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, 2003-2005 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.

Apple, iTunes, FireWire, the FireWire symbol, and iPod are trademarks of Apple Computer, Inc., registered in the U.S. and other countries.

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

Setting Up Your PC	1
Putting Your PC Together	1
Connecting to the PC	2
Turning On Your PC for the First Time	3
Setting Up and Connecting to Your Internet Account	4
Using HP products	5
Transferring your old PC information and files to your new PC	5
Using Desktop Icons	
Using HP Organize software	6
Using the Keyboard	7
Customizing the keyboard buttons	
Setting Up Sound	11
Using Speakers	
Setting up 3-connector sound	12
Configuring multi-channel audio output for the DVD player	13
Setting up 6-connector sound	14
Configuring the Sound Effect Manager (6-connector)	15
Configuring sound for recording with the	
Sound Effect Manager (6-connector)	
Using the Sound Effect Manager (6-connector)	17
Using Your PC Top	19
Using Your Docking Bay	19
Using Your Multistorage Bay	
Storing CDs, DVDs, or memory cards	23
Docking a peripheral device	23
Placing a peripheral device on the multistorage bay (top)	
Using the optional camera station PC top	
Removing cables from the multistorage bay cable tunnel	

Using the Memory Card Reader	. 29
Working with the Safely Remove Hardware utility	30
Using the memory card reader	30
Using a TV as a Monitor	. 33
Identifying Cables You May Need	
Connecting to a TV Set	
Viewing the PC Image on Your TV Screen	34
nView tab	35
Displays tab	36
Disabling the TV Option	36
nView tab (disabling)	
Ge Force tab (disabling)	37
Displays tab (disabling)	37
Disconnecting the TV	38
Using the HP Personal Media Drive	. 39
Connecting the Drive	39
Inserting the Drive	40
Locating the Drive and Assigning a Drive Letter	41
Using the Drive	42
Disconnecting the Drive	43
Working with Digital Images	. 45
Working with Digital Images	45
	45
Working with Digital Images	45 45
Working with Digital Images Using HP Image Zone Plus	45 45 47
Working with Digital Images Using HP Image Zone Plus Burning a label on a LightScribe media disc	45 45 47 47
Working with Digital Images Using HP Image Zone Plus Burning a label on a LightScribe media disc Creating disc labels with HP Image Zone Plus	45 45 47 47 51
Working with Digital Images Using HP Image Zone Plus Burning a label on a LightScribe media disc Creating disc labels with HP Image Zone Plus Playing CDs and DVDs	45 45 47 47 . 51 51
 Working with Digital Images Using HP Image Zone Plus Burning a label on a LightScribe media disc Creating disc labels with HP Image Zone Plus Playing CDs and DVDs Playing Music CDs with iTunes 	45 45 47 47 . 51 51 52
 Working with Digital Images Using HP Image Zone Plus Burning a label on a LightScribe media disc Creating disc labels with HP Image Zone Plus Playing CDs and DVDs Playing Music CDs with iTunes Playing CDs and DVDs with Windows Media Player Playing DVD Movies with InterVideo WinDVD Using country/region codes 	45 45 47 47 51 51 52 52 54
 Working with Digital Images Using HP Image Zone Plus Burning a label on a LightScribe media disc Creating disc labels with HP Image Zone Plus Playing CDs and DVDs Playing Music CDs with iTunes Playing CDs and DVDs with Windows Media Player Playing DVD Movies with InterVideo WinDVD Using country/region codes Playing Video CDs (VCD) with InterVideo WinDVD 	45 45 47 47 51 51 52 52 54 54
 Working with Digital Images Using HP Image Zone Plus Burning a label on a LightScribe media disc Creating disc labels with HP Image Zone Plus Playing CDs and DVDs Playing Music CDs with iTunes Playing CDs and DVDs with Windows Media Player Playing DVD Movies with InterVideo WinDVD Using country/region codes 	45 45 47 47 51 51 52 52 54 54
 Working with Digital Images Using HP Image Zone Plus Burning a label on a LightScribe media disc Creating disc labels with HP Image Zone Plus Playing CDs and DVDs Playing Music CDs with iTunes Playing CDs and DVDs with Windows Media Player Playing DVD Movies with InterVideo WinDVD Using country/region codes Playing Video CDs (VCD) with InterVideo WinDVD 	45 45 47 47 51 52 52 54 54 55
 Working with Digital Images Using HP Image Zone Plus Burning a label on a LightScribe media disc Creating disc labels with HP Image Zone Plus Playing CDs and DVDs Playing Music CDs with iTunes Playing CDs and DVDs with Windows Media Player Playing DVD Movies with InterVideo WinDVD Using country/region codes Playing Video CDs (VCD) with InterVideo WinDVD Playing Video CDs (VCD) with Windows Media Player 9	45 45 47 47 51 52 52 52 54 55 57
 Working with Digital Images Using HP Image Zone Plus Burning a label on a LightScribe media disc Creating disc labels with HP Image Zone Plus Playing CDs and DVDs Playing Music CDs with iTunes Playing CDs and DVDs with Windows Media Player Playing DVD Movies with InterVideo WinDVD Using country/region codes Playing Video CDs (VCD) with InterVideo WinDVD Playing Video CDs (VCD) with Windows Media Player 9	45 45 47 47 51 52 52 54 54 55 57 58
 Working with Digital Images Using HP Image Zone Plus Burning a label on a LightScribe media disc Creating disc labels with HP Image Zone Plus Playing CDs and DVDs Playing CDs and DVDs with Windows Media Player Playing DVD Movies with InterVideo WinDVD Using country/region codes Playing Video CDs (VCD) with InterVideo WinDVD Playing Video CDs (VCD) with Windows Media Player 9 Creating CDs and DVDs Using the Software Quick Reference Table Creating Music CDs with iTunes Creating Music CDs with Windows Media Player 	45 47 47 51 52 52 54 55 57 58 60 61
 Working with Digital Images Using HP Image Zone Plus Burning a label on a LightScribe media disc Creating disc labels with HP Image Zone Plus Playing CDs and DVDs Playing Music CDs with iTunes. Playing DVD Movies with InterVideo WinDVD Using country/region codes Playing Video CDs (VCD) with InterVideo WinDVD Playing Video CDs (VCD) with Windows Media Player 9 Creating CDs and DVDs Using the Software Quick Reference Table Creating Music CDs with iTunes. Creating Music CDs with Windows Media Player 	45 47 47 51 52 52 54 55 57 58 60 61 61
 Working with Digital Images Using HP Image Zone Plus Burning a label on a LightScribe media disc Creating disc labels with HP Image Zone Plus Playing CDs and DVDs Playing Music CDs with iTunes. Playing CDs and DVDs with Windows Media Player Playing DVD Movies with InterVideo WinDVD Using country/region codes Playing Video CDs (VCD) with InterVideo WinDVD Playing Video CDs (VCD) with Windows Media Player 9. Creating CDs and DVDs Using the Software Quick Reference Table Creating Music CDs with iTunes. Creating Music CDs with Windows Media Player Creating Data CDs Using Windows XP Creating CDs with RecordNow! 	45 47 47 51 52 52 52 54 55 55 58 60 61 61 62
 Working with Digital Images Using HP Image Zone Plus Burning a label on a LightScribe media disc Creating disc labels with HP Image Zone Plus Playing CDs and DVDs Playing Music CDs with iTunes. Playing DVD Movies with InterVideo WinDVD Using country/region codes Playing Video CDs (VCD) with InterVideo WinDVD Playing Video CDs (VCD) with Windows Media Player 9 Creating CDs and DVDs Using the Software Quick Reference Table Creating Music CDs with iTunes. Creating Music CDs with Windows Media Player 	45 47 47 51 52 52 52 54 55 55 58 60 61 61 62 62

Creating CDs to Play in Your Car or Home CD Players with RecordNow!	63
Creating CDs to Play on Your PC	64
Storing Files on a DVD or CD	65
Storing Data Files on Disc	66
Copying a DVD or CD	66
Erasing a DVD or CD	67
Removing Files in RecordNow!	67
Removing Files from a Recorded Data Disc	67
Archiving Files on a DVD or CD	68
Creating an Image File	68
Saving an Image	69
Burning an Image	69
Using Disc Labels	69
Disc Labeling with LightScribe	70
Lightscribe requirements	70
Burning a label on a LightScribe media disc	70
Creating a LightScribe label after burning a disc with iTunes	
Setting Automatic Recording Options	
Using Compatibility Information	
Identifying Compatible File Formats	
Using the Disc Quick Reference Tables	75
Using double-layer DVD+R discs	75
Using DVD+R and DVD-R discs	75
Using DVD+RW and DVD-RW discs	75
Using CD-R discs	76
Using CD-RW discs	76
Creating Movies Using WinDVD Creator	79
Getting started	
Using the Preview window	
Using the Media Library	
Using the Storyboard	
Identifying requirements for capturing video	
Capturing digital camcorder video	
Capturing analog video	
Capturing a still image	
Editing video files in WinDVD Creator	
Adding images	
Adding audio effects	
Adding transition effects	
Adding title effects	
Adding video filters	

Adding a menu	84
Making a movie	
Recording VHS analog video direct to DVD (select models only)	
Converting recorded TV to MPEG-2 format (Europe only)	86
Getting Help	87
Finding Onscreen Guides	
Finding Guides on the Web	
Using the Onscreen Help and Support Center	
Using Instant Support	
Using Updates from HP	
Getting messages	
Turning off messages	
Re-enabling messages	
Using PC Help & Tools	
Index	91

Setting Up Your PC



WARNING: Please read "Safety Information" in the Warranty and Support Guide before installing and connecting your PC to the electrical power system.



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

Putting Your PC Together

Follow the steps on the quick setup poster to set up your PC.

Look in the PC box for printed details or updates regarding your model PC.

After assembling your PC, but before you begin using it, arrange the PC and your work area to maintain your comfort and productivity. Refer to the Safety & Comfort Guide for important ergonomic information.



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

To view the Safety & Comfort Guide:

- Click Start, choose All Programs, choose Documentation, and then click Safety & Comfort Guide.
- Or
- Type

http://www.hp.com/ergo/

into your Web browser address box, and then press Enter on the keyboard.

Your PC features and location, availability, and number of connectors may vary.

Connecting to the PC

Connect your main hardware devices like the monitor, keyboard, and mouse to the back of the PC. Other peripheral devices like a printer, scanner, camera, or other equipment also plug into connectors on the back of your computer. Some PC models also have connectors on the front of the PC. The table does not show all connectors.

Connector	Connector symbol	Description
	¢	Mouse (PS/2 connector)
		Keyboard (PS/2 connector)
	•	Universal Serial Bus (USB) for mouse, keyboard, digital cameras, or other devices with USB connectors
	B	Printer (parallel)
		Monitor
SERIAL	Serial	Serial port for some digital cameras or other serial devices

Connector	Connector symbol	Description
	€ OUT	Audio Line Out (powered speakers)
	∑+(•))	Audio Line In
۲	Ĥ	Headphones
	LON	Microphone
	<i>″</i> ⁰	FireWire [®] (IEEE 1394) for video cameras or other devices with very fast transfer rates

Turning On Your PC for the First Time

After you have completed the steps on the quick setup poster, you are ready to turn on your PC.

- 1 Press the Power button on the monitor.
- **2** Press the On button on the front of the PC.
- **3** Turn on the speakers, if they are present.
- 4 Click an option to select your language (if applicable for your model). Click OK, and then confirm your selection by clicking Yes. Wait until the PC makes preparations. (It may take up to 30 minutes for this one-time language setup on the PC.)
- **5** Set up Microsoft[®] Windows[®] by following the onscreen instructions.

- **6** Double-click the large **Internet Access** icon, if it is present on your desktop. Wait until the PC displays the Easy Internet Sign-up window, and then follow the onscreen instructions.
- 7 Register your PC.

Setting Up and Connecting to Your Internet Account

Before you can connect to the Internet, you must sign up with an Internet service provider (ISP). HP has made arrangements with leading ISPs to help you sign up for Internet service using Easy Internet Sign-up (available on select models only).

NOTE: You may use any other ISP of your choice, or transfer your existing ISP account to this PC.

Use Easy Internet Sign-up to sign up for a new or transfer an existing ISP account (select ISPs only). The software programs for available ISPs are part of your PC. If you decide to subscribe to high-speed broadband, cable or digital subscriber line (DSL), contact your ISP for any specific software and hardware you may need.

1 Make sure the modem or other Internet access cable is connected.

NOTE: Easy Internet Sign-up finds and obtains updated information about ISP services by temporarily connecting to the Internet. The PC uses either the PC modem connected to an active telephone service line or an active broadband (cable or DSL) connection.

- 2 Choose an ISP using Easy Internet Sign-up. To open Easy Internet Sign-up:
 - a Double-click the **Easy Internet Sign-up** icon on the desktop. Or



Click Start on the taskbar, choose All Programs, choose Online Services, and then click Easy Internet Sign-up.

b Follow the onscreen instructions.

NOTE: The folder called *Online Services* includes icons for accessing various online services, but they may not be present in all countries/regions.

3 Connect to your ISP and the Internet (after you established your ISP account on this PC).

Use one of these methods:

• Double-click the ISP-provided icon on the desktop.

Or

• Press the Connect (or Internet) button on the keyboard (select models only).



Or

 If your PC is always connected to your ISP, open your browser program, such as Internet Explorer: Click Start, choose All Programs, choose Online Services, and click Internet Explorer.

NOTE: If you are using MSN, AOL, or others and have questions, contact the ISP directly.

Installing Software and Hardware Devices

After you turn on the PC the first time, you can install any software programs that came on CDs or DVDs included in the PC box (select models only).

You may wish to install additional software programs or hardware devices on your PC. Before installation, make a restore point using the Microsoft System Restore program, and then restart the PC after installation. By using System Restore, you insure you have a point to return to before an issue occurred. For information about System Restore, refer to the Microsoft Web site at:

http://www.microsoft.com/worldwide/

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.

NOTE: Only use original licensed software. Installing copied software may be illegal or may infect your PC with a virus.

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.

For antivirus software, uninstall the existing software program before reinstalling it or installing a new antivirus program.

Using HP products

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, turn it on, and your HP PC automatically configures it so it is ready to use.

Transferring your old PC information and files to your new PC

See the built-in Microsoft Windows Help and Support Center; search for *transfer wizard*, and select the overview article, "Files and Settings Transfer Wizard overview." This information describes a Microsoft solution for moving your files onto your new PC.

Using Desktop Icons

The desktop has shortcut icons that make it easy to find the things you need.

lcon	Opens	Use it to
	Help and Support (select models only)	View onscreen Help information about your PC.
	Easy Internet Sign-up	Set up a new or an existing Internet account.
	HP Image Zone Plus	Manage and protect your still photos, scanned images, and video clips.
	HP Organize (select models only)	Organize your PC shortcuts and your favorite Internet destination links.

