



HP ENVY 23 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:

- 58.4 cm (23-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 analog VGA
- Video signal input to support high-definition multimedia interface (HDMI)
- Plug and play capability if supported by your operating system
- Security slot provision on rear of monitor for optional cable lock
- 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

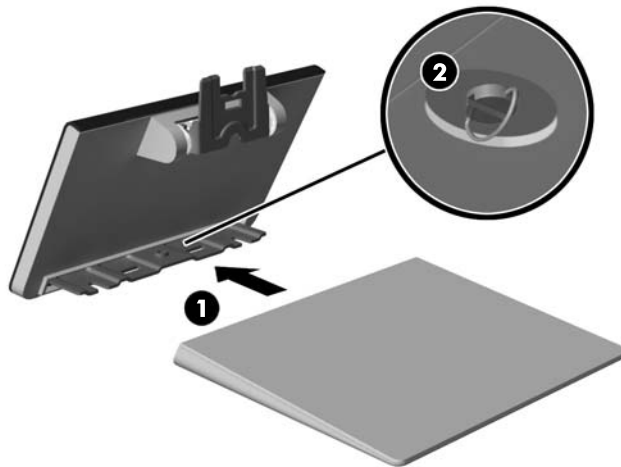
To set up the monitor, ensure that the power is turned off to the monitor, computer system, and other attached devices, then follow the instructions below.

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. Attach the base to the stand (1) and turn the screw (2) until it is finger tight to secure the base to the stand.



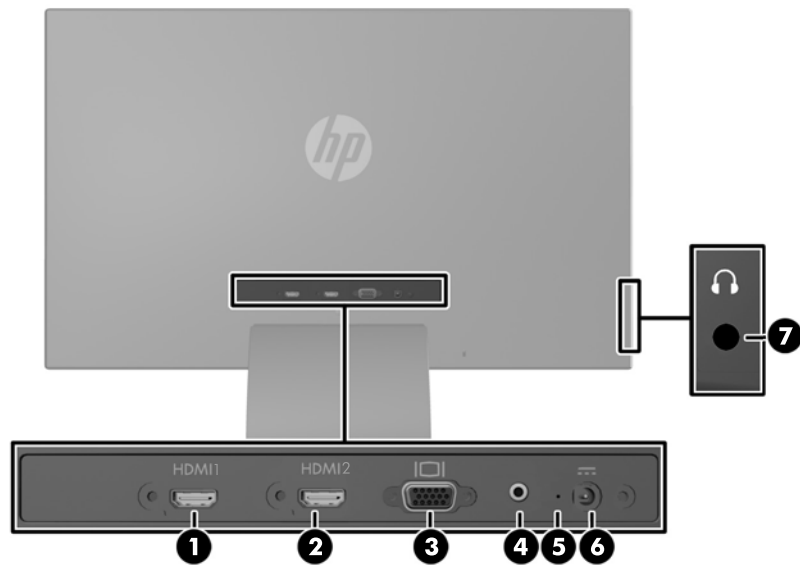
3. Insert the stand into the slot on the back of the display head until it clicks.



NOTE: When the base and stand are attached, the plastic hook automatically locks.




Rear and Side Components



| Component | Function |
|----------------------|--|
| 1 HDMI 1 | Connects the HDMI cable from the source device to the monitor. |
| 2 HDMI 2 | Connects the HDMI cable from the source device to the monitor. |
| 3 VGA | Connects the VGA cable from the source device to the monitor. |
| 4 Audio | Connects speakers to the monitor. |
| 5 DC Power LED | Illuminates when power adapter is connected to the monitor. |
| 6 DC Power Connector | Connects the DC power adapter to the monitor. |
| 7 Headphone jack | Connects the headphone cable (not included) to the monitor. |

