HP Media Center PC Getting Started Guide



The only warranties for HP products and services are set forth in the express statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. HP shall not be liable for technical or editorial errors or omissions contained herein.

HP assumes no responsibility for the use or reliability of its software on equipment that is not furnished by HP.

This document contains proprietary information that is protected by copyright. No part of this document may be photocopied, reproduced, or translated to another language without the prior written consent of HP.

Hewlett-Packard Company P.O. Box 4010 Cupertino, CA 95015–4010 USA

Copyright © 2000–2006 Hewlett-Packard Development Company, L.P.

This product incorporates copyright protection technology that is protected by method claims of certain U.S. patents and other intellectual property rights owned by Macrovision Corporation and other rights owners. Use of this copyright-protection technology must be authorized by Macrovision Corporation and is intended for home and other limited viewing uses only unless otherwise authorized by Macrovision Corporation. Reverse engineering or disassembly is prohibited. Apparatus Claims of U.S. Patent Nos. 4,631,603, 4,577,216, 4,819,098, and 4,907,093 licensed for limited viewing uses only.

Microsoft and Windows are U.S. registered trademarks of Microsoft Corporation.

HP supports lawful use of technology and does not endorse or encourage the use of our products for purposes other than those permitted by copyright law.

The information in this document is subject to change without notice.

Table of Contents

Before Getting Started	1
PC Setup Tips	. 1
Utility Programs	
Important Safety Information About Your HP Media Center PC	
Safety and Comfort	
Online Guides	
Connecting to the Internet	
HP Products Work Better Together Protecting the PC	
Installing Software	
Getting Help	
Setting Up the PC	
HP Media Center PC Front Connectors	
HP Media Center PC Rear Connectors	
Connecting a Digital Video Camera to the PC	
Connecting to Other Devices	10
Connecting the Television Signal	1
Using TV Cables	11
Audio and Video Cables	
Connecting the TV Signal Source	13
Connecting the Remote Sensor	15
Connecting the TV Signal Source	
When You Have an Existing Setup	
Using the TV as a Monitor	20
Using the Media Center Setup Wizard for Optional Setup of Your TV Display	22
Changing the Display for a GeForce Graphics Card	
Changing the Display for an ATI Graphics Card	
Changing the Display for an ATI Catalyst	-
Control Center Graphics Card	24
Changing your Display Using Windows XP	28

Configuring Speaker and

Sound Options	29
Sound Connector Types	
Speaker Configurations	
Connecting 2/2.1 (2 Speakers and a Subwoofer)	
Audio Speakers	33
Connecting 4.1 (4 Speakers and a Subwoofer)	
Audio Speakers	34
Connecting 5.1 (5 Speakers and a Subwoofer)	0.5
Audio Speakers	35
Connecting 7.1 (7 Speakers and a Subwoofer) Audio Speakers	24
Connecting the PC to a Home Audio System	30 37
Connecting Digital Audio	
Configuring Audio Output	
Configuring Audio Output with Multi-channel	
Sound Manager	
Configuring Audio Output with Sound Effect Manager	
Configuring Audio Output with a Sound Card	47
Configuring Audio Output with Realtek HD	
Sound Effect Manager	
Configuring the Realter HD Sound Effect Manager	
Configuring Multi-streaming Audio Configuring Audio for Media Center	
Configuring Audio for InterVideo WinDVD Player	
Using Headphones	
Resolving Sound Issues	
Using the Creative Sound Blaster X-FI Sound Card	
Using the PC Hardware	
-	
Using the Keyboard	
Special Keyboard Buttons Using the Remote Control	
Memory Card Reader	
Memory Insertion Guide	
Using Your Storage or Docking Bay	
Connecting the Wireless LAN	
Index	

Before Getting Started

This guide can help you get started using your new HP Media Center PC. You may want to browse some of the other documentation that came with your HP Media Center PC.

- Read the "Safety Information" section in the documentation that came with your PC.
- 2 Identify the items included with your HP Media Center PC.
- **3** Follow the setup information that came with your PC to connect your display.
- 4 Read this guide for information about using your HP Media Center PC.



A warning describes information you need to avoid possible personal injury or damage to equipment or data.

Read and follow all warnings.

PC Setup Tips

Choosing a PC setup location

If you intend to connect your PC to your TV, a set-top box, or a surround sound system, HP recommends that you choose a clear working area with easy access to the connectors of these devices. If your TV is wall-mounted, make sure that you have access to the rear ports on the TV before attempting to connect it to the PC.

Choosing a display

HP recommends using a PC monitor to initially set up the PC because it may be difficult to view text and images on a TV due to the higher resolution of Microsoft® Windows® XP. Some high resolutions may not be supported by some older or LCD displays. Also, high resolutions may result in a blank display after the Windows XP screen appears when you first start the PC if your display does not support it.

Using additional video cables

If you plan to connect your TV to the PC, you may need additional cables that are not included with your PC. HP Media Center PC models have different video output options, depending on your PC model. The options are: S-video, composite video, VGA, and DVI. For best video quality use DVI, then VGA, then S-video, followed by composite video. Check the documentation that came with your PC and TV to determine which cables you need. HP does not recommend video cable lengths over 1.5 meters (4.9 feet).

Using additional sound cables

If you plan to connect the PC audio to an amplifier or a TV, you may need additional sound cables that are not included with your PC. Your PC is able to output sound in several modes. Your PC has 3.5 mm female stereo headphone jacks for most outputs. Many amplifiers have RCA inputs. You need one 3.5 mm male-to-RCA stereo cable for stereo sound. You need three 3.5 mm male-to-RCA cables for surround sound. Check the documentation that came with your audio equipment for the best input method.

Using a video game console

If you are using a video game console device, HP recommends that you connect it directly to your display device using video signal switching hardware (not included) or connect it to a separate TV, rather than connecting it directly to the PC.



A note describes important information you need.

Component video output is available on select models only.



Please read the "Safety Information" section in the other documentation that came with your PC before installing and connecting your PC to the electrical power system.

Utility Programs

HP provides special utility programs in the PC Help & Tools folder that provide support information and initiate Application or System Recovery.

To find these programs, click **Start**, choose **All Programs**, **PC Help & Tools**, and then select a program or folder.

Updates from HP

HP may send support information or special offers to your desktop (not available in all countries/regions). You must be connected to the Internet to receive these updates. If you have turned off the Updates from HP feature, you will not receive these updates. To turn it back on, click **Start**, choose **All Programs, PC Help & Tools, Updates** from HP.

Important Safety Information About Your HP Media Center PC

This product has not been evaluated for connection to an "IT" power system (an AC distribution system with no direct connection to the earth, according to IEC 60950).

Safety and Comfort

After assembling your PC, but before using it, make sure the computer and your work area are properly set up to maintain your comfort and productivity. See the *Safety & Comfort Guide* for important ergonomic information. Click **Start**, choose **All Programs**, **PC Help & Tools**, and then click **Safety & Comfort Guide**. You can find important ergonomic information on the Internet. Just type *http://www.hp.com/ergo* into your Web browser address box, and then press Enter on the keyboard.

Online Guides

You can find online guides and information for your PC. To view online manuals for your PC, go to the Support Web address that is listed in the other documentation that came with your PC, and then search for your product name and number.

Online manuals are associated with specific PC model numbers. Some models do not have online manuals.

Connecting to the Internet

As part of the startup screens, you can select an Internet service provider (ISP). Before you can connect to the Internet, you must sign up with an ISP. You must have an Internet connection to use some of the Media Center features.

Easy Internet Sign-up helps you sign up for a new Internet account, set up an existing account, or configure Internet access using a LAN (local area network), cable modem, or DSL (digital subscriber line).

Requirements:

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

- Make sure the modem or other Internet access cable is connected.
- 2 Sign up with an ISP. If you already have an account with an ISP, skip this step and follow the instructions provided by the ISP. If Internet service was not set up during the initial setup of the PC, it can be set up now using the Easy Internet Sign-up or the Internet Services wizard (select models only).
- Click Start on the taskbar, choose All Programs, Online Services, and then click Easy Internet Sign-up or Internet Services.
- 4 Follow the onscreen instructions to select an ISP and set up Internet service.



Easy Internet Sign-up or Internet Services provides a list of Internet service providers; however, you may choose another ISP or transfer an existing account to this PC. To transfer existing accounts, follow the instructions provided by the ISP.



A modem connector is included with select models only.

HP Products Work Better Together

HP computers include preloaded software for select HP All-In-One, camera, scanner, and printer peripheral products. Preloaded software simplifies and speeds product setup for HP peripherals. Simply connect the HP peripheral product and turn it on, and your HP PC automatically configures it so it is ready to use.

Protecting the PC

HP provides a virus-scanning software program to help protect your PC (select models only).

The virus-scanning program manufacturer provides free virus scan updates through your Internet connection for an initial period after your PC purchase. You can purchase a subscription service for updates after the initial free period expires.

New types of viruses and spyware are invented all the time. Protect your PC by getting regular updates of your virus-scanning software from the program manufacturer.

If a software program or the operating system gets damaged, reinstall the software. See the PC *Troubleshooting and Maintenance Guide* that came with your PC for information about system recovery, application recovery and System Restore. System Restore is a software that creates restore points, a memory of the system file settings on the PC at a particular point in time.

When your PC has software problems, it is possible that a voltage spike, power outage, or brownout has occurred. Symptoms of voltage spikes include a flickering video display, unexpected PC startups, and the PC not responding to your commands. A voltage spike can occasionally corrupt or destroy files, so it is a good idea to consistently make backup copies of your data files. Prevent voltage spikes by installing a surge suppressor made for use with PCs between the power outlet and the PC power cord.

Installing Software

After you turn on the PC the first time and restart it, you can install any software programs that came on CDs or DVDs included in the PC box and are not preinstalled (select models only).

You may wish to install additional software programs or hardware devices on your PC. Restart the PC after each installation. Choose software that is compatible with your PC; check the operating system, memory, and other requirements listed for the new software for compatibility with your PC.

Install the new software according to the directions provided by the software manufacturer. Check the manufacturer's documentation or customer service information for help if you need it.

Getting Help

If you need more information about using or troubleshooting Media Center, refer to the Media Center online Help or Help and Support in the Start menu.

For help on general and miscellaneous problems you may be experiencing with the PC, refer to:

- The other troubleshooting documentation that came with your PC.
- The following pages in this section.
- The topics in Help and Support. Press the Help button on your keyboard, or click Start on the taskbar and select Help and Support.



Setting Up the PC

Follow the steps in the setup poster to set up the PC, and then read the topics in this section to find out more about the location of components and connectors on your PC, and to find out about some setup alternatives. Most of the hardware devices such as the monitor, keyboard, printer, and mouse can be connected at the back of the PC. Some peripheral devices, such as a digital video camera, can be plugged into the connectors on the back or the front of the PC.