Using HP Organize software

HP Organize software (select models only) is a desktop tool you use to organize both your PC shortcuts and your favorite Internet destination links. You use it to organize the important things you do on the PC and the Internet and to arrange them the way you want. HP Organize makes all your information available with just a few mouse clicks.

HP Organize looks like a window with multiple category frames. Each category has links to Internet destinations or shortcuts to software programs or files on your PC. Use the player area for viewing pictures, for listening to your MP3 music files stored on your computer, or for watching video clips. For searching, there is a search bar at the top of HP Organize where you can select the search engine you want to use.

To open HP Organize:

Double-click the desktop icon.

Or

- 1 Click **Start** on the taskbar.
- 2 Choose All Programs.
- 3 Choose HP.
- 4 Click HP Organize.



Using the Keyboard

Your keyboard has an arrangement of standard keys, indicator lights, and special buttons (select models only).

Identifying Special Keyboard Buttons

There are special buttons (select models only) at the top of the keyboard. (Some models have some of these special buttons on the left side of the main keys.) These buttons operate a CD or DVD player, connect you to the Internet, or provide quick access to specific functions.

NOTE: The number, location, and labeling of buttons vary by keyboard model.

lcon	Feature	Description
L	Standby	Puts PC into power-saving mode (screen is blank but PC is still on). To make screen reappear, press the Esc key, or press Standby again. May take 10–30 seconds before screen reappears.
	User	Switches between the PC users.
+hp hp or Club	HP	Links to an HP Web site.
? or ?	Help	Opens the Help and Support Center.
ið _{or} O	Pictures (Photos)	Opens an imaging software program. Can be reconfigured.
Jor J	Music	Starts iTunes or Windows Media Player. Can be reconfigured.

lcon	Feature	Description
	Video	Opens video software program. Can be reconfigured.
₩ or ₩	Shopping	
For S	Sports	
or (P)	Finance	
↔ or 	Connect, Internet	Goes to popular Web sites. Can be reconfigured to open a site or software program.
	Search	
ි ං රී	Chat	
\bowtie	E-Mail	
A B or Burn CD/DVD C > D = E < < F >	Media controls (CD/ DVD/MP3)	 Operates a disc player. A Open and close disc tray B Record C Play or pause D Stop E Skip to the previous track F Skip to the next track
	Volume control (Volume knob or Volume Up and Volume Down buttons)	Volume knob: Increases speaker volume when turned clockwise and decreases volume when turned counterclockwise. It can be turned indefinitely, even after maximum sound has been reached. Volume Up and Down buttons: Press the Volume Up ▲ button to increase volume and the Volume Down ▼ button to decrease volume.
₽\$, ₀, I	Mute	Turns speaker sound on and off.

NOTE: The number, location, and labeling of buttons vary by keyboard model.

Customizing the keyboard buttons

You can customize some of the special buttons on the keyboard (select models only) to open different programs or files or to connect to favorite Web sites:

- 1 Click **Start** on the taskbar.
- 2 Choose Control Panel.
- 3 Click Printers and Other Hardware, if it is present.
- 4 Double-click Keyboard.
- **5** On the Buttons tab, double-click the button you want to change.
- **6** For the Button configuration, click the **Down arrow** to the right of the list and choose the button capability, such as *Simple web page with label*.
- 7 Enter a display label and the address information. For a Web page, enter the URL.
- 8 Click OK.
- 9 On the Buttons tab, click **Apply**.
- **10** Repeat steps 5 through 9 for each button you want to customize.
- **11** Click **OK** to finish.

NOTE: Clicking the **Restore Defaults** button on the Button tab restores all of the Internet buttons to the factory settings.



Setting Up Sound

Using Speakers

Speakers are included with the monitor (select models only) or are sold separately. Your PC supports only an active (powered) speaker system; the speaker system must have its own power cord.

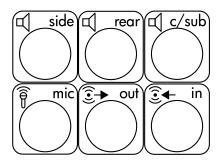
NOTE: A stereo speaker set is a left-right, two-channel speaker system. A *multi-channel audio speaker system* is a system with more than two channels, and it may include a subwoofer. For example, 7.1 channels, referred to as an eight-speaker mode, uses two front speakers (left-right), two side speakers (left-right), two rear speakers (left-right), a center speaker, and a subwoofer.

The PC supports a variety of sound options and speaker configurations. You may set up your PC for two stereo speakers or for multi-channel audio speaker systems. Connect your speaker system to the PC, and then configure the audio software for sound output. For details on connecting stereo speakers to the PC, see the quick setup poster. Location, availability, and number of connectors may vary.

• If your PC model includes three sound connectors (select models only) on the back of the PC, see "Setting up 3-connector sound" on page 12.



• If your PC model includes six sound connectors (select models only) on the back of the PC, see "Setting up 6-connector sound" on page 14.



NOTE: If your PC includes a sound card (select models only), refer to the documentation that came with the sound card.

Setting up 3-connector sound

PC models that include three sound connectors (select models only) on the back of the PC support up to six channels of sound (5.1 speaker output) and use the Multi-channel Sound Manager to configure the software settings.

Connecting the speaker system to the PC (3-connector)

The 3-connector audio speaker system uses the Audio In, Audio Out, and Mic connectors on the back or front of the PC. Refer to the quick setup poster for the location of the connectors.

- 1 With the speaker system off, assemble the speakers and, if used, the subwoofer. Refer to the speaker documentation.
- **2** Turn off the PC.
- **3** Connect the three audio cable plugs from the speaker system to the connectors on the back of the PC. (See the following table.)

Connect spe	eaker plugs fo	r:			
2 Speaker Mode	4/4.1 Speaker Mode	6/5.1 Speaker Mode	To PC connector	Connector icon	
Front speakers	Front speakers	Front speakers	Audio Out (lime green)	€ • •	
Not used for speakers	Rear speakers	Rear speakers	Audio In (blue)	∑★(•))	
Not used for speakers	Not used for speakers	Center/ subwoofer speakers	Mic-1 (pink)	LON	

- **4** Turn on the PC.
- 5 Turn on the speaker system.
- **6** Configure the audio output for this 3-connector multi-channel speaker system by performing the following procedure.

Configuring the Multi-Channel Sound Manager (3-connector)

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

3 Click **Multi-channel Sound Manager**. The Multi-channel Audio Configuration window opens.

NOTE: If you do not see the Speaker Configuration tab, your PC does not have the multi-channel capability. However, it still has two-channel (stereo) output.

- 4 Click the Speaker Configuration tab.
- 5 Select the option describing the number of speakers in your system, for example, 6/5.1 speaker mode. You can click the Speaker Test tab and then click a speaker icon to test it.
- 6 Click OK.

To use a microphone for recording, see "Using the microphone with the Multi-Channel Sound Manager (3-connector)" on page 13.

To hear DVD movies recorded with multi-channel audio from all speakers, change the audio properties for WinDVD to match your speaker configuration (if your InterVideo WinDVD program supports more than two channels). Refer to "Configuring multi-channel audio output for the DVD player" on page 13.

Using the microphone with the Multi-Channel Sound Manager (3-connector)

The 3-connector multi-channel speaker system (select models only) connects to the PC using the Microphone, Audio (Line) In, and Audio (Line) Out connectors on the back of the PC. Your PC may have a second microphone connector on the front of the PC. If present, this microphone connector is ready to use and does not affect the use of the multi-channel audio speaker system.

To use the microphone connector on the back of the PC with a 3-connector multichannel audio speaker system, you must disconnect the cables for the multi-channel speakers and change the audio configuration to a two-channel audio system. Refer to "Configuring the Multi-Channel Sound Manager (3-connector)" on page 12 to set the audio configuration.

Configuring multi-channel audio output for the DVD player

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

- Insert a DVD, or start InterVideo WinDVD. (Click Start, choose All Programs, choose InterVideo WinDVD, select 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.

- 3 Click the Audio tab.
- **4** Click the option for the number of speakers to match your multi-channel speaker system.

NOTE: When using the digital out connector for sound (6-connector, select models only), select **Digital (S/PDIF) out to External Processor**.

5 Click Apply.

NOTE: To test the speakers (multi-channel speakers only), click the **Test** button. The WinDVD control panel shows the speaker number being used. Click **Stop**.

6 Click OK.

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

Setting up 6-connector sound

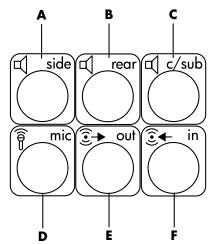
PC models that include six sound connectors (select models only) on the back of the PC, support up to eight channels of sound (7.1 speaker output) and use the Sound Effect Manager to configure the software settings.

Identifying the audio connectors (6-connector)

The PC supports a maximum of eight speakers in a multi-channel speaker system by using four of the six audio connectors on the back of the PC.

This PC also has digital audio out and digital audio in connectors for digital sound devices such as a DVD recorder or a digital stereo receiver/amplifier.

The four connectors (**A**, **B**, **C**, and **E**) for the 6-connector multi-channel speaker system are on the back of the PC.



- A Side speaker port (side)
- B Rear speaker port (rear)
- C Center speaker/ subwoofer port (c/sub)
- **D** Microphone (mic)
- E Audio line out (out) for front speakers
- **F** Audio line in (in)

The previous figure shows the six audio connectors arranged on the back of the PC: the four connectors (A, B, C, and E) used for eight-channel audio and the connectors for the microphone (D, mic) and the audio line in (F, in).

Connecting the speaker system to the PC (6-connector)

- 1 With the speaker system off, assemble the speakers and, if used, the subwoofer. Refer to the speaker documentation.
- **2** Turn off the PC.
- **3** Connect the audio cable plugs from the speaker system subwoofer to the connectors on the back of the PC. (See the following table.)

Connect speaker cable (plug) for:	To PC port (label, name, color):
Front speakers (or two stereo speakers)	Audio line out (E , out, lime green)
Side speakers	Side speaker (A , side, gray)
Rear speakers	Rear speaker (B , rear, black)
Center speaker/subwoofer	Center speaker/subwoofer (C , c/sub, gold)

- **4** Turn on the PC.
- **5** Turn on the speaker system.
- 6 Configure the audio output for this 6-connector multi-channel speaker system by performing the following procedure.

Configuring the Sound Effect Manager (6-connector)

- 1 Click **Start** on the taskbar.
- 2 Choose Control Panel.
- 3 If it is present, click Sounds, Speech, and Audio Devices.
- 4 Click Sound Effect Manager. The window opens.
- 5 Click the Speaker Configuration button.
- 6 Select the option describing the number of speakers in your system, for example, **7.1 speakers**.

A connector with no descriptive text in the Connection Guide indicates that the connector is not used for the selected speaker configuration.

NOTE: You can click the **Speaker Test** button to test the speakers.

7 Click OK.

To hear DVD movies recorded with multi-channel audio from all speakers, change the audio properties for WinDVD to match your speaker configuration (if your InterVideo WinDVD program supports more than two channels). Refer to "Configuring multi-channel audio output for the DVD player" on page 13.

To use a microphone or set up the PC for recording, see "Configuring sound for recording with the Sound Effect Manager (6-connector)" on page 16.

To use the other features of the Sound Effect Manager, see "Using the Sound Effect Manager (6-connector)" on page 17.

Configuring sound for recording with the Sound Effect Manager (6-connector)

The microphone connector on the front of the 6-connector audio PC 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.

NOTE: The pink and green connectors on the front of a PC with 6-connector sound can be retasked to perform other audio functions; refer to "Using the Audio Wizard in the Sound Effect Manager (6-connector)" on page 18.

- 1 Click **Start** on the taskbar.
- 2 Choose Control Panel.
- 3 If it is present, click Sounds, Speech, and Audio Devices.
- 4 Click Sounds and Audio Devices.
- 5 Click the **Audio** tab.
- 6 In Sound recording select the default device from the drop-down list. Choose:
 - **RealTek HD Front Pink Jack** to use the microphone connector on the front of the PC.
 - **RealTek HD Digital Input** to use the digital audio in connector on the back of the PC.
 - **RealTek HD Front Green Jack** to use the green connector on the front of the PC.
 - **Back Line in/Mic, Front Line in** to use the audio line in (in) or the microphone (mic) connectors on the back of the PC, or to use the audio line in connector on the front of the PC.

NOTE: For this selection, the audio line in connector is ready to use. To use the back mic connector, follow the steps in "Selecting the Back Line in/Mic, Front Line in connectors for recording (6-connector)" that follows this procedure.

7 Click Apply, and then click OK to close the window.

Selecting the Back Line in/Mic, Front Line in connectors for recording (6-connector)

Perform these steps when you select **Back Line in/Mic, Front Line in** for the sound recording in step 6 of the previous procedure.

NOTE: If you want to record from the mic connector on the back of the PC, you must perform these steps.

- 1 Click **Start** on the taskbar.
- 2 Choose Control Panel.
- 3 If it is present, click Sounds, Speech, and Audio Devices.
- 4 Click Sounds and Audio Devices.
- **5** On the Volume tab, in the *Device volume* area click the **Advanced** button. The Master Volume window opens.
- 6 Click Options and choose Properties.
- 7 In the *Mixer device* area, select **Back Line in/Mic, Front Line in** from the drop-down list. Click **OK**.
- 8 The recording control window opens and shows *Line In 1 or 2* selected. The line in connector you plug into is used. However, to use the mic connector on the back of the PC, click the **Select** check box under *Microphone* so a check mark appears in the box.

Using the Sound Effect Manager (6-connector)

The Sound Effect Manager has four buttons that display its control screens.

To open the Sound Effect Manager:

- 1 Click **Start** on the taskbar.
- 2 Choose Control Panel.
- 3 If it is present, click Sounds, Speech, 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.

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 test the speakers. A connector with no descriptive text in the Connector 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.

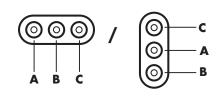
To enable the Audio Wizard:

Make sure the **Enable auto detection** check box is selected to enable the wizard. Click **OK** to close the window.

Using the Audio Wizard in the Sound Effect Manager (6-connector)

When you click the **Audio Wizard** button, a window opens that shows the three audio connectors on the front of the PC.

NOTE: The connectors on the front of your PC may be of a different type or may be in a different arrangement; look for the connector icon and color. Location, availability, and number of connectors may vary.



Connector	Name	lcon	Color
Α	Audio Line In	((•)) ✦ IN	Light blue
В	Microphone	LOM	Pink
C	Headphones Or Audio Line Out		Lime green

Retasking using the Audio Wizard (6-connector)

With the Audio Wizard enabled, both the microphone connector (\mathbf{B}) and the headphones connector (\mathbf{C}) 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 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 (out)
- Audio line in

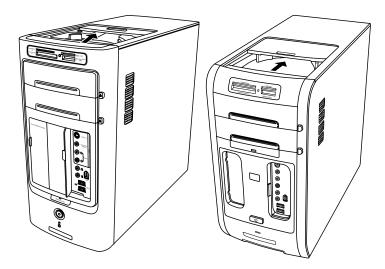
Using Your PC Top

Your PC may have a storage area (select models only) on the top of the PC chassis. For more information:

- See "Using Your Docking Bay" on page 19.
- See "Using Your Multistorage Bay" on page 22.

