

Dell™ Inspiron™ 600m

Owner's Manual



Notes, Notices, and Cautions



NOTE: A HINT 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 the *Tell Me How* help file. To access the help file, see page 88.

Information in this document is subject to change without notice.

© 2002 Dell Computer Corporation. All rights reserved.

Reproduction in any manner whatsoever without the written permission of Dell Computer Corporation is strictly forbidden.

Trademarks used in this text: *Dell*, the *DELL* logo, *Inspiron*, *Dell TravelLite*, *Dell TrueMobile*, *Dell Precision*, *Dimension*, *OptiPlex*, *DellNet*, and *Latitude* are trademarks of Dell Computer Corporation; *Intel*, *Pentium*, and *Celeron* are registered trademarks of Intel Corporation; *Microsoft* and *Windows* are registered trademarks of Microsoft Corporation; *Bluetooth* is a trademark owned by Bluetooth SIG, Inc., and is used by Dell Computer Corporation under license; *EMC* is a registered trademark of the EMC Corporation.

Other trademarks and trade names may be used in this document to refer to either the entities claiming the marks and names or their products. Dell Computer Corporation disclaims any proprietary interest in trademarks and trade names other than its own.

Model PP05L

December 2002 P/N 4N142 Rev. A00

Contents

CAUTION: Safety Instructions	11
General	11
Power	12
Battery	13
Air Travel	14
EMC Instructions	14
California Residents	14
When Using Your Computer	15
Ergonomic Computing Habits	16
When Working Inside Your Computer	16
Protecting Against Electrostatic Discharge	17
Battery Disposal	17

1 A Tour of Your Computer

Front View	20
Left Side View	23
Right Side View	25
Back View	26
Bottom View	30

2 Setting Up Your Computer

Connecting to the Internet	34
Setting Up Your Internet Connection	34

Modem and Internet Connection Problems	35
E-Mail Problems	36
Transferring Information to a New Computer	37
Setting Up a Printer	38
Printer Cable	39
Connecting a Parallel Printer	39
Connecting a USB Printer	40
Printer Problems	40
Setting Up the Docking Device to Connect to a Network	41
Power Protection Devices	41
Surge Protectors	42
Line Conditioners	42
Uninterruptible Power Supplies	42
Turning Off Your Computer	43

3 Using Batteries and Module Bay Devices

Using a Battery	46
Battery Performance	46
Checking the Battery Charge	47
Charging the Battery	49
Removing a Battery	49
Installing a Battery	50
Storing a Battery	50
Power Problems	51
About the Module Bay	52
Checking the Charge on the Second Battery	52

Removing and Installing Devices While the Computer Is Turned Off	53
If the Device Screw Is Not Installed	53
If the Device Screw Is Installed	54
Removing and Installing Devices While the Computer Is Running	56
If the Device Screw Is Not Installed	56
If the Device Screw Is Installed	58

4 Using the Keyboard and Touch Pad

Numeric Keypad	62
Keyboard Shortcuts	63
System Functions	63
Battery	63
CD or DVD Tray	63
Display Functions	63
Radios (Including Wireless Networking and Bluetooth™)	63
Power Management	64
Speaker Functions	64
Microsoft® Windows® Logo Key Functions	64
Customizing the Touch Pad	66
Touch Pad or Mouse Problems	66
External Keyboard Problems	66
Unexpected Characters	67

5 Using CDs, DVDs, and Other Multimedia

Using CDs and DVDs	70
CD and DVD Problems	70
If you cannot play a CD or DVD	70
If you cannot eject the CD, CD-RW, or DVD drive tray	70
If you hear an unfamiliar scraping or grinding sound	71
If the CD-RW drive stops writing	71
Sound and Speaker Problems	71
If you have a problem with integrated speakers	71
If you have a problem with external speakers	71
Copying CDs	72
Using Easy CD Creator Basic	73
Using Blank CD-R Discs or Blank CD-RW Discs	73
Helpful Tips	73
How to Copy a CD	74
Connecting a Television to the Computer	75
S-Video Connection	76
Composite Video Connection	78
Enabling the Display Settings for a Television	80

6 Setting Up a Home and Office Network

Connecting to a Network Adapter	82
Network Setup Wizard	82
Network Problems	83

7 Solving Problems

Finding Solutions	86
Accessing Help	88

Error Messages	88
Video and Display Problems	89
If the display is blank	89
If the display is difficult to read	90
If only part of the display is readable	91
Scanner Problems	91
Drive Problems	92
If you cannot save a file to a floppy drive	92
If you have problems with a hard drive	93
PC Card Problems	93
General Program Problems	94
A program crashes	94
A program stops responding	94
Error messages appear	94
If Your Computer Gets Wet	95
If You Drop or Damage Your Computer	96
Resolving Other Technical Problems	96
Drivers	97
What Is a Driver?	97
Identifying Drivers	97
Reinstalling Drivers and Utilities	98
Manually Reinstalling Drivers for Windows XP	99
Using System Restore	100
Creating a Restore Point	100
Restoring the Computer to an Earlier Operating State	100
Undoing the Last System Restore	101
Resolving Software and Hardware Incompatibilities	102

Reinstalling Microsoft® Windows® XP	103
Before You Reinstall	103
Reinstalling Windows XP	103
Reinstalling Drivers and Software	105

8 Adding and Replacing Parts

Adding Memory	108
Adding a Mini PCI Card	110
Replacing the Hard Drive	113

9 Appendix

Specifications	118
Standard Settings	125
Viewing the System Setup Screens	125
System Setup Screens	125
Commonly Used Options	126
Dell Technical Support Policy (U.S. Only)	128
Definition of "Dell-Installed" Software and Peripherals	129
Definition of "Third-Party" Software and Peripherals	129
Contacting Dell	129
Regulatory Notices	147
NOM Information (Mexico Only)	148
Limited Warranties and Return Policy	149
Limited Warranty for the U.S.	149
"Total Satisfaction" Return Policy (U.S. Only)	153
Limited Warranty Terms for Canada	153
"Total Satisfaction" Return Policy (Canada Only)	157
Dell Software and Peripherals (Canada Only)	158

One-Year End-User Manufacturer Guarantee (Latin America and the Caribbean Only)	159
Intel® Warranty Statement for Pentium® and Celeron® Processors Only (U.S. and Canada Only)	161

CAUTION: Safety Instructions

Use the following safety guidelines to help ensure your own personal safety and to help protect your computer and working environment from potential damage.

