Dell™ XPS™ M1330

Owner's Manual

Model PP11S

Notes, Notices, and Cautions

NOTE: A NOTE indicates important information that helps you make better use of your computer.

NOTICE: A NOTICE indicates either potential damage to hardware or loss of data and tells you how to avoid the problem.

CAUTION: A CAUTION indicates a potential for property damage, personal injury, or death.

Abbreviations and Acronyms

For a complete list of abbreviations and acronyms, see "Glossary" on page 177.

If you purchased a Dell™ n Series computer, any references in this document to Microsoft® Windows® operating systems are not applicable.

Contents

Finding Information

 NOTE: Some features or media may be optional and may not ship with your computer. Some features or media may not be available in certain countries.

 NOTE: Additional information may ship with your computer.

What Are You Looking For?	Find It Here
• A diagnostic program for my computer • Drivers for my computer • My device documentation • Notebook System Software (NSS)	**Drivers and Utilities CD (also known as ResourceCD)** **NOTE:** The *Drivers and Utilities* CD may be optional and may not ship with your computer. Documentation and drivers are already installed on your computer. You can use the CD to reinstall drivers (see "Reinstalling Drivers and Utilities" on page 106) or to run the Dell Diagnostics (see "Dell Diagnostics" on page 85). Readme files may be included on your CD to provide last-minute updates about technical changes to your computer or advanced technical-reference material for technicians or experienced users. **NOTE:** Drivers and documentation updates can be found at **support.dell.com**.
• Warranty information • Terms and Conditions (U.S. only) • Safety instructions • Regulatory information • Ergonomics information • End User License Agreement	**Dell™ Product Information Guide**
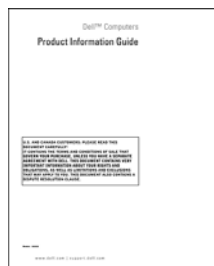
What Are You Looking For?	Find It Here
• How to set up my computer	**Setup Diagram**
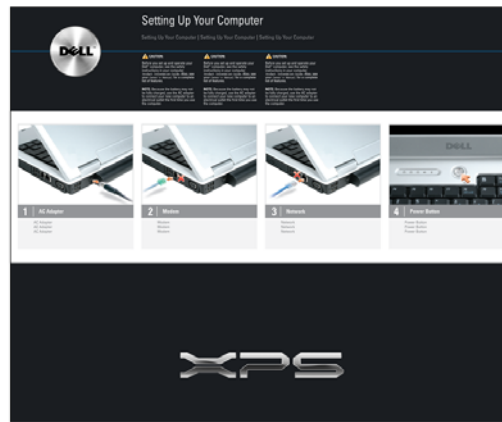
What Are You Looking For?	Find It Here
• Service Tag and Express Service Code • Microsoft Windows License Label	**Service Tag and Microsoft® Windows® License** These labels are located on the bottom of your computer. • Use the Service Tag to identify your computer when you use **support.dell.com** or contact technical support. • Enter the Express Service Code to direct your call when contacting technical support.

What Are You Looking For?	Find It Here
• Solutions — Troubleshooting hints and tips; articles from technicians; online courses; and frequently asked questions • Community — Online discussion with other Dell customers • Upgrades — Upgrade information for components, such as memory, the hard drive, and the operating system • Customer Care — Contact information, service call and order status, warranty, and repair information • Service and support — Service call status and support history, service contract, online discussions with technical support • Reference — Computer documentation, details on my computer configuration, product specifications, and white papers • Downloads — Certified drivers, patches, and software updates	**Dell Support Website — support.dell.com** **NOTE:** Select your region to view the appropriate support site.
• Notebook System Software (NSS)— If you reinstall the operating system for your computer, you should also reinstall the NSS utility. NSS provides critical updates for your operating system and support for Dell™ 3.5-inch USB floppy drives, Intel® processors, optical drives, and USB devices. NSS is necessary for correct operation of your Dell computer. The software automatically detects your computer and operating system and installs the updates appropriate for your configuration.	To download Notebook System Software: **1** Go to **support.dell.com** and click **Downloads**. **2** Enter your Service Tag or product model. **3** In the **Download Category** drop-down menu, click **All**. **4** Select the operating system and operating system language for your computer, and click **Submit.** **5** Under **Select a Device**, scroll to **System and Configuration Utilities**, and click **Dell Notebook System Software**.
• Software upgrades and troubleshooting hints • Frequently asked questions, hot topics, and general health of your computing environment	**Dell Support Utility** The Dell Support Utility is an automated upgrade and notification system installed on your computer. This support provides real-time health scans of your computing environment, software updates, and relevant self-support information. Access the Dell Support Utility from the icon in the taskbar. For more information, see "Dell Support Utility" on page 88.
• How to use Windows XP • How to work with programs and files • How to personalize my desktop	**Windows Help and Support Center** **1** Click the **Start** button and click **Help and Support**. **2** Type a word or phrase that describes your problem and click the arrow icon. **3** Click the topic that describes your problem. **4** Follow the instructions on the screen.

What Are You Looking For?	Find It Here
• Information on network activity, the Power Management Wizard, hotkeys, and other items controlled by Dell QuickSet	**Dell QuickSet Help** To view *Dell QuickSet Help*, right-click the ![QS icon] icon in the Microsoft® Windows® taskbar. For more information on Dell QuickSet, see "Dell™ QuickSet" on page 137.
• How to reinstall my operating system	**Operating System CD** **NOTE:** The *Operating System* CD is optional and may not ship with your computer. The operating system is already installed on your computer. To reinstall your operating system, use one of the following methods: • Microsoft Windows *System Restore* — Microsoft Windows *System Restore* returns your computer to an earlier operating state without affecting data files. • Dell *PC Restore* — Dell *PC Restore* returns your computer to its original operating state. Dell *PC Restore* may not ship with your computer. • *Operating System* CD — If you received an *Operating System* CD with your computer, you can use it to restore your operating system. For more information, see "Restoring Your Operating System" on page 108. After you reinstall your operating system, use the *Drivers and Utilities* CD (*ResourceCD*) (see "Reinstalling Drivers and Utilities" on page 106) to reinstall drivers for the devices that came with your computer. **NOTE:** The color of your CD varies based on the operating system you ordered.

1

About Your Computer

Determining Your Computer's Configuration

Based on selections that you made when purchasing your computer, your computer has one of several different video controller configurations. To determine your computer's video controller configuration:

1   Access the Microsoft® Windows® Help and Support Center. For instructions, see "Windows Help and Support Center" on page 13.

2   Under **Pick a Task**, click **Use Tools to view your computer information and diagnose problems.**

3   Under **My Computer Information**, select **Hardware**.

From the **My Computer Information - Hardware** screen, you can view the type of video controller installed in your computer, as well as the other hardware components.

Front View
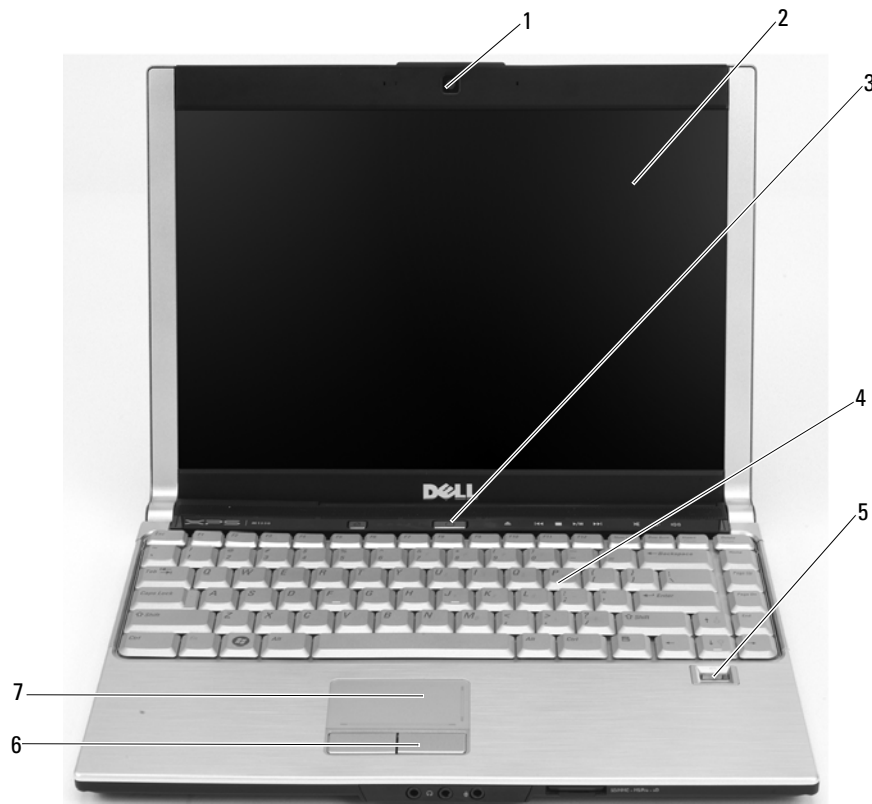
1	camera	6	touch pad buttons
2	display	7	touchpad
3	power button		
4	keyboard		
5	biometric reader		

CAMERA — For more information about the camera, see "Using the Optional Camera" on page 45.

DISPLAY — For more information about your display, see "Using the Display" on page 33.

POWER BUTTON — Press the power button to turn on the computer or to enter or exit a power management mode. See "Power Management Modes" on page 41.

SHUTTER BUTTON — Press the shutter button to take a picture. The shutter button is only available with the

optional camera.

SPEAKERS (2) — To adjust the volume of the integrated speakers, press the media control buttons.

DEVICE STATUS LIGHTS

⏻   Turns on when you turn on the computer, and blinks when the computer is in a power management mode.

🖴   Turns on when the computer reads or writes data.

      ⮞ **NOTICE:** To avoid loss of data, never turn off the computer while the 🖴 light is flashing.

🔋   Turns on steadily or blinks to indicate battery charge status.

If the computer is connected to an electrical outlet, the 🔋 light operates as follows:

- Solid green: The battery is charging.
- Flashing green: The battery is almost fully charged.

If the computer is running on a battery, the 🔋 light operates as follows:

- Off: The battery is adequately charged (or the computer is turned off).
- Flashing orange: The battery charge is low.
- Solid orange: The battery charge is critically low.

KEYBOARD AND WIRELESS STATUS LIGHTS —

The green lights located above the keyboard indicate the following:

🔢   Turns on when the numeric keypad is enabled.

🔠   Turns on when the uppercase letter function is enabled.

🔽   Turns on when the scroll lock function is enabled.

(WiFi)	Turns on when wireless networking is enabled. To enable or disable wireless networking, use the wireless switch. For information on using the wireless switch, see "Dell™ Wi-Fi Catcher™ Network Locator" on page 82.
✳	Turns on when a card with Bluetooth® wireless technology is enabled.

NOTE: The card with Bluetooth wireless technology is an optional feature, so the ✳ light turns on only if you ordered the card with your computer. For more information, see the documentation that came with your card.

To turn off only the Bluetooth wireless technology functionality, right-click the ✳ icon in the notification area and click **Disable Bluetooth Radio**.

To enable or disable wireless networking, use the wireless switch. For information on using the wireless switch, see "Dell™ Wi-Fi Catcher™ Network Locator" on page 82.

MEDIA CONTROL BUTTONS — Control CD, DVD, and Media Player playback.

✕	Mute the sound.
◁	Turn the volume down.
◁))	Turn the volume up.
▶/❙❙	Play or pause.
❙◀◀	Play the previous track.
▶▶❙	Play the next track.
■	Stop.

MICROPHONE/LINE-IN CONNECTOR — Attach a microphone or other sound input device to the ⎓ connector. For information about how to use the headphone connectors and the microphone/line-in connector for 5.1 surround sound mode, see "Connecting Your Computer to a TV or Audio Device" on page 56.

HEADPHONE CONNECTORS (2) — Attach headphones or speakers to the ⎓ connectors. For information about how to use the headphone connectors and the microphone/line-in connector for 5.1 surround sound mode, see "Connecting Your Computer to a TV or Audio Device" on page 56.

TOUCH PAD BUTTONS — Touch pad buttons provide the functionality of a mouse.

TOUCH PAD — Provides the functionality of a mouse.

KEYBOARD — The keyboard includes a numeric keypad as well as the Microsoft Windows logo key. For information on supported keyboard shortcuts, see "Key Combinations" on page 36.

DELL MEDIADIRECT™ BUTTON — Press the button to launch either Dell Media Experience or Dell MediaDirect.

Left Side View
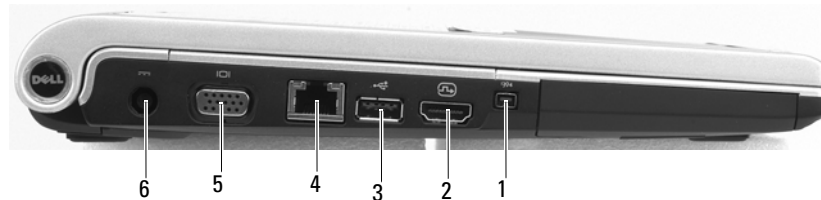
1	IEEE 1394	**4**	network connector
2	HDMI connector	**5**	video connector
3	USB connector	**6**	AC adapter connector

⊘ **NOTICE:** The network connector is slightly larger than the modem connector. To help prevent damage to the computer, do not plug a telephone line into the network connector.

USB CONNECTORS

Connect USB devices, such as a mouse, keyboard, or printer. You can also connect the optional floppy drive directly to a USB connector using the optional floppy-drive cable.

⚠ **CAUTION: Do not block, push objects into, or allow dust to accumulate in the air vents. Do not store your computer in a low-airflow environment, such as a closed briefcase, while it is running. Restricting the airflow can damage the computer or cause a fire.**

AIR VENTS — The computer uses fans to create airflow through the vents, which prevents the computer from overheating.

WIRELESS SWITCH — Turns on/off wireless devices such as Wi-Fi and internal cards with Bluetooth technology and scans for wireless networks. For more information about scanning for wireless networks, see "Dell™ Wi-Fi Catcher™ Network Locator" on page 82.

WI-FI CATCHER™ LIGHT — The light operates as follows:

- Flashing green: Searching for networks
- Solid green: Strong network found
- Solid yellow: Weak network found
- Flashing amber: No signal found or error
- Off: No signal found

EXPRESSCARD SLOT — Supports one ExpressCard. The computer ships with a plastic blank installed in the slot. You can add an ExpressCard to make WWAN connectivity available on your computer. For more information, see "Using Cards" on page 71.

HARD DRIVE — Stores software and data. For more information, see "Hard Drive" on page 116 and "Hard drive problems" on page 90.

Right Side View
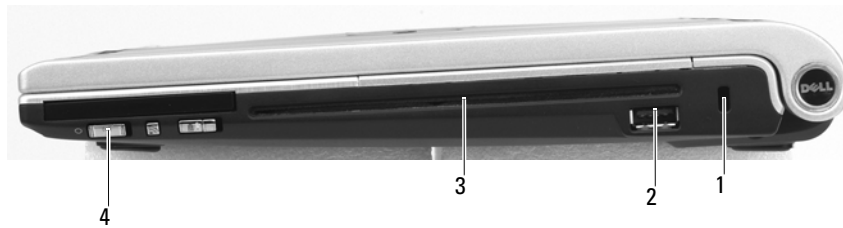
1	cable lock slot	**3**	optical drive
2	USB connector	**4**	Wireless switch

OPTICAL DRIVE BAY — You can install devices such as a DVD drive or other optical drive in the optical drive bay. For more information, see "Optical Drive" on page 115.

5-IN-1 MEDIA MEMORY CARD READER — Provides a fast and convenient way to view and share digital photos, music, and videos stored on a media memory card. The 5-in-1 media memory card reader reads the following digital media memory cards:

- Secure Digital (SD) card/SDIO
- MultiMediaCard (MMC)
- Memory Stick
- Memory Stick PRO
- xD-Picture Card

IEEE 1394 CONNECTOR — Connects devices supporting IEEE 1394 high-speed transfer rates, such as some digital video cameras.

VIDEO CONNECTOR

|◯| Connects an external VGA-compatible monitor.

Back View

1	air vent

NETWORK CONNECTOR (RJ-45)

Connects the computer to a network. The green and yellow lights next to the connector indicate activity for wired network communications.

For information on using the network adapter, see the online network adapter documentation supplied with your computer.

BATTERY — When a battery is installed, you can use the computer without connecting the computer to an electrical outlet. For more information about the battery, see "Using a Battery" on page 39.

AC ADAPTER CONNECTOR — Attaches an AC adapter to the computer. The AC adapter converts AC power to the DC power required by the computer. You can connect the AC adapter with your computer turned either on or off.

