



# HP Passport 1912nm and 1912nc Internet Monitors

User Guide

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## About This Guide

This guide provides information on setting up and using the Internet monitor.

 **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

## HP Passport 1912nm and 1912nc Internet Monitors

The HP Passport 1912nm and HP Passport 1912nc Internet monitors are designed to provide easy, simple access to the internet, streaming views of media content (video, audio, photos) directly through the monitor without the need for a PC. The monitors can also operate as standard external monitors when connected to a PC.

The Internet monitors have an active matrix, thin-film transistor (TFT) panel. The monitor models and features include:

- 1912nm and 1912nc models, 47 cm (18.5-inch) diagonal viewable area display with 1366 x 768 resolution, plus full-screen support for lower resolutions; includes custom scaling for maximum image size while preserving original aspect ratio
- Non-glare panel with CCFL backlight
- Web browser, video player, music player, and photo viewer
- Internet access and streaming views of media content without the need for a PC when in Net mode
- PC connectivity support when used as a standard monitor in PC mode
- Plug and play capability in PC mode
- Mode button on front panel that toggles between PC mode and Net mode
- 5ms response time
- Fast boot time
- USB 2.0 hub with one upstream port (connects to a computer) and five downstream ports (connects to USB devices)
- Audio in and audio out ports
- Built-in stereo speakers
- 4-in-1 media card reader (SD, MMC, MS, xD)
- Video signal input to support VGA analog
- Wired USB keyboard and mouse included
- Removable stand and Video Electronics Standards Association (VESA) standard mounting holes for flexible mounting solutions, including wall-mounting

- Security slot provision on rear of monitor for optional cable lock
- Tilt capability
- On-Screen Display (OSD) adjustments in several languages for easy setup and screen optimization
- Energy saver feature to meet requirements for reduced power consumption
- Energy Star® qualified
- Compliant with the following regulated specifications (for additional certifications and agency notices, refer to the *HP LCD Monitors Reference Guide* available on <http://www.hp.com/support>):
  - European Union CE Directives
  - Swedish TCO Requirements

## Net Mode vs PC Mode

The monitor can operate as a stand-alone Internet monitor (Net mode) or as a standard external monitor connected to a PC (PC mode).

- **Net Mode:** No PC is required. An active Ethernet cable is required for Internet access. In this mode you can browse the Internet, watch videos, listen to music, or view photographs.
- **PC Mode:** A PC is required. In this mode the monitor functions as a standard monitor and is totally independent of the Net mode interface and settings.

You can set up the monitor for both Net mode and PC mode and switch between the two modes by pressing the **Mode** button on the front of the monitor.

To set up the monitor for Net mode, refer to [Connecting the Cables for Net Mode on page 7](#). To set up the monitor for PC mode, refer to [Connecting the Cables for PC Mode on page 9](#).



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## 2 Setting Up the Monitor

You can install the monitor on a desktop or mount it on a mounting fixture such as a wall mount or swing arm. Be sure to place the monitor in a convenient, well-ventilated location. Connect the monitor cables after you have installed the monitor.

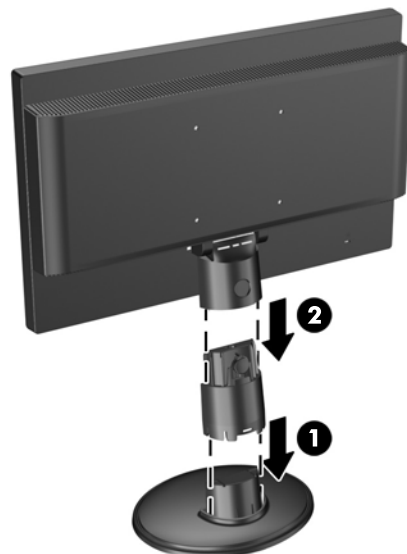
To set up the monitor, ensure that the power is turned off to the monitor and all attached devices, then follow the instructions below for your configuration.

### Preparing the Monitor for Desktop Use

To assemble the monitor for desktop use:


1. Set the monitor screen face down on a flat, soft, protected table or desk surface with the support column overhanging the edge.
2. Align the center column with the base and push the center column onto the base (1). Then align the monitor support column with the center column and push the monitor all the way onto the center column (2) until it snaps securely in place.

**Figure 2-1** Installing the Monitor Center Column and Base



3. Lift the monitor to an upright position and place on a flat, stable surface.

## Preparing the Monitor for Wall-Mounting

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

To attach the monitor to a mounting fixture:

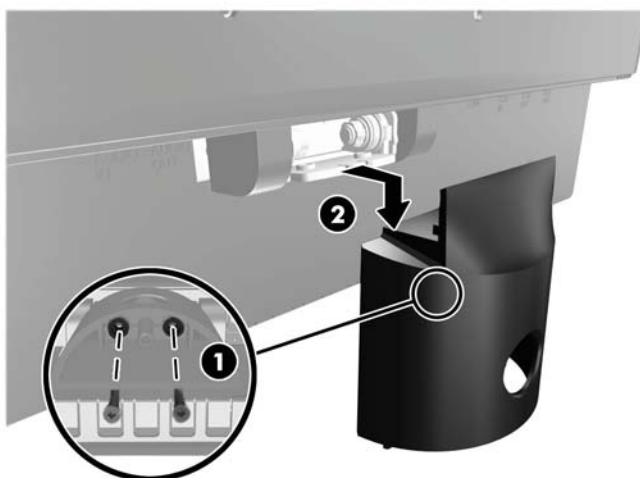
1. Set the monitor screen face down on a flat, soft, protected table or desk surface with the support column overhanging the edge.
2. If the center column and base are attached to the monitor, pinch together the two release tabs on the bottom of the base (1) and pull the base off the center column (2). Then press the button on the rear of the center column (3) and slide the center column off the monitor support column (4).