General

- Do not attempt to service the computer yourself unless you are a trained service technician. Always follow installation instructions closely.
- If you use an extension power cable with your AC adapter, ensure that the total ampere rating of the products plugged in to the extension power cable does not exceed the ampere rating of the extension cable.
- Do not push objects into air vents or openings of your computer. Doing so can cause fire or electric shock by shorting out interior components.
- Do not store your computer in a low-airflow environment, such as a carrying case or a closed briefcase, while the computer is turned on. Restricting airflow can damage the computer or cause a fire.
- Keep your computer away from radiators and heat sources. Also, do not block cooling vents. Avoid placing loose papers underneath your computer; do not place your computer in a closed-in wall unit or on a bed, sofa, or rug.
- Place the AC adapter in a ventilated area, such as a desk top or on the floor, when you use it to run the computer or to charge the battery. Do not cover the AC adapter with papers or other items that will reduce cooling; also, do not use the AC adapter inside a carrying case.
- The AC adapter may become hot during normal operation of your computer. Use care when handling the adapter during or immediately after operation.
- Do not allow your portable computer to operate with the base resting directly on exposed skin for extended periods of time. The surface temperature of the base will rise during normal operation (particularly when AC power is present). Allowing sustained contact with exposed skin can cause discomfort or, eventually, a burn.
- Do not use your computer in a wet environment, for example, near a bath tub, sink, or swimming pool or in a wet basement
- If your computer includes an integrated or optional (PC Card) modem, disconnect the modem cable if an electrical storm is approaching to avoid the remote risk of electric shock from lightning via the telephone line.

CAUTION: Safety Instructions (*continued*)

- To help avoid the potential hazard of electric shock, do not connect or disconnect any cables or perform maintenance or reconfiguration of this product during an electrical storm. Do not use your computer during an electrical storm unless all cables have been disconnected and the computer is operating on battery power.
- If your computer includes a modem, the cable used with the modem should be manufactured with a minimum wire size of 26 American wire gauge (AWG) and an FCC-compliant RJ-11 modular plug.
- Before you open the memory module/Mini PCI card/modem cover on the bottom of your computer, disconnect all cables from their electrical outlets and disconnect the telephone cable.
- If your computer has a modem RJ-11 connector and a network RJ-45 connector, insert the telephone cable into the RJ-11 connector, not the RJ-45 connector.
- PC Cards may become very warm during normal operation. Use care when removing PC Cards after their continuous operation.
- Before you clean your computer, disconnect the computer from the electrical outlet. Clean your computer with a soft cloth dampened with water. Do not use liquid or aerosol cleaners, which may contain flammable substances.

Power

- Use only the Dell-provided AC adapter approved for use with this computer. Use of another AC adapter may cause a fire or explosion.
- Before you connect the computer to an electrical outlet, check the AC adapter voltage rating to ensure that the required voltage and frequency match the available power source.
- To remove the computer from all power sources, turn the computer off, remove the battery pack, and disconnect the AC adapter from the electrical outlet.
- To help prevent electric shock, plug the AC adapter and device power cables into properly grounded power sources. These power cables may be equipped with 3-prong plugs to provide an earth grounding connection. Do not use adapter plugs or remove the grounding prong from the power cable plug. If you use a power extension cable, use the appropriate type, 2-prong or 3-prong, to mate with the AC adapter power cable.
- Be sure that nothing rests on your AC adapter's power cable and that the cable is not located where it can be tripped over or stepped on.

CAUTION: Safety Instructions (*continued*)

- If you are using a multiple-outlet power strip, use caution when plugging the AC adapter's power cable into the power strip. Some power strips may allow you to insert the plug incorrectly. Incorrect insertion of the power plug could result in permanent damage to your computer, as well as risk of electric shock and/or fire. Ensure that the ground prong of the power plug is inserted into the mating ground contact of the power strip.

Battery

- Use only Dell™ battery modules that are approved for use with this computer. Use of other types may increase the risk of fire or explosion.
- Do not carry a battery pack in your pocket, purse, or other container where metal objects (such as car keys or paper clips) could short-circuit the battery terminals. The resulting excessive current flow can cause extremely high temperatures and may result in damage to the battery pack or cause fire or burns.
- The battery poses a burn hazard if you handle it improperly. Do not disassemble it. Handle a damaged or leaking battery pack with extreme care. If the battery is damaged, electrolyte may leak from the cells and may cause personal injury.
- Keep the battery away from children.
- Do not store or leave your computer or battery pack near a heat source such as a radiator, fireplace, stove, electric heater, or other heat-generating appliance or otherwise expose it to temperatures in excess of 60°C (140°F). When heated to excessive temperatures, battery cells could explode or vent, posing a risk of fire.
- Do not dispose of your computer's battery in a fire or with normal household waste. Battery cells may explode. Discard a used battery according to the manufacturer's instructions or contact your local waste disposal agency for disposal instructions. Dispose of a spent or damaged battery promptly.

CAUTION: Safety Instructions (*continued*)

Air Travel

- Certain Federal Aviation Administration regulations and/or airline-specific restrictions may apply to the operation of your Dell computer while you are on board an aircraft. For example, such regulations/restrictions may prohibit the use of any personal electronic device (PED) that has the capacity for intentional transmission of radio frequency or other electromagnetic signals while on an aircraft.
 - In order to best comply with all such restrictions, if your Dell portable computer is equipped with Dell TrueMobile™ or some other wireless communication device, please disable this device before you board the aircraft and follow all instructions provided by airline personnel with regard to such device.
 - Additionally, the use of any PED, such as a portable computer, may be prohibited in aircraft during certain critical phases of flight, for example, takeoff and landing. Some airlines may further define the critical flight phase as any time the aircraft is below 3050 m (10,000 ft). Please follow the airline's specific instructions as to when the use of a PED is allowed.

EMC Instructions

Use shielded signal cables to ensure that you maintain the appropriate EMC classification for the intended environment. For parallel printers, a cable is available from Dell. If you prefer, you can order a cable from Dell at its worldwide website at www.dell.com.


Static electricity can harm electronic components inside your computer. To prevent static damage, discharge static electricity from your body before you touch any of your computer's electronic components, such as a memory module. You can do so by touching an unpainted metal surface on the computer's input/output panel.

California Residents

WARNING: Handling the cord on this product, or cords associated with accessories sold with this product, will expose you to lead, a chemical known to the State of California to cause birth defects or other reproductive harm. ***Wash your hands after handling the cord.***

When Using Your Computer

Observe the following safe-handling guidelines to prevent damage to your computer:


- When setting up the computer for work, place it on a level surface.
 - When traveling, do not check the computer as baggage. You can put your computer through an X-ray security machine, but never put your computer through a metal detector. If you have the computer checked by hand, be sure to have a charged battery available in case you are asked to turn on the computer.
 - When traveling with the hard drive removed from the computer, wrap the drive in a nonconducting material, such as cloth or paper. If you have the drive checked by hand, be ready to install the drive in the computer. You can put the hard drive through an X-ray security machine, but never put the drive through a metal detector.
 - When traveling, do not place the computer in overhead storage compartments where it could slide around. Do not drop your computer or subject it to other mechanical shocks.
 - Protect your computer, battery, and hard drive from environmental hazards such as dirt, dust, food, liquids, temperature extremes, and overexposure to sunlight.
 - When you move your computer between environments with very different temperature and/or humidity ranges, condensation may form on or within the computer. To avoid damaging the computer, allow sufficient time for the moisture to evaporate before using the computer.
-  **NOTICE:** When taking the computer from low-temperature conditions into a warmer environment or from high-temperature conditions into a cooler environment, allow the computer to acclimate to room temperature before turning on power.
- When you disconnect a cable, pull on its connector or on its strain-relief loop, not on the cable itself. As you pull out the connector, keep it evenly aligned to avoid bending any connector pins. Also, before you connect a cable make sure both connectors are correctly oriented and aligned.
 - Handle components with care. Hold a component such as a memory module by its edges, not its pins.
 - When preparing to remove a memory module from the system board or disconnect a device from the computer, turn off the computer, disconnect the AC adapter cable, and then wait 5 seconds before proceeding to help avoid possible damage to the system board.

