

HP Pavilion All-in-One PC

Getting Started

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HP Pavilion All-in-One PC Setup

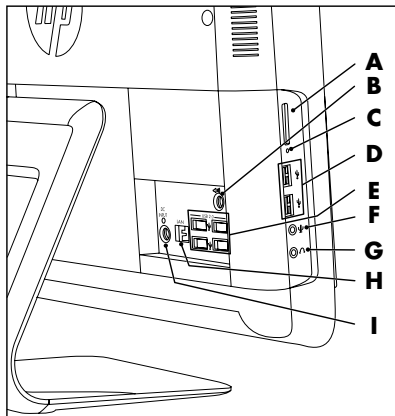
Computer Overview

The HP Pavilion All-in-One PC

The HP Pavilion All-in-One is a sleek, stylish computer with a built-in 47-cm diagonal widescreen display. This stylish All-in-One computer comes with features like webcam, CD/DVD player and burner, USB ports, media card reader, wireless 802.11 b/g networking, and built-in speakers.

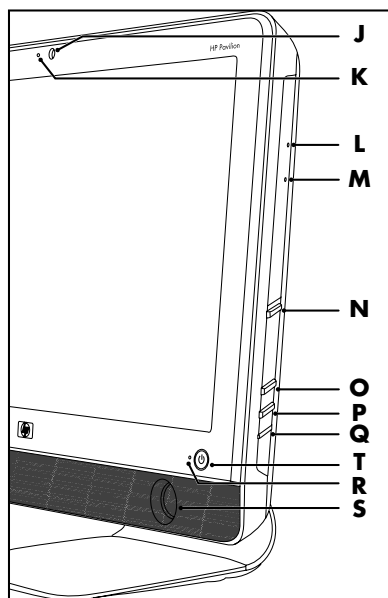
HP Pavilion All-in-One features

Features and configurations vary by model. Your computer may not exactly match the illustrations and descriptions in this guide.



Item	Description
A	Memory card reader Built-in memory card reader to read a memory card. Supported formats include: Extreme Digital (xD), Secure Digital (SD), Secure Digital High-Capacity (SDHC), MultiMediaCard (MMC), Memory Stick (MS), and Memory Stick Pro (MS Pro) memory cards. Additional media cards can be supported by using an adapter sleeve (purchased separately): Mini SD, RS-MMC, Micro SD, MS-Duo, and MS Pro Duo.

Item	Description (continued)	
B	Audio line out	Connect external 2.0 and 2.1 powered speakers.
C	Memory card reader LED	Indicates card reader activity.
D	USB 2.0 (2 ports)	Connect USB devices (USB 2.0) such as printers, external hard disk drives, digital cameras, and MP3 players.
E	USB 2.0 (4 ports)	Connect USB devices (USB 2.0) such as printers, external hard disk drives, digital cameras, and MP3 players.
F	Microphone jack	Connect an external microphone to the port.
G	Headphones jack	Listen to music without disturbing anyone, by connecting your headphones to the port.
H	Ethernet (Local Area Network [LAN]) port	Connect to the Internet through your wired network.
I	Power connector	Plug the power adapter into your computer.



Item	Description (continued)	
J	Webcam	Create videos and snapshots that you can view, send by e-mail, and upload to video sharing sites. Use the built-in webcam and microphone for video chats (Internet access required).

Item	Description (continued)	
K	Built-in microphone	Record sound for webcam videos and for video chats online.
L	Optical disc emergency eject	Insert a small pin to eject a disc when the optical disc Eject button does not work.
M	Optical disc drive and LED	Watch your favorite DVDs, or listen to your CD collection. Burn CDs and DVDs*. The LED indicates whether there is a disc in the drive. *Hewlett-Packard supports the lawful use of technology and does not endorse or encourage the use of our products for purposes other than those permitted by copyright law.
N	Optical disc Eject button	Press this button to open the optical disc drive to insert or remove a disc.
O	Brightness up	Press this button for a brighter screen display.
P	Brightness down	Press this button to dim the screen display.
Q	Hard disk drive LED	Indicates hard disk drive activity.
R	Power status LED	Indicator light is blue when computer is on; the light is off when computer is in sleep or hibernate mode.
S	Built-in speakers	Use the built-in stereo speakers for a powerful media experience when listening to music, or when watching your home videos and DVDs.
T	Power/Standby button	Press the button to turn on your computer or put it in Sleep mode.

Setting Up Your Computer



WARNING: Please read “Safety Information” in the *Limited Warranty and Support Guide* before installing and connecting the computer to the electrical power system.



WARNING: To reduce the risk of serious injury, read the *Safety & Comfort Guide*. It describes proper workstation setup, posture, and health and work habits for computer users. It also provides important electrical and mechanical safety information.

Follow the steps on the setup poster to set up the computer. See “Turning On Your Computer for the First Time” on page 4.

Checking the computer installation

Place the computer in the proper location so that:

- All ventilation openings are unobstructed.
- All cabling is out of the way. Do not place any cable in a walkway or where it can be stepped on or damaged from placing heavy objects on it.

Protect the computer and connected accessories by connecting all power cords to a power surge protection device. Use a power strip specifically labeled as having surge protection, an uninterruptible power supply (UPS), or similar device.

Look in the computer box for printed details or updates regarding the computer.

Turning On Your Computer for the First Time

After you have completed the steps on the setup poster, you are ready to turn on the computer.

NOTE: Do not connect or add other devices to the computer until after you turn on the computer for the first time and complete the initial setup.

To turn on the computer:

- 1 Press the Power button.
- 2 Turn on the external speakers, if they are present.
- 3 Set up the computer and Microsoft® Windows® 7 by following the onscreen instructions:
 - If prompted, select the country/region in which you are physically located, and wait while the computer makes preparations. (When you select an alternate language, it may take up to 30 minutes for this one-time language setup on the computer.)
 - Follow the onscreen instructions to register, sign up for updates, and get online.
 - The antivirus software may automatically open. Follow the onscreen instructions to set up this tool, which protects the computer and your privacy.
- 4 When you see the Windows desktop, the initial setup is complete.

For help with getting started using your computer, see the remaining topics in this section.

Turning off the computer

You will need to turn off the computer for safety reasons: to make repairs, to install new hardware or cards in the computer. If the computer will not be used for extended periods of time, you may want to turn it off.

As an alternative to shutting down the computer, you can lock it or put it into either Sleep or Hibernate mode, if it is available. You can set the power management timers to put the computer automatically into Sleep or Hibernate mode.

The computer has these reduced power states:

- **Sleep** mode saves your open documents and programs, and places your computer into a reduced-power state. During Sleep mode, the power status LED turns off, and the computer is ready to wake quickly.
- **Hibernate** mode (available as an advanced power setting) saves the system memory to a temporary file on the hard disk and then turns off the hardware. When you turn on the computer again, the programs, folders, and documents that you had open are restored to the screen.

Restarting the computer

When you restart the computer, the computer clears some settings and starts over using the operating system and software in its memory. Restarting is the easiest and most effective way to solve many software issues for the computer.

Also, you may want to install additional software programs or hardware devices onto the computer, and doing so may require that you restart the computer after installation.

To restart the computer:

- 1 Click the Windows **Start** button®.
- 2 Click the **Arrow** button next to Shut Down, and then click **Restart**.

Or

Quickly press the On button on the front of the computer.

Sound options

Your computer supports the following sound options:

- Built-in analog stereo speakers
- Analog 2.0 or 2.1 powered speakers
- Headphones

NOTES:

- Your computer supports powered speaker systems only. Powered speakers require a separate power supply.
 - By default, the internal speakers are on.
-

Connecting analog speakers

(Sold separately)

To connect active external speakers, such as left/right stereo speakers or a 2.1 system of two speakers and a subwoofer, to the computer:

- 1 Make sure the speaker system is turned off and unplugged.
- 2 For 2.0 powered speakers, connect the speaker cable to the Audio Line Out connector on the back of the computer.

Or

For 2.1 powered speakers, connect the Audio Line Out connector on the back of the computer to the subwoofer, and then connect the left and right speakers to the subwoofer.

- 3 Turn on the speaker system. If necessary, refer to the documentation that came with your speakers.



NOTE: When an Audio Line Out or headphone device is connected, the internal speakers are muted.

Connecting headphones

(Sold separately)

- Your computer comes with a headphones connector on the side of the computer.
- The headphones connector is labeled with a headphones icon.
- When headphones are plugged in, the sound to the internal speakers and the external speakers (if attached) is muted.