Using Your Docking Bay

Your PC may have a docking bay (select models only) on the top of the PC chassis.



You can use the docking bay to:

- Store CDs, DVDs, or memory cards.
- Dock a peripheral device in the bay, such as a digital camera docking station.
- Install a special cover (optional) and an HP camera and HP camera docking station. (Both the camera and the docking station are sold separately.)
- Install a special cover (optional) and an iPod Dock for use with an iPod, a portable music player. (Both iPod and iPod Dock are sold separately.)

The bay design allows you to place a device and thread the USB or FireWire (IEEE 1394) data cable and the power cord underneath the rear top cover to the connectors on the back of the PC.

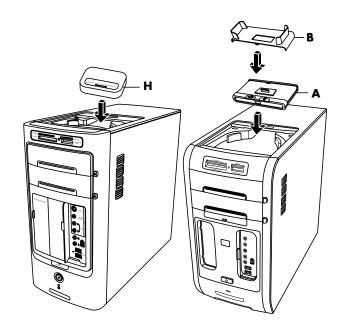
Your PC may look different from the ones shown here. Components and location, availability, and number of connectors may vary.

To store CDs, DVDs, or memory cards:

Gently press down on the bay lid and slide it open.

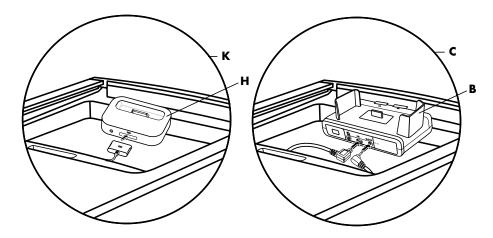
To install a peripheral device, an iPod Dock, or an HP camera and HP camera docking station:

- 1 Gently press down on the bay lid and slide it open.
- Place the peripheral device, the iPod Dock (H), or the camera docking station (A) on the top of the PC.

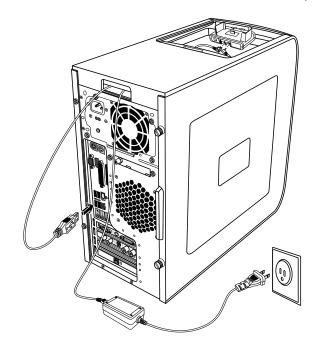


3 For a camera, place the camera cradle (**B**) that came with the digital camera on the camera docking station. The cradle clips onto the camera docking station.

4 Thread the cables that came with your peripheral device, iPod Dock (K) or camera docking station (C) through the cable tunnel; starting from the back of the PC, thread them to the front of the PC. Pull the cables to the center and connect them to the peripheral or the docking station.



5 Connect the cables to the back of the PC or to a power outlet.



For a peripheral, refer to the instructions that came with your peripheral device. For an iPod Dock, connect the iPod cable to the USB. Refer to the documentation that came with your iPod. For an HP camera docking station:

- Plug the USB cable into the back of the PC.
- Plug the power cord into a power outlet.

Optionally, if you want to view the camera images on a TV, plug the red and yellow connectors (not shown) into the TV.

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

6 Place the iPod Dock lid (L) or 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 When you want to use it, place the iPod (**M**) or the HP digital camera (**E**) into the docking station.
- 8 Follow the instructions that came with your peripheral or docking station.

Using Your Multistorage Bay

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

- Store CDs, DVDs, or memory cards.
- Dock a peripheral device in the bay, such as a digital camera docking station.
- Place a peripheral on the top of the chassis.
- Install the special cover and an HP camera and HP camera docking station (both sold separately).

The bay design allows you to place a device and thread the USB or FireWire (IEEE 1394) data cable and the power cord underneath the rear top cover to the connectors on the back of the PC. If you have problems inserting or removing cables in the cable tunnel, remove the rear top cover as described at the end of this section.

Your PC may look different from the one shown here. Components and location, availability, and number of connectors may vary.

Multistorage bay chassis figure 1

Storing CDs, DVDs, or memory cards

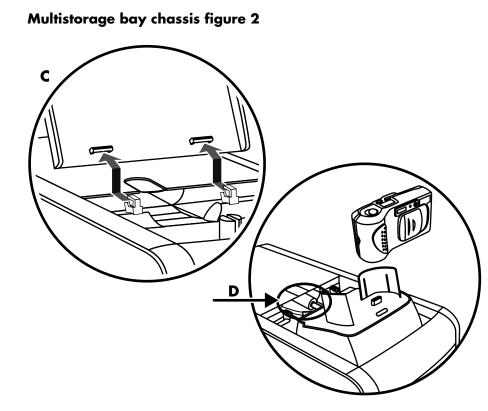
To store CDs and DVDs, open the bay cover (**A** in multistorage bay chassis figure 1) and gently lift the two sections to form the spindle (**B** in figure 1). You can store up to ten discs.

To store memory cards, open the top cover and, if necessary, lower the two spindle sections (**A** in figure 1).

Docking a peripheral device

To use the multistorage bay for a peripheral device, do the following:

 Open the bay cover (A in figure 1). Hold the cover on each side near the hinges, and then lift the cover and slide it toward the back of the chassis (C in figure 2). Gently lift it off.



- 2 Thread the cables through the cable tunnel opening at the back of the bay (D in figure 2). Connect data and power cables to the peripheral device, and place the peripheral in the bay.
- **3** Connect the data cable to the USB or FireWire (IEEE 1394) connector on the back of the PC. Plug the power cord for the peripheral device into a power outlet.

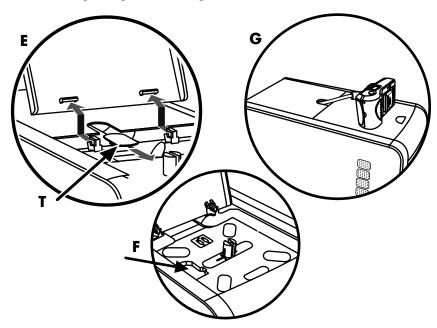
Placing a peripheral device on the multistorage bay (top)

To use the chassis top to place a peripheral device, do the following:

- 1 Open the bay cover (**A** in figure 1). Hold the cover on each side near the hinges, then lift the cover and slide it toward the back of the chassis (**C** in figure 2). Gently lift it off.
- Grasp the tab (T in figure 3) and pull it out toward the front of the chassis (E in figure 3). Put the tab in its storage area in the bay near the spindle (F in figure 3).
- **3** Thread the data and power cables for the device through the cable tunnel opening at the back of the bay. Place the cables in the tab opening and replace the bay cover. Close the cover.

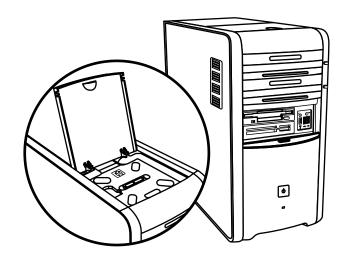
4 Connect the cables to the device and place it on top of the chassis (G in figure 3). Connect the data cable to the USB or FireWire (IEEE 1394) connector on the back of the PC. Plug the power cord for the peripheral device into a power outlet.

Multistorage bay chassis figure 3



Using the optional camera station PC top

Your PC chassis may include the optional camera docking station feature.

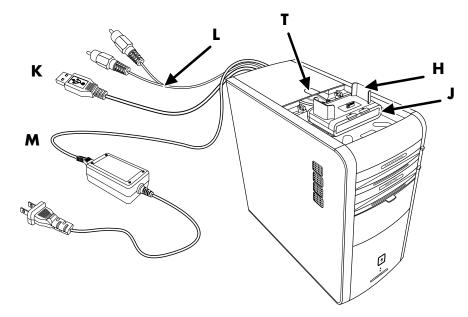


This feature lets you install a special bay cover (optional) on the PC chassis for using an HP camera and HP camera docking station. (Both the camera and the docking station are sold separately.) The camera includes a camera cradle, and the docking station includes cables.

This topic describes how to:

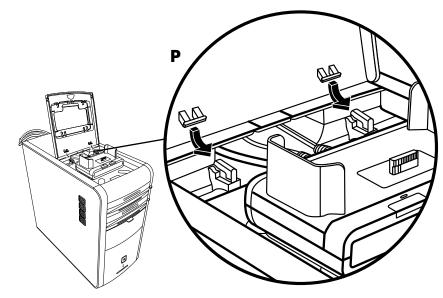
- Install the special bay cover on your PC chassis.
- Assemble the camera cradle (included with the camera), and position it on the docking station.
- Place the docking station into the chassis bay, and thread the cables.
- Insert the camera.
- Open the bay cover (A in figure 1). Hold the cover on each side near the hinges, then lift the cover and slide it toward the back of the chassis (C in figure 1). Gently lift it off.

To make it easy to insert the cables during step 3, grasp the tab (**T** in figure 5) and pull it out toward the front of the chassis (**E** in figure 3). Replace the tab after threading the cables.

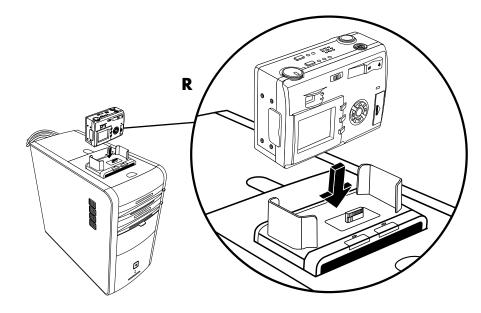


- 2 Place the camera cradle (**H** in figure 5) (included with the camera) onto the docking station (**J** in figure 5).
- Place the docking station into the bay. Thread the data cables (K and L in figure 5) and power cable (M in figure 5) through the cable tunnel opening at the back of the bay and connect them to the docking station.
- **4** Put the new cover on the cover hinges (**P** in figure 6). Close the cover over the docking station.

Multistorage bay chassis figure 6



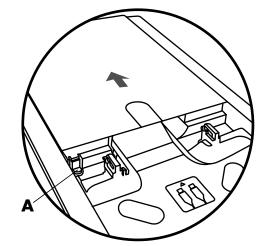
- **5** Connect the docking station cables:
 - Plug the USB cable (**K** in figure 5) into the back of the PC.
 - Plug the red and yellow connectors (**L** in figure 5) into a TV if you want to view the camera images on a TV.
 - Plug the power cord (**M** in figure 5) into a power outlet.
- 6 Insert the camera: Hold the camera over the camera cradle (**R** in figure 7) with the viewer window toward the front of the PC, and lower the camera onto the cradle.



Removing cables from the multistorage bay cable tunnel

If you cannot remove the cable for an external device from the multistorage bay cable tunnel, remove the rear top cover:

- 1 Open the bay cover. Hold the cover on each side near the hinges, and then lift the cover and slide it toward the back of the chassis. Gently lift it off.
- **2** Press the tab (**A** in figure 8) inside the bay and slide the top rear cover toward the back of the chassis; then lift off the cover.



Using the Memory Card Reader

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

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

Card	4-slot reader	2-slot reader
CompactFlash Type I media	Lower-left slot	Upper slot
CompactFlash Type II media	Lower-left slot	Upper slot
IBM Microdrive disk drive	Lower-left slot	Upper slot
Secure Digital (SD) Memory Card	Upper-right slot	Lower slot
MultiMediaCard (MMC)	Upper-right slot	Lower slot
Memory Stick (MS) Memory Card	Lower-right slot	Lower slot
Memory Stick (MS-Pro) Memory Card	Lower-right slot	Lower slot
SmartMedia (SM) Memory Card	Upper-left slot	Lower slot
xD media	Upper-left slot	Lower slot

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.

Working with the Safely Remove Hardware utility

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

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

Using the memory card reader

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

For the two-slot reader, the Secure Digital (SD) card, the MultiMediaCard (MMC), and the Memory Stick (MS or MS-Pro) cards must be inserted upside down (gold connector fingers facing up). Note the direction of the notched corner on the media.

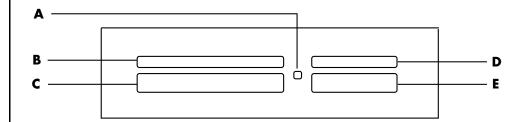
- 1 Insert the media into the card slot until it stops. The activity light (A) on the memory card reader lights, and the PC automatically detects the media.
- **2** The PC opens a window so you can use the media contents. You can copy files from or to the media.
- **3** When you are finished, right-click the drive icon, select **Eject**, check that the activity light is on but not blinking, and then remove the media. A steady activity light indicates that the PC is not reading or writing the media.



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

4-slot memory card reader

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



Card	Insert	Into 4-slot reader
CompactFlash Type I 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)
MultiMediaCard (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)

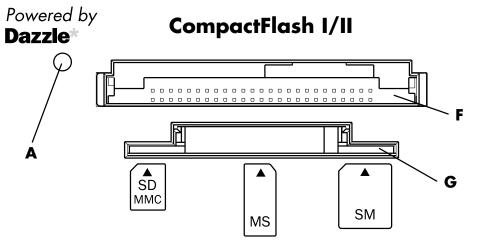
2-slot memory card reader

A Activity light

F Upper slot

G Lower slot

CompactFlash I/II



Card	Insert	Into 2-slot reader
CompactFlash Type I media	Receptacle edge (holes)	F (upper)
CompactFlash Type II media	Receptacle edge (holes)	F (upper)
IBM Microdrive disk drive	Receptacle edge (holes)	F (upper)
Secure Digital (SD) Memory Card	Upside down (gold connector fingers up)	G (lower)
MultiMediaCard (MMC)	Upside down (gold connector fingers up)	G (lower)
Memory Stick (MS) Memory Card	Upside down (gold connector fingers up)	G (lower)
Memory Stick (MS-Pro) Memory Card	Upside down (gold connector fingers up)	G (lower)
SmartMedia (SM) Memory Card	Facing up	G (lower)
xD media	Facing up	G (lower)

Using a TV as a Monitor

Your PC may have TV-out (select models only) capability, which means you can connect it to a television to view the computer image on a TV screen. With the TV-out feature, you can view the computer image, watch DVD movies (if you have a DVD player), or play games on your TV.

Identifying Cables You May Need

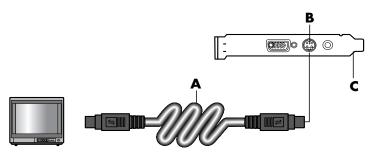
To connect a TV to the PC, you may need a video cable and an audio cable (not provided; purchase separately). The type of video cable you need depends on your TV:

- If your TV has an S-video 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 Set

To use your TV as a PC screen:

- 1 Turn off the PC.
- **2** Connect the TV cable using one of the following arrangements, depending on the connection jacks on your TV:
 - If your TV has an S-video jack, connect an S-video cable from the S-video In jack on the TV to the S-video jack on the back of the PC.