⚠ **CAUTION: The AC adapter works with electrical outlets worldwide. However, power connectors and power strips vary among countries. Using an incompatible cable or improperly connecting the cable to the power strip or electrical outlet may cause fire or equipment damage.**

⊘ **NOTICE:** When you disconnect the AC adapter cable from the computer, grasp the connector, not the cable itself, and pull firmly but gently to help prevent damage to the cable.

SECURITY CABLE SLOT — Lets you attach a commercially available antitheft device. For more information about the security cable slot, see "Security Cable Lock" on page 83.

Bottom View
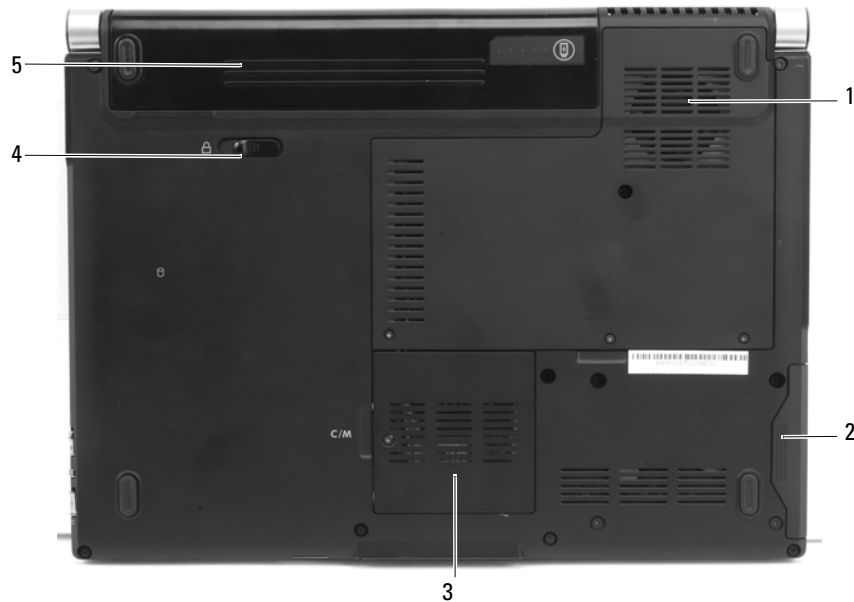
1	air vent	4	battery-bay release latch
2	hard drive	5	battery
3	communications card cover		

HARD DRIVE — Stores software and data. For more information, see "Hard Drive" on page 116 and "Hard drive problems" on page 90.

OPTICAL-DRIVE LOCKING SCREW — Holds the optical drive in place. For more information, see "Optical Drive" on page 115.

MEMORY MODULE COVER — Covers the compartment that contains the modem and the memory modules. For more information, see "Memory" on page 119.

⚠ **CAUTION: Do not block, push objects into, or allow dust to accumulate in the air vents. Do not store your computer in a low-airflow environment, such as a closed briefcase, while it is running. Restricting the airflow can damage the computer or cause a fire.**

AIR VENTS — The computer uses fans to create airflow through the vents, which prevents the computer from overheating.

COMMUNICATIONS CARD COVER — Covers the WLAN card slot and the Mobile Broadband card slot. For more information, see "Using Networks" on page 75.

BATTERY-BAY LATCH RELEASE — Releases the battery from the battery bay. See "Replacing the Battery" on page 43.

BATTERY CHARGE GAUGE — Provides information on the battery charge status. See "Checking the Battery Charge" on page 40.

BATTERY — When a battery is installed, you can use the computer without connecting the computer to an electrical outlet. For more information, see "Using a Battery" on page 39.

2

Setting Up Your Computer

Connecting to the Internet

NOTE: ISPs and ISP offerings vary by country.

To connect to the Internet, you need a modem or network connection and an Internet service provider (ISP). Your ISP will offer one or more of the following Internet connection options:

- Dial-up connections that provide Internet access through a telephone line. Dial-up connections are considerably slower than DSL and cable modem connections.
- DSL connections that provide high-speed Internet access through your existing telephone line. With a DSL connection, you can access the Internet and use your telephone on the same line simultaneously.
- Cable modem connections that provide high-speed Internet access through your local cable TV line.

If you are using a dial-up connection, connect a telephone line to the modem connector on your computer and to the telephone wall jack before you set up your Internet connection. If you are using a DSL or cable modem connection, contact your ISP for setup instructions.

Setting Up Your Internet Connection

To set up an Internet connection with a provided ISP desktop shortcut:

1 Save and close any open files, and exit any open programs.
2 Double-click the ISP icon on the Microsoft® Windows® desktop.
3 Follow the instructions on the screen to complete the setup.

If you do not have an ISP icon on your desktop or if you want to set up an Internet connection with a different ISP:

1 Save and close any open files, and exit any open programs.
2 Click the **Start** button and click **Internet Explorer**.

   The **New Connection Wizard** appears.
3 Click **Connect to the Internet**.

4 In the next window, click the appropriate option:

- If you do not have an ISP and want to select one, click **Choose from a list of Internet service providers (ISPs)**.

- If you have already obtained setup information from your ISP but you did not receive a setup CD, click **Set up my connection manually**.

- If you have a CD, click **Use the CD I got from an ISP**.

5 Click **Next**.

If you selected **Set up my connection manually**, continue to step 6. Otherwise, follow the instructions on the screen to complete the setup.

NOTE: If you do not know which type of connection to select, contact your ISP.

6 Click the appropriate option under **How do you want to connect to the Internet?**, and then click **Next**.

7 Use the setup information provided by your ISP to complete the setup.

If you are having problems connecting to the Internet, see "E-Mail, Modem, and Internet Problems" on page 90. If you cannot connect to the Internet but have successfully connected in the past, the ISP might have a service outage. Contact your ISP to check the service status, or try connecting again later.

Transferring Information to a New Computer

The Microsoft® Windows® XP operating system provides a Files and Settings Transfer Wizard to move data from a source computer to a new computer. You can transfer data, such as:

- E-mail messages
- Toolbar settings
- Window sizes
- Internet bookmarks

You can transfer the data to the new computer over a network connection, or you can store it on removable media, such as a writable CD, for transfer to the new computer.

NOTE: For instructions on setting up a direct cable connection between two computers, go to support.microsoft.com and search for Microsoft Knowledge Base Article #293118, titled *How to Use Files and Settings Transfer Wizard in Windows XP.* This information may not be available in some countries.

For transferring information to a new computer, you must run the Files and Settings Transfer Wizard. You can use the optional *Operating System* CD for this process or you can create a wizard disk with the Files and Settings Transfer Wizard utility.

Running the Files and Settings Transfer Wizard With the Operating System CD

✎ **NOTE:** This procedure requires the *Operating System* CD. This CD is optional and may not be included with all computers.

Prepare the New Computer for the File Transfer

1 Start the Files and Settings Transfer Wizard by clicking **Start**→ **All Programs**→ **Accessories**→ **System Tools**→ **Files and Settings Transfer Wizard**.

2 When the **Files and Settings Transfer Wizard** welcome screen appears, click **Next**.

3 On the **Which computer is this?** screen, click **New Computer** and click **Next**.

4 On the **Do you have a Windows XP CD?** screen, click **I will use the wizard from the Windows XP CD** and click **Next**.

5 When the **Now go to your old computer** screen appears, go to your old or source computer. Do *not* click **Next** at this time.

Copy Data From the Old Computer

1 On the old computer, insert the Windows XP *Operating System* CD.

2 On the **Welcome to Microsoft Windows XP** screen, click **Perform additional tasks**.

3 Under **What do you want to do?**, click **Transfer files and settings**.

4 On the **Files and Settings Transfer Wizard** welcome screen, click **Next**.

5 On the **Which computer is this?** screen, click **Old Computer** and click **Next**.

6 On the **Select a transfer method** screen, click the transfer method you prefer.

7 On the **What do you want to transfer?** screen, select the items you want to transfer and click **Next**.

After the information has been copied, the **Completing the Collection Phase** screen appears.

8 Click **Finish**.

Transfer Data to the New Computer

1 On the **Now go to your old computer** screen on the new computer, click **Next**.

2 On the **Where are the files and settings?** screen, select the method you chose for transferring your settings and files and click **Next**.

The wizard reads the collected files and settings and applies them to your new computer.

When all of the settings and files have been applied, the **Finished** screen appears.

3 Click **Finished** and restart the new computer.

Running the Files and Settings Transfer Wizard Without the Operating System CD

To run the Files and Settings Transfer Wizard without the optional *Operating System* CD, you must create a wizard disk that lets you create a backup of your data files. Create the wizard disk on removable media so that you can move it from your new computer to your old computer.

Create a Wizard Disk

1   Start the Files and Settings Transfer Wizard by clicking **Start**→ **All Programs**→ **Accessories**→ **System Tools**→ **Files and Settings Transfer Wizard**.

2   When the **Files and Settings Transfer Wizard** welcome screen appears, click **Next**.

3   On the **Which computer is this?** screen, click **New Computer** and click **Next**.

4   On the **Do you have a Windows XP CD?** screen, click **I want to create a Wizard Disk in the following drive:** and click **Next.**

5   Insert the removable media, such as a writable CD, and click **OK**.

6   When the disk creation completes and the **Now go to your old computer** message appears, *do not* click **Next**.

7   Go to the old computer.

Copy Data From the Old Computer

1   On the old computer, insert the wizard disk.

2   Click the **Start** button and click **Run**.

3   In the **Open** field on the **Run** window, browse to the path for **fastwiz** (on the appropriate removable media) and click **OK**.

4   On the **Files and Settings Transfer Wizard** welcome screen, click **Next**.

5   On the **Which computer is this?** screen, click **Old Computer** and click **Next**.

6   On the **Select a transfer method** screen, click the transfer method you prefer.

7   On the **What do you want to transfer?** screen, select the items you want to transfer and click **Next**.

After the information has been copied, the **Completing the Collection Phase** screen appears.

8   Click **Finish**.

Transfer Data to the New Computer

1 On the **Now go to your old computer** screen on the new computer, click **Next**.

2 On the **Where are the files and settings?** screen, select the method you chose for transferring your settings and files and click **Next**. Follow the instructions on the screen.

The wizard reads the collected files and settings and applies them to your new computer.

When all of the settings and files have been applied, the **Finished** screen appears.

3 Click **Finished** and restart the new computer.

NOTE: For more information about this procedure, search **support.dell.com** for document #PA1089586 (*How Do I Transfer Files From My Old Computer to My New Dell*™ *Computer Using the Microsoft Windows XP Operating System CD?*).

NOTE: Access to the Dell Knowledge Base document may not be available in certain countries.

Setting Up a Printer

NOTICE: Complete the operating system setup before you connect a printer to the computer.

See the documentation that came with the printer for setup information, including how to:

- Obtain and install updated drivers.
- Connect the printer to the computer.
- Load paper and install the toner or ink cartridge.

For technical assistance, refer to the printer owner's manual or contact the printer manufacturer.

Printer Cable

Your printer connects to your computer with either a USB cable or a parallel cable. Your printer may not come with a printer cable, so if you purchase a cable separately, ensure that it is compatible with your printer and computer. If you purchased a printer cable at the same time you purchased your computer, the cable may arrive in the box in which your computer was shipped.

Connecting a USB Printer

Ø **NOTE:** You can connect USB devices while the computer is turned on.

1   Complete the operating system setup if you have not already done so.

2   Attach the USB printer cable to the USB connectors on the computer and the printer. The USB connectors fit only one way.
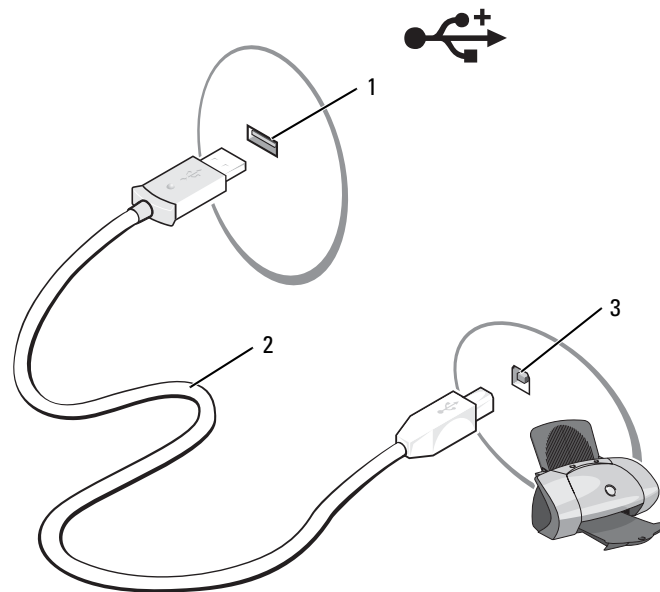
| 1 | USB connector on computer | 2 | USB printer cable | 3 | connector on printer |

3   Turn on the printer and then turn on the computer. If the **Add New Hardware Wizard** window appears, click **Cancel**.

4   Install the printer driver if necessary. See the documentation that came with your printer.

Power Protection Devices

Several devices are available to protect against power fluctuations and failures:

- Surge protectors
- Line conditioners
- Uninterruptible power supplies (UPS)

Surge Protectors

Surge protectors and power strips equipped with surge protection help prevent damage to your computer from voltage spikes that can occur during electrical storms or after power interruptions. Some surge protector manufacturers include warranty coverage for certain types of damage. Carefully read the device warranty when choosing a surge protector. A device with a higher joule rating offers more protection. Compare joule ratings to determine the relative effectiveness of different devices.

> **NOTICE:** Most surge protectors do not protect against power fluctuations or power interruptions caused by nearby lightning strikes. When a lightning storm is expected in your area, disconnect the telephone line from the telephone wall jack and disconnect your computer from the electrical outlet.

Many surge protectors have a telephone connector for modem protection. See the surge protector documentation for modem connection instructions.

> **NOTICE:** Not all surge protectors offer network adapter protection. Disconnect the network cable from the network wall connector during electrical storms and when a lightning storm is expected in your area.

Line Conditioners

> **NOTICE:** Line conditioners do not protect against power interruptions.

Line conditioners are designed to maintain AC voltage at a fairly constant level.

Uninterruptible Power Supplies

> **NOTICE:** Loss of power while data is being saved to the hard drive may result in data loss or file damage.

> **NOTE:** To ensure maximum battery operating time, connect only your computer to a UPS. Connect other devices, such as a printer, to a separate power strip that provides surge protection.

A UPS protects against power fluctuations and interruptions. UPS devices contain a battery that provides temporary power to connected devices when AC power is interrupted. The battery charges while AC power is available. See the UPS manufacturer documentation for information on battery operating time and to ensure that the device is approved by Underwriters Laboratories (UL).

3

Using the Display

Adjusting Brightness

When a Dell™ computer is running on battery power, you can conserve power by setting the brightness to the lowest comfortable setting by pressing <Fn> and the up- or down-arrow key on the keyboard.

> **NOTE:** Brightness key combinations only affect the display on your portable computer, not monitors or projectors that you attach to your portable computer or docking device. If your computer is connected to an external monitor and you try to change the brightness level, the Brightness Meter may appear, but the brightness level on the external device does not change.

You can press the following keys (key combinations) to adjust display brightness:

- Press <Fn> and the up-arrow key to increase brightness on the integrated display only (not on an external monitor).

- Press <Fn> and the down-arrow key to decrease brightness on the integrated display only (not on an external monitor).

Switching the Video Image

When you start the computer with an external device (such as an external monitor or projector) attached and turned on, the image may appear on either the computer display or the external device.

Press <Fn><F8> to switch the video image between the display only, the external device only, or the display and the external device simultaneously.

For more display options, click **Start**→ **Control Panel**→ **Display**→ **Settings**.

Setting Display Resolution

To display a program at a specific resolution, both the graphics card and the display must support the program, and the necessary video drivers must be installed.

Before you change any of the default display settings, make a note of the default settings for future reference.

If you choose a resolution or color palette that is higher than the display supports, the settings adjust automatically to the closest supported values.

1 Click the **Start** button and click **Control Panel**.

2 Under **Pick a category**, click **Appearance and Themes**.

3 Under **Pick a task...**, click the area you want to change, or under **or pick a Control Panel icon**, click **Display**.

4 Try different settings for **Color quality** and **Screen resolution**.

NOTE: As the resolution increases, icons and text appear smaller on the screen.

4

Using the Keyboard and Touch Pad

Numeric Keypad

The numeric keypad functions like the numeric keypad on an external keyboard. Each key on the keypad has multiple functions. The keypad numbers and symbols are marked in blue on the right of the keypad keys. To type a number or symbol, press <Fn> and the desired key after enabling the keypad.

- To enable the keypad, press <Num Lk>. The ⑨ light indicates that the keypad is active.
- To disable the keypad, press <Num Lk> again.

Key Combinations

System Functions

\<Ctrl\>\<Shift\>\<Esc\>	Opens the **Task Manager** window.