Connecting a microphone

(Sold separately)

- Your computer comes with a built-in microphone, next to the webcam on the front of the computer.
- There is also a microphone connector on the side of the computer. Connect an external microphone to the microphone connector on the computer.
- To select the microphone or adjust the volume, see “Selecting the microphone” on page 7.



Adjusting the speaker volume

There are several ways to adjust volume. Use the Volume icon on the Windows 7 taskbar to set speaker volume. Then, you can adjust the volume by using:

- The Volume buttons on the keyboard (select models only).
- The Volume knob on the speakers (select models only).

To set speaker volume, use the Volume icon on the taskbar:

- 1 Right-click the **Volume** icon on the taskbar, and then click **Open Volume Mixer**.

The Volume Mixer settings window opens.

- 2 Adjust the volume by clicking the slider bar and moving it.
- 3 When you are satisfied with the sound level, close the window by clicking the **X** in the upper-right corner.

For help with audio, check the troubleshooting items in “Audio and speakers” on page 31. For more information, open the Help and Support Center or refer to the Support Web site; see “Getting More Information” on page 23.

Selecting the microphone

The microphone on your computer is ready to use. If you have more than one microphone connected, select the microphone that you would like to use in Windows 7.

NOTE: When you have a webcam or an audio player connected to the computer, because of the audio input from the device, Windows 7 may recognize each as a microphone input.

To select the microphone that you would like to use in Windows 7:

- 1 Right-click the **Volume** icon on the taskbar, and then click **Recording Devices**. The Sound window opens.
- 2 Select the Microphone that you want to use, click **Set Default**, and then click **Apply**.
- 3 Click **OK**.

Adjusting microphone recording level in Windows 7

To adjust the recording level of the microphone:

- 1 Right-click the **Volume** icon on the taskbar, and then click **Recording Devices**. The Sound window opens.
- 2 Double-click the microphone connector that you want to use.
- 3 Click the **Levels** tab.
- 4 Adjust the recording level for the microphone by clicking the slider bar and moving it. Click **OK**, and then click **OK** again.



Connecting to a network

This section describes connecting to the Internet through a wired or wireless connection.

- Your computer supports a wireless or wired LAN that connects to other devices, such as a printer.
- The network connection to the Internet is usually through a broadband modem (digital subscriber line [DSL] or cable), which requires a separate subscription.

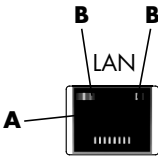
Wireless access point and Internet service are required and are not included. First-time wireless network installation requires that you:

- 1 Purchase high-speed Internet service from an Internet service provider (ISP).
- 2 Purchase a broadband modem (DSL or cable). This may be provided by the ISP.
- 3 Purchase and install a wireless router (sold separately), if one is required.

Setting up a wired Ethernet network connection

The Ethernet connection may be called a network interface adapter, network interface card, or NIC. It provides a high-speed or broadband connection to an Ethernet (10BaseT) or Fast Ethernet (100BaseT) network. After you connect this interface to a network, such as a LAN, you can connect to the Internet through the network.

- 1 Connect an Ethernet cable to the Ethernet (RJ-45) connector (**A**) on the back of the computer, and to the network router or LAN device.



- 2 With the computer turned on, check the indicator lights (**B**) next to the Ethernet connector for the status:
 - **ACTIVITY** — Lit yellow during network data transfer activity
 - **LINK** — Lit green when there is a valid network connection

Setting up a wireless network connection

(Select models only)

- You can connect the computer to a wireless network supporting IEEE 802.11b or 802.11g.
- You need an existing wireless LAN with an Internet connection. Consult your Internet Service Provider (ISP) for further information.
- To verify that the integrated WLAN device is installed on the computer correctly, see “Checking the wireless LAN device installation” on page 10.

For more information about setting up a wireless network, click **Start**, click **Help and Support**, and then type *Setting up a wireless network* into the Search Help box and press Enter.

Connecting to the Internet

Connecting to the Internet requires that you:

- 1 Purchase high-speed Internet service from an Internet service provider (ISP).
- 2 Purchase a broadband modem (DSL or cable). This may be provided by the ISP.
- 3 Purchase and install a wireless router (sold separately), if one is required.

The computer can connect to the Internet through a LAN or digital subscriber line (DSL). Wireless connection to the Internet may also be available (select models only). Check with your Internet Service Provider (ISP) for specific information on the connection.

- 1 Refer to "Setting Up Your Computer" on page 3 to make the hardware connections.
- 2 For a network connection, see "Connecting to a network" on page 8.
- 3 To check a wireless LAN device installation, see "Checking the wireless LAN device installation" on page 10.
- 4 To connect to the Internet:
 - Sign up with an ISP. If you already have an account with an ISP, skip this step and follow the instructions provided by the ISP.
 - If you did not set up the computer for Internet service during the initial setup, do so now by using Online Services:
 - a Click the **Start** button.
 - b Click **All Programs**.
 - c Click **Online Services** and then click **Get Online**.
 - d Follow the onscreen instructions to select an ISP and set up Internet service.

NOTE: Online Services provides a list of ISPs; however, you may choose another ISP or transfer an existing account to this computer. To transfer existing accounts, follow the instructions provided by the ISP.

- 5 Connect to the Internet. You must connect through your ISP.
- 6 Open your Web browser and browse the Internet.

You can use any Web browser; most computers have Microsoft Internet Explorer®. To open Internet Explorer:

- a Click the **Start** button.
- b Click **Internet Explorer**.

NOTE: If you have issues connecting to the Internet, see "Internet access" on page 32.

Checking the wireless LAN device installation

You can verify that the integrated WLAN device is installed on the computer correctly by using the Windows operating system Device Manager:

- 1 Click the **Start** button.
- 2 Type *Device Manager* into the Start Search box, and then click **Device Manager** to open the Device Manager window.
- 3 Click **Network adapters**. Your WLAN device should be listed here. The WLAN device may include the term *wireless*, *wireless LAN*, or *802.11*.

NOTE: If no WLAN device is listed, either the computer does not have an integrated WLAN device, or the driver for the device is not properly installed.

- 4 Click the **Start** button.
- 5 Type *Network and Sharing Center* into the Start Search box, and then click **Network and Sharing Center** to open the Network and Sharing Center window.
- 6 Click **Connect to a network**, and then follow the onscreen instructions.

Using wireless security features

When you set up a home WLAN or access an existing public WLAN, always enable security features to protect the network from unauthorized access. The most common security levels are Wi-Fi Protected Access Personal (WPA-Personal) and Wired Equivalent Privacy (WEP).

When setting up a network, use one or more of the following security measures:

- Enable WPA-Personal or WEP security encryption on the router.
- Change the default network name (SSID) and password.
- Set up a firewall.
- Set security on your Web browser.

Protecting your computer

Protect your computer, personal settings, and data from a variety of risks by using:

- Passwords.
- Antivirus software.
- Firewall software.
- Critical security updates.

NOTE: Security solutions are designed to act as deterrents, but they may not be able to prevent software attacks or to prevent the computer from being mishandled or stolen.

Computer risk	Computer feature
Unauthorized use of the computer or user account	User password
Computer viruses	Antivirus program
Unauthorized access to data	Firewall program Windows updates
Unauthorized access to Setup Utility, BIOS settings, and other system identification information	Administrator password
Ongoing or future threats to the computer	Windows critical security updates from Microsoft

Using passwords

A *password* is a group of characters that you choose to secure the computer information. Several types of passwords can be set, depending on how you want to control access to your information. Passwords can be set in the Windows operating system on the computer.



CAUTION: To avoid being locked out of the computer, record each password you set. Because passwords are not displayed as they are set, changed, or deleted, it is essential to record each password immediately and store it in a secure place. Do not store passwords in a file on the computer.

You can use the same password for more than one Windows security feature. A password set in Windows must be entered at a Windows prompt.

For information on Windows passwords: click the **Start** button, click **Help and Support**, and then type *passwords* into the Search Help box and press Enter. See “Using the Onscreen Help and Support Center” on page 23.

Using antivirus software

When you use the computer for e-mail, network, or Internet access, you expose it to computer viruses. Computer viruses can disable or damage the operating system, software programs, or computer utilities.

Antivirus software can detect most viruses, remove them, and, in most cases, repair any damage that they have caused. To provide ongoing protection against newly discovered viruses, you must keep the antivirus software up to date.