HP Media Center PC Front Connectors

Connector	lcon/label	Description and function	NH4
	S-Video 2	Secondary S-video connector to connect your VCR, video camera, or other analog source to the PC	Location, availability,
	Composite Video 2	Secondary Composite video connector to connect VCR, video camera, or other analog source to the PC	and number of connectors may vary.
۲	L Audio 2	Secondary Left audio input connector	
\bigcirc	R Audio 2	Seondary Right audio input connector	
	ų į	Headphones Out	
	LON	Microphone In	
	•	Universal Serial Bus (USB 2.0) for mouse, keyboard, digital cameras, or other devices with USB connectors	
	✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓<	FireWire® (IEEE 1394) connector for video cameras and other high-speed devices	

HP Media Center PC Rear Connectors

Connector	lcon/label	Description and function
		Power connector
	Φ	Mouse
		Keyboard
	SERIAL	Serial port for digital cameras or other serial devices
		(Select models only)
	B	Printer (parallel)
		(select models only)
	•	Universal Serial Bus (USB 2.0) for mouse, keyboard, digital cameras, or other devices with USB connectors
	″∕ = 1394	FireWire (IEEE 1394) connector for video cameras and other high-speed devices

Connector	lcon/label	Description and function
— — —	ETHERNET	Ethernet LAN connector
		The network interface adapter (also called a network interface card, or NIC) connects to an Ethernet (10BaseT) or Fast Ethernet (100BaseT) network hub. Connect this adapter in your PC to your local area network (LAN) hub or any broadband connection.
		Plug a network cable into the Ethernet (RJ-45) port on the back of the PC. Plug the other end of the network cable into a 10BaseT or 100BaseT port on the network hub.
		The green LED indicates a valid connection.
		Digital video output connector for TV/monitor
		(select models only)
		See the documentation that came with your display device.
	LON .	Microphone In (pink)
		Audio Line Out (powered speakers, green)
o	≦+((•))	Audio Line In (blue)
	Center	Center/Subwoofer audio (gold)
0	Rear	L – R rear audio (black)
	Side	L – R side audio (gray)
	S-video	S-video In from set-top box output connector

Connector	Icon/label	Description and function
	Composite Video	Composite Video In from set-top box connector (yellow)
۲	L audio	Left audio input from set-top box connector (white)
	R audio	Right audio input from set-top box connector (red)
\bigcirc	TV/Cable Ant	TV In (TV antenna or cable input from wall outlet with no set-top box)
	FM Ant	FM In (radio antenna input) Plug the FM radio antenna cable into the FM In port on the back of the PC on the TV tuner card. You may want to extend the ends of the cable to improve your FM radio signal reception.
		Modem (Line In RJ-11) (select models only) Plug the modem cable (provided in the PC box) into the computer modem connector on the back of the PC. Plug the other end to your telephone line wall jack connector.
	Analog Video	Analog Video Out: S-video or composite video (select models only)
	VGA	Monitor/VGA display output
in digital audio out	Digital audio In and Out	Digital audio input (white) Digital audio output (red)

Connecting a Digital Video Camera to the PC

When connecting an analog camera to the PC, use the Video and Audio In connectors on the front of the PC. The following instructions only apply to digital cameras.

See the documentation that came with your digital camera or your digital video camera.

To connect a digital camera or a digital video camera:

- Turn on the PC, and wait for Windows XP to start.
- 2 Connect the video camera transfer cable into the camera and then into an open port on the front or back of the PC. Most digital video cameras use either the FireWire (IEEE 1394) or the USB port.
- 3 A Found New Hardware message appears. Wait 2 or 3 minutes for Windows to make the necessary settings for the new device. When installation is complete, a message appears telling you the camera is ready to use.



If a Digital Video Device Auto Play window appears when you connect your camera, click Cancel.

If the PC does not recognize your digital camera or your digital video camera:

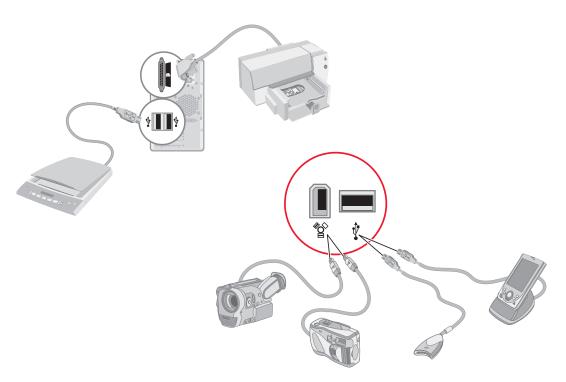
- Click Start on the taskbar, and then click Control Panel.
- 2 Click Performance and Maintenance, if available, and then double-click the System icon.
- Click the Hardware tab, and then click the Device Manager button.
- 4 Click the plus sign (+) next to imaging devices. If the name of the camera appears under imaging devices the device is ready. If the name is not there, try the following:
 - Click Action, and then Scan for hardware changes. Look in Device Manager for a new addition under imaging devices.
 - Unplug the video camera's transfer cable from the PC, and plug it into a different port. Look in Device Manager for a new addition under imaging devices.

Connecting to Other Devices Other peripheral devices can be connected to the

front or back of your HP Media Center PC by using



USB or FireWire ports. You can connect peripheral devices such as a printer, scanner, video camera, digital camera, memory card reader, and PDA (personal digital assistant) or handheld computer to the PC. See the documentation that came with your included with the PC. device.



Connecting the Television Signal

Using TV Cables

Your HP Media Center PC includes video and audio cables to connect the television signals.

Use video and audio cables to connect:

- Video out from the HP Media Center PC to the TV
- TV signal source video in to the HP Media Center PC
- Audio out from the HP Media Center PC to the TV
- TV signal source audio in to the HP Media Center PC

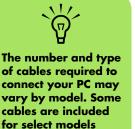


Location and number of connectors may vary by model.

Audio and Video Cables

The following table shows cable types that may be required to connect your HP Media Center PC to your television system. The number and type of cables included with your PC may vary by model.

Cable	Name	Description
	Composite video	RCA yellow end. Plug cable into an RCA connector such as Composite Video Out or TV Source In connector.
	S-video (Delivers a sharper image than composite video by providing separate color and black-and- white image signals.)	Y/C, 4-pin. Plug cable into an S-video connector such as S-video Video Out or TV Source In connector.
	Analog video cable (Select models only)	Used with analog video output connector. Provides S-video and composite video output.



only.

Cable	Name	Description
	DVI-I or DVI-D	Digital Video Out. Plug cable into a DVI-I or DVI-D input of an HDTV capable TV or monitor.
	TV coaxial cable	Plug cable into a TV signal source input connector from cable set-top boxes or antennas.
	Infrared transmitter (1 with single TV tuner or 2 with dual-tuner option)	Remote IR cable. Used to control TV signal source from set-top box.
	Splitter	Used to connect one signal source to two RF inputs on your PC.
	RCA stereo	RCA red and white ends. Used for TV signal source Audio In and Audio Out connectors to TV.

You may need to purchase extra cables separately. Your HP Media Center PC box may not include all the cables you need for your PC setup and may vary by model.

For example, you may want to use an S-video cable to connect the TV Out on the PC to your TV, if your TV has an S-video input connector.

Connecting the TV Signal Source

Connect the signal source for the TV by using the TV In coaxial connector or the composite/S-video In connector.

Plug the connector of a coaxial cable from your TV or from your TV cable into the TV/Cable Ant connector on the back of the PC, and then turn the connector to tighten it.

Or

Plug a cable into the S-video or composite video In connector on the back of the PC; use an S-video cable (not provided) or the composite video cable. Plug the other end of the cable into your set-top box or other device that is providing the signal source for the TV.

You must also plug audio cables (not provided) from your set-top box into the Audio In right (red) connector and the Audio In left (white) connector on the back of the PC, if you are using a set-top box with S-video or composite video output.

Refer to "HP Media Center PC Front Connectors" on page 5.

You must also connect the Remote Emitter cable if you are using a set-top box. See "Connecting the Remote Sensor" on page 15. Location and number of connectors may

vary by model.

Connecting a dual tuner (Select models only)



The Television Program Guide is not available in all countries/regions. If your HP Media Center PC has the dual tuner option, you must connect a second set of inputs if you are using a cable or satellite set-top box. If you are using a TV antenna or standard cable connector, the signal is routed to both tuners internally. Otherwise, connect a second set-top box to the second set of back-panel connectors.

For dual-tuner configurations, both TV sources must be of the same type: either cable TV, digital cable TV, satellite TV, or antenna. The TV sources must also have the same, identical channel lineup; for example, if you are using two satellite TV sources they must provide the exact same channels. All TV viewing and scheduling is provided through the Television (Electronic) Program Guide in Media Center, so both TV sources must have identical Television Program Guides.

The HP Media Center PC records television and allows you to control the television channels. The HP Media Center PC has two tuner configurations available:

TV Tuner type	Description
Single-tuner TV source	A single tuner allows you to watch or record one program only in NTSC.
Dual-tuner option	You can have dual TV inputs, if your PC includes the two TV tuner option. You can watch a show on one channel while Media Center records another show on a different channel. You can also record two different programs at the same time.

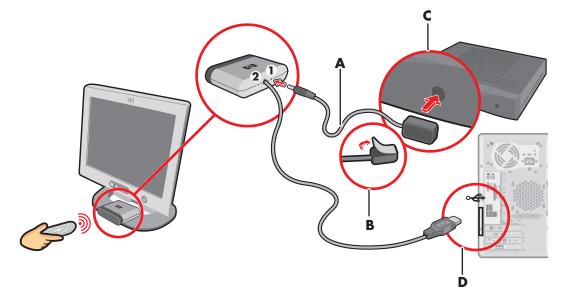
Connecting the Remote Sensor

The remote sensor is a small device that connects to the PC and allows the remote control to work with the Media Center program.

- If you have a cable TV set-top box, a satellite set-top box, or other set-top box that controls your TV signal, connect the remote control sensor cable (emitter) (A) into connector (1) on the back of the remote sensor, otherwise skip to step three. Connector (2) can also be used if you have a second set-top box.
- 2 Remove the paper from the backing tape on the end of the cable (B), and then press the end of the cable over the remote infrared (IR) receiver window on your cable TV set-top box (C). You can locate the remote infrared receiver window by using a flashlight to shine through the plastic on the front of most devices.
- 3 Plug the remote control sensor cable into a USB connector (D) on the back of the PC.
- 4 Place the remote sensor so that you can easily point at it with the remote control. (An ideal spot would be on top of the monitor or desk.)



You can locate the remote infrared receiver window on your cable TV set-top box by using a flashlight to shine through the plastic on the front of most devices.

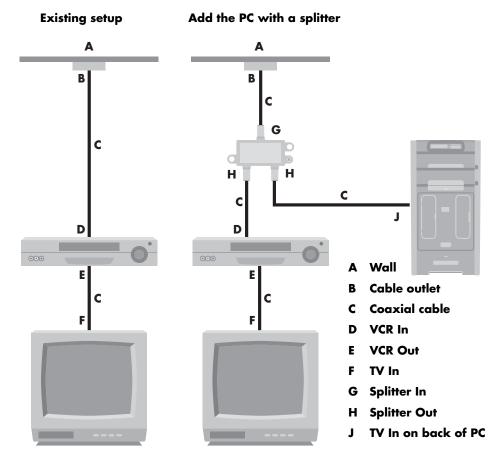


Connecting the TV Signal Source When You Have an Existing Setup

This section describes how to connect the PC to an existing setup for your TV signal source.