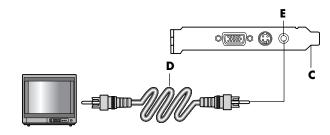
A S-video cableB S-video jackC Back of PC

D Composite video cable

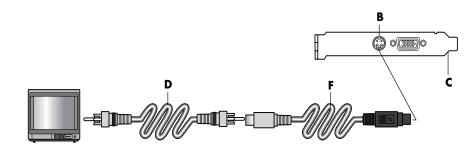
- **E** Composite jack
- C Back of PC

- **D** Composite video cable
- **F** S-video adapter cable
- **B** S-video jack
- ${\bf C}$ Back of PC

• If your TV has a composite video jack and your PC has a composite video jack, connect a composite video cable to the Video In jack on the TV to the composite video jack on the back of the PC.



• If your TV has a composite video jack and your PC has only an S-video jack, connect a composite video cable to the Video In jack on the TV and to an S-video adapter cable. Connect the S-video adapter cable to the S-video jack on the back of the PC.



NOTE: The S-video adapter cable is only needed if there is no composite video jack on the back of the PC.

3 To have sound come from your TV instead of from your PC, plug an audio cable into the audio input jack (Audio Line In) on the TV and plug the other end of the audio cable into the Audio Out jack (green connector) on the back of the PC.

Viewing the PC Image on Your TV Screen

NOTE: 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.

- 1 Make sure the video and audio cables are connected before you turn on the TV and the PC.
- **2** Turn on the TV. Press the Video/TV button on your remote control to select the Video setting, not the TV setting.

- **3** Turn on your PC.
- **4** 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.
- 6 Click the **Advanced** button.
- 7 Look at the tabs, and follow the steps that apply to your PC:
 - If you see the nView tab, continue with "nView tab."
 - If you see the Ge Force FX xxxx tab, continue with "Ge Force tab." (FX xxxx is the video card number.)
 - If you see the Displays tab, continue with "Displays tab."

nView tab

- 1 Click the **nView** tab.
- **2** To view the computer image on your PC monitor and your TV simultaneously, in the *nView Display Mode* area select **Clone**.

Or

To view the PC image on just the TV, in the *nView Display Mode* area, select **Standard [Dualview]**, click the **Device Settings** button, choose **Select Output Device**, and then select the **TV** option.

- **3** Click the **OK** button.
- **4** 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.

Ge Force tab

- 1 Click the **Ge Force FX xxxx** tab.
- 2 To view the computer 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 *nView Modes* area 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.
- **4** 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.

Displays tab

1 Click the **Displays** tab. This tab shows a monitor and a TV. Some PCs (select models only) show a TV for standard television and an HDTV for high-definition television. 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.

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

2 To view the computer 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.

NOTE: Some PC models can connect more than one display device (CRT monitor, flat panel monitor, TV, and so on) to the PC. You can change where the PC desktop appears by pressing Alt+F5. (Press the Alt key and the F5 key on the keyboard at the same time.) Each time you press the Alt+F5 key combination, the PC desktop appears on the next device. If Alt+F5 does not work, restart the PC and try again.

Disabling the TV Option

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

- 1 Right-click an empty area of the screen, and choose **Properties**. The Display Properties window opens.
- 2 Click the **Settings** tab.
- 3 Click the Advanced button.
- **4** Look at the tabs, and follow the steps that apply to your PC:
 - If you see the nView tab, continue with "nView tab (disabling)."
 - If you see the Ge Force FX xxxx tab, continue with "Ge Force tab (disabling)."
 - If you see the Displays tab, continue with "Displays tab (disabling)."

nView tab (disabling)

- 1 Click the **nView** tab.
- 2 If you viewed the computer image on your PC monitor and your TV simultaneously, select *nView Display Mode* in the list on the left, and then select the **Standard [Dualview]** option.

Or

If you viewed the PC image on just the TV, select *nView Display Mode* in the list on the left, select **Standard [Dualview]**, click the **Device Settings** button, choose **Select Output Device**, and then select the **Analog Display** option.

- 3 Click the **OK** button.
- **4** When the PC image appears on the monitor 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.

Ge Force tab (disabling)

- 1 Click the **Ge Force FX xxxx** tab.
- 2 In the *nView Modes* area select **Single display** from the drop-down list. In the *Current display* area select **Analog Display** or **Digital Display**.
- 3 Click the Apply button.
- **4** When the PC image appears on the monitor 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.

Displays tab (disabling)

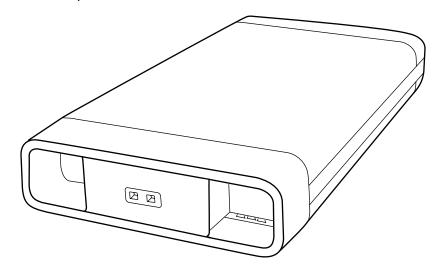
- 1 Click the **Displays** tab. This tab shows a monitor and a TV. (Select models show a monitor, a standard TV, and an HDTV.) The upper-left corner of each display icon is a button and a status indicator. A red corner indicates an inactive display; a green corner indicates an active display.
- 2 Click 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.
- **3** When the PC image appears on the monitor 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.

Disconnecting the TV

- 1 Disable the TV option. See the previous procedure.
- **2** Turn off the TV and the PC.
- **3** Remove the video cable from the TV and the PC.
- **4** Remove the audio cable from the TV and the PC.
- **5** Reconnect your PC speaker cable to the Line Out jack (lime-green connector) on the back of the computer.

Using the HP Personal Media Drive

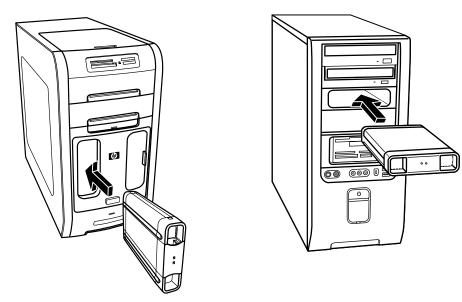
The HP Personal Media Drive (sold separately) can be used as an internal or external USB hard disk drive designed to quickly and easily increase your storage capacity and to transfer media files such as digital photos, music, videos, and other important files. You can also use the HP Personal Media Drive to back up other drives on your PC.



NOTE: Before starting the System Recovery Program, remove the HP Personal Media Drive. See your System Recovery documentation.

Connecting the Drive

As an external drive, the HP Personal Media Drive connects and disconnects easily from a USB 2.0 connector on the front or the back of most PCs. The drive comes with software, an external USB cable, and an external power cord and power adapter. For information about connecting and using the HP Personal Media Drive as an external drive, refer to the documentation that came with the HP Personal Media Drive. For some PCs (select models only), the HP Personal Media Drive is designed to fit inside a horizontal or vertical drive bay.



This special drive bay includes an internal USB port and power cable that connect to the drive when it is inserted.

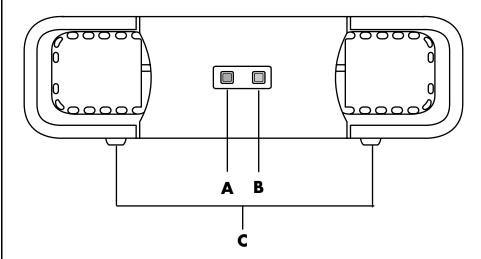
The drive turns on when it is plugged into an active USB port. If the PC is turned on with the drive connected, the drive automatically turns on. When the USB cable for the drive is not plugged in or when the USB power from the PC is turned off, the drive automatically turns off. When the PC is in standby mode (a reduced power state), the drive remains turned on.

WARNING: Do not move the PC with the HP Personal Media Drive inserted in the bay or connected to a USB port on the PC. This can cause damage to the drive and cause data loss.

Inserting the Drive

- **1** Turn on the PC.
- 2 Line up the ridges on the bottom of the drive with the two slots on the side or the bottom of the PC drive bay. Do not force the drive into the bay; it should slide easily into the bay.

NOTE: The drive can be easily inserted and removed from the bay without turning off the PC. This feature is sometimes referred to as *warm swappable*. 3 Slide the drive all the way into the drive bay until the drive is firmly connected to the internal power and USB port. With the PC turned on, the power indicator (B) on the front of the drive is lit when the drive is inserted correctly.



Locating the Drive and Assigning a Drive Letter

After you insert the drive into the PC, you can find the drive in My Computer. The operating system automatically assigns a letter to the drive. The assigned letter depends on the other storage devices connected to the PC.

To locate the drive:

- 1 Click **Start** on the taskbar.
- 2 Click My Computer.
- **3** Select the drive under Hard Disk Drives. The default name is HP Personal Media Drive.

You can permanently assign a drive letter to avoid the letter changing when you connect and disconnect this drive and other devices. Also, it is easier for a software program to locate the files on the HP Personal Media Drive if a drive letter is assigned. Some programs may not be able to find files if the drive has a new drive letter.

It is best to always remove your drive safely to avoid errors. See "Disconnecting the Drive" on page 43.

NOTE: To avoid multiple hard disk drives using the same drive letter, when connecting and removing the drives, assign the letter *Z* to the HP Personal Media Drive.

A Drive activity indicator

B Power on indicator

C HP Personal Media Drive guide ridges

light

light

To assign a drive letter:

- 1 Click Start on the taskbar.
- 2 Right-click My Computer.
- 3 Select Manage and then click Disk Management.
- 4 Right-click the HP Personal Media Drive.
- 5 Select Change Drive Letter and Paths.
- 6 Click **Change** and select a letter, and then apply the changes by clicking **OK**.

The default volume label of this drive is HP Personal Media Drive. You can rename the drive in the My Computer window by right-clicking the drive, selecting **Rename**, and then typing a new name. Rename the drive if you have more than one HP Personal Media Drive.

Using the Drive

To store files:

The best way to transfer files to the HP Personal Media Drive is to drag them from your local hard disk drive. This allows you to place files in specific folders. Refer to the following procedures for more detailed instructions about creating linked folders.

To play media files:

You can play media from an HP Personal Media Drive.

- 1 Click **Start** on the taskbar.
- 2 Click My Computer.
- 3 Double-click the HP Personal Media Drive icon to locate your media file.
- 4 Double-click the file. Most media files open in Windows Media Player.

To play music files:

You can play music files that are stored on the HP Personal Media Drive:

- 1 Click **Start** on the taskbar, click **My Computer**, and then double-click the **HP Personal Media Drive** icon.
- 2 Create a personal music folder by right-clicking the drive window and choosing **New** and then **Folder**. Type a name for your personal music folder.
- **3** Drag or copy your music files into this created folder.
- 4 Open Windows Media Player by clicking **Start**, **All Programs**, and then clicking **Windows Media Player**.
- 5 In the Windows Media Player window, click **Tools**, select **Options**, and then select the **Media Library** tab.
- 6 Click the Monitor Folders button.
- 7 Click Add to add a pathway to your HP Personal Media Drive.
- 8 Browse to locate your created music file folder on your HP Personal Media Drive, and then click **OK**.

9 Click **OK**, and then **OK** again to close the Options window. Now your music files on your HP Personal Media Drive appear in the Windows Media Player library when your drive is connected to the PC.

When you disconnect the drive, your music files may still appear in the Windows Media Player Library. To refresh your PC, open and close Windows Media Player. If that doesn't work, restart the PC.

Disconnecting the Drive

You can safely remove the drive when it is not active. When the amber activity light is blinking, the drive is active saving or transferring data. Removing the drive while the light is blinking may cause data loss or damaged files.

To disconnect the HP Personal Media Drive safely:

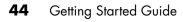
- 1 Close all programs that may be accessing your HP Personal Media Drive. Make sure that the activity light on the drive is off.
- 2 Double-click the **Safely Remove Hardware** icon in the system tray (on the Start taskbar). If this icon is hidden, click the arrows on the taskbar to display it. The Safely Remove Hardware window opens.



- 3 Double-click **USB Mass Storage Device** to locate your HP Personal Media Drive. USB Mass Storage Device may be listed twice. One may contain a memory card reader or other mass storage drive.
- 4 Select the **HP Personal Media Drive**, and then click **OK**. The name of the drive may be different if you renamed it, or it may appear as Generic Volume followed by the assigned drive letter.

A Safe to Remove Hardware message appears in the system tray, letting you know that the device is safe to disconnect.

- 5 Click Close.
- **6** Disconnect the drive by removing it from the drive bay.



Working with Digital Images

Working with Digital Images

You can connect a digital image source, such as a digital camera or a digital video camera, directly to the PC or through a docking station. Digital picture files you copy or download from the device appear in the My Pictures folder. You can copy digital picture files from the memory cards used by digital cameras and other digital imaging devices by using the memory card reader (select models only). Refer to "Using the Memory Card Reader" on page 29.

Using HP Image Zone Plus

Use the HP Image Zone Plus software program to manage your photos, scanned images, and video clips. It has all the tools you need for viewing, organizing, editing, printing, sharing, and protecting digital images.

To open HP Image Zone Plus:

• Click the **HP Image Zone Plus** icon on your desktop.

Or



• Click Start on the taskbar, choose All Programs, and then click HP Image Zone Plus.

- A Go to My Pictures button and mode tabs. Click the button labeled Go to
 My Pictures (or HP view) to toggle between the Microsoft My Pictures directory and the HP Image Zone Plus software.
- B Control area including view options, Print, Preferences, and Help buttons.
- **C** Work area, or *Gallery*, showing images on the PC.
- **D** Selection tray.

The HP Image Zone Plus window opens.



Click a mode tab at the top of the application window (**A**) to choose the desired work area, as described in the following list.

NOTE: Click the button labeled **Preferences** (**B**) to customize the HP Image Zone Plus and change some tab settings. For example, you can set HP Image Zone Plus to start any time you click the My Pictures folder.

My Images Click this tab to find, view, manage, and print single or multiple photos or video clips. At the top of the control area (**B**), click **All by date** to view all your images, or choose **Folders** to browse for images. To select the images that you want to print or use, simply click the image (or images) in the gallery (**C**), and it appears in the selection tray (**D**). The selection tray images appear under every tab. For more information, see "manage your images" in Help.

Edit Click this tab to make changes, such as crop and red eye removal, to the images and video clips you placed in the selection tray. For more information, see "edit your images" in Help.

Projects Click this tab to create or to print a project using the images in the selection tray. Projects include photo album pages, cards, and flyers. For more information, see "create projects" in Help.