**Figure 2-2** Removing the Monitor Center Column and Base



3. Remove the two screws that attach the support column to the monitor (1), then slide the support column back and remove it from the monitor (2).

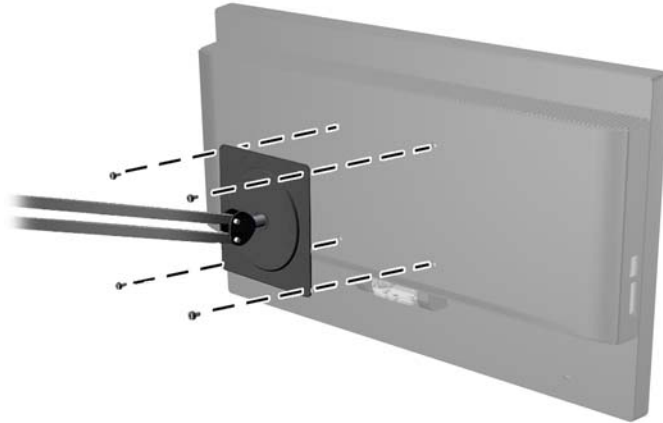
**Figure 2-3** Removing the Monitor Support Column



4. To attach the monitor to a mounting fixture, insert four 10mm screws through the holes on the mounting plate and into the mounting holes on the monitor.

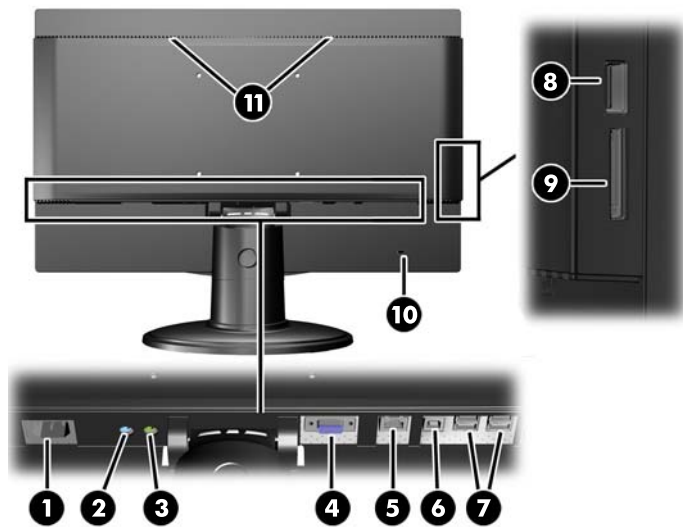
**⚠ CAUTION:** This monitor supports the VESA industry standard 100 mm mounting holes. To attach a third-party mounting solution to the monitor, four 4 mm, 0.7 pitch, and 10 mm long screws are required. Longer screws must not be used because they may damage the monitor. It is important to verify that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

**Figure 2-4** Mounting the Monitor



# Rear Components

Figure 2-5 Rear Components




Component	Function
1 AC Power Connector	Connects the AC power cord to the monitor.
2 Audio In Connector	Connects an input audio cable between the monitor and a PC when using the monitor in PC mode.
3 Audio Out Connector	Connects an output audio cable between the monitor and an external audio device.
4 VGA Connector	Connects a VGA cable between the monitor and a PC when using the monitor in PC mode.
5 Ethernet Connector	Connects an Ethernet cable to the monitor when using the monitor in Net mode.
6 USB In Connector	Connects the USB hub cable to the monitor's USB hub connector and to a host USB port/hub on a PC so that the USB ports on the monitor are active when using the monitor in PC mode.
7 4 USB Out Connectors	Connects external USB devices to the monitor.
8 USB Out Connector	Connects external USB devices to the monitor.
9 4-in-1 Media Card Reader Slot	Supports SD, MMC, MS, and xD cards.
10 Lock Slot	Attaches a locking mechanism to the monitor.
11 Speakers	Two 2-watt stereo speakers.

**NOTE:** In PC mode, a USB upstream cable (not provided) must be connected between the PC and the monitor's USB In connector in order for the USB Out connectors to function. In Net mode, the USB Out connectors function without connecting to a PC.