Display Functions

\<Fn\>\<F8\>	Displays icons representing all currently available display options (for example, display only, external monitor or projector only, both display and projector, and so on). Highlight the desired icon to switch the display to that option.
\<Fn\> and up-arrow key	Increases brightness on the integrated display only (not on an external monitor).
\<Fn\> and down-arrow key	Decreases brightness on the integrated display only (not on an external monitor).

Power Management

\<Fn\>\<Esc\>	Activates a power management mode. You can reprogram this keyboard shortcut to activate a different power management mode using the **Advanced** tab in the **Power Options Properties** window. See "Power Management Modes" on page 41.

Microsoft® Windows® Logo Key Functions

Windows logo key and \<m\>	Minimizes all open windows.
Windows logo key and \<Shift\>\<m\>	Restores all minimized windows. This command functions as a toggle to restore (maximize) all windows previously minimized with the use of the Windows logo key and \<m\> key combination.
Windows logo key and \<e\>	Runs Windows Explorer.
Windows logo key and \<r\>	Opens the **Run** dialog box.
Windows logo key and \<f\>	Opens the **Search Results** dialog box.
Windows logo key and \<Ctrl\>\<f\>	Opens the **Search Results-Computer** dialog box (if the computer is connected to a network).
Windows logo key and \<Pause\>	Opens the **System Properties** dialog box.

QuickSet Key Combinations

If QuickSet is installed, you can use other shortcut keys for functions such as the Battery Meter or activating power management modes. For more information about QuickSet key combinations, right-click the [icon] icon in the taskbar, and click **Help**.

Adjusting Keyboard Settings

To adjust keyboard operation, such as the character repeat rate, open the Control Panel, click **Printers and Other Hardware**, and click **Keyboard**. For information about the Control Panel, see the Windows Help and Support Center. To access the Help and Support Center, see "Windows Help and Support Center" on page 13.

Touch Pad

The touch pad detects the pressure and movement of your finger to allow you to move the cursor on the display. Use the touch pad and touch pad buttons as you would use a mouse.
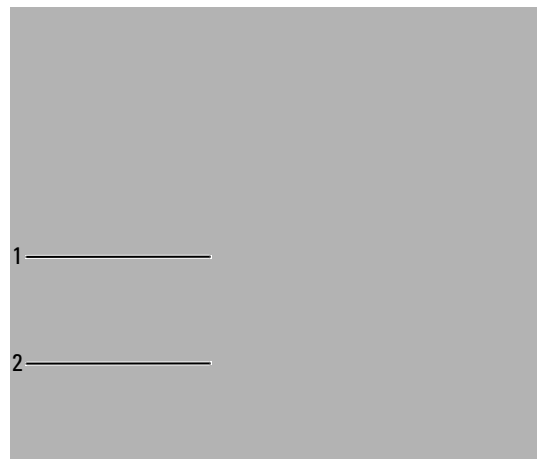
| 1 | touch pad | 2 | touch pad buttons (2) |

- To move the cursor, lightly slide your finger over the touch pad.
- To select an object, position the cursor on the object and lightly tap once on the surface of the touch pad or use your thumb to press the left touch-pad button.
- To select and move (or drag) an object, position the cursor on the object and tap twice on the touch pad. On the second tap, leave your finger on the touch pad and move the selected object by sliding your finger over the surface.
- To double-click an object, position the cursor on the object and tap twice on the touch pad or use your thumb to press the left touch-pad button twice.

The touch pad has silk screening on the right side and at the bottom to indicate vertical and horizontal scrolling capability. Scrolling is enabled by default. To disable this feature, modify the mouse properties through the Control Panel.

NOTE: The scroll zones may not work with all application programs. For the scroll zones to function properly, the application program must be able to use the touch-pad scroll feature.

Customizing the Touch Pad

You can use the **Mouse Properties** window to disable the touch pad or adjust its settings.

1 Open the Control Panel, click **Printers and Other Hardware**, and then click **Mouse**. For information about the Control Panel, see the Windows Help and Support Center. To access the Help and Support Center, see "Windows Help and Support Center" on page 13.

2 In the **Mouse Properties** window, click the **Touch Pad** tab to adjust touch pad settings.

3 Click **OK** to save the settings and close the window.

5

Using a Battery

Battery Performance

NOTE: For information about the Dell warranty for your computer, see the *Product Information Guide* or separate paper warranty document that shipped with your computer.

For optimal computer performance and to help preserve BIOS settings, operate your Dell™ portable computer with the battery installed at all times. One battery is supplied as standard equipment in the battery bay.

NOTE: Because the battery may not be fully charged, use the AC adapter to connect your new computer to an electrical outlet the first time you use the computer. For best results, operate the computer with the AC adapter until the battery is fully charged. To view battery charge status, access the Control Panel, click **Power Options**, and then click the **Power Meter** tab.

NOTE: Battery operating time (the time the battery can hold a charge) decreases over time. Depending on how often the battery is used and the conditions under which it is used, you may need to purchase a new battery during the life of your computer.

Battery operating time varies depending on operating conditions. Operating time is significantly reduced when you perform operations including, but not limited to, the following:

• Using optical drives

• Using wireless communications devices, ExpressCards, media memory cards, or USB devices

• Using high-brightness display settings, 3D screen savers, or other power-intensive programs such as complex 3D graphics applications

• Running the computer in maximum performance mode (See "Configuring Power Management Settings" on page 43.)

NOTE: It is recommended that you connect your computer to an electrical outlet when writing to a CD or DVD.

You can check the battery charge (see "Checking the Battery Charge" on page 40) before you insert the battery into the computer. You can also set power management options to alert you when the battery charge is low. See "Configuring Power Management Settings" on page 43 for information about accessing QuickSet or the **Power Options Properties** window.

⚠ **CAUTION: Using an incompatible battery may increase the risk of fire or explosion. Replace the battery only with a compatible battery purchased from Dell. The battery is designed to work with your Dell computer. Do not use a battery from other computers with your computer.**

⚠ **CAUTION: Do not dispose of batteries with household waste. When your battery no longer holds a charge, call your local waste disposal or environmental agency for advice on disposing of a lithium-ion battery. See "Battery Disposal" in the *Product Information Guide*.**

⚠ **CAUTION: Misuse of the battery may increase the risk of fire or chemical burn. Do not puncture, incinerate, disassemble, or expose the battery to temperatures above 65°C (149°F). Keep the battery away from children. Handle damaged or leaking batteries with extreme care. Damaged batteries may leak and cause personal injury or equipment damage.**

Checking the Battery Charge

The Dell QuickSet Battery Meter, the Microsoft® Windows® **Power Meter** window and 🔋 icon, the battery charge gauge and health gauge, and the low-battery warning provide information on the battery charge.

Dell™ QuickSet Battery Meter

If Dell QuickSet is installed, press <Fn><F3> to display the QuickSet Battery Meter. The Battery Meter displays status, charge level, and charge completion time for the battery in your computer. For information about QuickSet, right-click the 🔲 icon in the taskbar, and click **Help**.

Microsoft® Windows® Power Meter

The Windows Power Meter indicates the remaining battery charge. To check the Power Meter, double-click the 🔋 icon on the taskbar. For instructions on accessing more information about the Power Meter, see "Configuring Power Management Settings" on page 43.

If the computer is connected to an electrical outlet, a 🔌 icon appears.

Charge Gauge

By either pressing once or *pressing and holding* the status button on the charge gauge on the battery, you can check:

- Battery charge (check by pressing and *releasing* the status button)
- Battery health (check by pressing and *holding* the status button)

The battery operating time is largely determined by the number of times it is charged. After hundreds of charge and discharge cycles, batteries lose some charge capacity—or battery health. That is, a battery can show a status of "charged" but maintain a reduced charge capacity (health).

Check the Battery Charge

To check the battery charge, *press and release* the status button on the battery charge gauge to illuminate the charge-level lights. Each light represents approximately 20 percent of the total battery charge. For example, if four of the lights are on, the battery has 80 percent of its charge remaining. If no lights appear, the battery has no charge.

Check the Battery Health

NOTE: You can check battery health in one of two ways: by using the charge gauge on the battery as described below or by using the Battery Meter in Dell QuickSet. For information about QuickSet, right-click the icon in the taskbar, and click **Help**.

To check the battery health using the charge gauge, *press and hold* the status button on the battery charge gauge for at least 3 seconds. If no lights appear, the battery is in good condition, and more than 80 percent of its original charge capacity remains. Each light represents incremental degradation. If five lights appear, less than 60 percent of the charge capacity remains, and you should consider replacing the battery. See "Specifications" on page 163 for more information about the battery operating time.

Low-Battery Warning

NOTICE: To avoid losing or corrupting data, save your work immediately after a low-battery warning, and then connect the computer to an electrical outlet. If the battery runs completely out of power, hibernate mode begins automatically.

By default, a pop-up window warns you when the battery charge is approximately 90 percent depleted. You can change the settings for the battery alarms. See "Configuring Power Management Settings" on page 43 for information about accessing QuickSet or the **Power Options Properties** window.

Conserving Battery Power

Perform the following actions to conserve battery power:

- Connect the computer to an electrical outlet when possible because battery life is largely determined by the number of times the battery is used and recharged.

- Place the computer in standby mode or hibernate mode when you leave the computer unattended for long periods of time. See "Power Management Modes" on page 41 for more information about standby and hibernate modes.

- Use the Power Management Wizard to select options to optimize your computer's power usage. These options can also be set to change when you press the power button, close the display, or press <Fn><Esc>. See "Configuring Power Management Settings" on page 43 for more information on using the Power Management Wizard.

NOTE: See "Battery Performance" on page 39 for more information on conserving battery power.

Power Management Modes

Standby Mode

Standby mode conserves power by turning off the display and the hard drive after a predetermined period of inactivity (a time-out). When the computer exits standby mode, it returns to the same operating state it was in before entering standby mode.

NOTICE: If your computer loses AC and battery power while in standby mode, it may lose data.

To enter standby mode:

- Click **Start**→ **Shut Down**→ **Stand by**.

  or

- Depending on how you set the power management options on the **Advanced** tab (see "Configuring Power Management Settings" on page 43) in the **Power Options Properties** window, use one of the following methods:
  – Press the power button.
  – Close the display.
  – Press <Fn><Esc>.

To exit standby mode, press the power button or open the display depending on how you set the options on the **Advanced** tab. You cannot make the computer exit standby mode by pressing a key or touching the touch pad.

Hibernate Mode

Hibernate mode conserves power by copying system data to a reserved area on the hard drive and then completely turning off the computer. When the computer exits hibernate mode, it returns to the same operating state it was in before entering hibernate mode.

◯ **NOTICE:** You cannot remove devices or undock your computer while your computer is in hibernate mode.

Your computer enters hibernate mode if the battery charge level becomes critically low.

To manually enter hibernate mode:

- Click **Start**→ **Shut Down**, press and hold <Shift>, and then click **Hibernate**.

  or

- Depending on how you set the power management options on the **Advanced** tab in the **Power Options Properties** window, use one of the following methods to enter hibernate mode:
  – Press the power button.
  – Close the display.
  – Press <Fn><Esc>.

✎ **NOTE:** Some ExpressCards may not operate correctly after the computer exits hibernate mode. Remove and reinsert the card (see "Removing an ExpressCard or Blank" on page 72), or simply restart (reboot) your computer.

To exit hibernate mode, press the power button. The computer may take a short time to exit hibernate mode. You cannot make the computer exit hibernate mode by pressing a key or touching the touch pad. For more information on hibernate mode, see the documentation that came with your operating system.

Configuring Power Management Settings

You can use the QuickSet Power Management Wizard or Windows Power Options Properties to configure the power management settings on your computer.

- To access the QuickSet Power Management Wizard, double-click the ![icon] icon in the taskbar. For more information about QuickSet, click the **Help** button in the Power Management Wizard.

- To access the **Power Options Properties** window, click **Start→ Control Panel→ Performance and Maintenance→ Power Options**. For information on any field in the **Power Options Properties** window, click the question mark icon on the title bar and then click on the area corresponding to the information that you need.

Charging the Battery

✎ **NOTE:** With Dell™ ExpressCharge™, the AC adapter charges a completely discharged 6-cell battery in approximately 1 hour with the computer turned off. Charge time is longer with the computer turned on and also with the higher-capacity 9-cell battery. You can leave the battery in the computer as long as you like. The battery's internal circuitry prevents the battery from overcharging.

When you connect the computer to an electrical outlet or install a battery while the computer is connected to an electrical outlet, the computer checks the battery charge and temperature. If necessary, the AC adapter then charges the battery and maintains the battery charge.

If the battery is hot from being used in your computer or being in a hot environment, the battery may not charge when you connect the computer to an electrical outlet.

The battery is too hot to start charging if the 🔋 light flashes alternately green and orange. Disconnect the computer from the electrical outlet and allow the computer and the battery to cool to room temperature. Then connect the computer to an electrical outlet to continue charging the battery.

For more information about resolving problems with a battery, see "Power Problems" on page 100.

Replacing the Battery

For instructions about how to replace the main battery, see "Before Working Inside Your Computer" on page 114.

Storing a Battery

Remove the battery when you store your computer for an extended period of time. A battery discharges during prolonged storage. After a long storage period, recharge the battery fully (see "Charging the Battery" on page 43) before you use it.

6

Using the Optional Camera

If you ordered a camera when you bought your computer, the camera is integrated in the computer display. The camera and its integrated directional microphone allows you to take photos and videos and to communicate visually and verbally with other computer users. The swivel action of the camera is manually adjustable. The blue camera light appears when the camera is turned on. For more information about camera features, see "Specifications" on page 163.

NOTE: It is normal for the camera to feel warm to the touch when the computer is running and when the camera is in use.
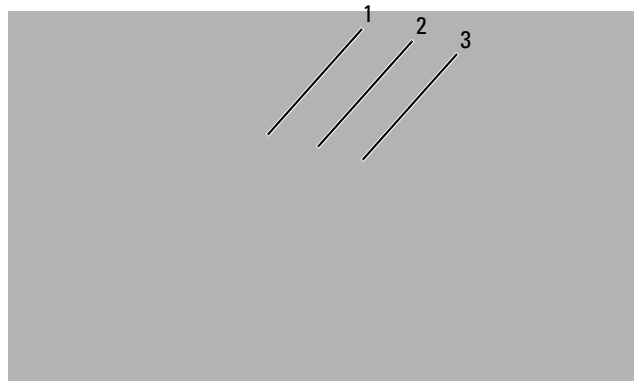
| 1 | directional microphone | 2 | camera | 3 | blue camera light |

Accessing the Camera's Help File

To access the camera's *Video Software Help* file, right-click the ▨ icon in the notification area and click **Help**.

Manually Adjusting the Camera Settings

If you do not want the camera to use automatic settings, you can manually adjust the camera settings.

1 Double-click the ▪ icon in the notification area and click **Camera Settings**.

2 In the **Camera Settings** window:

- Click the **Video** tab to adjust video settings, such as contrast and brightness.
- Click the **Audio** tab to adjust audio settings, such as the volume level.

For more information about camera settings and other camera-related topics, see the camera's *Video Software Help* file (see "Accessing the Camera's Help File" on page 45).

Creating a Picture or a Video

1 Click the ▪ icon in the notification area and click **QuickCapture**.

or

Press the shutter button to launch the QuickCapture application.

1   shutter button

The **QuickCapture** window appears and the blue camera light turns on. You can now direct the camera to point at the object or person that you want to record. The **QuickCapture** window on the screen shows you the camera target view.

2   *To take a picture*, click **Take a Picture**, or press the shutter button.

To record a video, click **Record a Video**.

Unless you designate a different location, the picture or video is automatically saved to the **My Pictures** folder on your hard drive.

For more information about creating pictures or videos, see the camera's *Video Software Help* file (see "Accessing the Camera's Help File" on page 45).

7

Using Multimedia

Playing a CD or DVD

NOTICE: Do not press down on the CD or DVD tray when you open or close it. Keep the tray closed when you are not using the drive.

NOTICE: Do not move the computer when you are playing CDs or DVDs.

NOTE: Depending on the aspect ratio of your display, movies may display differently.

  1   Press the eject button on the front of the drive.

  2   Pull out the tray.

  1   CD/DVD tray

3 Place the disc, label side up, in the center of the tray and snap the disc onto the spindle.

✎ **NOTE:** If you use a CD/DVD drive that shipped with another computer, you may need to install the drivers and software necessary to play CDs or DVDs or write data. For more information, see the *Drivers and Utilities* CD (the *Drivers and Utilities* CD is optional and may not be available for your computer or in certain countries).

4 Push the tray back into the drive.

To format CDs for storing data, to create music CDs, or to copy CDs, see the CD software that came with your computer.

✎ **NOTE:** Ensure that you follow all copyright laws when you create CDs.

Adjusting the Volume

✎ **NOTE:** When the audio output is muted, you do not hear sound from speakers or headphones.

1 Double-click the speaker icon in the taskbar.

   or

   Click **Start**→ **All Programs**→ **Accessories**→ **Entertainment**→ **Volume Control**.

