

 **BLACKBIRD 002**
GAMING SYSTEM

Getting Started

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Setting Up the Computer



WARNING: The power supply is preset for the country/region in which you purchased your computer. If you move, please check the voltage requirements for your new location before plugging the computer into an AC power outlet.



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

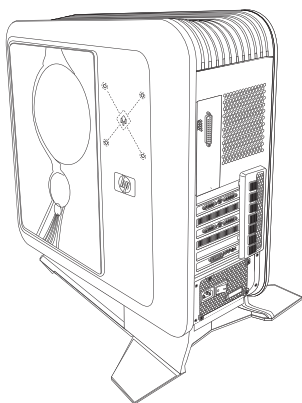
Putting the Computer Together

Follow the steps on the setup poster to set up the computer. Read the topics in this section to learn more about the location of components and connectors on the computer, and to learn about some setup alternatives.

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

Placing the computer in the proper location

All Blackbird 002 systems ship with a base stabilizer (computer stand), which you must install when you set up your computer. Once you install the base stabilizer, the system meets safety standards for product stability in either floor-standing or desktop-mounted setups. See the instructions for attaching the base stabilizer in the *Attaching the Computer Stand* document that came with the computer.



When setting up your new computer, place it where ventilation openings are unobstructed. Make sure that all connections are secure and that all cabling is out of the way. Do not place cabling in walkways or where it can be stepped on or damaged from placing furniture on it.



WARNING: Setting up the computer without the base stabilizer is not recommended because it is more susceptible to being knocked over, which can cause serious personal injury and hardware damage. For instructions on how to install the base stabilizer, see the *Attaching the Computer Stand* document that came with the computer.

Using surge protection

Help protect the monitor, computer, and accessories by connecting all power cords for the computer and peripheral devices (such as a monitor, printer, or scanner) to a surge protection device, such as a power strip with surge protection or an uninterruptible power supply (UPS). Many surge protection devices have surge protection inputs and outputs for modem or telephone lines. Telephone lines are a common path for lightning spikes to get into the system. Some surge protection devices have surge protection for television cable connections as well. Use those if the computer has a television tuner installed.





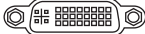

Not all power strips provide surge protection; the power strip must be specifically labeled as having this capability. Use a power strip whose manufacturer offers a damage replacement policy that replaces the equipment if surge protection fails.








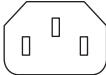

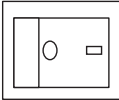


Connecting to the computer

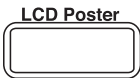


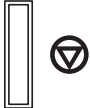

Connect the main hardware devices, such as the monitor, keyboard, and mouse, to the back of the computer. Other peripheral devices, such as a printer, scanner, or camera, also plug into connectors on the back of the computer. Some computers also have connectors on the front of the computer. The following table shows some, but not all, connectors:

NOTE: The location, availability, and number of connectors on the computer may vary.

NOTE: For more information about the computer connectors, LEDs, and buttons, see the motherboard documentation that came with the computer.

| Connector/LED/Button | Description and function |
|--|---|
|  | Mouse (PS/2 connector). |
|  | Keyboard (PS/2 connector). |
|  | 4-pin Universal Serial Bus (USB) connectors for connecting USB 2.0 devices, such as a mouse, keyboard, or digital camera. |
|  eSATA | External Serial Advanced Technology Attachment (eSATA) connector enables SATA hard disk drives to be attached externally. For more information, see the motherboard documentation. NOTE: An eSATA connection requires its own power connector. |
|  | Four DVI (Digital video output) connectors to connect a TV or monitor. You may need to use a VGA-to-DVI or a HDMI-to-DVI adapter to connect the display to the computer. See the documentation that came with your display device. |
|  | S-video connector for connecting a TV display. |

| Connector/LED/Button | Description and function (continued) |
|---|---|
|  | Audio Line Out (to powered speakers). |
|  | Microphone (pink) connector. |
|  | Headphones (green) connector. |
|  | Optical Out/Microphone In to connect to a microphone. The Mic connector also functions as a center/subwoofer Line Out when a multichannel audio configuration is activated. |
|  | IEEE 1394a connector. This 6-pin connector provides high-speed connectivity for audio/video devices, storage peripherals, PCs, or portable devices with very fast transfer rates. |
|  | Coaxial S/PDIF Out (orange) port connects an external audio output device via an optical S/PDIF cable. |
|  | Optical Out connector. Optical SPDIF output connects to the Optical In on a set of digital speakers. The digital speakers would then split up the audio signal to the correct speaker. |
|  | Power cord connector. |
|  | Computer power LED. |
|  | Power switch to be turned on before the power button on the front of the computer is pressed. |
|  | Power button. Press the power button after the power switch on the back of the computer is turned on. |
|  | LAN 1 and LAN 2 (RJ-45) connectors. Supported by NV Gigabit LAN controller, this connector allows gigabit connection to a local area network (LAN) through a network hub. |

| Connector/LED/Button | Description and function (continued) |
|---|---|
|  <p>LCD Poster</p> | <p>LCD Poster display window displays system activity such as boot error messages.</p> |
|  | <p>Hard disk drive is active LED.</p> |
| <p>LED SW</p>  | <p>Onboard LED SW button turns internal motherboard LEDs on and off.</p> <p>These blue lights are strategically located beside key motherboard connectors to allow you to install components conveniently without a flashlight. See the following Warning.</p> |
|  | <p>Reset button allows you to restart the computer without turning off the power.</p> |
|  | <p>WARNING: Before you install or remove any component, make sure to press the onboard LED SW button first, and make sure the standby power LED is off. Failure to do so may cause injury or severe damage to the motherboard, peripherals, and/or components.</p> |

Using DVI Connectors with SLI Technology

The computer models that include dual graphics cards come configured with Scalable Link Interface (SLI) enabled. Dual graphics cards with SLI technology work together to render 3D applications to create a better performance experience.

IMPORTANT: In SLI mode only one of the top two DVI connectors is active. This means you cannot use the other three DVI connectors. If you do not have SLI mode enabled, you can use up to four of the DVI connectors on the back of the computer.

If you are not sure if you have SLI Mode, you can find out by completing the following steps:

- 1 Right-click anywhere on the desktop, and then click **NVIDIA Control Panel**.
- 2 On the left-hand side of the window, under 3D Settings, click **Set SLI configuration**.
- 3 From the menu bar, click **3D settings**.
- 4 Click the drop-down menu and select **Show SLI Visual Indicators**. This window helps you to determine if SLI technology is enabled and working.

Connecting a Digital Camera (Photo or Video)

The following instructions apply only to digital photo cameras and digital video cameras.

NOTE: When connecting an analog video camera to the computer, use the Video and Audio In connectors on the front or back of the computer.

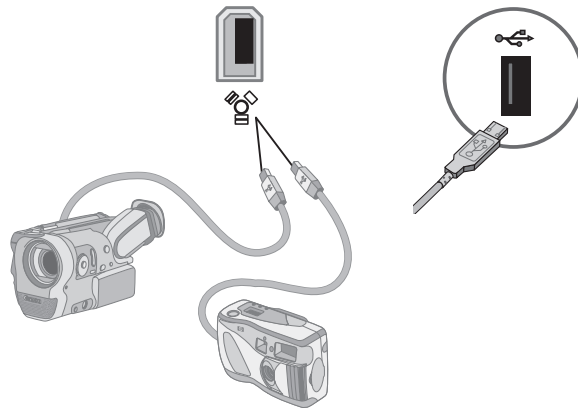
Refer to the documentation that came with your digital photo camera or digital video camera.

To connect a digital photo camera or a digital video camera:

- 1 Turn on the computer, and wait for the Microsoft® Windows Vista® operating system to start.

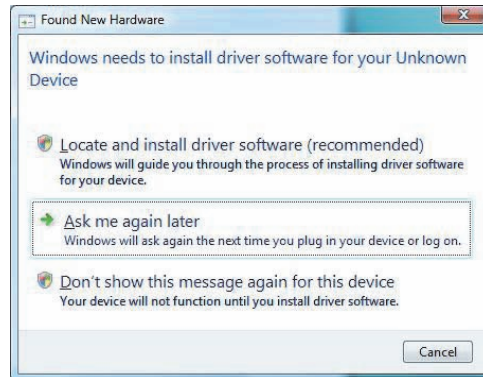
NOTE: If a Digital Video Device AutoPlay window appears when you connect the camera, click **Cancel**.

- 2 Connect the 6-pin video camera transfer cable into the camera, and then into an open port on the front or back of the computer. Most digital video cameras use either the FireWire® (IEEE 1394) port or the USB port.




- 3 A *Found New Hardware* message appears. Wait 2 or 3 minutes for Windows Vista to make the necessary settings for the new device. When installation is complete, a message appears, indicating that the camera is ready to use.

- 4 You may need to install driver software for your camera. If so, Windows displays a message asking if you want to locate and install driver software. Insert the driver software CD, click **Locate and install driver software**, and then follow any onscreen instructions to install the software.



If the computer does not recognize the digital photo camera or the digital video camera:

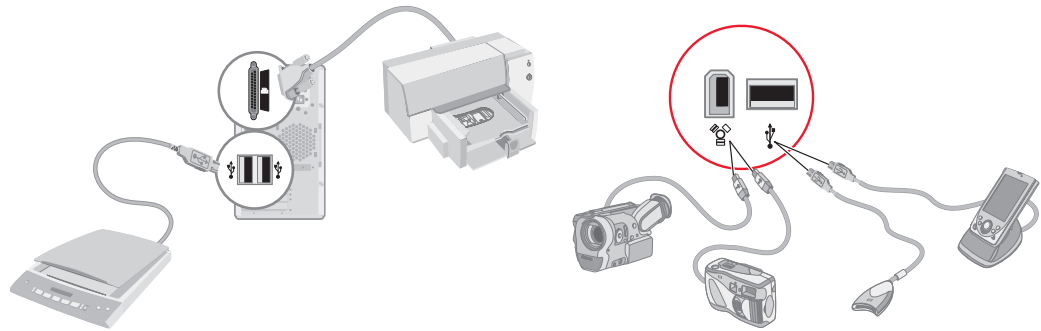
- 1 Click the **Windows Start Button**®  on the taskbar, and then click **Control Panel**.
- 2 Click **System and Maintenance**, and then click **System**.
- 3 Click **Device Manager**.
- 4 Click the plus sign (+) next to the camera port. If the name of the camera appears, the device is ready. If the name is not there, try the following:
 - Click **Action**, and then click **Scan for hardware changes**. Look in Device Manager for a new addition under the port.
 - Unplug the video camera transfer cable from the computer, and plug it into a different port. Look in Device Manager for a new addition under the port.

Connecting Other Devices

Other peripheral devices can be connected to the front or back of the computer by using USB or FireWire (IEEE 1394) ports. These peripheral devices include printers, scanners, video cameras, digital photo cameras, memory card readers, and PDAs (personal digital assistants) or handheld computers. Refer to the documentation that came with your device.

NOTE: Some peripheral devices are not included with the computer.

NOTE: You must use a 6-pin (not a 4-pin) FireWire (IEEE 1394) cable with the 6-pin FireWire (IEEE 1394) connector on the computer.



Storing Documentation and Recovery Discs

Store all computer user manuals and warranty information in an easy-to-find, safe location. It is a good idea to store the system recovery discs with the documentation. This allows easy access to all important computer documents and files.

Adjusting the Monitor

Adjusting the screen resolution by using Vista

To change the screen resolution by using Vista:

- 1 Right-click an empty area of the desktop, and then click **Personalize**.
- 2 Click **Display Settings**.
- 3 If necessary, select the monitor, and then adjust the screen resolution by using the slider under Resolution.
- 4 Click **Apply**.

- 5 Click **Yes**, if it is present.
- 6 Click **OK**.

NOTE: You can connect more than one display device (CRT monitor, flat panel monitor, TV, and so on) to the computer at a time (select models only). You can quickly change which device displays the computer desktop by pressing Alt+F5. Each time you press Alt+F5, the computer desktop appears on the next device. If pressing Alt+F5 does not work, restart the computer and try again.

Adjusting the screen resolution by using the NVIDIA Control Panel

To change the screen resolution by using the NVIDIA Control Panel:

- 1 Right-click an empty area of the desktop, and then click **NVIDIA Control Panel**.
- 2 Select **Standard** or **Advanced** and then click **OK**.
- 3 Under Display, click **Change resolution**.
- 4 If necessary, select the display, and then adjust the screen resolution by using the slider under Display resolution.
- 5 Click **Apply**, and then click **Yes** if you want to apply that resolution.

Or

Click **No**, and change the resolution by using the slider under Display resolution again, click **Apply** and then click **Yes**.

Setting Up a Local Area Network

A home local area network (LAN) may consist of either a wired or a wireless network that you can use to connect the computer to other devices on the network, including other computers. The network components may include a hub or a switch, which can connect multiple devices to the network, or a router, which can connect computers or a broadband Internet connection to the network. This network connection also enables you to share data and printers or other devices among your computers. The network connection to the Internet is usually through a dial-up or cable modem.

A *wired network* uses Ethernet cables to connect the devices on the network. For example, the Ethernet cable plugs into the computer network interface adapter and the router.

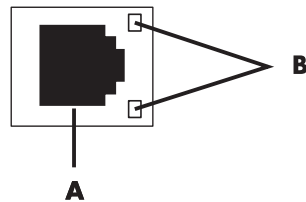
A *wireless network* uses radio waves to connect the devices on the network. For example, both the computer and the router have an antenna and adapter that use the same Wi-Fi industry standard: 802.11n, 802.11b, 802.11g, or 802.11a.

Setting Up a Wired (Ethernet) Connection

The *Ethernet* connection, which may be called network interface adapter, Network Interface Card, or NIC, 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 connector (**A**) on the back of the computer, and to the network router or LAN device.

NOTE: Your computer may not come with an Ethernet connector.



A Ethernet connector (RJ-45 port)

B Ethernet indicator lights

- 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

NOTE: Your Ethernet connector may have only one indicator light.

Connecting a Modem

For information on connecting to the Internet, see “Connecting to the Internet” in this guide.

Connecting Speakers or Microphone

Speakers are included with the monitor (select models only), or they are sold separately.

NOTE: For product information on the HP Support Web site, go to:
<http://www.hp.com/support>

For details about connecting stereo speakers to the computer, see the setup poster.

NOTE: Speakers may be *passive* (no power button or power cord) or *active* (power button or power cord). Your computer supports only active (powered) speaker systems; the speaker system must have its own power cord.

A *stereo speaker set* is a left-right, two-channel speaker system. A *multichannel audio speaker system* is a system with more than two channels, and it may include a subwoofer. For example, 5.1 channels, referred to as *six-speaker mode*, uses two front speakers (left-right), two rear speakers (left-right), a center speaker, and a subwoofer.

If the computer has multichannel audio speaker capacity (select models only), you can connect four channels for four-speaker output, or six channels for 5.1 speaker output.

Connect the speaker system to the computer, and then configure the audio software for sound output.

Sound Connector Types

Your model may include one of three analog sound connector types on the back of the computer:

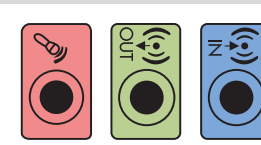

- Three connectors
- Six connectors
- Audio card

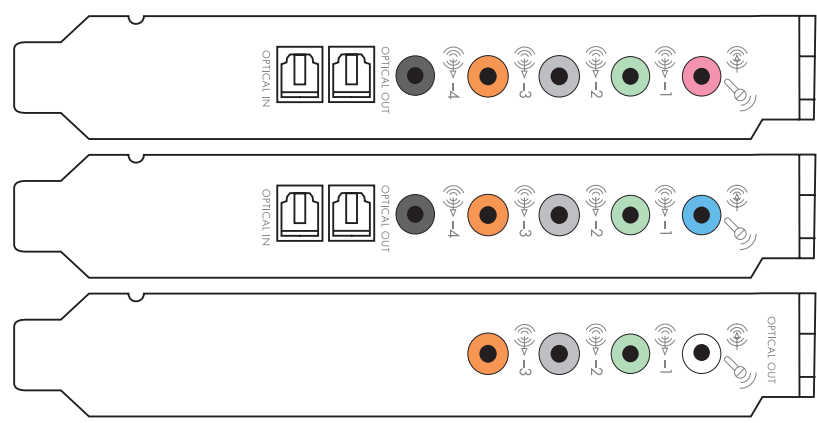
The connectors are 3.5 mm (1/8-inch) stereo mini-jacks that connect from the back of the computer to speakers and microphones.

Your system may also have a separate Digital Out connector (select models only).
Software configuration is different for each connector type, as noted in the instructions.

NOTE:

- Type 3 has three connectors.
- Type 6 has six connectors.
- Type S has audio card.

| Sound connector | | Illustration | Type |
|----------------------|--|---|----------|
| Three connectors | Your computer model may include three sound connectors. You can connect up to a 5.1 audio system to the computer. |  | 3 |
| Six connectors | Your computer model may include six sound connectors on the back of your computer. You can connect up to a 7.1 audio system to the computer. |  | 6 |
| Audio card connector | Your computer may include a audio card. You can connect up to a 5.1 audio system (7.1 audio system for select models) or digital speakers to the audio card on the computer. | See the following illustrations. | S |





When installing cables, use the sound connectors that match your computer model, as shown in the installation procedure steps.

The following table shows the sound connectors on the back panel of computer systems.

| Sound connector | | | Description |
|---|---|---|---|
| Type 3 | Type 6 | Type 5 | |
|  |  |  | Line Side (gray) connects to side left and right analog speakers in an eight-speaker system (7.1). |
|  |  |  | Line C/Sub (gold) connects to front center/subwoofer speakers in a multichannel audio configuration. |
|  |  |  | Line Rear (black) connects to rear left and right analog speakers in a multichannel audio configuration. |
|  |  |  | Line Out (lime green) connects to front left and right analog speakers. |
|  |  |  | Mic (pink) connects to a microphone. (Type 3 also functions as center/subwoofer Line Out when a multichannel audio configuration is enabled.) |
|  |  |  | Line In (light blue) connects to an analog audio device such as a CD player for input into computer. (Type 3 also functions as rear Line Out when a multichannel audio configuration is enabled.) |
|  |  |  | Digital Audio Out or SPDIF Out (orange) connects to a digital audio device with digital input (such as a home audio receiver/amplifier) or to digital speakers (select models only). |
| | |  | FlexiJack (pink) connects to analog Line In devices or a microphone. The FlexiJack supports two functions. You must select either the microphone or the Line In function in the Creative Console Launcher. See "Configuring the FlexiJack connector." |
| | |  | FlexiJack (blue) connects to analog Line In devices or a microphone. The FlexiJack supports two functions. You must select either the microphone or the Line In function in the Creative Console Launcher. See "Configuring the FlexiJack connector." |

Sound connector (continued)

| Type 3 | Type 6 | Type S | Description |
|--------|--------|---|---|
| | |  | Optical In (optical SPDIF input) connects recording devices such as a mini disc recorder, digital audio tape recorder, or external hard disk recorder. |
| | |  | Optical Out (optical SPDIF output) connects playback devices such as a mini disc player, digital audio tape player, or DVD player. |

NOTE:

- Type 3 has three connectors.
- Type 6 has six connectors.
- Type S has audio card.

Connecting a Microphone

Your computer comes with one microphone connector in the back of the computer. Some models have a second microphone connector in the front of the computer. Only one microphone connector works at a time, and the back connector is ready to use unless you have the multichannel audio speakers option. For computers with the multichannel audio speakers option, the microphone connector in the front of the computer, if present, is ready to use.

To use a microphone connected to the front of your computer (select models only), select the working microphone. See "Selecting a microphone."

HP computers support many different audio options, sound connections, and speaker configurations. You may set up your computer for two stereo speakers or for multichannel audio speaker systems. Connect your speaker system to the computer, and then configure the audio software for sound output. For more details about connecting stereo speakers to the computer, see the setup poster.

This chapter describes the most typical options. Your system may have different components.

Speakers are included with the monitor (select models only) or are sold separately.

NOTE: For additional information on connecting the speakers, refer to the setup poster that came with the computer and the documentation that came with your speakers.

Speaker Configurations

You may set up your computer for the following supported configurations:

| Name | Speaker system | See |
|----------------------|---|---|
| Headphones | None, muted. | "Connecting Headphones." |
| 2 (stereo) | Left speaker, right speaker. | "Connecting 2/2.1 (Two speakers and a subwoofer) audio speakers." |
| 2.1 | Left speaker, right speaker, and a subwoofer. | "Connecting 2/2.1 (Two speakers and a subwoofer) audio speakers." |
| 4.1 | Two front speakers, two rear speakers, and a subwoofer. | "Connecting 4.1 (Four speakers and a subwoofer) audio speakers." |
| 6/5.1 | Two front speakers, two rear speakers, a center speaker, and a subwoofer. | "Connecting 5.1 (Five speakers and a subwoofer) audio speakers." |
| 8/7.1 | Two front speakers, two rear speakers, two side speakers, a center speaker, and a subwoofer (select models only). | "Connecting 7.1 (Seven speakers and a subwoofer) audio speakers." |
| Home audio system | Home stereo or home theater audio system with passive speakers. | "Connecting your home stereo system (optional)." |
| Digital audio | Digital speakers or digital input connector on audio system. | "Connecting digital audio." |
| Multistreaming audio | Two front speakers, two rear speakers, two side speakers, a center speaker, and a subwoofer (select models only). | "Configuring multistreaming audio." |

Speaker types

Speakers may be included with the monitor (select models only) or are sold separately. Refer to the product documentation for your speakers.

Your computer supports only an active (powered) speaker system. An active speaker system must have its own power cord. A home audio system does not require active speakers, because the receiver provides amplification.

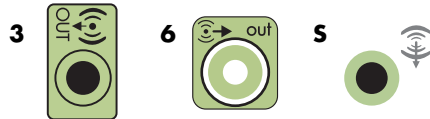
A stereo speaker set is a left-right, two-channel speaker system. A multichannel audio speaker system has a left-right front and left-right rear channel, and it may include a subwoofer and a center speaker. Side speakers are included in more advanced systems. A subwoofer provides enhanced bass sounds.

“.1” indicates a subwoofer. For example, 7.1 channels refers to an eight-speaker mode and uses two front speakers (left-right), two side speakers (left-right), two rear speakers (left-right), a center speaker, and a subwoofer.

Connecting 2/2.1 (Two speakers and a subwoofer) audio speakers

To connect simple left/right stereo active speakers or two speakers and a subwoofer for two-channel (2.1 speaker) output:

- 1 Turn off the computer.
- 2 Connect the speaker cable to the lime green Audio Line Out connector that matches the back of your computer.



NOTE:

- Type 3 is three connectors.
- Type 6 is six connectors.
- Type S is sound card.

-
- 3 Connect the cable to the audio system. For 2.1 speakers that were shipped with your computer (select models only), connect the Audio Line Out connector to the subwoofer.
 - 4 Connect the left and right speakers to the subwoofer. Refer to the speaker documentation.
 - 5 Turn on the computer.

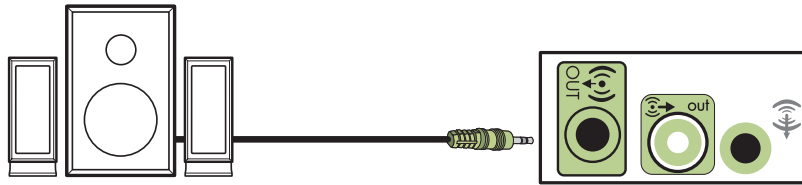
NOTE: Always turn on the computer before you turn on the speaker system.

- 6 Plug in the speaker system power.
- 7 Turn on the speaker system.

Step 8 is optional for a two-speaker setup.

- 8 After the speakers are connected to the computer, configure the audio software for sound output for your computer model. See “Connecting Speakers or Microphone.”
 - Type 3: See “Configuring speakers with Realtek HD Audio Manager.”
 - Type 6: See “Configuring speakers with Realtek HD Audio Manager.”
 - Type S (audio card): See “Using the Creative Sound Blaster X-Fi or X-Fi Fatality audio card.”

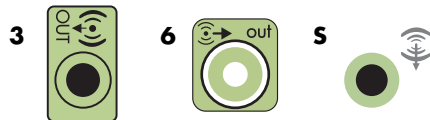
The following diagram shows a typical 2.1 audio installation:



Connecting 4.1 (Four speakers and a subwoofer) audio speakers

To connect two front speakers, two rear speakers, and a subwoofer for four-channel (4.1 speaker) output:

- 1 Turn off the computer.
- 2 Connect the front speaker cable to the lime green Audio Line Out connector that matches the back of your computer.



NOTE:

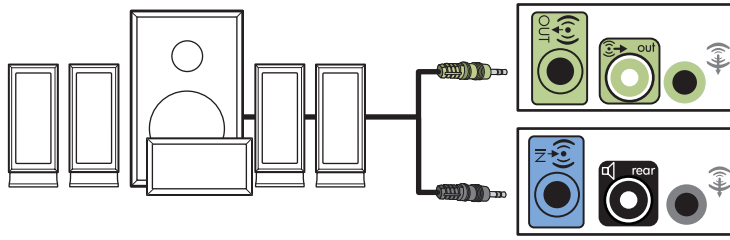
- Type 3 is three connectors.
- Type 6 is six connectors.
- Type S is sound card.

- 3 Connect the rear speaker cable to the black connector that matches the back of your computer.



- Type 3: See "Configuring speakers with Realtek HD Audio Manager."
- Type 6: See "Configuring speakers with Realtek HD Audio Manager."
- Type S (audio card): See "Using the Creative Sound Blaster X-Fi or X-Fi Fatality audio card."

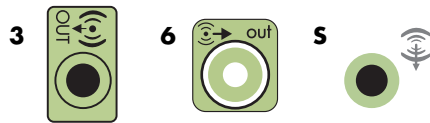
The following diagram shows a typical 4.1 audio installation:



Connecting 5.1 (Five speakers and a subwoofer) audio speakers

To connect two front speakers, two rear speakers, a center speaker, and a subwoofer for six-channel (5.1 speaker) output:

- 1 Turn off the computer.
- 2 Connect the front speaker cable to the lime green Audio Line Out connector that matches the back of your computer.