## Connecting the Cables

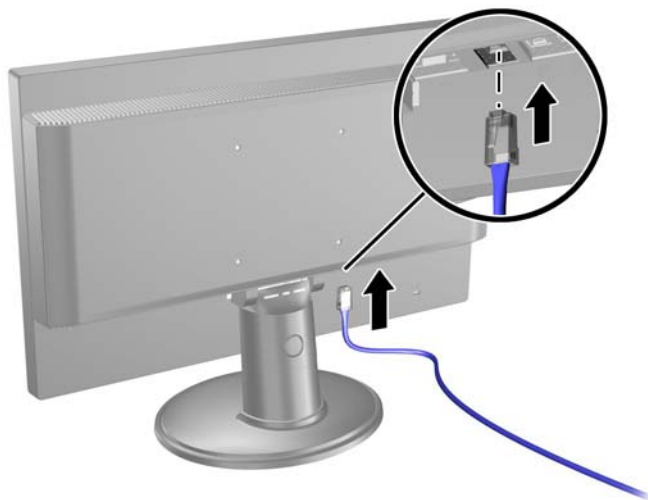
The cable connections required depends on whether you will operate the monitor as a stand-alone Internet monitor (Net mode) or as a standard external monitor connected to a PC (PC mode).

 **NOTE:** You can connect the cables for both Net mode and PC mode and switch between the two modes by pressing the [Mode](#) button on the front of the monitor.

### Connecting the Cables for Net Mode

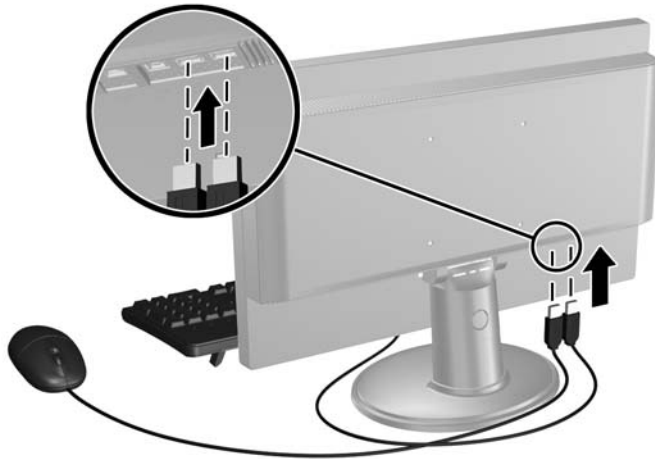
1. Place the monitor in a convenient, well-ventilated location.
2. Connect an active Ethernet cable to the Ethernet port on the monitor's rear panel.

**Figure 2-6** Connecting the Ethernet Cable



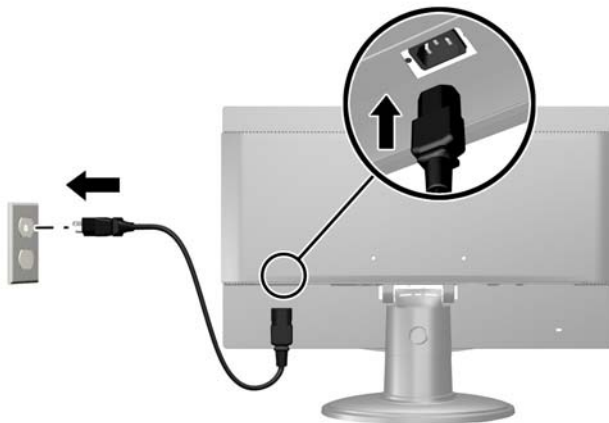
3. Connect the supplied keyboard and mouse (required to navigate) to the USB ports on the monitor's rear panel.

**Figure 2-7** Connecting the Keyboard and Mouse



4. Connect one end of the power cord to the AC power connector on the back of the monitor and the other end to an electrical wall outlet.

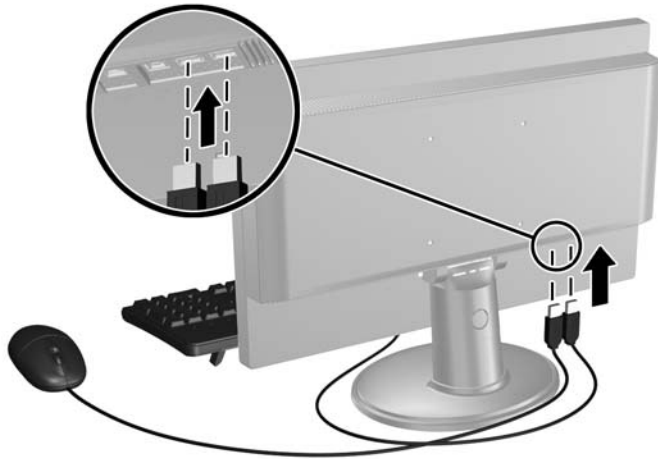
**Figure 2-8** Connecting the Power Cord



## Connecting the Cables for PC Mode

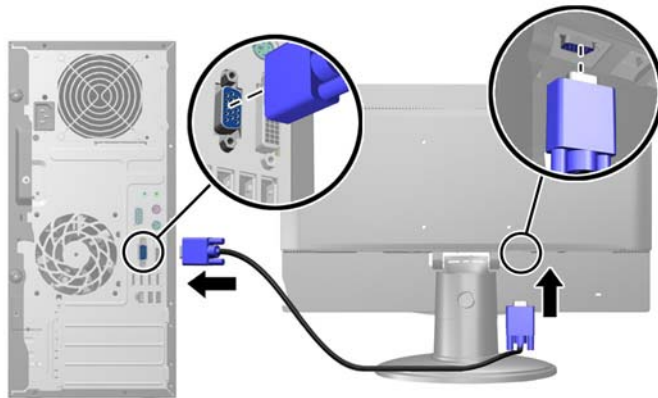
1. Place the monitor in a convenient, well-ventilated location near the PC.
2. Connect the supplied keyboard and mouse (required to navigate) to the USB ports on the monitor's rear panel.