2 In the **Volume Control** window, click and drag the bar in the **Volume Control** column and slide it up or down to increase or decrease the volume.

For more information on volume control options, click **Help** in the **Volume Control** window.

The Volume Meter displays the current volume level, including mute, on your computer. Either click the ▫ icon in the taskbar and select or deselect **Disable On Screen Volume Meter** or press the media-control volume buttons to enable or disable the Volume Meter on the screen.

When the Volume Meter is enabled, adjust the volume with the media control volume-up and volume-down buttons.
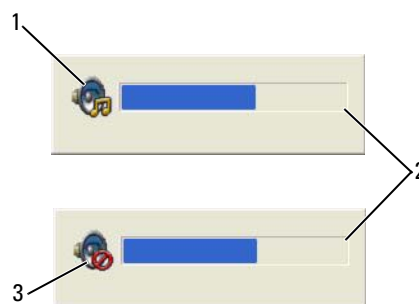
| 1 | volume icon | 2 | Volume Meter | 3 | mute icon |

Adjusting the Picture

If an error message notifies you that the current resolution and color depth are using too much memory and preventing DVD playback, adjust the display properties.

1 Click the **Start** button and click **Control Panel**.

2 Under **Pick a category**, click **Appearance and Themes**.

3 Under **Pick a task...**, click **Change the screen resolution**.

4 In the **Display Properties** window, click and drag the bar in **Screen resolution** to reduce the screen resolution setting.

5 Click the drop-down menu under **Color quality**, and then click **Medium (16 bit)**.

6 Click **OK** to save the settings and close the window.

Copying CDs and DVDs

🖉 **NOTE:** Ensure that you observe all copyright laws when creating CDs or DVDs.

This section applies only to computers that have a CD-RW, DVD+/-RW, or CD-RW/DVD (combo) drive.

🖉 **NOTE:** The types of CD or DVD drives offered by Dell may vary by country.

The following instructions explain how to make an exact copy of a CD or DVD using Roxio Creator Plus - Dell Edition. You can also use Roxio Creator Plus for other purposes, such as creating music CDs from audio files stored on your computer or backing up important data. For help, open Roxio Creator Plus, and then click the question mark icon in the upper-right corner of the window.

How to Copy a CD or DVD

🖉 **NOTE:** CD-RW/DVD combo drives cannot write to DVD media. If you have a CD-RW/DVD combo drive and you experience recording problems, check for available software patches on the Sonic support website at **www.sonic.com**.

The DVD-writable drives installed in Dell computers can write to and read DVD+/-R, DVD+/-RW and DVD+R DL (dual layer) media, but cannot write to and may not read DVD-RAM or DVD-R DL media.

NOTE: Most commercial DVDs have copyright protection and cannot be copied using Roxio Creator Plus.

1. Click **Start**→ **All Programs**→ **Roxio**→ **Creator Projects**→ **RecordNow Copy**.

2. Under the **Copy** tab, click **Disc Copy**.

3. To copy the CD or DVD:

   - *If you have one CD/DVD drive*, ensure that the settings are correct, and then click **Disc Copy**. The computer reads your source CD or DVD and copies the data to a temporary folder on your computer hard drive.

     When prompted, insert a blank CD or DVD into the drive and click **OK**.

   - *If you have two CD/DVD drives*, select the drive into which you have inserted your source CD or DVD, and then click **Disc Copy**. The computer copies the data from the source CD or DVD to the blank CD or DVD.

   Once you have finished copying the source CD or DVD, the CD or DVD that you have created automatically ejects.

Using Blank CDs and DVDs

CD-RW drives can write to CD recording media only (including high-speed CD-RW media) while DVD-writable drives can write to both CD and DVD recording media.

Use blank CD-Rs to record music or permanently store data files. After the maximum storage capacity of a CD-R is reached, you cannot write to that CD-R again (see the Sonic documentation for more information). Use blank CD-RWs if you plan to erase, rewrite, or update information on the CD later.

Blank DVD+/-Rs can be used to permanently store large amounts of data. After you create a DVD+/-R disc, you may not be able to write to that disc again if the disc is *finalized* or *closed* during the final stage of the disc creation process. Use blank DVD+/-RWs if you plan to erase, rewrite, or update information on the disc later.

CD-Writable Drives

Media Type	Read	Write	Rewritable
CD-R	Yes	Yes	No
CD-RW	Yes	Yes	Yes

DVD-Writable Drives

Media Type	Read	Write	Rewritable
CD-R	Yes	Yes	No
CD-RW	Yes	Yes	Yes
DVD+R	Yes	Yes	No
DVD-R	Yes	Yes	No
DVD+RW	Yes	Yes	Yes
DVD-RW	Yes	Yes	Yes
DVD+R DL	Yes	Yes	No
DVD-R DL	Maybe	No	No
DVD-RAM	Maybe	No	No

Helpful Tips

- Use Microsoft® Windows® Explorer to drag and drop files to a CD-R or CD-RW only after you start Roxio Creator Plus and open a Creator project.

- Use CD-Rs to burn music CDs that you want to play in regular stereos. CD-RWs may not play in many home or car stereos.

- You cannot create audio DVDs with Roxio Creator Plus.

- Music MP3 files can be played only on MP3 players or on computers that have MP3 software installed.

- Commercially available DVD players used in home theater systems may not support all available DVD formats. For a list of formats supported by your DVD player, see the documentation provided with your DVD player or contact the manufacturer.

- Do not burn a blank CD-R or CD-RW to its maximum capacity; for example, do not copy a 650-MB file to a blank 650-MB CD. The CD-RW drive needs 1–2 MB of blank space to finalize the recording.

- Use a blank CD-RW to practice CD recording until you are familiar with CD recording techniques. If you make a mistake, you can erase the data on the CD-RW and try again. You can also use blank CD-RWs to test music file projects before you record the project permanently to a blank CD-R.

- See the Sonic website at www.sonic.com for additional information.

Using Dell Media Experience and Dell MediaDirect™

Based on configuration settings and selections you made when ordering your computer, your computer provides support for:

- Dell Media Experience — A multimedia user interface for accessing and playing digital media such as music and videos

- Dell MediaDirect — An instant-on multimedia playback mode for digital media

    NOTE: Dell QuickSet is necessary for Dell MediaDirect to function. Changing or disabling QuickSet's default settings can limit Dell MediaDirect's functionality. For more information about Dell QuickSet, see "Dell™ QuickSet" on page 137.

Press the Dell MediaDirect button, located on the hinge cover, to launch either Dell Media Experience or Dell MediaDirect.

If the Computer Is Turned On or in Standby Mode

If you press the Dell MediaDirect button while the computer is on or in standby mode, either Windows XP Media Center Manager or Dell Media Experience launches, depending on your system setup. If both applications are installed, Windows XP Media Center Manager will launch.

    NOTE: If both Windows XP Media Center and Dell Media Experience are installed on your computer, you must launch Dell Media Experience through Start→ Programs or click the Media Experience icon on the desktop.

If the Computer Is Turned Off or in Hibernate Mode

When your computer is turned off or in hibernate mode, you can press the Dell MediaDirect button to start the computer and automatically launch the Dell MediaDirect application program.

    NOTICE: You cannot reinstall the Dell Media Experience or Dell MediaDirect feature if you voluntarily reformat the hard drive. You will need the installation software to reinstall these media application programs. Contact Dell for assistance. See "Contacting Dell" on page 141.
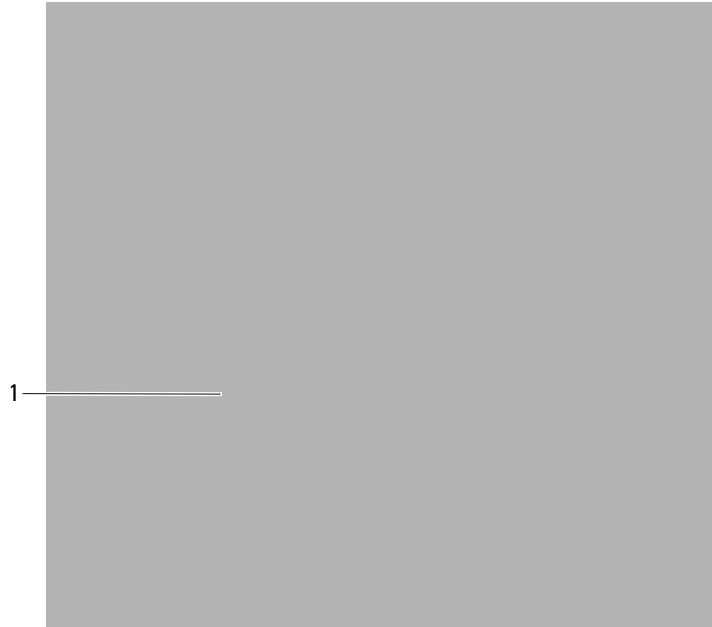
1   Dell MediaDirect button

Dell MediaDirect and Dell Media Experience Help

The Dell media application program on your computer provides help information. When you launch either program, click the desktop icon for additional help.

Connecting Your Computer to a TV or Audio Device

📝 **NOTE:** Video and audio cables for connecting your computer to a TV or other audio device are not included with your computer. Cables and component video adapters are available for purchase from Dell.

Your computer has an S-video TV-out connector that, together with a standard S-video cable (available from Dell), enables you to connect the computer to a TV.
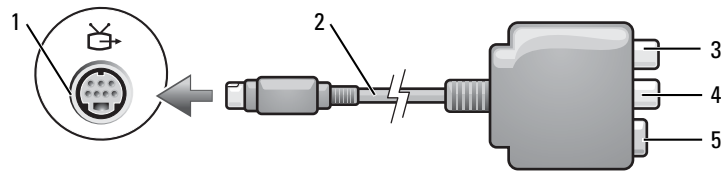
| 1 | S-video TV-out connector | 3 | S/PDIF digital audio connector | 5 | S-video connector |
| 2 | composite video adapter | 4 | composite video-output connector | | |

| 1 | S-video TV-out connector | 3 | S/PDIF digital audio connector | 5 | Pb (blue) component video-output connector |
| 2 | component video adapter | 4 | Pr (red) component video-output connector | 6 | Y (green) component video-output connector |
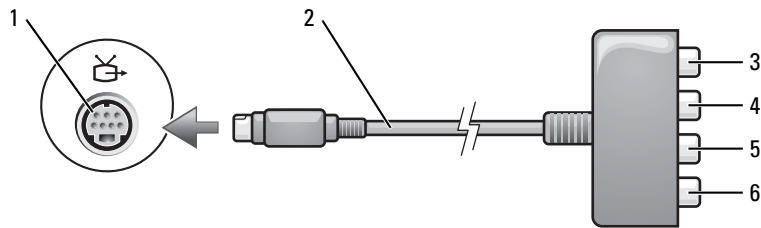
Your TV has either an S-video input connector, a composite video-input connector, or a component video-input connector. Depending on what type of connector is available on your TV, you can use a commercially available S-video cable, composite video cable, or component video cable to connect your computer to your TV.

It is recommended that you connect video and audio cables to your computer in one of the following combinations.

✎ **NOTE:** See the diagrams at the beginning of each subsection to help you determine which method of connection you should use.

- S-video and standard audio
- Composite video and standard audio
- Component-out video and standard audio

When you finish connecting the video and audio cables between your computer and your TV, you must enable your computer to work with the TV. See "Enabling the Display Settings for a TV in Microsoft® Windows® XP" on page 68 to ensure that the computer recognizes and works properly with the TV. Additionally, if you are using S/PDIF digital audio, see "Enabling S/PDIF Digital Audio" on page 67.

S-Video and Standard Audio
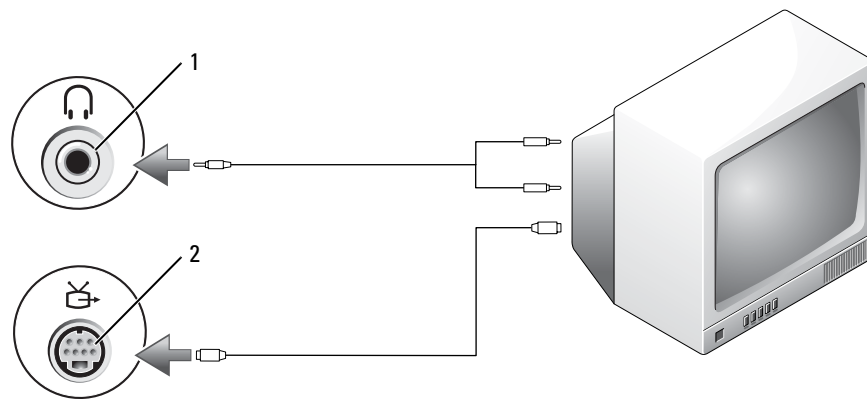
1 audio connector	**2** S-video TV-out connector
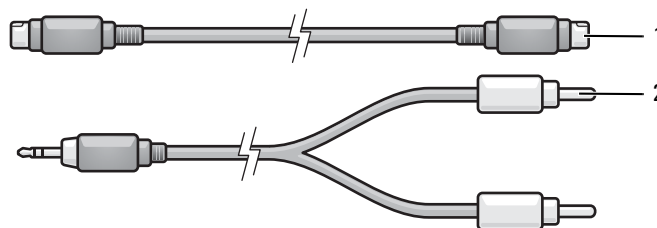
1 standard S-video cable	**2** standard audio cable

1 Turn off the computer and the TV and/or audio device that you want to connect.

✍ **NOTE:** You can connect an S-video cable directly to the S-video TV-out connector on the computer (without the component video adapter) if your TV or audio device supports S-video but not S/PDIF digital audio.

2 Plug one end of the S-video cable into the S-video output connector on the computer.

3 Plug the other end of the S-video cable into the S-video input connector on your TV.

4 Plug the single-connector end of the audio cable into the headphone connector on your computer.

5 Plug the two RCA connectors on the other end of the audio cable into the audio input connectors on your TV or other audio device.

6 Turn on the TV and any audio device that you connected (if applicable), and then turn on the computer.

7 See "Enabling the Display Settings for a TV in Microsoft® Windows® XP" on page 68 to ensure that the computer recognizes and works properly with the TV.

S-Video and S/PDIF Digital Audio
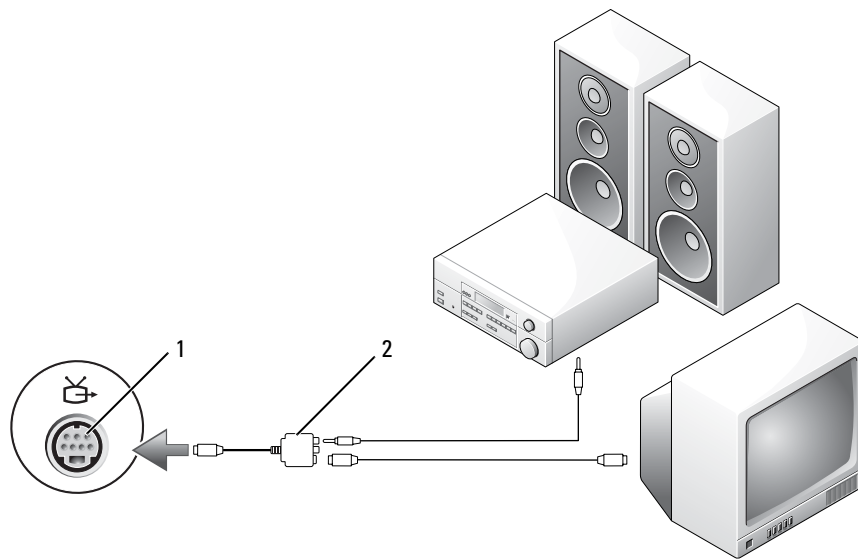
| **1** | S-video TV-out connector | **2** | composite video adapter |

| 1 | composite video adapter | 2 | S-video cable | 3 | S/PDIF digital audio cable |

1 Turn off the computer and the TV and/or the audio device that you want to connect.

2 Connect the composite video adapter to the S-video TV-out connector on your computer.

3 Plug one end of the S-video cable into the S-video output connector on the composite video adapter.
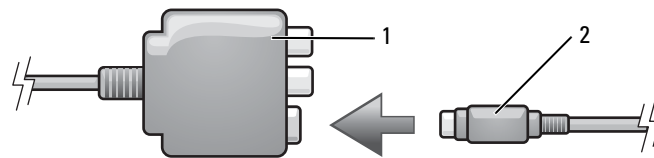
| 1 | composite video adapter | 2 | S-video cable |

4 Plug the other end of the S-video cable into the S-video input connector on the TV.

5 Plug one end of the S/PDIF digital audio cable into the digital audio connector on the composite video adapter cable.
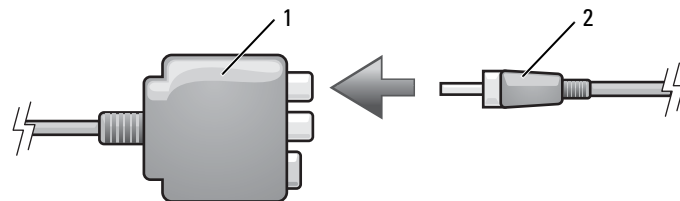
| 1 | composite video adapter | 2 | S/PDIF digital audio cable |

6 Plug the other end of the S/PDIF digital audio cable into the audio input connector on your TV or audio device.

7 Turn on the TV, turn on any audio device that you connected (if applicable), and then turn on the computer.

8 See "Enabling the Display Settings for a TV in Microsoft® Windows® XP" on page 68 to ensure that the computer recognizes and works properly with the TV.