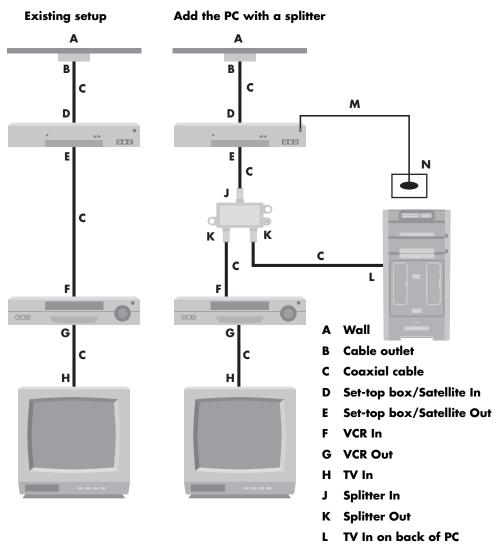
Wall to VCR to TV using coaxial cable

Remove the coaxial cable at the input to the VCR, and connect it to the input of a coaxial cable signal splitter (not included; available at electronics stores). Connect two coaxial cables to the splitter outputs. Connect one of these cables to the input of the VCR and the other one to the TV connector on the back of the PC.



Wall to cable TV set-top box or satellite box to VCR to TV using coaxial cable

Remove the coaxial cable at the input to the VCR, and connect it to the input of a coaxial cable signal splitter (not included; available at electronics stores). Connect two coaxial cables to the splitter outputs. Connect one of these cables to the input of the VCR and the other one to the TV connector on the back of the PC. Be sure to connect the remote control sensor cable (emitter) and position it on your set-top box or satellite box. This allows the PC to change the channel on the box. See "Connecting the Remote Sensor" on page 15.



- M Remote control sensor cable
- N Remote control sensor

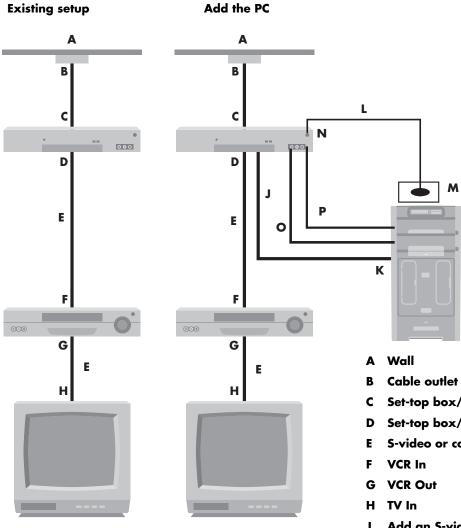
Wall to cable TV set-top box or satellite box to VCR and TV using S-video cable or composite video cable between the box and the VCR or TV

- Do not detach any cables from your existing setup.
- 2 Connect an additional cable:
 - Using S-video (not included): Connect an additional S-video cable to a second output on the set-top box or satellite box. Plug the other end of the cable into the S-video In connector on the back of the PC.

Or

Using composite video: Connect an additional composite video cable to a second output on the set-top box or satellite box. Connect the other end of the cable to the S-video to composite video adapter cable; connect the adapter to the S-video In connector on the back of the PC.

- 3 When using a composite video or S-video cable, you must also plug audio cables (not provided) from your satellite or set-top box into the Audio In right (red) and Audio In left (white) connectors on the back of the PC.
- 4 Be sure to connect the remote sensor control cable and position it on your set-top box or satellite box. This allows the PC to change the channel on the box. See "Connecting the Remote Sensor" on page 15.



- Set-top box/Satellite In
- Set-top box/Satellite Out
- S-video or composite cable
- Add an S-video or composite J cable with adapter
- K S-video In on back of PC
- Remote control sensor cable L
- **Remote control sensor** Μ
- Set-top box/Second output Ν
- 0 **R-Audio**
- Ρ L-Audio

Using the TV as a Monitor

If your Media Center PC has TV-out capability (select models only), you can connect it to a TV to view the PC image on a TV screen. With the TV-out feature, you can view the PC image, watch DVD movies, or play games on your TV. This is an optional feature.

Cables for connecting to a TV

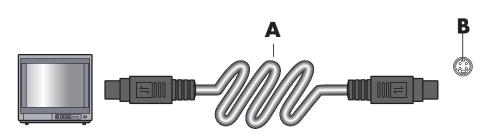
To connect a TV to the PC, you will need a video cable and an audio cable. The type of video cable you need depends on your TV:

If your TV has an S-video input jack, you need an S-video cable.

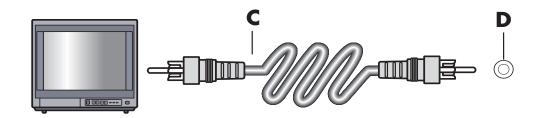
If your TV has a composite video jack, you need a composite video cable, and depending on the jacks on the back of your PC, you may also need an S-video adapter cable.

Connecting to a TV

- Turn off the PC.
- 2 Connect the TV cable using one of the following arrangements, depending on the connection jacks on your TV.
- 3 If your TV has an S-video jack, connect an S-video cable (A) (not provided) from the S-video In jack on the TV to the S-video Out jack (B) on the back of the PC (select models only).



4 If your TV has a composite video input jack and your PC has a composite video output jack, connect a composite video cable (C) to the Video In jack on the TV and to the composite video out jack (D) on the back of the PC (select models only).



5 Turn on the TV and select the TV In video source; refer to the documentation for your TV set. Enable the image for the TV. For more information about this step, see "Viewing the PC image on the TV" on page 25. video card (select models only) and Video In on the TV tuner card.

 \bigcirc

There may be two S-video connectors on the back of the PC: S-video Out on the



If you choose the option Preview Automatic Adjustment, the screen may appear black or seem to halt for approximately 20 seconds. Wait until the wizard screen reappears, choose Do not adjust any settings, click Next, and then continue with the next step in this procedure.



The type of video card on your PC determines how the PC selects the TV-out option. Some options and menus in this procedure may be different for your PC.

Using the Media Center Setup Wizard for Optional Setup of Your TV Display

If your TV connects to the system using a composite or S-video connection, the Media Center setup wizard cannot make automatic adjustment of settings for your TV display.

This automatic adjustment is available during the Optional Setup, within the "Optimize how Media Center looks on your display" option. Instead of using the wizard for automatic adjustment, set the TV display by using the Windows Desktop Properties.

The following procedure describes what to do within the Media Center setup wizard and how to use the Windows Desktop Properties to adjust settings for your TV display:

- During the Media Center setup wizard, at the Optional Setup, after you select **Optimize** how Media Center looks on your display, and then click Next.
- 2 When the Display Configuration window appears, click **Next**.
- 3 Select the display type for, and then select the connection type for your TV display by proceeding as described below:
 - If you choose the option Composite or S-video, click Next, and then continue with step 4 that follows.
 - If you choose the options DVI or VGA or Component (YPbPr), you do not need to continue with this procedure. Continue using the wizard to adjust your TV display.
- 4 On the next screen, select Keep my current Settings and continue, and then click Next. Do not select the option Preview Automatic Adjustment.

- 5 Continue using the wizard, and then either close or minimize Media Center.
- 6 Right-click a free area of the Windows desktop, and choose Properties.
- Click the **Settings** tab, and then click the **Advanced** button on that tab.
- Select the GeForce tab. If you have a GeForce tab, see "Changing the Display for a GeForce Graphics Card" on page 23.

Or

Select the **ATI Displays** tab. If you have an ATI Displays tab, see "Changing the Display for an ATI Graphics Card" on page 23.

Or

If you have the ATI Catalyst Control Center graphics card, see "Changing the Display for an ATI Catalyst Control Center Graphics Card" on page 24.

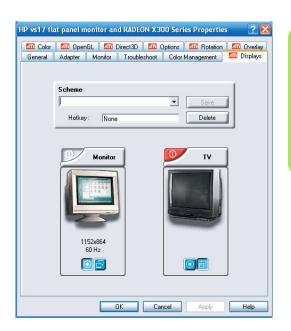
Changing the Display for a GeForce Graphics Card

- Follow the "Using the Media Center Setup Wizard for Optional Setup of Your TV Display" on page 22.
- 2 Click the **GeForce** tab.
- 3 Click TV Settings.

- 4 Select the Device Adjustment button, and then you can select the various screen adjustment settings.
- 5 Click **Apply**, and then click **OK**.
- Click **OK** again to close the window.

Changing the Display for an ATI Graphics Card

- Follow the "Using the Media Center Setup Wizard for Optional Setup of Your TV Display" on page 22.
- 2 Click the ATI Displays tab.
- 3 Click the **TV** button (the small bar above the TV icon). The TV Properties window opens. (Your TV must be connected to the system.)
- 4 Click the **Adjustments** tab.
- 5 Adjust the screen position or screen size, and then click **Apply**.
- Click **OK** as needed to close the windows.



You may need to click

the On button (at the left corner of the TV button bar) to make the On button green, and then click Apply.

Changing the Display for an ATI Catalyst Control Center Graphics Card

- Follow the "Using the Media Center Setup Wizard for Optional Setup of Your TV Display" on page 22.
- 2 Right-click desktop and then select ATI Catalyst Control Center.

🖥 View 🔹 🌘 Hotkeys	- 🔒 Profiles - 👹 Preferences - 🕜 Help -
Graphics Settings	
Information Center	Displays Manager
Displays Manager	
3D	Graphics Adapter : 2.RADEON X300 Series Secondary [HP vs17]
Video	Desktop and Display Setup
	To change your desktop setup, use the display wizard. For extended desktop mode, drag the icons below to match
	the physical arrangement of your desktop.
	1
	rimary
	Identify
	Current Desktop Mode: Extended desktop
	Desktop area: Selected display:
(III)	1152 x 864 v 0n HP vs17
invent	For configuring additional displays, you can access the Advanced Displays Manager by clicking the View button in the toolbar.
	Displays Manager by clicking the view baktor in the colibar.

- 3 Click the ATI Catalyst Control Center button to open the display control window.
- 4 Click the **Displays Manager** button. The Desktop and Display Setup window appears on the right side of the window.
- 5 Select the **Wizard** button.
- Select your display type.
- 7 Select type of content you want to view:

Windows Desktop

Or

- Full screen video
- 8 Click Next.
- Select Apply to enable the recommended settings.
- **10** Select **Yes** or **No** to keep settings.
- Click Finish.

Viewing the PC image on the TV

To view your PC image on the TV:

- Make sure the video and audio cables are connected before you turn on the TV and the PC.
- Z Turn on the TV. Make sure the Video input setting is selected, not the TV setting.
- **3** Turn on the PC.
- When the Windows desktop appears, right-click an empty area of the desktop, and choose **Properties**. The Display Properties window opens.
- 5 Click the Settings tab.

Click the **Advanced** button.

- Look at the tabs and follow the steps that apply to your PC:
 - If you see GeForce tab, see "Viewing the PC image on the TV using the GeForce graphics card" on page 25.
 - If you see the following ATI *Displays* tab, see "Viewing the PC image on the TV using the ATI graphics card" on page 26.