**Figure 2-9** Connecting the Keyboard and Mouse




3. Connect a VGA cable between the VGA connector on the PC and the VGA connector on the rear of the monitor.

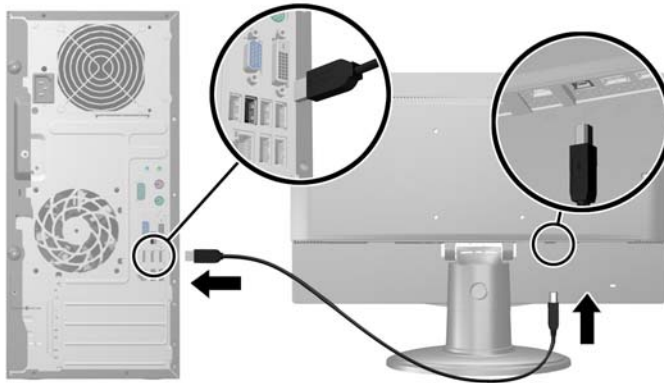
**Figure 2-10** Connecting the VGA Cable




4. Connect the upstream end of a USB cable to the USB In connector on the monitor's rear panel and the downstream end to a USB Out connector on the PC.

 **NOTE:** This step is optional. However, the USB cable is required for the USB Out ports and the 4-in-1 media card reader on the monitor to function in PC mode.

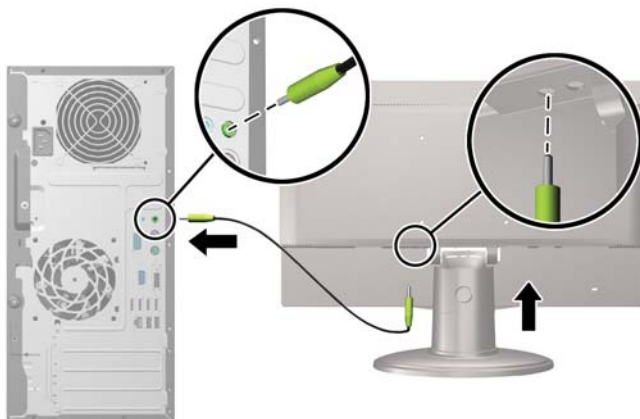
**Figure 2-11** Connecting a USB Cable



5. Connect one end of an audio cable to the Audio In connector on the monitor's rear panel and the other end to an Audio Out connector on the PC.

 **NOTE:** This step is optional. However, the audio cable is required for the monitor's speakers to function in PC mode.

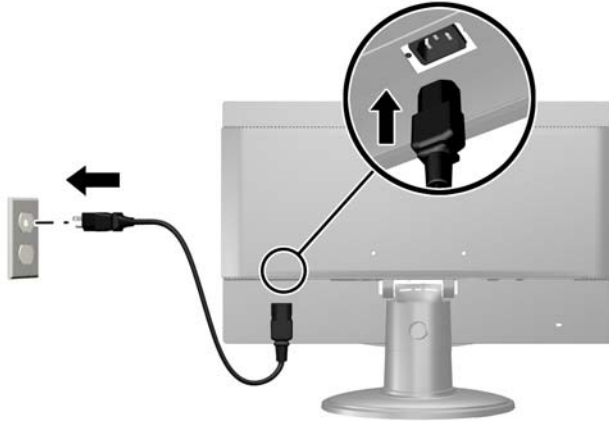
**Figure 2-12** Connecting an Audio Cable





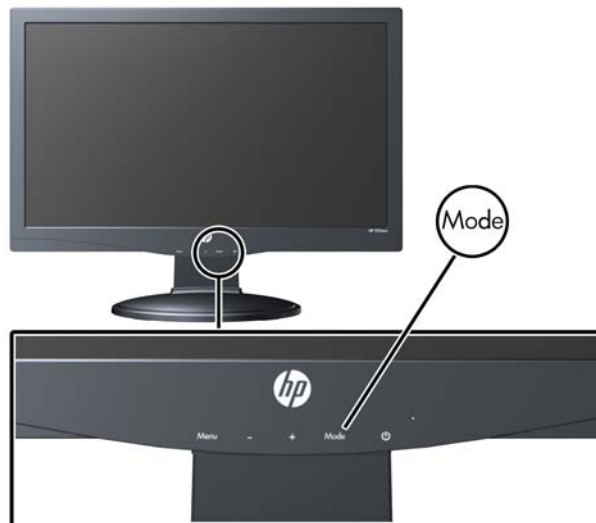
6. Connect one end of the power cord to the AC power connector on the back of the monitor and the other end to an electrical wall outlet.

