Multimedia

User Guide

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1 Multimedia hardware

Using the audio features

The following illustration and table describe the audio features of the computer.

NOTE Your computer may look slightly different from the illustration in this section.

Component		Description
(1)	Internal microphones (2)	Record sound. **NOTE** A microphone icon next to the microphone opening indicates that the computer has an internal microphone.
(2)	Speakers (2)	Produce sound.
(3)	Audio-in (microphone) jack	Connects an optional computer headset microphone, stereo array microphone, or monaural microphone.
(4)	Audio-out (headphone) jack	Connects optional powered stereo speakers, headphones, ear buds, a headset, or television audio.

Component		Description
(5)	Audio-out (headphone) S/PDIF jack	Provides enhanced audio performance, including surround sound and other high-end audio output.
(6)	Volume mute button	Mutes and restores speaker sound.
(7)	Volume scroll zone	Adjusts speaker volume. Slide your finger to the left to decrease volume and to the right to increase volume. You can also tap the minus sign on the scroll zone to decrease volume, or you can tap the plus sign on the scroll zone to increase volume.

Using the audio-in (microphone) jack

The computer is equipped with a stereo (dual-channel) microphone jack that supports a stereo array and monaural microphone. Using sound recording software with external microphones allows for stereo recordings and stereo playbacks.

NOTE When connecting a microphone to the microphone jack, use a microphone with a 3.5-mm plug.

Using the audio-out (headphone) jack

WARNING! To reduce the risk of personal injury, adjust the volume before putting on headphones, earbuds, or a headset.

CAUTION To prevent possible damage to an external device, do not plug a single sound channel (monaural) connector into the headphone jack.

In addition to connecting headphones, the headphone jack is used to connect the audio input function of an audio/video device such as a television or VCR.

NOTE When connecting a device to the headphone jack, use only a 3.5-mm stereo plug.

NOTE When a device is connected to the headphone jack, the speakers are disabled.

Using the S/PDIF digital audio headphone jack

S/PDIF (Sony/Phillips Digital Interface), or digital audio, provides enhanced audio performance, including surround sound and other high-end audio output.

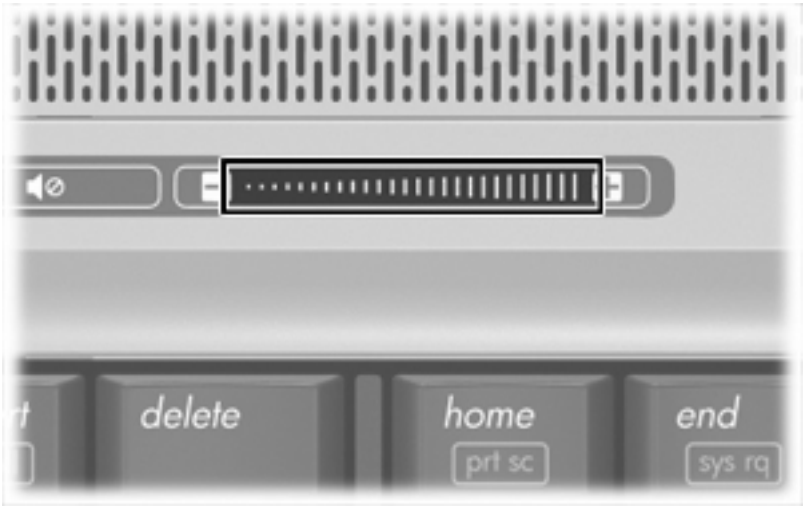
The second headphone jack allows two users to connect and listen to computer sound. For digital audio connections, connect the S/PDIF digital audio cable to the digital audio connector on your audio/video equipment.

NOTE In order to use S/PDIF with the headphone jack, you will need an optional mini TOS link cable and/or adapter.

Adjusting the volume

You can adjust the volume using the following controls:

- Computer volume buttons:
  - To mute or restore volume, press the mute button.
  - To decrease volume, slide your finger across the volume scroll zone from right to left.
  - To increase volume, slide your finger across the volume scroll zone from left to right.