The type of video card on your PC determines how the PC selects the TV-out option. Some options and menus in this procedure may be different for your PC.

Viewing the PC image on the TV using the GeForce graphics card

- Click the **GeForce** tab.
- 2 To view the PC image on your PC monitor and your TV simultaneously, in the *nView Modes* area select **Clone** from the drop-down list.

Or

To view the PC image on just the TV, in the area *nView Modes*, select **Single display** from the drop-down list, and then, if necessary, in the *Current display* area select **TV** from the drop-down list.

- **3** Click the **Apply** button.
- When the PC image appears on the TV screen, click **Yes** to keep the setting. You have 15 seconds to accept this new setting before it reverts to the previous setting.
- 5 Click the **OK** button to save changes, and then click **OK** again to close the Display Properties window.

Viewing the PC image on the TV using the ATI graphics card



Your TV must be connected to the PC to change the display.

- Click the ATI Displays tab. This tab shows a monitor and a TV. The upper-left corner of each display icon is a button and a status indicator. A red corner indicates an inactive display; a green corner indicates an active display.
- 2 To view the PC image on your PC monitor and your TV simultaneously, click the upper-left corner of the TV icon so that it is green. Click Apply.

Or

To view the PC image on just the TV, click the TV corner so it is green, and then click the monitor corner so it is red. Click **Apply**.

- 3 When the PC image appears on the TV screen, click **Yes** to keep the setting. You have 15 seconds to accept this new setting before it reverts to the previous setting.
- 4 Click the **OK** button to save changes, and then click **OK** again to close the Display Properties window.

Enabling and Disabling the TV option using the GeForce Graphics Card

When you want to disconnect the TV from the PC, you may need to disable the TV option to return your PC display to its original resolution.

To enable or disable the TV option to view your PC image on the original display:

- Right-click an empty area of the screen, and choose **Properties**.
- 2 Click the Settings tab.
- 3 Click the Advanced button.
- 4 Click the **GeForce** tab.
- 5 Click the Current Display drop-down list and then select Analog Display or Digital Display.

- Click the **Apply** button.
- When the PC image appears on the TV screen, click Yes to keep the setting. You have 15 seconds to accept this new setting before it reverts to the previous setting.
- Click the **OK** button to save changes, and then click **OK** again to close the Display Properties window.



Your TV must be connected to the PC to change the display.

Enabling and Disabling the TV option using the ATI Displays Graphics Card

When you want to disconnect the TV from the PC, you may need to disable the TV option to return your PC display to its original resolution.

To enable or disable the TV option to view your PC image on the original display:

- Right-click an empty area of the screen, and choose **Properties**.
- 2 Click the **Settings** tab.
- Click the Advanced button.
- 4 Click the ATI Displays tab. This tab shows a monitor and a TV. The upper-left corner of each display icon is a button and a status indicator. A red corner indicates an inactive display; a green corner indicates an active display.
- Click the upper-left corner of the TV icon so it is red, and then click the upper-left corner of the monitor icon so it is green. Click the Apply button.
- When the PC image appears on the TV screen, click Yes to keep the setting. You have 15 seconds to accept this new setting before it reverts to the previous setting.
- 7 Click the **OK** button to save changes, and then click **OK** again to close the Display Properties window.



Enabling and Disabling the TV option with ATI Catalyst Control Center

When you want to disconnect the TV from the PC, you may need to disable the TV option to return your PC display to its original resolution.

To disable the TV option to view your PC image on the original display:

- Right-click an empty area of the screen, and choose **ATI Catalyst Control Center**.
- 2 Click the ATI Catalyst Control Center button.
- 3 Click Displays Manager button. The Desktop and Display Setup window appears.
- 4 Right-click the icon that represents the TV display and select Enable.
- **5** Select **Yes** or **No** to keep your settings.
- 🗴 Click Finish.



Disconnecting the TV

- Disable the TV option. See the previous procedure, "Viewing the PC image on the TV" on page 25.
- 2 Turn off the TV and the PC.
- 3 Remove the video cable from the TV and the PC.

Changing your Display Using Windows XP

- Right-click a free area of the Windows desktop, and choose **Properties**.
- **2** Click the **Settings** tab.
- 3 Select the display you want to view by clicking the 1 or 2 in the window or by selecting the correct display by clicking the drop-d-own arrow under Display.
- 4 Select your display settings, and then click Apply to save your changes.

Display Properties	? 🗙
Themes Desktop Screen Saver Ap	ppearance Settings
Drag the monitor icons to match the ph	ysical arrangement of your monitors.
Display: 2. Generic Television on RADEON X3	2
Screen resolution	Color quality
Less More	Highest (32 bit)
1152 by 864 pixels	
Use this device as the primary moni Extend my Windows desktop onto I Identify	
ОК	Cancel Apply

Configuring Speaker and Sound Options

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

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

Sound Connector Types

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

- Three connectors
- Six connectors
- Sound card

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

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

Software configuration is different for each connector type, as noted in the instructions.

Connector	Description	Illustration	Туре
Three connectors	Your PC model may include three sound connectors. You can connect up to a 5.1 audio system to the PC. If you want to connect multichannel audio, follow the instructions carefully.		3
Six connectors	Your PC model may include six sound connectors on the back of your PC. You can connect up to a 7.1 audio system to the PC.	t side t rear t c/sub mic 3+ out 3+ in	6



Type 3 is three connectors

Type 6 is six connectors

Type S is sound card

Connector	Description	Illustration	Туре
Sound card connector	Your PC may include a sound card. You can connect up to a 5.1 audio system (7.1 audio system for select models) or digital speakers to the sound card on the PC.	See below.	5
\leq]

Use the sound connectors that match your PC model when installing cables, as shown in the installation procedure steps.

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

Sound connector			
Туре 3	Туре б	Type S	Description
	side		Line Side (gray) for side speakers in an eight-speaker system (7.1).
	C/sub	A \$	Line C/Sub (gold) for center/subwoofer speakers in a multichannel audio configuration.
	reor	B ●	Line Rear (black) for rear speakers in a multichannel audio configuration.
	tuo €	c t	Line Out (lime green) for front speakers.



Type 6 is six connectors

Type S is sound card

Sound connector			
Туре 3	Туре б	Type S	Description
	() () () () () () () () () () () () () (D	Mic (pink) connects to microphone. (Type 3: Also functions as center/subwoofer Line Out when a multichannel audio configuration is activated.)
	to in	E O	Line In (light blue) connects to an analog audio device such as a CD player for input into PC. (Type 3: Also functions as rear Line Out when a multichannel audio configuration is activated.)
AUDIO OUT	AUDIO OUT		Digital Out (orange) connects to a digital audio device with digital input (such as a home audio receiver/amplifier) or digital speakers (select models only).

Speaker Configurations

You may set up your HP Media Center PC for the following supported configurations:

Name	Speaker system	See
Headphones	None, muted.	"Using Headphones" on page 54.
2 (stereo)	Left speaker, right speaker.	"Connecting 2/2.1 (2 Speakers and a Subwoofer) Audio Speakers" on page 33.
2.1	Left speaker, right speaker, and a subwoofer.	"Connecting 2/2.1 (2 Speakers and a Subwoofer) Audio Speakers" on page 33.
4.1	Two front speakers, two rear speakers, and a subwoofer.	"Connecting 4.1 (4 Speakers and a Subwoofer) Audio Speakers" on page 34.
6/5.1	Two front speakers, two rear speakers, a center speaker, and a subwoofer.	"Connecting 5.1 (5 Speakers and a Subwoofer) Audio Speakers" on page 35.

Name	Speaker system	See
8/7.1	Two front speakers, two rear speakers, two side speakers, a center speaker, and a subwoofer (select models only).	"Connecting 7.1 (7 Speakers and a Subwoofer) Audio Speakers" on page 36.
Home audio system	Home stereo or home theater audio system with passive speakers.	"Connecting the PC to a Home Audio System" on page 37.
Digital audio	Digital speakers or digital input connector on audio system.	"Connecting Digital Audio" on page 41.
Multi- streaming audio	Two front speakers, two rear speakers, two side speakers, a center speaker, and a subwoofer (select models only).	"Configuring Multi-streaming Audio" on page 50.

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 PC 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.

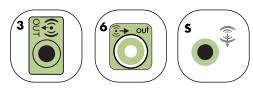
A stereo speaker set is a left-right, two-channel speaker system. A multichannel audio speaker system has a left-right front and left-right rear channel, and it may include a subwoofer and a center speaker. Side speakers are included in more advanced systems. A subwoofer provides enhanced bass sounds.

".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 (2 Speakers and a Subwoofer) Audio Speakers

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

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



- Connect the cable to the audio system. For 2.1 speakers that were shipped with your PC (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.

The following diagram shows a typical 2.1 audio installation:

5 Turn on the PC.

- O 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 PC, configure the audio software for sound output for your PC model:
 - Type 3 connectors: See "Configuring Audio Output with Multi-channel Sound Manager" on page 42.
 - Type 6 connectors: See "Configuring Audio Output with Sound Effect Manager" on page 44.
 - Sound card: See "Configuring Audio Output with a Sound Card" on page 47.



Type 3 is three connectors

Type 6 is six connectors



Always turn on the PC before you turn on the speaker system.



Connecting 4.1 (4 Speakers and a Subwoofer) Audio Speakers

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

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



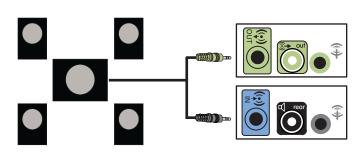
3 Connect the rear speaker cable to the black connector that matches the back of your PC.



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

The following diagram shows a typical 4.1 audio installation:

- 4 Connect the cables to the audio system.
- 5 Connect the front and rear speakers to the subwoofer. Refer to the speaker documentation.
- Turn on the PC.
 - Plug in the speaker system power.
- 5 Turn on the speaker system.
- After the speakers are connected to the PC, configure the audio software for sound output for your PC model:
 - Type 3 connectors: See "Configuring Audio Output with Multi-channel Sound Manager" on page 42.
 - Type 6 connectors: See "Configuring Audio Output with Sound Effect Manager" on page 44.
 - Sound card: See "Configuring Audio Output with a Sound Card" on page 47.



Type 3 is three connectors

Type 6 is six connectors

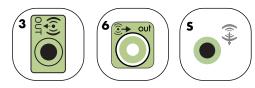


Always turn on the PC before you turn on the speaker system.

Connecting 5.1 (5 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:

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



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



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 PC.



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

- Connect the cables to the audio system.
- Connect the front, rear, and center speakers to the subwoofer. Refer to the speaker documentation.
- 7 Turn on the PC.
- 8 Plug in the speaker system power.
- Furn on the speaker system.
- After the speakers are connected to the PC, configure the audio software for sound output for your PC model:
 - Type 3 connectors: See "Configuring Audio Output with Multi-channel Sound Manager" on page 42.
 - Type 6 connectors: See "Configuring Audio Output with Sound Effect Manager" on page 44.
 - Type 6 connectors multi-streaming: See "Configuring Audio Output with Sound Effect Manager" on page 44
 - Sound card: See "Configuring Audio Output with a Sound Card" on page 47.