Composite Video and Standard Audio
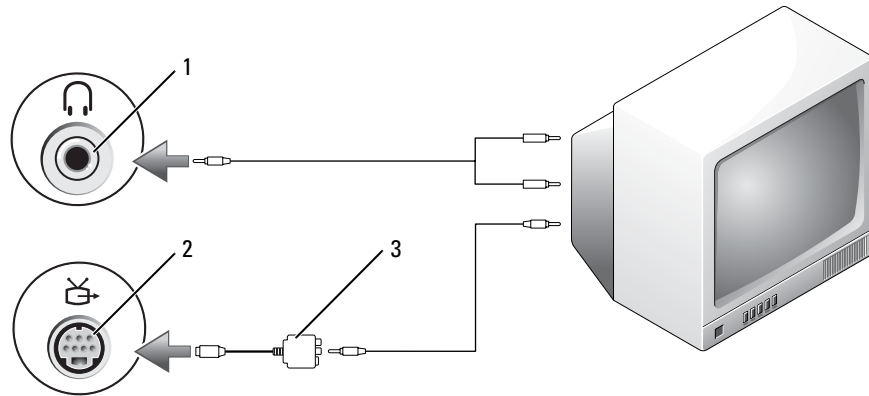
| 1 | audio input connector | 2 | S-video TV-out connector | 3 | composite video adapter |

| 1 | composite video adapter | 2 | composite video cable | 3 | standard audio cable |
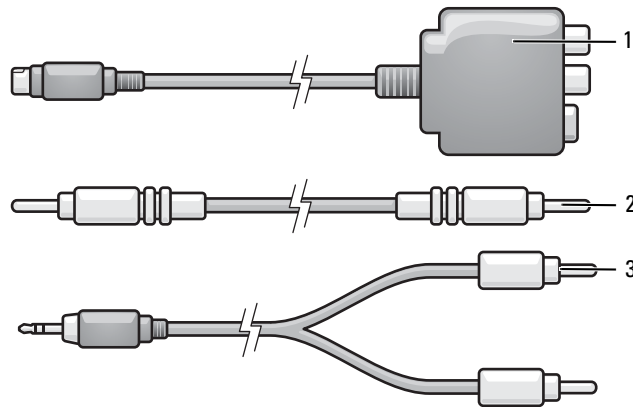
1 Turn off the computer and the TV and/or audio device that you want to connect.

2 Connect the composite video adapter to the S-video TV-out connector on your computer.

3 Plug one end of the composite video cable into the composite video-output connector on the composite video adapter.
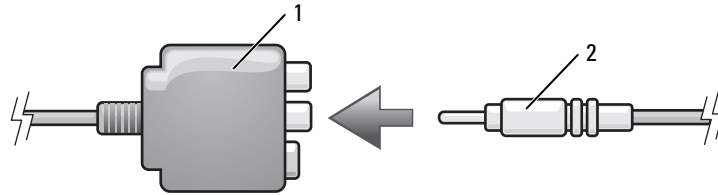
1 composite video adapter   **2** composite video cable

4 Plug the other end of the composite video cable into the composite video-input connector on the TV.

5 Plug the single-connector end of the audio cable into the headphone connector on the computer.

6 Plug the two RCA connectors on the other end of the audio cable in to the audio input connectors on your TV or other audio device.

7 Turn on the TV, turn on any audio device that you connected (if applicable), and then turn on the computer.

8 See "Enabling the Display Settings for a TV in Microsoft® Windows® XP" on page 68 to ensure that the computer recognizes and works properly with the TV.

Composite Video and S/PDIF Digital Audio

1 S-video TV-out connector   **2** composite video adapter

1   composite video adapter   **2**   composite video cable   **3**   standard audio cable

1   Turn off the computer and the TV and/or audio device that you want to connect.

2   Connect the composite video adapter to the S-video TV-out connector on the computer.

3   Plug one end of the composite video cable into the composite video-input connector on the composite video adapter.

1   composite video adapter   **2**   composite video cable

4   Plug the other end of the composite video cable into the composite video-input connector on the TV.

5   Plug one end of the S/PDIF digital audio cable in to the S/PDIF audio connector on the composite video adapter.

1   composite video adapter   **2**   S/PDIF digital audio cable

6 Plug the other end of the digital audio cable into the S/PDIF input connector on your TV or other audio device.

7 Turn on the TV, turn on any audio device that you connected (if applicable), and then turn on the computer.

8 See "Enabling the Display Settings for a TV in Microsoft® Windows® XP" on page 68 to ensure that the computer recognizes and works properly with the TV.

Component Video and Standard Audio

1	S-video TV-out connector	**2**	component video adapter

1	component video adapter	**2**	component video cable	**3**	standard audio cable

1 Turn off the computer and the TV and/or audio device that you want to connect.

2 Connect the component video adapter to the S-video TV-out connector on your computer.

3 Plug all three ends of the component video cable into the component video-output connectors on the component video adapter. Make sure that the red, green, and blue colors of the cable match the corresponding adapter ports.
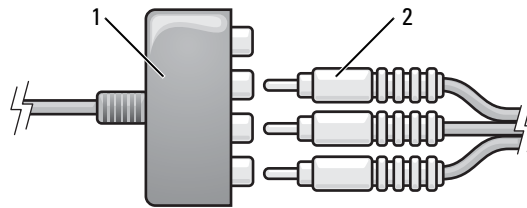
1 component video adapter   2   component video cable

4 Plug all three connectors from the other end of the component video cable into the component video-input connectors on the TV. Make sure that the red, green, and blue colors of the cable match the colors of the TV input connectors.

5 Plug the single-connector end of the audio cable into the headphone connector on the computer.

6 Plug the two RCA connectors on the other end of the audio cable into the audio input connectors on your TV or audio device.

7 Turn on the TV, turn on any audio device that you connected (if applicable), and then turn on the computer.

8 See "Enabling the Display Settings for a TV in Microsoft® Windows® XP" on page 68 to ensure that the computer recognizes and works properly with the TV.

Component Video and S/PDIF Digital Audio
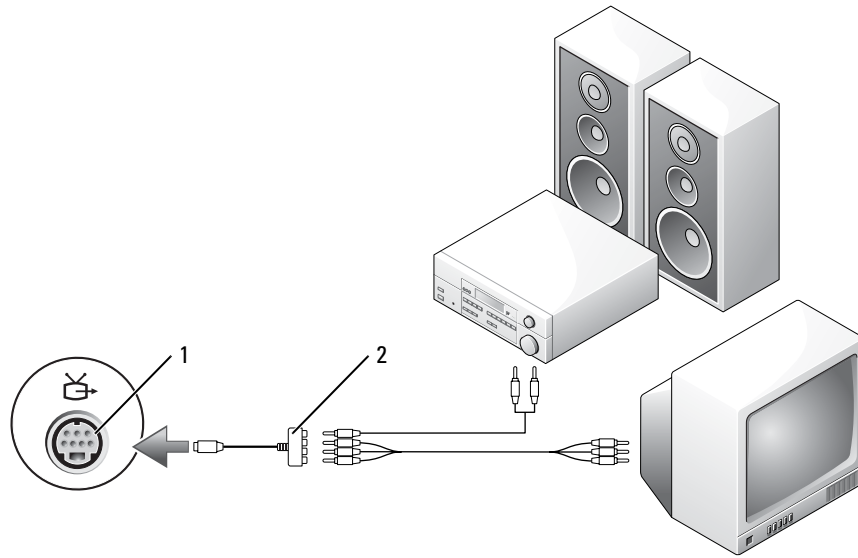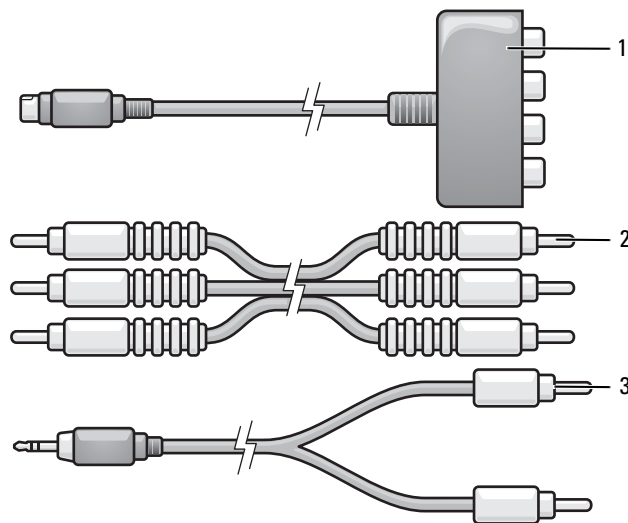
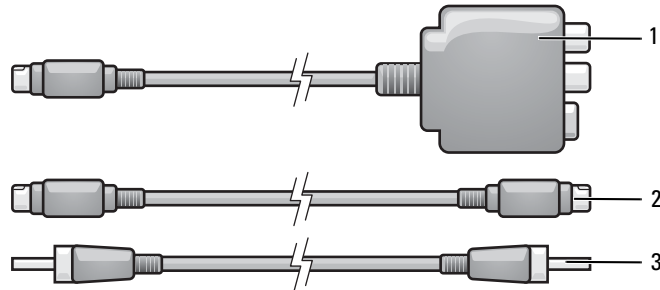| **1** | S-video TV-out connector | **2** | component video adapter |

| **1** | component video adapter | **2** | component video cable | **3** | standard audio cable |

1 Turn off the computer and the TV and/or audio device that you want to connect.

2 Connect the component video adapter to the S-video TV-out connector on the computer.

3 Plug all three ends of the component video cable into the component video-output connectors on the component video adapter. Make sure that the red, green, and blue colors of the cable match the corresponding adapter ports.
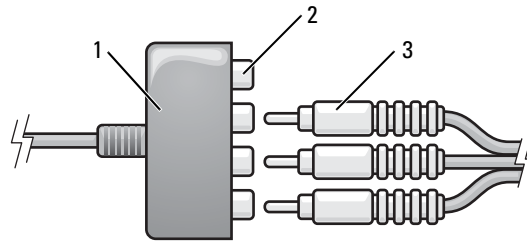
| 1 | component video adapter | 2 | component video-output connectors | 3 | component video cable |

4 Plug all three connectors from the other end of the component video cable into the component video-input connectors on the TV. Make sure that the red, green, and blue colors of the cable match the colors of the TV input connectors.

5 Plug one end of the S/PDIF digital audio cable into the S/PDIF audio connector on the component video adapter.
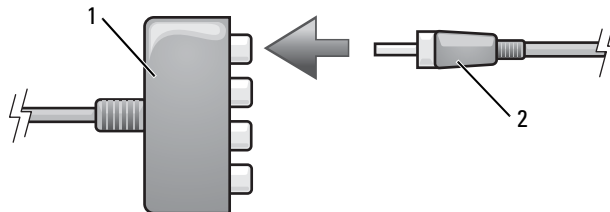

| 1 | component video adapter | 2 | S/PDIF digital audio cable |

6 Plug the other end of the digital audio cable into the S/PDIF input connector on your TV or other audio device.

7 Turn on the TV, turn on any audio device that you connected (if applicable), and then turn on the computer.

8 See "Enabling the Display Settings for a TV in Microsoft® Windows® XP" on page 68 to ensure that the computer recognizes and works properly with the TV.

Enabling S/PDIF Digital Audio

If your computer has a DVD drive, you can enable digital audio for DVD playback.

1   Click **Start**, point to **All Programs**, and click **PowerDVD** to launch the **Cyberlink PowerDVD** application.

2   Insert a DVD into the DVD drive.

    If the DVD begins playing, click the stop button.

3   Click the **Settings** option.

4   Click the **DVD** option.

5   Click the **DVD Audio Setting** icon.

6   Click the arrows beside the **Speaker Configuration** setting to scroll through the options, and select the **SPDIF** option.

7   Click the **Back** button once, and then click the **Back** button again to return to the main menu screen.

Enabling S/PDIF in the Windows Audio Driver

1   Double-click the speaker icon in the Windows notification area.

2   Click the **Options** menu and then click **Advanced Controls**.

3   Click **Advanced**.

4   Click **S/PDIF Interface**.

5   Click **Close**.

6   Click **OK**.

Setting Up the Cyberlink (CL) Headphones

NOTE: The CL headphone feature is available only if your computer has a DVD drive.

If your computer has a DVD drive, you can enable digital audio for DVD playback.

1   Click **Start**, and point to **All Programs**, and click **PowerDVD** to launch the **Cyberlink PowerDVD** program.

2   Insert a DVD into the DVD drive.

    If the DVD begins playing, click the stop button.

3   Click the **Settings** option.

4   Click the **DVD** option.

5   Click the **DVD Audio Setting** icon.

6   Click the arrows beside the **Speaker Configuration** setting to scroll through the options, and select the **Headphones** option.

7 Click the arrows beside the **Audio listening mode** setting to scroll through the options, and select the **CL Headphone** option.

8 Click the arrows beside the **Dynamic range compression** option to select the most suitable option.

9 Click the **Back** button once, and then click the **Back** button again to return to the main menu screen.

Enabling the Display Settings for a TV in Microsoft® Windows® XP

Video Controller

📝 **NOTE:** To ensure that the display options appear correctly, connect the TV to the computer before you enable the display settings.

1 Click the **Start** button, point to **Settings**, and then click **Control Panel**.

2 Double-click **Display** and click the **Settings** tab.

3 Click **Advanced**.

4 Click the tab for your video card.

📝 **NOTE:** To determine the type of video card installed in your computer, see the Windows Help and Support Center. To access the Help and Support Center, click **Start**→ **Help and Support**. Under **Pick a Task**, click **Use Tools to view your computer information and diagnose problems.** Then, under **My Computer Information**, select **Hardware**.

5 In the display devices section, select the appropriate option for using either a single display or multiple displays, ensuring that the display settings are correct for your selection.

Sound Modes

Your computer is designed to run on two different sound modes—stereo and 5.1 surround sound.

Stereo Sound Mode

Your computer ships with stereo sound mode as the default. For this mode, the computer is equipped with two different headphone connectors and a microphone/line-in connector at the front of the computer. You can simultaneously use two sets of headphones or other sound output devices and a microphone or other sound input device.

5.1 Surround Sound Mode

To switch to 5.1 surround sound mode, you need to connect a speaker's three differently colored cable connectors—green, yellow, and black—to the headphone and microphone connectors at the front of the computer.

📝 **NOTE:** You must connect the speaker's black cable connector first or the 5.1 surround sound mode does not work.

1 Connect the speaker's black cable connector to the microphone/line-in connector at the front of the computer.

A pop-up menu appears, giving the status of which connectors are plugged in to each jack.
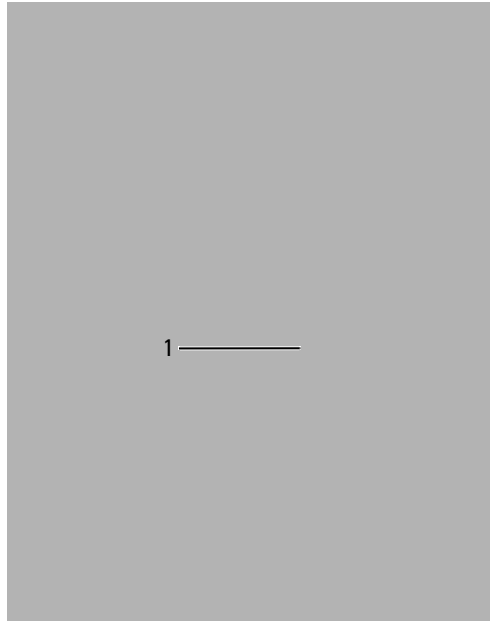
| 1 | black cable connector |

2 Connect the speaker's green cable connector to the left headphone connector.

3 Connect the speaker's yellow cable connector to the right headphone connector.
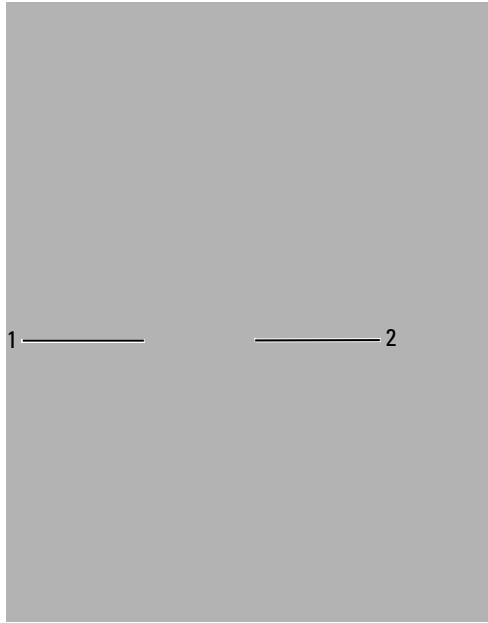
| **1** | green cable connector | **2** | yellow cable connector |

8

Using Cards

ExpressCards

ExpressCards leverage PC Card technology to provide a fast and convenient way to add memory, wired and wireless network communications (including wireless wide area network [WWAN] communications), multimedia, and security features to your computer.