**Figure 2-13** Connecting the Power Cord



7. After turning on power to the monitor, you must press the **Mode** button on the monitor's front panel to change from Net mode to PC mode.

**Figure 2-14** Pressing the Mode Button



# Front Panel Controls

Figure 2-15 Monitor Front Panel Controls

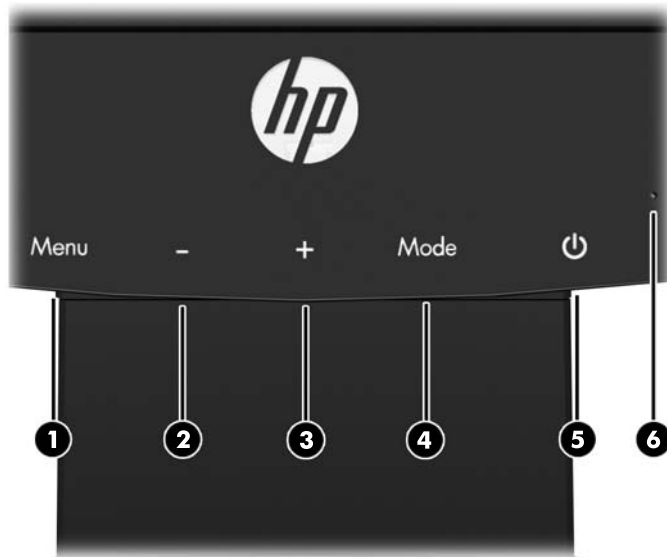


Table 2-1 Monitor Front Panel Controls

Control	Function
1 Menu	Opens the On-Screen Display (OSD) menu, selects items within the OSD menu, and closes the OSD menu.
2 - (Minus)	If the OSD menu is on, press to navigate backward through the OSD menu and decrease adjustment levels.  If the OSD menu is inactive, press to open the OSD volume control menu and adjust the volume level.
3 + (Plus)	If the OSD menu is on, press to navigate forward through the OSD menu and increase adjustment levels.  If the OSD menu is inactive and the monitor is in Net mode, press to open the OSD volume control menu and adjust the volume level.  If the OSD menu is inactive and the monitor is in PC mode, press to activate the auto adjustment feature to optimize the screen image.
4 Mode	Toggles the monitor between Net mode and PC mode.
5 Power	Turns the monitor on or off.
6 Power LED	Blue = Fully powered.  Amber = Sleep mode.  Flashing Amber = Sleep Timer mode.

## Adjusting the Tilt

For optimal viewing, adjust the screen tilt to your own preference.

1. Face the front of the monitor and hold the base so that you do not topple the monitor while changing the tilt.
2. Adjust the tilt by moving the top edge of the monitor either toward or away from you, without touching the screen.

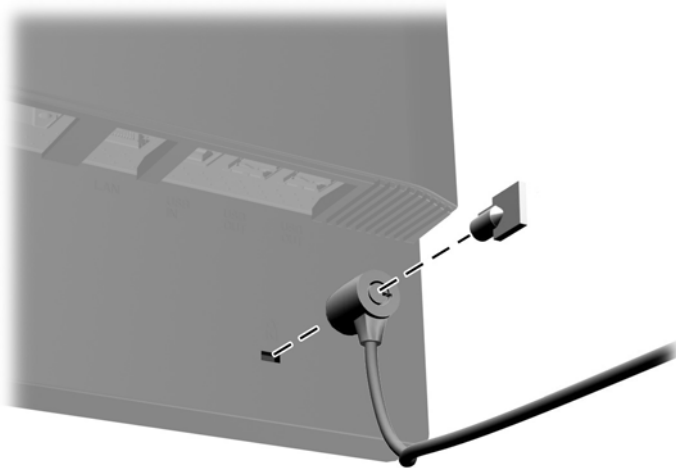
**Figure 2-16** Adjusting the Tilt



## Installing a Cable Lock

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


**Figure 2-17** Installing a Cable Lock




# Turning on the Monitor for the First Time

After connecting the cables, press the power button on the front of the monitor to turn it on.

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 **NOTE:** Net mode is the monitor's default mode. You can toggle between Net mode and PC mode by pressing the [Mode](#) button on the monitor's front panel.

 **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 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.


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The first time you turn on the monitor there will be a brief video highlighting the monitor's features (select models only). You can bypass the video by pressing the [Esc](#) key on your keyboard. If you would like to play this video again, it is stored as a sample in the Video player.

After the video ends or is bypassed the Startup Wizard will begin. Follow the instructions in the Startup Wizard to:

- Select your language
- Set the date and time
- Set the timer to turn off the display after an assigned period of inactivity
- Enter the network settings
- Assign a password that secures access to the monitor settings and unlocks the monitor, if desired

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 **NOTE:** You can modify the settings that were entered in the Startup Wizard any time by clicking the Settings icon on the Net mode Home page. For more information on the settings in the Startup Wizard, refer to [Adjusting the Settings on page 19](#).


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After completing the Startup Wizard, the Net mode Home page will be displayed.