When Using Your Computer (*continued*)

- Clean the display with a soft, clean cloth and water. Apply the water to the cloth; then stroke the cloth across the display in one direction, moving from the top of the display to the bottom. Remove moisture from the display quickly and keep the display dry. Long-term exposure to moisture can damage the display. *Do not* use a commercial window cleaner to clean your display.
- If your computer gets wet or is damaged, follow the procedures described in "If Your Computer Gets Wet" on page 95 or "If You Drop or Damage Your Computer" on page 96. If, after following these procedures, you confirm that your computer is not operating properly, contact Dell (see "Contacting Dell" on page 129 for the appropriate contact information).

Ergonomic Computing Habits

 **CAUTION:** Improper or prolonged keyboard use may result in injury.



 **CAUTION:** Viewing the display or external monitor screen for extended periods of time may result in eye strain.

For comfort and efficiency, observe the ergonomic guidelines in the *Tell Me How* help file when setting up and using your computer. To access the help file, see "Accessing Help" on page 88.

This portable computer is not designed for continuous operation as office equipment. For extended use in an office, it is recommended that you connect an external keyboard.

When Working Inside Your Computer

Before removing or installing memory modules, Mini PCI cards, or modems, perform the following steps in the sequence indicated.

-  **NOTICE:** The only time you should ever access the inside of your computer is when you are installing memory modules, a Mini PCI card, or a modem.
 -  **NOTICE:** Wait 5 seconds after turning off the computer before disconnecting a device or removing a memory module, Mini PCI card, or modem to help prevent possible damage to the system board.
- 1 Shut down your computer and turn off any attached devices.
 - 2 Disconnect your computer and devices from electrical outlets to reduce the potential for personal injury or shock. Also, disconnect any telephone or telecommunication lines from the computer.
 - 3 Remove the main battery from the battery bay and, if necessary, the secondary battery from the module bay.

When Using Your Computer (*continued*)

- 4 Ground yourself by touching the unpainted metal surface of the I/O panel on the back of the computer.

While you work, periodically touch the I/O panel to dissipate any static electricity that might harm internal components.

Protecting Against Electrostatic Discharge

Static electricity can harm electronic components inside your computer. To prevent static damage, discharge static electricity from your body before you touch any of your computer's electronic components, such as a memory module. You can do so by touching an unpainted metal surface on the computer's I/O panel.

As you continue to work inside the computer, periodically touch an I/O connector to remove any static charge your body may have accumulated.

You can also take the following steps to prevent damage from electrostatic discharge (ESD):

- When unpacking a static-sensitive component from its shipping carton, do not remove the component from the antistatic packing material until you are ready to install the component. Just before unwrapping the antistatic packaging, be sure to discharge static electricity from your body.
- When transporting a sensitive component, first place it in an antistatic container or packaging.
- Handle all sensitive components in a static-safe area. If possible, use antistatic floor pads and workbench pads.



Battery Disposal

Your computer uses a lithium-ion battery and a reserve battery. For instructions about replacing the lithium-ion battery in your computer, see "Using a Battery" on page 46. The reserve battery is a long-life battery, and it is very possible that you will never need to replace it. However, should you need to replace it, the procedure must be performed by an authorized service technician.

Do not dispose of the battery along with household waste. Contact your local waste disposal agency for the address of the nearest battery deposit site.

SECTION 1

A Tour of Your Computer

Front View

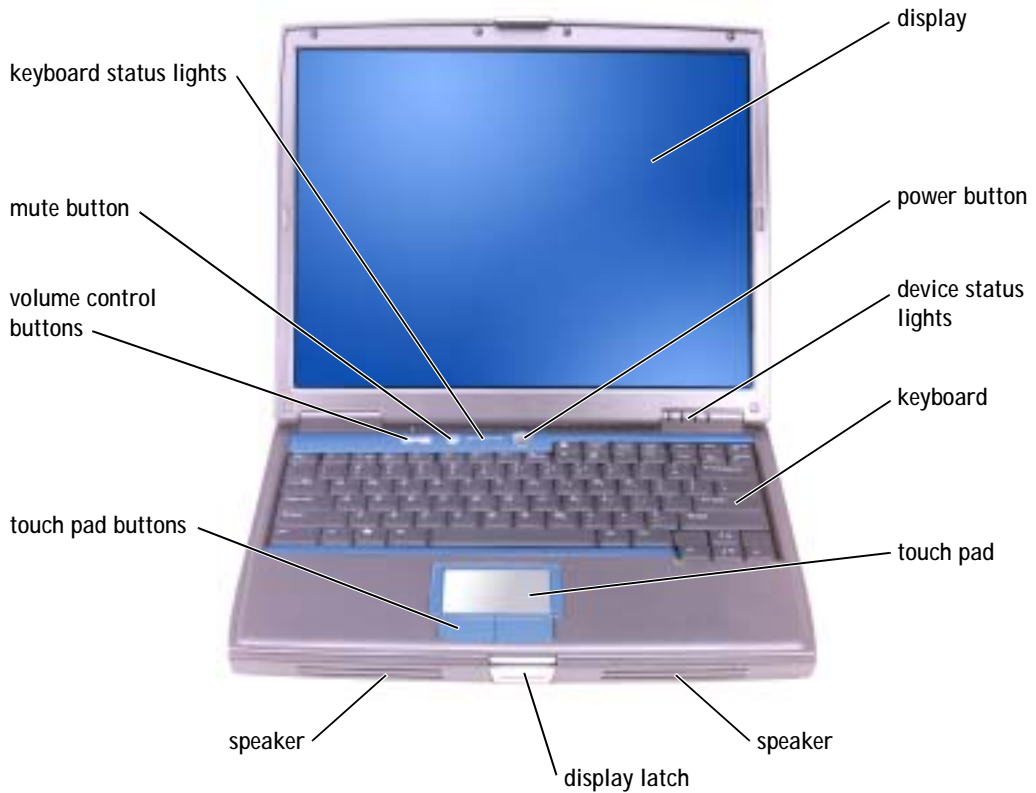
Left Side View

Right Side View

Back View

Bottom View

Front View



DISPLAY — For more information about your display, see the *Tell Me How* help file. To access the help file, see "Accessing Help" on page 88.