See "Specifications" on page 163 for information on supported ExpressCards.

NOTE: An ExpressCard is not a bootable device.

ExpressCard Blanks

Your computer shipped with a plastic blank installed in the ExpressCard slot. Blanks protect unused slots from dust and other particles. Save the blank for use when no ExpressCard is installed in the slot; blanks from other computers may not fit your computer.

To remove the blank, see "Removing an ExpressCard or Blank" on page 72.

Installing an ExpressCard

You can install an ExpressCard in the computer while the computer is running. The computer automatically detects the card.

ExpressCards are generally marked with a symbol (such as a triangle or an arrow) or a label to indicate which end to insert into the slot. The cards are keyed to prevent incorrect insertion. If card orientation is not clear, see the documentation that came with the card.

CAUTION: Before you begin any of the procedures in this section, follow the safety instructions in the *Product Information Guide*.

To install an ExpressCard:

 1 Hold the card with the top side of the card facing up. The latch may need to be in the "in" position before you insert the card.

2 Slide the card into the slot until the card is completely seated in its connector.

If you encounter too much resistance, do not force the card. Check the card orientation and try again.

The computer recognizes the ExpressCard and automatically loads the appropriate device driver. If the configuration program tells you to load the manufacturer's drivers, use the floppy disk or CD that came with the ExpressCard.

Removing an ExpressCard or Blank

⚠ **CAUTION: Before you begin any of the procedures in this section, follow the safety instructions in the *Product Information Guide*.**

⊘ **NOTICE:** Use the ExpressCard configuration utility (click the ⬚ icon in the taskbar) to select a card and stop it from functioning before you remove it from the computer. If you do not stop the card in the configuration utility, you could lose data.

Press the latch and remove the card or blank. For some latches, you must press the latch twice: once to pop the latch out, and then a second time to pop the card out.

Save a blank to use when no ExpressCard is installed in a slot. Blanks protect unused slots from dust and other particles.

Media Memory Cards

The 5-in-1 media memory card reader provides a fast and convenient way to view and share digital photos, music, and videos stored on a media memory card.

NOTE: A media memory card is not a bootable device.

The 5-in-1 media memory card reader reads the following media memory cards:

- Secure Digital (SD) card/SDIO
- MultiMediaCard (MMC)
- Memory Stick
- Memory Stick PRO
- xD-Picture Card

Installing a Media Memory Card

You can install a media memory card in the computer while the computer is running. The computer automatically detects the card.

Media memory cards are generally marked with a symbol (such as a triangle or an arrow) or a label to indicate which end to insert into the slot. The cards are keyed to prevent incorrect insertion. If card orientation is not clear, see the documentation that came with the card.

⚠ **CAUTION: Before you begin any of the procedures in this section, follow the safety instructions in the *Product Information Guide*.**

To install a media memory card:

1 Hold the card with the top side of the card facing up.

2 Slide the card into the slot until the card is completely seated in its connector.

If you encounter too much resistance, do not force the card. Check the card orientation and try again.

The computer recognizes the media memory card and automatically loads the appropriate device driver. If the configuration program tells you to load the manufacturer's drivers, use the CD that came with the media memory card, if applicable.

Removing a Media Memory Card

⚠ **CAUTION: Before you begin any of the procedures in this section, follow the safety instructions in the *Product Information Guide*.**

⊘ **NOTICE:** Use the media memory card configuration utility (click the ![icon] icon in the taskbar) to select a card and stop it from functioning before you remove it from the computer. If you do not stop the card in the configuration utility, you could lose data.

Press the card in to release it from the card reader so that it is partially ejected, and remove the card.

9

Using Networks

Physically Connecting to a Network or Broadband Modem

Before you connect your computer to a network, the computer must have a network adapter installed and a network cable connected to it.

To connect a network cable:

1 Connect the network cable to the network adapter connector on the back of your computer.

NOTE: Insert the cable connector until it clicks into place, and then gently pull the cable to ensure that it is securely attached.

2 Connect the other end of the network cable to a network connection device or a network wall connector.

NOTE: Do not use a network cable with a telephone wall connector.

Network Setup Wizard

The Microsoft® Windows® XP operating system provides a Network Setup Wizard to guide you through the process of sharing files, printers, or an Internet connection between computers in a home or small office.

1 Click Start→ All Programs→ Accessories→ Communications→ Network Setup Wizard→ Next→ Checklist for creating a network.

*NOTE: Selecting the connection method labeled **This computer connects directly to the Internet** enables the integrated firewall provided with Windows XP Service Pack 2 (SP2).*

2 Complete the checklist.

3 Return to the Network Setup Wizard and follow the instructions on the screen.

Wireless Local Area Network (WLAN)

A WLAN is a series of interconnected computers that communicate with each other over the air waves rather than through a network cable connected to each computer. In a WLAN, a radio communications device called an access point or wireless router connects network computers and provides Internet, or network, access. The access point or wireless router and the wireless network card in the computer communicate by broadcasting data from their antennas over the air waves.

What You Need to Establish a WLAN Connection

Before you can set up a WLAN, you need:

- High-speed (broadband) Internet access (such as cable or DSL)
- A broadband modem that is connected and working
- A wireless router or access point
- A wireless network card for each computer that you want to connect to your WLAN
- A network cable with the network (RJ-45) connector

Checking Your Wireless Network Card

Depending on what you selected when you purchased your computer, the computer has a variety of configurations. To confirm that your computer has a wireless network card and to determine the type of card, use one of the following:

- The **Start** button and the **Connect To** option
- The order confirmation for your computer

Start Button and Connect To Option

1 Click **Start**→ **Connect To**→ **Show all connections**.

If **Wireless Network Connection** does not appear under **LAN or High-Speed Internet**, you may not have a wireless network card.

If **Wireless Network Connection** appears, you have a wireless network card.

2 To view detailed information about the wireless network card:

a Right-click **Wireless Network Connection.**

b Click **Properties**. The **Wireless Network Connection Properties** window appears. The wireless network card's name and model number are listed on the **General** tab.

NOTE: If your computer is set to the **Classic Start** menu option, you can view network connections by clicking the **Start**→ **Settings**→ **Network Connections**. If **Wireless Network Connection** does not appear, you may not have a wireless network card.

The Order Confirmation for Your Computer

The order confirmation that you received when you ordered your computer lists the hardware and software that shipped with your computer.

Setting Up a New WLAN

Connecting a Wireless Router and a Broadband Modem

1 Contact your Internet service provider (ISP) to obtain specific information about the connection requirements for your broadband modem.

2 Ensure that you have wired Internet access through your broadband modem before you attempt to set up a wireless Internet connection. See "Physically Connecting to a Network or Broadband Modem" on page 75.

3 Install any software required for your wireless router. Your wireless router may have been shipped with an installation CD. Installation CDs usually contain installation and troubleshooting information. Install the required software according to the instructions provided by the router manufacturer.

4 Shut down your computer and any other wireless-enabled computers in the vicinity through the **Start** menu.

5 Disconnect your broadband modem power cable from the electrical outlet.

6 Disconnect the network cable from the computer and the modem.

NOTE: Wait for a minimum of 5 minutes after disconnecting your broadband modem before you continue with the network setup.

7 Disconnect the AC adapter cable from your wireless router to ensure that there is no power connected to the router.

8 Insert a network cable into the network (RJ-45) connector on the unpowered broadband modem.

9 Connect the other end of the network cable into the Internet network (RJ-45) connector on the unpowered wireless router.

10 Ensure that no network or USB cables, other than the network cable connecting the modem and the wireless router, are connected to the broadband modem.

✎ **NOTE:** Restart your wireless equipment in the order described below to prevent a potential connection failure.

11 Turn on *only* your broadband modem and wait for at least 2 minutes for the broadband modem to stabilize. After 2 minutes, proceed to step 12.

12 Turn on your wireless router and wait for at least 2 minutes for the wireless router to stabilize. After 2 minutes, proceed to step 13.

13 Start your computer and wait until the boot process completes.

14 See the documentation that came with your wireless router to do the following in order to set up the wireless router:

   • Establish communication between your computer and your wireless router.

   • Configure your wireless router to communicate with your broadband router.

   • Find out your wireless router's broadcast name. The technical term for the name of your router's broadcast name is Service Set Identifier (SSID) or network name.

15 If necessary, configure your wireless network card to connect to the wireless network. See "Connecting to a WLAN" on page 78.

Connecting to a WLAN

✎ **NOTE:** Before you connect to a WLAN, ensure that you have followed the instructions in "Wireless Local Area Network (WLAN)" on page 76.

✎ **NOTE:** The following networking instructions do not apply to internal cards with Bluetooth® wireless technology or cellular products.

This section provides general procedures for connecting to a network via wireless technology. Specific network names and configuration details vary. See "Wireless Local Area Network (WLAN)" on page 76 for more information about how to prepare for connecting your computer to a WLAN.

Your wireless network card requires specific software and drivers for connecting to a network. The software is already installed.

✎ **NOTE:** If the software is removed or corrupted, follow the instructions in the user documentation for your wireless network card. Verify the type of wireless network card installed in your computer and then search for that name on the Dell Support website at **support.dell.com**. For information on the type of wireless network card that is installed in your computer, see "Checking Your Wireless Network Card" on page 76.

Determining the Wireless Network Device Manager

Depending on the software installed on your computer, different wireless configuration utilities may manage your network devices:

- Your wireless network card's client utility
- The Windows XP operating system

To determine which wireless configuration utility is managing your wireless network card:

1 Click **Start**→ **Settings**→ **Control Panel**→ **Network Connections**.
2 Right-click the **Wireless Network Connection** icon, and then click **View Available Wireless Networks**.

If the **Choose a wireless network** window states **Windows cannot configure this connection**, the wireless network card's client utility is managing the wireless network card.

If the **Choose a wireless network** window states **Click an item in the list below to connect to a wireless network in range or to get more information**, the Windows XP operating system is managing the wireless network card.

For specific information about the wireless configuration utility installed on your computer, see your wireless network documentation in the Windows Help and Support Center.

To access the Help and Support Center:

1 Click **Start**→ **Help and Support**.
2 Under **Pick a Help topic**, click **Dell User and System Guides**.s
3 Under **Device Guides**, select the documentation for your wireless network card.

Completing the Connection to the WLAN

When you turn on your computer and a network (for which your computer is not configured) is detected in the area, a pop-up appears near the network icon in the notification area (in the lower-right corner of the Windows desktop).

Follow the instructions provided in any utility prompts that appear on your screen.

Once you have configured your computer for the wireless network that you selected, another pop-up notifies you that your computer is connected to that network.

Thereafter, whenever you log on to your computer within the range of the wireless network that you selected, the same pop-up notifies you of the wireless network connection.

> **NOTE:** If you select a secure network, you must enter a WEP or WPA key when prompted. Network security settings are unique to your network. Dell cannot provide this information.

> **NOTE:** Your computer can take up to 1 minute to connect to the network.

Monitoring the Status of the Wireless Network Card Through Dell™ QuickSet

The wireless activity indicator(s) provide you with an easy way to monitor the status of your computer's wireless devices. The indicator(s) display whether your computer's integrated wireless devices are enabled or disabled. When you turn the wireless networking function on or off, the wireless activity indicator(s) change to display the status.

You can turn on or off the option to have wireless activity indicator(s) appear when you use the wireless switch to enable or disable wireless network connections. Click the Dell QuickSet icon in your taskbar, click **Hotkey Popups**, and select or deselect **Wireless Activity Indicator Off**.

For more information about the wireless activity indicator(s), see the *Dell QuickSet Help* file. For information about QuickSet and how to access the *Dell QuickSet Help* file, see "Dell™ QuickSet" on page 137.

Mobile Broadband (or Wireless Wide Area Network)

A Mobile Broadband network, also known as a Wireless Wide Area Network (WWAN), is a high-speed digital cellular network that provides Internet access over a much wider geographical area than a Wireless Local Area Network (WLAN), which typically covers only from 100 to 1000 feet. Your computer can maintain Mobile Broadband network access as long as the computer is within a cellular-data coverage zone. Contact your Service Provider for coverage of a high-speed digital cellular network.

✎ **NOTE:** Even if you are able to make a call from your cellular phone in a specific geographical location, that location may not necessarily be within a cellular-data coverage zone.

What You Need to Establish a Mobile Broadband Network Connection

✎ **NOTE:** Depending on your computer, you can use either a Mobile Broadband ExpressCard or Mini-Card, but not both, to establish a Mobile Broadband network connection.

To set up a Mobile Broadband network connection, you need:

* A Mobile Broadband ExpressCard or Mini-Card (depending on your computer's configuration)

✎ **NOTE:** For instructions on using ExpressCards, see "Using Cards" on page 71.

* Activated Mobile Broadband ExpressCard or activated Subscriber Identity Module (SIM) for your service provider

* The Dell Mobile Broadband Card Utility (already installed on your computer if you purchased the card when you purchased your computer, or on the CD that accompanied your card if purchased separately from your computer)

   If the utility is corrupted or deleted from your computer, see the Dell Mobile Broadband Card Utility user's guide for instructions. The user's guide is available through the Windows Help and Support Center (or on the CD that accompanied your card if you purchased it separately from your computer). To access the Help and Support Center, see "Windows Help and Support Center" on page 13.

Checking Your Dell Mobile Broadband Card

Depending on what you selected when you purchased your computer, the computer has a variety of configurations. To determine your computer configuration, see one of the following:

- Your order confirmation
- Microsoft® Windows® Help and Support Center

To check your Mobile Broadband card in the Help and Support Center:

1 Click **Start**→ **Help and Support**→ **Use Tools to view your computer information and diagnose problems**.

2 Under **Tools**, click **My Computer Information** and then click **Find information about the hardware installed on this computer**.

On the **My Computer Information - Hardware** screen, you can view the type of Mobile Broadband card installed in your computer as well as other hardware components.

> **NOTE:** The Mobile Broadband card is listed under **Modems**.

Connecting to a Mobile Broadband Network

> **NOTE:** These instructions only apply to Mobile Broadband ExpressCards or Mini-Cards. They do not apply to internal cards with wireless technology.

> **NOTE:** Before you connect to the Internet, you must activate Mobile Broadband service through your cellular service provider. For instructions and for additional information about using the Dell Mobile Broadband Card Utility, see the user's guide available through the Windows Help and Support Center. To access the Help and Support Center, see "Windows Help and Support Center" on page 13. The user's guide is also available on the Dell Support website at **support.dell.com** and on the CD included with your Mobile Broadband card if you purchased the card separately from your computer.

Use the Dell Mobile Broadband Card Utility to establish and manage a Mobile Broadband network connection to the Internet:

1 Click the Dell Mobile Broadband Card Utility icon, , on the Windows desktop, to run the utility.

2 Click **Connect**.

> **NOTE:** The **Connect** button changes to the **Disconnect** button.

3 Follow the instructions on the screen to manage the network connection with the utility.

or

1 Click **Start**→ **All Programs**→ **Dell Wireless**.

2 Click **Dell Wireless Broadband** and follow the instructions on the screen.

Enabling/Disabling the Dell Mobile Broadband Card

NOTE: If you are unable to connect to a Mobile Broadband network, ensure that you have all the components for establishing a Mobile Broadband connection (see "What You Need to Establish a Mobile Broadband Network Connection" on page 80), and then verify that your Mobile Broadband card is enabled by verifying the setting of the wireless switch.

You can turn your computer's wireless devices on and off with the wireless switch on the left side of the computer (see "Left Side View" on page 21).

If the switch is in the "on" position, move the switch to the "off" position to disable the switch and the Mobile Broadband card. If the switch is in the "off" position, move the switch to the "on" position to enable the switch and the Dell Mobile Broadband card. For information about the wireless switch positions, see "wireless switch" on page 21.

To monitor the status of your wireless device, see "Monitoring the Status of the Wireless Network Card Through Dell™ QuickSet" on page 80.

Dell™ Wi-Fi Catcher™ Network Locator

The wireless switch on your Dell computer uses the Dell Wi-Fi Catcher Network Locator software to scan specifically for WiFi wireless local area networks (LAN) in your vicinity.