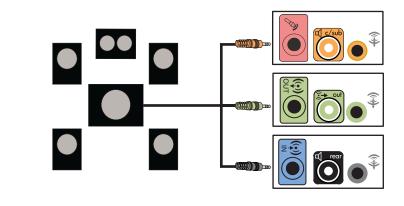


Type 3 is three connectors

Type 6 is six connectors



The following diagram shows a typical 5.1 audio installation:



Connecting 7.1 (7 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:

- Turn off the PC.
- 2 Connect the front speaker cable to the limegreen Audio Line Out connector on the back of your PC.



3 Connect the rear speaker cable to the black connector on the back of your PC.



4 For type 6 connectors only, connect the side speaker cable to the gray connector on the back of your PC.



5 Connect the center speaker and subwoofer speaker cable to the gold connector on the back of your PC.



Ocnnect the cables to the audio system.



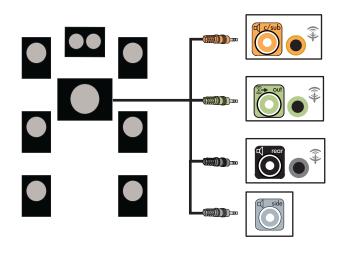
- 7 Connect the front, rear, side, and center speakers to the subwoofer. Refer to the speaker documentation.
- **8** Turn on the PC.
- 9 Plug in the speaker system power.
- **10** Turn on the speaker system.

The following diagram shows a typical 7.1 audio installation:

- After the speakers are connected to the PC, configure the audio software for sound output for your PC model:
 - Type 6 connectors: See "Configuring Audio Output with Sound Effect Manager" on page 44.
 - Type 6 connectors multi-streaming: See "Configuring Audio Output with Realtek HD Sound Effect Manager" on page 48.



Always turn on the PC before you turn on the speaker system.



Connecting the PC to a Home Audio System

You can connect your HP Media Center PC to your home stereo or home theater multichannel audio receiver/amplifiers using your existing speakers. For example, see "2.1 home stereo installation" on page 38, or "5.1 home audio installation" on page 39.

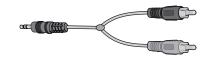
Y adapter cables

Y adapter and

are purchased separately.

extension cables

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



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

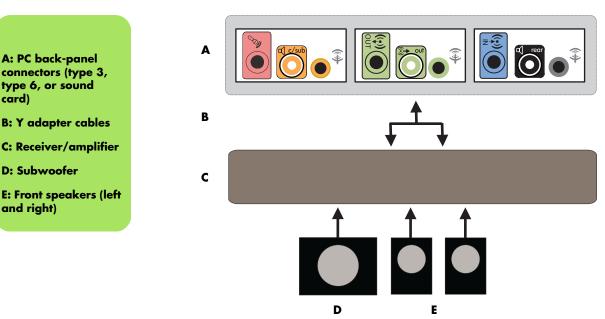
- 2/2.1 speaker system: 1 Y adapter cable
- 4/4.1 speaker system: 2 Y adapter cables
- 6/5.1 speaker system: 3 Y adapter cables
- 8/7.1 speaker system: 4 Y adapter cables

Connecting a home stereo to a PC typically requires audio cables that are long enough to connect from the PC to the stereo. You may also need to purchase RCA or mini-extension cables.

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.

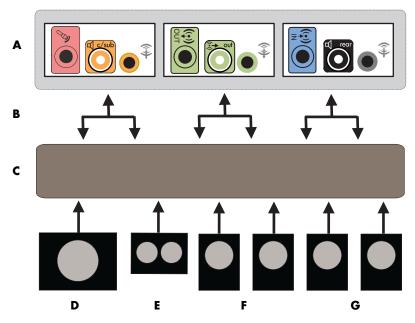
This is only a suggested configuration. Your system may be different.



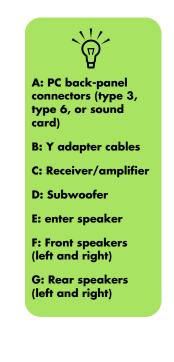
PC to 2.1 multichannel audio system connection

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.



PC to 5.1 multichannel audio system connection



5.1 home audio installation procedure

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

- Turn off the PC.
- **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 PC.



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.

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 PC.



 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 PC.



- 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.

O Turn on the receiver/amplifier.

- Select the receiver/amplifier input that the Y adapter cables are plugged into.
- Turn on the PC.
- After the audio system is connected to the PC, configure the audio software for sound output for your PC model:
 - Type 3 connectors: See "Configuring Audio Output with Multi-channel Sound Manager" on page 42.
 - Type 6 connectors: See "Configuring Audio Output with Sound Effect Manager" on page 44.
 - Sound card: See "Configuring Audio Output with a Sound Card" on page 47.

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



Type 3 is three connectors

Type 6 is six connectors

```
Type S is sound card
```

Connecting Digital Audio

(Select models only)

If you have a sound card and you are connecting your home stereo AV receiver via digital out, plug the 3.5 mm stereo plug into the **Digital Out** connector on the sound card. Connect the red RCA stereo plug on the 3.5 mm Y cable to the AV receiver's digital input connector. If the red RCA stereo plug does not work, try the white stereo plug. One of the connectors is not used.



To connect digital audio, your PC must include a digital out connector on the sound card or on the back panel. You do not need to connect multichannel speaker outputs if you connect the digital output.

To connect digital audio speakers:

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



- **3** Turn on the PC.
- 4 Plug in the speaker system power.
- 5 Turn on the speaker system.

 After the speakers are connected to the PC, configure the audio software for sound output for your PC model:

- Audio card with digital output and type 3 connectors: See "Configuring Audio Output with Multi-channel Sound Manager" on page 42. Follow the instructions to enable digital audio output.
- Audio card with digital output and type 6 connectors: See "Configuring Audio Output with Sound Effect Manager" on page 44. Digital audio output is already enabled as the default.
- Sound card: See "Configuring Audio Output with a Sound Card" on page 47.
 Follow the instructions to enable digital audio output.



Type 3 is three connectors

Type 6 is six connectors

Configuring Audio Output

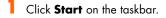
You can configure your speaker's audio output with the following software. Use the software that applies to your PC model:

- Multi-channel Sound Manager (type 3 connectors)
- Sound Effect Manager (type 6 connectors)
- Realtek HD Sound Effect Manager (multistreaming audio)
- Creative Speaker Settings (sound card)
- Media Center (all systems)
- WinDVD Player (all systems)

Configuring Audio Output with Multi-channel Sound Manager

Follow these steps after you have installed and connected your speakers, if your PC model has type 3 connectors.

To configure multichannel audio output for PCs with Multi-channel Sound Manager:





3 Click Multi-channel Sound Manager.

The Multi-channel Audio Configuration window opens with one of five control screens.

Multi-channel Audio Configuration		
Sound Effect Equalizer Speaker Configuration Sp	beaker Test General	
Number of Speakers Audio Connector Switch		
6 / 5.1 speaker mode		Rear Speaker Out
		Front Speaker Out
		Center/Subwoofer Speaker Out
	Digital Audio Out	Digital Audio Out
	I	nformation
Enable digital audio output		ables prior to changing speaker ges in your software DVD player or
		ОК

- Sound Effect Select the environment settings.
- Equalizer Equalize the audio frequencies.
- Speaker Configuration Select the number of speakers. An Audio Connector Switch indicates the speaker configuration.
- Speaker Test Test all connected speakers for correct configuration.
- General View driver and audio information.
- 4 Click the Speaker Configuration tab near the top of the window to open the control screens. (Your speakers may need to be plugged in to see this tab.)

- 5 Select the option describing the number of speakers in your system, in a range from 2/2.1 speaker mode to 6/5.1 speaker mode.
- Enable digital audio if you want digital audio output. See "Enabling digital audio output with Multi-channel Sound Manager (optional)" on page 44.
- 7 Click OK.
- 8 Test the speakers. Click the **Speaker Test** tab. Follow the instructions.
- 9 Configure audio output for the Media Center. See "Configuring Audio for Media Center" on page 53.
- Configure audio output for the WinDVD Player. See "Configuring Audio for InterVideo WinDVD Player" on page 54.

Enabling digital audio output with Multi-channel Sound Manager (optional)

Your PC must include a digital audio out connector on the back panel.

To enable digital audio output:

- Follow steps 1 through 5 of the previous procedure, "Configuring Audio Output with Multi-channel Sound Manager."
- 2 Place a check next to **Enable digital audio output**. The *Output digital and analog* option is automatically selected.
- Connect the digital audio output connector on the back of your PC to your home audio system's digital audio input.
- 4 Select your stereo system's digital audio input.
- 5 Click **OK**.

- Test the speakers. (If you test using a DVD, you need to configure WinDVD first. See "Configuring Audio for InterVideo WinDVD Player" on page 54.)
- Configure audio output for the Media Center. See "Configuring Audio for Media Center" on page 53.
- 8 Configure audio output for the WinDVD Player. See "Configuring Audio for InterVideo WinDVD Player" on page 54.

If you select **Enable digital audio output**, the microphone volume setting becomes not muted, and the recording source is fixed in Stereo Mix. If you place the microphone too close to the speakers, feedback can occur.

Configuring Audio Output with Sound Effect Manager

Follow these steps after you have installed and connected your speakers, if your PC model has type 6 connectors.

To configure multichannel audio output for PCs with Sound Effect Manager:

- Click **Start** on the taskbar.
- 2 Click Control Panel.
- Click Sounds, Speech and Audio Devices (or Sounds and Audio Devices).
- 4 Click Sound Effect Manager. The window opens.
- 5 Click a button near the top of the window to see that control screen.

 Select the option describing the number of speakers in your system in a range from
 2.1 Speaker to 7.1 Speaker.

- Click the Speaker Test button to test the speakers.
- 🎖 Click **OK**.
- Configure audio output for the Media Center. See "Configuring Audio for Media Center" on page 53.
- 10 Configure audio output for the WinDVD Player. See "Configuring Audio for InterVideo WinDVD Player" on page 54.



If you do not see the device for your configuration, change the speaker selection in the Speaker Configuration window.

The Sound Effect Manager control screens

- Sound Effect selects the Environment and the Equalizer settings. You can select an Environment such as Under Water or Auditorium. To use the Equalizer, click the Power button in the center of the circular equalizer control to turn on the Equalizer. You can click a preset button, such as Pop or Live, or manually adjust the settings and then save them for easy selection later.
- Speaker Configuration selects the number of speakers, shows the Connection Guide, and has the Speaker Test button to

To enable the Audio Wizard

Make sure the **Enable Auto Detection** check box is selected to enable the wizard. Click **OK** to close the window. test the speakers. A connector with no descriptive text in the Connection Guide indicates that the connector is not used for the selected speaker configuration.

- Digital Audio selects the digital audio output and digital audio frequency for the digital audio connectors on the PC.
- Audio Wizard opens a window that shows the connector panel on the front of the PC. To close the window without enabling the wizard, click OK.