NOTE:

- Type 3 is three connectors.
- Type 6 is six connectors.
- Type S is sound card.

- 3 Connect the rear speaker cable to the black connector that matches the back of your computer.



For type 3-connector systems, the blue Audio Line In connector functions as a Rear Line Out when a multichannel audio configuration is activated.

- 4 Connect the center/subwoofer speaker cable to the gold (or pink Mic) connector that matches the back of your computer.



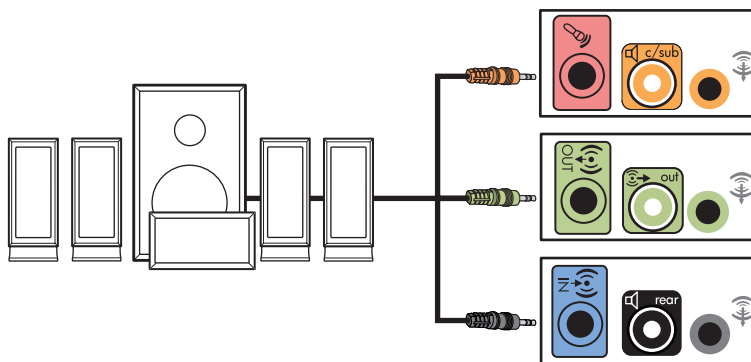
For type 3-connector systems, the pink Mic connector functions as a center/subwoofer speaker Line Out when a multichannel audio configuration is activated.

- 5 Connect the cables to the audio system.
- 6 Connect the front, rear, and center speakers to the subwoofer. Refer to the speaker documentation.
- 7 Turn on the computer.

NOTE: Always turn on the computer before you turn on the speaker system.

- 8 Plug in the speaker system power.
- 9 Turn on the speaker system.
- 10 After the speakers are connected to the computer, configure the audio software for sound output for your computer model. See "Configuring Speaker and Sound Options."
 - Type 3: See "Configuring speakers with Realtek HD Audio Manager."
 - Type 6: See "Configuring speakers with Realtek HD Audio Manager."
 - Type 6 — multistreaming: See "Configuring multistreaming audio."
 - Type S (audio card): See "Using the Creative Sound Blaster X-Fi or X-Fi Fatality audio card."

The following diagram shows a typical 5.1 audio installation:



Connecting 7.1 (Seven speakers and a subwoofer) audio speakers

(Select models only)

To connect two front speakers, two side speakers, two rear speakers, a center speaker, and a subwoofer for eight-channel (7.1 speaker) output:

- 1 Turn off the computer.
- 2 Connect the front speaker cable to the lime green Audio Line Out connector on the back of your computer.



- 3 Connect the rear speaker cable to the black Audio Line Rear connector on the back of your computer.



- 4 For type 6 connectors only, connect the side speaker cable to the gray Audio Line Side connector on the back of your computer.



- 5 Connect the center speaker and subwoofer speaker cable to the gold Audio Line C/Sub connector on the back of your computer.



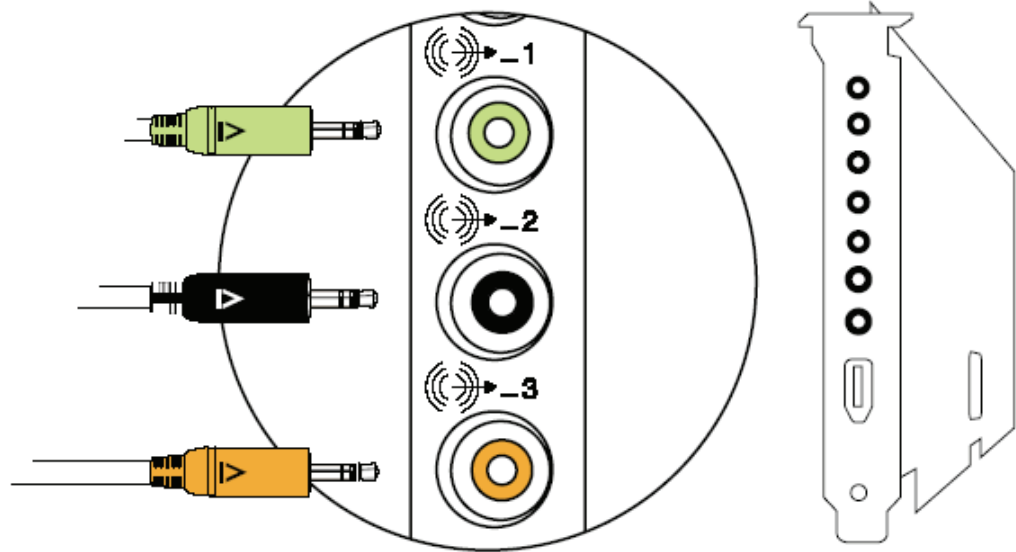
- 6 Connect the cables to the audio system.
- 7 Connect the front, rear, side, and center speakers to the subwoofer. Refer to the speaker documentation.
- 8 Turn on the computer.

NOTE: Always turn on the computer before the speaker system.

- 9 Connect the speaker system to the power.
- 10 Turn on the speaker system.
- 11 After the speakers are connected to the computer, configure the audio software for sound output for your computer model.

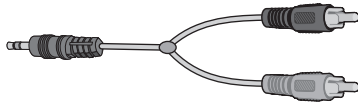
The following diagram shows a typical 7.1 audio installation.

| | Color | Description |
|---|--------------|------------------------------|
| 1 | Lime green | Front audio input |
| 2 | Black | Rear audio input |
| 3 | Orange | Center/subwoofer audio input |
| 4 | Gray | Side audio input (not shown) |



Connecting your home stereo system (optional)

Most home receivers/amplifiers have RCA-type input connectors. You must connect Y adapter cables between your computer and your receiver/amplifier. Y adapter cables have one 3.5 mm (1/8-inch) stereo mini-jack on one end, and two RCA connectors on the other. These cables are purchased separately.



The number of Y adapter cables that you need to connect to your home stereo system depends on the number of speakers that you install:

- 2/2.1 speaker system: One Y adapter cable
- 4/4.1 speaker system: Two Y adapter cables
- 6/5.1 speaker system: Three Y adapter cables
- 8/7.1 speaker system: Four Y adapter cables

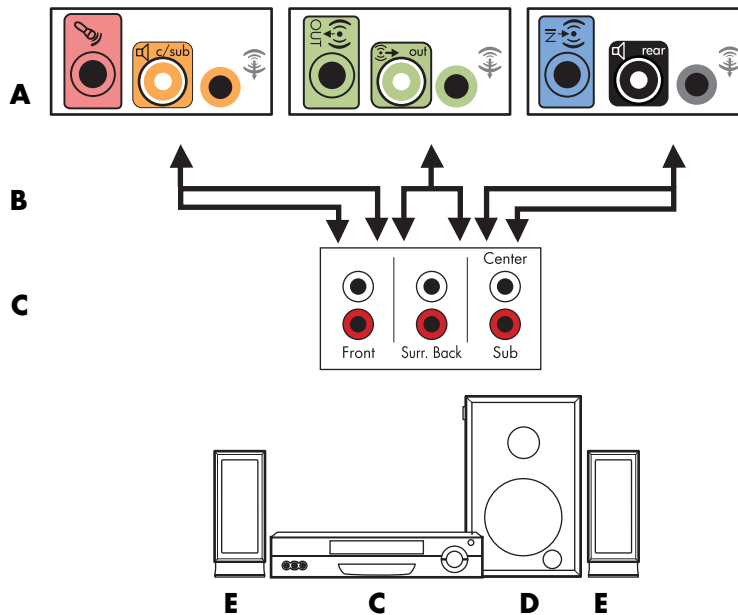
Connecting a home stereo system to a computer requires audio cables that are long enough to reach from the computer to the stereo. You also must purchase Y adapter or mini-extension cables.

NOTE: Y adapter and mini-extension cables are purchased separately.

2.1 home stereo installation

The following diagram shows a typical two-channel (2.1 speaker) installation that uses passive stereo speakers and plugs into a home stereo standard left and right input.

This is only a suggested configuration. Your system may be different.



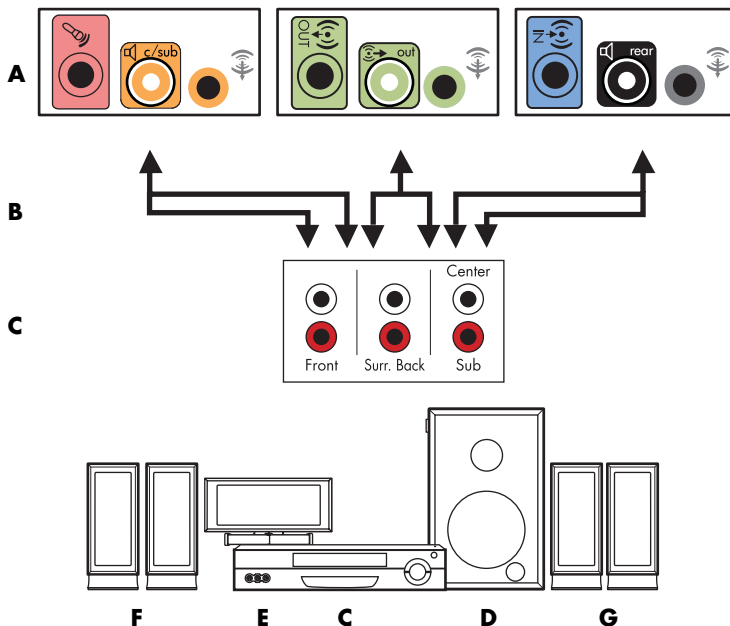
Computer to 2.1 multichannel audio system connection

- A** Computer back-panel connectors (type 3, type 6, or sound card)
- B** Y adapter cables
- C** Receiver/amplifier (audio input jacks)
- D** Subwoofer
- E** Front speakers (left and right)

5.1 home audio installation

The following diagram shows a typical advanced home theater audio six-channel (6/5.1 speaker) installation that requires multichannel inputs on a receiver/amplifier.

This is only a suggested configuration. Your system may be different.



Computer to 5.1 multichannel audio system connection

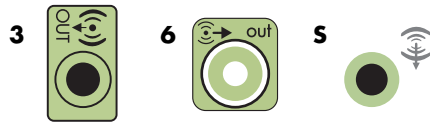
- A Computer back-panel connectors (type 3, type 6, or sound card)
- B Y adapter cables
- C Receiver/amplifier (audio input jacks)
- D Subwoofer
- E Center speaker
- F Front speakers (left and right)
- G Rear speakers (left and right)

5.1 home audio installation procedure

To connect a six-channel (5.1 speaker) home audio system to the computer:

- 1 Turn off the computer.
- 2 Turn off the receiver/amplifier.

- 3 Connect the front stereo mini-jack end of a Y adapter cable into the lime green Audio Line Out connector that matches the back of your computer.



NOTE:

- Type 3 is three connectors.
 - Type 6 is six connectors.
 - Type S is sound card.
-

NOTE: Receiver/amplifier input connectors may be labeled Surround, 5.1 Channel inputs, 6 Channel inputs, CD, DVD, or DVD In.

Connect the left and right ends of the Y adapter cable into the front left (L) and right (R) inputs on the back of the receiver/amplifier.

- 4 If you have rear speakers, connect the rear stereo mini-jack end of a Y adapter cable into the Audio Line In (blue) or the Rear Speaker Out (black) connector that matches the back of your computer.



- Connect the left and right ends of the Y adapter cable into the rear left (L) and right (R) inputs on the back of the receiver/amplifier.
- 5 If you have a center/subwoofer speaker, connect the stereo mini-jack of a Y adapter cable into the microphone (pink) connector or the center speaker/subwoofer (gold) connector that matches the back of your computer.



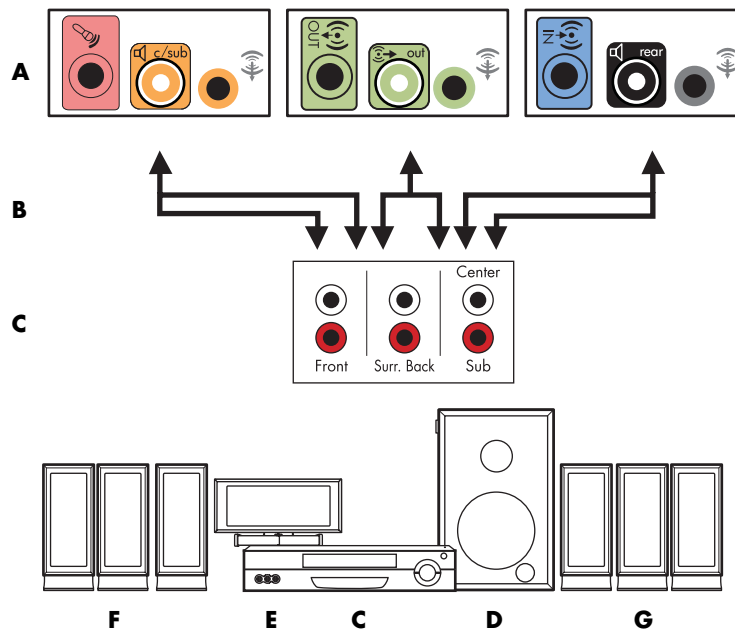
- Connect the left and right ends of the Y adapter cable into the center/subwoofer inputs on the back of the receiver/amplifier (6/5.1 or higher-channel system).
 - Plug the Y adapter cable into the subwoofer connector on the back of the receiver even if a subwoofer is not used.
- 6 Turn on the receiver/amplifier.
 - 7 Select the receiver/amplifier input that the Y adapter cables are plugged into.

- 8 Turn on the computer.
- 9 After the audio system is connected to the computer, configure the audio software for sound output for your computer model. See “Connecting Speakers or Microphone.”
 - Type 3: See “Configuring speakers with Realtek HD Audio Manager.”
 - Type 6: See “Configuring speakers with Realtek HD Audio Manager.”
 - Type S (audio card): See “Using the Creative Sound Blaster X-Fi or X-Fi Fatality audio card.”

7.1 home audio installation

The following diagram shows a typical advanced home theater system with an eight-channel 8/7.1 speaker installation that requires multichannel inputs on a receiver/amplifier.

This is only a suggested configuration. Your system may be different.



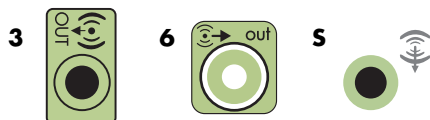
Computer to 7.1 multichannel audio system connection

- A Computer back-panel connectors (type 3, type 6, or type S)
- B Y adaptor cables
- C Receiver/amplifier (audio input jacks)
- D Subwoofer
- E Center speaker
- F Front speakers (left and right)
- G Rear speakers (left and right)

7.1 home audio installation procedure

To connect an eight-channel (7.1 speaker) home audio system to the computer:

- 1 Turn off the computer.
- 2 Turn off the receiver/amplifier.
- 3 Connect the front stereo mini-jack end of a Y adapter cable into the lime green Audio Line Out connector on the back of your computer.



NOTE:

- Type 3 has three connectors.
- Type 6 has six connectors.
- Type S has audio card.

NOTE: Receiver/amplifier input connectors may be labeled Surround, 7.1 Channel inputs, 6 Channel inputs, CD, DVD, or DVD In.

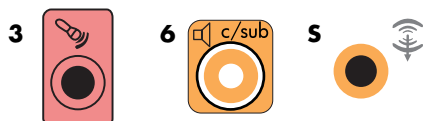
Connect the left and right ends of the Y adapter cable into the front left (L) and right (R) inputs on the back of the receiver/amplifier.

- 4 If you have rear speakers, connect the rear stereo mini-jack end of a Y adapter cable into the Audio Line In (light blue) or the Rear Speaker Out (black) connector on the back of your computer.



Connect the left and right ends of the Y adapter cable into the rear left (L) and right (R) inputs on the back of the receiver/amplifier.

- 5 If you have a center/subwoofer speaker, connect the stereo mini-jack of a Y adapter cable into the microphone (pink) connector or the center speaker/subwoofer (gold) connector on the back of your computer.



Connect the left and right ends of the Y adapter cable into the center/subwoofer inputs on the back of the receiver/amplifier (8/7.1 or higher-channel system).

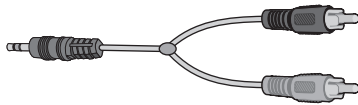
Connect the Y adapter cable to the subwoofer connector on the back of the receiver, even if you are not using a subwoofer.

- 6 Turn on the receiver/amplifier.
- 7 Select the receiver/amplifier input to which the Y adapter cables are connected.
- 8 Turn on the computer.
- 9 After the audio system is connected to the computer, configure the audio software for sound output for your computer model. See “Configuring Speaker and Sound Options.”

Connecting digital audio

(Select models only)

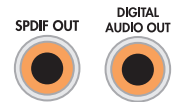
If you have an audio card and you are connecting your home stereo AV receiver via digital out, connect the 3.5 mm (1/8-inch) stereo plug to the Digital Audio Out connector on the audio card. Connect the red RCA stereo plug on the 3.5 mm (1/8-inch) Y adapter cable to the AV receiver’s digital input connector on the AV receiver. If the red RCA stereo plug does not work, try the white stereo plug. Only one of the connectors is needed.



To connect digital audio, your computer must include a Digital Audio Out connector on either the audio card or the back panel. You must connect multichannel speaker outputs if you connect the digital output.

To connect digital audio speakers:

- 1 Turn off the computer.
- 2 Connect the orange Digital Audio Out connector on the back panel of your computer to the digital input (S/PDIF) on the digital speakers or a digital audio system.
- 3 Turn on the computer.



NOTE: Always turn on the computer before the speaker system.

- 4 Connect the speaker system to the power.
- 5 Turn on the speaker system.
- 6 After the speakers are connected to the computer, configure the audio software for sound output for your computer model. See “Configuring Speaker and Sound Options.”
 - Audio card with digital output and type 3 connectors: See “Configuring speakers with Realtek HD Audio Manager.” Follow the instructions to enable digital audio output.
 - Audio card with digital output and type 6 connectors: See “Configuring speakers with Realtek HD Audio Manager.” By default, digital audio output is already enabled.
 - Audio card: Follow the instructions to enable digital audio output.

Connecting Headphones

Your computer comes with a headphones connector (lime green) on the front of the computer. The headphones connector is labeled with a headphones icon.



You can also connect headphones to the Line Out connector (lime green) on the back of your computer.



Using a 2.1 speaker system with headphones

For select models with the 2.1 speaker system, look for the headphones connector on the right side of the main speaker. When headphones are plugged in, the sound to the speakers and the subwoofer is muted.

Using a 5.1 to 7.1 speaker system with headphones

For select models that include a 5.1 or higher speaker system, a headphones connector is located on the right side of the control tower.

If the control tower displays *HP* (for headphones), the headphones are enabled; the sound to the speakers and the subwoofer is muted.







- Push and hold the On button on the control tower for several seconds to enable sound from the speakers.
- Press the On button briefly to enable the headphones.

Connecting Speakers Using the Creative Sound Blaster X-Fi Sound Card

This section provides an overview of connecting to the Creative Sound Blaster X-Fi sound card.

NOTE: For additional information on connecting the speakers, refer to the documentation that came with your speakers.

Connecting the speakers

| Connector | Description |
|--|---|
|  | AD-Link for AD_Link X-Fi I/O Console (the X-Fi console is sold separately) |
|  | Line Out_3 (orange or yellow) 5.1 audio setup: Front center, subwoofer 6.1 audio setup: Front center, subwoofer, and rear center 7.1 audio setup: Front center, subwoofer, and side left |
|  | Line Out_2 (black) 4.1, 5.1, 6.1 audio setup: Rear left and right 7.1 audio setup: Rear left, rear right, and side right |
|  | Line Out_1 (lime green) 2/2.1 audio setup: Front left and right |
|  OR  | FlexiJack (white) for Line In, Microphone, Digital In/Out The FlexiJack supports three functions. You must select the function in the Creative Console Launcher. See "Connecting the FlexiJack connector." |

To connect the X-Fi sound card to your speakers:

- 1** Use the audio connection table to connect your audio system to the sound card.
- 2** Turn on the computer.
- 3** Plug in and turn on the speaker system power.

After connecting the speaker system to the sound card, follow the steps in "Configuring the FlexiJack connector" to configure the speaker settings in the Creative Sound Blaster X-Fi software.

Connecting the FlexiJack connector

The FlexiJack connector performs three functions:

- Digital Input/Output
- Line In
- Microphone

You must select the function in the Creative Console Launcher.

NOTE: If you are using the FlexiJack as your Digital In connection and you want to connect digital speakers as your output device, you will need a special connector from Creative.


Finding Support and Information

You can find troubleshooting support and information specific for your computer by using the Internet to access the HP Blackbird Web site.

- Go to **<http://www.hp.com/blackbird>** and **<http://www.hp.com/blackbird/support>** in your Web browser.

Finding Guides on the Web

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

- 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 Click **See support and troubleshooting information**, enter the model number of your computer, and then click **Search** .
- 5 Click **Manuals**.
- 6 Locate the manual you want, and then do one of the following:
 - Click the title to display the file in Adobe Acrobat Reader (which you can download from the Manuals page if it is not currently installed on your computer).
 - Right-click the title, click **Save Target As**, specify a location on the computer where you want to save the file, rename the file (retaining the .pdf extension), and then click **Save**.

Using the Onscreen Help and Support Center

Information about your computer is in the onscreen Help and Support Center (select models only). 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 (select models only) on your keyboard.

Or

- Click the **Windows Start Button**  on the taskbar, and then click **Help and Support**.

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 **Windows Start Button**  on the taskbar.
- 2 Click **All Programs**.
- 3 Click **PC Help & Tools**.
- 4 Click **Hardware Diagnostic Tools** to view or use these tools.

Using the hardware diagnostic tools

The hardware diagnostic tools help you to do the following:

- View the computer system information, such as memory usage, drive capacity and CPU usage.
- Find alerts about your computer.
- Show information, and run diagnostic tests on computer hardware and some computer peripheral hardware, such as printers, monitors, speakers, and network adapters.
- Run a computer system test.

Turning On the Computer for the First Time



WARNING: Before you install or remove any component, make sure to press the onboard LED SW button first, and make sure the standby power LED is off. Failure to do so may cause injury or severe damage to the motherboard, peripherals, and/or components.

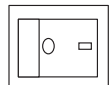
After making all the connections, replace the system case cover.

- 1 Make sure that all buttons and switches are turned off.

NOTE: Ensure that the LED SW button is not pushed in, or the computer will not turn on.



- 2 Connect the power cord to the power connector at the back of the computer.
- 3 Connect the power cord to a power outlet that is equipped with a surge protector.
- 4 Turn on the devices in the following order:
 - a Press the Power button on the monitor.
 - b Turn on all external SCSI devices starting with the last device on the chain.
 - c Press the Power switch to the powered on position on the back of the computer, and then press the On button on the front of the computer.



NOTE: You do not need to turn the Power switch to the powered off position on the back of the computer to turn off the computer.

LED SW



- 5 After applying power, the system power LED on the system front panel case lights up. The computer runs the power-on self tests or POST. While the tests are running, the BIOS beeps or additional messages appear on the LCD poster screen on the back of the computer. If you do not see anything within 30 seconds from the time you turned on the power, the system may have failed a power-on test. Call HP Support for assistance.

- 6 At power on, hold down the Delete key to enter the BIOS Setup. Follow the BIOS setup instructions in the printed guide for the motherboard that came with the computer.
- 7 Turn on the speakers, if they are present.
- 8 Set up the computer by following the onscreen instructions. If prompted, select the country/region where 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.)
- 9 Set up Microsoft Windows Vista by following the onscreen instructions.
- 10 Follow the onscreen instructions to register with HP, sign up for updates, and get online. See "Connecting to the Internet."

Turning Off the Computer

For best results, when using Microsoft Windows Vista, do not shut down the computer, except when you must turn off the power for safety reasons, such as to make repairs, install new hardware or cards in the computer chassis, or change a battery.

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.

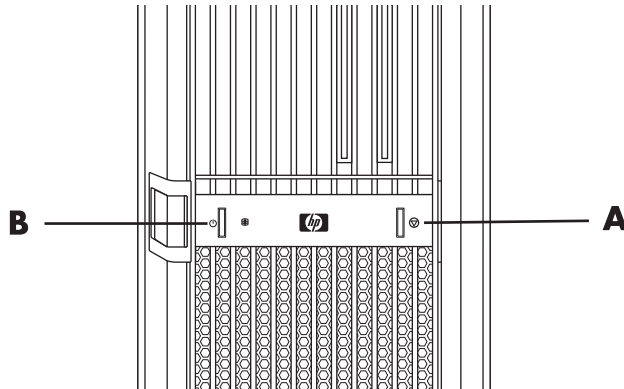
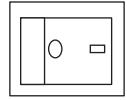
Sleep and Hibernate modes are power states. Sleep mode saves your work to memory, so you can resume quickly; saves your work to the hard disk; and then goes to a reduced-power state. During Sleep mode, the computer hardware light remains on, and the computer is ready to wake quickly and resume your work where you left off. Hibernate mode saves the system memory to a temporary file on the hard disk and then turns off the hardware.

Some computers also have a reduced-power state called Away mode. Away mode turns off the display and mutes the audio, but otherwise keeps the computer operational. During Away mode, the computer can perform tasks such as recording a scheduled TV program or streaming video and music files to a remote location.

Using the Reset button


The Reset button **(A)** is located on the front of the computer across from the power button **(B)**. The Reset button can be used to restart the computer without turning off the power.


NOTE: The power switch on the back of the computer must be set to the powered on position in order to use the power and the reset buttons.

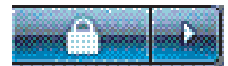


Using Shut Down

For best results, when using Windows Vista, turn off the computer without pressing any buttons on the computer chassis.

NOTE: For information on the Windows Start Button , see "Using the Windows Start Button Menu."