POWER BUTTON — Press the power button to turn on the computer or exit a power management mode. For more information about power management, see the *Tell Me How* help file. To access the help file, see "Accessing Help" on page 88.











NOTICE: To avoid losing data, turn off your computer by performing a Microsoft® Windows® operating system shutdown (see "Turning Off Your Computer" on page 43) rather than by pressing the power button.

If the computer stops responding, press and hold the power button until the computer turns off completely (which may take several seconds).


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.
-
-  Turns on when Bluetooth™ is enabled. To enable or disable Bluetooth, press  
-

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 — The keyboard includes a numeric keypad as well as the Windows logo key . For information on supported keyboard shortcuts, see "Using the Keyboard and Touch Pad" on page 61.

TOUCH PAD — Provides the functionality of a mouse. See "Using the Keyboard and Touch Pad" on page 61 for more information.

SPEAKERS — To adjust the volume of the integrated speakers, press the volume control buttons, mute button, or volume-control keyboard shortcuts. For more information, see "Using the Keyboard and Touch Pad" on page 61.

DISPLAY LATCH — Keeps the display closed.

TOUCH PAD BUTTONS — Provide the functionality of a mouse. See "Using the Keyboard and Touch Pad" on page 61 for more information.

VOLUME CONTROL BUTTONS — Press these buttons to adjust the volume.

MUTE BUTTON — Press this button to turn off the volume.

KEYBOARD STATUS LIGHTS



The green lights located above the keyboard indicate the following:



Turns on when the numeric keypad is enabled.

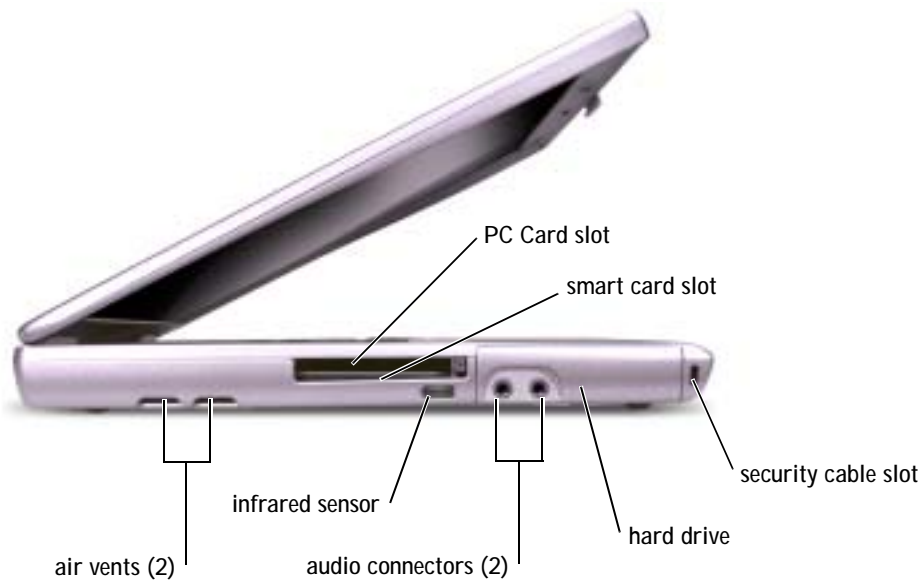


Turns on when the uppercase letter function is enabled.



Turns on when the scroll lock function is enabled.

Left Side View



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

CAUTION: Do not block, push objects into, or allow dust to accumulate in the air vents. Do not store your Dell™ 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.

PC CARD SLOT — Supports one PC Card, such as a modem or network adapter. The computer ships with a plastic blank installed in the slot. For more information,

NOTE: The computer turns on the fan when the computer gets hot. Fan noise is normal and does not indicate a problem with the fan or the computer.

see the *Tell Me How* help file. To access the help file, see "Accessing Help" on page 88.


SMART CARD SLOT — Supports one smart card. For more information, see the *Tell Me How* help file. To access the help file, see "Accessing Help" on page 88.


INFRARED SENSOR — Lets you transfer files from your computer to another infrared-compatible device without using cable connections.

When you receive your computer, the sensor is disabled. You can use the system setup program to enable the sensor. For information on transferring data, see the Help and Support Center or the documentation that came with your infrared-compatible device.

AUDIO CONNECTORS




Attach a microphone to the  connector.

Attach headphones or speakers to the  connector.

HARD DRIVE — Stores software and data.

SECURITY CABLE SLOT — Lets you attach a commercially available antitheft device to the 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.



Right Side View



SECURITY CABLE SLOT — Lets you attach a commercially available antitheft device to the 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.




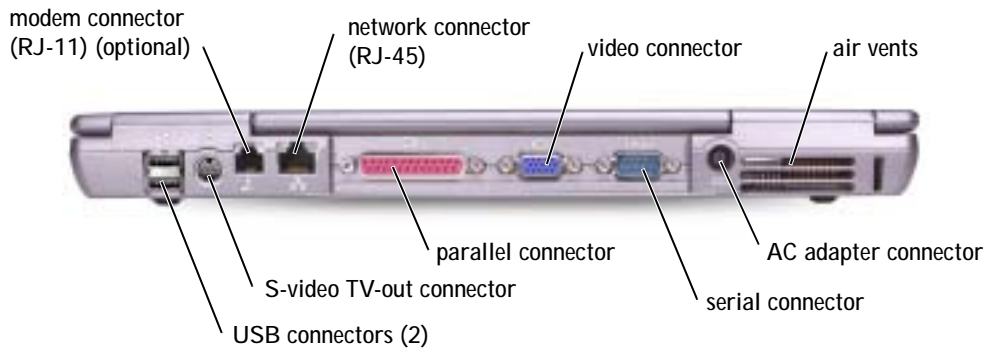
MODULE BAY — You can install devices such as an optical drive or a Dell TravelLite™ module in the module bay. For more information, see "About the Module Bay" on page 52.

DEVICE LATCH RELEASE — Releases the module bay device. See "About the Module Bay" on page 52 for instructions.

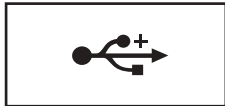
Back View

 **NOTICE:** To avoid damaging the computer, wait 5 seconds after turning off the computer before you disconnect an external device.

 **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.



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.



S-VIDEO TV-OUT CONNECTOR



Connects your computer to a TV. For more information, see "Connecting a Television to the Computer" on page 75.

MODEM CONNECTOR (RJ-11) (OPTIONAL)

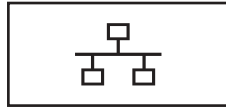


If you ordered the optional internal modem, connect the telephone line to the modem connector.