To scan for WiFi networks, slide the switch toward the front of the computer and release, so that the switch springs back to the middle "on" position. To turn off the network locator function, slide the switch to the back or "off" position. The Wi-Fi Catcher Network Locator software functions regardless of whether your computer is turned on or off, in hibernate mode, or in standby mode, as long as the switch is configured through QuickSet or the BIOS (system setup program) to control WiFi network connections.

For more information on the Wi-Fi Catcher Network Locator software and to enable the feature through QuickSet, see the *Dell QuickSet Help* file. To access the *Help* file, right-click the ![icon] icon in the taskbar and click **Help**.

Microsoft® Windows® Firewall

The Windows Firewall provides basic protection from unauthorized access to the computer while the computer is connected to the Internet. The firewall is automatically enabled when you run the Network Setup Wizard. When the firewall is enabled for a network connection, the firewall icon appears with a red background in the **Network Connections** section of the Control Panel.

NOTE: Enabling the Windows Firewall does not reduce the need for virus-checking software.

For more information, see the Help and Support Center for the Microsoft® Windows® XP operating system. To access the Help and Support Center, see "Windows Help and Support Center" on page 13.

10

Securing Your Computer

Security Cable Lock

NOTE: Your computer does not ship with a security cable lock.

A security cable lock is a commercially available antitheft device. To use the lock, attach it to the security cable slot on your Dell™ computer. For more information, see the instructions included with the device.

NOTICE: Before you buy an antitheft device, ensure that it will work with the security cable slot on your computer.

Passwords

Passwords prevent unauthorized access to your computer. When using passwords, observe the following guidelines:

- Choose a password that you can remember, but not one that is easy to guess. For example, do not use the names of family members or pets for passwords.

- It is recommended that you do not write down your password. If you do write it down, however, ensure that the password is stored in a secure place.

- Do not share your password with other people.
- Ensure that people are not watching you when you type your password.

NOTICE: Passwords provide a high level of security for data in your computer or hard drive. However, they are not foolproof. If you require more security, obtain and use additional forms of protection, such as smart cards, data encryption programs, or PC Cards (or Mini-Cards) with encryption features.

Use the **User Accounts** option in the Control Panel in the Microsoft® Windows® operating system to create user accounts or to change passwords. Once you create a user password, you must enter it each time you turn on or unlock your computer. If you do not enter a password within 2 minutes, the computer returns to its previous operating state.

For more information, see your Windows documentation.

Computer Tracking Software

Computer tracking software may enable you to locate your computer if it is lost or stolen. The software is optional and may be purchased when you order your Dell™ computer, or you can contact your Dell sales representative for information about this security feature.

NOTE: Computer tracking software may not be available in certain countries.

NOTE: If you have computer tracking software and your computer is lost or stolen, you must contact the company that provides the tracking service to report the missing computer.

If Your Computer Is Lost or Stolen

- Call a law enforcement agency to report the lost or stolen computer. Include the Service Tag in your description of the computer. Ask that a case number be assigned and write down the number, along with the name, address, and phone number of the law enforcement agency. If possible, obtain the name of the investigating officer.

NOTE: If you know where the computer was lost or stolen, call a law enforcement agency in that area. If you do not know, call a law enforcement agency where you live.

- If the computer belongs to a company, notify the security office of the company.
- Contact Dell customer service to report the missing computer. Provide the computer Service Tag, the case number, and the name, address, and phone number of the law enforcement agency to which you reported the missing computer. If possible, give the name of the investigating officer.

The Dell customer service representative will log your report under the computer Service Tag and record the computer as missing or stolen. If someone calls Dell for technical assistance and gives your Service Tag, the computer is identified automatically as missing or stolen. The representative will attempt to get the phone number and address of the caller. Dell will then contact the law enforcement agency to which you reported the missing computer.

Troubleshooting

Dell Diagnostics

⚠️ **CAUTION: Before you begin any of the procedures in this section, follow the safety instructions in the** *Product Information Guide*.

When to Use the Dell Diagnostics

If you experience a problem with your computer, perform the checks in "Lockups and Software Problems" on page 97 and run the Dell Diagnostics before you contact Dell for technical assistance.

📛 **NOTICE:** The Dell Diagnostics works only on Dell computers.

🖊 **NOTE:** The *Drivers and Utilities* CD is optional and may not ship with your computer.

Start the Dell Diagnostics from either your hard drive or from the *Drivers and Utilities* CD (also known as the *ResourceCD*).

Starting the Dell Diagnostics From Your Hard Drive

The Dell Diagnostics is located on a hidden diagnostic utility partition on your hard drive.

🖊 **NOTE:** If your computer cannot display a screen image, contact Dell. See "Contacting Dell" on page 141.

 1 Shut down the computer.

 2 Connect the computer to an electrical outlet.

 3 Diagnostics can be invoked one of two ways:

 a Turn on the computer. When the DELL™ logo appears, press <F12> immediately. Select **Diagnostics** from the boot menu and press <Enter>.

🖊 **NOTE:** If you wait too long and the operating system logo appears, continue to wait until you see the Microsoft® Windows® desktop. Then shut down your computer and try again.

 b Press and hold the <Fn> key while powering the system on.

🖊 **NOTE:** If you see a message stating that no diagnostics utility partition has been found, run the Dell Diagnostics from the *Drivers and Utilities CD*.

The computer runs the Pre-boot System Assessment, a series of initial tests of your system board, keyboard, hard drive, and display.

- During the assessment, answer any questions that appear.
- If a failure is detected, the computer stops and beeps. To stop the assessment and restart the computer, press <n>; to continue to the next test, press <y>; to retest the component that failed, press <r>.
- If failures are detected during the Pre-boot System Assessment, write down the error code(s) and contact Dell.

If the Pre-boot System Assessment completes successfully, you receive the message `Booting Dell Diagnostic Utility Partition. Press any key to continue.`

4 Press any key to start the Dell Diagnostics from the diagnostics utility partition on your hard drive.

Starting the Dell Diagnostics From the Drivers and Utilities CD

1 Insert the *Drivers and Utilities* CD.

2 Shut down and restart the computer.

When the DELL logo appears, press <F12> immediately.

If you wait too long and the Windows logo appears, continue to wait until you see the Windows desktop. Then shut down your computer and try again.

> **NOTE:** The next steps change the boot sequence for one time only. On the next start-up, the computer boots according to the devices specified in the system setup program.

3 When the boot device list appears, highlight **CD/DVD/CD-RW Drive** and press <Enter>.

4 Select the **Boot from CD-ROM** option from the menu that appears and press <Enter>.

5 Type `1` to start the *ResourceCD* menu and press <Enter> to proceed.

6 Select **Run the 32 Bit Dell Diagnostics** from the numbered list. If multiple versions are listed, select the version appropriate for your computer.

7 When the Dell Diagnostics **Main Menu** appears, select the test you want to run.

Dell Diagnostics Main Menu

1 After the Dell Diagnostics loads and the **Main Menu** screen appears, click the button for the option you want.

Option	Function
Express Test	Performs a quick test of devices. This test typically takes 10 to 20 minutes and requires no interaction on your part. Run **Express Test** first to increase the possibility of tracing the problem quickly.

Option	Function
Extended Test	Performs a thorough check of devices. This test typically takes 1 hour or more and requires you to answer questions periodically.
Custom Test	Tests a specific device. You can customize the tests you want to run.
Symptom Tree	Lists the most common symptoms encountered and allows you to select a test based on the symptom of the problem you are having.

2   If a problem is encountered during a test, a message appears with an error code and a description of the problem. Write down the error code and problem description and follow the instructions on the screen.

If you cannot resolve the error condition, contact Dell. See "Contacting Dell" on page 141.

NOTE: The Service Tag for your computer is located at the top of each test screen. If you contact Dell, technical support will ask for your Service Tag.

3   If you run a test from the **Custom Test** or **Symptom Tree** option, click the applicable tab described in the following table for more information.

Tab	Function
Results	Displays the results of the test and any error conditions encountered.
Errors	Displays error conditions encountered, error codes, and the problem description.
Help	Describes the test and may indicate requirements for running the test.
Configuration	Displays your hardware configuration for the selected device.
	The Dell Diagnostics obtains configuration information for all devices from the system setup program, memory, and various internal tests, and it displays the information in the device list in the left pane of the screen. The device list may not display the names of all the components installed on your computer or all devices attached to your computer.
Parameters	Allows you to customize the test by changing the test settings.

4 When the tests are completed, if you are running the Dell Diagnostics from the *Drivers and Utilities* CD, remove the CD.

5 When the tests are completed, close the test screen to return to the **Main Menu** screen. To exit the Dell Diagnostics and restart the computer, close the **Main Menu** screen.

Dell Support Utility

The Dell Support Utility is installed on your computer and available from the Dell Support icon on the taskbar or from the **Start** button. Use this support utility for self-support information, software updates, and health scans of your computing environment.

Accessing the Dell Support Utility

Access the Dell Support Utility from the Dell Support icon on the taskbar or from the **Start** menu.

If the Dell Support icon does not appear in your taskbar:

1 Click the **Start** button and point to **Programs**.

2 Click **Dell Support** and point to **Dell Support Settings**.

3 Ensure that the **Show icon on the taskbar** option is checked.

> **NOTE:** If the Dell Support Utility is not available from the **Start** menu, go to **support.dell.com** and download the software.

The Dell Support Utility is customized for your computing environment.

The Dell Support icon in the taskbar functions differently when you click, double-click, or right-click the icon.

Clicking the Dell Support Icon

Click or right-click the 🗇 icon to perform the following tasks:

- Check your computing environment
- View the Dell Support Utility settings
- Access the help file for the Dell Support Utility
- View frequently asked questions
- Learn more about the Dell Support Utility
- Turn the Dell Support Utility off

Double-Clicking the Dell Support Icon

Double-click the 🗇 icon to manually check your computing environment, view frequently asked questions, access the help file for the Dell Support Utility, and view Dell Support settings.

For more information about the Dell Support Utility, click the question mark (**?**) at the top of the Dell Support screen.

Drive Problems

⚠️ **CAUTION: Before you begin any of the procedures in this section, follow the safety instructions in the _Product Information Guide_.**

ENSURE THAT MICROSOFT® WINDOWS® RECOGNIZES THE DRIVE — Click the **Start** button and click **My Computer**. If the floppy, CD, or DVD drive, is not listed, perform a full scan with your antivirus software to check for and remove viruses. Viruses can sometimes prevent Windows from recognizing the drive.

TEST THE DRIVE —

- Insert another floppy disk, CD, or DVD to eliminate the possibility that the original one is defective.
- Insert a bootable floppy disk and restart the computer.

CLEAN THE DRIVE OR DISK — See "Cleaning Your Computer" on page 173.

ENSURE THAT THE CD IS SNAPPED ONTO THE SPINDLE

CHECK THE CABLE CONNECTIONS

CHECK FOR HARDWARE INCOMPATIBILITIES — See "Resolving Software and Hardware Incompatibilities" on page 108.

RUN THE DELL DIAGNOSTICS — See "Dell Diagnostics" on page 85.

CD and DVD drive problems

📝 **NOTE:** High-speed CD or DVD drive vibration is normal and may cause noise, which does not indicate a defect in the drive or the CD or DVD.

📝 **NOTE:** Because of different regions worldwide and different disc formats, not all DVD titles work in all DVD drives.

Problems writing to a CD/DVD-RW drive

CLOSE OTHER PROGRAMS — The CD/DVD-RW drive must receive a steady stream of data when writing. If the stream is interrupted, an error occurs. Try closing all programs before you write to the CD/DVD-RW.

TURN OFF STANDBY MODE IN WINDOWS BEFORE WRITING TO A CD/DVD-RW DISC — See "Power Management Modes" on page 41 for information on standby mode.

CHANGE THE WRITE SPEED TO A SLOWER RATE — See the help files for your CD or DVD creation software.

If you cannot eject the CD, CD-RW, DVD, or DVD+RW drive tray

1 Ensure that the computer is shut down.
2 Straighten a paper clip and insert one end into the eject hole at the front of the drive; push firmly until the tray is partially ejected.
3 Gently pull out the tray until it stops.

If you hear an unfamiliar scraping or grinding sound

- Ensure that the sound is not caused by the program that is running.

- Ensure that the disk or disc is inserted properly.

Hard drive problems

ALLOW THE COMPUTER TO COOL BEFORE TURNING IT ON — A hot hard drive may prevent the operating system from starting. Try allowing the computer to return to room temperature before turning it on.

RUN CHECK DISK —

1 Click the **Start** button and click **My Computer**.

2 Right-click **Local Disk C:**.

3 Click **Properties**.

4 Click the **Tools** tab.

5 Under **Error-checking**, click **Check Now**.

6 Click **Scan for and attempt recovery of bad sectors**.

7 Click **Start**.

E-Mail, Modem, and Internet Problems

⚠ **CAUTION: Before you begin any of the procedures in this section, follow the safety instructions in the *Product Information Guide*.**

📝 **NOTE:** Connect the modem to an analog telephone jack only. The modem does not operate while it is connected to a digital telephone network.

CHECK THE MICROSOFT OUTLOOK® EXPRESS SECURITY SETTINGS — If you cannot open your e-mail attachments:

1 In Outlook Express, click **Tools**, click **Options**, and then click **Security**.

2 Click **Do not allow attachments** to remove the checkmark.

CHECK THE TELEPHONE LINE CONNECTION

CHECK THE TELEPHONE JACK

CONNECT THE MODEM DIRECTLY TO THE TELEPHONE WALL JACK

USE A DIFFERENT TELEPHONE LINE—

- Verify that the telephone line is connected to the jack on the modem. (The jack has either a green label or a connector-shaped icon next to it.)

- Ensure that you hear a click when you insert the telephone line connector into the modem.

- Disconnect the telephone line from the modem and connect it to a telephone. Listen for a dial tone.

- If you have other telephone devices sharing the line, such as an answering machine, fax machine, surge protector, or line splitter, then bypass them and connect the modem directly to the telephone wall jack. If you are using a line that is 3 m (10 ft) or more in length, try a shorter one.

RUN THE MODEM HELPER DIAGNOSTICS — Click the **Start** button, point to **Programs** and then click **Modem Helper**. Follow the instructions on the screen to identify and resolve modem problems. (Modem Helper is not available on certain computers.)

VERIFY THAT THE MODEM IS COMMUNICATING WITH WINDOWS —

1 Click the **Start** button and click **Control Panel**.

2 Click **Printers and Other Hardware**.

3 Click **Phone and Modem Options**.

4 Click the **Modems** tab.

5 Click the COM port for your modem.

6 Click **Properties**, click the **Diagnostics** tab, and then click **Query Modem** to verify that the modem is communicating with Windows.

If all commands receive responses, the modem is operating properly.

ENSURE THAT YOU ARE CONNECTED TO THE INTERNET — Ensure that you have subscribed to an Internet provider. With the Outlook Express e-mail program open, click **File**. If **Work Offline** has a checkmark next to it, click the checkmark to remove it and connect to the Internet. For help, contact your Internet service provider.

SCAN THE COMPUTER FOR SPYWARE — If you are experiencing slow computer performance, you frequently receive pop-up advertisements, or you are having problems connecting to the Internet, your computer might be infected with spyware. Use an anti-virus program that includes anti-spyware protection (your program may require an upgrade) to scan the computer and remove spyware. For more information, go to **support.dell.com** and search for the keyword *spyware*.

Error Messages

⚠ **CAUTION: Before you begin any of the procedures in this section, follow the safety instructions in the *Product Information Guide*.**

If the message is not listed, see the documentation for the operating system or the program that was running when the message appeared.

AUXILIARY DEVICE FAILURE — The touch pad, track stick, or external mouse may be faulty. For an external mouse, check the cable connection. Enable the **Pointing Device** option in the system setup program (see "Using the System Setup Program" on page 171). If the problem persists, contact Dell. See "Contacting Dell" on page 141.

BAD COMMAND OR FILE NAME — Ensure that you have spelled the command correctly, put spaces in the proper place, and used the correct pathname.

CACHE DISABLED DUE TO FAILURE — The primary cache internal to the microprocessor has failed. Contact Dell. See "Contacting Dell" on page 141.

CD DRIVE CONTROLLER FAILURE — The CD drive does not respond to commands from the computer. See "Drive Problems" on page 89.

DATA ERROR — The hard drive cannot read the data. See "Drive Problems" on page 89.

DECREASING AVAILABLE MEMORY — One or more memory modules may be faulty or improperly seated. Reinstall the memory modules and, if necessary, replace them. See "Memory" on page 119.

DISK C: FAILED INITIALIZATION — The hard drive failed initialization. Run the hard drive tests in the Dell Diagnostics. See "Dell Diagnostics" on page 85.

DRIVE NOT READY — The operation requires a hard drive in the bay before it can continue. Install a hard drive in the hard drive bay. See "Hard Drive" on page 116.

ERROR READING PCMCIA CARD — The computer cannot identify the ExpressCard. Reinsert the card or try another card. See "ExpressCards" on page 71.