- 1 Close any open software programs by clicking the **X** at the upper-right corner of each program window.
- 2 Click the **Windows Start Button**  on the taskbar.
- 3 Click the **Arrow** button next to the Lock button.
- 4 Click **Shut Down**.
- 5 Turn off the monitor.




To turn on the computer after a shut down:

- 1 Press the power button on the monitor.
- 2 Press the On button on the front of the computer.

Using Lock

If you lock the computer, only you or the administrator can log on to it.

- 1 Click the **Windows Start Button**  on the taskbar.
- 2 Click the **Lock** button.
- 3 To unlock this computer, you must enter your password.



Using Sleep mode


When the computer is in Sleep mode, it goes into a reduced-power state. The monitor is blank, as if it were turned off. By using Sleep mode:

- You save time, because you do not have to wait for the computer to go through the normal startup routine when you wake it again. The next time that you use the computer, any programs, folders, and documents that were open before you put the computer into Sleep mode are available.
- The computer can receive faxes, if you set it to do so.
- The computer can retrieve e-mail messages and download information from the Internet automatically, if you set it to do so.


To put the computer into Sleep mode manually:

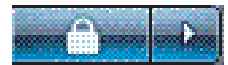
- Press the Sleep button on the keyboard, if it is present.

Or

- 1 Click the **Windows Start Button**  on the taskbar.
- 2 Click the **Power** button.

Or


- 1 Click the **Windows Start Button**  on the taskbar.
- 2 Click the **Arrow** button next to the Lock button.
- 3 Click **Sleep**.



To wake the computer from Sleep mode:

- Press the Sleep button on the keyboard.
- Or
- Quickly press the On button on the front of the computer.

If the computer does not work properly when you wake it from Sleep mode, restart the computer.

- 1 Click the **Windows Start Button**  on the taskbar.
- 2 Click the **Arrow** button next to the Lock button.



- 3 Click **Restart**.


Or

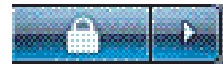
Quickly press the On or Reset button on the front of the computer.

Using Hibernate mode

Hibernate mode is available as an advanced power setting. When the computer is in Hibernate mode, it saves to the hard disk drive everything that is in computer memory, turns off the monitor and the hard disk drive, and then turns itself off. When you turn on the computer again, your programs, folders, and documents are restored to the screen.

To put the computer into Hibernate mode manually:


- 1 Click the **Windows Start Button**  on the taskbar.
- 2 Click the **Arrow** button next to the Lock button.
- 3 Click **Hibernate**, if it is present.

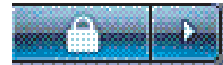


NOTE: If Hibernate is not present, you can set up the computer to go into Hibernate mode automatically; see “Automatic Sleep, Hibernate, or Away mode.”

To wake the computer from Hibernate mode, press the On button on the front of the computer.


If the computer does not work properly when you wake it from Hibernate mode, restart the computer.

- 1 Click the **Windows Start Button**  on the taskbar.
- 2 Click the **Arrow** button next to the Lock button.
- 3 Click **Restart**.



Automatic Sleep, Hibernate, or Away mode

You can set the computer to go into Sleep, Hibernate, or Away modes automatically when it is idle for a specified number of minutes. To put the computer into a mode automatically, modify the power management settings.

- 1 Click the **Windows Start Button**  on the taskbar.
- 2 Click **Control Panel**.
- 3 Click **System and Maintenance**.
- 4 Click **Power Options**.
- 5 Click **Change when the computer sleeps**.

- 6 For Sleep or Away mode, select an option from the Put the computer to sleep drop-down menu, and click **Save changes**.

Or


For Hibernate or Away mode:

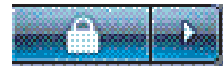
- a Click **Change advanced power settings**.
- b Click the plus sign (+) next to Sleep.
- c Click an item and make selections, and then click **Apply**.
- d Click **OK**.

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.

- 1 Click the **Windows Start Button**  on the taskbar.
- 2 Click the **Arrow** button next to the Lock button.
- 3 Click **Restart**.



Or

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

Connecting to the Internet

The computer can connect to the Internet through the telephone modem. There are other ways to connect to the Internet that do not use the telephone modem, such as a LAN (local area network) or DSL (digital subscriber line). Check with your Internet Service Provider (ISP) for specific information on the connection. See "About the Internet" for more information about using the Internet.

Refer to the "Setting Up the Computer" chapter of this guide to make the hardware connections: for a modem, see "Connecting a Modem" and for a network see "Setting Up a Local Area Network."

To connect to the Internet, you must have:

- A computer.
- A dial-up modem, a cable modem, or a DSL modem for high-speed broadband connections. Contact your ISP for any specific software and hardware that you may need.
- Internet service with an ISP.
- A Web browser.

To connect to the Internet:

- 1 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.
- 2 Connect to the Internet. You must connect through your ISP.
 - Double-click the ISP-provided icon on the desktop, and log in.
- 3 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 **Windows Start Button**  on the taskbar.
- b Click **Internet Explorer**.

NOTE: If you have questions, contact your ISP directly.

Using the Computer with Safety and Comfort



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.

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 **Windows Start Button**  on the taskbar, 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.

Setting Up User Accounts

User accounts enable you to set the privileges for each user of the computer. For example, you can set the software programs that each user is allowed to access.

Windows Vista provides three types of user accounts:

- **Administrator:**
 - Is allowed to change account types for other users, change passwords, change system-wide settings, access all files on the computer, and install software and drivers that are compatible with Windows Vista.
- **Limited - Standard User:**
 - Is not allowed to change other user settings or passwords. A Limited account may not be able to install or run some software.
 - Is allowed to change the limited account picture, and to create, edit, or delete the account password.
- **Guest:**
 - Is allowed to use most software and change system settings that do not affect other users or the security of the computer.
 - Is not allowed to change other user settings or passwords, or install software.
 - Does not have access to password-protected files, folders, and settings.

Creating multiple user accounts on the same computer has certain advantages, as well as some drawbacks.

- **Advantages to multiple user accounts:**
 - Ability to create individual user settings
 - Ability to limit access to software for certain users
- **Drawbacks to multiple user accounts:**
 - More memory (RAM) usage
 - Multiple Temporary Internet Files folders to remove during Disk Cleanup
 - More data to back up
 - Longer time to complete virus scan

Protecting the Computer

Protect the 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 | Security feature |
|--|---|
| Unauthorized use of the computer or user account | User password |
| Computer viruses | AVG antivirus |
| Unauthorized access to data | AVG (antivirus and firewall program) Windows Vista updates |
| Unauthorized access to Setup Utility, BIOS settings, and other system identification information | Administrator password |
| Ongoing or future threats to the computer | 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 Microsoft Windows Vista 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.

Use the following list as a basic guide when choosing a password:

- Choose a password that is easy for you to remember but difficult for others to guess.
- Choose a long password (minimum of six characters).
- Use a combination of uppercase and lowercase letters, numbers, and symbols.

- Don't use personal information that others can easily figure out, such as your birthday, child's name, or phone number.
- Don't write down passwords unless you store them in a secure place away from the computer. Do not store passwords in a file on the computer.

You can use the same password for more than one Windows Vista security feature.

- A password can have any combination of up to eight letters and numbers, and it is not case sensitive.
- A password must be set and entered with the same keys. For example, if you set the password with number keys on the keyboard, the password is not recognized if you subsequently try to enter it with the embedded numeric keypad.

NOTE: Select models include a separate numeric keypad, which functions exactly like the keyboard number keys, except in the case of passwords.

- A password set in Windows Vista must be entered at a Windows Vista prompt.

The following table lists the Windows Vista passwords and describes their functions. For information on how to set passwords, see "Using passwords." For additional information on Windows Vista passwords, such as screen saver passwords, type *passwords* into the Search Help box in the Help and Support Center.

| Password | Function |
|--------------------------------------|--|
| Windows Vista Administrator password | Protects administrator-level access to computer contents. |
| Windows Vista User password | Protects access to a Windows Vista user account and the computer contents. It must be entered when you resume from Sleep or Away mode. |



CAUTION: If you forget the Administrator password, you cannot access Setup Utility.


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 the operating system, software programs, or utilities, or cause them to function abnormally.

Antivirus software can detect most viruses, destroy them, and in most cases repair any damage that viruses may have caused. To provide ongoing protection against newly discovered viruses, antivirus software must be kept up to date.

The AVG Antivirus program, which is preinstalled on the computer, includes antivirus, anti-spyware, anti-spam, and firewall components. The software includes a free update period. It is strongly recommended that you protect the computer against new viruses beyond the free period by purchasing extended update service. Instructions for using and updating AVG software, and for purchasing extended update service, are provided within the program.

To open and access AVG:

- 1 Click the **Windows Start Button**  on the taskbar.
- 2 Click **All Programs**.
- 3 Click **AVG 7.5**, and then click **AVG Test Center**.

See “Using the AVG Antivirus Software” for more information about using the AVG antivirus software.

For more information about computer viruses, type *viruses* into the Search Help box in the Help and Support Center.


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, the computer, and your data. To protect your privacy, use firewall software. Microsoft Windows Vista includes firewall software preinstalled on the computer.

Also, AVG, 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.

To open and access AVG:

- 1 Click the **Windows Start Button**  on the taskbar.
- 2 Click **All Programs**.
- 3 Click **AVG 7.5**, and then click **AVG Test Center**.


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 Vista operating system. HP recommends that you run Windows Vista Update monthly to install these updates. One way to keep the operating system up to date is to use the Automatic Updates feature.

When you are connected to the Internet, Windows Vista 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 Vista 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.

To configure Automatic Updates:

- 1 Click the **Windows Start Button**  on the taskbar.
- 2 Click **Control Panel**.
- 3 Click **Security**.
- 4 Click **Windows Update**.
- 5 Click **Change settings**.
- 6 Select the desired configuration:
 - **Install updates automatically (recommended)** — This is the default setting, and it enables you to specify a day and time to automatically download and install recommended updates.
 - **Download updates but let me choose whether to install them**
 - **Check for updates but let me choose whether to download and install them**
 - **Never check for updates (not recommended)** — This option makes the computer more vulnerable to security threats and performance problems and is not recommended.
- 7 Click **OK**.

Installing critical security updates




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.

Guidelines for Installing Software and Hardware Devices

After you set up the computer, 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.
 - a Make sure you are logged in as an Administrator.
 - b Click the **Windows Start Button**  on the taskbar.
 - c Click **Control Panel**.
 - d Click **System and Maintenance**.
 - e Click **Backup and Restore Center**.
 - f Click **Create a restore point or change settings**.
 - g In the System Properties window, on the System Protection tab, click **Create**. Follow the onscreen instructions.

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. For information on System Restore, go to the Microsoft Web site at: <http://www.microsoft.com/worldwide>


- 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's documentation or customer service information.
- If you need to restore factory settings after you install a program that is incompatible:
 - a Make sure you are logged in as an Administrator.
 - b Click the **Windows Start Button**  on the taskbar.
 - c Click **Help and Support**.
 - d Click **Recover factory settings**.
 - e Choose an option, and then follow the onscreen instructions.
- 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, or it may result in an unstable installation or infect the computer with a virus.

Transferring Files and Settings from an Old Computer to a New Computer

You can copy files from the old computer to a new computer by using media such as CDs or DVDs, memory sticks, or personal media drives. You can also copy certain settings such as Web browser Favorites and address books by using Windows Easy Transfer software, which is included with Microsoft Windows Vista.

To transfer your files and settings:

- 1 Click the **Windows Start Button**  on the taskbar.
- 2 Click **Help and Support**.
- 3 Type *transfer files* into the Search Help box.
- 4 Click the overview article **Transfer files and settings from another computer**. This article describes a Microsoft solution for moving your files to your new computer.
- 5 Click **Windows Easy Transfer**.
- 6 Follow the onscreen instructions in the Windows Easy Transfer wizard to transfer your files from an old computer to a new one.

Using the Keyboard

IMPORTANT: Please see the documentation that came with the keyboard for additional information about using the keyboard, customizing keyboard buttons, and using any special keyboard keys. You may need to install keyboard software and drivers to access all the special features and functions of the keyboard.

Your computer may include either a standard keyboard or a wireless keyboard. Using the keyboard is the primary way that you enter text and commands for the computer.

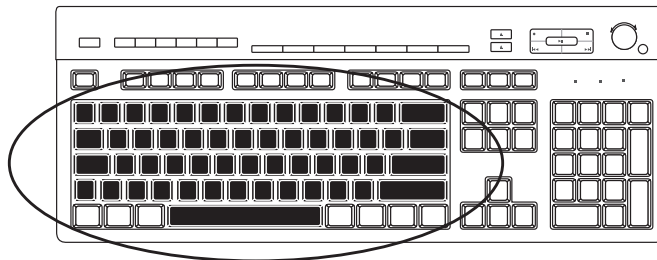
A *standard keyboard* connects to the keyboard connector in the back of the computer.

A *wireless keyboard* (select models only) uses a receiver/transmitter, instead of a connector cable, to communicate with the computer. A light on the receiver indicates receiver activity.

Identifying Keyboard Features

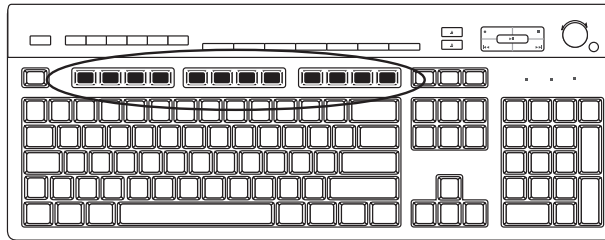
The keyboard contains an arrangement of standard keys, indicator lights, and special buttons (select models only). Your keyboard may vary from the illustrations that follow.

Alphanumeric keys



The alphanumeric keys are the main keys found on a standard typewriter.

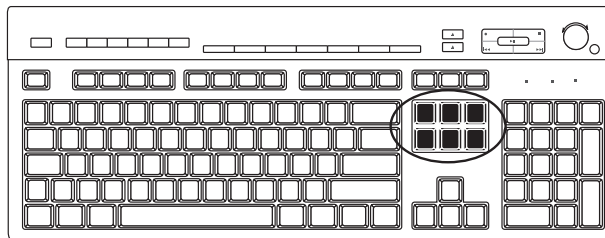
Function keys



The function keys, located above the main keys, are labeled F1 through F12. Most function key operations vary by software program. F1 and F3 are available at all times:

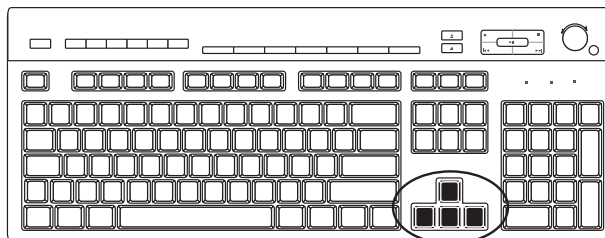
- Pressing F1 opens a Help window for the software program being used.
- Pressing F3 opens a search window.

Edit keys



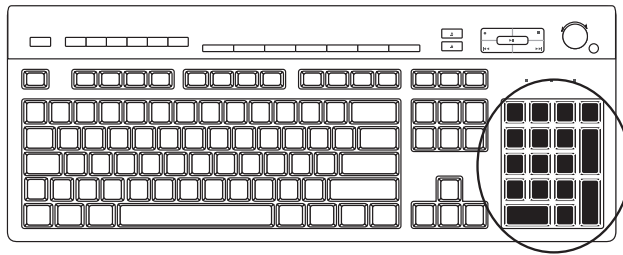
The edit keys are Insert, Home, Page Up, Delete, End, and Page Down. Use these keys to insert and delete text, and to quickly move the cursor on the screen. The edit keys function differently with some software programs.

Arrow keys



The arrow keys are controls for moving up, down, right, and left. You can use these keys instead of the mouse to move the cursor for navigation on a Web page, in a document, or in a game.

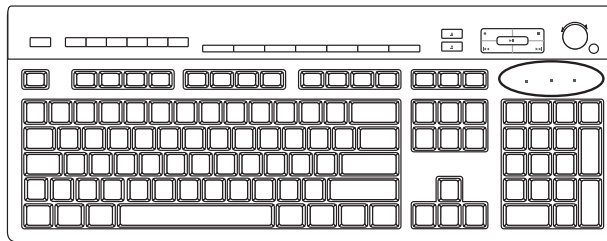
Numeric keys



Press the Num Lock key to lock and unlock the numeric key functions:

- When the Num Lock light on the keyboard is on, the numeric keys work in the same way as the number keys and arithmetic functions found on a basic calculator.
- When the Num Lock light on the keyboard is off, the numeric keys are directional keys used to move the cursor or play games.

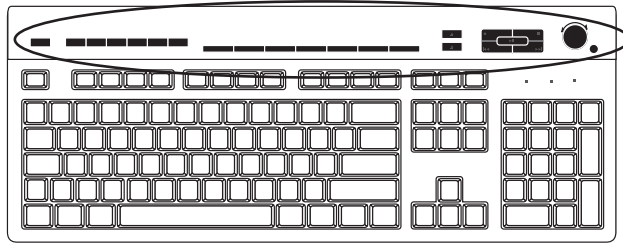
Keyboard indicators



Each keyboard indicator is a light labeled with a name or with an icon for its status:

| Icon | Name | Description |
|------|-------------|--|
| 1 | Num Lock | When lit, numeric keys are locked as number keys and arithmetic functions. |
| A | Caps Lock | When lit, alphanumeric keys are locked to uppercase. |
| ↓ | Scroll Lock | When lit, scroll function is locked. |

Special keyboard buttons



There are special buttons (select models only) at the top of the keyboard. These buttons operate a CD or DVD player, control speaker volume, connect you to the Internet, or provide quick access to specific functions. (Some keyboard models have some of these special buttons to the left side of the main keys, some do not have the Internet buttons, and some use a different layout on the top right.)

Media control or playback buttons

| Icon | Label | Description |
|------------------------------|---------------------|---|
| | Eject 1 and Eject 2 | Opens or closes upper and lower optical drive trays. |
| | Rec | Starts recording to selected media. |
| | Stop | Stops media. |
| | Play/Pause | Plays or pauses media. |
| | Prev | Rewinds media. |
| | Next | Fast-forwards media. |
| Or Or | Volume | Volume knob controls speaker volume: Turn clockwise to increase speaker volume and counterclockwise to decrease volume. NOTE: The Volume knob can continue to be turned, even after maximum volume has been reached. Volume Up and Down buttons control speaker volume: Press the Volume Up button to increase volume and the Volume Down button to decrease volume. |
| Or | Mute | Turns speaker sound on and off. |

Using the Mouse

IMPORTANT: Please see any documentation that came with the mouse for additional information about using the mouse, customizing mouse buttons, and using special buttons or features that are included with the mouse. You may need to install mouse software and drivers to access all the special features and functions of the mouse.

Your computer includes a mouse for directing the cursor (pointer) on the Windows Vista desktop. The mouse uses a roller ball or optics (a light and sensor) to sense movement and cause the cursor on the screen to move. Use the mouse on a flat surface.

NOTE: The optical mouse cannot work on a glass, translucent, or reflective surface.

Using the Mouse Buttons

The mouse has two or three buttons on the top:

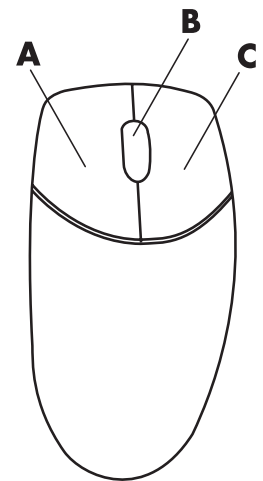
- Click the left mouse button (**A**) to position the cursor or select an item.
- Click the right mouse button (**C**) to display a menu of commands for the item you clicked.
- On select models, use the scroll wheel button (**B**) in the center for scrolling and panning.

NOTE: Your mouse may look different from the one shown here.

You see these terms for using the mouse:

- *Click* means to press and release the left mouse button once.
- *Double-click* means to click the left mouse button and then quickly click it again.
- *Right-click* means to press and release the right button once.

To select an item, click it.



To select sequential items in a list or group, click the first item in the list, and then press and hold the Shift key on the keyboard while you click the last item.

To select non-sequential items, click the first item, and then press and hold the Ctrl key on the keyboard while you click the additional items.

You can switch the function of the left and right buttons for left-handed use. See “Changing Mouse Settings.”

Scrolling

Click the left mouse button to place the cursor in a document, and then:

- To scroll toward the beginning of the document, roll the scroll wheel button up (away from you).
- To scroll toward the end of the document, roll the scroll wheel button down (toward you).

Autoscrolling

- 1 Place the cursor anywhere in the document, and then press the scroll wheel button once. An autoscroll icon appears.
- 2 Move the mouse in the direction you want to scroll. The farther you move the mouse from the starting point, the faster the document scrolls.
- 3 To stop autoscrolling, press the scroll wheel button again.



NOTE: Autoscrolling does not work with some software programs.

Panning


- 1 Place the cursor anywhere in the document, and then press and hold down the scroll wheel button.
- 2 Slowly move the mouse in the direction you want to pan. The farther that you move the mouse from the starting point, the faster the document pans.
- 3 To stop panning, release the scroll wheel button.

NOTE: Panning works only if the horizontal scroll bar in the window is active. Panning does not work with some software programs.

Changing Mouse Settings


Switching mouse button functions

To switch the functions of the right and left mouse buttons for left-handed use:

- 1 Click the **Windows Start Button**  on the taskbar.
- 2 Click **Control Panel**.
- 3 Click **Hardware and Sound**, if it is present.
- 4 Click **Mouse**.
- 5 Click the **Buttons** tab, and check **Switch primary and secondary buttons**.
- 6 Click **Apply** (using the new primary button), and then click **OK**.


Changing mouse pointer speed

To change the speed of the cursor on the screen relative to the motion of the mouse:

- 1 Click the **Windows Start Button**  on the taskbar.
- 2 Click **Control Panel**.
- 3 Click **Hardware and Sound**, if it is present.
- 4 Click **Mouse**.
- 5 Click the **Pointer Options** tab.
- 6 In the Motion area, use the slider to adjust the pointer speed. You can select other pointer options by placing a check in the check box next to the setting that you want.
- 7 Click **Apply**, and then click **OK**.

Changing the double-click speed


To change the double-click speed of the right mouse button:

- 1 Click the **Windows Start Button**  on the taskbar.
- 2 Click **Control Panel**.
- 3 Click **Hardware and Sound**, if it is present.
- 4 Click **Mouse**.
- 5 Click the **Buttons** tab.
- 6 In the Double-click speed area, use the slider to adjust the double-click speed.
- 7 Click **Apply**, and then click **OK**.

Turning on the ClickLock option


ClickLock enables you to highlight or drag an object without holding down the mouse button.

To turn on the ClickLock option:

- 1 Click the **Windows Start Button**  on the taskbar.
- 2 Click **Control Panel**.
- 3 Click **Hardware and Sound**, if it is present.
- 4 Click **Mouse**.
- 5 Click the **Buttons** tab.
- 6 In the ClickLock area, place a check in the **Turn on ClickLock** check box.
- 7 Click **Apply**, and then click **OK**.

Changing the scroll wheel speed

To change the scroll wheel speed:

- 1 Click the **Windows Start Button**  on the taskbar.
- 2 Click **Control Panel**.
- 3 Click **Hardware and Sound**, if it is present.
- 4 Click **Mouse**.
- 5 Click the **Wheel** tab.
- 6 In the Vertical Scrolling area, adjust the number of lines per scroll by clicking the arrow buttons.
Or
In the Horizontal Scrolling area, adjust the number of lines per scroll by clicking the arrow buttons.
- 7 Click **Apply**, and then click **OK**.

Configuring Speaker and Sound Options

Speakers are included with the monitor (select models only), or they are sold separately. For details about connecting stereo speakers to the computer, see the setup poster. For details about connecting multichannel speakers, see “Connecting Speakers or Microphone.”

NOTE: Speakers may be *passive* (no power button or power cord) or *active* (power button or power cord). Your computer supports only active (powered) speaker systems; the speaker system must have its own power cord.

A *stereo speaker set* is a left-right, two-channel speaker system. A *multichannel audio speaker system* is a system with more than two channels, and it may include a subwoofer. For example, a 5.1 channel speaker system, referred to as *six-speaker mode*, uses two front speakers (left-right), two rear speakers (left-right), a center speaker, and a subwoofer.

If your computer has multichannel audio speaker capacity (select models only), you can connect four channels for four-speaker output, or six channels for 5.1 speaker output.

Your model may include one of three sound card types on the back of the computer:

- Creative Sound Blaster X-Fi
- Creative Sound Blaster X-Fi Fatality
- Analog Devices, Inc (ADI)

Your system may also have a separate Digital Out connector (select models only).

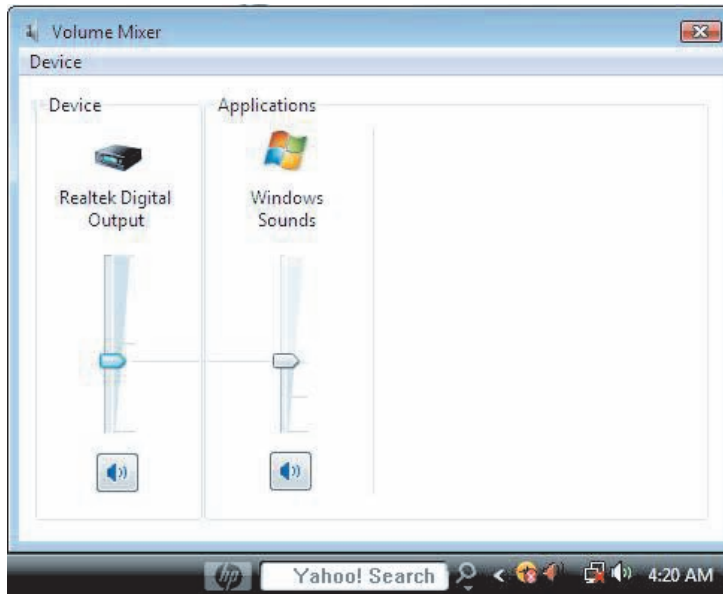
See “Connecting Speakers or Microphone” for more information about connecting your speaker system, and then configure the audio software for sound output as described in this section.