Using the Audio Wizard in the Sound Effect Manager (type 6 connectors)

The Sound Effect Manager Audio Wizard can help you connect front-panel audio.

To use the Audio Wizard:

- Turn on the PC.
- 2 Click Start on the taskbar.
- 3 Choose Control Panel.
- 4 Click Sounds, Speech and Audio Devices (or Sounds and Audio Devices).
- 5 Click Sound Effect Manager. The window opens.
- Click Audio Wizard. A window opens that shows the connector panel on the front of the PC.
- 7 Place a check in the **Enable jack detection** check box to enable the wizard.
- Connect the speaker system audio cable plugs into the connectors on the front of your PC. The panel display highlights a cable that is properly inserted in a connector.
- Close the window.

Retasking front-panel connectors

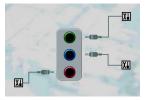
To retask using the Audio Wizard (type 6-connector):

With the Audio Wizard enabled, both the microphone connector and the headphones connector on the front of the PC can be retasked to perform a different audio function. These two connectors are universal audio jacks. When you plug in a cable, the wizard asks you to select the

- Follow steps 1 through 7 of the procedure "The Sound Effect Manager control screens."
- When you plug in a cable, the wizard asks you to select the device you plugged in from a list.
- Close the window.

function for the cable from a list, and then it sets the universal audio jack to perform as the selected function. The functions are:

- Stereo speaker (out)
- Microphone (in)
- Headphone (in)
- Audio line in



Disabling digital audio output with Sound Effect Manager (optional)

To disable digital audio output:

- Follow the procedure "Configuring Audio Output with Sound Effect Manager" on page 44.
- 2 Click the Digital Audio button. Select Digital output off (you can also select Digital-in to Digital-out pass through mode).

3 Close the window.

If you select **Enable digital audio output**, the microphone volume setting becomes not muted and the recording source is fixed in Stereo Mix. If you place the microphone too close to the speakers, feedback can occur.

Configuring Audio Output with a Sound Card

Follow these steps after you have installed and connected your speakers.

To configure multichannel audio output for PCs with the Creative Sound Blaster Audigy sound card:

- Click **Start** on the taskbar.
- 2 Choose All Programs.
- Choose Creative, SoundBlaster Audigy. Click Creative Speaker Settings. The speaker settings window opens.
- 4 Select a speaker setting from the Speaker/ Headphone Selection drop-down menu. Enter a speaker configuration from 2/2.1 to 2/7.1.
- 5 Enable digital audio if you want digital audio output. See "Enabling digital audio output with a sound card (optional)" on page 47.

- Olick the Channel button to test the speakers.
- 7 Adjust the speaker volume settings on the PC. Click the **Calibrate** button. The wizard starts. Follow the wizard's basic instructions.
- 8 Close the window.
- Configure audio output for the Media Center. See "Configuring Audio for Media Center" on page 53.
- Configure audio output for the WinDVD Player. See "Configuring Audio for InterVideo WinDVD Player" on page 54.

Enabling digital audio output with a sound card (optional)

To enable digital audio output:

- Follow steps 1 through 4 of the previous procedure, "Configuring Audio Output with a Sound Card."
- 2 Place a check mark in the Digital Output Only check box.
- Connect the digital audio output connector on the back of your PC to your home audio system's digital audio input.
- 4 Select your stereo system's digital audio input.
- 5 Play a DVD to test the speakers.

- 6 Adjust the speaker volume settings on the PC. Click the **Calibrate** button. The wizard starts. Follow the wizard's basic instructions.
- 7 Close the window.
- 8 Configure audio output for the Media Center. See "Configuring Audio for Media Center" on page 53.
- 9 Configure audio output for the WinDVD Player. See "Configuring Audio for Media Center" on page 53.

Disabling digital audio output with Sound Effect Manager (optional)

To disable digital audio output:

- Open the Sound Effect Manager: Click Start, Control Panel, Sounds, Speech and Audio, and then Sound Effect Manager.
- 2 Click Audio Wizard. A window opens displaying the connector panel on the front of the PC.
- Click the Digital Audio button. Select Digital output off (you can also select Digital-in to Digital-out pass through mode).
- **4** Close the window.

If you select **Enable digital audio output**, the microphone volume setting becomes active, the recording source is fixed in Stereo Mix, and if you place the microphone too close to the speakers, feedback can occur.

Configuring Audio Output with Realtek HD Sound Effect Manager

Follow these steps after you have installed and connected your speakers, if your PC model has type 6 connectors and is capable of multi-streaming audio.

To configure multichannel audio output for PCs with Realtek HD Sound Effect Manager:

- Click **Start** on the taskbar.
- 2 Click Control Panel.
- Click Sounds, and then Speech and Audio Devices (or Sounds and Audio Devices).
- 4 Click Realtek HD Sound Effect Manager. The window opens.
- 5 Click a button near the top of the window to see that control screen.



If you do not see the device for your configuration, change the speaker selection in the Speaker Configuration window.

The Realtek HD Sound Effect Manager control screens

- Sound Effect selects the Environment and the Equalizer settings. You can select an environment, such as Under Water or Auditorium. To use the Equalizer, click the Power button in the center of the circular equalizer control to turn it on. You can click a preset button, such as Pop or Live, or manually adjust the settings and then save them for easy selection later.
- Mixer allows control over volume, playback, mute, recording and multi-streaming audio. Click the Multi-streaming setting button to set up multi-streaming.



- Audio I/O selects the number of speakers, shows whether the plugs are analog or digital, and selects the digital audio output and digital input device. Only speakers being used are displayed.
- Microphone allows fine control over the microphone/recording quality. Includes buttons for noise suppression and acoustic echo cancellation.

Configuring the Realtek HD Sound Effect Manager

- Click the **Audio I/O** tab.
- Select the option describing the number of speakers in your system — for example,
 7.1 speakers.
- 3 Only connectors being used are shown; if the connector is not shown it means that it is not used for the selected speaker configuration.
- 4 Click **OK**.

To hear DVD movies recorded with multi-channel audio from all speakers, change the audio properties for the DVD player software program to match your speaker configuration (if your DVD program supports more than two channels).

To use a microphone or set up the PC for recording, see "Configuring sound for recording with the Realtek HD Sound Effect Manager" on page 50.

To use Multi-streaming Audio, see "Configuring Multi-streaming Audio" on page 50.

Configuring sound for recording with the Realtek HD Sound Effect Manager



connectors" on

page 50.

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, use these steps to select it:

- Click Start on the taskbar; Control Panel, Sounds, Speech, and Audio Devices, and then Realtek HD Sound Effect Manager.
- 2 Click the Mixer tab.
- **3** In *Record* click the drop-down list. Choose:
- RealTek HD Digital Input to use the digital audio in connector (select models only).
- Line in/Mic in to use the Audio Line In (In) or the Microphone (Mic) connectors.
- 4 Click **OK** to close the window.

Retasking front panel audio connectors

The pink and green connectors on the front of the PC connectors can be retasked as needed.

- Click Start on the taskbar; Control Panel, Sounds, Speech, Devices, and then Realtek HD Sound Effect Manager.
- 2 Click the Audio I/O tab.
- Click the **Tool** icon in the Front Panel section. The connector settings window displays.
- 4 Select Enable Jack detection when device is plugged in, and click OK.

The front pink and green connectors can now be used as input or output devices.

Configuring Multi-streaming Audio

The Realtek HD Sound Effect Manager software allows you to listen to two different audio sources on two different speaker sets.

For example, you 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 Multi-streaming Audio for your system if you want to hear two audio sources on separate speakers.

Audio output overview

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

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

Audio input overview

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

- From an externally connected device source, such as:
 - A microphone with cable connected to Mic In (pink).
 - An MP3 player cable connected to Line In (blue).
- 2 From an internal source inside, or directly connected to, the PC, 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:

- Windows Media Player
- WinDVD
- Other installed media player software



Digital Audio In cannot be multistreamed.

When to use multi-streaming audio

You may multi-stream two audio sources as described in the following typical examples:

- For online gaming, where you hear 5.1 game sound on your AV receiver or powered speakers: while you also hear gaming conversation on your headset. See "Example 1: For Online Gaming" on page 52.
- 2 For digital home entertainment, where you hear:
 - DVD sound on your living room TV/display or AV receiver from the rear speaker connections.
- While you also hear your PC headphone or powered speakers that are connected to the front panel green headphone jack, from one of the following external PC audio sources:
- a Front panel Line In
- Internal source residing on: a hard disk drive, DVD, CD, USB Drive, or other external device.

See Example 2.

Setting up multi-streaming audio Example 1: For Online Gaming

To configure multi-streaming audio output for online gaming with Realtek HD Sound Effect 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:

- Connect the audio input and output connectors to:
 - 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 system tray to open the Realtek HD Audio Sound Effect Manager window.
- Choose the Mixer tab.
- 4 Click the Multi-streaming setting audio button. The dialog box opens.

- 5 Select the Enable multi-streaming playback check box.
- Select one of the following options to determine how you would like to hear your own voice.
 - Check the Output Mic In/Line In to front panel check box, and select OK.
 - Check the Output Mic In/Line In to rear panel check box, and select OK.
 - Select **Realtek HD Audio rear output** from the drop-down list.
- Start the game that you are about to play. You should hear the gaming sound on the rear stereo, 5.1, or 7.1 speakers.
- At the Mixer tab, select **Realtek HD Audio front output** to enable audio conversation with your teammates.



Example 2: For Digital Home Entertainment

To configure multi-streaming audio output for digital home entertainment with Sound Effect Manager:

- Connect the audio output connectors to:
 - A headphone set or powered speakers connected to the front Headphone Out (green) connector for stereo music playback.
 - A set of powered stereo, 5.1, or 7.1 speakers connected to the rear Speaker Out connectors for DVD playback sound output.
- 2 Click the **Realtek HD Audio Manager** icon on the system tray to open the Realtek HD Audio Sound Effect Manager window.
- Choose the Mixer tab.
- 4 Click the Multi-streaming setting audio button The dialog box opens.
- 5 Select the Enable multi-streaming playback check box, and select OK.

- Select Realtek HD Audio rear output from the drop-down list.
- Open WinDVD to play a DVD movie. You should hear the DVD sound on the rear speakers.
- Select Realtek HD Audio front output from the drop-down list.
- Open Windows Media Player to play music. You should hear the music sound on the front headphone connection.
- To hear an external device source from the Line In or Mic In connection:
 - Click the Multi-streaming setting audio button. The dialog box opens.



b Check the Output Mic In/Line In to front panel check box in the dialog box, and select OK.

Configuring Audio for Media Center

Follow these steps after you have installed, connected, and configured your speakers.

To configure multichannel audio output for the Media Center:

- Click Start on the taskbar, scroll down, and select Media Center.
- 2 Click Settings, click DVD. Scroll down and click Audio.
- **3** Select **Speaker Configuration**.
- 4 Select your Speaker Configuration by clicking on the (+) or (-). If you select Analog-2 Channel, then select the channel mode by clicking the (+) or (-).
- Click **Save**.
- Close the window.