HP Instant Share Click this tab to share photos with family and friends. Using HP Instant Share, you can create an e-mail, select the pictures to include, and then send your message. HP Instant Share creates thumbnails of your images that the recipients can view immediately in the message instead of opening a large e-mail attachment. To view the original photo, they can click on a thumbnail in their message, which links them to a secure Web page. On the Web page, they can see the photos, order prints (if the service is available in your country/region), save the images to their PC, and other tasks. For more information, see "share your images" in Help.

NOTE: You must be connected to the Internet to use the HP Instant Share feature.

Backup and Restore Click this tab to create backup discs of all the images on your PC or to restore images (either from a backup disc or from an automatically created digital negative).

Pictures to Go Click this tab to send photos to a mapped drive (such as a flash memory card or USB flash drive), or to synchronize photos on an HP iPaq, a handheld pocket PC. You can use the date, keyword, and album organization information to choose which photos to send, or choose the photos manually. Deleting the *keep current* option for synchronizing with an iPaq automatically updates the photos on the device every time it synchronizes.

For more information on using HP Image Zone Plus, click the **Help** link in the control area (**B**) of the program window.

Burning a label on a LightScribe media disc

You can burn the label before or after you burn the disc with data, music, or picture files. Labels can be a simple title and contents list or you can get more creative by adding backgrounds and images.

Creating disc labels with HP Image Zone Plus

Creating a label with LightScribe is a separate process from recording data, music, or picture files onto a disc. Depending on the LightScribe software you use, you can create a label before or after you burn files onto the disc.

NOTE: To burn the label, you must flip the disc over and place it label side down in the disc tray.

You can quickly create a label for a disc that contains your images you have organized and edited in the HP Image Zone Plus program.

NOTE: Any images you have not organized and edited in HP Image Zone Plus will not be backed up.

To burn a disc label in HP Image Zone Plus:

- 1 Click Start, All Programs, HP, HP ImageZone Plus, and then click HP ImageZone Plus again.
- 2 Select the **Backup and Restore** tab, and then click **Backup** on the left side of the window.
- 3 Click Print LightScribe label.
- 4 Insert disc, and click **OK**. The Sonic Express Labeler program opens.
- **5** Click **Text** and then enter your text for Title and Subtitle.
- 6 For each line of content description, click **New** and enter text for the information you want to include, and then click **OK**.
- 7 Click **OK** again when finished adding all the contents information.
- 8 Select a label template by clicking Layout and choosing a layout.
- 9 Select a background, if desired, by clicking **Background**. Select one of the provided backgrounds or click **More** to find one of your own images to use as a background.

NOTE: LightScribe creates a grayscale image similar to a black and white photograph.

10 When you are satisfied with the appearance of your label design, insert the LightScribe disc (label side down) into the disc drive tray and then click **Print**.

NOTE: If a message is displayed that the disc is not recognized, you may not have the correct media or you may need to flip the disc over to record your label. To record the label, the disc must be placed label side down in the disc tray.

- 11 From the Disc Label menu, select LightScribe 12cm Disc.
- **12** Select a Contrast Level and then click **OK** to begin burning the label. The disc is ejected when the label is complete.

The estimated time to complete the label displays, along with a progress bar to show you the time remaining. Printing a label can take up to 40 minutes, depending on how much data is on the label. You can continue to work on your PC while LightScribe is burning the label.

NOTE: A sudden bump or vibration of the PC during the labeling process may affect the quality of the label.

Creating a backup disc of your pictures with a LightScribe label

NOTE: This procedure does not allow you to edit your label. The label automatically contains a disc title, the name of the person logged in, and the date and time the label is recorded. This type of label takes about 3–7 minutes to print.

Create an incremental backup disc of images you have put into ImageZone.

- 1 Click Start, All Programs, HP, HP ImageZone Plus, and then click HP ImageZone Plus again.
- 2 Select the **Backup and Restore** tab, and then click **Backup** on the left side of the window.
- 3 Click Start backup.
- 4 Select Full backup or Incremental backup, and then click Next.
- 5 Select your media type, make sure the Use LightScribe Media check box is selected, and then click Next.
- 6 Select the LightScribe drive from the drop-down list, and then click **Next**.
- 7 Insert a blank disc, and then click Write disc. If you want to create a LightScribe label for your backup disc, insert a LightScribe disc with the label side up.
- 8 After the backup is complete, turn your disc over with the label side facing down, and then click **Write Label**.
- 9 When the label is complete, click **Next**, and then click **Finish**.



Playing CDs and DVDs

Your PC includes software that lets you play music CDs and DVD movies (select models only). This section describes how to:

- Play music CDs using Windows Media Player, or play music CDs or DVDs with iTunes.
- Play DVD movies using Windows Media Player or InterVideo WinDVD (select models only).
- Play video CDs (VCD) with InterVideo WinDVD or Windows Media Player.

Playing Music CDs with iTunes

You must have either a CD or DVD drive.

- 1 Insert the music CD into your CD or DVD drive.
 - The iTunes window opens. If the Audio CD wizard window opens, choose Play Audio CD using iTunes from the list. You may have to scroll down in the window to see iTunes.

Or

- If the iTunes window does not automatically open, click Start on the taskbar, choose All Programs, click iTunes, and then click iTunes.
- 2 The music CD automatically begins to play.

Or

Click the CD in the source list, and then click the **Play** button in the upper-left corner of the iTunes window. To play a particular song, double-click the song name (or track number).

NOTE: If you do not have an Internet connection, your CD is listed as Audio CD on the source list and your song names are listed as track numbers.

For more information on using iTunes, click the **Help** menu in the iTunes menu bar. For help on line, go to:

http://www.hp.com/music/

Playing CDs and DVDs with Windows Media Player

Your PC must have a DVD drive to play DVD movies.

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

Or

- If the Windows Media Player window does not automatically open, click **Start** on the taskbar, choose **All Programs**, and then click **Windows Media Player**.
- **2** To play the CD or DVD, use the playback buttons in the Windows Media Player window. To play a particular track, double-click the title (or track number) in the Playlist. You can also control playback by using the media control buttons on the keyboard (select models).

For more information on using Windows Media Player, click the **Help** menu in the Windows Media Player menu bar. If necessary, first display the menu bar by clicking the **up arrow** icon in the upper-left corner of the Windows Media Player window.

Playing DVD Movies with InterVideo WinDVD

The InterVideo WinDVD program uses a DVD drive (select models only) to play DVD movies.

NOTE: Most DVD movies are localized to geographical countries/regions. See "Using country/region codes" on page 54.

1 Insert a DVD disc into the DVD drive.

NOTE: On a double-sided DVD, read the text around the inner hole of the disc to determine which side (A versus B or Standard versus Widescreen) to play. Place the disc in the tray with the label facing up for the side you want to play.

2 Close the disc tray by gently pushing the tray into the PC.

The movie plays in its own resizable video window, and the WinDVD control panel appears. If the Play DVD movie wizard window opens, select **Play DVD movie using InterVideo WinDVD** from the list. You may have to scroll down in the window to see it.

Or

If the program does not automatically open:

- a Click Start, choose All Programs, choose InterVideo WinDVD, select InterVideo WinDVD Player, and then click InterVideo WinDVD.
- **b** Use the playback buttons on the control panel to view the movie.

NOTE: To see what a button does on the control panel, place the mouse pointer on the button; the button title appears onscreen.

NOTE: If you are playing a movie full screen and the WinDVD control panel is hidden, you can redisplay it by clicking anywhere in the video window.



To use the WinDVD control panel:

- To move the WinDVD control panel, place the mouse pointer on the panel (but not on a button), and drag it to the desired location on the screen.
- To resize the video window when it is not full screen, place the mouse pointer on a window corner and drag the border.

Or

Click the **Full Screen** button in the upper-right corner of the WinDVD control panel.



 For information on the InterVideo WinDVD software, refer to the online Help within the program by clicking the ? (question mark) icon in the WinDVD control panel.

Using country/region codes

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

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



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

WinDVD is not preset to a particular country/region — the country/region code of the first DVD movie you play determines your DVD country/region.

For example, if you play a DVD with a country/region 1 code, WinDVD sets the current country/region of your DVD player to 1. If you later play a DVD that is coded for a different country/region, WinDVD asks if you want to set this as the current country/region.

Playing Video CDs (VCD) with InterVideo WinDVD

- 1 Insert your video CD (VCD) into a DVD or CD drive.
- 2 Select Play DVD movie using InterVideo WinDVD, and click OK. Or

If the program doesn't open, click **Start**, choose **All Programs**, choose **InterVideo WinDVD**, select **InterVideo WinDVD Player**, and then click **InterVideo WinDVD**.

3 If you have a dual-language VCD, the sound of one language comes out of the left speaker and the other language comes out of the right speaker. Double-click the **Volume** icon on the taskbar.



- **4** Under **Volume Control Balance**, move the slider bar all the way to the right or to the left, depending on which language you want to hear.
- **5** Close the Volume Control window.

Playing Video CDs (VCD) with Windows Media Player 9

- 1 Insert your video CD (VCD) into a DVD or CD drive.
- 2 Select Play DVD movie using Windows Media Player, and click OK. Or

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

- 3 Click **File** on the menu bar at the top, and click **Open**. (If you do not see the menu bar, click the small circle with the up/down arrows in the upper-left corner of the window.)
- 4 Click the Look In drop-down arrow and select the drive that has the Video CD.
- **5** Double-click the **MPEGAV** folder.
- 6 Select Any File (*.*) from the Files of type drop-down list.
- 7 Select the file, and click **Open**.
- 8 If you have a dual-language VCD, the sound of one language comes out of the left speaker and the other language comes out of the right speaker. Click **View** on the menu bar, choose **Enhancements**, and select **Graphic Equalizer**.
- **9** Move the **Balance** slider bar all the way to the left or to the right, depending on which language you want to hear.
- **10** Close the Graphic Equalizer window.



Creating CDs and DVDs

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

NOTE: If your recording fails, manually select a slower recording speed (if available) each time you make a recording. Refer to the Help menu in your selected software program or your troubleshooting documentation for more information about selecting a slower recording speed.

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

If your PC has a CD-RW or DVD Writer (select models only), your PC has recording software and you can make your own music or data CDs.

Your PC has four recording software programs: iTunes, Windows Media Player, RecordNow!, and Windows XP. You copy or download music to their libraries and can then organize or copy the music files. You can copy Windows Media files that have a .wma extension, .mp3 files, or .wav files to a CD by using a CD Writer or DVD Writer drive. You can also use iTunes or Windows Media Player to copy music files to a portable device or memory card.

Use a CD-R disc if you are going to play the disc in a CD player, CD-ROM, CD-RW, DVD-ROM, or DVD+RW/+R, DVD-RW/-R, or double-layer DVD+R drive. CD-R discs are compatible with more players than CD-RW discs.

Using the Software Quick Reference Table

To open the DVD Writer/CD Writer software programs, click **Start** on the taskbar, choose **All Programs**, select the program folder, and then click the program to open the software. Refer to the following table to determine the best programs for the tasks you want to do.

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

Your PC comes with the following software programs. Use this table to find out what you can do within each program.

Software	With this program you can		
iTunes	 Play music CDs, MP3s, and other audio files. Record music files. Record a copy of an existing music or data CD to use on the PC. Organize digital files into a library for recording or listening. 		
Windows Media Player	 Play music CDs, MP3s, and other audio files. Play DVD movies. (Windows Media Player can play DVDs only if another DVD player program, such as InterVideo WinDVD, is installed.) Play Windows Movie Maker files. Record music files. Organize digital files into a library for recording or listening. 		
RealOne Player	 Play music CDs, MP3s, and other audio files. Play DVD movies. (RealOne Player can play DVDs only if another DVD player program, such as InterVideo WinDVD, is installed.) Play video CDs. Record music files. Organize digital files into a library for recording or listening. 		

NOTE: Some programs listed below may not be included with your PC model.

Software	With this program you can
Windows Movie Maker 2.0	 Import audio, video, and other media files from a videotape, an audiotape, a Web camera, or a television broadcast. Record audio and video files to create a video project that becomes a Windows Media source file with a .wmv extension. Edit and preview files. Send movie in an e-mail or to a Web server. Add music files (.mp3). Import audio files such as .mp3, .asf, or .wma; video files such as .ymv, .asf, .avi, or .mpg; or image files such as .jpg or .gif. Can create .avi and .wmv (Windows Media Video) files.
InterVideo WinDVD	Play DVD movies and video CDs (VCD).
	 Record data and music files. Record a copy of an existing music or data CD to use on the PC. Create customized music CDs from CDs in your collection, or from .wav, .mp3, or .wma files. These CDs can be played in your home or car stereo. Copy and share data files. Copy short video files. NOTE: Video files recorded with RecordNow! can be viewed on a PC, but not on home DVD video players.

Software	With this program you can
InterVideo WinDVD Creator	 Capture digital and analog video files directly from a digital video (DV) camera, VCR, or other analog capture device.
	NOTE: Your PC may not include an analog capture device.
and the second second	 Assemble movies by capturing video clips and scenes into a video project.
	• Edit your movies. Cut scenes and add music and sound effects, still images, text, video transitions, and voice-overs.
	 Preview movies during editing and before recording final files.
	 Create video files, export them to your hard disk drive or your digital video camera, and then play them on your PC.
	• Create video files, record them to DVDs and CDs, and then play them on some set-top DVD players.
	• Record video files to seven different formats.
muvee autoProducer	 Capture digital video files directly from a digital video (DV) camera.
-0-	 Assemble movies that include your video clips and pictures.
-12	• Add your favorite music to the background.
	• Add captions to the beginning and end of your movie.
	 Choose from a variety of styles to give your movie a unique look.

Creating Music CDs with iTunes

To create a music CD using iTunes:

- 1 Click **Start** on the taskbar, choose **All Programs**, select **iTunes**, and then click **iTunes**.
- 2 Click the Edit menu, and select Preferences.
- 3 Click the **Burning** tab, and choose **Audio CD** as the Disc Format.
- 4 Click the **Use Sound Check** check box if you would like all songs on the CD to play at the same volume level, and click **OK**.
- 5 Click the File pull-down menu, and select New Playlist.
- 6 Enter a name for your new playlist, and an empty playlist window opens.
- 7 Drag and drop selected songs from your source to your new playlist.
- 8 Click the Burn Disc button in the upper-right corner.

9 Insert a blank disc into your drive. Do not use a double-layer DVD+R disc, they are not compatible with this program.

10 Click OK.

For more information on using iTunes, click the **Help** menu in the iTunes menu bar or refer to your *iPod Warranty and Support Guide*.

Creating Music CDs with Windows Media Player

- 1 Click Start on the taskbar, choose All Programs, and then click Windows Media Player.
- 2 Click Copy to CD or Device.
- **3** Click the drop-down arrow in the **Items to Copy** field, and select the songs you want to burn to a CD.

If there are not any songs listed, insert a CD into your drive, and click **Copy from CD**. Follow the onscreen instructions.