Adjusting speaker volume

- 1 Right-click the white **Microsoft 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 and moving it.



- 3 When you are satisfied with the sound level, click the **Close** box (the **X** in the upper-right corner) to close this window.



Selecting a microphone

Your computer comes with one microphone connector on the back of the computer. Some models have a second microphone connector on the front of the computer. Only one microphone connector works at a time, and the back connector is ready to use unless you have the multichannel audio speakers option. For computers with the multichannel audio speakers option, the microphone connector on the front of the computer, if it is present, is ready to use.

To use a microphone connected to the front of your computer (select models only), select the working microphone:

NOTE: If you connect your microphone to the back of your computer, you do not need to perform this procedure.

- 1 Right-click the white **Microsoft Volume** icon on the taskbar, and then click **Recording Devices**. The Sound window opens.
- 2 Select the **Recording** tab.
- 3 Double-click **Microphone**, and select the **General** tab.
- 4 Click the microphone connector that you want to use, and then click **Apply**.
- 5 Click **OK**.



Configuring audio output

You can configure your speaker audio output by using the following software. Use the software that applies to your computer model:

- Creative Sound Blaster X-Fi or X-Fi Fatality Speaker Settings Configuration (audio card)
- Windows Media Center (all systems)



Using the Creative Sound Blaster X-Fi or X-Fi Fatality audio card

This section provides an overview of configuring and recording with the Creative Sound Blaster X-Fi or X-Fi Fatality audio card (select models).

Configuring the audio card software

After you have installed and connected the speakers, follow these steps to configure multichannel audio output for computers:

NOTE: Three modes are available; Entertainment Mode is selected here. For information about the other modes, see “Sound Blaster X-Fi configuration modes.”

- 1 Click the **Windows Start Button**  on the taskbar.
- 2 Point to **All Programs**.
- 3 Click **Creative, Sound Blaster X-Fi**, and then click **Creative Console Launcher**.
- 4 The Entertainment Mode window opens. If a different mode displays, click the **Mode** button, and then select **Entertainment Mode**.
- 5 Click the **Windows Start Button** , **All Programs**, **Creative**, and then **Creative Console Launcher**.
- 6 Click the **Speakers** button.



- 7 Click **Auto Detect**. Creative automatically detects the type of speakers that are connected to your system.




- 8 Click **X** to close the window.

Now that you have configured the audio card software, you must configure audio output for your media software program. The procedure is different for each program. Refer to the instructions that came with the media software program.

Configuring the FlexiJack connector

Your audio device may have a FlexiJack connector that supports both microphone and Line input. If so, you can change the FlexiJack mode, if necessary. To do this, you must select the function in the Creative Console Launcher after you connect the audio cable to the FlexiJack connector on the audio card.

NOTE: If you are using the FlexiJack as your Digital In connection, and you want to connect digital speakers as your output device, you need a special connector from Creative.

- 1 Connect your audio cable to the FlexiJack connector on the audio card.
- 2 Click the **Windows Start Button** , **All Programs, Creative**, and then **Creative Console Launcher**.
- 3 Click the **Jacks** button.
- 4 Under FlexiJack Mode, select either **Digital I/O** or **Mic-In/Line-In**.
- 5 Close the window.



Sound Blaster X-Fi configuration modes

The Sound Blaster X-Fi audio card includes three modes: Audio Creation Mode, Entertainment Mode, and Game Mode.

The main functions, such as speaker configuration, equalizer, and volume control, are available in all three modes. However, each mode optimizes the audio card resources to provide the best audio performance for different activities.

Using Audio Creation Mode

The Audio Creation Mode enables advanced recording functions.

Available features:

- Recording from several audio sources
- Applying studio-quality effects
- Mixer settings
- Equalizer settings

Using Entertainment Mode

The Entertainment Mode optimizes the audio card for playing movies and music.

Available features:

- Configuring speakers and headphones
- Configuring surround sound, DTS, and THX
- Volume, bass, and treble controls
- Mixer settings

Using Game Mode


The Game Mode optimizes the audio card for playing games.

Available features:

- Volume, bass, and treble controls
- Mixer settings
- Configuring speakers and headphones
- Configuring surround sound


More information

For more information about configuring and using the audio card, go to the Creative Sound Blaster X-Fi documentation:

- 1 Click the **Windows Start Button**  on the taskbar.
- 2 Point to **All Programs**.
- 3 Click **Creative, Sound Blaster X-Fi**, and then click **Documentation**.
- 4 Click **Online Manual**.

Configuring speakers with Realtek HD Audio Manager

After you have installed and connected your speakers, complete the following steps if your computer model has type 6 connectors and is capable of multistreaming audio:

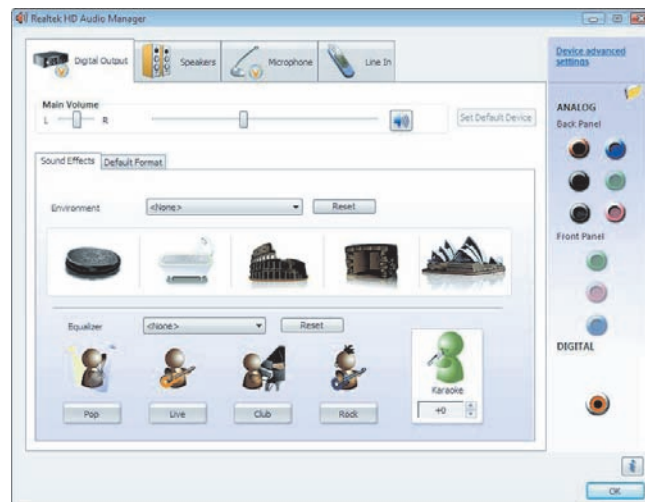
- 1 Click the **Windows Start Button**  on the taskbar.
- 2 Click **Control Panel**.
- 3 Click **Hardware and Sound**.
- 4 Click **Realtek HD Audio Manager**. The window opens.

NOTE: You must have your speakers connected for Realtek to display the Speakers tab.

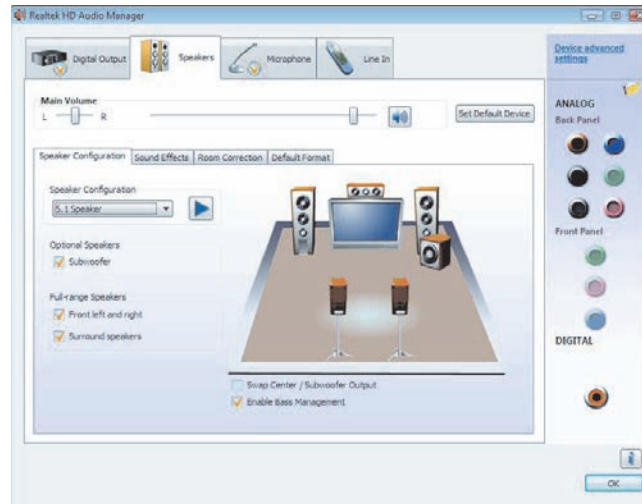
- 5 Click the **Speakers** tab to open that control screen.
- 6 Click the **Speaker Configuration** tab.
- 7 Select your type of speakers from the drop-down menu.
- 8 Click **OK**.

The Realtek HD Audio Manager control screens

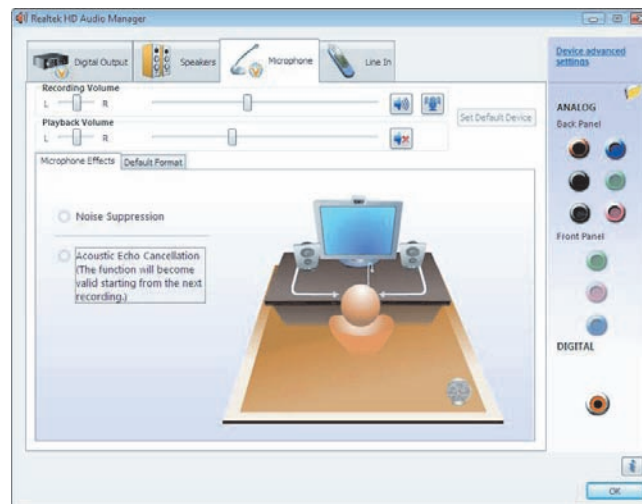
- **Digital Output:** Enables you to select the Environment and Equalizer settings. You can select an environment, such as **Stone Room** or **Auditorium**. Under Equalizer, you can either click a preset button, such as **Pop** or **Live**, or manually adjust the settings and then save them for easy selection later.



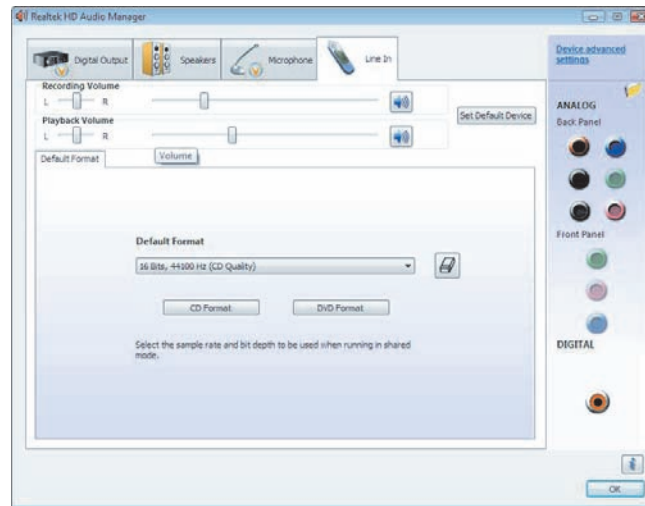
- **Speakers:** Enables you to select the number of speakers, view whether the connectors are analog or digital, and select the digital audio output and digital audio input devices. Only speakers that are currently being used are displayed.



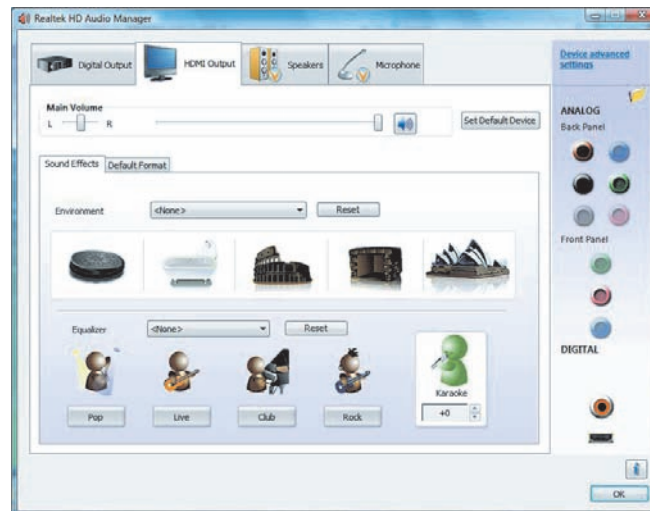
- **Microphone:** Enables fine control over the recording volume and playback volume of the microphone. Includes buttons for noise suppression and acoustic echo cancellation.



- **Line In (Digital Input):** Enables control over volume, playback, mute, recording, and multistreaming audio.




- **HDMI Output:** Enables you to select the Environment and Equalizer settings. You can select an environment, such as **Stone Room** or **Auditorium**. Under Equalizer, you can either click a preset button, such as **Pop** or **Live**, or manually adjust the settings and then save them for easy selection later.



Configuring sound for recording with the Realtek HD Audio Manager


The microphone connector is ready to use for recording sound. If you want to use another connector for recording, such as the Digital Audio In connector, complete the following steps to select it:

- 1 Click the **Windows Start Button**  on the taskbar.
- 2 Click **Control Panel**.
- 3 Click **Hardware and Sound**, and then **Realtek HD Audio Manager**.
- 4 Click the **Line In** tab.
- 5 Click **Digital In** tab, and then select **Set Default Device**.
- 6 Click **OK** to close the window.

NOTE: You can retask the front pink, blue, and green connectors to perform other audio functions; see “Retasking front panel audio connectors.”

Retasking front panel audio connectors

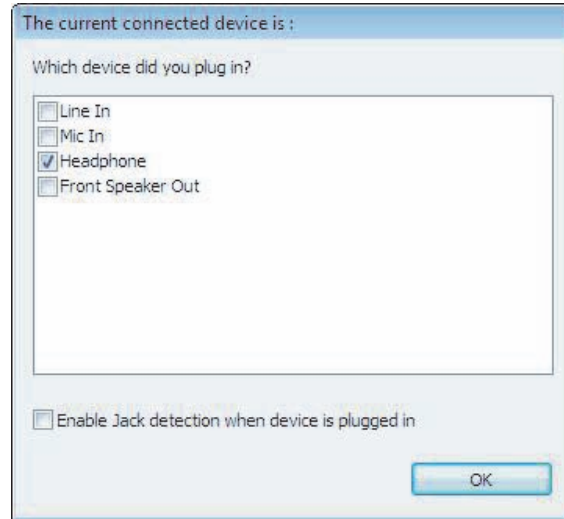
You can retask the Line In, Mic In, Headphone, and Front Speaker Out connectors on the front of the computer, as necessary.

- 1 Click the **Windows Start Button**  on the taskbar.
- 2 Click **Control Panel**.
- 3 Click **Hardware and Sound**, and then click **Realtek HD Audio Manager**.
- 4 Click a front connector icon that you want to retask.

NOTE: Only the connectors that are not dimmed are able to be retasked.



- 5 Place a check in the device check box that you want to select, and then click **OK**.



You can now use the front connectors as either input or output devices.

Configuring multistreaming audio

The Realtek HD Audio Manager software enables you to listen to two different audio sources on two different speaker sets.

For example, you can hear one audio source through a rear-panel speaker connection, and a second source through a front-panel headphone or speaker connection. You must configure multistreaming audio for the system if you want to hear two audio sources on separate speakers.

Audio output overview

The front-panel audio output is the green stereo headphone connector only.

The rear-panel outputs are the speaker connectors that can be set up as multichannel out from stereo 2.0 to 7.1 (select models only) configurations. Refer to your user documentation for information about setting up powered speakers or your AV receiver.

Audio input overview

You can select two of the following audio sources to play through front-panel headphone and rear-panel speaker connectors:

- 1 From an externally connected device source, such as:
 - A microphone with cable connected to Mic In (pink).
 - An MP3 player with cable connected to Line In (blue).
- 2 From an internal source inside, or directly connected to, the computer, audio files may reside on: hard disk drives, DVDs, CDs, USB drives, HP Personal Media Drives, or any connected device. Play internal media files through programs such as:
 - Microsoft Windows Media Player.
 - Other installed media player software.

NOTE: Digital Audio In cannot be multistreamed.

When to use multistreaming audio

You may multistream two audio sources as described in the following typical examples:

- 1 For online gaming:
 - You hear 5.1 game sound on AV receiver or powered speakers.
 - You also hear gaming conversation on a headset.


See “Example 1: For online gaming.”
- 2 For digital home entertainment:
 - You hear DVD sound on a living room TV/display or AV receiver from the rear-speaker connections.
 - You also hear sound on the computer or powered speakers that are connected to the front-panel green headphone jack, from one of the following external computer audio sources:
 - a Front-panel Line In
 - b Internal source residing on a hard disk drive, DVD, CD, USB drive, or other external device

See “Example 2: For digital home entertainment.”

Setting up multistreaming audio


Example 1: For online gaming

To configure multistreaming audio output for online gaming with Realtek HD Audio Manager, you must enable Voice-over-IP software (software used to converse over the Internet). Other players hear your voice from the microphone via the Internet, and you hear the game audio from the rear speakers.

- 1 Connect the audio input and output connectors as follows:
 - A headphone set to the front Headphone Out (green) connector
 - A microphone to the front Mic In (pink) connector for online conversation
 - A set of powered stereo 5.1 or 7.1 speakers to the rear Speaker Out connectors for gaming sound output
- 2 Click the **Realtek HD Audio Manager** icon on the taskbar to open the Realtek HD Audio Manager window. 
- 3 Click the **Device Advanced Settings** button.
- 4 Select **Make front and rear output devices playback two different audio streams simultaneously**.
- 5 Place a check in the **Output Mic In/Line In to front panel** check box, and click **OK**.
Or
Place a check in the **Output Mic In/Line In to rear panel** check box, and click **OK**.

Example 2: For digital home entertainment


To configure multistreaming audio output for digital home entertainment with Realtek HD Audio Manager:

- 1 Connect the audio output connectors as follows:
 - A headphone set or powered speakers to the front Headphone Out (green) connector for stereo music playback
 - A set of powered stereo 5.1 or 7.1 speakers to the rear Speaker Out connectors for DVD playback sound output
- 2 Click the **Realtek HD Audio Manager** icon on the taskbar to open the Realtek HD Audio Manager window. 
- 3 Click the **Device Advanced Settings** button.

- 4 Select **Make front and rear output devices playback two different audio streams simultaneously**.
- 5 Place a check in the **Output Mic In/Line In to front panel** check box, and then click **OK**.
Or
Place a check in the **Output Mic In/Line In to rear panel** check box, and then click **OK**.

Configuring audio for Windows Media Center


After you have installed, connected, and configured the speakers, follow these steps to configure multichannel audio output for Windows Media Center:

- 1 Click the **Windows Start Button**  on the taskbar.
- 2 Click **Windows Media Center**.
- 3 Under Tasks, click **settings, General**, and then click **Windows Media Center Setup**.
- 4 Click **Set Up Your Speakers**. The Welcome to Speaker Setup window opens.
- 5 Click **Next**.
- 6 Choose the speaker connection type, and then click **Next**.
- 7 Select the number of speakers, and then click **Next**.
- 8 Click **Test** to test the speakers.
- 9 Click **Finish**.

Selecting recording devices

(Type 6 connectors only)

To select a sound recording device:

- 1 Click the **Windows Start Button**  on the taskbar.
- 2 Click **Control Panel**.
- 3 Click **Sounds and Audio Devices** (or **Sounds, Speech and Audio Devices**). The Sounds and Audio Devices window opens.
- 4 Click the **Audio** tab.
- 5 Under Sound Recording, select a recording device, such as **Realtek HD Front Pink Jack**.
- 6 Click **OK**.
- 7 Close the window.

Resolving sound issues

If you do not have sound from the speakers, try the following:

- Check the volume and mute settings. See “Connecting Headphones.”
- Use active (powered) speakers, or speakers with an amplifier.
- Check the sound cable connections.
- Ensure that the software program and sound software are properly configured.
- Some software programs may result in low volume, even when the Volume is turned to the maximum value. If this is the case, click the **Volume** icon on the taskbar, and increase the system volume.
- Reconfigure the sound software for surround sound.
- Reinstall the audio card drivers by using application reinstallation program; refer to the *Troubleshooting and Maintenance Guide* that came with the computer.

Introducing Your Computer Software

The operation of your computer is controlled by two kinds of software:

- The Microsoft Windows Vista operating system, which displays the desktop on the monitor and controls your computer's hardware, peripherals, and software programs.
- Software programs that perform specific functions, such as word processing.

The software programs included with the computer may vary by model and by country/region.

Learning More About Software

You can find information on using software and on the Microsoft Windows Vista operating system in this guide and the onscreen Help. For Microsoft Windows Vista, you can also open the built-in Help and Support Center.

- Press the Help button (labeled with a question-mark icon) on your keyboard (select models only).

Or

- Click the **Windows Start Button**  on the taskbar, and then click **Help and Support**.

For help with specific software, refer to the onscreen Help within the program.

Using the Desktop

The *desktop* is the work area that appears on the monitor screen. It includes the taskbar along one edge, and shortcut icons that make it easy to find the things you need.

The taskbar shows the *Windows Start Button* ; a button for each open window, so that you can switch between programs; and the notification area that includes the time.

A *shortcut icon* is a small picture that you click to open a folder or start a program. One icon on the desktop that performs a special function is for the Recycle Bin, which collects files or shortcuts that you delete. When you empty the Recycle Bin, the files or shortcuts are permanently deleted. You can retrieve items from the Recycle Bin until you empty it.

Removing desktop icons

You can remove most desktop icons by deleting them.

To delete a desktop icon:

- 1 Right-click the desktop icon.
- 2 Click **Delete**. The icon is placed in the Recycle Bin.


Retrieving desktop icons

- 1 Double-click the **Recycle Bin** icon on your desktop.
- 2 Drag the icon onto the desktop.

Removing files permanently

- 1 Right-click a file, and then click **Delete**.
- 2 Right-click the **Recycle Bin** icon on the desktop, and then click **Empty Recycle Bin**.

Using the Windows Start Button Menu

Click the **Windows Start Button**  on the taskbar to open the Start menu. From the Start menu, you can:

- Open programs or documents.
- Open the Help and Support Center.
- Start a search.
- Open the Control Panel to view or change settings.

Using the All Programs menu

To find the software programs on your computer:

- 1 Click the **Windows Start Button**  on the taskbar.
- 2 Click **All Programs**.

The All Programs menu displays a list of folders organized according to task (select models only).

A *folder* contains a list of items. Each item is actually a shortcut, or link, to a program, a document, or another folder. The Music folder, for example, contains shortcuts to the programs that you use to play music CDs.

Organizing the All Programs list


To change the name of an item:

- 1 Right-click the item.
- 2 Click **Rename**.
- 3 Type the new name, and then press Enter on the keyboard.
- 4 Click **Yes** in the message that appears.

To copy an item:

- 1 Right-click the item.
- 2 Click **Copy**.
- 3 Go to the desktop or folder, right-click an empty area, and then click **Paste**.

If you use Add or Remove Programs in the Control Panel to delete a software program, the shortcut in All Programs may not be removed. To remove a shortcut:

- 1 Click the **Windows Start Button**  on the taskbar.
- 2 Click **All Programs**.
- 3 Click the folder.
- 4 Right-click the shortcut, and then click **Delete**.

Using the Control Panel

The Control Panel is where you can set up or change properties and settings for the monitor, the keyboard, the mouse, the modem, a network connection, and other components and features of the computer. The Control Panel also provides tools for changing system performance, adding hardware, adding or removing programs, and other tasks.







To open the Control Panel:

- 1 Click the **Windows Start Button**  on the taskbar.
- 2 Click **Control Panel**.

Resizing Windows

All windows have three buttons in the upper-right corner. The middle button is either the Maximize button or the Restore Down button, depending on the state of the window.



| Feature | Name | Description |
|--|--------------|--|
|  | Minimize | Collapses the window to the taskbar (but does not close it). To bring the window back up, click the taskbar button with the name of the window. |
|  | Maximize | Expands the window to the full-screen size. |
|  | Restore Down | Reduces the window from full-screen size, so that it covers only a portion of the screen. |
|  | Close | Closes the window, and stops the program or task. |
|  | Resize | Resizes a window (not available when window is maximized). Move your mouse cursor over any window border until the cursor becomes a double-headed arrow. Click and hold down the left mouse button. Drag the border to the left or right to change the width. Drag the border up or down to change the height. |
|  | Scroll bar | Appears in a window when the information does not fit on one screen. Clicking and dragging a vertical scroll bar moves the screen up and down. Clicking and dragging a horizontal scroll bar moves the screen left and right. |

Working with Digital Images

You can connect a digital image source, such as a digital camera or a digital video camera, to the computer either directly or through a docking station. Digital picture files that you copy or download from the device appear in the Pictures folder.

Digital cameras and other digital imaging devices use memory cards, or media, to store digital picture files. You can copy digital picture files from the memory cards used by digital cameras and other digital imaging devices by using the memory card reader (select models only).

About the Internet

This section describes connecting to and using the Internet, including how to use a Web browser and electronic mail (e-mail).

Use the Internet to search for information or services on the Web, or to retrieve, read, or send e-mail messages.

The *Internet* is a group of computers that communicate with each other through telephone lines, digital services, or cable lines. Each Internet computer is independent, and its operators choose which files to make available to users of the Internet. To connect your computer to the Internet and use the information and services available there, you need an Internet Service Provider (ISP).

ISPs are businesses that give you access to the Internet, and most of them provide e-mail service. ISPs usually charge a monthly fee for their services. When your computer connects to the Internet, it is actually communicating with the Internet computer belonging to the ISP. The ISP verifies your account, and then provides you access to the Internet. You use a Web browser program to search for and display Web site information. Some ISPs allow you to choose a browser program, while others provide their own browser.

Your connection to an ISP may be through a traditional telephone dial-up modem, local area network (LAN), cable modem, digital subscriber line (DSL), or asymmetric digital subscriber line (ADSL). (DSL, ADSL, and cable ISPs are not available in all countries/regions.)

The *World Wide Web* (WWW), also called the *Web*, is a public part of the Internet used by individuals, companies, governments, and organizations. These individuals and groups have created millions of Web sites in support of their activities. A Web site consists of one or more Web pages. A *Web page* is a file or group of files that a user can access by entering the file location, or Uniform Resource Locator (URL).

The *URL* identifies a Web site location, typically in the form *http://www.name.extension* (for example, **http://www.hp.com**). The URL may include the path to a specific file within that site. Each period, or dot, in the URL separates elements within the address. For example, you will see the URL extension *.com* used by companies. When you enter the URL into your browser address box and press the Enter key on your keyboard, the browser contacts that location and opens the Web page for you.

Imagine that you are reading a newspaper. On page 1, you may read something like “For more details, see page 3, column 2.” You turn the page for more information. A *hyperlink* on a Web page works the same way, except that you move to the new page by clicking the hyperlink. The way that a hyperlink links files together is what gives the Web its name, because the Web weaves together and connects ideas from all over the world.

Your *e-mail address* identifies the electronic post office box where people can send you electronic mail. E-mail addresses have the form *name@domain.extension*. The domain is usually the name of the ISP or organization. The extension usually identifies the type of organization. For example, if your name is Jane Jones, and XYZ is your ISP, your e-mail address might be *JaneJones@xyz.com*, with the extension *.com* indicating that XYZ is a company. For information on using e-mail, see “Sending and Receiving E-Mail.”