Configuring Audio for InterVideo WinDVD Player

Follow these steps after you have installed, connected, and configured your speakers.

The InterVideo WinDVD program (select models only) is set up for two-speaker (stereo) output. To hear all speakers from DVD movies recorded with multichannel audio, change the audio properties for WinDVD to match your speaker configuration (if your InterVideo WinDVD program supports more than two channels).

If you want to play a stereo DVD, you may change the audio properties of WinDVD to match the recorded DVD audio output.

Insert a DVD.

Or

Click Start, choose All Programs, InterVideo WinDVD, InterVideo WinDVD Player, and then click InterVideo WinDVD. The WinDVD video window opens.

2 Right-click anywhere in the WinDVD video window, and then click **Setup**. The Setup window opens. Click the Audio tab.

- 4 Select Audio Output Configuration. Choose Analog or Digital (S/PDIF). Click Apply.
- 5 Select Audio Speaker Configuration. Click the option for the number of speakers to match your multichannel speaker system.
- You can click the **Test** button to test the speakers. You should be able to hear the speakers. Click **Stop**, and then click **OK**.

Using Headphones

Your PC comes with a headphones connector (lime green) on the front of the PC. 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 PC.



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.

Selecting recording devices (Type 6 connectors only)

To select a sound recording device:

- Click **Start** on the taskbar.
- 2 Choose Control Panel.
- Click Sounds and Audio Devices (or Sounds, Speech and Audio Devices). The Sounds and Audio Devices window opens.
- 4 Click the Audio tab. The window opens.
- 5 In Sound Recording, select a recording device; for example, Realtek HD Front Pink Jack.
- 6 Click OK.
- 7 Close the window.

Resolving Sound Issues

If you don't have sound from your speakers, check the following:

- Check volume and mute settings. See "Using Headphones" on page 54.
- Use active, powered speakers, or speakers with an amplifier.
- Verify sound cable connections.
- Make sure the software program and sound software are configured.
- Some programs may result in low volume, even when the Volume knob is turned to the maximum position. If this is the case, double-click the **Volume** icon on the taskbar, and increase the volume.
- Reconfigure the sound software for surround sound.
- Reinstall the sound card drivers by using HP Application Recovery. See "Application Recovery" in the PC Troubleshooting and Maintenance Guide.

Using the Creative Sound Blaster X-FI Sound Card

This section provides an overview of connecting to, configuring, and recording with the Creative Sound Blaster X-Fi sound card.

Connecting the speakers

Connector	Description
O O No. 195	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
(°7 _3	6.1 audio setup: Front center, subwoofer, and rear center
	7.1 audio setup: Front center, subwoofer, and side left
	Line Out_2 (black)
((+)) 2	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)
((→))→_1	2/2.1 audio setup: Front left and right
2	FlexiJack (white) for Line-In, Microphone, Digital In/Out
((+))→ ♪?`` or ●	The FlexiJack supports three functions. You must select the function in the Creative Console Launcher. See "Configuring the FlexiJack connector" on page 58.
DIGITAL_IO	

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

- Use the audio connection table to connect your audio system to the sound card.
- **2** Turn on the PC.
- **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 sound card software* section to configure the speaker settings in the Creative Sound Blaster X-Fi software.

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

Configuring the sound card software

Follow these steps after you have installed and connected your speakers to configure multi-channel audio output for PCs.

- Click **Start** on the taskbar.
- 2 Choose All Programs.
- 3 Choose Creative, SoundBlaster X-Fi and then click Creative Console Launcher.



The Entertainment Mode window displays. If a different mode displays, click the **Mode** button and then select **Entertainment Mode**.

4 Select a speaker setting from the Speakers and Headphones Selection drop-down menu. Select speaker configuration from 2/2.1 to 7.1.

- If your speakers support digital audio, and you want to enable digital audio, see "Configuring the FlexiJack connector" on page 58.
- Close the window.

Now that the sound card software has been configured, you need to configure audio output for your media software program. The procedure is different for each program. See the instructions that came with the media software program.



Three modes are available; Entertainment Mode is selected here. For information about other modes, see "Sound Blaster X-Fi configuration modes" on page 59.

Configuring 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.

Connect your audio cable to the FlexiJack connector on the sound card (white).

- **2** Follow steps 1 through 4 of the "Configuring the sound card software" on page 57.
- 3 Click the Digital I/O button. The Digital I/O window displays.
- 4 Under FlexiJack Mode, select either Digital I/O or Mic-In/Line-In.
- 5 Close the window.

Recording with the sound card

The Sound Blaster X-Fi enables sound recording from multiple audio sources using Smart Recorder.

- Click **Start** on the taskbar.
- 2 Choose All Programs, Creative, SoundBlaster X-Fi, and then Smart Recorder. The Smart Recorder window displays.

SMART RECORDER			<u>? -</u> ×
Record Now	Record Wizard	Schedule	My Recordings
Source	Microphone	-	
Level			
		Analyze	
	Smart Recorder can analyze the so signal/input and set the optimum le loud section of the music and click i	rvel. Play a	
Format	WMA 128 kbps Stereo		
	Remove Hiss and Clicks	Default	
			= +
		Click Meter	
Status	Ready to Record		
	• REC	- -	
Record Location	C:\Documents and Settings\\My	Recordings Browse	
Free Space	206.75 GB		

Smart Recorder Tools	Description
RecordNow	Configure settings for audio source, recording format, output location, and audio quality on one screen.
Record Wizard	Configure recording settings with the help of a wizard.
Schedule	Set Smart Recorder to automatically record at a time of your choosing.
My Recording	Access your saved recordings.

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.

Sound Blaster X-Fi configuration modes

The Sound Blaster X-Fi sound 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 sound card resources to provide the best audio performance for the activity.

Audio Creation Mode

Optimizes the sound card for advanced recording functions.

Available features:

- Recording from several audio sources
- Applying studio quality effects

- Mixer settings
- Equalizer settings

Entertainment Mode

Optimizes the sound card for playing movies and music.

Available features:

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

Game Mode

Optimizes the sound card for playing games.

Available features:

- Volume, base, and treble controls
- Mixer settings

- Configure speakers and headphones
- Configure surround sound

Using the Sound Blaster X-Fi documentation

For additional information on configuring and using the sound card:

Click **Start** on the taskbar.

2 Choose All Programs, Creative, SoundBlaster X-Fi, and then click Documentation.

3 Click **Online Manual**.

Using the PC Hardware

Using the Keyboard

Your PC may include a standard keyboard or a wireless keyboard.

A standard keyboard connects to the keyboard connector in the back of the PC.

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

The keyboard has an arrangement of standard keys, indicator lights, and special buttons.

Special Keyboard Buttons

Your keyboard may not include some of the buttons listed.

Access buttons

lcon	Feature	Description or function
C	Standby	Puts PC into or out of power-saving mode. May take 10–30 seconds before screen reappears.
?	INFO	Opens the Help and Support Center.
 	Internet	Opens your Internet browser. Can be reconfigured to open any Web site or software program.
Q	Search	Opens a Web page designed to search the Internet. Can be reconfigured to open any Web site or software program.
\bowtie	E-mail	Opens an e-mail program. Can be reconfigured to open any Web site or software program.
+hp Club	HP Club	Links to an HP Web site.

Media control or playback buttons





lcon	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.
	Volume	Volume knob controls speaker volume.
■) ■))	Volume	Volume buttons control speaker volume.
☆ ⊗ ∎	Mute	Turns speaker sound on and off.



Clicking the Restore Defaults button on the Buttons tab restores all of the buttons to factory settings.

Customizing the keyboard buttons

- Click Start on the taskbar, choose Control Panel, and then click Printers and Other Hardware, if it is present.
- 2 Double-click Keyboard.
- **3** In the Keyboard Properties window that opens, click the **Buttons** tab.
- **4** On the Buttons tab, double-click the button you want to change.
- 5 Click the **Down arrow** to the right of the list and choose the button capability.

- Enter a display label and address information.
 For a Web page, enter the complete URL in the Address box.
- 7 Click OK.
- 8 On the Buttons tab, click **Apply**.
- Repeat steps 5 through 9 for each button you want to customize.
- **10** Click **OK** to finish.

Using the Remote Control

Use the remote control to open the Media Center program, and use it to view TV, record TV programs, play previously recorded TV programs, and play music, movies, or video.

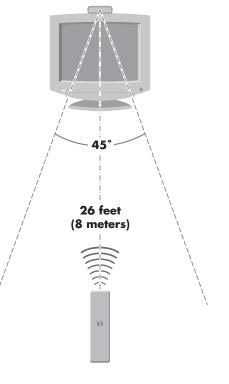
Use the remote control at a maximum distance of 8 meters (26 feet) from the remote sensor and at a maximum of 22.5 degrees (45 degrees total) from the center of the remote sensor.

Troubleshooting the remote control

If your remote doesn't work:

- Make sure that the batteries for the remote control are charged and installed correctly.
- Make sure the front of the remote sensor (IR receiver) is not blocked.
- Point the remote control within a 45-degree angle range and less than 8 meters (26 feet) away.
- If a pressed key repeats itself or sticks, unplug the remote sensor from the USB connector, wait 1 minute, and plug the remote sensor back in. Try altering the lighting conditions in the room or moving the location of the remote sensor if this continues.
- Press the Enter button on the remote control after changing a channel.
- Point the remote control toward the remote sensor, and press a button. A faint red light should appear on the remote sensor. If the light appears, then the problem is probably in the Media Center software. Close Media Center, restart the PC, and then open Media Center again.
- If the remote control works in Media Center but not when changing channels, you need to reconfigure the Media Center software settings for the cable set-top box or satellite receiver.

To open Media Center using the remote control, simply point it at the remote sensor and press the Start button.





Remote sensor is not receiving a signal from the remote control

If a faint red light doesn't appear when you point the remote control at the remote sensor and press the OK button, try the following:

- Click Start, right-click My Computer, and then select Properties.
- 2 Click the Hardware tab, and then click Device Manager.
- 3 Click the plus (+) sign next to Universal Serial Bus Controllers.
- 4 If the eHome Infrared Receiver is listed under Universal Serial Bus Controllers, Windows is properly detecting the IR Receiver. If it is not listed, go to the next step.
- 5 Unplug the end of the USB cable on the remote sensor from the PC, and plug it into the same USB port.
- Disconnect all other USB devices, leave the remote sensor plugged in, and then restart the PC. Plug in other USB devices after the remote sensor appears in the Device Manager window.

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 can read and can write to a variety of types of memory cards and the Microdrive disk drives.

The card reader is accessible directly on the front of the PC. It has four 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 the title is present.

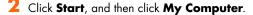
Formatting a memory card

If you have not used the memory card before, you may need to format it first.

Format your 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 light on the reader lights, and the computer automatically detects the media.



- 3 Under Devices with Removable Storage, right-click the correct memory card icon.
- 4 Select Format, and then type a label name into the label field. For best compatibility, select FAT as the file system settings.
- 5 Click Start.
- Click OK on the Format Complete window, and then click Close.



Using the memory card reader

- Insert the media into the correct card slot on the reader until it stops. The activity light (**A**) on the memory card reader lights, and the PC automatically detects the media.
- 2 An Autoplay window opens. Select a program to access your files. The PC opens a program so you can access the media contents. You can copy files from or to the media.

