontal sync signal and/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 will utilize 0.5 watts of power. There is a brief warm-up period before the monitor will return 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 only works when connected to computers that have 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.