The antivirus program, which is preinstalled on the computer, includes antivirus and firewall components. The software includes a free trial subscription of protection updates. To protect the computer against new viruses beyond the trial period, purchase an extended update service. Instructions for using and updating the antivirus software, and for purchasing extended update service, are provided within the program.

For more information about computer viruses: click the **Start** button, click **Help and Support**, and then type *viruses* into the Search Help box and press Enter. See “Using the Onscreen Help and Support Center” on page 23.

Using firewall software

When you use the computer for e-mail, network, or Internet access, unauthorized persons may be able to gain access to information about you, your computer, and your data. To protect your privacy, use firewall software:

- Windows includes firewall software preinstalled on the computer.
- The antivirus program, which is preinstalled on the computer, includes a firewall program.

Firewall features include logging, reporting, and automatic alarms to monitor all incoming and outgoing communications.

Under some circumstances, a firewall can block access to Internet games, interfere with printer or file sharing on a network, or block authorized e-mail attachments. To solve the problem temporarily, disable the firewall, perform the task that you want to perform, and then enable the firewall again. To resolve the problem permanently, reconfigure the firewall.

Configuring the computer for automatic Microsoft software updates

Microsoft continually updates the Windows operating system. Run Windows Update monthly to install these updates, or keep the operating system up to date by using the Automatic Updates feature.

When you are connected to the Internet, Windows Update automatically notifies you (through a pop-up message or icon in the notification area) when critical updates are available. When you see the Windows Update message, allow the updates to download to your system. If you update the system weekly, or even monthly, the time required for download is minimal.



CAUTION: To reduce the risk of information damage or loss from security breaches and computer viruses, install all critical updates from Microsoft as soon as you receive an alert.

Additional updates to the operating system and other software may have become available after the computer was shipped. Download all available updates and install them onto the computer.

Setting up user accounts

When you share a computer with several people, you can set up a user account for each computer user. Windows uses the information in the user account to determine what files and folders the computer user can access, when they can make changes to the computer, and their personal preferences. Each person can access only their own files and settings.

For more information, click the **Start** button, click **Help and Support**, and then type *User Accounts* into the Search Help box and press Enter. See “Using the Onscreen Help and Support Center” on page 23.

Guidelines for installing software and hardware devices

After you set up the computer and complete the initial setup, you may want to install additional software programs or hardware devices. Keep in mind the following important guidelines:

- Before installation, make a restore point by using the Microsoft System Restore program. The *restore point* is a snapshot of the computer settings. By using System Restore, you ensure that you have a stable set of settings to use.
- Choose software that is compatible with the computer; check the operating system, memory, and other requirements listed for the new software.
- Install the new software according to the directions provided by the software manufacturer. If you need help, check the manufacturer documentation or customer service information.
- For antivirus software, uninstall the existing software program before reinstalling it or installing a new antivirus program.

NOTE: Use only licensed original software. Installing copied software may be illegal, may result in an unstable installation, or may infect the computer with a virus.

Transferring files and settings from an old computer to your new computer

You can copy files from an old computer to your new computer by using CDs or DVDs, memory sticks, or personal media drives, or by using the Windows Easy Transfer cable (sold separately). To transfer files and copy certain settings, such as Web browser Favorites and address books, use Windows Easy Transfer software, which is included with Windows.

Windows Easy Transfer software guides you to copy files and settings to a storage device or across the Easy Transfer Cable connected to the old computer. The Easy Transfer Cable is a USB cable designed specifically to connect two computers and work with the Windows Easy Transfer software. A standard USB cable does not work.

To transfer your files and settings:

- 1 Click the **Start** button.
- 2 Type *Windows Easy Transfer* into the Start Search box, and then click **Windows Easy Transfer**.
- 3 Follow the onscreen instructions in the Windows Easy Transfer Wizard to transfer your files from an old computer to your new one.

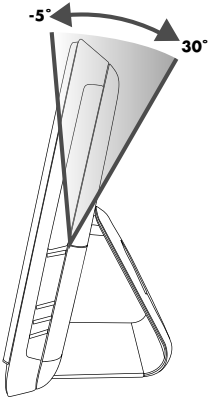
For more information, click the **Start** button, click **Help and Support**, and then type *moving files* into the Search Help box and press Enter. See "Using the Onscreen Help and Support Center" on page 23.

Special Features of Your Computer

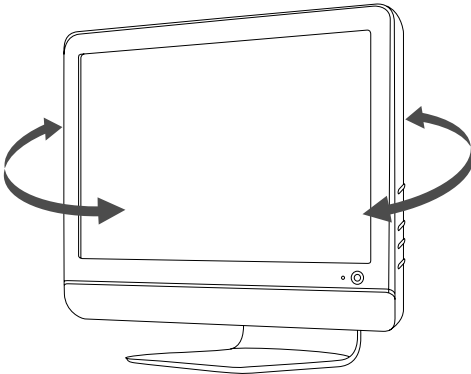
Adjusting the Tilt and Swivel

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

- 1 Face the front of the computer and hold the base so that you do not topple the computer while changing the tilt.
- 2 Adjust the tilt by moving the top edge of the display screen either toward or away from you (the range is -5° to 30°), without touching the screen.



The computer allows a usable range of motion with the swivel feature.

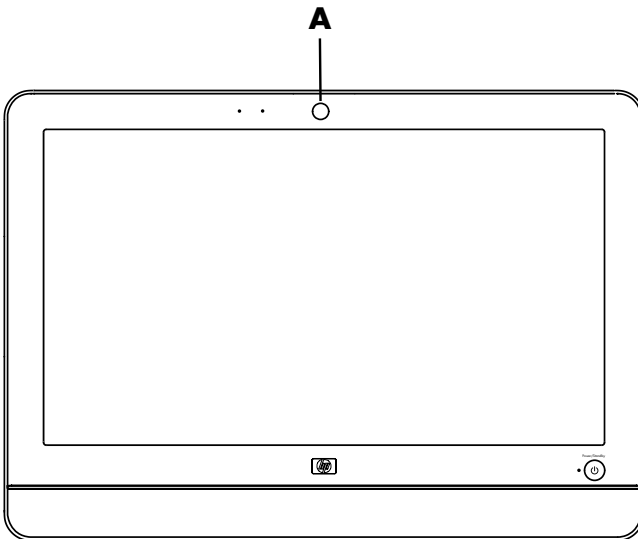


Webcam

The webcam (**A**) is located at the top front of the computer.

Use your webcam to:

- Create videos from files on your computer.
- Create snapshots to view, organize, edit, send, and print.
- Create video notes for an enhanced visual calendar and to share.
- Initiate live video chats with Windows Live Messenger or another compatible software program.
- Import live videos into a movie-making program to save, send, stream on the Web, or record to disc.



Capturing webcam video and snapshots

Learn to use CyberLink YouCam to capture videos and snapshots from the webcam:

- 1 Click the **Start** button.
- 2 Click **All Programs, CyberLink YouCam**, and then click **CyberLink YouCam** again.
- 3 Click **Tutorials** to view an instructional video.

Having a video chat or making conference calls

To set up a video chat, you must have a connection to the Internet, an ISP, and software that enables you to make video calls over the Internet. As with chat or instant messenger software, you can use this kind of software to chat with one or more people at a time. This software may require a separate subscription.

There is a built-in microphone next to the webcam on the front of the computer. A jack for an external microphone is on the side of the computer. The optimal distance for recording sound with the microphone is about .5 meters away from the microphone.

Before you can set up a video chat:

- 1 Download an Internet messenger or video phone call program. Make sure the person you are calling has compatible video-calling software.
- 2 Enable your webcam as the default video input. This is usually done through the video setup in the Tools menu in the software program you are using.
- 3 Send your video call by following the instructions for the video-calling software program.

To start a video chat in CyberLink YouCam:

- 1 Click the **Start** button.
- 2 Click **All Programs**.
- 3 Click **CyberLink YouCam, CyberLink YouCam**, and then click **Start a Video Call**.

Using the Memory Card Reader

Your computer comes with a multi-format, single slot (6-in-1) memory card reader. Digital cameras and other digital imaging devices use memory cards, or *media*, to store digital picture files. The memory card reader can read from and write to a variety of memory cards.