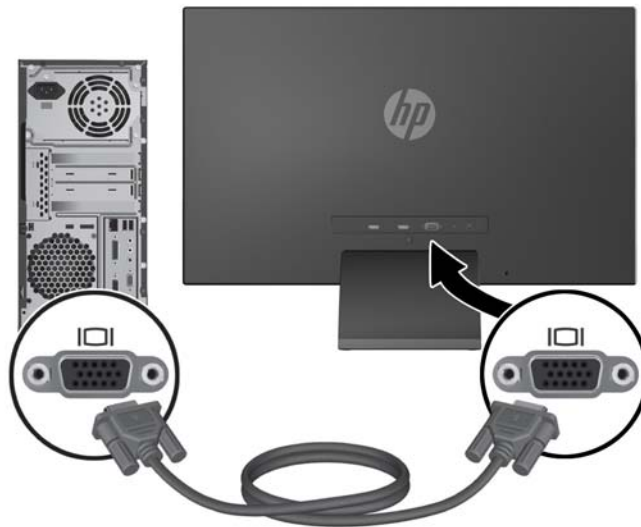
Connecting the Cables

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

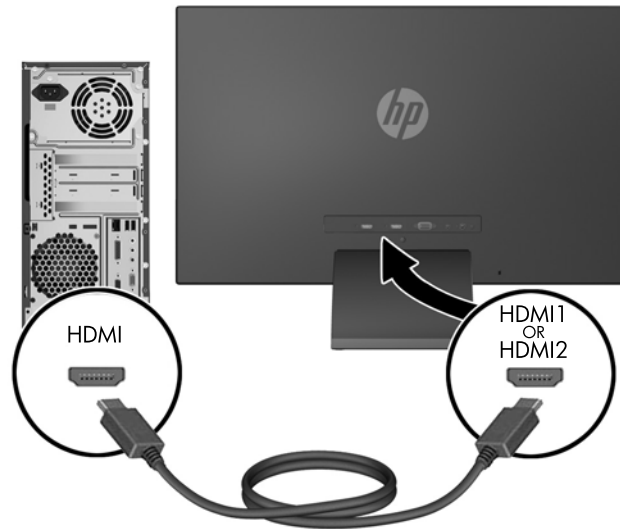
 **NOTE:** The monitor is capable of supporting analog or HDMI input. The video mode is determined by the video cable used.

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.

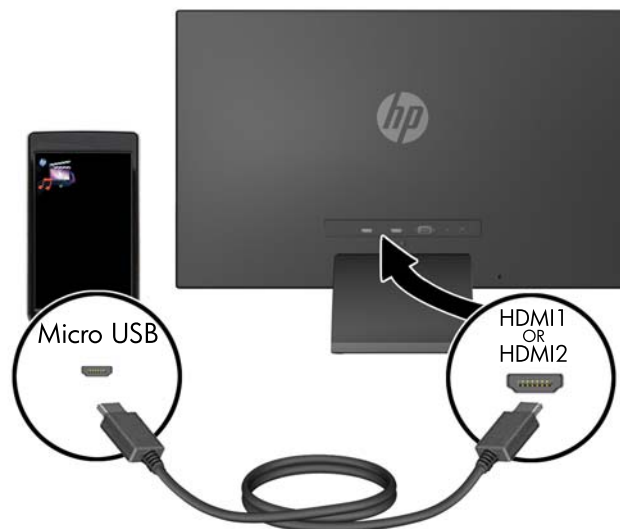
- A VGA cable is provided with the monitor for analog operation. Connect the provided VGA cable to the VGA connector on the rear of the monitor and the other end to the VGA connector on the source device.



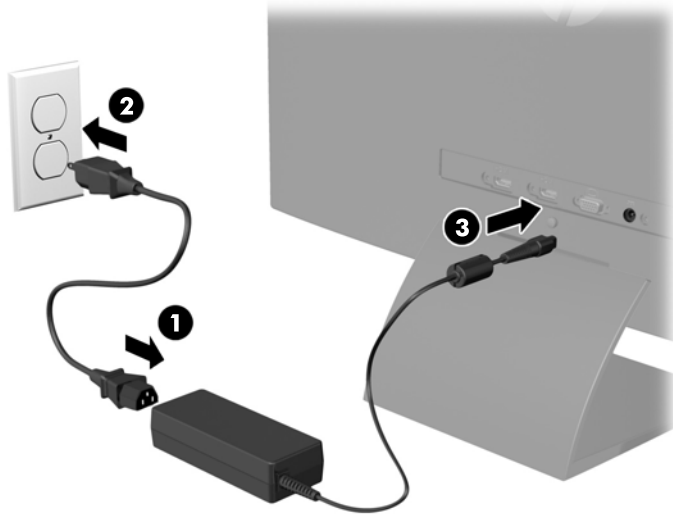
- An HDMI cable is provided. Connect the provided HDMI cable to an HDMI connector on the back of the monitor and the other end to the source device.



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



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

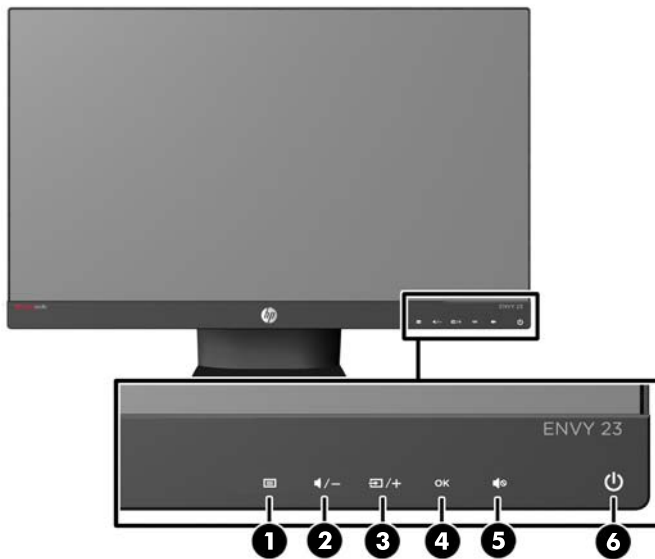









Table 2-1 Monitor Front Panel Controls

| Control | Function |
|--|---|
| 1  Menu | Opens, selects or exits the OSD menu. |
| 2  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. |
| 3  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. |
| 4  OK | If the OSD menu is on, press to select the highlighted menu item. |
| 5  Mute | If OSD menu is inactive, press to mute sound. |
| 6  Power | Turns the monitor on or off. |