For information on using the modem, see the online modem documentation supplied with your computer. See "Accessing Help" on page 88.

NETWORK CONNECTOR (RJ-45)

NOTICE: The network connector is slightly larger than the modem connector. To avoid damaging the computer, do not plug a telephone line into the network connector.



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

For information on using the network adapter, see the device user's guide supplied with your computer. See "Accessing Help" on page 88.

PARALLEL CONNECTOR



Connects a parallel device, such as a printer.

VIDEO CONNECTOR



Connects an external monitor. For more information, see the *Tell Me How* help file. To access the help file, see "Accessing Help" on page 88.

SERIAL CONNECTOR



Connects serial devices, such as a mouse or handheld device.

AC ADAPTER CONNECTOR — Attach 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.



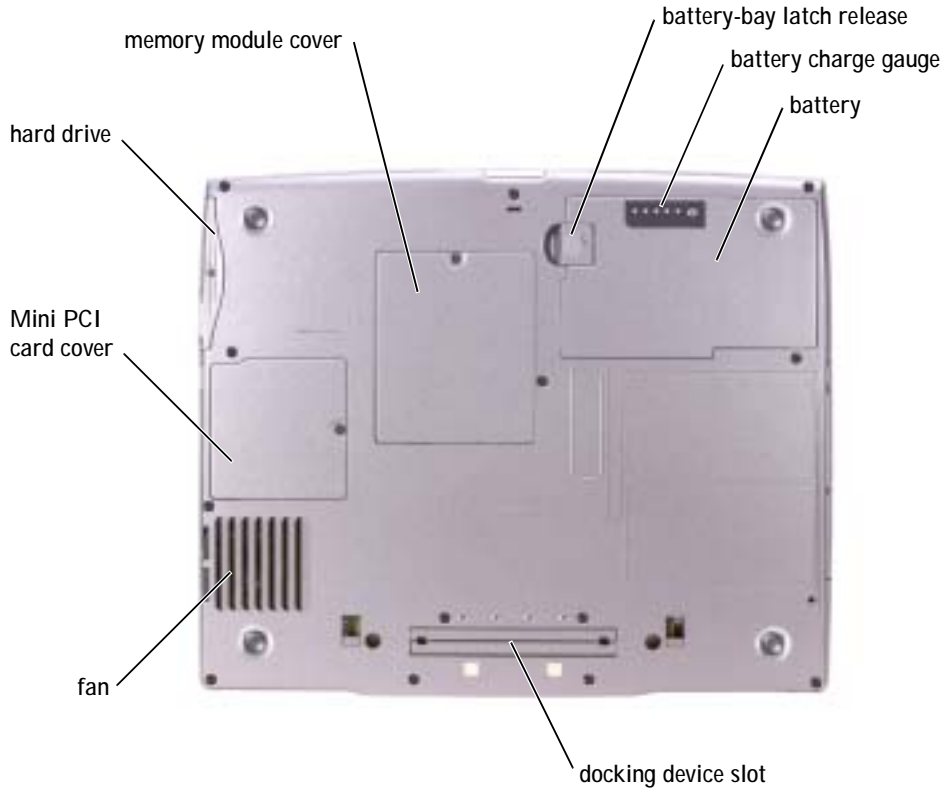
NOTICE: When you disconnect the AC adapter cable from the computer, grasp the connector, not the cable itself, and pull firmly but gently to avoid damaging the cable.

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

NOTE: The computer turns on the fan when the computer gets hot. Fan noise is normal and does not indicate a problem with the fan or the computer.

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.

Bottom View



MEMORY MODULE COVER — Covers the compartment that contains the memory module(s). See "Adding Memory" on page 108.

BATTERY-BAY LATCH RELEASE — Releases the battery. See "Using a Battery" on page 46 for instructions.

BATTERY CHARGE GAUGE — Provides information on the battery charge. See "Using a Battery" on page 46.

BATTERY — When a battery is installed, you can use the computer without connecting the computer to an electrical outlet. See "Using a Battery" on page 46.

DOCKING DEVICE SLOT — Lets you attach your computer to a docking device. See the documentation that came with your docking device for additional information.

FAN — The computer uses an internal fan to create airflow through the vents, which prevents the computer from overheating.



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.

MINI PCI CARD COVER — Covers the compartment that contains the Mini PCI card. See "Adding a Mini PCI Card" on page 110.

HARD DRIVE — Stores software and data.



NOTE: The computer turns on the fan when the computer gets hot. Fan noise is normal and does not indicate a problem with the fan or the computer.

SECTION 2

Setting Up Your Computer

Connecting to the Internet

Modem and Internet Connection Problems

E-Mail Problems

Transferring Information to a New Computer

Setting Up a Printer

Printer Problems

Setting Up the Docking Device to Connect to a Network

Power Protection Devices

Turning Off Your Computer



NOTE: ISPs and ISP offerings vary by country.

Connecting to the Internet

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

- Dial-up connections that provide Internet access through a phone line. Dial-up connections are considerably slower than DSL and cable modem connections.
- DSL connections that provide high-speed Internet access through your existing phone line. With a DSL connection, you can access the Internet and use your phone 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 AOL or MSN connection:

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

If you do not have an **MSN Explorer** or **AOL** 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.

- 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.



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

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.

Modem and Internet Connection Problems



NOTICE: Connect the modem to an analog telephone wall jack only. Connecting the modem to a digital telephone network damages the modem.



NOTICE: Modem and network connectors look similar. Do not plug a telephone line into the network connector.

CHECK THE TELEPHONE WALL JACK — Disconnect the telephone line from the modem and connect it to a telephone. Listen for a dial tone. Ensure that you have touchtone telephone service. Try connecting the modem to a different telephone wall jack.

Slow connection speeds can be caused by telephone noise as well as by telephone line or network conditions. Contact your telephone company or network administrator for more information.

CONNECT THE MODEM DIRECTLY TO THE TELEPHONE WALL JACK — 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 use the telephone line to connect the modem directly to the telephone wall jack.

CHECK THE CONNECTION — Verify that the telephone line is connected to the modem.

CHECK THE TELEPHONE LINE — Try using a different telephone line. If you are using a line that is 3 m (10 ft) or more in length, try a shorter one.



NOTE: If you can connect to your Internet service provider (ISP), your modem is functioning properly. If you are sure that your modem is working properly and you still experience problems, contact your ISP.

IRREGULAR DIAL TONE — If you have voice mail service, you might hear an irregular dial tone when you have messages. Contact your telephone company for instructions on restoring a dial tone.

TURN OFF CALL WAITING (CATCH-PHONE) — See your telephone directory for instructions on deactivating this feature. Then adjust the dial-up networking connection properties.