Supported memory card or media formats include:

- Extreme Digital (xD)
- Secure Digital (SD)
- Secure Digital High-Capacity (SDHC)
- MultiMediaCard (MMC)
- Memory Stick (MS)
- Memory Stick Pro (MS Pro)

Additional media cards can be supported by use of an adapter sleeve:

- Mini Secure Digital (Mini SD)
- Micro Secure Digital (Micro SD)
- Reduced-size Multi Media Card (RS-MMC)
- Memory Stick Duo (MS Duo)
- Memory Stick Pro Duo (MS Pro Duo)

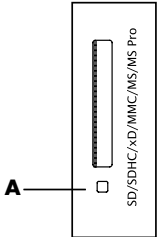
The card reader is accessible directly on the side of the computer. It has one vertical card slot that accepts the media.

When you insert media, the Safely Remove Hardware window may appear. If it opens, or if you open the Safely Remove Hardware window by mistake, click **Close**.



CAUTION: Do not click *Stop* in the Safely Remove Hardware window with the USB Mass Storage Device selected. Doing so removes the operating system recognition of the memory card reader from your computer, and you must restart the computer to see the memory card reader again.

Memory card reader



The memory card reader LED (**A**) blinks to indicate that the computer is accessing the memory card to read or write.

To use the memory card reader:

- 1 Insert the media into the card slot until it stops.

The memory card reader LED (**A**) on the memory card reader lights, and the computer automatically detects the media.

NOTE: You must insert media correctly. Note the direction of the notched corner on the media. For more information, open the Help and Support Center or refer to the Support Web site; see “Getting More Information” on page 23. Also, some memory cards, such as CF Ultra/III, are not compatible with the memory card reader that came with your computer.

- 2 Select a program to access your files. You can copy files from or to the media.

Or

If the AutoPlay window does not open, click the **Start** button, click **Computer**, and then double-click the **Memory Card** icon to display the files on the media. You can copy files from or to the media.

- 3 When you are finished, right-click the drive icon, click **Eject**, check that the memory card reader LED is on or off, but not blinking, and then remove the media.

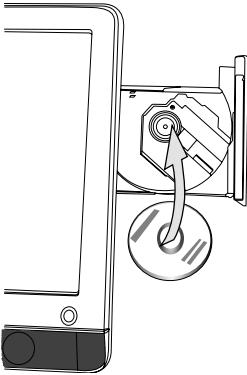


CAUTION: Do not try to remove media when the memory card reader LED is blinking. Doing so may cause loss of data.

Using a Vertical CD/DVD Drive

Your computer has an optical disc drive that is installed in a vertical position. The Eject button is just below drive door. The drive will accept either a standard-sized disc or a minidisc.

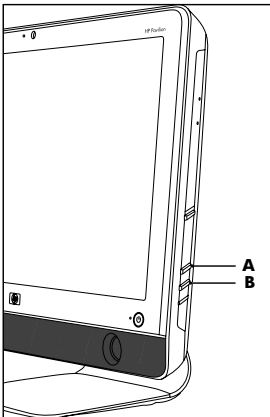
- 1 Face the front of the computer.
- 2 Press the Eject button to open the CD/DVD tray.
- 3 Place the disc into the inner circle inside the tray with the label facing out.
- 4 Holding the back of the tray, press the disc into the center, until the disc clicks into place, and then press the front of the tray to close it.



Adjusting the Screen Brightness

Your computer has two buttons on the side panel for adjusting the brightness on the screen.

- 1 Press the upper button (**A**) to make the screen brighter.
- 2 Press the lower button (**B**) to dim the screen brightness.



To adjust screen resolution, click the **Start** button, click **Control Panel**, click **Display**, and click the **Settings** tab. Adjust the screen resolution by moving the adjustment bar to the left or right. Click **OK**.

Using Software

NOTE: Some of the programs that are listed may not be included with your model. This is not a complete list of all included software.

Your computer includes software to:

- Record and play CDs.
- Record data CDs.
- Import and edit video files.
- Record video CDs and DVDs.
- Organize digital media files.

The following table describes the functionality that is specific to each of these programs. Use the table to determine which program to use to perform a task.

With this program: You can:

MediaSmart



- View movies on DVD or video CD in the MediaSmart DVD mode.
- Play music from a music collection, create playlists, and organize music collections on the hard drive.
- View, edit, and print pictures in JPG format; create slideshows; and upload photos to Snapfish for printing or sharing.
- View Internet TV and record and play back TV shows.
- View video files on the computer and upload videos to YouTube.

NOTE: The YouTube Web site is not available in all countries/regions. YouTube requires an Internet connection, and you must set up an account.

- Create and update a playlist for both music and videos.
-

With this program: You can: (continued)

CyberLink DVD Suite



- Record data and music files.
- Record a copy of an existing music or data CD to use on the computer.
- Create customized music CDs from CDs in your collection, or from .wav, .mp3, or .wma files. These CDs can be played in your home or car stereo.
- Copy and share data files.
- Create archive CDs or DVDs from files on your computer.
- Verify that the disc has been created without errors.
- Record movie files to create VCDs and DVDs that you can play on some DVD players.
- Copy and share video files.
- Capture video files.
- Edit video files.
- Create LightScribe labels for discs using CyberLink LabelPrint.

HP Advisor

- Set up computer functions such as backup or printers.
 - Explore capabilities to find out what your computer can do.
 - See status of your computer, plus get alerts and updates.
 - Discover software and service offers from HP and its partners.
 - Access support diagnostics and Help content.
-

Getting More Information

Using the Onscreen Help and Support Center

Information about your computer is in the onscreen Help and Support Center. Here, you can find links to driver updates, access to technical support options, and information about commonly asked questions.

To open the Help and Support Center:


- Press the Help button, located on select keyboards.

Or

- Click the **Start** button, and then click **Help and Support**.

Accessing Support on the Web

You can find information for your computer on the Internet:

- 1 Go to **<http://www.hp.com/support>** in your Web browser.
- 2 Select your country/region and language.
- 3 Click **Support and Drivers**.
- 4 Enter the model number of your computer, and then click **Search** . Click an item to view it.

Finding Additional Guides on the Web

You can find guides for your computer by using the Internet to access the Support Web site:

- 1 Go to the Support Web site (**<http://www.hp.com/support>**) and search for your model number using the previous procedure.
- 2 Click **Manuals**.

Using the PC Help & Tools Folder

The PC Help & Tools folder contains special utilities for computer owners, such as support information and programs.

To see the items in the PC Help & Tools folder:

- 1 Click the **Start** button, **All Programs**, and then click **PC Help & Tools**.
- 2 Click **Hardware Diagnostic Tools** to view or use these tools.

Using HP Advisor Software

(Select models only)

HP Advisor is a desktop tool you use to monitor and access system health information about key areas of your computer. HP Advisor has three major areas:

- **PC Dock** — Access HP and Partner software directly on your desktop and customize your dock by dragging and dropping items.
- **PC Dashboard** — Check your computer status at a glance with the PC Dashboard. Access all the items you need to run your computer from HP and Partners.
- **PC Discovery** — Explore HP and Partner software and online services that are installed on your computer, and find offers for exciting new software and services.

To open the HP Advisor Dock, click the **HP** logo on the taskbar.

Using the Computer with Safety and Comfort

Before you begin using the computer, arrange the computer and your work area to maintain your comfort and productivity. Refer to the *Safety & Comfort Guide* for important ergonomic information:

- Click the **Start** button, click **All Programs**, click **User Guides**, and then click **Safety & Comfort Guide**.

Or

- Type
<http://www.hp.com/ergo>
into the Web browser address box, and then press Enter on the keyboard.

Upgrading and Servicing Your PC

Refer to the *Upgrading and Servicing Guide*:

- Click the **Start** button, click **All Programs**, click **User Guides**, and then click **Upgrading and Servicing Guide**.
- If not present, follow the steps in “Finding Additional Guides on the Web” on page 23, and then select **Upgrading and Servicing Guide**.

Troubleshooting and Maintenance

This section contains:

- Troubleshooting tables in “Troubleshooting Computer Problems” on page 25.
- Software repair information in “Software Troubleshooting” on page 39.
- Maintenance information and guidelines in “Maintenance” on page 42.

For more information, refer to the Help and Support Center or access the Support Web site. (See “Getting More Information” on page 23.)

Refer to the documentation provided by the product manufacturer for information about peripheral-specific problems, such as issues with a printer.

Troubleshooting Computer Problems

These tables present some symptoms of issues you may encounter while installing, starting up, or using your computer. The tables also provide possible solutions you can try.