 **NOTE:** The front panel controls are inactive unless they are illuminated. To activate the controls, tap on the area where the icons are located. All icons will become illuminated and active. The backlight for the icons will turn 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 computer 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, 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, then the monitor will display the highest ranking priority input in the following order: HDMI, 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.

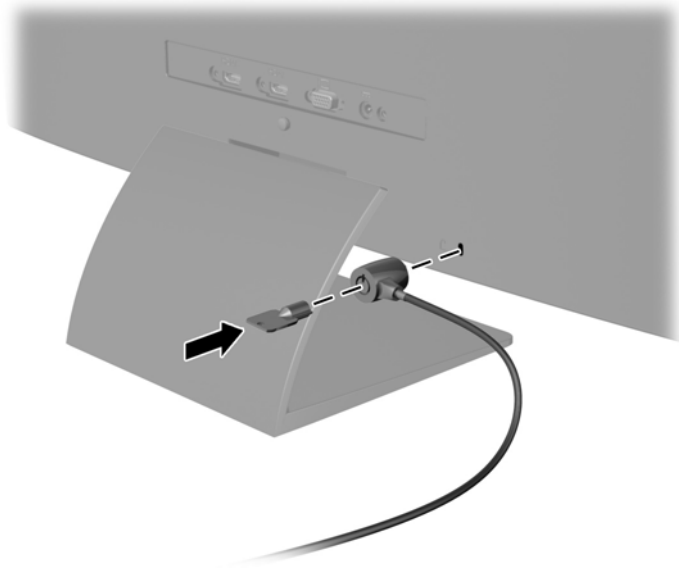
Locating the Rating Label

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.



Installing a Cable Lock

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




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 the **Windows Start button™** 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 & Software**, type your monitor model in the **Search** field, and click **Search**.
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 **Product Support & Troubleshooting**, and then type your monitor model in the **Search** field.

 **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 23 Specifications

| | | |
|--|--------------------------|-----------------------|
| Display | 58.4 cm wide screen | 23 inches wide screen |
| Type | IPS | |
| Viewable Image Size | 58.4 cm diagonal | 23-inch diagonal |
| Tilt | -5 to 25° | |
| Maximum Weight (Unpacked) | 3.53 kg | 7.78 lbs |
| Dimensions (include base) | | |
| Height | 40.4 cm | 15.92 inches |
| Depth | 17.3 cm | 6.83 inches |
| Width | 53.2 cm | 20.94 inches |
| Maximum Graphic Resolution | 1920 x 1080 (60 Hz) | |
| Optimum Graphic Resolution | 1920 x 1080 (60 Hz) | |
| Text Mode | 720 x 400 | |
| Dot Pitch | 0.265 (H) x 0.265 (V) mm | |
| Pixels Per Inch | 96 PPI | |
| Horizontal Frequency | 24 to 94 kHz | |
| Vertical Refresh Rate | 50 to 76 Hz | |
| Environmental Requirements Temperature | | |
| Operating Temperature | 5 to 35° C | 41 to 95° F |
| Storage Temperature | -20 to 60° C | -4 to 140° F |
| Relative Humidity | 20 to 70% | |
| Power Source | 100 – 240 VAC 50/60 Hz | |

Table A-1 HP ENVY 23 Specifications (continued)

| | | |
|-----------|--------------|------------------|
| Altitude: | | |
| Operating | 0 to 5000 m | 0 to 16,400 feet |
| Storage | 0 to 12192 m | 0 to 40,000 feet |

| | | |
|-----------------------------|------------|--|
| Measured Power Consumption: | | |
| Full Power | 28 watts | |
| Typical Settings | 26.5 watts | |
| Sleep | <0.5 watts | |
| Switch Off | <0.5 watts | |

| | | |
|----------------|--|--|
| Input Terminal | One VGA connector, two HDMI connectors | |
|----------------|--|--|

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 | 1920p60 | 1920 x 1080 | 67.5 | 60 |
| 6 | 1920p50 | 1920 x 1080 | 56.25 | 50 |

Power Adapter

Table A-4 Power Adapters/Model

| Manufacturer | Model Number | Power Supply Rating |
|--------------|----------------------|---------------------|
| LiteOn | PA-1041-91AM-LF | 40W/19V |
| Honor | ADS-45NP-19-1 19040G | 40W/19V |

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, 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.