4 Click the **Copy** button in the upper-right corner.

For more information on using Windows Media Player, click the **Help** menu in the Windows Media Player menu bar. If necessary, first display the menu bar by clicking the **Up arrow** icon in the upper-left corner of the Windows Media Player window.

Creating Data CDs Using Windows XP

Your PC has recording software to record data files, such as text files or digital pictures, onto CDs.

- 1 Click **Start** on the taskbar, and choose **My Documents** or the folder that has the files you want to copy.
- 2 Select the file or files you want to copy.
- 3 Click Copy to CD in the Tasks list.
- 4 Click **My Computer** in the Other Places list, and then double-click the disc drive you want to use.
- 5 Insert a blank disc into the drive.
- 6 Click **Write these files to CD** in the CD Writing Tasks list. The CD Writing Wizard window appears.
- 7 Click Next.
- 8 Click Finish.

Creating CDs with RecordNow!

NOTE: For more information about recording CDs, refer to the Help menu in the RecordNow! software program.

NOTE: The CD-RW, DVD Writer, or Double-Layer drive is available on select models only.

- 1 Click **Start** on the taskbar.
- 2 Choose All Programs.
- 3 Click Sonic RecordNow!, and then click RecordNow! again.
- 4 If you need to erase a disc (CD-RW, DVD+RW, or DVD-RW): Insert the disc, and select the **Home Screen** Tab, and then select **Erase Disc**.

Creating Music CDs with RecordNow!

RecordNow! creates *closed session* music CDs, which means you must record all music files on one CD in one recording session. Music files can be recorded repeatedly on a rewritable CD-RW disc, but all previously recorded files must be erased first. CD-R discs cannot be erased.

NOTE: CD-R discs play in most home and car stereos. CD-RW discs play only in some stereos.

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

Tips

You can use RecordNow! to create audio CDs to play in your car, on your home CD player, or on your PC.

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

- To play your music CD in a home or car stereo, it needs to be recorded as a music CD in CD Audio (CDA) format, not as a data CD.
- You must record all music files in one recording session because RecordNow! closes the CD after recording is complete. Music files can be recorded repeatedly onto a rewritable (CD-RW) disc, but all previously recorded music files must be erased first.

Creating CDs and DVDs 63

- As you add music files in the recording session, RecordNow! calculates and displays the amount of recording time available to record additional music files.
- You can't record song titles unless you make an exact copy of a music CD in your collection.
- If you try to record more than a standard CD can hold, RecordNow! displays a message warning you that all the tracks may not fit on your disc.

Creating CDs to Play in Your Car or Home CD Players with RecordNow!

- 1 Click Start, choose All Programs, Sonic RecordNow!, and then click RecordNow!.
- 2 Select the Audio Projects tab.
- 3 Select Audio CD for Car or Home CD Player.
- 4 Insert a music CD to view the tracks on your CD. Select View if you would like to look at another optical drive.

Or

Click **Find**, and then click either **Scan for Music** or **Browse** to find music files on your hard disk drive that you want to record.

5 Select the tracks you want to record, and then click Add.

NOTE: Press and hold Ctrl on your keyboard to select more than one track.

- 6 Click the **Burn** icon when you have added all the audio files to your music CD project.
- 7 Click Yes.
- 8 When prompted, insert a blank CD-R or CD-RW disc.
- 9 Click OK. It is best not to use the PC while recording.
- **10** Click **Done** when recording is complete.

Click the **Help** icon, and then select **RecordNow! Help** for more information about recording music CDs with the RecordNow! program.





Creating CDs to Play on Your PC

- 1 Click Start, choose All Programs, Sonic RecordNow!, and then click RecordNow!.
- 2 Click the Audio Projects tab.
- 3 Select Jukebox CD.



4 Insert a music CD to view the tracks on your CD. Or

Click **Find**, and then click either **Scan for Music** or **Browse** to find music files on your hard disk drive that you want to record.

NOTE: RecordNow! scans for all audio files, even the sounds from your operating system. If you don't want to display some of these sounds, you can select the **Options** icon (wrench), and then select **Audio**. Select **Hide audio files shorter than (in seconds)**, type the number of seconds, and click **OK**.



5 Select the tracks you want to record, and then click **Add**.

NOTE: Press and hold the Ctrl key to select more than one track.

6 Click the **Burn** icon when you have added all the audio files to your music CD project.



- 7 Click Yes.
- 8 When prompted, insert a blank CD-R or CD-RW disc. If the CD-RW disc is not blank, RecordNow! prompts you to erase it and then automatically begins writing to it when it is erased.

NOTE: If you want to play your music CD in your home or car stereo, use a CD-R disc. CD-RW discs may not play in some stereos.

- 9 Click OK. It is best not to use the PC while recording.
- **10** Click **Done** when recording is complete.

Click the **Help** icon, and then select **RecordNow! Help** for more information about recording music CDs with the RecordNow! program.

Storing Files on a DVD or CD

Unlike music CDs, data DVDs and CDs can be recorded in multiple sessions.

- 1 Click Start, choose All Programs, Sonic RecordNow!, and then click RecordNow!.
- 2 Select the Data Projects tab.
- 3 Insert a blank or appendable CD-R, CD-RW, DVD+R, DVD+RW, DVD-R, DVD-RW, or Double-Layer DVD+R (select models) disc into your drive, and then click Data Disc.
 - If the disc is blank, follow the onscreen instructions.

Or

• If the disc is full, insert a blank or another appendable disc.

Or

• If you are adding files to a disc, follow the onscreen instructions.

NOTE: An appendable disc means additional files can be added to it, if there is disc space available. Recorded audio CDs are closed session discs, which are not appendable.

- 4 To name your disc, select Volume Label, and then type a name over it. RecordNow! assigns a name based on the recording date if you don't type a name.
- **5** Add your data files to the file selection window:
 - Click the **Add Files and Folders** button, find and select your folders and files, and then click **Add**. Repeat this step until all files are added.

		10	68.4 MB Us	sec
S Volume Label		¥ G	00)	×
Name	Size	Туре	Path	^
RecordNow7 images		File Folder	C:\Docu	
🚞 My Webs		File Folder	C:\Docu	
🗎 My Videos		File Folder	C:\Docu	
My Pictures		File Folder	C:\Docu	
🛅 My Music		File Folder	C:\Docu	
🚞 My eBooks		File Folder	C:\Docu	
ideo2dvd.wcp	20 KB	WinDVD	C:\Docu	
🖻 Personal Folders(1)	32 KB	Office D	C:\Docu	
2.wcp	117 KB	WinDVD	C:\Docu	
1.wcp	144 KB	WinDVD	C:\Docu	
AV02122004_17305	2 MB	Movie fil	C:\Docu	*
<			>	
Add Files and Folders			Load Di	sc
Cancel Save)	!	<u>B</u> urn	l

P

• Drag your file from your desktop or from anywhere in Windows Explorer into the file selection window. Repeat this step until all files are added.

NOTE: You can rename your files in the file selection window by selecting and typing over the current name. This does not affect the original files on your hard disk drive.

- 6 Click the **Burn** icon when all of your files have been added.
- 7 Click **Done** when recording is complete.



Click the **Help** icon, and then click **RecordNow! Help** for more information about recording data files with the RecordNow! program.

Storing Data Files on Disc

When storing data files on a disc, it is important to note that:

 You can add new data files to a CD-R, DVD+R, and a DVD-R in a later recording session, until the disc is full. With DVD+R and DVD-R discs, you need to select the correct setting in RecordNow! to record files in a later session. To do this, insert your recorded DVD, open RecordNow!, click the **Options** icon (wrench), click **Data**, select the recording option you want, and then click **OK**.



- When you record files that have the same name as previously recorded files, RecordNow! updates the file and the previous version is overwritten.
- RecordNow! allows you to change file names and titles of files you want to record and names of files that were previously recorded.
- As you select data files to record to your disc, RecordNow! calculates and displays the amount of recording space used on your disc.

Copying a DVD or CD

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

RecordNow! allows you to make a copy of a music or data disc from your collection. You can't copy commercial DVDs because they are protected by copyright laws and are encoded to prevent illegal duplication.

To make a copy of a music or data disc from your collection:

- 1 Click Start, choose All Programs, Sonic RecordNow!, and then click RecordNow!.
- 2 Select the Data Projects tab.
- 3 Select Exact Copy.
- 4 Insert the CD or DVD you want to copy.

- 5 Click the Copy icon.
- 6 Insert a blank DVD or CD into the drive, and then click **OK**.



7 Click **Done** when the recording is complete.

Erasing a DVD or CD

You can use RecordNow! to erase music, data, or video files from rewritable DVDs and CDs, leaving almost all the disc space available for new recordings.

If you try to record a video or music file to a rewritable disc that has files on it, the recording program prompts you to erase the disc first.

- 1 Click Start, choose All Programs, Sonic RecordNow!, and then click RecordNow!.
- 2 Insert the DVD+RW, DVD-RW, or CD-RW you want to erase. If an Auto Play window opens, click **Cancel**.
- 3 Select the Home Screen tab and then Erase Disc.
- 4 Click **Yes** to confirm that you want to erase the disc.

Removing Files in RecordNow!

When removing files in RecordNow!, it is important to note:

- When you remove a recorded file from a data DVD+R, DVD-R, or CD-R, the disc space is lost and can't be used for new recordings.
- You can't remove music files from previously recorded music CDs, but you can remove music files from the File Selection window in RecordNow! before you record the files to your disc.
- If you delete files from the File Selection window in RecordNow! before the disc is recorded, available disc space is not affected. If you remove a file from a DVD+R, DVD-R, or CD-R after the disc is recorded, available disc space is lost.

Removing Files from a Recorded Data Disc

RecordNow! can't erase files from recordable (record once) DVDs or CDs, but files that have been previously recorded can be removed. When you remove a recorded file from a data DVD+R, DVD-R, or CD-R, the disc space is lost and can't be used for new recordings.

To remove data files from a recorded DVD or CD:

- Click Start, choose All Programs, Sonic RecordNow!, and then click 1 RecordNow!
- 2 Select the **Data Projects** tab.
- **3** Insert the disc from which you want to remove files. If an Auto Play window opens, click **Cancel**.
- Click Data Disc. 4
- You must have at least one file on your data disc to re-record it. Select the file you want to remove, and then click the **Remove** icon in the upper-right corner.
- 6 Click Yes.
- 7 Click the **Burn** icon to save your data disc without the files you removed.



8 Click **Done** when the recording is complete.

Archiving Files on a DVD or CD

- Click Start, choose All Programs, Sonic RecordNow!, and then click RecordNow!
- 2 Select the **Backup Projects** tab.
- Select File Archive. 3
- Insert a blank CD or DVD into the drive. 4
- Place a check mark in the **Changed since** box to limit the scan to files that have been changed since the last time you completed a File Archive.
- 6 Add your files to the Archive window:
 - Select one or more categories from the list on the left, and click **Scan**. RecordNow! scans your hard disk for files related to the category and moves them to the Archive window on the right.

Or

- Drag files from the Windows Explorer to the Archive window.
- 7 Click the **Burn** icon when all of your files have been added. If the files do not fit on one disc, File Archive asks you for additional discs.



Click **Done** when recording is complete.

Creating an Image File

RecordNow! can take all the files from a CD or DVD and convert them into a single file called an *image file*. You can use the image file to reproduce the original disc. This is often used when you need to make multiple copies of the same disc.



Saving an Image

- 1 Click Start, choose All Programs, Sonic RecordNow!, and then click RecordNow!.
- 2 Select the **Backup Projects** tab.
- 3 Select Save Image.
- 4 Insert the source disc into the drive.
- 5 Click **Browse** to set the destination and name of the image file.
- 6 Click the **Save** icon to create the image file.

Burning an Image

- 1 Click Start, choose All Programs, Sonic RecordNow!, and then click RecordNow!.
- 2 Select the Backup Projects tab.
- 3 Select Burn Image.
- 4 Click the **Browse** button to locate your saved image file.
- 5 Click the **Burn** icon.
- **6** Insert a blank recordable CD or DVD into the drive.
- 7 Click **Done** when recording is complete.

Recording Video Files

Video quality depends on the quality of the source files, the PC speed, and its graphics processing ability. Refer to the "Recording VHS analog video direct to DVD (select models only)" section of this guide.

NOTE: Your DVD Writer or CD Writer drive will not copy commercially available DVD movies. Most commercial DVDs are encoded to prevent unauthorized duplication.

Using Disc Labels



WARNING: When labeling your DVDs, do not use sticky labels. They can cause the DVD to play erratically. Instead, write on the DVD with a felt-tip pen to label it.

Disc Labeling with LightScribe

LightScribe (select models only) is a direct disc labeling technology providing you a simple way to burn precise, silk-screen quality labels. It combines the CD or DVD drive of your PC with specially coated discs (sold separately) and enhanced disc-labeling software.

A LightScribe-enabled CD or DVD disc drive uses the optical laser in the drive to burn a label onto a thin dye coating on the label side of the disc. There is no ink to smear or paper to curl, and there are no adhesives to loosen.

LightScribe media is identified by the LightScribe logo on the retail packaging and on the inner hub area of the disc itself. Your PC comes ready to work with many versions of LightScribe media; however, as new media versions are introduced you will need to update the driver software for your LightScribe-enabled CD or DVD drive. Get driver updates from the HP Support Web site.

Lightscribe requirements

Burning a label with LightScribe requires three things:

- LightScribe-enabled DVD drive
- LightScribe software
- LightScribe discs (sold separately)

Burning a label on a LightScribe media disc

You can burn the label before or after you burn the disc with data, music, or picture files. Labels can be a simple title and contents list or you can get more creative by adding backgrounds and images.

You can design and burn the label with InterVideo Disc Label or Sonic Express Labeler.

- 1 Click Start, All Programs, InterVideo DiscLabel, and then click InterVideo DiscLabel again.
- 2 Select a template style from the Template menu, and click Apply.
- 3 Double-click the title text box, if present, or click Add Text.
- 4 Type the text into the Rich Text Edit window, and then click OK.
- **5** With the text box selected (click the box once), use the Text toolbar to modify the font, color, and other text properties.
- 6 Double-click the list text box, if present, or click **Add List** to add a list of contents to the label.
- 7 Click Add to add a row to the list.
- 8 Move the cursor over a list row item (Title, Artist, Length), and double-click to edit the item.
- 9 Click **OK** when you are finished with the list.

- **10** Click **Edit Background**, and then click **Change Background** to add a background image to the label.
- Follow the onscreen instructions to browse to and select an image file. InterVideo Disc Label supports .jpg, .bmp, and .png image files.

NOTE: LightScribe creates a grayscale (monochrome) image similar to a black and white photograph.

- 12 Click Add Image and follow the onscreen instructions to browse to and select an image file. InterVideo Disc Label supports .jpg, .bmp, and .png image files.
- **13** Click and drag the image to the area you want it to appear on the label. You can resize the image by clicking and dragging the sides or corners of the image.