Using a Browser

A Web browser program searches for and displays Web site information. How you explore the Internet depends on whether your ISP provides the browser or allows you to choose your own.

Once you are connected to the Internet, your browser opens the home Web page. You can go to a different Web site by entering its address (such as **http://www.hp.com**) into the address box in the browser, and then pressing Enter on your keyboard. Or you can use the browser search feature to search for references to a specific word or phrase on the Web.


Searching the Internet

Most Web browser programs include a search feature. You may need to click a button or select a menu option to display the search feature, depending on the type of browser program. Type a question, or a word that describes the information that you want to find, into the Search box, and then press Enter.

The Windows search feature includes direct use of Internet Explorer Search.

NOTE: If your ISP provides the browser, you may not be able to use Internet Explorer to search the Internet.

To begin a search:

- 1 Click the **Windows Start Button**  on the taskbar.
- 2 Type a word or question; what you type automatically appears in the *Start Search* box. As you type, the search results appear in the left pane.
- 3 Do one of the following:
 - Click a result to open it.
 - Click the **X** in the search window to clear the results of the search and return to the main list of programs.
 - Click **See all results** to display a list of all found search items on the computer and for advanced options.
 - Click **Search the Internet** to search the Internet by opening your browser.


Restricting Internet content

The Internet provides you with a wide variety of information, but some information may not be suitable for every viewer. With Content Advisor (a feature of Internet Explorer), you can:

- Set up a password.
- Control Internet access.
- Set up a list of Web sites that people who use your computer cannot view.
- Adjust the type of content people can view with and without your permission.

Once you set up restricted rating levels in Content Advisor, users can view Web sites and other pages that you have specified under the rating setup. However, to view unrated Web sites or pages, users must enter the Content Advisor password that you have set. This means that any unrated page, even Help and Support or Internet Explorer, is not viewable if the user does not know the password.

To enable Content Advisor:

- 1 Click the **Windows Start Button**  on the taskbar.
- 2 Click **Internet Explorer**.
- 3 Click **Tools**, and then click **Internet Options**.
- 4 Click the **Content** tab.
- 5 In the Content Advisor area, click **Enable**.
- 6 Click the **General** tab, click **Create password**, and type a password.
- 7 Click **OK**, and then click **OK** again.

To allow access to an unrated site or page you approve of:

- 1 Open the Web site.
- 2 When the password window appears, select the **Always allow viewing** or **Allow viewing only this time** option.

Using the AVG 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 your 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 antivirus software up to date.

AVG, an antivirus software program, is preinstalled on your computer and includes a free trial subscription of protection updates. You can quickly check for updates in the AVG Test Center window. Hewlett-Packard strongly recommends that you protect the computer against new viruses beyond the trial period by purchasing an extended update service.

Opening AVG software

When you first set up the computer, AVG helps you to configure and register your copy of AVG.

Ensure that you set up AVG before you start using the Internet.

- 1 Click the **Windows Start Button**  on the taskbar.
- 2 Click **All Programs**.

- 3 Click **AVG**, and then click **AVG Test Center**.



- 4 Click the **Check for Updates** button to get the latest AVG updates, which keep your computer protected.
- 5 For more information about using and updating the AVG software, press F1 on your keyboard to open the AVG Help window.




Manually running a system scan

To scan all hard drives on your computer for viruses and security risks:

- 1 Double-click the **AVG** icon on the desktop.

Or


Click the **Windows Start Button**  on the taskbar, **All Programs**, **AVG**, and then click **AVG Test Center**.

- 2 Click the **Scan Computer** button. Depending on the number of files on your computer, this may take several minutes. If a virus is found, AVG removes it or provides instructions for removal.
- 3 When the scan is complete, click **Close**. AVG lists any security risks or viruses found in the Security status window.



Scheduling a full system scan time

To set up the time for a full system scan:


- 1 Click the **Windows Start Button**  on the taskbar, **All Programs**, **AVG**, and then click **AVG Control Center**.
- 2 Select **Scheduler** from the Security status window.
- 3 Double-click the **Scheduled Tasks** button.
- 4 Click **New Schedule**.
- 5 Click the **Task** tab.
- 6 Type a name for your scan in the Name window.

- 7 Use the drop-down arrows to select what type of task to schedule, such as **Test** or **Update**.
- 8 Click the **Perform Task** tab. Use the drop-down arrows to select frequency of task settings and a start date.
- 9 Click **Apply**, and then **OK**.
- 10 Click the **Close** button.

NOTE: If the computer is in Sleep mode, the AVG program does not perform a scheduled antivirus scan. AVG displays a message asking if you want to *Start Task* as soon as the computer is out of Sleep mode.

Setting up a custom scan

To create a custom scan for specific files, folders, CDs, and drives:

- 1 Click the **Windows Start Button**  on the taskbar, **All Programs**, **AVG**, and then click **AVG Test Center**.
- 2 Click the **Scan Selected Areas** button.
- 3 Place a check in the check box next to each drive or folder you want to scan.
- 4 Click **Scan Selected Areas** button. Depending on the number of files on your computer, this may take several minutes. If a virus is found, AVG will remove it or provide instructions for its removal.
- 5 When the scan is complete, click **Close**. AVG lists any security risks or viruses found in the Security status window.



NOTE: If the computer is in Sleep mode, the AVG program does not perform a scheduled antivirus scan. AVG displays a message asking if you want to *Start Task* as soon as the computer is out of Sleep mode.

Sending and Receiving E-Mail

E-mail enables you to send and receive letters, pictures, postcards, and even music and video clips.

NOTE: E-mail may contain a virus in the message itself or as an attachment. To protect your computer, do not open any message that originates from an unfamiliar source or that appears suspect to you. Instead, delete such messages.


Your computer comes with an e-mail program from Microsoft called Windows Mail (select models only). You may also use e-mail programs from other vendors. Some ISPs provide their own e-mail programs. You use an e-mail program to send, receive, and organize your messages. You can organize, read, and create new messages even when you are offline (not connected to the Internet).

Using Windows Mail

To set up Windows Mail, you first need some information from your ISP: your e-mail address, user name, password, the names of your incoming and outgoing e-mail servers, and perhaps some other details.

The first time you start Windows Mail, make sure the computer is connected to the Internet, and follow the wizard to set up your account.

To add an account in Windows Mail:

- 1 Click the **Windows Start Button**  on the taskbar.
- 2 Click **All Programs**.
- 3 Click **Windows Mail**.
- 4 Click **Tools**, and then click **Accounts**.
- 5 Click **Add, E-mail Account**, and then click **Next**.
- 6 Follow the onscreen instructions to add your account.

Using the e-mail program provided by your ISP

Follow the instructions provided by your ISP to install its Web browser and e-mail program, and to set up and use your e-mail account. You can then send and receive e-mail when your computer is connected to your ISP.

Software Quick Reference Table


(Select models only)

Your computer includes a number of software programs that:

- 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.

Note that some of the programs that are listed may not be included with your model, and that this is not a complete list of all included software.

To open any of these programs, click the **Windows Start Button**  on the taskbar, click **All Programs**, select the program folder (for example, **DVD Play**), and then click the program name to open the software.

With this program: **You can:**

DVD Play
(select models only)



- Play DVD movies and video CDs (VCDs).
- Play Blu-ray and High-Definition DVDs if the computer has a Blu-ray and HD DVD disc drive.
- Use the Zoom and Pan features.
- Create viewing bookmarks.

CyberLink Power2Go
(select models only)



- 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.
- Copy video files.
- Verify that the disc has been created without errors.

CyberLink PowerProducer
(select models only)



- 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.

CyberLink LabelPrint
(select models only)



- Burn a label directly onto LightScribe-enabled CDs, DVDs, and mini-discs by using LightScribe technology.
- Burn a label directly onto the disc's label side by using LabelFlash technology.
- Print labels to attach directly onto a disc.

Microsoft Windows Movie Maker
(select models only)



- Import audio, video, and other media files from videotape, audiotape, Web cameras, or television broadcasts.
- Record audio and video files to create a video project that becomes a Microsoft Windows Media source file with a .wmv extension.
- Edit and preview files.
- Send a movie in an e-mail or upload it to a Web server.
- Add music files (.mp3).
- Import audio files such as .mp3, .asf, or .wma; video files such as .wmv, .asf, .avi, or .mpg; or image files such as .jpg or .gif.
- Create .avi and .wmv (Windows Media Video) files.

NOTE: You may have a software update CD included with your computer. You may need to install this CD before using the DVD Writer/CD Writer drive. To do this, follow the installation instructions that came with the CD.

Managing Files

A *file* is any unit of information that is named and stored on the computer hard disk drive or other electronic storage media, such as a CD, diskette, or even in a digital camera. A file can be a document, picture, music, video, or other data. Almost everything that you do on the computer involves working with files.

The computer can copy files to other storage media within component drives, such as diskettes, memory cards, CDs or DVDs, or it can send them to output devices, such as a printer.

Organizing Files with Folders

In Windows Vista, folders enable you to organize the files on the computer. Like paper folders within a filing cabinet, folders on the computer provide a way to group related files together.

A folder can contain any type of file, and it can even contain other folders. Each file within a folder must have a unique name, but two different folders can have files with the same name.

There are two methods for working with files and folders on the computer:

- The Computer view enables you to quickly see all the files and folders within a specific folder on the computer. It also contains links to common tasks for managing files, such as copying, moving, deleting, and renaming.


To open the Computer view, click the **Windows Start Button**  on the taskbar, and then click **Computer**.

- Windows Explorer enables you to quickly see all the folders and files on the computer. It also makes it easy to move or copy files from one folder to another.

To open Windows Explorer, click the **Windows Start Button**  on the taskbar, and then click **Windows Explorer**.

To navigate the Computer and Windows Explorer views, double-click folders to open and display their contents. Click the **Back** arrow button to retrace the path through the opened folders.



Creating Folders

- 1 Click the **Windows Start Button**  on the taskbar, and then click **Computer**.
Or
Click the **Windows Start Button**  on the taskbar, and then click **Windows Explorer**.
- 2 Navigate to the location where you want to place the new folder.
- 3 Click **Organize**, and then click **New Folder**.
- 4 Type a name for the folder, and then press Enter on the keyboard.

Moving Files



CAUTION: Do not move any file that is part of an installed program. Doing so can cause the program to become unusable.

- 1 Click the **Windows Start Button**  on the taskbar, and then click **Computer**.
Or
Click the **Windows Start Button**  on the taskbar, and then click **Windows Explorer**.
- 2 Find the file that you want to move, and then click it to select it.
- 3 Click **Organize**, and then **Cut**.
- 4 Find and open the folder in which you want to put the file.
- 5 Click **Organize**, and then **Paste**.

NOTE: You can also move files by dragging them into a new location. (You can have two or more Windows Explorer windows open at one time.) Select an item in Computer or in Windows Explorer, and then press and hold the right mouse button while moving the item into another folder. Release the mouse button and click **Move Here** to place the item in the new location.

Finding Files

To find a file, you can use the Search box at the top of every folder, or the search box on the Windows Start Button menu, which searches the whole computer.

To search from a folder Search box:

- 1 Click the **Windows Start Button**  on the taskbar, and then click **Computer**.


Or

Click the **Windows Start Button**  on the taskbar, and then click **Windows Explorer**.

- 2 Find the folder that you want to search. Search looks in the current folder and all subfolders.
- 3 Click in the search box at the top of the window, and begin to type.

The Search box filters according to what you type. It displays files if your term matches the file name, tags, or other file properties. It displays text documents if the term occurs in any of the text inside the document file.



To search from the Windows Start Button menu:

- 1 Click the **Windows Start Button**  on the taskbar.
- 2 Type a word or question; what you type automatically appears in the *Start Search* box. As you type, the search results appear in the left pane.
- 3 Do one of the following:
 - Click a result to open it.
 - Click the **X** to clear the results of the search and return to the main list of programs.
 - Click **See all results** to show the results in a folder for advanced options.
 - Click **Search the Internet** to search the Internet by opening the browser.

Renaming Files



CAUTION: Do not change the file name extension (the last three characters of a file name, after the period). Doing so could make the file unrecognizable to the computer.

- 1 Click the **Windows Start Button**  on the taskbar, and then click **Computer**.
Or
Click the **Windows Start Button**  on the taskbar, and then click **Windows Explorer**.
- 2 Find the file or folder you want to rename, and then click it to select it.
- 3 Click **Organize**, and then **Rename**.
- 4 Type the new name, and then press Enter on the keyboard.

NOTE: Another way to rename a file is to right-click the file, and then click **Rename**.

Deleting Files



CAUTION: Do not delete any file that is part of an installed program. Doing so can cause the program to become unusable.

- 1 Find the file that you want to delete, and then click it to select it.
- 2 Click **Organize**, and then **Delete**.
- 3 Click **Yes** to confirm the delete and send the file to the Recycle Bin.

If you make a mistake and need to retrieve the deleted file, see “Retrieving Files from the Recycle Bin.”



NOTE: Another way to delete a file is to right-click the file, and then click **Delete**.

Retrieving Files from the Recycle Bin

If you discover that you need a file that you have deleted, you can usually retrieve it from the Recycle Bin. When a file is deleted, it goes to the Recycle Bin and stays there until the Recycle Bin is emptied manually or it is cleared to make room for more recently deleted files.

- 1 Double-click the **Recycle Bin** icon on the desktop.
- 2 Right-click the file that you want to retrieve, and then click **Restore this item**.
The file is removed from the Recycle Bin and goes back to its previous location.

Copying Files

- 1 Click the **Windows Start Button**  on the taskbar, and then click **Computer**.
Or
Click the **Windows Start Button**  on the taskbar, and then click **Windows Explorer**.
- 2 Find the file that you want to copy, and then click it to select it.
- 3 Click **Organize**, and then **Copy**.
- 4 Find and open the folder in which you want to put the file.
- 5 Click **Organize**, and then **Paste**.

NOTE: You can also copy files by dragging them into a new location. Select an item in Computer or in Windows Explorer, and then press and hold the right mouse button while moving the item into another folder. Release the mouse button, and then select **Copy Here** to copy the item to the new location.

Using a Printer

For instructions on connecting and using a printer, refer to the user manual that came with the printer.

Printers receive instructions from the computer by means of software programs called printer drivers. In many cases, the computer automatically finds the necessary printer driver for your particular printer to work with the computer. If it does not, follow the instructions that came with the printer to install the specific printer driver manually.

You can print text and graphics from most software programs and Web sites if you have a printer connected to the computer, and if the computer has the necessary software installed for the printer.

To print:

- 1 Click **File** on the program menu bar, and then click **Print**.
- 2 Select your printing options:
 - Select the printer.
 - Choose the page range (for example: all pages, current page, or range of pages).
 - Determine the number of copies.
- 3 Click **OK** or **Print**.

Using CD and DVD Media Drives

Using the CD and DVD Drives

Your computer can come with several types of CD or DVD drives that allow you to perform different tasks. What you can do depends on what kind of drive you have.

| Allows you to: | CD-ROM | CD-RW | DVD-ROM | DVD+RW/+R | Blu-ray DVD+RW/+R | HD DVD+RW/+R |
|---------------------------------------|---------------|--------------|----------------|------------------|------------------------------|-------------------------|
| Read data from CDs. | • | • | • | • | • | • |
| Play music CDs. | • | • | • | • | • | • |
| Read DVDs. | | | • | • | • | • |
| Record (burn) data or music to discs. | | • | | • | • | • |
| Play DVD movies. | | | • | • | • | • |
| Record (burn) DVD movies. | | | | • | • | • |
| Read Blu-ray discs. | | | | | • | |
| Record data to Blu-ray discs. | | | | | • | |
| Read HD discs. | | | | | | • |

The combination (combo) drive is available on select models only. It combines the functions of two drives into one: either a DVD+RW/+R drive (DVD writer) and a CD-RW drive (CD writer), or a DVD-ROM drive and a CD-RW drive.

Handling CDs and DVDs

To avoid damaging a disc, follow these guidelines:

- Return the disc to the case when you are finished using it.
- Handle the disc by its outside edges or center hole only.
- Do not touch the unlabeled side of a disc or place the unlabeled side down on a desk. Doing so could scratch the surface of the disc.
- Store discs at room temperature.

Inserting and removing CDs and DVDs



CAUTION: Use only standard-shaped (circular) discs in the drives. Using non-standard discs, such as heart-shaped discs or business-card discs, may damage the drive.

To insert a CD or DVD:

- 1 With the computer turned on, press the Eject button near the front of the drive to open the disc tray.

NOTE: On some computers, the drive is located behind a door on the front of the computer. On other computers, the drive is a slot that does not include a disc tray.

- 2 Remove the CD or DVD from its case, holding the disc edges or center hole only.
- 3 Gently place the disc in the tray or press the disc into the slot drive with the label facing up or facing right if the drive is vertically positioned in the computer.

NOTE: If you have a slot drive, you can skip step 4 because the drive does not include a disc tray.

NOTE: On a double-sided DVD, read the text around the center hole to determine which side (A versus B or Standard versus Widescreen) to play. Place the disc in the tray with the label facing up for the side that you want to play. If the CD drive is vertically positioned in the computer, place the disc with the label facing right for the side that you want to play.

4 Close the disc tray by:

- Gently pushing the tray into the computer.

Or

- Clicking the open/close button on the control panel for the program that controls the drive.

Or

- Pressing the media control open/close button or Eject button on the keyboard (select models only).

Or

- Pressing the Eject button on the drive, if it is accessible.

To remove a CD or DVD:

- 1 With the computer turned on, open the disc tray by pressing the Eject button.
- 2 Holding on to the disc edges or center hole only, lift the disc out of the disc tray or out of the slot drive.

NOTE: If you have a slot drive, you can skip step 4 because the drive does not include a disc tray.

3 Place the disc in its case.

4 Close the disc tray by gently pushing the tray into the computer.

Compatibility Information

An important feature of a DVD Writer/CD Writer drive is its high level of compatibility with other optical drives and CD and DVD players:

- The CDs that you create play in most home and car stereos as well as most computer DVD-ROM and CD-ROM drives.
- The DVDs that you create are compatible with some DVD video players and with most computer DVD-ROM drives.
- CD-R discs are more compatible with home and car stereos than CD-RW discs are.
- Blu-ray disc drives are required to play Blu-ray discs.
- Blu-ray disc drives can read Blu-ray discs and record to Blu-ray discs.
- HD disc drives are capable of playing HD discs but not recording HD data to disc.

The DVD Writer/CD Writer drive is able to read from and record to almost every type of optical disc. Writing speed rates for the DVD Writer/CD Writer drive are fast, allowing quick recording times.

Disc Features and Compatibility Table

| Disc | File type | Can be recorded onto | Plays in computer | Plays in home or car stereo | Plays in home DVD player |
|---------------------------------|-----------|----------------------|-------------------|-----------------------------|--------------------------|
| CD-ROM | Data | No | Yes | No | No |
| | Music | No | Yes | Yes | Varies by model |
| CD-R | Data | Yes | Yes | No | No |
| | Music | Yes | Yes | Varies by model | Varies by model |
| CD-RW | Data | Yes | Yes | No | No |
| | Music | Yes | Yes | Varies by model | Varies by model |
| DVD-ROM | Data | No | Yes | No | No |
| | DVD movie | No | Yes | No | Yes |
| DVD-RAM | Data | Yes | Varies by model | No | No |
| | DVD movie | Yes | Varies by model | No | Varies by model |
| DVD+R and DVD-R | Data | Yes | Yes | No | No |
| | DVD movie | Yes | Yes | No | Varies by model |
| Double-layer DVD+R/DVD-R | Data | Yes | Varies by model | No | Varies by model |
| | DVD movie | Yes | Varies by model | No | Varies by model |
| DVD+RW and DVD-RW | Data | Yes | Yes | No | No |
| | DVD movie | Yes | Yes | No | Varies by model |
| Blu-ray DVD | Data | Yes | Yes | No | Varies by model |
| | Movie | Yes | Yes | No | Varies by model |
| HD DVD | Data | No | Yes | No | Varies by model |
| | Movie | No | Yes | No | Varies by model |
| VCD | DVD movie | No | Yes | No | Varies by model |

NOTE: Some computers come with the double-layer DVD Writer. It supports single-layer and double-layer DVD media. Double-layer technology gives you greater capacity and allows you to store up to 8 GB* of data on double-layer DVD+R or DVD-R media. Double-layer is a new technology. Double-layer media compatibility varies widely with some home DVD players and DVD-ROM drives. * 1 GB is defined as 1 billion bytes. 1 GB = 1 billion bytes when referring to hard disk drive capacity. Actual formatted capacity is less.

For the latest disc compatibility information for your computer, go to the HP Support Web site at: <http://www.hp.com/support>

NOTE: Double-layer DVD technology is supported by select models only.

Optical Drive Quick Reference Table

| Optical drive can: | CD-ROM | CD-RW | DVD-ROM | DVD-RAM | DVD+RW/+R DVD-RW/-R | Double-layer DVD | Combo CD-RW/ DVD | LightScribe DVD+RW/+R | BD HD DVD+RW/+R |
|---|---------------|--------------|----------------|----------------|--------------------------------|-----------------------------|---------------------------------|----------------------------------|----------------------------|
| Read CDs, CD-Rs, and CD-RWs. | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Read DVDs. | No | No | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Read data on a CD. | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Play music. | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Record data or music to disc for storage or backup. | No | Yes | No | Yes | Yes | Yes | Yes | Yes | Yes |
| View DVD movies. | No | No | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Record DVD movies. | No | No | No | Yes | Yes | Yes | No | Yes | Yes |
| Play games. | Yes | Yes | Yes | No | Yes | Yes | Yes | Yes | Yes |
| Create LightScribe label. | No | No | No | No | No | No | No | Yes | Yes |
| Play Blu-ray DVD. | No | No | No | No | No | No | No | No | Yes |
| Play HD DVD. | No | No | No | No | No | No | No | No | Yes |
| Record data to Blu-ray disc. | No | No | No | No | No | No | No | No | Yes |
| Record HD data to DVD. | No | No | No | No | No | No | No | No | No |

Using Blu-ray and HD Disc Drives

If the computer came with a Blu-ray (BR) and high-definition (HD) disc drive, there are three programs that are designed specifically for use with this drive:

- DVD Play plays Blu-ray, high-definition (HD), and regular commercial DVD discs.
- PowerProducer is a video editing program for creating Blu-ray or DVD discs.
- PowerToGo is a Blu-ray disc recording (burning) program for different types of data storage, such as video, music, pictures, and other data. This program enables you to record data to Blu-ray, HD DVD, and other recordable DVD discs.

NOTE: The BD HD DVD+RW/+R drive does not support recording high-definition data to disc.

For more information about using these programs, see “Playing DVDs” and “Creating Audio and Data Discs.”

Using the Memory Card Reader

Digital cameras and other digital imaging devices use memory cards, or *media*, to store digital picture files. The optional memory card reader (select models only) can read from and write to a variety of types of memory cards and the IBM Microdrive disk drive.

The card reader is accessible directly on the front of the computer. It has four or two horizontal card slots, which accept the memory cards and the Microdrive disk drive.

You can place media in one or more of the card slots and use each media independently. Place only one piece of media in a slot at one time.

Each card slot has its own drive letter and icon. When you insert media, the display label may change to the title of the media, if a title is present.

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 your memory card reader again.

To use the memory card reader:


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

The activity light (**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, see “Media Insertion Guide.” CompactFlash and Microdrive are keyed and cannot be inserted incorrectly. Insert the receptacle edge (holes) of this media into the slot.

- 2 Select a program to access your files. The computer opens a program, so that you can access the media contents. You can copy files from or to the media.

Or

If the AutoPlay window does not open, click the **Windows Start Button**  on the taskbar, click **Computer**, and then double-click the **Memory Card** icon to display the files on the memory card.

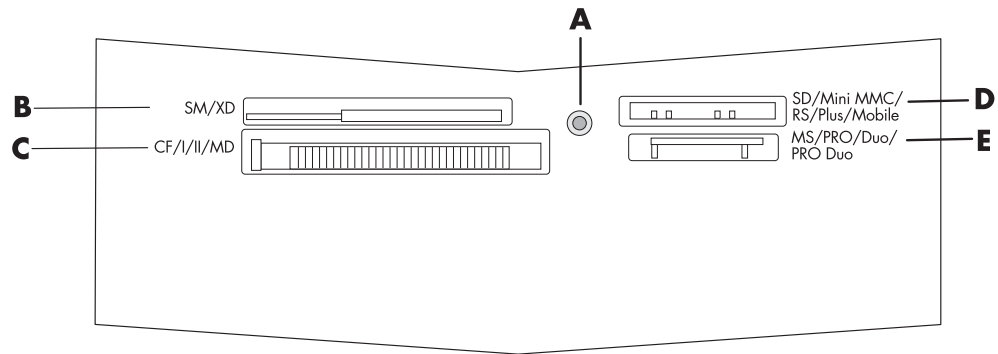
- 3 When you are finished, right-click the drive icon, click **Eject**, check that the activity light is on but not blinking, and then remove the media. A steady activity light indicates that the computer is not reading or writing the media card.



CAUTION: Do not try to remove media when the activity light is blinking. Doing so may cause loss of data.

Media Insertion Guide

4-slot memory card reader (select models only)



- A Activity light
- B Upper-left slot
- C Lower-left slot
- D Upper-right slot
- E Lower-right slot

| Card | Insert the media | 4-slot reader location |
|---|-------------------------|--|
| SmartMedia (SM) memory card | Facing up | B (upper-left) SM |
| xD media | Facing up | B (upper-left) xD |
| CompactFlash Type I media | Receptacle edge (holes) | C (lower-left) CF/I |
| CompactFlash Type II media | Receptacle edge (holes) | C (lower-left) CF/II |
| Microdrive disk drive | Receptacle edge (holes) | C (lower-left) MD |
| Secure Digital (SD) memory card | Facing up | D (upper-right) SD |
| Mini Secure Digital (MiniSD) Memory Card* | Facing up | D (upper-right) MiniSD |
| MultiMediaCard (MMC) | Facing up | D (upper-right) MMC |
| Reduced size MultiMediaCard (RSMMC)* | Facing up | D (upper-right) RSMMC |
| MultiMediaCard Plus (MMC +)* | Facing up | D (upper-right) MMC Plus |
| MultiMediaCard Mobile (MMC Mobile)* | Facing up | D (upper-right) MMC Mobile |
| Memory Stick (MS) memory card | Facing up | E (lower-right) MS |
| Memory Stick (MS-Pro) memory card | Facing up | E (lower-right) PRO |
| Memory Stick (MS-Pro Duo) memory card* | Facing up | E (lower-right) PRO Duo |
| Memory Stick (MS-Duo) memory card* | Facing up | E (lower-right) MS Duo |

*Select models only. Not available in all countries/regions.