The troubleshooting tables appear in the following order:

- “Computer does not start” on page 26
- “Power” on page 27
- “Display” on page 27
- “Keyboard and mouse (with cable)” on page 27
- “Wireless keyboard and mouse” on page 29
- “Audio and speakers” on page 31
- “Internet access” on page 32
- “CD and DVD players” on page 33
- “Hardware installation” on page 36
- “Performance” on page 38
- “Memory card reader” on page 38

Computer does not start

Symptom	Possible solution
Computer will not turn on or start.	<p>Ensure that the cables connecting the computer to the external power source are plugged in properly.</p> <p>When the cables connecting the computer to the external power source are plugged in properly, and the wall outlet is functioning, the green power supply light on the back of the computer should be on; if it is not, refer to the <i>Limited Warranty and Support Guide</i> to contact Support.</p> <hr/> <p>Test the wall outlet by connecting a different electrical device to it.</p> <hr/> <p>Incompatible memory (RAM) may have been installed. Reinstall the old memory to return your computer to its original state. For instructions, refer to the <i>Upgrading and Servicing Guide</i>.</p>
Computer seems to be locked up and is not responding.	<p>Use the Windows Task Manager to close any programs not responding, or restart the computer:</p> <ol style="list-style-type: none">1 Press the Ctrl, Alt, and Delete keys on the keyboard simultaneously.2 Click Start Task Manager.3 Select the program that is not responding, and then click End Task. <p>If closing programs does not work, restart the computer:</p> <ol style="list-style-type: none">1 Press the Ctrl, Alt, and Delete keys on the keyboard simultaneously.2 Click the arrow next to the red Shut Down button, and then click Restart. <p>Or</p> <ol style="list-style-type: none">1 Press and hold the On button for 5 or more seconds to turn off the computer.2 Press the On button to start the computer.
Error message: <i>Hard disk drive error</i> .	Refer to the <i>Limited Warranty and Support Guide</i> to contact Support.

Power

Symptom	Possible solution
Error message: <i>Invalid system disk</i> or <i>Non-System disk</i> or <i>Disk error</i> .	When optical disc drive activity stops, remove the disc and press the spacebar on the keyboard. The computer should start up.
Computer does not turn off when the On button is pressed.	Press and hold the On button until the computer turns off. Check power settings.
Computer shuts down automatically.	The computer may be in an exceedingly hot environment. Let it cool down. Ensure computer air vents are not blocked and internal fan is running. Note that your computer may not have an internal fan.

Display

Symptom	Possible solution
Screen is blank, and power light is not lit.	Reconnect the power plug to the back of the computer and to the wall outlet. Press the On button on the front of the computer.
Screen is blank.	Press the space bar on the keyboard or move the mouse to make the screen display visible again. Press the Esc key on the keyboard to resume from Sleep or Hibernate mode. Press the On button to turn on the computer.
Images on the screen are too large or too small, or the images are fuzzy.	Adjust the monitor resolution setting in Windows 7: <ol style="list-style-type: none">1 Click the Start button, and then click Control Panel.2 Under Appearance and Personalization, click Adjust Screen Resolution.3 Adjust resolution as necessary, and then click Apply.

Keyboard and mouse (with cable)

Symptom	Possible solution
Keyboard commands and typing are not recognized by the computer.	Turn off the computer by using the mouse, unplug and reconnect the keyboard to the back of your computer, and then turn on your computer.

Keyboard and mouse (with cable) (continued)

Symptom	Possible solution
Mouse (with cable) does not work or is not detected.	<p>Unplug and reconnect the mouse cable to your computer.</p> <hr/> <p>If the mouse is still not detected, turn off the computer, unplug and reconnect the mouse cable, and then restart the computer.</p> <hr/>
Cursor does not respond to mouse movement.	<p>Restart your computer by using the keyboard:</p> <ol style="list-style-type: none">1 Press the Alt and Tab keys on the keyboard simultaneously to navigate to an open program.2 Press the Ctrl and S keys on the keyboard simultaneously to save your changes in the selected program (Ctrl+S is the keyboard shortcut for Save on most—not all—programs).3 Repeat step 1 and step 2 to save changes in all open programs.4 After saving changes in all open programs, press the Ctrl and Esc keys on the keyboard simultaneously to display the Windows Start Menu.5 Use the arrow keys to select the Arrow button next to Shut Down, select Shut Down, and then press the Enter key on the keyboard.6 After the shutdown is complete, unplug and reconnect the mouse connector to the back of your computer, and then turn on your computer. <hr/>
Cursor responds slowly, moves only vertically or horizontally, or does not track smoothly.	<p>For an optical mouse:</p> <ul style="list-style-type: none">■ Clean the optical mouse: Gently wipe the light sensor lens on the bottom of the mouse with a lint-free cloth (not paper).■ Use a mouse pad, white sheet of paper, or other less reflective surface under the mouse. <p>For detailed cleaning instructions, go to: http://www.hp.com/support</p> <p>Select your country/region and language, search on your computer model number, and then search on the keyword <i>cleaning</i>.</p> <hr/>
I cannot move the cursor using the arrow keys on the number key pad.	<p>Press the Num Lock key on the keyboard to turn off the Num Lock light. The Num Lock light should not be on if you want to use the arrow keys on the number key pad.</p> <hr/>

Wireless keyboard and mouse

Symptom

Wireless keyboard or mouse does not work or is not detected.

Possible solution

A Check for these problems:

- Ensure you are using the wireless keyboard or wireless mouse within range of the receiver, approximately 10 meters for normal use, and within 30 cm during initial setup or for resynchronization.
- Check the LED on the mouse to indicate battery power level. When the mouse powers up:
 - If the LED is green, the mouse has full power.
 - If the battery level is low, the LED will be amber and will fade in and out 10 times continuously.
 - If the battery level is below 2.0 V, the LED will not turn on, and the battery will need to be replaced.
- Replace the batteries in the keyboard and mouse; do not use rechargeable batteries: Turn the devices over, turn the mouse off, take off the battery cover, remove the old batteries, and insert new alkaline batteries. Then turn on the mouse and press the Connect button.
- Ensure the mouse is not in Suspend mode, which occurs after 20 minutes of inactivity. Click the left mouse button to reactivate it.

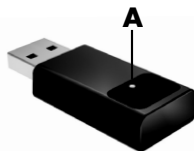
B Resynchronize the keyboard and mouse to the receiver:

The receiver, wireless keyboard, and wireless mouse shown in the illustrations are examples; your models may vary.

IMPORTANT: During these steps, place the wireless keyboard and wireless mouse on the same level as the receiver, within 30 cm of the receiver, and away from interference from other devices.

- 1 Unplug and reconnect the receiver into a USB connector on the computer.

The receiver may have an LED light **(A)**.



Wireless keyboard and mouse (continued)

Symptom

Wireless keyboard or mouse does not work or is not detected.
(continued)

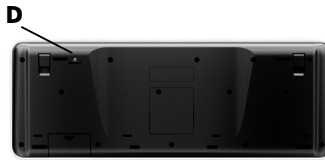
Possible solution

- 2 Check that the mouse is on **(B)**, and push and hold the Connect button **(C)** on the underside of the mouse for 5 to 10 seconds.



NOTE: The receiver connection session times out after 60 seconds. To ensure the connection was established, and that the receiver did not time out instead, move the mouse and check for response on the screen.

- 3 After the mouse connection is established, continue with the steps that follow to repeat the procedure for the keyboard.
- 4 Push and hold the Connect button **(D)** on the underside of the keyboard for 5 to 10 seconds.



Audio and speakers

Symptom

Possible solution

No sound is produced.

Press the Mute button on the keyboard to see whether the Mute feature is enabled.

Or

- 1 Right-click the **Volume** icon on the taskbar, and then click **Open Volume Mixer**.



The Volume Mixer settings window opens.

- 2 If programs are muted, click the **Mute** button to unmute.

To increase the volume, click the **Volume** icon on the task bar, or use the keyboard controls. Check the volume setting in your software program.

If you are using external speakers, make sure that you connected powered (active) speakers and that they are turned on.

Turn off your computer, and then unplug and reconnect the external speakers. Ensure the external speakers are connected to a Line Out connector.

To resume from Sleep mode, press the Sleep button (select models only), or press the Esc key on the keyboard.

Unplug headphones if they are connected to your computer.

Internet access

Symptom

I cannot connect to the Internet.

Possible solution

Contact your ISP for assistance.

Verify that you are using the proper cables for your Internet connection type.