- Microsoft® Windows® volume control:

  a. Click the **Volume** icon in the notification area, at the far right of the taskbar.

  b. Increase or decrease the volume by moving the slider up or down. Select the **Mute** check box to mute the volume.

  – or –

  a. Double-click the **Volume** icon in the notification area.

  b. In the Master Volume column, increase or decrease the volume by moving the **Volume** slider up or down. You can also adjust the balance or mute the volume.

  If the Volume icon is not displayed in the notification area, follow the steps below to place it there:

  a. Select **Start > Control Panel > Sounds, Speech, and Audio Devices > Sounds and Audio Devices**.

  b. Click the **Volume** tab.

  c. Select the **Place volume icon in the taskbar** check box.

  d. Click **Apply**.

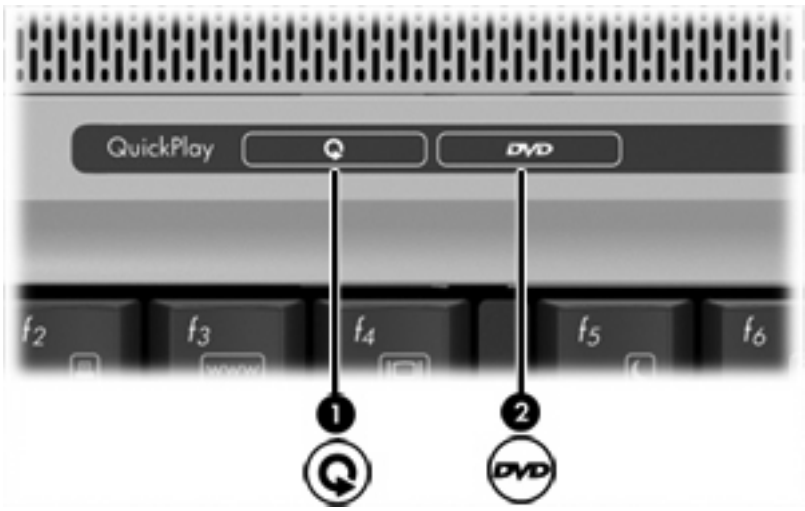
- Program volume control:

  Volume can also be adjusted within some programs.

Using the QuickPlay buttons

NOTE Media button and DVD button functions vary, depending on the software installed on your computer. Refer to the following table for more information.

The media button **(1)** and the DVD button **(2)** allow you to listen to music, play DVDs, and watch movies with the touch of a button.



Component		Description
(1)	Media button	If QuickPlay is installed and the computer is • On, opens a music program or the Media menu allowing you to select a multimedia program. • Off, opens a music program or the Media menu allowing you to select a multimedia program. **NOTE** Press the power button to exit the multimedia program. • In standby, resumes from standby into Microsoft® Windows®. If QuickPlay is not installed and the computer is • On, opens the default media player. • Off, does not function. • In standby, resumes from standby into Windows. **NOTE** This button does not affect the procedure for restoring from hibernation.
(2)	DVD button	If QuickPlay is installed and the computer is • On, opens the default DVD program to start a DVD in the optical drive. • Off, opens QuickPlay to start a DVD in the optical drive.

Component	Description
	NOTE Press the power button to exit QuickPlay. • In standby, resumes from standby into Windows. If QuickPlay is not installed and the computer is • On, opens the default DVD program to start a DVD in the optical drive. • Off, does not function. • In standby, resumes from standby into Windows. **NOTE** This button does not affect the procedure for restoring from hibernation.

Using the video features

The computer includes several ways to transmit audio and video signals to an external display:

- External monitor port that connects a television, monitor, or projector
- S-Video-out jack that connects a range of advanced video components
- HDMI port (select models only) that connects standard, enhanced, or high-definition video or audio components

NOTE Use only one type of video or audio connection at a time. For example, if you connect an external monitor cable and an S-Video cable, the computer will not simultaneously display the video and audio content to an external display.

Using the external monitor port

The external monitor port connects an external display device, such as an external monitor or projector, to the computer.

To connect a display device, connect the device cable to the external monitor port.

NOTE If a properly connected external display device does not display an image, press fn+f4 to transfer the image to the device.