NOTE: Some memory cards, such as CF Ultra/III, are not compatible with the memory card reader that came with the computer.

Understanding the Activity Light

The memory card reader activity light is off when there are no media cards plugged into the slots.

The light turns on when a media card is inserted into a slot.

The light blinks when data is being transferred between the card and the computer.


Formatting a Memory Card

If you have not used the memory card before, or if the card has become corrupted, you may need to format the card before using it.

NOTE: Some memory cards have a lock position. To view or edit your picture files, make sure that the memory card is in the unlocked position.

- 1 Format the memory card in your digital camera. Follow the instructions that came with your digital camera.

Or

Insert the media into the correct card slot on the reader until it stops and locks into place. The activity light on the memory card reader lights, and the computer automatically detects the media.
- 2 Click the **Windows Start Button**  on the taskbar, and then click **Computer**.
- 3 In the Devices with Removable Storage area, right-click the correct memory card icon.
- 4 Select **Format**, and then type a label name into the label box.
- 5 For best compatibility, select **FAT** as the file system settings.
- 6 Click **Start**.
- 7 Click **OK** in the Format Complete window, and then click **Close**.

Troubleshooting the Memory Card Reader

If you are having problems reading from or writing to a memory card, try the following:

- Some cards have a read/write or security switch on the card. Make sure that the read/write switch is set to Write Enabled before attempting to write data to the card.
- Make sure that the amount of data that you want to store is not larger than the storage limit of the memory card.
- Make sure that the memory card is one of the supported types: CompactFlash Type I and II, Microdrive, Memory Stick, Memory Stick Pro, MultiMediaCard, Secure Digital, SmartMedia, or xD media.
- Make sure that the memory card is fully inserted into the correct slot.
- Remove the memory card when the activity light is not blinking, and shine a flashlight into the empty slot. If any of the pins are bent, replace the memory card reader, or have the computer serviced if a pin is touching another pin. To straighten slightly bent pins, use the tip of a fine-point retracted ballpoint pen with the computer off.
- Inspect the ends of the memory cards for anything that could be blocking a proper connection. Clean the contacts with a lint-free cloth and small amounts of alcohol. Replace the memory card, if necessary.
- The memory card reader is a device that uses the Safely Remove Hardware task. This appears as a taskbar icon next to the time. Do not click **Stop** in the Safely Remove Hardware window. Doing so disconnects the drive. If this happens, restart the computer.
- Do not insert or remove memory cards when the activity light is blinking. Doing so may cause data loss, or it may permanently damage the card reader.
- Format a memory card before you use it. See “Formatting a Memory Card.”

Using Windows Media Center

Microsoft Windows Media Center lets you do amazing things with your computer. With a full range of easy-to-use digital entertainment features, you can experience movies, music, and photos like never before.

Windows Media Center is simple and convenient to use. You can easily find and choose your media. You can play movies, listen to music, and view photos with a single remote control (select models only). Combine the powerful features of your computer with a home theater receiver to enjoy an even more dynamic entertainment experience.

Windows Media Center is optimized for widescreen and high-definition displays. With the new onscreen layout of your photos, music, and videos, you can now see up to three times more content on a widescreen display than with previous versions of Windows Media Center.





Setting Up Windows Media Center

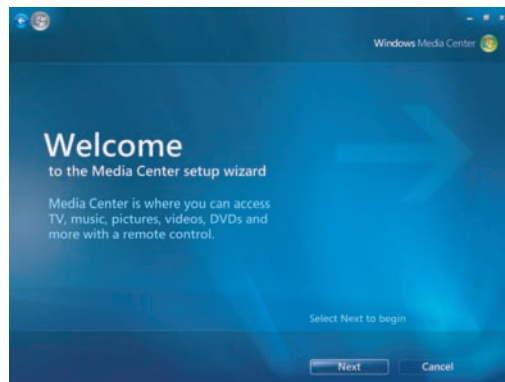
The first time that you start Windows Media Center on the computer, a Windows Media Center setup wizard opens. You must complete each step in the setup wizard to be able to use all the features in Windows Media Center. The Windows Media Center setup wizard may take several minutes to complete. If there are steps that you still need to complete, you can go to the Settings menu to do so. See “Completing the setup wizard.”

NOTE: For more information about setting up the computer, refer to the setup instructions that came with the computer.

Completing the setup wizard

If you did not complete the Windows Media Center setup wizard steps the first time through, you can complete or change your selections by using the following procedure. You need to complete all of the required setup steps to access all of the Windows Media Center features.

- 1 Press the Windows Media Center Start button  on the remote control, or, with the mouse, click the **Windows Start Button**  on the taskbar, and then click **Windows Media Center**.
- 2 Scroll up or down to the Tasks menu, and then select **settings**. Use the arrow keys on the keyboard or on the remote control to scroll right and left to see all of the Tasks menu items.
- 3 Select **General, Windows Media Center Setup**, and then **Run Setup Again**. Follow the onscreen instructions to complete the wizard.



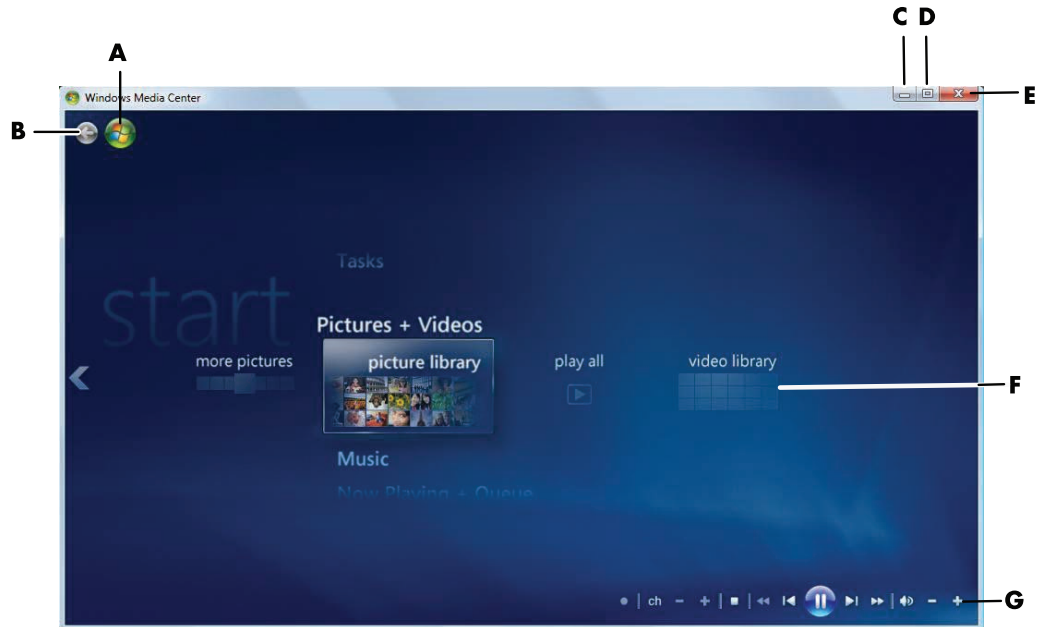
The following are some of the items that are included in the setup wizard:

- **Check for your Internet connection.** An Internet connection allows you to access media links, display information about your music CDs and DVDs, and download the Television Program Guide if your computer came with a TV tuner.

NOTE: You must subscribe to an Internet Service Provider to have an Internet connection.

- **Optimize how Windows Media Center looks on your display.** You can:
 - Change display settings such as brightness, contrast, color, and centering.
 - Test and adjust the display settings of the monitor, TV, or other display.
 - Use the Windows Media Center video to help you change onscreen centering, sizing, aspect ratio (shape), brightness, contrast, color, and sharpness of the display with either the TV remote control or the monitor controls.
- **Set up your speakers.** Select how many speakers you have, and test them. Speakers are sold separately for some models.
- **Set up your Music, Picture, and Video Libraries.** Set up Windows Media Center to scan your Music, Picture, and Video folders for new media files. Windows Media Center can then automatically add these files to your media libraries. You can have Windows Media Center scan other folders or stop scanning a folder.

Windows Media Center Start Menu



- A** Open the Windows Media Center Start menu.
- B** Go back one screen.
- C** Minimize the Windows Media Center window.
- D** Resize the Windows Media Center window.
- E** Close the Windows Media Center window.
- F** Use arrow keys to scroll up and down, left and right through the submenu items.
- G** Use media playback controls: Play, Stop, Pause, Skip, Fast-forward, Replay, Rewind, Record, Volume Up/Down, Mute, and Channel Up/Down.

Windows Media Center Start menu items

- **HD DVD Play or Play DVD** — See “Playing DVD Movies in Windows Media Center.”
- **Online Media** — Get access to various photo, video, radio, TV, and various media providers.
- **Pictures + Videos** — View digital pictures, play a slide show, or print photos. Watch home videos. See “Playing video CDs (VCDs) with Windows Media Player.”
- **Music** — Play music files or music CDs, create and edit playlists, and record music files to CD. See “Using Music with Windows Media Center” and “Copying Music Files to CD in Windows Media Center.” Listen to internet radio station. See “Listening to Online Radio Stations.”
- **Tasks** — Change program settings. See “Changing Windows Media Center Settings.” Add a Windows Media Center Extender device. Synchronize content from another device with the computer. Burn CDs and DVDs. See “Copying Music Files to CD in Windows Media Center.” Find utilities and programs.
 - **Shutdown** — Get access to the Shutdown, Restart, Sleep, Close, Log Off, and Media Only menus. Media Only mode gives you access to Windows Media Center, but not to the rest of the computer. See “Windows Media Center control menu.”

NOTE: Some of the features and programs that are listed are for select models only.

Windows Media Center Features

You can control the Windows Media Center functions and navigate Windows Media Center windows by using the remote control (select models only), keyboard, or mouse. You can easily switch back and forth between them by either moving the mouse, or by pressing a button on the remote control or the keyboard.

NOTE: Some of the Windows Media Center features listed are for select models only. Some of the components listed in the computer documentation, such as speakers and TV tuners, are optional or sold separately.

You can run Windows Media Center side-by-side with other Windows software programs. It is possible to browse through your pictures, watch videos, and play music while using other Windows programs.

With Windows Media Center, you can:

- Play back your digital videos.
- View your digital pictures or play them as a slide show with music.
- Easily print your photos.
- Browse, select, and play music CD files with full-screen visualizations.
- Record CD tracks to your media library.

- Play DVD movies. Resume playing your DVDs where you left off.

NOTE: If your computer came with a rewritable DVD drive, the drive is able to read and record to DVD+/-R/-RW media.

- Listen to Internet radio stations.
- Access streaming music and video subscription services. Some music and video subscription services may not be available in all countries/regions.
- Open specific windows in Windows Media Center by using the shortcut buttons on the remote control.
- Easily back up your media files to CD, DVD, or another hard disk drive, such as the HP Personal Media Drive and HP Pocket Media Drive (sold separately).
- Use the Optimization setting to keep the computer running smoothly.
- Use Sleep mode to save power when the computer is not in use. Then, you can display the computer desktop instantly by touching a keyboard key or a remote control button.

The right music for the moment

In the Music section, you can quickly browse the entire music library by artist, song, or album title, as well as by genre, composer, or year. Windows Media Center automatically downloads thumbnails of album art, giving you a very visual way to find the albums that you want to hear. You can shuffle and repeat your music, create playlists, apply visualizations, and burn playlists to CD or DVD with the push of a button.

You can also start a picture slide show directly from your music library when you are selecting or playing your music. If you subscribe to music services, you can now add this option directly to the Start menu, next to the Music Library.

It is easy to search for and add music to your library from another Windows-based computer in your home.

Playing Internet radio

Windows Media Center can also play Internet radio. You can access various Internet radio Web sites.

Sharing your digital memories

With Windows Media Center, you can turn your simple photo collection into a cinematic slide show that can be shared on the computer or the television in the living room. The Play All option on the Start menu enables a full slide show of photos at the click of a button, and you can even enjoy the slide show with music from your music collection for a truly memorable experience.

If you want to create a slide show with a soundtrack, you can easily create a playlist of photos and music to burn to DVD.

In the Picture Library, you can navigate easily through your photos by folder or by the date on which they were taken, with thumbnails and highlighting that help you quickly identify the specific images or folders that you want to see. You can also perform basic editing functions, such as rotating or touching up pictures, either from within the Picture Library or during a slide show.

Transforming your living space into a theater

In the Videos Library, you can easily play any of the home movies that have been imported from your video recorder. Windows Media Center has built-in support for high-definition video.

Whether you are watching a DVD movie or your own home videos, Windows Media Center delivers a rich viewing experience with a high-quality digital sound system. Sit back, and enjoy the show.

Online media

Online Media is a link to various media providers, where you can find various media offers and services. The Online Media window is periodically updated by Microsoft. Some of the services that are listed may not be available in certain countries/regions.





Your computer must be connected to the Internet to access the Online Media Web sites.

Navigating Windows Media Center

Opening Windows Media Center with a mouse

You can use either the remote control or the mouse to open and navigate Windows Media Center.

To use the mouse:

- 1 Click the **Windows Start Button**  on the taskbar, and then click **Windows Media Center** .
- 2 Move the mouse over the Windows Media Center Start menu items, and click a category to select it. To scroll the list of Start menu items, move the mouse pointer over the list until an item is selected, then continue moving the pointer up or down the list to see the items that are not displayed.
- 3 After you select a menu category, scroll the mouse left or right, and then click an item to open that window.
- 4 Move the mouse to display the Windows Media Center menu bar, and then click the back arrow at the top of the window to go to a previous window. 
- 5 Click the **Windows Media Center Start**  icon at the top of the Windows Media Center window to return to the Windows Media Center Start menu.

Using the Windows Media Center menu bars

When you move the mouse, the Windows Media Center menu bars appear. These menu bars allow you to access:

- Media controls (play, fast-forward, rewind, stop, and others).
- The back arrow.
- Window-control icons (minimize, maximize, and close).
- The Windows Media Center icon that takes you to the main Windows Media Center menu.



If you use the remote control, or if you stop using the mouse (after 5 seconds), the Windows Media Center menu bars become hidden.

NOTE: You can use the resize buttons to switch to the desktop or to run Windows Media Center side-by-side with another program.

Selecting items in Windows Media Center

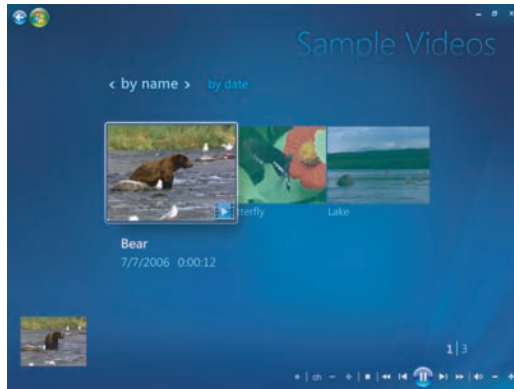
You can control the Windows Media Center functions and navigate Windows Media Center windows by using the remote control, the keyboard, or a mouse.

In the Windows Media Center windows, a selected item such as a folder, file, or menu item is either highlighted or moves to a zoomed-out position.



To select items in Windows Media Center, use the mouse, the arrow keys on the keyboard or the arrow buttons on the remote control, and then press the Enter key on the keyboard or the OK button on the remote control to enter your selection.

If you have media playing, such as music or a slide show, it appears in an inset window in the lower-left corner. To switch from watching media in the inset window to watching it in full-screen mode, use the arrow buttons on the remote control or the arrow keys on the keyboard to select it, and then press the OK button on the remote control or the Enter key on the keyboard.





Inset window









Full-screen mode

Windows Media Center control menu

To access the control menu in Windows Media Center, move the mouse to display the menu bars:

- 1 Click the **Windows Start Button**  on the taskbar, and then click **Windows Media Center**.
- 2 From the Tasks menu, click **shutdown** to open the window with the menu items that are listed in the following table. Use the arrow keys on the remote control or the keyboard to scroll to the right or left of the screen to select the other options. 



| Icon | Action |
|---|---|
|  | Closes Windows Media Center. |
|  | Logs off and ends your Windows Media Center session and switches users. |
|  | Shuts down the computer. |
|  | Restarts the computer. |

| Icon | Action (continued) |
|---|---|
|  | Puts the computer in a power-reduced or Sleep mode. |
|  | Puts the computer in Media Only mode, which gives you access to Windows Media Center, but not to the rest of the computer. NOTE: This option is listed in the Tasks menu. |

Changing Windows Media Center Settings

In the Windows Media Center settings window, you can change settings for viewing your pictures and slide shows, and for controlling sound and the display of all of the Windows Media Center windows.

To change your Windows Media Center settings:

- 1 Press the Windows Media Center Start button  on the remote control, or, with the mouse, click the **Windows Start Button**  on the taskbar, and then click **Windows Media Center**.
- 2 From the Tasks menu, select **settings**.
- 3 Select a settings category.
- 4 Select one of the settings listed. Then, use the arrow keys on the keyboard or the arrow buttons on the remote control to select an option, or follow the onscreen instructions.
- 5 Select **Save** to save your changes.

Windows Media Center Settings categories

■ General

- **Startup and Window behavior.**
- **Visual and Sound Effects** to set transition animations, sounds, and background colors when navigating in Windows Media Center.
- **Program Library Options** to allow programs in the Program Library to control the media experience and access media information in Windows Media Center. Also, you can hide Internet security warnings.
- **Windows Media Center Setup** to configure an Internet connection and speakers, run Windows Media Center setup again, and configure the TV display or monitor.

- **Parental Controls** to block unwanted TV channels and movie ratings, change access code, and reset parental controls.

NOTE: The parental controls, captions display, radio, and TV settings listed in Windows Media Center do not apply to computer models that do not include a TV tuner.

- **Automatic Downloads Options** to get media information about CDs, DVDs, and movies from the Internet.
- **Optimization** to keep the computer running smoothly by performing various tasks on a regularly scheduled basis. The Optimization setting closes and then opens Windows Media Center at a specific time each day that you determine.
- **TV** to set up TV signal, audio, and closed captioning (not all channels support closed captioning). You can download or edit the Television Program Guide, set hard disk drive recorder storage space, configure the display, and set recording defaults.
- **Pictures** to set slide show settings.
- **Music** to select visualizations or song information to display when playing a song.
- **DVD** to select a language for subtitles, audio tracks, and menus of your DVDs; program the Skip and Replay buttons on the remote control for your DVDs; and select closed captioning.
- **Library Setup** to have Windows Media Center scan specified computer folders for media files.
- **Radio** to organize or delete preset radio stations.

To view information for your computer, go to the Support Web address that is listed in the *Limited Warranty and Support Guide*, and search for your model's name and number. The product model is on the lower front of the computer.

To find the online documentation for your product, search for your model number, and then click **Manuals**.

NOTE: Information and guides are associated with specific computer model numbers. Some models do not have guides or manuals available on the Web site.

Using Windows Media Center power settings

When the computer is in Sleep mode, it appears off, but you can actually still perform tasks such as recording TV programs or music files. Sleep mode turns off the display and mutes the audio.


NOTE: The audio or video of TV recordings is not affected when the computer is in Sleep mode.

You can activate Sleep mode by pressing the Sleep button on the computer, keyboard, or remote control.



You can return to the desktop almost instantly by pressing any Sleep button again, by pressing any key on the keyboard, by moving the mouse, or by pressing any button on the remote control.

To change the computer power settings:

- 1 Click the **Windows Start Button**  on the taskbar, and then click **Control Panel**.
- 2 Click **System and Maintenance**.
- 3 Click **Power Options**.
- 4 Select the **Balanced**, **Power saver**, or **High performance** option.
- 5 Click **Change plan settings**.
- 6 Click the drop-down arrow next to *turn off the display* to select a time span to turn off the display.
- 7 Click the drop-down arrow next to *put the computer to sleep* to select a time span for putting the computer into Sleep mode.
- 8 Click **Save changes**.

Playing CDs, DVDs, or VCDs

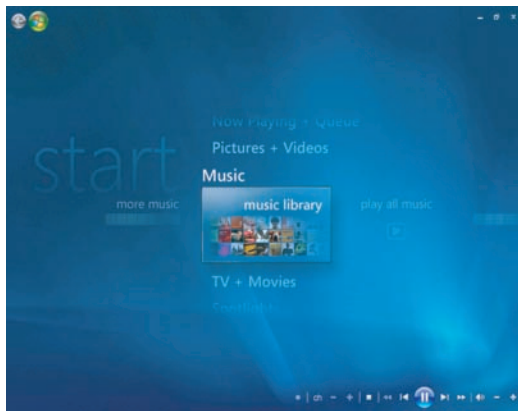
This section describes how to play CDs, DVDs, or VCDs by using Windows Media Center, Windows Media Player, or other audio and video programs.

This section also describes using Music and radio, and changing DVD and audio settings.

Using Music

The Music area in Windows Media Center is a great way to play, organize, and back up your music files. It is designed to work with the Windows Media Player program.

You can find and play your favorite music files and CDs that you have added to the music library and the Windows Media Player music library. In addition, you can listen to various Internet radio stations.



There are several Windows Media Center music menus from which you can choose:

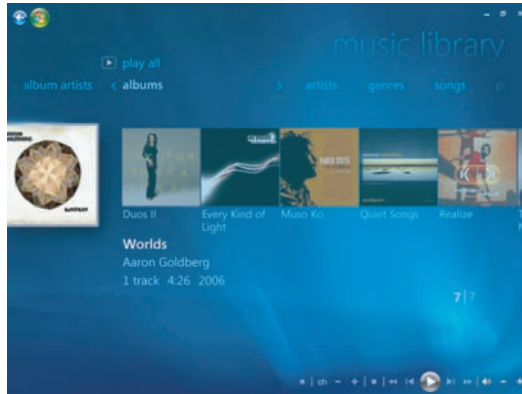
- Music library
- Play all
- Radio
- Search

All these menu options are described in detail in this section.

Using Music with Windows Media Center

You can copy digital music files and organize a music library by using music library in the Windows Media Center or by using the Windows Media Player program.

Music files that are added to music library in the Windows Media Center and in the Windows Media Player are accessible from within Windows Media Center and the Windows Media Player.



In Windows Media Center Music, you can:

- Play CDs or selected music tracks from your created music library in the Windows Media Center or the Windows Media Player.
- Select and edit a personalized list of songs in the *playlist* from the music library.
- Delete songs from a music library or a queue list.
- Burn your favorite songs to CDs.
- Back up your music tracks to a DVD or to an HP Personal Media Drive or other storage device.
- Listen to Internet Radio (select models only).
- Search music tracks and files.
- Organize your music by artist, album, song, composer, year, playlist, and genre.

Using the music library

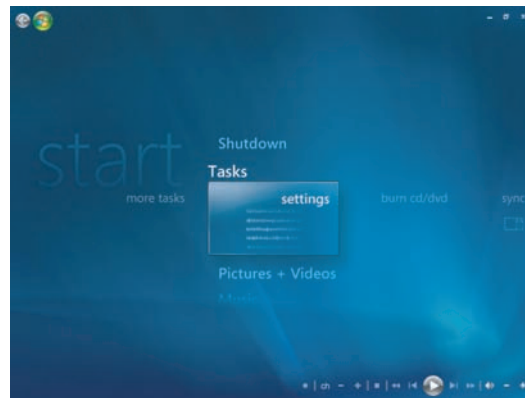
Adding music to the music library

When you add music files to the music library, they are placed into the music library in the Windows Media Center and the Windows Media Player. The added music files can immediately be found and played back using Music in Windows Media Center or the Windows Media Player.

You can also add music files to the music library from within the Windows Media Player program. For more information about adding and deleting music files to the library, use the Windows Media Player Help menu.

Adding music files from the hard disk drive

- 1 Click the **Windows Start Button**  on the taskbar, and then click **Windows Media Center**.



- 2 From the Tasks menu, click **settings**.
- 3 Click **Library Setup**.
- 4 Click **Add folder to watch**, and then click **Next**.


- 5 Click **Add folders on this computer**, and then click **Next**.




- 6 Use the arrow buttons on the keyboard or the remote control to select a location. When you find the folder that contains the music folder, select it by making sure an arrow appears next to the folder. Repeat this step to add additional folders, click **Next**, and then click **Finish**.
- 7 Click **OK**.

Adding music files from a CD

To add the CD tracks to the Windows Media Center music library:

- 1 Click the **Windows Start Button**  on the taskbar, and then click **Windows Media Center**.
- 2 Click **Music**.
- 3 Click **music library**.
- 4 Insert a CD into the CD drive.
- 5 Select **albums**.
- 6 Select the album CD you want to add to the music library.
- 7 Click **Copy CD**. The first time that you copy a music CD, you must select the copy-protection option, and then follow any onscreen instructions.
- 8 After selecting the choices for copy options in the next few windows, click **Next**.
- 9 Click **Yes** to begin copying tracks to the music library. This process may take several minutes, depending on the length of the music tracks.
- 10 Click **OK**.

Deleting music files from the music library

- 1 Click the **Windows Start Button**  on the taskbar, and then click **Windows Media Center**.
- 2 Click **Music**.
- 3 Click **music library**.
- 4 Click **albums**.
- 5 Select the album that you would like to delete, and then click **Delete**.
- 6 Click **Yes** when the Confirm Delete window is displayed.