Or

If the Autoplay window does not open, you can click **Start**, click **My Computer**, and then double-click the **memory card** icon to display the files on the memory card.

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

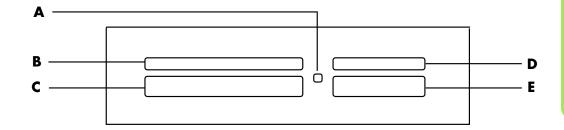


Do not try to remove media when the inuse light is blinking. Doing so may cause loss of data.

Understanding the activity light

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

Memory Insertion Guide



Media must be inserted correctly. Note the direction of the notched corner on the media. See the "Memory Insertion Guide" on page 65. CompactFlash and Microdrive are keyed and cannot be inserted incorrectly. Insert the receptacle edge (holes) of this media into the slot.

- A In-use light (indicates data is being read or written)
- B SmartMedia/xD
- C CompactFlash I/II or Microdrive
- D MMC/SD (MultiMedia Card/Secure Digital)
- E MS/MS-Pro (Memory Stick or Memory Stick Pro)

Some memory cards, such as CF Ultra/III, are not compatible with the memory card reader that came with your HP Media Center PC.

Card	Insert the media	4-slot reader location
CompactFlash Type 1 media	Receptacle edge (holes)	C (lower-left)
CompactFlash Type II media	Receptacle edge (holes)	C (lower-left)
IBM Microdrive disk drive	Receptacle edge (holes)	C (lower-left)
Secure Digital (SD) memory card	Facing up	D (upper-right)
MultiMedia Card (MMC)	Facing up	D (upper-right)
Memory Stick (MS) memory card	Facing up	E (lower-right)
Memory Stick (MS-Pro) memory card	Facing up	E (lower-right)
SmartMedia (SM) memory card	Facing up	B (upper-left)
xD media	Facing up	B (upper-left) xD

Troubleshooting the memory card reader

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

- Some cards have a read/write or security switch on the card. Make sure the read/write switch is set to Write Enabled before attempting to write data to it.
- Make sure the amount of data you want to store is not larger than the storage limit of the memory card.
- Make sure the memory card is one of the supported types: CompactFlash Type I and II, Microdrive, Memory Stick, Memory Stick Pro, MultiMedia Card, Secure Digital, SmartMedia, or xD media.
- Make sure the memory card is fully inserted into the correct slot.
- Remove the memory card when the light is not flashing, and shine a flashlight into the empty slot. If any of the pins are bent, replace the memory card reader, or have the PC 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 system tray icon next to the time. Do not click **Stop** in the Safely Remove Hardware window. If you do click **Stop**, the drive is disconnected. If this happens, restart the PC.
- Do not insert or remove memory cards when the in-use light is flashing. To do 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" on page 64.



CompactFlash and Microdrive are keyed and cannot be inserted incorrectly. Insert the receptacle edge (holes) of this media into the slot.

Safely Remove Hardware Utility

If you inadvertently open the Safely Remove Hardware window, click **Close**.

If you click **Stop** while the USB Mass Storage Device is selected, the operating system will not recognize the memory card reader. You will need to restart the PC for it to recognize the memory card reader.

🍫 Safely Remove Hardware		? 🗙
Select the device you want to unplu Windows notifies you that it is safe I computer.		
Hardware devices:		
😭 USB Mass Storage Device		
USB Mass Storage Device at Location 0		
	Properties	Stop
Display device components		Close

Using Your Storage or Docking Bay

Your PC may have a storage or docking bay (select models only) on the top of the PC. You can use the docking bay to:

- Store CDs, DVDs, or memory cards.
- Dock a peripheral device, such as a digital camera docking station.
- Install a special cover (optional) and an HP digital camera and HP digital camera docking station. (Both the HP digital camera and the camera docking station are sold separately.)
- The bay design of the PC allows you to place a device and thread a FireWire (IEEE 1394) or USB data cable and power cord underneath the rear top cover to the connectors on the back of the PC.

Storing CDs, DVDs, or memory cards

To store your CDs, DVDs, or memory cards in the storage bay, gently press down the CD storage lid and slide it open.

Do not click Stop in the Safely Remove Hardware window while the USB Mass Storage Device is selected. Doing so removes the operating system

recognition of the memory card reader from your PC. You must restart the PC to use your reader

again.

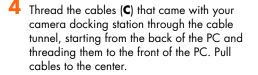
Installing an HP Camera Docking Station

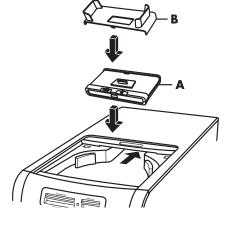
Some HP Media Center PCs include a camera docking bay. This bay is designed to hold an HP camera docking station and some HP digital cameras. The following items are optional and can be purchased separately:

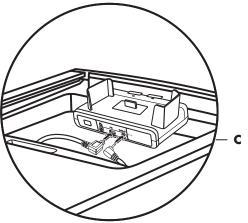
- Camera docking station
- Digital camera cables
- PC camera docking bay lids
- HP digital camera and bracket

To install the HP camera docking station:

- Gently press down the CD storage lid and slide it open.
- 2 Place the camera docking station (A) on the top of the PC.
- **3** Place the camera bracket (**B**) that came with your digital camera on the camera docking station.









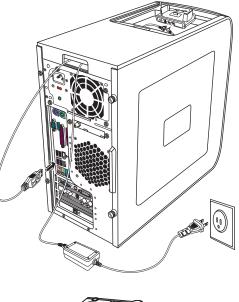
The camera bracket clips onto the camera dock base. This bracket comes with the digital camera.

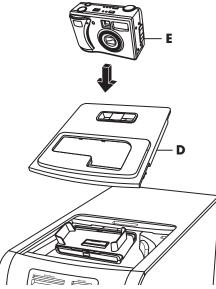
5 Connect the cables:

- Plug the USB cable into the back of the PC. (The location of USB ports varies by PC model.)
- Plug the red and yellow connectors (not shown) into a TV if you want to view the camera images on a TV (optional).
- Plug the power cord into a power outlet.

Refer to the instructions that came with the HP camera docking station.

- Place the correct camera docking station lid
 (D) on top of the PC. Gently guide the edge of the lid into the top of the PC.
- **7** Place the HP digital camera (**E**) into the camera docking station.
- 8 Follow the instructions that came with your camera docking station.





Connecting the Wireless LAN

(Select models only)



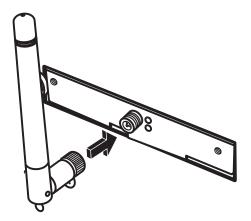
The wireless LAN antenna connector is located in one of the I/O slots on the back of the PC.

You can connect the HP Media Center PC to an 802.11b/g wireless network. An external antenna is supplied with your system. You must connect this antenna to connect to the wireless network. You need an existing wireless LAN with an Internet connection (consult your ISP for further information).

You can establish a wireless network using your HP Media Center PC as a wireless access point or you can use your PC as a client if you already have a wireless network functioning.

An external antenna is supplied with your system and must be connected to the 802.11 module to increase the range and sensitivity of the radio.

- Screw the wireless LAN antenna into the wireless LAN connector on the back of the PC.
- 2 You may want to move the end of the antenna away from the PC to improve your signal reception.



Index

A

audio connector 7 audio connector switch 43 Audio Line Out (powered speakers) 7 digital audio connector 45 retasking (multi-streaming) 50

B

batteries installing in remote control 63 type for remote control 63 buttons media control or playback 62

C

cables connecting PC to TV 20 included 11 TV 11 camera docking station, installing 69 coaxial cable connecting the TV signal source 17 CompactFlash reader 65 Composite Video In connector 8 computer connecting the remote sensor 15 connecting the TV signal source 13 getting started 1 connecting digital video camera 9, 37 headphones 54 connector Audio Line In 7 Audio Line Out 7 back panel 6 Composite Video In 8 FireWire (IEEE 1394) 5, 6 FM In 8 front panel 5 headphones 5 keyboard 6 Microphone In 5 modem 8 monitor 7 mouse 6 printer 6 S-video In 7 TV/Cable Ant 8 USB 5, 6

Creative Sound Blaster X-Fi Sound Card audio modes 59 configuring 57 recording 58 using 56

D

devices connecting 10 digital camera connecting 9, 10 using 64 digital video camera connecting to PC 9, 37 recording videos 9, 37 troubleshooting 9 documentation online guides 2 drives memory card reader 64

E

equalizer Realtek HD Sound Effect Manager 49 Ethernet network hub 7

F

FireWire (IEEE 1394) connector 5, 6 FM In connector 8 FM radio antenna connecting 8 Found New Hardware message, connecting a digital camera 9

Н

headphones connector 5 using 54 home stereo system connecting to the PC 37 home videos 9, 37 HP updates from 2

I

installing camera dock 69 camera docking station 69 Internet Internet service provider 3 signing up with an ISP 3

K

keyboard connector 6 keys 61 using 61 keyboard buttons access 61 configuring 62 media playback 62 special 61

L

LAN antenna 71

Μ

Media Center opening with remote control 63 memory card reader in-use light 65 troubleshooting 67 using 64, 65 memory card, formatting 64 Memory Stick (MS) reader 65 Memory Stick Pro (MS-Pro) reader 65 Microdrive reader 65 microphone connector 5 modem connector 8 monitor connector 7 mouse connector 6 multi-channel speakers configuring 49 MultiMedia Card (MMC) reader 65 Mute button 62

Ν

network interface adapter 7

Ρ

PC

choosing a setup location 1 connecting the remote sensor 15 connecting the TV signal source 13 connecting TV signal source with set-top box and VCR 17 front-panel connectors 5 protecting with virus-scanning software 4 setup tips 1 virus scanning program 4 printer connecting 10 connector 6

R

recording videos from digital video camera 9, 37 with Realtek HD Sound Effect Manager, 50 remote control range 63 type of battery to use 63 using 63 remote sensor 64 connecting 15 using 63

S

Safely Remove Hardware utility 68 safety information 2 ergonomic information 2 scanner, connecting 10 Secure Digital (SD) reader 65 serial port connector 6 settings remote control and remote sensor 64 SmartMedia (SM) reader 65 software installing 4 sound using additional sound cables 1 speaker systems 29 speakers configuring multichannel audio for Sound Manager 42 connecting multichannel audio speakers to the PC 30, 33-41, 44 enable digital audio output 44, 46, 48 multichannel audio connecting 48 resolving sound issues 55 setting up digital speaker output 47 standby mode button 61 stereo connecting to the PC 37 S-video In connector 7

Т

troubleshooting remote sensor 64 TV connecting 20 connecting the TV signal source 13, 16, 18 disabling the TV option 27 disconnecting 28 setting up 25 using as a monitor 20, 21 TV tuner connecting TV to PC 21 signal source 13

U

USB connector 5, 6 utility programs 2

V

video game console using 1 video, using additional video cables 1 videos working with home videos 9 virus-scanning program 4

Х

xD reader 65

Part Number: 5991-4144