Using the S-Video-out jack

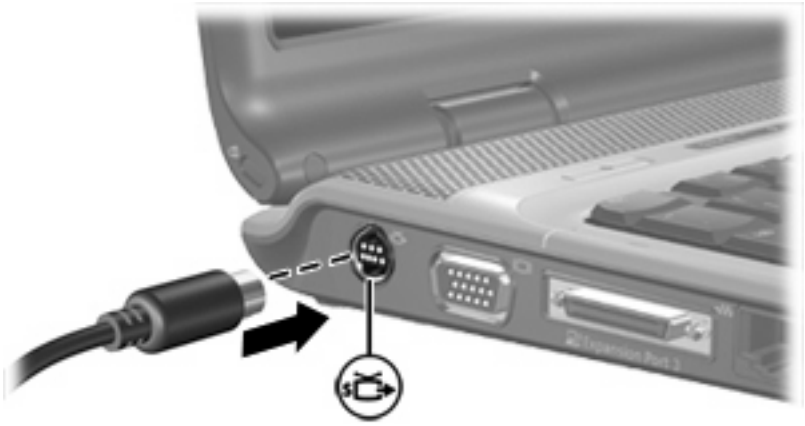
The 7-pin S-Video-out jack connects the computer to an optional S-Video device such as a television, VCR, camcorder, overhead projector, or video capture card.

The computer can support one S-Video device connected to the S-Video-out jack, while simultaneously supporting an image on the computer display or any other supported external display.

NOTE To transmit video signals through the S-Video-out jack, you need an S-Video cable (purchased separately). If you are playing a DVD movie on your computer and displaying it on your television (combining audio and video functions), you also need a standard audio cable (purchased separately) to connect the headphone jack. Both of these cables are available from most electronics retailers.

To connect a video device to the S-Video-out jack:

1. Plug one end of the S-Video cable into the S-Video-out jack on the computer.



2. Connect the other end of the cable to the video device, according to the device manufacturer's instructions.

3. Press fn+f4 to switch the image between the display devices connected to the computer.

NOTE If the computer is connected to an optional expansion product, and the S-Video-out jack is inaccessible, connect the S-Video cable to the S-Video-out jack on the expansion product.

Using the HDMI port (select models only)

Select computer models include an HDMI (High Definition Multimedia Interface) port. The HDMI port connects the computer to an optional video or audio device such as a high-definition television, set-top box, DVD player, or any compatible digital or audio component.

The computer can support one HDMI device connected to the HDMI port, while simultaneously supporting an image on the computer display or any other supported external display.

NOTE To transmit video signals through the HDMI port, you need an HDMI cable (purchased separately), available from most electronics retailers.

To connect a video or audio device to the HDMI port:

1. Plug one end of the HDMI cable into the HDMI port on the computer.

2. Connect the other end of the cable to the video device, according to the device manufacturer's instructions.
3. Press fn+f4 to switch the image between the display devices connected to the computer.

Using the integrated camera (select models only)

Select computer models include an integrated camera, located on the top of the display. This camera can be used with a variety of software to

- Capture video.
- Stream video with instant message software.
- Take still photos.

The camera light **(1)** is turned on when the camera **(2)** is being accessed by a program.

Capturing and streaming video

To illustrate how each camera feature works, the following examples use specific software not available on all computers. Select **Start > All Programs** to locate the video software installed on your computer, and refer to the individual program's online Help for further information.

Capturing video

You can use the camera to capture video for playback at a later time. This example uses MovieMaker software, not available on all computers.

1. Select **Start > Programs > Windows MovieMaker**.
2. Click **Capture from Video Device**. The Video Capture Wizard opens.
3. Click the listing for the integrated camera from the list of available devices.
4. Check the microphone and camera settings, and adjust if necessary.
5. Click **Next**.
6. Select the file name and path where you want to save the video file, and then click **Next**.
7. Select the video settings, and then click **Next**.
8. Click **Start Capture**. When you finish recording, click **Stop Capture**.
9. Click **Finish** to save the video file and close the wizard.

Streaming video with an instant message program

You can use the camera to send real-time video through an instant message program. This example uses Windows Messenger, not available on all computers.