Using supported music file types

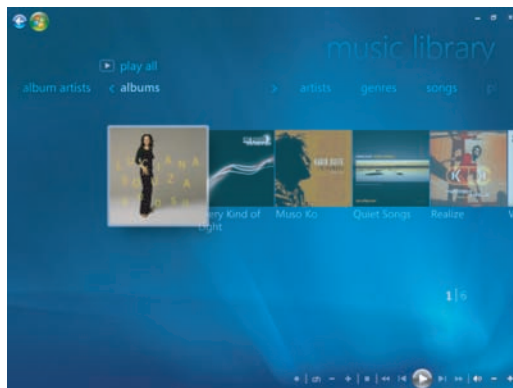
You can play the following types of digital audio files in Music. Refer to Windows Media Player Help for more information about supported file types.

Playing Music Files in Windows Media Center

To open Windows Media Center, select **Music** by scrolling up or down in the Windows Media Center window, and then by clicking **music library**. You will find a few music albums and tracks listed in the Windows Media Center and Windows Media Player music library.

To play music, click one or more songs, and then click **play**. You can also click **play all** to hear all of the tracks that are stored in Music.

NOTE: You may not find any audio files when you click **playlists** for the first time unless you have already added audio files to your Windows Media Center and Windows Media Player music libraries. When you copy music files using Windows Media Center or Windows Media Player, the CD information is copied and displayed in Windows Media Center and in the Windows Media Player music library.




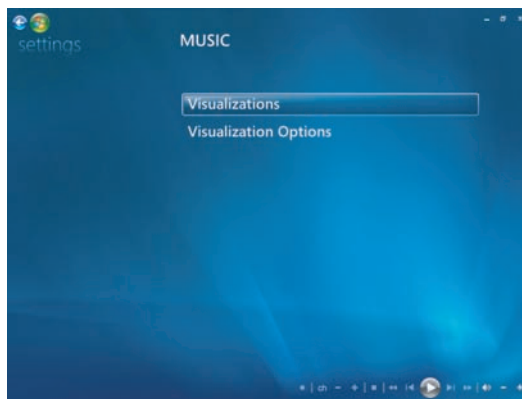
If you insert a music CD when Windows Media Center is not open, the AutoPlay window appears and lists various options. You can select the Audio CD options by using the Windows Media Center or Windows Media Player. If you have another program set as the default audio player, Windows opens the program and begins playing the CD. You can set the AutoPlay defaults in the Control Panel.



Changing the visualization settings


You can change the visualization settings such as the alchemy, bars and waves, and battery settings. You can also set the visualization options to start visualizations when the music plays at the beginning of the song, always, or never.

Click the **Windows Start Button**  on the taskbar, and then click **Windows Media Center**.




- 1 From the Tasks menu, click **settings**, and then click **Music**.
- 2 Click **Visualizations** or **Visualization Options**.
- 3 After making the changes, click **Save**.

Playing an album in Windows Media Center

- 1 Click the **Windows Start Button**  on the taskbar, and then click **Windows Media Center**.
- 2 Click **Music**.
- 3 Click **music library**.
- 4 Insert a music CD into the CD drive.
- 5 Click **albums**.
- 6 Select the album that you want to play.
- 7 Click **Play Album**.

Playing a song in Windows Media Center

You can play a song from anywhere in Music. You can select it from the *songs* list, or from the *albums*, *artists*, *genres*, *composers* and other lists. You can also play a single song from a playlist:


- 1 Click the **Windows Start Button**  on the taskbar, and then click **Windows Media Center**.
- 2 Click **Music**.
- 3 Click **music library**.
- 4 Click **songs**. The list displays all of the songs in the library.
- 5 Use the arrow buttons on the remote control or the arrow keys on the keyboard or select a song by moving the mouse and clicking the song.
- 6 Click **Play Song** to play it.

Creating a Queue in Windows Media Center

A *queue* is a temporary list of songs that is created in Music as you select songs, albums, or playlists to play. You can continue to add songs, or you can delete songs from the queue.

You can create a queue and save it as a playlist that you can access in Windows Media Center or the Windows Media Player.

- 1 From the Music window:
 - Select **music library**, select **songs**, and then use the arrow keys to select a song you want, or move the mouse over the songs. Click the song that you would like to add to the queue, and then click **Add to Queue**.
- Or
- Select **albums** or **playlists**, select an album or a playlist, and then select **Add to Queue** to add the entire album or playlist to the queue.

- 2 Use the Back button on the remote control or the Backspace key on the keyboard to go back to the songs, albums, or playlists menus if you want to select more songs to add to the queue list. Repeat step 1. Or click the mouse on the left arrow on the top left of the screen to go back. 
- 3 After you add the last song for the queue list, select **play all**. All of the songs in the queue list are played in the order you have selected them.
- 4 While the queue is being played, you can view the queue by selecting **View Queue**. You can edit or clear a queue, save it as a playlist or burn a queue list on a CD or a DVD. You can also select to shuffle the songs in the queue list.


Finding and Playing an Album in Windows Media Center

- 1 From Windows Media Center, click **Music**, and then click **music library**.
- 2 Use the arrow buttons on the remote control, or the arrow keys on the keyboard or the mouse, to select an album, and then press OK on the remote control. Press the Enter key on the keyboard or click the album to select the album and see the album details.

Using album details

In the album details window, you can select from:

- **Play** to play the album.
 - **Add to Queue** to add to a queue list.
 - **Burn** to burn the tracks on a CD or a DVD.
 - **Edit** to edit the information of the album.
 - **Delete** to delete the album.
- 1 Click **Play Album** to play the album from the album details window.
 - 2 The now playing window opens, and the album starts playing.

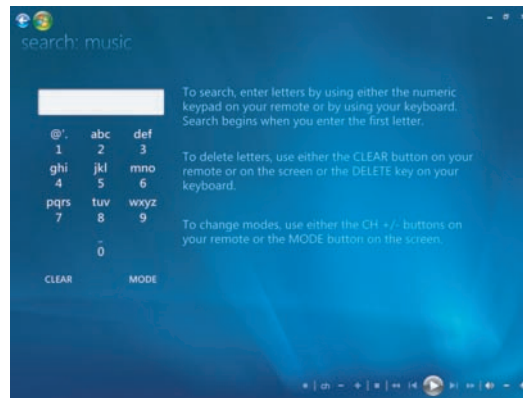
- 3 In the now playing window, you can also select:
 - **View Queue** to view an ordered list of all tracks that will be played on the album.
 - **Visualize** to view a moving picture while listening to a song.
 - **Play Slide Show** to play a slide show while the album is playing.
 - **Shuffle** to rearrange the play order.
 - **Repeat** to play the album again.
 - **Buy Music** to connect to the Internet, find CD information, and buy music CDs.
 - To go back to Windows Media Center, press Start on the remote control, or click the left arrow on the top left of the screen.
- 4 To return to the previous window, press the Back button on the remote control or the Backspace key on the keyboard, or click the left arrow on the top left of the screen to go back. 

Using Search in Windows Media Center

Searching for music tracks and files

You can search for music files if you cannot locate them:

- 1 Click the **Windows Start Button**  on the taskbar, and then click **Windows Media Center**.
- 2 Click **Music**, and then double-click **search**.



- 3 To search, enter letters by using either the alphanumeric keypad on the remote or the keyboard. The search begins when you enter the first letter.

Creating a Playlist in Windows Media Center

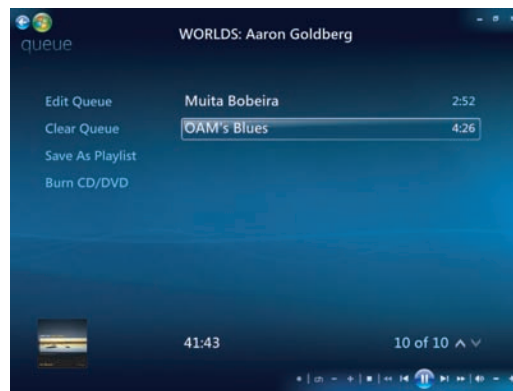
A *playlist* is a customized list of songs that you can keep to play later or record to a CD. Using playlists, you can group various digital music files together and determine the order in which you want the files to play.

You can create a playlist that includes several tracks from various CDs or even a playlist that contains background music for a slide show.

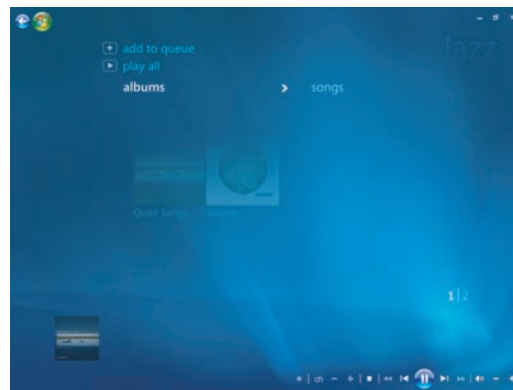
You can create playlists in Windows Media Center or the Windows Media Player.

To create a playlist:

- 1 Select **Music**, select **music library**, and then select either **albums**, **artists**, **playlists**, **songs**, or **genres**.
- 2 Use the arrow buttons on the remote control, or the arrow keys on the keyboard, or use the mouse to navigate to and select the music that you want to add to the playlist.



- 3 Press OK on the remote control, or press the Enter key on the keyboard, or click the selection to select a song.
- 4 Click **Add to Queue** to add the music to the list of music in the queue.




- 5 Go back to the Windows Media Center. Click the mouse on the left arrow on the top left of the screen to go back to Windows Media Center.

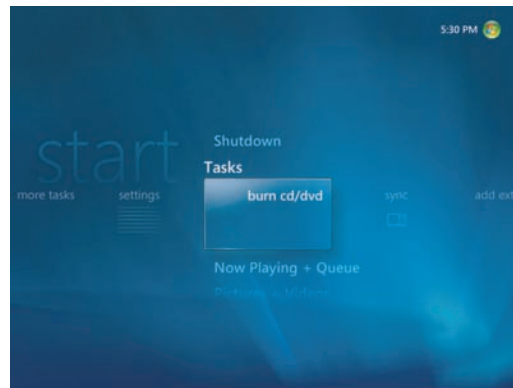


- 6 Click **play all**.
- 7 Click **View Queue**.
- 8 Click **Save As Playlist**, and give the playlist a name.
- 9 Use the alphanumeric keypad to enter a name for the playlist, and then click **Save**.

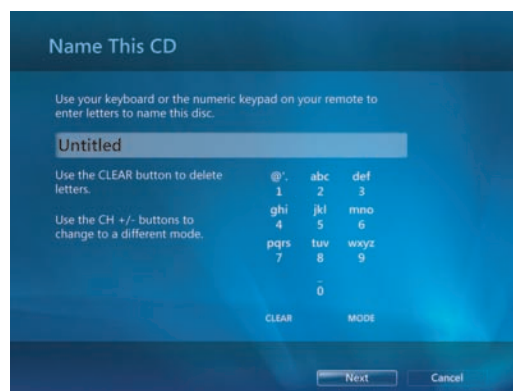
Copying Music Files to CD in Windows Media Center

To copy the music files to CD:

- 1 Click the **Windows Start Button**  on the taskbar, and then click **Windows Media Center**.



- 2 Click **Tasks**, and then click **burn cd/dvd**.
- 3 A message opens asking you to insert media. Insert a blank CD-R disc, and then click **Retry**.
- 4 Select a disc format, either **Audio CD** or **Data CD**, and then click **Next**.



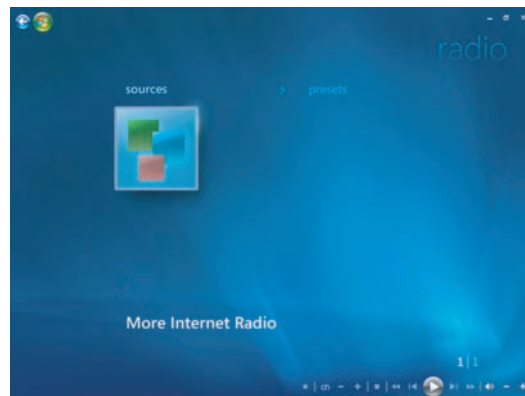
- 5 Use the arrow keys on the keyboard to select the **Untitled** text box.
- 6 Use the alphanumeric keypad buttons on the remote control or the keyboard to enter a name for the CD, and then click **Next**. This will take you to the Choose Music window.

- 7 Use the arrow keys to scroll through songs. You can select more songs by clicking **albums**, **playlists**, and other music menu options. A check mark appears next to the song when it is selected. Press the Back button on the remote control or click **Add More** in the Review & Edit List to select more songs from different menus. You can also change the name of the CD by clicking **Change Name**, and clear all selections by clicking **Clear All** in this window.
- 8 Click **Next** when you have selected all the songs to record to CD.
- 9 Click **Burn CD** to record your music to disc.
- 10 Click **Yes** to confirm you want to burn a disc with these files.
- 11 Click **OK** to do other things while the disc is being burned.
- 12 Click **Done** when the recording is complete.

Listening to Online Radio Stations

In the radio area of Windows Media Center, you can play, listen, and preset various online radio stations.

- 1 From the Windows Media Center, click **Music**, and then click **radio** twice.
- 2 Click **presets** to preset and organize your favorite radio stations.
- 3 By clicking **sources**, you can access the Music and Radio menu.



- 4 Click the right mouse button to view a list and to go to the settings menu.
- 5 Click the right mouse button for the icons to appear to go to the previous menu.

Playing Music CDs

To play music CDs, you must have either a CD or DVD drive.


- Insert the music CD into the CD or DVD drive.
- The default audio program opens. If a dialog window opens, choose the program you want to use from the list. You may have to scroll down in the window to see all available programs.
- The music CD automatically begins to play.

Playing CDs with Windows Media Player

NOTE: Some commercial music CDs are copy-protected and cannot be played with Windows Media Player. Such CDs come with their own (built-in) player that must be used.

- 1 Insert the music CD or DVD movie into the drive.
 - When the AutoPlay window opens, select **Windows Media Player** from the list. You may have to scroll down in the window to see Windows Media Player.

Or

 - If the Windows Media Player window does not automatically open, click the **Windows Start Button**  on the taskbar, click **All Programs**, and then click **Windows Media Player**.
- 2 To play the CD or DVD, click the **Now Playing** tab on the Windows Media Player taskbar. You can also control playback by using the media control buttons on the keyboard (select models only).

NOTE: The computer must have a connection to the Internet to see CD information such as artist name, song titles, and album art.

For more information on using Windows Media Player, click the drop-down arrow on the Player taskbar, and then click **Help**.


Playing DVDs

The computer must have a DVD drive to play DVD movies. Some computer models include a DVD drive that can also play Blu-ray DVDs (BD) and High-Definition DVDs (HD DVD).


To play a DVD, you must have a DVD drive:

- 1 Insert the DVD into the DVD drive.
- 2 When the DVD dialog window opens, choose the program you want to use from the list. You may have to scroll down in the window to see all available programs.

Or



If the dialog window does not appear, click the **Windows Start Button**  on the taskbar, click **All Programs**, and then click **HP DVD Play** or **DVD Play BD/HD**, or **Power Cinema** depending on the type of DVD drive and computer model that you have.
- 3 Use the controls in the DVD program to play the DVD.
- 4 To reduce the DVD Play window, double-click anywhere in the window. To return the display to full-size, double-click anywhere in the window again.

Using Windows Media Center to play DVDs

- 1 Click the **Windows Start Button**  on the taskbar.
- 2 Click **Windows Media Center** to open Windows Media Center.
- 3 Scroll to **TV+ Movies**, and then click **HP DVD Play**.
- 4 Use the mouse to operate the media controls to control the movie.
- 5 To play the DVD in full-screen mode, double-click anywhere in the DVD Play window.

Troubleshooting poor playback when playing DVDs

If you experience poor playback, such as skipping, when playing DVDs with DVD Play or Power Cinema, try the following solutions in the order listed:

- 1 If the computer includes Windows Media Center, try playing the DVD from within Windows Media Center. Windows Media Center automatically adjusts the display for the best screen resolution to allow optimal DVD playback.
 - a Click the **Windows Start Button**  on the taskbar, click **All Programs**, and then click **Windows Media Center**.
 - b Scroll up to the TV + Movies menu, and then select **HP DVD Play**.
 - c Use the DVD controls to play the movie.
- 2 Change the resolution of the display until the issue is resolved.
 - a Click the **Windows Start Button**  on the taskbar, click **Control Panel**, and then, under Appearance and Personalization, click **Adjust screen resolution**.
 - b Move the Resolution slider to a slightly lower resolution, and then click **Apply**.
 - c Click **Yes**.
 - d Try playing the DVD again. If the playback is still poor, repeat steps **a** to **d** until a better display resolution is found.
- 3 Try reducing the size of the playback window.

NOTE: Having a higher-end computer graphics (video) card and increasing computer memory may also improve DVD playback.

Using country/region codes

Most DVD discs have country/region codes embedded in the disc data that limit where the DVD movie can be played.

The country/region number is usually placed over a world globe that is printed on the DVD packaging and disc. DVDs without country/region codes play on any player or drive in any country/region.




WARNING: You can change countries/regions only five times before the country/region code locks and becomes permanent. Once the code locks, you can play DVDs from that country/region only. If the country/region code locks and you need help, contact Support.

Playing DVD Movies in Windows Media Center

(Select models only)

Watching DVDs in Windows Media Center allows you to control the playback with the remote control. If you play the DVD in another program outside of Windows Media Center, you will not be able to use the remote control.

- 1 Click the **Windows Start Button**  on the taskbar, and then click **Windows Media Center**.
- 2 Insert the DVD into the drive. If you have other media playing, Windows Media Center asks if you want to play the DVD. Select **HP DVD Play**. If you don't select an option, the DVD automatically plays in full-screen mode after a few seconds.

Or

If the DVD is already in the drive, select **HP DVD Play**. The DVD movie begins playing in full-screen mode.




- 3 If a DVD menu appears, use the remote control or the mouse to select the DVD menu items and control the DVD movie playback.

- 4 To stop playing the DVD, press Stop on the remote control or move the mouse to display the media controls, and then click the **Stop** button.
- 5 Move the mouse for other icons to appear.

NOTE: To view additional controls, click the right mouse button. A window pops up, displaying additional options such as: *zoom, movie details, title menu, eject, and settings.*

Changing the DVD Settings


You can change the DVD settings such as the DVD language, closed captioning, and remote control options.

Click the **Windows Start Button**  on the taskbar, and then click **Windows Media Center**.

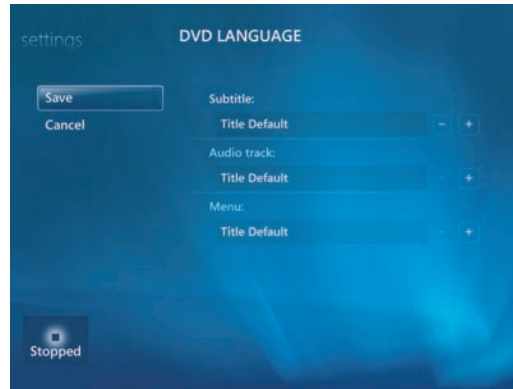
- 1 From the Tasks menu, click **settings**.
- 2 In the Settings window, select **DVD**.
- 3 Click **DVD Language, Closed Captioning, or Remote Control Options**.
- 4 Select the settings, and then click **Save**.

Changing the DVD movie language

To select DVD language settings for subtitles, audio track and menu:

- 1 Click the **Windows Start Button**  on the taskbar, and then click **Windows Media Center**.
- 2 From the Tasks menu, click **settings, DVD, and then DVD Language**.
- 3 Use the arrow buttons on the remote control or the arrow keys on the keyboard to select **(+)** or **(-)**. Press OK on the remote control, or press the Enter key on the keyboard, to scroll through the languages available.

- 4 When you find the language you want, click **Save**.




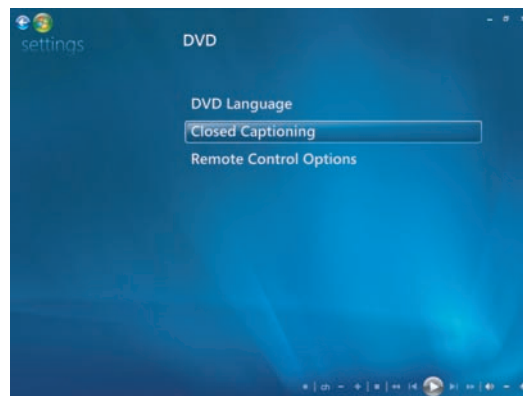
- 5 To return to the main settings window, press the Backspace key on the keyboard or press the Back button on the remote control, or click the left arrow on the top left of the screen.



Changing DVD closed captioning

You can change the DVD closed captioning options:


- 1 Click the **Windows Start Button**  on the taskbar, and then click **Windows Media Center**.
- 2 From the Tasks menu, click **settings**.
- 3 In the settings window, click **DVD**.
- 4 In the DVD Settings window, click **Closed Captioning**.

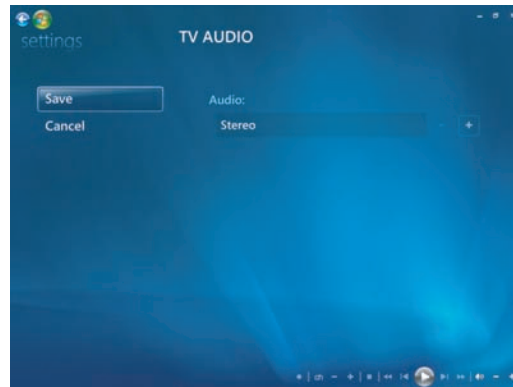


- 5 After making the changes, click **Save**.

Changing DVD Audio Settings

To select DVD audio settings for viewing the DVD:

- 1 Click the **Windows Start Button**  on the taskbar, and then click **Windows Media Center**.
- 2 From the Tasks menu, click **settings**.
- 3 Click **TV**.
- 4 Click **Audio**. The TV Audio window opens.




- 5 Select the speaker and sound options. Select the speaker output and the channel mode, if applicable. Click **Save**.

Playing DVDs with Windows Media Player

The computer must have a DVD drive to play DVD movies.

- 1 Insert the DVD movie into the drive.
 - When the AutoPlay window opens, select **Windows Media Player** from the list. You may have to scroll down in the window to see Windows Media Player.

Or

 - If the Windows Media Player window does not automatically open, click the **Windows Start Button**  on the taskbar, click **All Programs**, and then click **Windows Media Player**.
- 2 To play the DVD, click the **Now Playing** tab on the Player taskbar, and then click the **Play** button. You can also control playback by using the media control buttons on the keyboard (select models only).

For more information on using Windows Media Player, click the drop-down arrow on the Player taskbar, and then click **Help**.
- 3 In the List pane, click a DVD title or chapter name. You can double-click a chapter to begin playing the movie at that point. You can also right-click a chapter and click **Find DVD Info** to find online information about the movie.

Using DVD Play to Play DVDs, Videos, High-Definition DVDs, and Blu-ray DVDs

Depending on the type of DVD drive that is included with the computer, you can play DVDs, HD DVDs, or Blu-ray discs. The front of the drive is labeled with the type of discs that the DVD drive can play. Some drives can play both Blu-ray and HD DVDs. This means a better movie viewing experience, greater picture quality, and more bonus content.

Keep the following in mind when playing Blu-ray and HD DVDs:

- The DVD Play BD/HD DVD player software is capable of playing standard DVD movie discs; however, the enhanced features are available only with Blu-ray and HD DVD discs.
- HD DVD and Blu-ray movies play only through the DVD Play BD/HD DVD software.
- CPU power is dedicated to support HD DVD and Blu-ray playback functions. It is recommended that you close all other applications before and during HD DVD and Blu-ray playback.
- AACS keys are integrated into the computer for copy protection purposes. Occasional renewal of the AACS key is required, and easily done by connecting to the Internet.
- Some HD DVD and Blu-ray advanced features may not be supported.
- As HD DVD and Blu-ray are new formats containing new technologies, certain disc, digital connection, compatibility, and/or performance issues may arise, and do not constitute defects in the product. Flawless playback on all systems is not guaranteed.
- For some HD-DVD and Blu-ray titles to play, they may require a DVI or HDMI digital connection, and the display may require HDCP support.

To play a DVD, you must have a DVD drive:

- 1 Insert the DVD into the DVD drive.

The default DVD program opens. If the DVD wizard window opens, choose the program that you want to use from the list. You may have to scroll down the window to see all available programs.



- 2 Use the controls in the DVD program to play the DVD.

NOTE: To use the DVD Play controls, you must use the mouse.

NOTE: The Advanced Access Content System (AACSS) key that DVD Play uses must be updated every seventeen months in order for it to play DVD titles. For more information about playing video clips, click the ? (Help) button in the DVD Play control bar.

Playing Video CDs (VCDs)

To play a VCD you must have either a CD or DVD drive:

- 1 Insert the VCD into the CD or DVD drive.

The default video CD program opens. If the Video CD wizard window opens, choose the program you want to use from the list. You may have to scroll down in the window to see all available programs.

- 2 Use the controls in the VCD program to play the VCD.

Playing video CDs (VCDs) with Windows Media Player

To play VCDs with Windows Media Player you must have either a CD or DVD drive:

- 1 Insert the (VCD) into the DVD or CD drive.
- 2 Select **Play using Windows Media Player**, and then click **OK**.

Or

If the program doesn't open, click the **Windows Start Button** , click **All Programs**, and then click **Windows Media Player**.

- 3 To play the VCD, click the **Now Playing** tab on the Player taskbar, and then click **Play VCD**. You can also control playback by using the media control buttons on the keyboard (select models only).

For more information on using Windows Media Player, click the drop-down arrow on the Windows Media Player taskbar and then click **Help**.

- 4 In the List pane, double-click a VCD chapter to start playing the VCD at that point.

Creating Audio and Data Discs

This chapter contains the procedures that you must perform to record (or *burn*) files to recordable CD and DVD discs. It also includes information about labeling the discs by using the LightScribe labeling technology that is available on select models or by creating a paper label.