NOTE: To remove an image from the label, click the image, and then press Delete on your keyboard.

14 When you are satisfied with the appearance of your label design, click LightScribe Print. Click Print, insert the LightScribe media (label side down) in the disc tray, and then click OK.

To burn a label with Sonic Express Labeler:

1 Click Start, All Programs, Sonic RecordNow!, and then click Express Labeler.

NOTE: You can open the Express Labeler from within RecordNow! by clicking **Label Disc**.

- 2 Select the **Project** area and make sure that **Disc Label** is selected.
- 3 Click **Text**, and then enter text for the Title and Subtitle.
- **4** For each line of content description, click **New** and enter text for the information you want to include, and then click **OK**.
- 5 Select a label template by clicking Layout and choosing a layout.
- 6 Select a background, if desired, by clicking **Background**. Select one of the provided backgrounds, or click **More** to find one of your own images to use as a background.

NOTE: LightScribe creates a grayscale (monochrome) image similar to a black and white photograph.

- 7 When you are satisfied with the appearance of your label, insert the LightScribe media disc (label side down) into the disc drive tray, and then click Print.
- 8 From the Disc Label menu, select LightScribe 12cm Disc.
- 9 Select a Contrast Level, and then click **OK** to begin burning the label.

Creating a LightScribe label after burning a disc with iTunes

iTunes works with Sonic Express Labeler to allow you to burn labels on a data CD or audio CD. The playlist you create in iTunes to burn a disc is automatically imported into Express Labeler so that this information is available for you to use on your LightScribe label. To use Express Labeler from iTunes, the data or music tracks in the playlist you are using must fit on a single CD.

- 1 Click Start, All Programs, iTunes, and then click iTunes again.
- **2** Burn a data or audio CD with iTunes. When the burning process is complete, click **Yes** on the Create LightScribe Label window.
- **3** In the Step 1: Select Project area, make sure that **Disc Label** is selected.
- 4 Select a label template by clicking Layout and choosing a layout. The various layouts show different amounts of playlist information. Some show only the playlist title and others show the playlist title and track names. You can edit playlist information by clicking Text to open the Edit Text window.
- **5** Select a background, if desired, by clicking **Background**. Select one of the provided backgrounds or click **More** to find one of your own images to use as a background.

NOTE: LightScribe creates a grayscale (monochrome) image similar to a black and white photograph.

- 6 When you are satisfied with the appearance of your label design, insert the LightScribe disc (label side down) into the disc drive tray and then click **Print**.
- 7 From the Disc Label menu, select LightScribe 12cm Disc.
- 8 Select a Contrast Level and then click **OK** to begin burning the label.

The estimated time to complete the label displays, along with a progress bar to show you the time remaining. You can continue to work on your PC while LightScribe is burning the label.

Setting Automatic Recording Options

When you first insert a blank CD into your DVD Writer or CD Writer drive, you may see options for the type of disc you insert.

NOTE: When you insert a blank DVD into your DVD Writer/CD Writer drive, an options window does not appear. You must open the program you want to use with your DVD, and then perform an action.



For example, if you insert a blank CD-RW disc, you see options such as:

- Open writable CD folder using Windows Explorer.
- Create a disc using RecordNow!.
- Take no action.

The options displayed depend on what software is on the PC.

You can choose to have a specific action occur automatically each time you insert a blank CD by selecting the **Always do the selected action** check box.

If you later decide that you want to change the option you have set:

- 1 Click Start.
- 2 Click My Computer.
- **3** Right-click the **DVD Writer** or **CD Writer drive** icon (may be labeled DVD/CD-RW), and select **Properties**.
- 4 Click the AutoPlay tab.
- 5 Click Select an action to perform, select an action, and then click OK. Or

Click Prompt me each time to choose an action, and then click OK.

If this window of options does not appear, you can click **Start**, **My Computer**, right-click the **DVD Writer** or **CD Writer drive** icon (may be labeled DVD/CD-RW), and then select one of the available options.

You can also open a program before you insert a disc. After the program is opened, select an action and follow the onscreen instructions within the program.

If the option you want is not listed, you can select **Take no action**, and then click **OK**. The window closes, and you can then manually select a different option through the Start menu on the desktop.

Here are some of the other options you can choose to view the files on the disc you inserted:

- Click Start, My Computer, and then right-click the DVD Writer/ CD Writer drive icon and choose Explore.
- Click Start, My Computer, and then double-click the DVD Writer/ CD Writer drive icon.

Using Compatibility Information

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

• The CDs that you create play in most home and car stereos and in most computer DVD-ROM and CD-ROM drives.

NOTE: CD-R discs are compatible with more home and car stereos than CD-RW discs.

• The DVDs that you create are compatible with some DVD video players and with most computer DVD-ROM drives.

Your DVD Writer/CD Writer drive is able to read from and record to almost every type of optical disc. Writing speed rates for the DVD Writer/CD Writer drive allow quick recording times.

Identifying Compatible File Formats

Your DVD Writer/CD Writer drive can read and record the following audio formats:

- WAV, MP3, WMA, and CDA for CDs
- WAV, MPEG-1, MPEG-2, WMA, and Layer 2 files for DVDs

Your DVD Writer/CD Writer drive can read and record the following video formats:

- MPEG-1 and MPEG-2
- AVI and WMV

Using the Disc Quick Reference Tables

You can use DVD+RW, DVD+R, DVD-R (select models only), DVD-RW (select models only), double-layer DVD+R, CD-RW, and CD-R discs in the DVD Writer/CD Writer drive.

NOTE: Some PCs come with the Double-Layer DVD-Writer drive support single-layer and double-layer DVD media. Double-Layer technology gives you greater capacity and allows you to store up to 8.5GB* of data on double-layer DVD+R media.

Double-layer is a new technology. The double-layer media created may not work with some home DVD players and computer DVD-ROM drives.

*GB is defined as 1 billion bytes.

For the latest disc compatibility information for your PC, check the following Web site: **http://www.hp.com**

Using double-layer DVD+R discs

- Can only be written to with a Double-Layer DVD-Writer drive (select models only).
- Can't be erased or written to again.
- Hold up to 8.5GB the equivalent of 12 CDs.
- Record up to 4 hours of video files, depending on the quality of the recording.
- Can be used to back up your hard disk drive files.

Using DVD+R and DVD-R discs

- Can't be erased or written to again. Some programs, like RecordNow!, allow you to record data in multiple sessions until the disc is full.
- Can't edit a DVD+R or DVD-R that has been recorded as a DVD movie.
- Hold up to 4.7GB the equivalent of seven CDs.
- Record up to 2 hours of video files, depending on the quality of the recording.
- Compatible with more DVD drives and players than a DVD+RW or DVD-RW disc.
- Can be used to back up your hard disk drive files.

Using DVD+RW and DVD-RW discs

- Can be erased and rewritten.
- Can hold up to 4.7GB equivalent of seven CDs.
- Record up to 2 hours of video files, depending on the quality of the recording.
- Can be used to back up hard disk drive files that you can update periodically.

Using CD-R discs

- Can't be erased or written to again. Some programs, like RecordNow!, allow you to record data in multiple sessions until the disc is full.
- Can hold up to 80 minutes of music files, or up to 99 tracks.
- Can hold up to 700MB of data, depending on the CD.
- Can be used to create storage discs for your hard disk drive files.

Using CD-RW discs

- Can be erased or rewritten.
- Can hold up to 80 minutes of music files, or up to 99 tracks.
- Can hold up to 700MB of data, depending on the CD.
- Can be used to create storage discs for your hard disk drive files.

Video recording length

Disc type	Video quality setting			
	Good	Better	Best	
8.5GB Double-Layer DVD+R	325 minutes	217 minutes	108 minutes	
4.7GB DVD+RW, DVD+R, DVD-RW, DVD-R	180 minutes	120 minutes	60 minutes	
700MB CD-RW, CD-R	27 minutes	18 minutes	9 minutes	
650MB CD-RW, CD-R	24 minutes	16 minutes	8 minutes	

NOTE: CD-R discs are compatible with more home and car stereos than CD-RW discs.

Disc feature and compatibility

Disc	File type	Can be recorded onto	Plays in PC	Plays in home or car stereo	Plays in home DVD player
CD-ROM	Data	No	Yes	No	No
	Music	No	Yes	Yes	Varies by player
CD-R	Data	Yes	Yes	No	No
	MP3 Music	Yes	Yes	Varies by player	Varies by player
CD-RW	Data	Yes	Yes	No	No
	MP3 Music	Yes	Yes	Varies by player	Varies by player
DVD-ROM	Data	No	Yes	No	No
	DVD movie	No	Yes	No	Yes
DVD+R and DVD-R	Data	Yes	Yes	No	No
	DVD movie	Yes	Yes	No	Varies by player
Double- Layer DVD+R	Data	Yes	Varies by player	No	Varies by player
	DVD movie	Yes	Varies by player	No	Varies by player
DVD+RW and DVD-RW	Data	Yes	Yes	No	No
	DVD movie	Yes	Yes	No	Varies by player
VCD	DVD movie	No	Yes	No	Varies by player

Optical drive quick reference

Optical drive can	CD- ROM	CD- RW	DVD- ROM	DVD+RW/+R DVD-RW/-R	Double- Layer	Combo CD-RW/ DVD
Read CDs, CD-Rs, and CD-RWs	•	•	•	•	•	•
Read DVDs			•	•	•	•
Read data on a CD	•	•	•	•	•	•
Play music	•	•	•	•	•	•
Record data or music to disc for storage or backup		•		•	•	•
View DVD movies			•	•	•	•
Record DVD movies				•	•	
Play PC games	•	•	•	•	•	•

Creating Movies Using WinDVD Creator

WinDVD Creator allows you to capture (copy), edit, and record your home movies in four easy steps by using the InterVideo WinDVD Creator software program (select models only).

Capture: Take videos and pictures from digital camcorders, analog video devices, and Webcams, and then save them to your hard disk drive.

Edit: Arrange and trim your files. Add titles, transition effects, images, and audio.

Add menu: Add a menu with chapters to your DVD.

Make Movie: Finalize your project by burning your movie to a DVD.

For more information on WinDVD Creator, click the **Help** menu in the WinDVD Creator menu bar.

Getting started

- 1 Click Start, choose All Programs, InterVideo WinDVD, InterVideo WinDVD Creator, and then click InterVideo WinDVD Creator again.
- **2** Select one of the menu options:
 - **Start New Project:** Opens the Edit section for you to begin creating a new project.
 - **Open existing project:** Opens the Open window for you to select an existing project.
 - Archive Video to DVD: Opens a wizard for you to bypass the hard disk drive and record directly from your camera to a recordable DVD or CD.
 - Edit Existing Video File: Opens the Import Media Files window for you to select an existing video clip.
 - Record to Video File: Opens the Capture section for you to capture media.
 - CD Labeling: Opens the InterVideo Disc Label program for you to design and create your own disc labels.

Using the Preview window

The Preview window is located in the upper-left corner. It behaves differently for each task.

Capture: Displays what your capture device is viewing.

Edit: Plays back the selected video or displays the selected image.

Add Menu: Displays what your menu and buttons look like.

Using the Media Library

The Media Library contains your video clips, images, and audio tracks. To import existing media files from your hard disk or CDs into your Media Library, click the **Drag and Drop** button.

Capture: Located in bottom-right corner. Contains your video clips, images, and audio tracks.

Edit: Located in upper-right corner. Contains your video clips, images, and audio tracks.

Add Menu: Located in upper-right corner. Contains menu themes, video backgrounds, audio tracks, images, buttons, chapter layouts, and chapter thumbnails.

Using the Storyboard

The Storyboard is located on the bottom of the Edit and Add Menu area. The Storyboard can be displayed in either Menu Picker or Timeline mode. Use the Storyboard to organize your media and add special effects such as titles, transition effects, audio tracks, and video filters.

Identifying requirements for capturing video

You can copy (capture) video files to your hard disk drive by using the WinDVD Creator program. Among the devices supported by WinDVD Creator are analog video devices, digital camcorders, and Web cameras. Use your composite or S-video inputs to capture video from a VCR, or an analog video camera.

To capture video files, you need to:

- Connect your video source device properly.
- Turn your device on and set it to playback mode.
- Make sure the program you want to use can detect your digital or analog device. In the WinDVD Creator capture screen, click your input source, click the Wrench icon, select the Device Control tab, and select your source from the Video Source drop-down menu.

NOTE: You may need to turn your device off and on again for the program to detect it.

If your PC has multiple video devices connected, they all appear on the Capture screen. Select the video source you would like to use.

Capturing digital camcorder video

- 1 Click Start, choose All Programs, InterVideo WinDVD, InterVideo WinDVD Creator, and then click InterVideo WinDVD Creator again.
- 2 Click the Record to Video File button.
- 3 Connect your digital camcorder to your PC.
- **4** Make sure the output from your digital camcorder appears in the Preview window. If it does not, double-check your connections and make sure your camera is in playback mode.
- 5 Click the **Play** button to preview your video file before you record it.
- 6 Find your starting point in the video, and click the **Pause** button.
- 7 Click the **Record** button.
- 8 Enter a file name, click **Save**, and recording begins.
- **9** Click the **Stop** button to stop capturing your video file. Your video file is processed and automatically saved to the My Videos folder on your hard disk drive. The video clip appears in the Media Library portion of the screen.
- **10** To play back your captured video, click the file in the Media Library, and click the **Play** button in the Preview window.

Capturing Web camera video

- 1 Click Start, choose All Programs, InterVideo WinDVD, InterVideo WinDVD Creator, and then click InterVideo WinDVD Creator again.
- 2 Click the **Record to Video File** button.
- **3** Connect your Web camera to your PC.
- **4** Make sure the output from your Web camera appears in the Preview window. If it does not, double-check your connections.
- **5** Click the **Record** button.
- 6 Enter a file name, click **Save**, and recording begins.
- 7 Click the **Stop** button to stop capturing your video file. Your video file is processed and automatically saved to the My Videos folder on your hard disk drive. The video clip appears in the Media Library portion of the screen.
- 8 To play back your captured video, click the file in the Media Library, and click the **Play** button in the Preview window.

Capturing analog video

- 1 Click Start, choose All Programs, InterVideo WinDVD, InterVideo WinDVD Creator, and then click InterVideo WinDVD Creator again.
- 2 Click the **Record to Video File** button.
- **3** Connect your VCR, television, or other input device to your composite or S-video inputs.
- 4 Click your input source, click the **Wrench** icon, and select the **Device Control** tab.
- **5** Select your composite or S-video source in the Video Source drop-down menu. Click **OK**.
- 6 Click the **Record** button.
- 7 Enter a file name, click **Save**, and recording begins.
- 8 Click the **Stop** button to stop capturing your video file. Your video file is processed and automatically saved to the My Videos folder on your hard disk drive. The video clip appears in the Media Library portion of the screen.
- **9** To play back your captured video, click the file in the Media Library and click the **Play** button in the Preview window.