1. Open Windows Messenger by double-clicking the icon in the notification area, at the far right of the taskbar.
2. Sign in to Windows Messenger.
3. Select **Actions > Voice/Video > Start a Video Conversation**.
4. Click the name of the person you want to connect with, and then click **OK**. An instant message window is displayed, and the camera image is displayed next to the message area.
5. If the Audio and Video Tuning Wizard opens, follow the instructions to adjust your camera and microphone settings.

Taking still photos

You can also use the integrated camera to take still photos.

1. Select **Start > Control Panel > Scanners and Cameras**.
2. Double-click the listing for the integrated camera, and then click **Next**.
3. Click **Take Picture**.
4. Follow the directions in the Picture Wizard to select any of the following options:
    - Publish the pictures to a Web site.
    - Order prints of the pictures.
    - Save the pictures on your computer.

Adjusting camera properties

You can adjust the following properties for the integrated camera:

- Brightness—Controls the amount of light that is incorporated into the image.
- Contrast—Controls the difference between lighter and darker areas on the image.
- Hue—Controls the aspect of color that distinguishes it from another color (what makes a color red, green, or blue). Hue is distinct from saturation, which measures the intensity of the hue.
- Saturation—Controls the strength of color in the final image. A higher saturation setting creates a bolder image. A lower saturation setting creates a more subtle image.
- Sharpness—Controls the definition of edges in an image. A higher sharpness setting creates a more defined image. A lower sharpness setting creates a softer image.
- Gamma—Controls the contrast affecting the mid-level grays or midtones of an image. A lower gamma setting makes greys look black, and makes dark colors even darker.
- White Balance—Controls the color temperature of the dominant light sources. This enables white objects in the image to appear truly white. The white balance settings in the Properties dialog box are displayed as WB (Red) and WB (Blue). A higher white balance setting increases the concentration of the color (red or blue). A lower white balance setting decreases the concentration of the selected color.
- Exposure—Controls the relative amount of light that enters the camera sensor.
- Gain—Controls the intensity range, thus altering the color contrast of the image.
- Light Source—Controls the settings to adjust the camera exposure for the ambient light.
- Flip—Reverses the captured image vertically.
- Mirror—Reverses the captured image horizontally.
- Privacy—Turns off the capture function.
- Low Light—Lowers the frame rate automatically in a poor lighting environment to maintain the brightness of the captured image.

The Properties dialog box is accessible from various programs that use the integrated camera, usually from a configuration, settings, or properties menu.

Guidelines for using the camera

For best results, observe the following guidelines while using the camera:

- Be sure that you have the latest version of an instant message program before attempting a video conversation.

  NOTE Your integrated camera may not work properly across some network firewalls. If you are having trouble viewing or sending video to someone on another LAN or outside your network firewall, contact your network administrator for assistance.

- Whenever possible, place bright light sources behind the camera and out of the picture area.

Using the optical drive

The optical drive allows you to play, copy, and create CDs or DVDs, depending on the type of optical drive and software installed on your computer.

Identifying the installed optical drive

To view the type of optical drive installed in the computer:

- Select **Start > My Computer**.

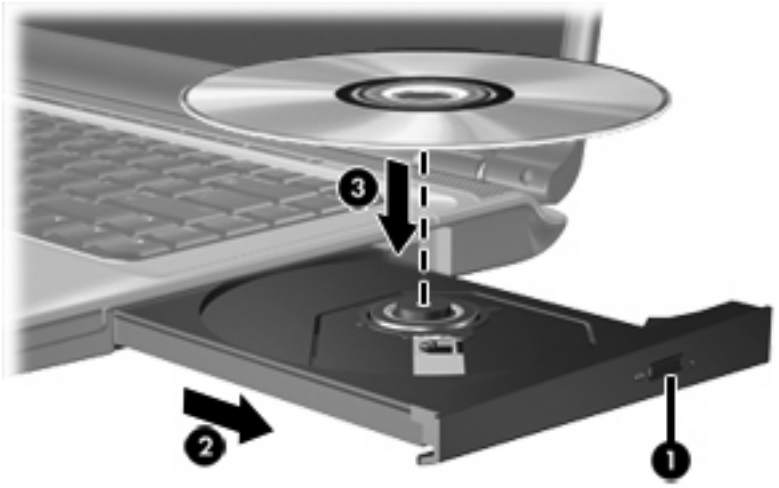
  The type of optical drive installed in the computer is displayed under Devices with Removable Storage.