- 1 Click the **Start** button and click **Control Panel**.
- 2 Click **Printers and Other Hardware**, click **Phone and Modem Options**, click the **Dialing Rules** tab, and then click **Edit...**
- 3 In the **Edit Location** window, ensure that **To disable call waiting, dial:** is checked, and then select the proper code as listed in your telephone directory.
- 4 Click **Apply** and click **OK**.
- 5 Close the **Phone and Modems Options** window.
- 6 Close the **Control Panel** window.

VERIFY THAT THE MODEM IS COMMUNICATING WITH WINDOWS —

- 1 Click the **Start** button and click **Control Panel**.
- 2 Click **Printers and Other Hardware** and click **Phone and Modem Options**.
- 3 Click the **Modems** tab.
- 4 Click the COM port for your modem.
- 5 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.

E-Mail Problems

ENSURE THAT YOU ARE CONNECTED TO THE INTERNET — With the Outlook Express e-mail program open, click **File**. If **Work Offline** has a check mark next to it, click the check mark to remove it and connect to the Internet.

Transferring Information to a New Computer

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

- E-mails
- Toolbar settings
- Window sizes
- Internet bookmarks

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

To prepare the new computer for the file transfer:

- 1 Click the **Start** button, point to **All Programs**→**Accessories**→**System Tools**, and then click **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.

To 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**.

To 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.

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.
- Contact the printer manufacturer for technical assistance.

Printer Cable

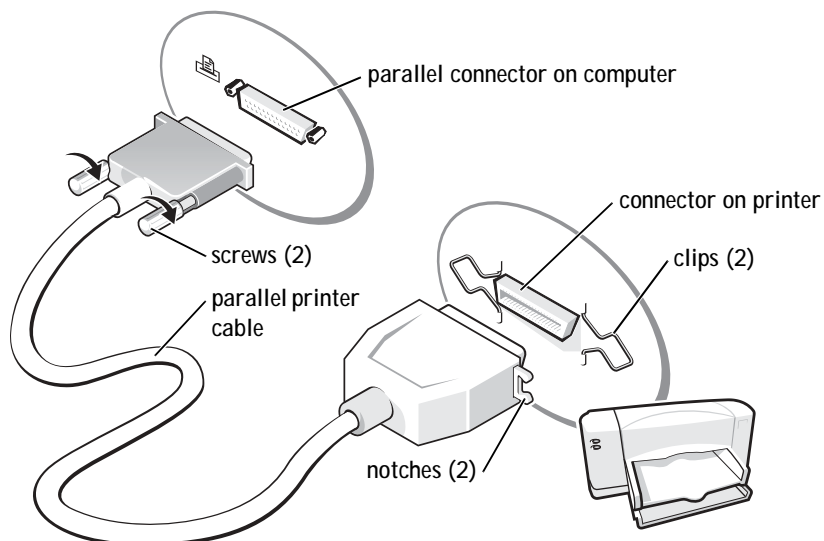
Your printer connects to your computer with either a USB cable or a parallel cable. Your printer may not come with a printer cable, so if you purchase a cable separately, ensure that it is compatible with your printer. If you purchased a printer cable at the same time you purchased your computer, the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

Connecting a Parallel Printer

- 1 Complete the operating system setup, if you have not already done so.
- 2 Shut down the computer (see "Turning Off Your Computer" on page 43).

 **NOTICE:** For best results, use a 3-m (10-ft) or shorter parallel cable.

- 3 Attach the parallel printer cable to the parallel connector on the computer and tighten the two screws. Attach the cable to the connector on the printer and snap the two clips into the two notches.



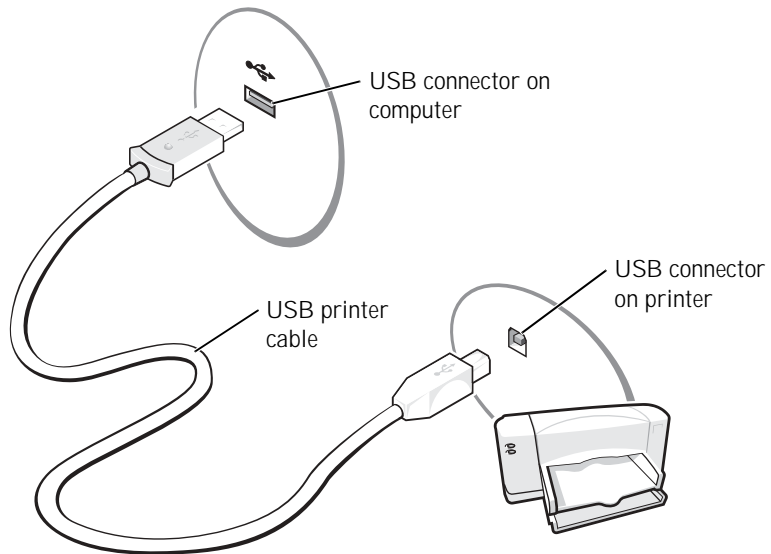
- 4 Turn on the printer and then turn on the computer. If the **Add New Hardware Wizard** window appears, click **Cancel**.

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

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

Connecting a USB Printer

- 1 Complete the operating system setup if you have not already done so.
- 2 Install the printer driver if necessary. See the documentation that came with your printer.
- 3 Attach the USB printer cable to the USB connectors on the computer and the printer. The USB connectors fit only one way.



Printer Problems

CHECK THE PRINTER CABLE CONNECTIONS — Ensure that the printer cable is properly connected to the computer.

TEST THE ELECTRICAL OUTLET — Ensure that the electrical outlet is working by testing it with another device, such as a lamp.



ENSURE THAT THE PRINTER IS TURNED ON — See the documentation supplied with the printer.


VERIFY THAT WINDOWS® RECOGNIZES THE PRINTER

- 1 Click the **Start** button.
- 2 Click **Control Panel**.
- 3 Click **Printers and Other Hardware**.
- 4 Click **View installed printers or fax printers**. If the printer model is listed, right-click the printer icon.
- 5 Click **Properties**, and then click the **Ports** tab. Ensure that the **Print to the following port(s)**: setting is **LPT1 (Printer Port)**.

REINSTALL THE PRINTER DRIVER — See "Reinstalling Drivers and Utilities" on page 98.

Setting Up the Docking Device to Connect to a Network

-  **NOTICE:** Do not install a network adapter or a network adapter/modem combination PC Card until you complete the docking device setup.
-  **NOTICE:** To prevent serious operating system problems, do not connect your computer to a docking device until the Windows operating system setup on the computer is complete.

 **NOTE:** A network adapter is also referred to as a network interface controller (NIC).

A docking device allows you to more fully integrate your portable computer into a desktop environment.

For instructions and details on setting up a docking device, refer to the documentation that came packaged with the device.


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 to prevent damage to your computer from voltage spikes that can occur during electrical storms or following power interruptions. The level of protection is usually commensurate with the cost of the surge protector. 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 lightning occurs 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 jack 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 jack during electrical storms.

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.

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).