Run the wireless setup wizard:

- 1 Click the **Start** button, and then click **Control Panel**.
- 2 Click **Network and Internet**, and then click **Network and Sharing Center**.
- 3 In the Network and Sharing Center window, click **Set up a connection or network** to open the wizard.
- 4 Follow the onscreen instructions.

Use Device Manager to verify that the integrated WLAN device is installed on the computer correctly:

- 1 Click the **Start** button.
- 2 Type *Device Manager* into the Start Search box, and then click **Device Manager**.
- 3 Click **Network adapters**. Your WLAN device should be listed here. The WLAN device may include the term *wireless*, *wireless LAN*, or *802.11*.
- 4 Click the **Start** button.
- 5 Type *Network and Sharing Center* into the Start Search box, and then click **Network and Sharing Center** to open the Network and Sharing Center window.
- 6 Click **Connect to a network**, and then follow the onscreen instructions.

CD and DVD players

Symptom

Possible solution

The CD or DVD drive cannot read a disc, or it takes too long to start.

Ensure the disc is inserted with the label facing out and centered in the tray.

Wait at least 30 seconds for the drive to determine the type of media.

Clean the disc with a disc cleaning kit, available from most computer stores.

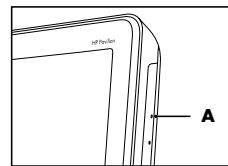
The driver may be corrupted or outdated. For detailed information about restoring and updating drivers, see "Updating drivers" on page 39.

I cannot remove a CD or DVD.

Turn on your computer, and press the Eject button nearest the drive to open the tray.

If you suspect a problem with the Eject button itself:

- 1 Click the **Start** button, and then click **Computer**.
- 2 Right-click the CD or DVD drive you want to open.
- 3 Select **Eject** from the menu.
- 4 If the disc is stuck, stick a pin in the hard eject button (**A**), a small pin hole on side of the computer, to release it.



I cannot play a DVD movie on a DVD player.

Your DVD player cannot play video files that were recorded onto the DVD as data files. To play a movie properly, use a video recording program. Some video files may be viewed on a computer, but not on a home DVD video player.

CD and DVD players (continued)

Symptom

Possible solution

I cannot create (record) a disc.

Ensure the disc is inserted with the label facing out and centered in the tray.

Verify that you are using the correct disc type (media) for the drive. Try a different brand of disc.

Ensure the disc is clean and undamaged. If recording stopped during a recording session, the disc may be damaged; use a different disc.

Use the correct type of disc for the type of files you are recording.

When using a CD-R disc, ensure it is blank if recording music, and that it is blank or appendable (with space to add more data files) if recording data.

Verify that you are using the correct disc type when you make a copy of a disc. Some recording programs can record only to the same disc type as the source. For example, you can record a DVD only to a DVD+R/-R or a DVD+RW/-RW disc, and you can record a CD only to a CD-R or a CD-RW disc.

Select a slower write speed for the recording drive, if a slower speed is available.

The recording software may not let you add a track if it exceeds the available space on your disc. You can make space available by removing one or more tracks from the list before recording the files to the disc.

Close all software programs and windows before recording.

Ensure you have enough available space on your hard disk drive to store a temporary copy of the content.

Click the **Start** button, and then click **Computer**. Right-click the hard disk drive, and then click **Properties** to view the available space.

If you are on a network, copy the files from a network drive to your hard disk drive first, and then record them to disc.

Close all programs and windows, and then restart your computer.

Video

Symptom	Possible solution
Some video files do not play.	Your file may be corrupt or in an unsupported format. Open the video file in a video editor, and then resave the file in a supported format.
Codec error messages appear when I try to play certain video files.	<p>Open the file in Windows Media Player. Ensure Windows Media Player is configured to automatically download codecs.</p> <ul style="list-style-type: none">■ If the correct codec is available, the file will play. Note that you must be connected to the Internet to download the codec file.■ If the correct codec is not available, check to see whether there is an update available for Windows Media Player. <p>For more information, open Windows Media Player Help and search for <i>codec</i>.</p>
Error message: <i>Files Needed To Display Video Are Missing or Corrupt.</i>	<ol style="list-style-type: none">1 Click the Start button.2 Type <i>Device Manager</i> into the Start Search box, and then click Device Manager to open the Device Manager window.3 Click the plus sign (+) next to Sound, video and game controllers.4 Right-click TV tuner (select models only), and then click Update Driver Software.5 Select Search automatically for updated driver software.6 Follow the instructions to update the driver.7 If you are prompted, restart the computer.

Hardware installation

Symptom

Possible solution

A new device is not recognized as part of the system.

Install the device driver provided with the device, or download and install the driver from the device manufacturer Web site.

You may need an updated driver for Windows. Contact the device vendor directly for an update.

For HP peripheral devices, visit the HP Web site:

<http://www.hp.com/support>

Ensure that all cables are properly and securely connected and that the pins in the cable or connector are not bent.

Turn off the computer, turn on the external device, and then turn on the computer to integrate the device with the computer.

Disable the automatic settings in the operating system for the new device, and choose a basic configuration that does not cause a resource conflict.

You can also reconfigure or disable devices to resolve the resource conflict.

A new device does not work.

To install or uninstall a device driver, you must be logged in with administrative privileges. If you need to switch users, click the **Start** button, click the **Arrow** button next to Shut Down, and then click **Switch User**. Choose a user with administrative privileges.

Hardware installation (continued)

Symptom

A device does not work after installing a new device.

Possible solution

To resolve a device conflict, you may need to disable one of the devices or uninstall an old device driver:

- 1 Click the **Start** button.
 - 2 Type *Device Manager* into the Start Search box, and then click **Device Manager** to open the Device Manager window.
 - 3 Click the plus sign (+) next to the problem device and check for an exclamation point in a yellow circle near the device icon. The exclamation point means there is a device conflict or problem with the device. Exclamation points do not always appear when a device is not working properly.
 - 4 If you have removed a hardware device, but the device driver is still listed in the Device Manager, this may be causing the device conflict. To uninstall the old driver so that the new device driver works properly, right-click the device, click **Uninstall**, and then click **OK**.
 - 5 Right-click the name of the device, and then select **Properties**.
 - 6 Click the **General** tab to see whether your device is enabled and working properly. If it is available, click the **Troubleshoot** button, and follow the onscreen instructions in the device troubleshooter wizard.
 - 7 Restart the computer. Click the **Start** button, click the **Arrow** button next to Shut Down, and then click **Restart**.
-

Performance

Symptom	Possible solution
Computer displays a processor speed that is lower than expected.	<p>This happens when the processor is automatically running in a lower power state, because the applications running do not require the maximum processing power.</p> <p>Verify that your system contains the processor you purchased. To verify, click the Start button, right-click Computer, click Properties, and under the General tab check the processor installed on your system.</p>
Software programs and files take longer than expected to open or respond.	<p>If you created multiple user accounts on your computer, ensure other users are not logged in. If there are multiple users logged in simultaneously, system resources must be shared among them.</p> <p>For information about other tasks, see “Maintenance tasks” on page 42.</p>

Memory card reader

Symptom	Possible solution
Memory card reader cannot read the memory card.	<p>Do not insert or remove memory cards when the memory card reader LED is flashing. Doing so may cause data loss or permanent damage to the card reader.</p> <p>Some memory cards have a Read/Write or a Security switch. Ensure the switch is set to Write Enabled before you attempt to write data to the card.</p> <p>Ensure the amount of stored data does not exceed the storage limit of the memory card.</p> <p>Ensure the memory card is one of the supported types: Memory Stick (MS), Memory Stick Pro (MS Pro), MultiMediaCard (MMC), Secure Digital (SD), Secure Digital High-Capacity (SDHC), or Extreme Digital (xD).</p> <p>Additional media card types can be supported by use of an adapter sleeve: Mini Secure Digital (Mini SD), Micro Secure Digital (Micro SD), Reduced-sized MultiMediaCard (RS-MMC), Memory Stick Duo (MS Duo), or Memory Stick Pro Duo (MS Pro Duo).</p>

Memory card reader (continued)

Symptom	Possible solution
Memory card reader cannot read the memory card. (continued)	Ensure the memory card is fully inserted into the slot and the LED is on. <hr/> Inspect the ends of the memory cards for dirt or material that closes a hole or spoils a metal contact. Clean the contacts with a lint-free cloth and a small amount of isopropyl alcohol. Replace the memory card if necessary.

Software Troubleshooting

Your computer uses the operating system and installed software programs during normal operation. If your computer works improperly or stops because of the software, you may be able to repair it.