Inserting an optical disc

1. Turn on the computer.
2. Press the release button **(1)** on the drive bezel to release the media tray.
3. Pull out the tray **(2)**.
4. Hold the CD or DVD by the edges to avoid touching the flat surfaces and position the disc over the tray spindle, with the label side up.

   NOTE If the tray is not fully accessible, tilt the disc carefully to position it over the spindle.

5. Gently press the disc **(3)** down onto the tray spindle until the disc snaps into place.



6. Close the media tray.

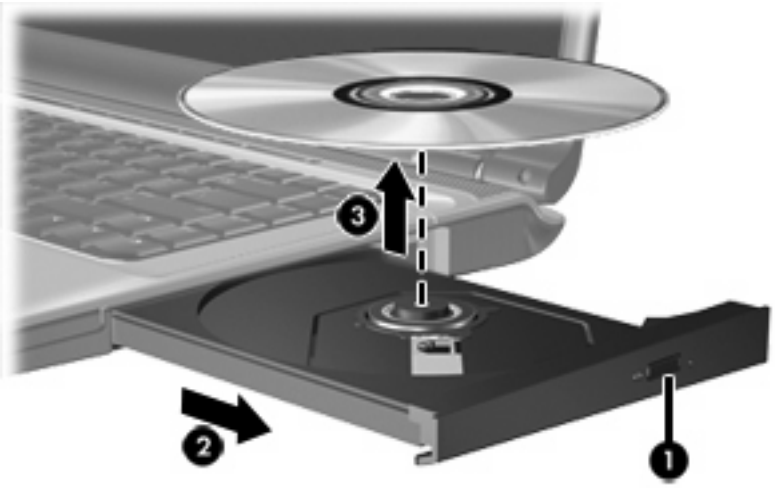
NOTE After you insert a disc, a short pause is normal. If you have not selected a media player, an AutoPlay dialog box opens. It prompts you to select how you want to use the media content.

Removing an optical disc (with power)

If the computer is running on external or battery power:

1. Turn on the computer.
2. Press the release button **(1)** on the drive bezel to release the media tray, and then gently pull out the tray **(2)** until it stops.
3. Remove the disc **(3)** from the tray by gently pressing down on the spindle while lifting the outer edges of the disc. Hold the disc by the edges and avoid touching the flat surfaces.

NOTE If the tray is not fully accessible, tilt the disc carefully as you remove it.



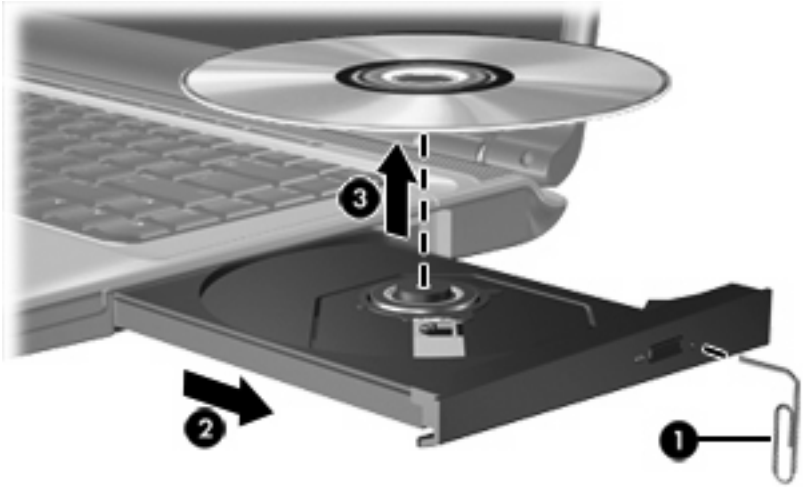
4. Close the media tray and place the disc in a protective case.