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# 3 Using the Net Mode Interface


The Net mode Home page is displayed when the monitor is powered on. Click on one of the icons to use that feature of the Internet monitor.

 **NOTE:** The user interface and features in this chapter are only available when the monitor is in Net mode.





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**Figure 3-1** Net Mode Home Page



 **NOTE:** The Net mode modules listed below are independent applications that cannot be run simultaneously. For example, if you are listening to music in the Music module and switch to the Browser module, the music session will end.

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	Music	Click this icon to listen to music stored on a media device.
	Video	Click this icon to watch videos stored on a media device.
	Browser	Click this icon to browse the Internet.
	Photo	Click this icon to view photographs stored on a media device.

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Settings

Click this icon to adjust the monitor settings.



Home

This icon is displayed in the lower left corner of the screen when you are not at the Home page. You can click the Home icon at any time to return to the Home page.

**NOTE:** When you return to the Home page any Net mode application you were running will close (Video, Browser, Music, Photo).

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## Browsing the Internet

The monitor uses the Firefox web browser to browse the Internet and includes support for Adobe Flash and HTML5. You must have Internet access to browse the Internet (not provided).

To browse the Internet:

1. Ensure that you have a live Ethernet cable (not provided) plugged into the monitor.
2. Click the **Browser** icon on the Net mode Home page.
3. If you are in an environment with a firewall, you must manually enter an HTTP proxy configuration to use the browser. On the browser toolbar, go to **Edit > Preferences > Advanced > Network > Settings > Manual Proxy Configuration**, enter the information provided by your IT support and click the **OK** button to apply.
4. Use the browser to browse the Internet.

To change your browser's landing page:

1. Go the website that you would like to become your landing page.
2. Using the browser controls, go to **Edit** and then select **Preferences**.
3. In the new page that appears, the first part is **Startup**. Under **Startup**, use the drop-down arrow to select **Show my home page**. Then click the **Use Current Page** button under the **Home Page** section.

## Listening to Music

You can use the music player to listen to music that you have stored on a USB flash media device or media card.



**NOTE:** The audio file name and the folder(s) name can be any length but cannot include special characters or spaces in order for the file manager to recognize the audio file.


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To listen to music:


1. Click the **Music** icon on the Net mode Home page.
2. Insert the media device into the 4-in-1 media card reader or a USB port on the monitor.

3. In the Music module, select the media device that you inserted, navigate to the desired music file and click on it.

---

 **NOTE:** If a photos folder was selected in the Slide Show options section of the Settings module, a slide show of the selected photos will be displayed while the music is playing (refer to [Slide Show Options on page 19](#) to configure a slide show). If you do not want to view a slide show of photos while playing music, make sure that no folder is selected in the Slide Show options section of the Settings module.

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4. Use the controls at the bottom of the slide show player to stop, start, or pause the slide show and adjust volume levels.
5. To return to the navigation folder where your music is stored, click  at the bottom of the slide show player.


The following audio formats are supported and will be displayed:

- MP3
- AAC
- WMA

## Watching Videos


You can use the video player to watch videos that you have stored on a USB flash media device or media card.

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 **NOTE:** The video file name and the folder(s) name can be any length but cannot include special characters or spaces in order for the file manager to recognize the video file.

---

To watch a video:

1. Click the **Video** icon on the Net mode Home page.
2. Insert the media device into the 4-in-1 media card reader or a USB port on the monitor.
3. In the Video module, select the media device that you inserted, navigate to the desired video file and click on it. The video will begin playing.
4. Use the controls at the bottom of the video player to stop, start, or pause the video and adjust volume levels.
5. To return to the navigation folder where your video is stored, click  at the bottom of the video player.


The following video formats are supported and will be displayed:

- MPEG4 H.263
- MPEG4 H.264
- MPEG2 VC1

# Viewing Photographs

You can use the photograph viewer to view photographs that you have stored on a USB flash media device or media card.

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 **NOTE:** The photo file name and the folder(s) name can be any length but cannot include special characters or spaces in order for the file manager to recognize the photo file.

---


To view photographs:

1. Click the **Photo** icon on the Net mode Home page.
2. Insert the media device into the 4-in-1 media card reader or a USB port on the monitor.
3. In the Photo module, select the media device that you inserted, navigate to the desired photo file and click on it. The photograph will be displayed.
4. Use the controls at the bottom of the video player to go to the next or previous photograph, rotate the photograph or run a slide show of the photographs. The slide show will display all the photographs you have stored in the same media device folder.

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 **NOTE:** To run a slide show of photos while playing music, configure the slide show in the Slide Show Settings (refer to [Slide Show Options on page 19](#)) then select the music in the Music module (refer to [Listening to Music on page 16](#)). You cannot play music while viewing photos within the Photo module.

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5. To return to the navigation folder where your photographs are stored, click  at the bottom at the bottom of the slide show player.

The following picture formats are supported and will be displayed:

- JPEG
- GIF
- PNG
- BMP



## Adjusting the Settings

To configure the settings, click the **Settings** icon on the Net mode Home page.