Some software repairs are as simple as restarting your computer, and others require performing a system recovery from files on your hard disk drive.

Software repair overview

The most efficient way to repair software problems is simply to restart the computer or turn the computer off completely and then power it back up again. If this does not work, then explore the following methods for fixing your computer if you are experiencing software problems:

- Updating drivers (see the following section, “Updating drivers”).
- Microsoft System Restore (see “Microsoft System Restore” on page 40) — Restores your computer configuration to a configuration that was in use before the current software problem existed.
- Software program and hardware driver reinstallation (See “Software program and hardware driver reinstallation” on page 41) — Allows reinstallation of the factory-installed software or hardware driver by using the Recovery Manager program.
- System recovery (see “System Recovery” on page 44) — Erases and reformats the hard disk drive, deleting all data files you have created, and then reinstalls the operating system, programs, and drivers.

Updating drivers

A *driver* is a software program that enables your computer to communicate with an attached device, such as a printer, hard disk drive, mouse, or keyboard.

Complete the following procedure to update a driver, or to revert to an earlier version of the driver if the new one does not solve your problem:

- 1 Click the **Start** button.
- 2 Type *Device Manager* into the Start Search box, and then click **Device Manager** to open the Device Manager window.
- 3 Click the plus sign (+) to expand the type of device you want to update or rollback. (For example, DVD/CD-ROM drives).

- 4 Double-click the specific item (for example, **HP DVD Writer 640b**).
- 5 Click the **Driver** tab.
- 6 To update a driver, click **Update Driver**, and then follow the onscreen instructions.
Or
To revert to an earlier version of a driver, click **Rollback Driver**, and then follow the onscreen instructions.

Microsoft System Restore

Microsoft Windows 7 includes a feature that enables you to restore your computer configuration to a configuration that was in use before the current software problem existed. The feature does this by creating a restore point where it records the computer settings at that time and date.

When a new program is installed, the operating system automatically creates a restore point before it adds the new software. You can also set restore points manually.

If you experience a problem that you think may be due to software on your computer, use System Restore to return the computer to a previous restore point.

NOTE: Always use this System Restore procedure before you use the system recovery program.

To start a System Restore:

- 1 Close all open programs.
- 2 Click the **Start** button, right-click **Computer**, and then click **Properties**.
- 3 Choose **System protection, System Restore**, and then click **Next**.
- 4 Follow the onscreen instructions.

To manually add restore points:

- 1 Close all open programs.
- 2 Click the **Start** button, right-click **Computer**, and then click **Properties**.
- 3 Click **System protection**.
- 4 Under Protection Settings, select the disk for which you want to create a restore point.
- 5 Click **Create**.
- 6 Follow the onscreen instructions.

For more information about software restore points:

- 1 Click the **Start** button, and then click **Help and Support**.
- 2 Type *system restore* in the Search Help box, and then press Enter.

Software program and hardware driver reinstallation

If an individual factory-installed software program or hardware driver is damaged, you can reinstall it by using the Recovery Manager program (select models only).

NOTE: Do not use the Recovery Manager program to reinstall software programs that came on CDs or DVDs included in the computer box. Reinstall these programs directly from the CDs or DVDs.

Before you uninstall a program, be sure you have a way to reinstall it. Check that it is still available from where you initially installed it (for example, discs or the Internet). Or check that the program is in the list of programs you can reinstall from the Recovery Manager.

To check the list of installable programs in the Recovery Manager:

- 1 Click the **Start** button, **All Programs**, **Recovery Manager**, and then click **Recovery Manager**. If prompted, click **Yes** to allow the program to continue.
- 2 Under I need help immediately, click **Software Program Reinstallation**.
- 3 Click **Next** at the Welcome screen.

A list of programs opens. Check whether your program is there.

To uninstall a program:

- 1 Close all software programs and folders.
- 2 Uninstall the damaged program:
 - a Click the **Start** button, and then click **Control Panel**.
 - b Under Programs, click **Uninstall a program**.
 - c Select the program you want to remove, and then click **Uninstall**.
 - d Click **Yes** if you want to continue with the uninstall process.

To reinstall a program using the Recovery Manager:

- 1 Click the **Start** button, click **All Programs**, click **Recovery Manager**, and then click **Recovery Manager**.
- 2 Click **Software Program Reinstallation**.
- 3 Click **Next** at the Welcome screen.
- 4 Choose the program you want to install, click **Next**, and follow the onscreen instructions.
- 5 When you have finished reinstalling, restart the computer.

NOTE: Do not skip this last step. You must restart the computer after recovering software programs or hardware drivers.

Maintenance

This section includes information about tasks you can perform to help ensure trouble-free operation of your computer, and to ease the recovery of important information on your computer if problems arise in the future.

Maintenance tasks

It is important that you perform simple maintenance of your computer to ensure that it works at peak performance.

Weekly

Software Cleanup	Using Disk Cleanup or safe third-party cleaning tools removes junk files and temporary files that accumulate and slow down your system. Also, check for programs you no longer need and uninstall them.
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Defragmentation	Running Disk Defragmenter keeps your hard disk in good condition, as well as improves system performance. Frequently performing this task does not harm your system.
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Virus Scan	Performing a full virus scan every week can catch anything that may have slipped through unnoticed. Most antivirus products have a scheduling feature to keep track of this automatically.
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Monthly

Hardware Cleanup	Thoroughly clean the inside and outside of your computer.
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Software Updates	Using Windows Updates can fix operating system bugs and improve performance. Also, be sure to check for driver updates for your hardware and new versions of your favorite programs.
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Hard Disk Diagnostic	Sometimes a failing hard disk can be caught beforehand, saving you a lot of surprises in the future.
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Yearly

System Recovery	In time, your system may still get bogged down, depending on the usage of the computer. Use System Recovery to wipe your Windows operating system installation clean, restoring it to the original configuration when you first powered up your system. Remember to make a backup first! Before proceeding with a recovery, see "System Recovery" on page 44 for further details.
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Creating data backup discs

Use CD or DVD recording (or *burning*) software that is installed on your computer to create backup discs of important information, including personal files, e-mail messages, and Web site bookmarks. You can also move data to an external hard disk drive.

When writing data to a backup disc, use software that includes *write verification* functionality. This feature compares the data on your hard disk drive with the data copied to the disc to ensure it is an exact copy. Depending on your disc recording software, you may need to manually enable this feature (refer to the software documentation).

If you encounter recording issues, try alternate media (different types or brands). Also, use the Windows Explorer tool to view your files and verify content was copied over. To open Windows Explorer, right-click the **Start** button, and then click **Explore**.

Creating system recovery discs

This is a one-time procedure that you should perform while your computer is working properly. If you encounter problems with your computer later, you can restore it to its original factory settings by using the system recovery discs that you created. Refer to “Creating recovery discs” on page 45 for details.

Keeping the computer free of dust, dirt, and heat

Keeping your computer system free of dust, dirt, and heat will prolong its life. Dust, pet hair, and other particles can build up, creating a blanket effect; as a result, components can overheat, or, in the case of the keyboard and mouse, not work smoothly and effectively. Check your system once a month for visible signs of dust and debris, and clean it about once every three months.

Cleaning the computer and monitor

- 1 Unplug the computer from its power source.
- 2 Use a clean, dry cloth to dust the computer and the monitor.
- 3 Use a clean cloth dampened with warm water to wipe the computer case.
Do not use water on the monitor screen.

NOTE: If there is sticker residue or a spill on the computer, use isopropyl or rubbing alcohol and a lint-free cloth to remove it.

- 4 Use a clean cloth to dry the computer case.
- 5 Use a clean, dry cloth to clean the monitor screen, or, for more thorough cleaning use an antistatic screen cleaner and a clean cloth.

Cleaning the computer vents

Air vents keep the computer and monitor cool. To maintain efficient air flow, keep these vents clean by using a small battery-powered vacuum cleaner. (A battery-powered vacuum cleaner eliminates the risk of electric shock.)

- 1 Run the vacuum over the vents in the computer case.
- 2 Remove any debris that has accumulated in and around the computer connectors (for example, the Ethernet and USB connectors).

Cleaning the keyboard and mouse

When cleaning the keyboard keys, use a low setting on the battery-powered vacuum cleaner, to avoid removing key caps and springs.