 **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.

Turning Off Your Computer

 **NOTICE:** To avoid losing data, turn off your computer by performing a Microsoft® Windows® operating system shutdown, as described next, rather than by pressing the power button.

- 1 **Save and close any open files, exit any open programs, click the Start button, and then click Turn Off Computer.**
- 2 **In the Turn off computer window, click Turn off.**

The computer turns off after the shutdown process finishes.

 **NOTE:** As an alternative to turning off your computer, you can set your computer to enter standby or hibernate mode.

SECTION 3

Using Batteries and Module Bay Devices

Using a Battery

Power Problems


About the Module Bay


Removing and Installing Devices While the Computer Is
Turned Off

Removing and Installing Devices While the Computer Is
Running

Using a Battery

Battery Performance

 **NOTE:** Batteries for portable computers are covered only during the initial one-year period of the limited warranty for your computer. For more information about the Dell warranty for your computer, see "Limited Warranties and Return Policy" on page 149.

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


Use a battery to power the computer when the computer is not connected to an electrical outlet. One battery is supplied as standard equipment in the battery bay.


Battery operating time varies depending on operating conditions. With average usage, you may expect from 3 to 4 hours from a single, fully charged battery. You can install an optional second battery in the module bay to significantly increase operating time. For more information about the second battery, see "About the Module Bay" on page 52.


Operating time is significantly reduced when you perform operations including, but not limited to, the following:

- Using optical drives, especially DVD and CD-RW drives
- Using wireless communications devices, PC Cards, or USB devices
- Using high-brightness display settings, 3D screen savers, or other power-intensive programs, such as 3D games
- Running the computer in maximum performance mode


You can check the battery charge on the bottom of the computer. You can also set power management options to alert you when the battery charge is low.

 **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 lithium-ion 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 the battery disposal instructions in "Battery Disposal" on page 17.



 **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, Microsoft® Windows® power meter window and  icon, the battery charge gauge, and the low-battery warning provide information on the battery charge.

For more information about checking the charge on the second battery, see "About the Module Bay" on page 52.

Dell QuickSet Battery Meter

Press   to display the QuickSet **Battery Meter**

The **Battery Meter** screen displays status, charge level, and charge completion time for the primary and secondary batteries in your computer.

The following icons appear in the **Battery Meter** screen:



- The computer is running on battery power.
- The battery is discharging or idle.




- The computer is connected to an electrical outlet and running on AC power.
- The battery is charging.





- The computer is connected to an electrical outlet and running on AC power.
 - The battery is discharging, idle, or charging.
-

For more information about QuickSet, right-click the  icon in the taskbar, and click **Help**.

 **NOTE:** Dell recommends that you connect your computer to an electrical outlet when writing to a CD.

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 more information on the **Power Meter** tab, see the *Tell Me How* help file. To access the help file, see "Accessing Help" on page 88.


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

Charge Gauge

Press 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 the battery has 80 percent of its charge remaining, four of the lights are on. If no lights appear, the battery has no charge.



Low-Battery Warning

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

A low-battery warning occurs when the battery charge is approximately 90 percent depleted. The computer beeps once, indicating that minimal battery operating time remains. During that time, the speaker beeps periodically. If two batteries are installed, the low-battery warning means that the combined charge of both batteries is approximately 90 percent depleted. The computer enters hibernate mode when the battery charge is at a critically low level. For more information on low-battery alarms, see the *Tell Me How* help file. To access the help file, see "Accessing Help" on page 88.

Charging the Battery

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.


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 on resolving problems with a battery, see "Power Problems" on page 51.


Removing a Battery

For more information about removing the second battery, see "About the Module Bay" on page 52.

 **CAUTION:** Before performing these procedures, turn off the computer, disconnect it from the electrical outlet, and disconnect the modem from the telephone wall jack.

 **NOTICE:** If you choose to replace the battery with the computer in standby mode, you have up to 90 seconds to complete the battery replacement before the computer shuts down and loses any unsaved data.

- 1 Ensure that the computer is turned off, disconnected from an electrical outlet, and disconnected from the telephone wall jack.

 **NOTE:** The AC adapter charges a completely discharged battery in approximately 1 hour with the computer turned off. Charge time is longer with the computer turned on. You can leave the battery in the computer as long as you like. The battery internal circuitry prevents the battery from overcharging.

- 2 If the computer is connected to a docking device (docked), undock it. See the documentation that came with your docking device for instructions.
- 3 Slide and hold the battery-bay latch release on the bottom of the computer, and then remove the battery from the bay.



Installing a Battery

Slide the battery into the bay until the latch release clicks.

For more information about installing the second battery, see "About the Module Bay" on page 52.

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 before you use it.

Power Problems

CHECK THE POWER LIGHT — When the power light is lit or blinking, the computer has power. If the power light is blinking, the computer is in standby mode—press the power button to exit standby mode. If the light is off, press the power button to turn on the computer.

CHARGE THE BATTERY — The battery charge may be depleted.

- 1 Reinstall the battery.
- 2 Use the AC adapter to connect the computer to an electrical outlet.
- 3 Turn on the computer.

CHECK THE BATTERY STATUS LIGHT — If the battery status light flashes orange or is a steady orange, the battery charge is low or depleted. Connect the computer to an electrical outlet.

If the battery status light flashes green and orange, the battery is too hot to charge. Turn off the computer (see "Turning Off Your Computer" on page 43), disconnect the computer from the electrical outlet, and then let the battery and computer cool to room temperature.

If the battery status light rapidly flashes orange, the battery may be defective. Contact Dell (see "Contacting Dell" on page 129).

TEST THE ELECTRICAL OUTLET — Ensure that the electrical outlet is working by testing it with another device, such as a lamp.

CHECK THE AC ADAPTER — Check the AC adapter cable connections. If the AC adapter has a light, ensure that the light is on. Make sure that the AC adapter is a Dell AC adapter that is designed to work with your computer.


CONNECT THE COMPUTER DIRECTLY TO AN ELECTRICAL OUTLET —


Bypass power protection devices, power strips, and the extension cable to verify that the computer turns on.

ELIMINATE POSSIBLE INTERFERENCE — Turn off nearby fans, fluorescent lights, halogen lamps, or other appliances.

ADJUST THE POWER PROPERTIES — See the *Tell Me How* help file or search for the keyword *standby* in the Help and Support Center. To access help, see "Accessing Help" on page 88.

RESEAT THE MEMORY MODULES — If the computer power light turns on but the display remains blank, reseat the memory modules (see "Adding Memory" on page 108).

 **NOTE:** See the *Tell Me How* help file for information on standby mode. To access the help file, see "Accessing Help" on page 88.

 **NOTE:** You do not need to install the device screw unless you want to secure the module inside the computer for security purposes.