The Settings module includes five tabs for configuring and adjusting the settings:

- **Slide Show Options:** Sets up and customize a music and photograph slide show.
- **Network:** Configures the monitor's network connection.
- **Date/Time:** Sets the monitor's date and time.
- **Language:** Selects a language for the monitor.
- **System:** Returns all settings to their factory default values, sets the timer, updates the software, locks the monitor, and enables or disables fast boot.
- **Password:** Sets a password required to access the Settings module and unlock the monitor.

### Slide Show Options

The Slide Show Options allow you to select photos that will be displayed during all music playback.

To configure a slide show of photos during all music playback:

1. Select the **Slide Show Options** tab in the Settings module.
2. In the **Select Photos for Display during Music playback** section, click the folder icon and navigate to the folder with photos that you want to run as a slide show while playing music.
3. In the **Slide Show Photo Settings** section, select an effect of how the photographs transition from one photograph to another in the slide show.
4. In the **Slide Show Photo Settings** section, select a time period to display each of the photographs in the slide show.
5. Click the **Apply** button to save the configuration.

After the slide show is configured, the slide show of photos that you selected will run when you play any music from the Music module (see [Listening to Music on page 16](#)).

### Network Settings

The Network settings allow you to configure the network connection.

To configure the network settings:

1. Select the **Network** tab in the Settings module.
2. Click the **Auto** button in the **Wizard** section and follow the instructions on the screen, or click the **Manual** button to enter the information manually then click the **Apply** button.

## Date/Time Settings

The Date/Time settings allow you to set the date and time for the monitor.

To set the date and time:

1. Select the **Date/Time** tab in the Settings module.
2. Select your time zone to automatically set the date and time or click the **Manual** button and manually set the date and time.
3. Click the **Apply** button to save the settings.

## Language Settings

The Language settings allow you to select a language for the monitor.

To select a language:

1. Select the **Language** tab in the Settings module.
2. Select a language.
3. Click the **Apply** button to save the settings.

## System Settings

The System settings allow you to return all settings to the factory default values, set the monitor's timer to put the display in standby mode after a designated period of inactivity, update the software, lock the monitor's screen, and enable or disable the fast boot feature.

**To return all settings to the factory default values:**

1. Select the **System** tab in the Settings module.
2. Click the **Set Default Value** button.
3. Click the **Apply** button to save the settings.

**To set the timer so that the monitor goes into standby mode after a designated period of inactivity:**

1. Select the **System** tab in the Settings module.
2. In the **Turn Off the Display** section, adjust the hours and/or minutes to transpire before the display automatically goes into standby mode if there is no activity detected. You can also select the **Never** button to disable the timer. The monitor will return to full power if it detects mouse or keyboard activity.
3. Click the **Apply** button to save the timer's settings.

**To update the software:**



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**NOTE:** The monitor must be connected to the Internet to update the software. Internet access is not provided. Contact your local Broadband supplier.

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1. Select the **System** tab in the Settings module.
2. In the **Software Version** section, click the **Update Now** button or click the **Auto Update** button and adjust the number of days to transpire before the software is automatically updated.
3. Click the **Apply** button to save the software update settings.

**To lock the monitor's screen and restrict access to your current session without a password (after a password is set up):**

1. Select the **System** tab in the Settings module.
2. Click the **Lock Screen** button.
3. To unlock the monitor's screen, enter your password and click the **Done** button. For more information on passwords, refer to [Password Settings on page 21](#).

**To enable or disable the fast boot feature:**

1. Select the **System** tab in the Settings module.
2. In the **Fast Boot** section, click either the **Disable** or **Enable** button.
3. Click the **Apply** button to save the fast boot settings.



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**NOTE:** When Fast Boot is enabled, the monitor will resume from standby within seconds. Fast Boot must be disabled to meet Energy Star qualification.

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## Password Settings

The Password settings allow you to create a password that is required to access the Settings module and unlock the monitor's screen if it has been locked.

**To set a password:**

1. Select the **Password** tab in the Settings module.
2. Click the **On** button (or click the **Off** button if you do not want access to the Settings module to require a password or if you do not want a password required to unlock the monitor's screen).
3. Enter your password in the **Password** text box. The password must be 6 to 10 characters and is not case sensitive. Special characters are allowed but spaces are not allowed.
4. Enter your password again in the **Verify Password** text box.
5. Click the **Apply** button to save the settings.

**To change your password:**

1. Select the **Password** tab in the Settings module.
2. Ensure that the **On** button is selected.
3. Enter your new password in the **Password** text box. The password must be 6 to 10 characters and is not case sensitive. Special characters are allowed but spaces are not allowed.

4. Enter your new password again in the **Verify Password** text box.
5. Click the **Apply** button to save the settings.

**To cancel a password:**

1. Select the **Password** tab in the Settings module.
2. Click the **Off** button. A password will not be required to access the Settings module or unlock the monitor's screen
3. Click the **Apply** button to save the settings.

**If you forgot your password and need to reset all settings to the default values:**



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**NOTE:** The only way to access the Settings module and unlock the monitor's screen if you have forgotten your password is to reset all Settings to the default values. The default setting for the password is **Off**.