EXTENDED MEMORY SIZE HAS CHANGED — The amount of memory recorded in NVRAM does not match the memory installed in the computer. Restart the computer. If the error appears again, contact Dell. See "Contacting Dell" on page 141.

THE FILE BEING COPIED IS TOO LARGE FOR THE DESTINATION DRIVE — The file that you are trying to copy is too large to fit on the disk, or the disk is too full. Try copying the file to a different disk or use a larger capacity disk.

A FILENAME CANNOT CONTAIN ANY OF THE FOLLOWING CHARACTERS: \ / : * ? " < > | — Do not use these characters in filenames.

GATE A20 FAILURE — A memory module may be loose. Reinstall the memory modules and, if necessary, replace them. See "Memory" on page 119.

GENERAL FAILURE — The operating system is unable to carry out the command. The message is usually followed by specific information—for example, `Printer out of paper.` Take the appropriate action.

HARD-DISK DRIVE CONFIGURATION ERROR — The computer cannot identify the drive type. Shut down the computer, remove the hard drive (see "Hard Drive" on page 116), and boot the computer from a CD. Then shut down the computer, reinstall the hard drive, and restart the computer. Run the Hard-Disk Drive tests in the Dell Diagnostics (see page 85).

HARD-DISK DRIVE CONTROLLER FAILURE 0 — The hard drive does not respond to commands from the computer. Shut down the computer, remove the hard drive (see "Hard Drive" on page 116), and boot the computer from a CD. Then shut down the computer, reinstall the hard drive, and restart the computer. If the problem persists, try another drive. Run the Hard-Disk Drive tests in the Dell Diagnostics (see page 85).

HARD-DISK DRIVE FAILURE — The hard drive does not respond to commands from the computer. Shut down the computer, remove the hard drive (see "Hard Drive" on page 116), and boot the computer from a CD. Then shut down the computer, reinstall the hard drive, and restart the computer. If the problem persists, try another drive. Run the Hard-Disk Drive tests in the Dell Diagnostics (see page 85).

HARD-DISK DRIVE READ FAILURE — The hard drive may be defective. Shut down the computer, remove the hard drive (see "Hard Drive" on page 116), and boot the computer from a CD. Then shut down the computer, reinstall the hard drive, and restart the computer. If the problem persists, try another drive. Run the Hard-Disk Drive tests in the Dell Diagnostics (see page 85).

INSERT BOOTABLE MEDIA — The operating system is trying to boot to a nonbootable CD. Insert a bootable CD.

INVALID CONFIGURATION INFORMATION-PLEASE RUN SYSTEM SETUP PROGRAM — The system configuration information does not match the hardware configuration. The message is most likely to occur after a memory module is installed. Correct the appropriate options in the system setup program (see "Using the System Setup Program" on page 171).

KEYBOARD CLOCK LINE FAILURE — For external keyboards, check the cable connection. Run the Keyboard Controller test in the Dell Diagnostics (see page 85).

KEYBOARD CONTROLLER FAILURE — For external keyboards, check the cable connection. Restart the computer, and avoid touching the keyboard or the mouse during the boot routine. Run the Keyboard Controller test in the Dell Diagnostics (see page 85).

KEYBOARD DATA LINE FAILURE — For external keyboards, check the cable connection. Run the Keyboard Controller test in the Dell Diagnostics (see page 85).

KEYBOARD STUCK KEY FAILURE — For external keyboards or keypads, check the cable connection. Restart the computer, and avoid touching the keyboard or keys during the boot routine. Run the Stuck Key test in the Dell Diagnostics (see page 85).

LICENSED CONTENT IS NOT ACCESSIBLE IN MEDIADIRECT — Dell MediaDirect™ cannot verify the Digital Rights Management (DRM) restrictions on the file, so the file cannot be played. See "Dell MediaDirect™ problems" on page 98.

MEMORY ADDRESS LINE FAILURE AT ADDRESS, READ VALUE EXPECTING VALUE — A memory module may be faulty or improperly seated. Reinstall the memory modules and, if necessary, replace them (see "Memory" on page 119).

MEMORY ALLOCATION ERROR — The software you are attempting to run is conflicting with the operating system, another program, or a utility. Shut down the computer, wait 30 seconds, and then restart it. Try to run the program again. If the error message still appears, see the software documentation.

MEMORY DATA LINE FAILURE AT ADDRESS, READ VALUE EXPECTING VALUE — A memory module may be faulty or improperly seated. Reinstall the memory modules and, if necessary, replace them (see "Memory" on page 119).

MEMORY DOUBLE WORD LOGIC FAILURE AT ADDRESS, READ VALUE EXPECTING VALUE — A memory module may be faulty or improperly seated. Reinstall the memory modules and, if necessary, replace them (see "Memory" on page 119).

MEMORY ODD/EVEN LOGIC FAILURE AT ADDRESS, READ VALUE EXPECTING VALUE — A memory module may be faulty or improperly seated. Reinstall the memory modules and, if necessary, replace them (see "Memory" on page 119).

MEMORY WRITE/READ FAILURE AT ADDRESS, READ VALUE EXPECTING VALUE — A memory module may be faulty or improperly seated. Reinstall the memory modules and, if necessary, replace them (see "Memory" on page 119).

NO BOOT DEVICE AVAILABLE — The computer cannot find the hard drive. If the hard drive is your boot device, ensure that the drive is installed, properly seated, and partitioned as a boot device.

NO BOOT SECTOR ON HARD DRIVE — The operating system may be corrupted. Contact Dell. See "Contacting Dell" on page 141.

NO TIMER TICK INTERRUPT — A chip on the system board may be malfunctioning. Run the System Set tests in the Dell Diagnostics (see page 85).

NOT ENOUGH MEMORY OR RESOURCES. EXIT SOME PROGRAMS AND TRY AGAIN — You have too many programs open. Close all windows and open the program that you want to use.

OPERATING SYSTEM NOT FOUND — Reinstall the hard drive (see "Hard Drive" on page 116). If the problem persists, contact Dell. See "Contacting Dell" on page 141.

OPTIONAL ROM BAD CHECKSUM — The optional ROM apparently failed. Contact Dell. See "Contacting Dell" on page 141.

A REQUIRED .DLL FILE WAS NOT FOUND — The program that you are trying to open is missing an essential file. Remove and then reinstall the program.

  1 Click the **Start** button and click **Control Panel**.

  2 Click **Add or Remove Programs**.

  3 Select the program you want to remove.

  4 Click **Remove** or **Change/Remove** and follow the prompts on the screen.

  5 See the program documentation for installation instructions.

SECTOR NOT FOUND — The operating system cannot locate a sector on the hard drive. You may have a defective sector or corrupted FAT on the hard drive. Run the Windows error-checking utility to check the file structure on the hard drive. See the Windows Help and Support Center for instructions. To access the Help and Support Center, see "Windows Help and Support Center" on page 13. If a large number of sectors are defective, back up the data (if possible), and then reformat the hard drive.

SEEK ERROR — The operating system cannot find a specific track on the hard drive.

SHUTDOWN FAILURE — A chip on the system board may be malfunctioning. Run the System Set tests in the Dell Diagnostics (see page 85).

TIME-OF-DAY CLOCK LOST POWER — System configuration settings are corrupted. Connect your computer to an electrical outlet to charge the battery. If the problem persists, try to restore the data by entering the system setup program. Then immediately exit the program. See "Using the System Setup Program" on page 171. If the message reappears, contact Dell. See "Contacting Dell" on page 141.

TIME-OF-DAY CLOCK STOPPED — The reserve battery that supports the system configuration settings may require recharging. Connect your computer to an electrical outlet to charge the battery. If the problem persists, contact Dell. See "Contacting Dell" on page 141.

TIME-OF-DAY NOT SET-PLEASE RUN THE SYSTEM SETUP PROGRAM — The time or date stored in the system setup program does not match the system clock. Correct the settings for the **Date** and **Time** options. See "Using the System Setup Program" on page 171.

TIMER CHIP COUNTER 2 FAILED — A chip on the system board may be malfunctioning. Run the System Set tests in the Dell Diagnostics (see page 85).

UNEXPECTED INTERRUPT IN PROTECTED MODE — The keyboard controller may be malfunctioning, or a memory module may be loose. Run the System Memory tests and the Keyboard Controller test in the Dell Diagnostics (see page 85).

X:\ IS NOT ACCESSIBLE. THE DEVICE IS NOT READY — Insert a disk into the drive and try again.

WARNING: BATTERY IS CRITICALLY LOW — The battery is running out of charge. Replace the battery, or connect the computer to an electrical outlet. Otherwise, activate hibernate mode or shut down the computer.

ExpressCard Problems

⚠ **CAUTION: Before you begin any of the procedures in this section, follow the safety instructions in the *Product Information Guide*.**

CHECK THE EXPRESSCARD — Ensure that the ExpressCard is properly inserted into the connector.

ENSURE THAT THE CARD IS RECOGNIZED BY WINDOWS — Double-click the **Safely Remove Hardware** icon in the Windows taskbar. Ensure that the card is listed.

IF YOU HAVE PROBLEMS WITH A DELL-PROVIDED EXPRESSCARD — Contact Dell. See "Contacting Dell" on page 141. Also, for Mobile Broadband (WWAN) ExpressCards, see "For information about troubleshooting wireless local area networks, see "Wireless Local Area Network (WLAN)" on page 76." on page 99.

IF YOU HAVE PROBLEMS WITH AN EXPRESSCARD NOT PROVIDED BY DELL — Contact the ExpressCard manufacturer.

IEEE 1394 Device Problems

⚠ **CAUTION: Before you begin any of the procedures in this section, follow the safety instructions in the *Product Information Guide*.**

ENSURE THAT THE IEEE 1394 DEVICE IS RECOGNIZED BY WINDOWS —

1 Click the **Start** button and click **Control Panel**.

2 Click **Printers and Other Hardware**.

If your IEEE 1394 device is listed, Windows recognizes the device.

IF YOU HAVE PROBLEMS WITH A DELL-PROVIDED IEEE 1394 DEVICE — Contact Dell or the IEEE 1394 device manufacturer. See "Contacting Dell" on page 141.

IF YOU HAVE PROBLEMS WITH AN IEEE 1394 DEVICE NOT PROVIDED BY DELL — Contact Dell or the IEEE 1394 device manufacturer. See "Contacting Dell" on page 141.

ENSURE THAT THE IEEE 1394 DEVICE IS PROPERLY INSERTED INTO THE CONNECTOR

Keyboard Problems

⚠️ **CAUTION: Before you begin any of the procedures in this section, follow the safety instructions in the *Product Information Guide*.**

📝 **NOTE:** Use the integrated keyboard when running the Dell Diagnostics or the system setup program. When you attach an external keyboard, the integrated keyboard remains fully functional.

External Keyboard problems

📝 **NOTE:** When you attach an external keyboard, the integrated keyboard remains fully functional.

CHECK THE KEYBOARD CABLE — Shut down the computer. Disconnect the keyboard cable and check it for damage, and firmly reconnect the cable.

If you are using a keyboard extension cable, disconnect it and connect the keyboard directly to the computer.

CHECK THE EXTERNAL KEYBOARD —

1 Shut down the computer, wait 1 minute, and turn it on again.

2 Verify that the numbers, capitals, and scroll lock lights on the keyboard blink during the boot routine.

3 From the Windows desktop, click the **Start** button, point to **Programs**→ **Accessories**, and then click **Notepad**.

4 Type some characters on the external keyboard and verify that they appear on the display.

If you cannot verify these steps, you may have a defective external keyboard.

TO VERIFY THAT THE PROBLEM IS WITH THE EXTERNAL KEYBOARD, CHECK THE INTEGRATED KEYBOARD —

1 Shut down the computer.

2 Disconnect the external keyboard.

3 Turn on the computer.

4 From the Windows desktop, click the **Start** button, point to **Programs**→ **Accessories**, and click **Notepad**.

5 Type some characters on the internal keyboard and verify that they appear on the display.

If the characters appear now but did not with the external keyboard, you may have a defective external keyboard. Contact Dell. See "Contacting Dell" on page 141.

RUN THE KEYBOARD DIAGNOSTICS TESTS — Run the PC-AT Compatible Keyboards tests in the Dell Diagnostics (see page 85). If the tests indicate a defective external keyboard, contact Dell. See "Contacting Dell" on page 141.

Unexpected characters

DISABLE THE NUMERIC KEYPAD — Press <Num Lk> to disable the numeric keypad if numbers are displayed instead of letters. Verify that the numbers lock light is not lit.

Lockups and Software Problems

⚠ **CAUTION: Before you begin any of the procedures in this section, follow the safety instructions in the *Product Information Guide*.**

The computer does not start up

ENSURE THAT THE AC ADAPTER IS FIRMLY CONNECTED TO THE COMPUTER AND TO THE ELECTRICAL OUTLET

The computer stops responding

⊘ **NOTICE:** You might lose data if you are unable to perform an operating system shutdown.

TURN THE COMPUTER OFF — If you are unable to get a response by pressing a key on your keyboard or moving your mouse, press and hold the power button for at least 8 to 10 seconds until the computer turns off. Then restart your computer.

A program stops responding or crashes repeatedly

END THE PROGRAM —

1 Press <Crtl><Shift><Esc> simultaneously.

2 Click the **Applications** tab and select the program that is no longer responding.

3 Click **End Task**.

📝 **NOTE:** The chkdsk program may run when you restart the computer. Follow the instructions on the screen.

CHECK THE SOFTWARE DOCUMENTATION — If necessary, uninstall and then reinstall the program. Software usually includes installation instructions in its documentation or on a floppy disk or CD.

A program is designed for an earlier Microsoft® Windows® operating system

RUN THE PROGRAM COMPATIBILITY WIZARD — The Program Compatibility Wizard configures a program so it runs in an environment similar to non-Windows XP operating system environments.

1 Click the **Start** button, point to **Programs**→ **Accessories**, and then click **Program Compatibility Wizard**.

2 In the welcome screen, click **Next**.

3 Follow the instructions on the screen.

A solid blue screen appears

TURN THE COMPUTER OFF — If you are unable to get a response by pressing a key on your keyboard or moving your mouse, press and hold the power button for at least 8 to 10 seconds until the computer turns off. Then restart your computer.

Dell MediaDirect™ problems

CHECK THE DELL MEDIADIRECT HELP FILE FOR INFORMATION — Click the question mark icon at the bottom of the Dell MediaDirect screen to access Help.

TO PLAY MOVIES WITH DELL MEDIADIRECT, YOU MUST HAVE A DVD DRIVE AND THE DELL DVD PLAYER — If you purchased a DVD drive with your computer, this software should already be installed.

VIDEO QUALITY PROBLEMS — Turn off the **Use Hardware Acceleration** option. This feature takes advantage of the special processing in some graphics cards to reduce processor requirements when playing DVDs and certain types of video files.

CANNOT PLAY SOME MEDIA FILES — Because Dell MediaDirect provides access to media files outside the Windows XP operating system environment, access to licensed content is restricted. Licensed content is digital content that has Digital Rights Management (DRM) applied to it. The Dell MediaDirect environment cannot verify the DRM restrictions, so the licensed files cannot be played. Licensed music and video files have a lock icon next to them. You can access licensed files in the Windows XP operating system environment.

ADJUSTING THE COLOR SETTINGS FOR MOVIES THAT CONTAIN SCENES THAT ARE TOO DARK OR TOO BRIGHT —

Click **EagleVision** to use a video enhancement technology that detects video content and dynamically adjusts the brightness/contrast/saturation ratios.

NOTICE: You cannot reinstall the Dell MediaDirect feature if you voluntarily reformat the hard drive. Contact Dell for assistance. See "Contacting Dell" on page 141.

Other software problems

CHECK THE SOFTWARE DOCUMENTATION OR CONTACT THE SOFTWARE MANUFACTURER FOR TROUBLESHOOTING INFORMATION —

- Ensure that the program is compatible with the operating system installed on your computer.
- Ensure that your computer meets the minimum hardware requirements needed to run the software. See the software documentation for information.
- Ensure that the program is installed and configured properly.
- Verify that the device drivers do not conflict with the program.
- If necessary, uninstall and then reinstall the program.

BACK UP YOUR FILES IMMEDIATELY

USE A VIRUS-SCANNING PROGRAM TO CHECK THE HARD DRIVE, FLOPPY DISKS, OR CDS

SAVE AND CLOSE ANY OPEN FILES OR PROGRAMS AND SHUT DOWN YOUR COMPUTER THROUGH THE **Start** MENU

SCAN THE COMPUTER FOR SPYWARE — If you are experiencing slow computer performance, you frequently receive pop-up advertisements, or you are having problems connecting to the Internet, your computer might be infected with spyware. Use an anti-virus program that includes anti-spyware protection (your program may require an upgrade) to scan the computer and remove spyware. For more information, go to **support.dell.com** and search for the keyword *spyware*.