Removing an optical disc (without power)

If external or battery power is unavailable:

1. Insert the end of a paper clip **(1)** into the release access in the front bezel of the drive.
2. Press in gently on the paper clip until the tray is released, and then pull out the tray **(2)** until it stops.
3. Remove the disc **(3)** from the tray by gently pressing down on the spindle while lifting the outer edges of the disc. Hold the disc by the edges and avoid touching the flat surfaces.

NOTE If the tray is not fully accessible, tilt the disc carefully as you remove it.



4. Close the media tray and place the disc in a protective case.

Using the media activity functions

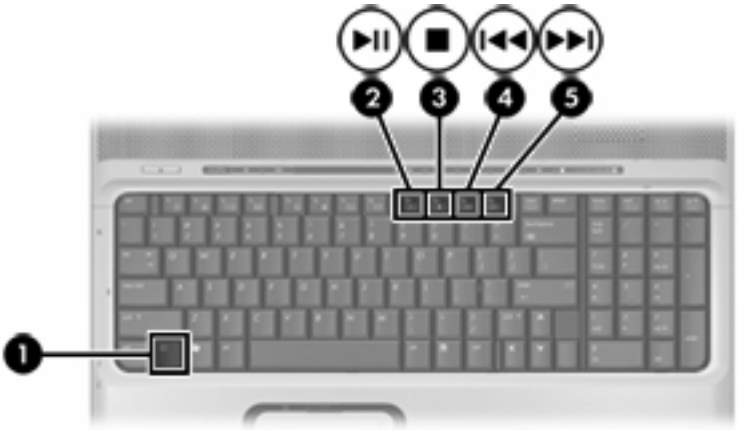
The media activity hotkeys and the media activity buttons (select models only) control the play of an audio CD or a DVD that is inserted into the optical drive.

Using the media activity hotkeys

Media activity hotkeys are combinations of the fn key **(1)** and any of the 4 function keys:

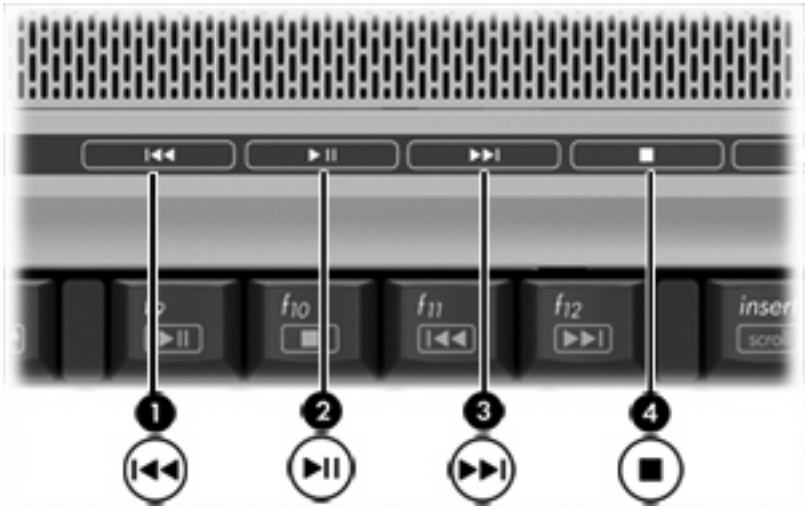
NOTE To control the play of a video CD, use the media activity controls in your video CD player program.

- To play, pause, or resume an inserted audio CD or a DVD, press fn+f9 **(2)**.
- To stop an inserted audio CD or a DVD that is playing, press fn+f10 **(3)**.
- To play the previous track of an audio CD or the previous chapter of a DVD that is playing, press fn+f11 **(4)**.
- To play the next track of an audio CD or the next chapter of a DVD that is playing, press fn+f12 **(5)**.



Using the media activity buttons

The following illustration and table describe the media activity buttons.



Component		Description
(1)	Previous/rewind button	When a disc is playing in the optical drive: • Plays the previous track or chapter, when pressed once. • Rewinds when press with the fn key.
(2)	Play/pause button	When a disc is in the optical drive and is • Not playing, plays the disc. • Playing, pauses the disc.
(3)	Next/fast forward button	When a disc is playing in the optical drive: • Plays the next track or chapter, when pressed once. • Fast forwards when press with the fn key.
(4)	Stop button	When a disc is playing in the optical drive, stops the current disc activity.