The computer includes one or more CD, DVD, or combination optical drives that are capable of recording. Additionally, the computer may include the following software programs for recording to CDs or DVDs:

- CyberLink Power2Go (select models only)
- CyberLink PowerProducer (select models only)
- CyberLink LabelPrint (select models only)
- Windows Vista
- Windows Media Center

These programs include features that enable you to copy, archive, and manage music, video, image, and data files, and then record the files to CDs or DVDs. You can also use Windows Media Player to download and copy music files to a portable device or memory card.



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NOTE: *Burn* is an industry term used to describe the recording of information onto a DVD or CD. Optical recording uses a laser beam to place information onto the disc, thus the term *burning*.

Erasing Rewritable Discs Before Recording

Previously recorded files on rewritable discs (CD-RW, DVD-RW, or DVD+RW) must be erased before recording new files. CD-R, DVD-R, and DVD+R discs cannot be erased.

To erase a rewritable disc in CyberLink Power2Go:

- 1 Click the **Windows Start Button**  on the taskbar, **All Programs, CyberLink Power2Go**, and then click **Power2Go**.
- 2 Click **Tools**, and then click **Erase Disc**.
- 3 Insert the rewritable disc that you want to erase.
- 4 Click the **Quick erase** or **Full erase** option, and then click the **Erase** button. 
- 5 Click **OK** when the disc has been erased.

Working with Audio CDs

You can create audio CDs that play in the car or home CD player, and on computers. You can create two main types of music CDs:

- **Uncompressed** — Typical CD format, like you would purchase on a commercial CD. This type of CD holds 10 to 20 songs, depending on their length.

Uncompressed files can be burned on CD-Rs (which play in most home and car stereos, DVD players, and computers) or CD-RWs (which play only in some stereos, DVD players, and computers).

The procedure for creating this type of CD is described in “Creating audio CDs.”

- **Compressed** — Files are burned to a disc using a compressed file format (.mp3, wma, or .m4a). The smaller file format enables you to fit approximately ten times as many songs onto the disc (depending on length and format).

Compressed files can be burned to CD-Rs, CD-RWs, DVDs, DVD-RWs, or DVD+RWs (select models only). Compressed files can only be played on computers, CD players, or DVD players that support the *file format* that you use to create the disc (.mp3 is most commonly supported). For file format compatibility, check the documentation for the device in which you intend to play the disc. You may hear a slight loss of sound quality using compressed audio files.

For more compatibility information, see “Disc Features and Compatibility Table.”

CyberLink Power2Go allows you to create *closed-session* or *multisession* CDs and DVDs. For closed-session CDs and DVDs, you must record or copy all files on one disc in one recording session. For multisession CDs and DVDs, you can record or copy files in several sessions until the disc is filled or until you close the session.

NOTE: Music files can be recorded repeatedly on a rewritable CD-RW disc, but all previously recorded files must be erased first. CD-R discs cannot be erased.

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Audio CD tips

When recording music files, it is important to note that:

- As you add music files in the recording session, the software calculates and displays the amount of recording time that is available to record additional music files. If you try to record more than a standard CD can hold, a message opens warning you that all the tracks may not fit on the disc.
- If the recording fails, manually select a slower recording speed, if available, each time you make a recording. Refer to the Help menu in the selected software program for more information about selecting a slower recording speed.
- If you change the write speed of the recording, run a Write Simulation test to verify that the burner can burn to the disc at the selected speed without causing recording errors.
- You can select the “Enable buffer underrun protection” option when burning a disc to ensure that data is written to disc without interruption. An interruption in data can result in an unusable disc.
- You can select the “Verify recorded data” option to compare recorded data to the source data to ensure accurate burning.

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Before you begin creating discs

- Save all work, and close all open programs.
- Turn off the screen saver.

Creating audio CDs

This section provides instructions for burning an audio CD that can be played in most home and car CD players.

To create an audio CD:



- 1 Insert a writable CD into the disc-burning drive.
CD-R discs play in most home and car stereos, DVD players, and computers. CD-RW discs play only in some stereos, DVD players, and computers.
- 2 Click the **Windows Start Button** , **All Programs, CyberLink Power2Go**, and then click **Power2Go**.
- 3 Select the **Music Disc** icon.
- 4 Select the disc type, **CD** or **DVD**, select the content type, and then click **OK**.
- 5 Locate the music files that you want to add, and then click them and drag them to the bottom half of the Power2Go window.
- 6 When you are done adding files, click the **Burn** icon in the toolbar. 

NOTE: For more help using CyberLink Power2Go, click the **Help** icon in the program. 

- 7 Select the recording options. See “Audio CD tips.”
- 8 Click **Burn** to begin recording your music files to disc.
- 9 Click **OK** when the audio CD is completed.



Creating video discs

This section provides instructions for creating a video disc. You can create a video disc from files on the computer hard disk drive or directly from a digital video camera.

- 1 Insert a writable disc into the disc-burning drive.
- 2 Open the CyberLink PowerProducer program by clicking the **Windows Start Button** , **All Programs, CyberLink PowerProducer**, and then clicking **PowerProducer**.
- 3 Click the **Produce Movie Disc** icon.
- 4 Select the disc type, **DVD** or **HD DVD**. Use the drop-down arrows to select recording format, disc capacity, and playback aspect ratio settings. Click the arrow button when you are done. 
- 5 Under Import, click **Video files**. Locate the video files, and then click **Open**.

Or

Under Capture, click **Video** to add a video file from the computer hard disk drive or from a digital video camera.

- 6 If desired, use the tools that are available in the Edit area to make changes to the video.
- 7 Click the check button when you are done, and then click the arrow button to proceed to the Final Output window. 
- 8 Select the burn options, and then click the **Burn Disc** icon. 
- 9 When ready to create the video disc, click **Burn**.

NOTE: For more help using CyberLink PowerProducer, click the **Help** icon.




Copying a disc

The following section explains how to make a copy of an existing CD or DVD.

Copying a disc using two disc drives

If you have two disc drives, you can copy a CD or DVD directly from one drive to the other. To copy a DVD by using this method, you must have two DVD drives. Otherwise, use the steps in the next section to copy the DVD.

To copy a CD or DVD using two disc drives:

- 1 Insert a writable CD or DVD into a disc-burning drive.
- 2 Insert the disc that you want to copy into the other disc drive.
- 3 Click the **Windows Start Button** , **All Programs**, **CyberLink Power2Go**, and then click **Power2Go**.
- 4 Click the **Copy Disc** icon, and then click **OK**.
- 5 Ensure that the correct disc drives are selected.
- 6 Click the **Copy** button.

NOTE: For more help using CyberLink Power2Go, click the **Help** icon in the program.



Copying a disc using one disc drive

If you have only one disc drive, CyberLink Power2Go stores an image file of the disc temporarily on the computer hard disk drive.

Use these steps to copy a CD or DVD using one disc drive:

- 1 Insert the disc that you want to copy into the disc-burning drive.

NOTE: If a CD-playing program opens automatically, close it before going to step 2.




- 2 Click the **Windows Start Button** , **All Programs**, **CyberLink Power2Go**, and then click **Power2Go**.

- 3 Click the **Copy Disc** icon, and then click **OK**.
- 4 Select the burn options, and then click the **Copy** button.
Power2Go creates an image file of the disc. This file is temporarily stored on the computer hard disk drive.
- 5 When you are prompted, insert a writable CD or DVD into the disc-burning drive, and then click **OK**.
- 6 When the message *Copy Disc: Completed successfully* appears, click **OK**. The disc is ejected automatically.

Creating data discs

This section provides instructions for burning data files onto a disc.

To create a data disc:

- 1 Insert a writable disc into the disc-burning drive.
- 2 Click the **Windows Start Button** , **All Programs, CyberLink Power2Go**, and then click **Power2Go**.
- 3 Click the **Data Disc** icon. 
- 4 Select disc type, and then click **OK**.
- 5 Locate files from the hard disk drive, and then click and drag them to the lower section of the window.
- 6 When you are done adding files, click the **Burn** icon in the toolbar. 

NOTE: For more help using CyberLink Power2Go, click the **Help** icon in the program. 

- 7 Select the recording options.
- 8 Click **Burn** to begin recording your music files to disc.
- 9 Click **OK** when the data disc is completed.

Making a disc label using LightScribe Technology

(Select models only)

The following section provides instructions for making a disc label by using LightScribe technology. For instructions on making a paper label, refer to “Making a paper disc label.”

What is LightScribe?

LightScribe is an innovative technology that uses a special disc drive, special media (CDs or DVDs), and label-making software to burn labels directly onto CDs and DVDs. A LightScribe-enabled CD or DVD disc drive uses the optical laser in the drive to burn a label onto a thin dye coating on the label side of the disc. There is no ink to smear or paper to curl, and there are no adhesives to loosen.

LightScribe requirements

Burning a label with LightScribe requires three things:



- A LightScribe-enabled disc drive (select models only), identified by the LightScribe logo
- Labeling software that supports LightScribe
- A writable LightScribe disc (sold separately)



Making a LightScribe label by using CyberLink LabelPrint

You may burn data, music, and videos to the disc before or after labeling the disc. See “Creating audio CDs” and “Creating data discs.”

To make a LightScribe label:

- 1 Place the disc into the disc drive with the top of the disc facing down. The top is the gold non-reflective side of the disc, opposite of the side that you record data onto.
- 2 Close the drive.
- 3 Open CyberLink LabelPrint by clicking the **Windows Start Button** , **All Programs, CyberLink LabelPrint**, and then clicking **LabelPrint**. 
- 4 Under **Step 1: Select the type of label you want to print**, select one of the following:
 - **Disc Label** (LightScribe label)Or
 - **MiniDisc Label** (LightScribe label)
- 5 Click the arrow button at the bottom of the window to continue.



- 6 Under **Step 2: Edit titles and other information**, design the disc label:
- a Type in a disc title, author, and date.
 - b Type in song titles, artist/author and time/size of the files.
 - c You can click the **Import** icon to import MP3 information, if desired.



- 7 Click the arrow button at the bottom of the window to continue.



- 8 Under **Step 3: Select the label's layout and background**:

- a Select a layout style by clicking the arrows under Layout Style to scroll through the different label layouts available, and then click the **Select** button when you find the one that you want.
- b Select a background image by clicking the arrows under Background Image to scroll through the different background images that are available, and then click the **Select** button when you find the one that you want.
- c If you are creating a paper label, select a paper size under Paper Template by using the drop-down arrow.

- 9 Click the arrow button at the bottom of the window to continue.

- 10 When you are ready to create the LightScribe label, click the **Print** icon.



- 11 Click **OK** to create the LightScribe label. The estimated time to complete the label displays, along with a progress bar. It is possible to continue to work on the computer while the LightScribe label is created.

For more help using CyberLink LabelPrint, click the **Help** icon to open the Help information.



Making a paper disc label

The following section provides instructions for creating a paper label for the disc. To create a LightScribe label, refer to "Making a disc label using LightScribe Technology."

- 1 Load the printer with adhesive label paper. You can purchase label paper at most office-supply stores.
- 2 Open CyberLink LabelPrint by clicking the **Windows Start Button**, **All Programs**, **CyberLink LabelPrint**, and then clicking **LabelPrint**.
- 3 Under **Step 1: Select the type of label you want to print**, select one of following:
 - **Front Cover** (paper insert label)
 - **Back of Front Cover** (paper insert label)
 - **Disc Inlay** (paper insert label)



- 4 Click the arrow button at the bottom of the window to continue.



5 Under **Step 2: Edit titles and other information**, design the disc label:

- a Type in a disc title, author, and date.
- b Type in song titles, artist/author, and time/size of the files.
- c Click the **Import** icon to import MP3 information.



6 Click the arrow button at the bottom of the window to continue.



7 Under **Step 3: Select the label's layout and background**:

- a Select a layout style by clicking the arrows under Layout Style to scroll through the different label layouts available, and then click the **Select** button when you find the one that you want.
- b Select a background image by clicking the arrows under Background Image to scroll through the different background images that are available, and then click the **Select** button when you find the one that you want.
- c If you are creating a paper label, select a paper size under Paper Template by using the drop-down arrow.

8 Click the arrow button at the bottom of the window to continue.

9 When you are ready to create the LightScribe label, click the **Print** icon.



For more help using CyberLink LabelPrint, click the **Help** icon to open the Help information.



Working with Pictures and Videos

You can view, copy, edit, print, and share digital images and videos by using the computer.

You can transfer digital images and videos to the computer by using the following methods:

- CD or DVD: Insert the disc into the CD or DVD drive.
- Digital camera or digital video camera: Connect the device to the computer by using the transfer cable that came with the device. (Select models have a digital camera docking bay.)
- Memory card: Insert the memory card into the memory card reader (select models only).

Digital images that you copy or transfer to the computer may appear in the Pictures folder by default.

Working with Digital Images

You can connect a digital image source, such as a digital photo or video camera, directly to the computer or through a docking station. Most digital picture files that you copy or download from the device appear in the Pictures folder.

NOTE: When transferring pictures from a digital photo camera to the computer, set the camera's USB setting to disk drive instead of digital camera.

Windows Vista detects the external device and opens a message, asking if you want to view the images.

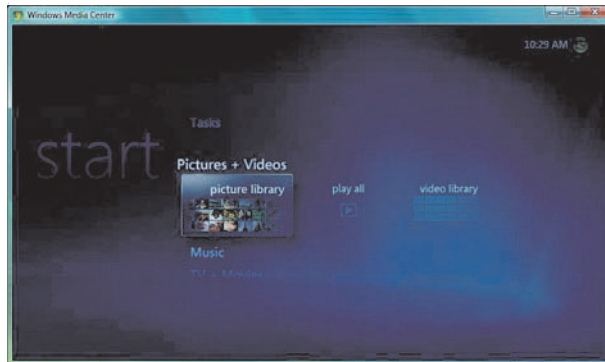
You can copy digital picture files from the memory cards that are used by digital cameras and other digital imaging devices by using the memory card reader (select models only).

Viewing Pictures in Windows Media Center

With Windows Media Center, you can view, sort, edit, print, and create a CD or DVD of the pictures from the folders that you create in the Pictures directory in Windows Explorer.



Pictures is a folder on the hard disk drive in the Documents window, and it is also a Windows Media Center menu item that enables you to view and search for the digital images by using the remote control or the keyboard and mouse.

The Pictures + Videos menu in Windows Media Center provides all the tools that you need for viewing, organizing, editing, printing, sharing, and protecting the digital images.



Adding Pictures in Windows Media Center

Adding picture files from the hard disk drive

- 1 Click the **Windows Start Button**  on the taskbar, and then click **Windows Media Center**.
- 2 Click **Pictures + Videos**.
- 3 Click **picture library**.
- 4 Press Ctrl+D on the keyboard or the *i* (More information) button on the remote control, and then click **Library Setup**. 
- 5 Click **Add folder to watch**, and then click **Next**.
- 6 Click **Add folders on this computer**, and then click **Next**.
- 7 Place a check mark next to the folders that you want Windows Media Center to check, and then click **Next**.
- 8 Click **Finish**.

Viewing Pictures in Windows Media Center


After you organize your pictures in the Pictures folder in Windows Explorer, open Windows Media Center to view them:


- 1 Click the **Windows Start Button**  on the taskbar, and then click **Windows Media Center**.
- 2 Click **Pictures + Videos** and then click **picture library**.
- 3 Select a folder, **tags**, or **date taken**. The window shows a small picture image (thumbnail) of each photo.
 - Select **date taken** to view each photo with the date it was taken.
 - Select **folders** if you have organized your pictures into folders. Each folder icon displays a thumbnail of photos. The pictures are displayed just as you organized them in the Pictures folder in Windows Explorer.
- 4 Use the arrow keys on the keyboard to move through the picture files and folder files, and select a picture.
- 5 Press the Enter key on the keyboard to select a picture or folder to view. The selected picture opens in full-screen mode.
- 6 Press the Enter key on the keyboard again to zoom to 150 percent; press it again to zoom to 225 percent. Use the remote control arrow buttons to pan across a picture. Press Enter or OK a third time to return the picture to its original size.

NOTE: While viewing a picture, you can press the *i* (More information) button on the remote control or Ctrl+D on the keyboard, click **Picture Details**, click **Settings**, and then click **Pictures** to:

- Select a slide transition, a slide time delay, and a background color.
 - Include picture folders you have created.
 - Show captions.
 - Display pictures randomly.
 - Show song information during a slide show.
-


Viewing pictures as a slide show

- 1 Click the **Windows Start Button**  on the taskbar, and then click **Windows Media Center**.
- 2 Click **Pictures + Videos**, and then click **picture library**.
- 3 Select the folder of pictures that you want to view as a slide show, and then press Enter on the keyboard.
- 4 Click **play slide show**, and then press Enter on the keyboard.

- 5 Press Ctrl+D on the keyboard or the *i* (More information) button on the remote control, and then click **Picture Details**. The picture name, location, and last modification date are displayed, if they are available. 
- 6 Press the Backspace key on the keyboard or the Back button on the remote control to go to a previous screen.
- 7 Use the arrow keys on the keyboard or the arrow buttons on the remote control to display the next or previous pictures.

If you do not select the pictures that you want to view as a slide show, Windows Media Center uses the first folder that is listed. If you have picture files that are not stored in folders that you created, Windows Media Center plays all of the files that are stored in the Pictures folder.

Viewing a slide show with music

- 1 Click the **Windows Start Button**  on the taskbar, and then click **Windows Media Center**.
- 2 Click **Music**, and then click **music library**.
- 3 Select the music that you want, and then press Enter on the keyboard.

NOTE: If the music does not start automatically, move the mouse to display the media control menu bar, and then click the **Play** button, or press the Play button on the remote control.

- 4 Press the Backspace key on the keyboard until you are back at the Windows Media Center Start menu.
- 5 Click **Pictures + Videos**, and then click **picture library**.
- 6 Select the folder of pictures that you want to view as a slide show, and then press Enter on the keyboard.
- 7 Click **play slide show**, and then press the Enter key on the keyboard. When Windows Media Center switches to full-screen mode, the inset window disappears, but the music continues to play.

Using supported picture file types in Windows Media Center

You can view the following types of image files in Windows Media Center.

| File extension | File type |
|--------------------|----------------------------------|
| .jpg, .jpeg | Joint Photographic Experts Group |
| .tif, .tiff | Tagged Image File Format |
| .gif | Graphics Interchange Format |
| .bmp | Bitmap |
| .wmf | Windows MetaFile |
| .png | Portable Network Graphics |



- Only supported image file types display in the Pictures + Videos area of Windows Media Center. Unsupported files are skipped in a slide show.

NOTE: If the message *Image cannot be displayed* appears, the file may be corrupted, or it may be an unsupported file type. You may need to edit the image with a photo editor and save it in a supported file format.

- Folder icons appear even if the images inside them cannot be displayed.
- Corrupted and unsupported image file types display a generic image icon, but they cannot be displayed.
- Some file types are supported only if appropriate filters and software are installed.

Editing Pictures in Windows Media Center

Fixing red eye or contrast



- 1 Click the **Windows Start Button**  on the taskbar, and then click **Windows Media Center**.
- 2 Click **Pictures + Videos**, and then click **picture library**.
- 3 Select a picture to edit.
- 4 Press the *i* (More information) button on the remote control or Ctrl+D on the keyboard, and then select **Picture Details**. 

- 5 Click **Touch Up**.



- 6 Click **Contrast** or **Red Eye**.
- 7 Click **Preview** to see the result.
- 8 After you select the options that you want to fix, click **Save**. The picture displays with the new settings.
- 9 Click **Yes** to save changes and replace the original picture file.

Cropping pictures in Windows Media Center


- 1 Click the **Windows Start Button**  on the taskbar, and then click **Windows Media Center**.
- 2 Click **Pictures + Videos**, and then click **picture library**.
- 3 Select a picture to edit.
- 4 Press the *i* (More information) button on the remote control or Ctrl+D on the keyboard, and then select **Picture Details**. 
- 5 Click **Touch Up**.
- 6 Click **Crop**.



- 7 Use the mouse and keyboard to do one or more of the following:
 - Select the arrows under the picture to move the picture side to side, or up or down.
 - Select the magnifying glass tools to move the cropping tool in or out.
 - Select the rotate tool to move the cropping tool to a vertical or horizontal position.
- 8 After you select the settings that you want to fix, click **Save**. Once you save the picture, you cannot revert to the original picture.
- 9 Click **Yes** to save changes and replace the original picture file.



Rotating pictures

If the picture appears horizontally or vertically, and you want to change the orientation, you can change it in Windows Media Center:

- 1 Click the **Windows Start Button**  on the taskbar, and then click **Windows Media Center**.
- 2 Click **Pictures + Videos**.
- 3 Select the picture you want to rotate.
- 4 Press the *i* (More information) button on the remote control or Ctrl+D on the keyboard, and then select **Picture Details**.
- 5 Click **Rotate**. Rotation occurs clockwise in 90° increments.


Printing Pictures in Windows Media Center

NOTE: You must set up the printer before you try to print from Windows Media Center; otherwise, by default, the file is saved to the Documents folder when you try to print the picture.

- 1 Click the **Windows Start Button**  on the taskbar, and then click **Windows Media Center**.
- 2 Click **Pictures + Videos**, and then click **picture library**.
- 3 Select the picture that you want to print.
- 4 Press Ctrl+D on the keyboard or the *i* (More information) button on the remote control, and then click **Picture Details**. Click **Print**, and then click **Print** again. 
- 5 Follow any onscreen instructions.

Copying Pictures to CDs and DVDs in Windows Media Center

NOTE: In Windows Media Center, all pictures are copied to CDs as .jpg files.

- 1 Click the **Windows Start Button**  on the taskbar and then click **Windows Media Center**.
- 2 From the Tasks menu, click **burn cd/dvd**.
- 3 Insert writable media (CD-R, CD-RW, DVD+/-R, or DVD+/-RW) into the drive.
- 4 Click **Data CD/DVD**, and then click **Next**.

NOTE: If you are using a writable disc that contains data, you must select **Erase Disc** to continue.

- 5 Select the **Untitled** area, enter the name of the disc by using the numeric keys on the keyboard or the remote control, and then select **Next**. Use the Backspace key on the keyboard or the Clear button on the remote control to delete letters.
- 6 Click **Picture Library**, and then click **Next**.
- 7 Select the pictures that you want to copy, and then click **Next**. A check mark appears next to a picture when you select it.
- 8 Click **Add More** to add more pictures to the disc.
- 9 After you have selected all of your pictures, select **Burn CD**.
- 10 Click **Yes**. Windows Media Center opens a message if you need to insert an additional disc to complete the recording. Windows Media Center opens a message when the disc has been created.
- 11 Click **Done** when the disc has been created.

Playing Videos in Windows Media Center


The Pictures + Videos area in Windows Media Center makes it easy to play home video files that you created or video files that you downloaded from the Internet.

In Pictures + Videos you can:

- Play videos that are stored anywhere on the hard disk drive.
- Create a CD or DVD of your video files.
- View your videos in full-screen mode or from an inset window in Windows Media Center.
- View small thumbnail images and the titles of your video files.

Playing digital videos

After you organize the videos in the Videos folder or Shared Video folder in Windows Explorer, open Windows Media Center to watch them:

- 1 Click the **Windows Start Button**  on the taskbar, and then click **Windows Media Center**.
- 2 Click **Pictures + Videos**.
- 3 Click **video library**.
- 4 Select the video folder that you want. The video folder opens, displaying a list of video files. You may need to use the scroll arrows at the bottom of the window to display all videos.

NOTE: Use the mouse to select the up arrows and down arrows at the bottom of the window, to scroll to other pages of video files and folders.


- 5 Click the video file. The video plays in full-screen mode. Use the mouse to resize the window if you want to watch the video while doing something else on the desktop.
- 6 To exit full-screen mode and return to the previous window, press the Back button on the remote control or the Backspace key on the keyboard. The video continues to play in the inset window.
- 7 When the video is finished, click **Restart** to replay the video, or click **Done** to close the file and return to the Videos area.

NOTE: You can maximize the media that is playing in the inset window by using the arrow buttons to select the inset window and then pressing OK on the remote control or Enter on the keyboard, or you can just click the inset window.

Using supported video file types

You can view the following types of video files in Windows Media Center. Other file types are supported if the computer has the correct software installed:

| File extension | File type |
|---|--|
| .avi | Windows Video file (Audio Video Interleaved) |
| .dvr-ms | Digital Video Recording—Microsoft (TV file format) |
| .mpeg, .mpg, .mpe, .m1v, .mp2, .mpv2 | Movie file |
| .wm, .asf | Windows Media file |
| .wmv | Windows Media Video file |

NOTE: For more information about supported video file types, refer to *Help and Support*. Click the **Windows Start Button** , and then click **Help and Support**.


Transferring and Recording Video Files

Once you capture the video by using video capture and editing software, you can use Windows Media Center to find it and add it to the Videos area.


Recording analog and digital video files

Refer to *Help and Support* for more information about capturing and recording video files from analog and digital video cameras.

To find information in Help and Support:

- 1 Click the **Windows Start Button**  on the taskbar, and then click **Help and Support**.
- 2 Type in search words such as *recording video*.

Creating a DVD from Video Files in Windows Media Center

- 1 Click the **Windows Start Button**  on the taskbar, and then click **Windows Media Center**.
- 2 From the Tasks menu, click **burn cd/dvd**.
- 3 Insert writable media (CD-R, CD-RW, DVD+/-R, or DVD+/-RW) into the drive.
- 4 Select **Video DVD**, and then click **Next**.

NOTE: If you are using a rewritable disc that contains data, you must select **Erase Disc** to continue.

- 5 Select the **Untitled** area, enter the name of the disc by using the numeric keys on the keyboard or the remote control, and then click **Next**. Use the Backspace key on the keyboard or the Clear button on the remote control to delete letters.
- 6 Click **Video Library**, and then click **Next**.
- 7 Select the files you want to copy, and then click **Next**. A check mark appears next to a file when you select it.
- 8 Click **Add More** to add more files to the disc.
- 9 After you have selected all of the files, click **Burn DVD**.
- 10 Click **Yes**. Windows Media Center opens a message if you need to insert an additional disc to complete the recording. Windows Media Center opens a message when the disc has been created.
- 11 Click **Done** when the disc has been created.

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