Capturing a still image

1 Pause your input device on the position for which you would like an image.

- 2 Click the **Capture Still Image** button under the Preview window.
- **3** The image is saved to the My Pictures folder on your hard disk drive.

Editing video files in WinDVD Creator

After you capture video files, use the WinDVD Creator Edit module to create your customized video file. In Edit mode you can add:

- Video files
- Still images
- Audio and music tracks
- Transition effects
- Title effects
- Video filters

To edit your video files:

- 1 If your project is already open, click the **Edit** button, and skip to step 4.
- 2 Click Start, choose All Programs, InterVideo WinDVD, InterVideo WinDVD Creator, and then click InterVideo WinDVD Creator again.
- 3 Open a project by selecting either the Start New Project or the Open Existing Project button.

- **4** If you have already captured video for this project, drag and drop the video files from the Media Library to the Storyboard. If you have video files on your hard disk drive you would like to add to this project, click the **Drag and Drop** button.
- **5** If you do not like the sequence of the video files, drag and drop the files in the Storyboard to change the sequence.

Adding images

- 1 Click the Image Library icon.
- 2 Click the **Drag and Drop** button to open the My Pictures folder on your hard disk drive.



4 Drag and drop images from the Image Library to your Storyboard.

Click the following icons to edit still images and video files:

Storyboard icor	15		
Group	Groups multiple images into one on the Storyboard.		
Expand	Expands grouped images so they are all displayed on the Storyboard.		
Save Movie	Records output directly to a DV camcorder. Or writes output to a file in your selected format.		
Edit Clip	 Trims a video clip: Double-click a video clip on the Storyboard. Adjust the sliders to cut off video at the beginning or the end. 		
Merge Clip	Merges a clip with the next clip.		
Split Clip	 Splits a video clip: Click the video clip you want to split. Click the Play button in the Preview window. Click the Split Clip icon at the point of the clip you want split. 		

Adding audio effects

- 1 Click the Audio Library icon.
- 2 Click the **Drag and Drop** button to open the My Music folder on your hard disk drive.



PAN

- **3** Select the audio files from your hard disk you want to add to your audio library, and click **Open**.
- **4** Drag and drop the audio files from the Audio Library to the video file of your choice.
- **5** A musical note icon appears in the bottom right corner of the video file to which the audio track was assigned.
- **6** To keep the audio track running for more than one video file, switch from Storyboard mode to Timeline mode. Drag the music track across more than one video file.

Adding transition effects

- 1 Click the Transition Effects icon.
- **2** Drag and drop a transition effect between the two video files you would like the effect to appear.





Adding title effects

- 1 Click the **Title Effects** icon.
- 2 Drag and drop a title effect either in between video files or to a video file on the Storyboard.
- 3 Type the text you would like to appear on your title screen.
- 4 If you inserted the title effect in between video clips, click on the **Image Setting** icon to adjust the length of time you want the title clip to appear.

A capital *T* appears in the bottom-right corner of the title clip on the Storyboard.

Adding video filters

- 1 Click the Video Filters icon.
- **2** Drag and drop a video filter to the video of your choice.

Adding a menu

The Add Menu section turns your project interactive. It creates a menu theme and breaks your project into chapters. The menu theme can be your own images and music or a custom theme that comes with WinDVD Creator.

- 1 If your project is already open, click the **Add Menu** button.
- 2 Click Start, choose All Programs, InterVideo WinDVD, InterVideo WinDVD Creator, and then click InterVideo WinDVD Creator again.

- 3 Select the **Open existing project** button, and select your project.
- 4 Click the Add Menu button.
- **5** Click the Media Library icons to add a menu theme, chapters, buttons, audio tracks, and images to your DVD.
- 6 Click the Storyboard icons to edit the chapters and menu items.

Making a movie

This is the final step of your DVD project. You select a format, the type of TV system, and volume name.

- 1 If your project is already open, click the **Make Movie** button, and skip to step 5.
- 2 Click Start, choose All Programs, InterVideo WinDVD, InterVideo WinDVD Creator, and then click InterVideo WinDVD Creator again.
- 3 Select the **Open existing project** button, and select your project.
- 4 Click the Make Movie button.
- **5** Insert a blank recordable DVD or CD into your drive.
- **6** Choose one from each of the following sections (order of selections may differ):

Select	То:		
Burn to Disc	Select where you would like the file to be recorded:		
	 Burn to Disc: Use this to burn directly to a DVD or CD. Write content to hard disk for later burning: Use this to create the file on your hard disk drive. 		
Select Device	Select the device that contains the blank recordable DVD or CD.		
Burning Speed	Select the speed to use when recording your project.		
Format	Select one of the formats to record your project.		
TV System	Select either NTSC or PAL for your TV system. The NTSC format is used in North America, and the PAL format is used in European and Asian countries/regions.		
Volume Name of Disc	Enter a volume name for your disc (optional).		

- 7 Click Start.
- 8 Click OK.

Recording VHS analog video direct to DVD (select models only)

To record VHS analog video direct to DVDs:

- Connect your VCR or other analog video source to your composite or S-video input.
- 2 Insert a blank recordable DVD or CD.
- 3 Click Start, choose All Programs, InterVideo WinDVD, InterVideo WinDVD Creator, and then click InterVideo WinDVD Creator again.
- **4** Select the **Archive Video to DVD** button, and follow the onscreen instructions.

Converting recorded TV to MPEG-2 format (Europe only)

- 1 If your project is already open, click the **Edit** button, and skip to step 4.
- 2 Click Start, choose All Programs, InterVideo WinDVD, InterVideo WinDVD Creator, and then click InterVideo WinDVD Creator again.
- 3 Open a project by selecting either the **Start New Project** or the **Open Existing Project** button.
- 4 Click the Save Movie icon, and select Output to File.
- 5 Select a GQ, HQ, SP, LP, or EP format, and click OK.
- 6 Enter a file name and click **Save**.

Getting Help

Finding Onscreen Guides

The Documentation folder (select models only) in the All Programs menu contains any onscreen guides included with your PC.

To see the items in the Documentation folder:

- 1 Click **Start** on the taskbar.
- 2 Choose All Programs.
- 3 Choose Documentation.
- 4 Click an item to view it or use it.

NOTE: If there are no guide titles listed in the folder, your PC has no onscreen guides.

Finding Guides on the Web

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

To view information for your PC, go to the Support Web address listed in the *Warranty and Support Guide*, and search for your product name and number. The product number is on the lower front of the PC chassis or is inside the CD storage area.

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

Using the Onscreen Help and Support Center

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

To open the Help and Support Center:

• Press the Help button (select models only) on your keyboard.

Or

• Click Start on the taskbar, and choose Help and Support.

Using Instant Support

When you need assistance to solve a PC-related problem, use HP Instant Support (select models only). With HP Instant Support, you can run tests or submit a problem for help over the Internet. When you submit a problem, you communicate over the Internet with a Support analyst who works with you on solving the problem.

To start HP Instant Support:

- 1 Click Start on the taskbar.
- 2 Click Help and Support.
- 3 Click Connect to Customer Support.
- 4 Click Start a New Request.
- **5** Follow the onscreen instructions to run a test or submit a problem. (Your PC must be connected to the Internet to submit a request.)

Using Updates from HP

Updates from HP (select models only) is an Internet-based service provided by HP to bring you important information for your PC:

- Product notices
- System updates
- Tips
- Special offers for your PC

Messages arrive while you're connected to the Internet and may display an alert or a notice on your desktop. View messages as they arrive, or read them later.

Most Support updates delivered by Updates from HP messages are also available to you through the Support Web site under the information for your PC model.

Getting messages

After you view or close a message, it will not automatically display again.

To read a previously received message, open Updates from HP:

- 1 Click **Start** on the taskbar.
- 2 Choose All Programs.
- 3 Choose PC Help & Tools.
- 4 Choose Updates from HP.
- 5 Click Updates from HP again.

Updates from HP opens and lists the message titles. To read a message, double-click the message title in the window. You can close this window, and Updates from HP remains active.

Turning off messages

NOTE: You cannot receive Updates from HP messages, including important Support messages that may be critical to the operation of your PC, while the service is off.

To turn off the Updates from HP Service:

- 1 Click **Start** on the taskbar.
- 2 Choose All Programs.
- 3 Choose PC Help & Tools.
- 4 Choose Updates from HP.
- 5 Click Disable Updates from HP.

The service is turned off until you re-enable it.

Re-enabling messages

When you re-enable the Updates from HP Service, the service runs whenever you are connected to the Internet, and you automatically receive messages as they become available.

To turn on the service:

Double-click the **Re-enable Updates from HP** icon on the desktop.

Or

- 1 Click **Start** on the taskbar.
- 2 Choose All Programs.
- 3 Choose PC Help & Tools.
- 4 Choose Updates from HP.
- 5 Click Re-enable Updates from HP.

Using PC Help & Tools

The PC Help & Tools folder (select models only) in the All Programs menu contains special utilities for PC owners such as support information and programs.

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

- 1 Click **Start** on the taskbar.
- 2 Choose All Programs.
- 3 Choose PC Help & Tools.
- 4 Click an item to view it or use it.

Index

Α

adding a menu 84 adding images 83 antivirus, installing program 5 appendable disc 65 audio wizard 18 automatic recording options setting 72

B

burning CDs 57 buttons customizing 9 E-Mail 8 Help 7 HP 7 Mute 8 On 3 Power 3 Search 8 special keys 7 Standby 7 user 7

С

cable tunnel 20, 24 cables, for connecting a TV 33 camera docking station 20 capturing requirements 80 video and images 79 card reader, memory 29 carpal tunnel syndrome 1 chassis, symbols 2 components 3 connecting a TV 33 multi-channel speakers 3-connectors 12 multi-channel speakers 6-connectors 15 connectors cable tunnel 20, 24 PC back 2 symbols on chassis 2 converting recorded TV 86 copying a DVD or CD 66 country/region codes 54 creating CDs 57 creating labels 47 customizing keyboard buttons 9

D

desktop 6 digital images, managing 45 digital picture 29, 45 work area 46 disc CD-R 76 CD-RW 76 compatible file formats 74 double-layer DVD+R 75 DVD+R75 DVD+RW 75 DVD-R 75 DVD-RW 75 feature and compatibility 77 quick reference 74 disc and drive compatibility information 74

disc labels 69 disconnecting TV 38 Documentation folder 87 double-layer DVD+R discs 75 double-sided DVD 52 drive HP Personal Media Drive 39, 42 DVD player, multi-channel audio 13

E

edit video files 82 e-mail keyboard button 8 equalizer Sound Effect Manager (6-connector) 17 erasing a DVD or CD 67

F

file formats 74

G

gallery 46

н

hard disk drive connecting an HP Personal Media Drive to the PC 40 Help onscreen Help and Support 88 Help and Support 88 Help and Support Center 5 Help button 7 HP Image Zone Plus 45 gallery 46 tab definitions 46 HP Instant Support 88 HP keyboard button 7 HP Organize 6 HP Personal Media Drive 39 activity and power lights 41 automatic on and off feature 40 disconnecting the drive 43 inserting a drive 40 location and drive letter 41 storing files 42

image files 68 adding 83 installing software programs 5 Internet finding an ISP 4 keyboard button 8 organizing destinations 6 signing up with an ISP 4 iPod, connecting 20 iTunes 60 creating music CD 60 features 58 playing music CDs 51

Κ

keyboard customizing buttons 9 types of buttons 7 using 7

L

LightScribe 47, 70 backup disc 48 InterVideo DiscLabel 70 iTunes 72 requirements 70 Sonic Express Labeler 71

M

manuals, on the Web 87 memory card reader card types 29 using 29 microphone 6-connector, using 17 using with multi-channel speakers 13 monitor 3 Multi-channel Sound Manager 12 multi-channel speakers 11 connecting 3-connectors 12 connecting 6-connectors 15 selecting for 3-connector PC 12 selecting for 6-connector PC 15 using a microphone 13 multistorage bay 22

music about burning a music CD 62 burning CD 60 playing with iTunes 51 playing with Windows Media Player 52 music button 7 Mute button 8

0

online manuals 87 onscreen guides 87 optical drive quick reference 78 organizing Internet links and the PC 6

Ρ

PC

organizing information 6 running tests 88 setting it up 1 transferring files and settings to new PC 5 turning on 3 viewing PC image on TV 34 PC Help & Tools 90 peripherals 3 docking a device 20, 23 Pictures (Photos) button 7 pictures, managing 45 product notices 88

R

RealOne Player features 58 recording VHS files direct to DVD 86 RecordNow! 62 copying a DVD or CD 66 creating music CDs 62 erasing a DVD or CD 67 features 59 image files 68 removing files 67 storing files on a DVD or CD 65 removing files 67 repetitive strain injury (RSI) 1 retasking audio connectors 18

S

Safety & Comfort Guide 1 safety warnings 1 setting up PC 1 shortcut icons 6 software installing 5 software quick reference 58 sound connectors 11 3-connectors PC 12 6-connectors PC 14 Sound Effect Manager 17 audio wizard 18 retasking connectors 18 sound manager, multi-channel, 3-connectors 12 sound manager, multi-channel, 6-connectors 17 speaker system 11 speakers 11 multi-channel 11 special offers 88 Standby button 7 storage multi-storage bay 22 storing files about storing data files 66 Support messages 88 symbols on chassis 2 system updates 88

T.

television, viewing PC image on a TV 33 tips 88 transferring information to your new PC 5 turning on PC first time 3 TV connecting 33 disconnecting 38 TV-out 33 cables 33 connecting a TV set 33 disabling TV option 36 viewing PC image on TV 34

U

Updates from HP, using 88 updating, system 88 USB connecting an HP Personal Media Drive to the PC 39 User button 7

V

VCD playing with Windows Media Player 55 playing with WinDVD 54 VHS, recording to DVD 86 video button 8 Video CDs playing with Windows Media Player 55 playing with WinDVD 54 video files recording 69 video recording length 76 viewing onscreen guides 87 volume controls 8

W

Web guides 87 Windows Media Player creating music CDs 61 features 58 play music CDs 52 playing video CDs 55 Windows Movie Maker 2.0 features 59 Windows XP creating data CDs 61 WinDVD 13 control panel 53 features 59 playing DVD movies 52 playing video CDs 54 WinDVD Creator adding a menu 84 adding audio effects 83 adding images 83 adding title effects 84 adding transition effects 84 capture 79 edit 79 editing video files 82 features 60 help 79 making movie 85 media library 80 preview window 80 recording VHS video files direct to DVD 86 storyboard 80 wizard audio for Sound Effect Manager 18 working in comfort 1

Part Number: 5991-1973