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1. Turn the power off.
2. Press and hold down the **Menu** button and the **– (Minus)** button on the monitor's front panel at the same time, then press the power button to turn on the monitor.
3. Continue holding down the **Menu** button and the **– (Minus)** button for 10 seconds.
4. Reset the password and reconfigure the other settings as necessary.

## Printing in Net Mode

Standard print functionality in Net mode is not supported. However, convenience printing may be supported via HP ePrint.



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**NOTE:** HP ePrint provides convenience printing, and documents printed with ePrint may appear different from the original. Style, formatting and text flow may differ slightly from the original document. For documents requiring a higher quality (such as legal documents), HP recommends that you print from the software application on your computer where you will have more control over how your printouts appear.

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## Introducing ePrint

HP ePrint lets you print from virtually anywhere to an HP printer that supports ePrint. Once enabled, ePrint assigns an email address to your printer. To print, simply send an email containing your document to your printer's address. For more information, visit <http://www.hp.com/go/ePrintCenter> for compatibility and details.

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## 4 Finding More Information

Refer to the *HP LCD Monitors Reference Guide* at <http://www.hp.com/support> for additional information on:

- Optimizing monitor performance
- Safety and maintenance guidelines
- Agency regulatory and environmental notices
- Using the OSD menu
- Downloading additional software from the Web for PC mode.

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 enter your monitor model in the SEARCH window.




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

The VGA cable, USB upstream cable, audio cable, Ethernet cable, and Internet access are not provided.

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# 5 Technical Specifications

 **NOTE:** All specifications represent the typical specifications provided by HP's component manufacturers; actual performance may vary either higher or lower. Specifications are subject to change. The complete and latest specifications on display products are available on <http://www.hp.com/support>.

## 1912nm and 1912nc Models

**Table 5-1 1912nm and 1912nc Specifications**

Maximum Weight (Unpacked)	3.65 kg	8.05 lbs
Dimensions (include base)		
Height	34.8 cm	13.7 inches
Depth	18.0 cm	7.09 inches
Width	44.8 cm	17.64 inches
Maximum Graphic Resolution	1366 × 768 (60 Hz)	
Optimum Graphic Resolution	1366 × 768 (60 Hz)	
Power Source	100 – 240 VAC 50/60 Hz	
Graphics Input Terminal	One VGA connector for PC mode (cable not included)	
ARM based Processor	IT OMAP4430 ARM Cortex-A9 1.0 GHz Dual Core	
Flash RAM Memory	2GB	
DDR II Memory	1G	
USB 2.0 ports	1 upstream + 5 downstream	
Supported USB Devices	USB 2.0 Storage Devices	
	USB Keyboard and Mouse (Provided)	
Audio	Line In + Line Out	
HID	USB Keyboard + USB Mouse	
Operating System	Custom HP Linux Kernel 2.6.35	
Image / Component Updates	HP Easy Update Manager	
Internet Solution (Browser)	Firefox v4.0	

**Table 5-1 1912nm and 1912nc Specifications (continued)**

Video Player	Support
Audio Player	Support
Photo Frame	Support
Video Codecs	H.264, H.263, MPEG2, MPEG4, VC-1
Video Container	MP4, M4V, MPG, MKV, WMV, AVI, MOV, ASF, 3GP, VOB
Audio Codecs	MP3, AACLC, HE-ACC, WMA10 std, WMA Pro, WMA9 Lossless
Audio Container	MP1, MP2, MP3, AAC, M4A, WMA, ASF
Picture Codecs (2048 x 1536 3M max)	JPEG, PNG, GIF, BMP
Productivity - Document Handler	Box.net / Google Docs
Adobe Flash (720P)	Adobe Flash 10.1
External Input Devices	4-in-1 Card Reader (for SD, MMC, MS, xD) and USB (2.0) Thumb Drive


For a list of recommended USB and card reader storage devices consult the 1912nm Quickspecs.



**NOTE:** HP recommends that the storage device is formatted FAT16/32.

# 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.

 **NOTE:** The preset modes can only be adjusted if the monitor is in PC mode. In Net mode, the preset is locked at 1366 x 768 at 60Hz and cannot be adjusted.

## 1912nm and 1912nc Models (PC Mode)

**Table 5-2 Factory Preset Modes**

Preset	Pixel Format	Horz Freq (kHz)	Vert Freq (Hz)
1	640 × 480	31.47	59.94
2	720 × 400	31.47	70.09
3	800 × 600	37.88	60.32
4	1024 × 768	48.36	60.00
5	1280 × 720	45.0	60.0
6	1280 × 960	60.0	60.0
7	1280 × 1024	63.98	60.02
8	1366 × 768	47.71	59.79

**Table 5-3 High Definition Video Formats**

Preset	Timing Name	Pixel Format	Horz Freq (kHz)	Vert Freq (Hz)
1	480p	720 × 480	31.469	60
2	576p	720 × 576	31.25	50
3	720p50	1280 × 720	37.5	50
4	720p60	1280 × 720	45	60

## 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 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 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 is turned amber. When the monitor is in the reduced power state, the monitor will utilize less than one watt 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).



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**NOTE:** The above power saver feature only works when connected to computers that have energy saver features.

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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.