- 1 Vacuum between the keys of the keyboard and along the grooves.
- 2 Use a clean, dry cloth and isopropyl alcohol to clean buildup on the keyboard keys and along its edges.
- 3 Wipe the body of the mouse and the mouse cord with cleaning wipes or a cloth and cleanser.

If you have a roller ball mouse, clean the ball and rollers inside:

- 1 Turn the mouse upside down.
- 2 Rotate the ball-cover ring counterclockwise to remove the ring and release the roller ball.
- 3 Rinse the roller ball with soap and warm water.
- 4 Clean the rollers inside the mouse with a cotton swab dampened with isopropyl alcohol.
- 5 After the roller ball and rollers are completely dry, replace the ball and ball-cover ring.

System Recovery

System recovery completely erases and reformats the hard disk drive, deleting all data files you have created. System recovery reinstalls the operating system, programs, and drivers. However, you must reinstall any software that was not installed on the computer at the factory. This includes software that came on CDs included in the computer accessory box, and software programs you installed after purchase.

You must choose one of the following methods to perform a system recovery:

- Recovery Image — Run the system recovery from a recovery image stored on your hard disk drive. The recovery image is a file that contains a copy of the original factory-shipped software. To perform a system recovery from a recovery image, see “System recovery from the Windows 7 Start Menu” on page 46.

NOTE: The recovery image uses a portion of the hard disk drive that cannot be used for data storage.

- Recovery Discs — Run the system recovery from a set of recovery discs that you create from files stored on your hard disk drive. To create recovery discs, see the next section.

Creating recovery discs

Complete the procedure described in this section to create a set of recovery discs from the recovery image stored on your hard disk drive. This image contains the operating system and software program files that were originally installed on your computer at the factory.

You can create only one set of recovery discs for your computer. Furthermore, the recovery discs you create can be used only with your computer.

Choosing recovery discs

To create recovery discs, your computer must have a DVD writer.

- Use DVD+R or DVD-R blank media to create your system recovery discs.
- You cannot use CDs or DVD+RW, DVD-RW, DVD+RW DL, DVD-RW DL, DVD+R DL, or DVD-R DL discs to create recovery discs.

Use high-quality discs to create your set of recovery discs. The verification standard for the recovery disc creation process is very high. You may see error messages such as *Recording failure when writing disc* or *Error detected during disc verification*.

Your discs may be rejected if they are not defect-free. You will be prompted to insert a new blank disc to try again. It is normal that some of your discs may be rejected.

The number of discs in the recovery disc set depends on your computer model (typically 1–3 DVDs). The Recovery Disc Creator program tells you the specific number of blank discs needed to make the set.

The process takes some time to verify that the information written on the disc is correct. You can quit the process at any time. The next time you run the program, it resumes where it left off.

To create recovery discs:

- 1 Close all open programs.
- 2 Click the **Start** button, click **All Programs**, click **Recovery Manager**, and then click **Recovery Disc Creation**. If prompted, click **Yes** to allow the program to continue.
- 3 Follow the onscreen instructions. Label each disc as you make it (for example, Recovery 1, Recovery 2).
- 4 Store the recovery discs in a safe place.

System recovery options

You should attempt a system recovery in the following order:

- 1 Through the hard disk drive, from the Windows 7 Start menu.
- 2 Through the hard disk drive, by pressing the F11 key on the keyboard during system startup.
- 3 Through recovery discs that you create.
- 4 Through recovery discs purchased from HP Support. To purchase recovery discs, go to <http://www.hp.com/support> and visit the Software & Driver downloads page for your computer model.

System recovery from the Windows 7 Start Menu

If the computer is working, and Windows 7 is responding, use these steps to perform a system recovery.

NOTE: System recovery deletes all data and programs you created or installed after purchase. Therefore, ensure you have backed up, to a removable disc, any data you want to keep.

- 1 Turn off the computer.
- 2 Disconnect all peripheral devices from the computer, except the keyboard and mouse.
- 3 Turn on the computer.
- 4 Click the **Start** button, click **All Programs**, click **Recovery Manager**, and then click **Recovery Manager**. If prompted, click **Yes** to allow the program to continue.
- 5 Under I need help immediately, click **System Recovery**.
- 6 Select **Yes**, and then click **Next**.
Your computer restarts.

NOTE: If your system does not detect a recovery partition, it will prompt you to insert a recovery disc. Insert the disc and proceed to Step 7 in the section “Starting system recovery from user-created recovery discs” on page 47.

- 7 Under I need help immediately, click **System Recovery**.
- 8 If you are prompted to back up your files, and you have not done so, select **Back up your files first (recommended)**, and then click **Next**. Otherwise, select **Recover without backing up your files**, and then click **Next**.
System recovery begins. After system recovery is complete, click **Finish** to restart the computer.
- 9 Complete the registration process, and wait until you see the desktop.
- 10 Turn off the computer, reconnect all peripheral devices, and turn the computer back on.
- 11 Perform the procedure “Performing the post-recovery procedure” on page 48.

System recovery at system startup

If Windows 7 is not responding, but the computer is working, use these steps to perform a system recovery:

NOTE: System recovery deletes all data and programs you created or installed after purchase. Therefore, ensure you back up, to a removable disc, any data you want to keep.

- 1 Turn off the computer. If necessary, press and hold the On button until the computer turns off.
- 2 Disconnect all peripheral devices from the computer, except the keyboard and mouse.
- 3 Press the On button to turn on the computer.

- 4 As soon as you see the initial company logo screen appear, repeatedly press the F11 key on your keyboard until the *Windows is Loading Files...* message appears on the screen.
- 5 Under I need help immediately, click **System Recovery**.
- 6 If you are prompted to back up your files, and you have not done so, select **Back up your files first (recommended)**, and then click **Next**. Otherwise, select **Recover without backing up your files**, and then click **Next**.
System recovery begins. After system recovery is complete, click **Finish** to restart the computer.
- 7 Complete the registration process, and wait until you see the desktop.
- 8 Turn off the computer, reconnect all peripheral devices, and turn the computer back on.
- 9 Perform the procedure "Performing the post-recovery procedure" on page 48.

Starting system recovery from user-created recovery discs

This section contains the procedure for performing a system recovery from the recovery discs you created as described in "Creating recovery discs" on page 45.

NOTE: System recovery deletes all data and programs you created or installed after purchase. Therefore, ensure you back up, onto a removable disc, any data you want to keep.

To perform a system recovery using recovery discs:

- 1 If the computer is working, create a backup DVD containing all the data files you want to save. When you are done, remove the backup disc from the drive tray.



CAUTION: All data on the hard disk drive will be deleted. You will lose data if it is not backed up.

- 2 Insert recovery disc #1 into the DVD drive tray, and close the tray.
- 3 If the computer works, click the **Start** button, click the **Arrow** button next to Shut Down, and then click **Shut Down**.
Or
If the computer is not responding, press and hold the On button for approximately 5 seconds, or until the computer turns off.
- 4 Disconnect all peripheral devices from the computer, except the keyboard and mouse.
- 5 Press the On button to turn on the computer.
If you are prompted to choose between running System Recovery from disc or from hard drive, select **Run program from disc**, and then click **Next**.
- 6 Under I need help immediately, click **Factory Reset**.
- 7 If you are prompted to back up your files, and you have not done so, select **Back up your files first (recommended)** button, and then click **Next**. Otherwise, select **Recover without backing up your files** button, and then click **Next**.
- 8 If you are prompted to insert the next recovery disc, do so.

- 9 When the Recovery Manager is finished, remove all recovery discs from the system.
- 10 Click **Finish** to restart the computer.
- 11 After restarting the computer, see “Setting Up Your Computer” on page 3.

Performing the post-recovery procedure

- 1 At the Welcome to Microsoft Windows screen, follow the onscreen setup instructions.
- 2 Follow the instructions in “Turning On Your Computer for the First Time” on page 4.

Additional Troubleshooting

For additional troubleshooting solutions, refer to the following:

■ HP Support Assistant

HP Support Assistant helps you maintain your PC performance and resolve problems faster with automated updates, onboard diagnostics, and guided assistance.

To open HP Support Assistant, click the **Start** button, **All Programs**, **HP**, and then click **HP Support Assistant**.

■ Windows 7 Troubleshooting Tools

Windows 7 provides troubleshooting tools that can automatically troubleshoot and fix common computer problems. To access the Windows 7 Troubleshooting Tools:

- 1 Click the **Start** button, and then click **Control Panel**.
- 2 Click **System and Security**.
- 3 Under Action Center, click **Find and fix problems (troubleshooting)**.

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