2 Multimedia software

The computer includes preinstalled multimedia software. Some computer models also include additional multimedia software on an optical disc.

Depending on the hardware and software included with the computer, the following multimedia tasks may be supported:

- Playing digital media, including audio and video CDs, audio and video DVDs, and Internet radio
- Creating or copying data CDs
- Creating, editing, and burning audio CDs
- Creating, editing, and burning a video or movie to a DVD or video CD

NOTE For details about using software included with the computer, refer to the software manufacturer's instructions, which may be provided on disc, as online Help files, or on the software manufacturer's Web site.

Locate and install software

The computer includes a range of software that may be

- **Preinstalled on your hard drive**. To locate and install the ready-to-use software preinstalled on your computer:

  a. Select **Start > All Programs**.

  b. Double-click the program you want to install.

- **Provided on CD or DVD**. To install a software application from a disc:

  a. Insert the disc into your optical drive.

  b. When the installation wizard opens, follow the on-screen instructions.

  c. Restart the computer if prompted to do so.

Using multimedia software

To use the multimedia software installed on the computer:

1. Select **Start > All Programs**, and then open the multimedia program you want to use. For example, if you want to use Windows Media Player to play an audio CD, click **Windows Media Player**.

   NOTE Some programs may be located in subfolders.

2. Insert the media disc, such as an audio CD, into the optical drive.
3. Follow the instructions on the screen.

– or –

1. Insert the media disc, such as an audio CD, into the optical drive.

   An AutoPlay dialog box opens.

2. Click the multimedia task you want to perform from the list of tasks for each installed multimedia program.

   NOTE The AutoPlay dialog box allows you to select a multimedia program for the media disc. After you select a program from the list, select the **Always do the selected action** check box.

3. Click **OK**.

Protecting playback

To prevent the loss of playback or playback quality, do not connect or disconnect hardware while playing a disc.

To prevent the loss of playback while the computer is operating in Windows, do not initiate standby or hibernation while playing a disc. Otherwise, you may see the warning message “Putting the computer into hibernation or standby might stop the playback. Do you want to continue?” If this message is displayed, click **No**.

After you click No:

- Playback may resume.

  – or –

- Playback may stop and the screen may clear. To return to playing the CD or DVD, press the power button and then restart the disc.

Protecting the CD or DVD write process

CAUTION To prevent loss of information or damage to a disc:

Before writing to a disc, connect the computer to a reliable external power source. Do not write to a disc while the computer is running on battery power.

Before writing to a disc, close all open programs except the disc software you are using.

Do not copy directly from a source disc to a destination disc or from a network drive to a destination disc. Instead, copy from a source disc or network drive to your hard drive, and then copy from your hard drive to the destination disc.

Do not use the computer keyboard or move the computer while the computer is writing to a disc. The write process is sensitive to vibration.

Changing DVD region settings

Most DVDs that contain copyrighted files also contain region codes. The region codes help protect copyrights internationally.

You can play a DVD containing a region code only if the region code on the DVD matches the region setting on your DVD drive.

CAUTION The region settings on your DVD drive can be changed only 5 times.

The region setting you select the fifth time becomes the permanent region setting on the DVD drive.

The number of allowable region changes remaining on the drive is displayed in the Changes remaining box on the **DVD Region** tab. The number in the field includes the fifth and permanent change.

To change settings through the operating system:

1. Select **Start > My Computer**.
2. Right-click in the window and select **Properties > Hardware** tab **> Device Manager**.
3. Click **DVD/CD-ROM drives**, right-click the DVD drive for which you want to change region settings, and then click **Properties**.
4. Make the desired changes on the **DVD Region** tab.
5. Click **OK**.

Observing the copyright warning

It is a criminal offense, under applicable copyright laws, to make unauthorized copies of copyright-protected material, including computer programs, films, broadcasts, and sound recordings. Do not use this computer for such purposes.

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