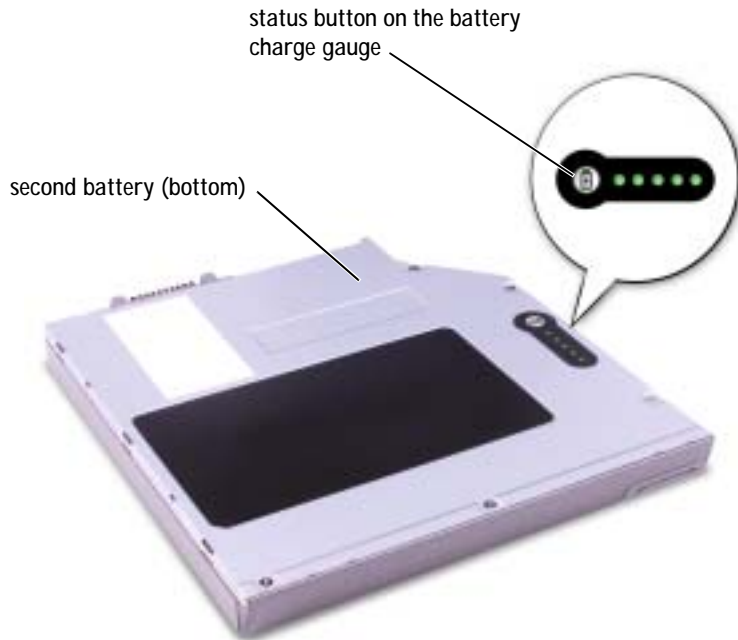
About the Module Bay

You can install devices such as a floppy drive, CD drive, CD-RW drive, DVD drive, CD-RW/DVD drive, DVD+ RW, second battery, or second hard drive in the module bay.

Your Dell™ computer ships with an optical drive installed in the module bay. However, the device screw is not installed in the optical drive but packaged separately. When you install your device in the module bay, you can install the device screw.

Checking the Charge on the Second Battery

Before you install a second battery, press 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 the battery has 80 percent of its charge remaining, four of the lights are on. If no lights appear, the battery has no charge.



Removing and Installing Devices While the Computer Is Turned Off

Your computer ships with an optical drive installed in the module bay. However, the device screw is not installed in the optical drive but packaged separately. When you install your device in the module bay, you can install the device screw.

If the Device Screw Is Not Installed

➡ **NOTICE:** To prevent damage to devices, place them in a safe, dry place when they are not installed in the computer. Avoid pressing down on them or placing heavy objects on top of them.

- 1 Press the device latch release so that the latch release pops out.



🔩 **NOTE:** If the device screw is not installed, you can remove and install devices while the computer is running and connected to a docking device (docked).

🔩 **NOTE:** You do not need to install the device screw unless you want to secure the module inside the computer for security purposes.

- 2 Pull the device by the latch release to remove the device from the module bay.



- 3 Insert the new device into the bay, push the device until you feel a click, and push the device latch release in so that it is flush with the computer.

If the Device Screw Is Installed


- 1 Save and close any open files, exit any open programs, and then shut down the computer.
 - 2 If the computer is connected to a docking device (docked), undock it. See the documentation that came with your docking device for instructions.
- NOTICE:** To prevent damage to devices, place them in a safe, dry place when they are not installed in the computer. Avoid pressing down on them or placing heavy objects on top of them.
- 3 Close the display and turn the computer over.

- 4 Use a #1 Phillips screwdriver to remove the device screw from the bottom of the computer.





- 5 Press the device latch release so that the latch release pops out.
- 6 Pull the device by the latch release to remove the device from the module bay.



-  **NOTICE:** Insert devices into the module bay before you dock and turn on the computer.
- 7 Insert the new device into the bay, push the device until you feel a click, and push the device latch release in so that it is flush with the computer.
- 8 Replace the device screw.
- 9 Turn on the computer.


Removing and Installing Devices While the Computer Is Running

 **NOTE:** If the device screw is not installed, you can remove and install devices while the computer is running and connected to a docking device (docked).

 **NOTE:** You do not need to install the device screw unless you want to secure the module inside the computer for security purposes.

Your computer ships with an optical drive installed in the module bay. However, the device screw is not installed in the optical drive but packaged separately. When you install your device in the module bay, you can install the device screw.

If the Device Screw Is Not Installed

- 1 Double-click the **Safely Remove Hardware** icon on the taskbar.
 - 2 Click **Stop** and wait for the operating system to confirm that the device has stopped.
 - 3 Click the device you want to eject.
-  **NOTICE:** To prevent damage to devices, place them in a safe, dry place when they are not installed in the computer. Avoid pressing down on them or placing heavy objects on top of them.

- 4 Press the device latch release so that the latch release pops out.




- 5 Pull the device by the latch release to remove the device from the module bay.



- 6 Insert the new device into the bay, push the device until you feel a click, and push the device latch release in so that it is flush with the computer. Windows XP automatically recognizes the new device.
- 7 If necessary, enter your password to unlock your computer.

If the Device Screw Is Installed

- 1 Double-click the **Safely Remove Hardware** icon on the taskbar.
 - 2 Click the device you want to eject.
 - 3 If the computer is connected to a docking device (docked), undock it. See the documentation that came with your docking device for instructions.
-  **NOTICE:** To prevent damage to devices, place them in a safe, dry place when they are not installed in the computer. Avoid pressing down on them or placing heavy objects on top of them.
- 4 Use a #1 Phillips screwdriver to remove the device screw from the bottom of the computer.



- 5 Press the device latch release so that the latch release pops out.
- 6 Pull the device by the latch release to remove the device from the module bay.



- 7 Insert the new device into the bay, push the device until you feel a click, and push the device latch release in so that it is flush with the computer. Windows XP automatically recognizes the new device.
- 8 If necessary, enter your password to unlock your computer.

SECTION 4

Using the Keyboard and Touch Pad

Numeric Keypad
Keyboard Shortcuts
Customizing the Touch Pad
Touch Pad or Mouse Problems
External Keyboard Problems
Unexpected Characters

Numeric Keypad









NOTE: When you connect an external keyboard or keypad to the computer, the keypad is disabled.

NOTE: You can change options for using the numeric keypad in the system setup program.



The keypad numbers and symbols are marked in blue on the right side of the keypad keys. To type a number or symbol, press **Num Lk** **Scroll Lk** to enable the numeric keypad, and then hold down **Fn** and press the desired key.

Keyboard Shortcuts



System Functions

  	Opens the Windows Task Manager window.
	Enables and disables the numeric keypad.
 	Enables and disables the scroll lock.







Battery

 	Displays the Dell™ QuickSet Battery Meter.
---	--



CD or DVD Tray

 	Ejects the tray out of the drive.
---	-----------------------------------

Display Functions

 	Switches the video image to the next display in the following sequence: the integrated display only, the integrated display and an external CRT monitor simultaneously, an external CRT monitor only, the integrated display and an external DVI monitor simultaneously, and an external DVI monitor only.
 	Increases brightness on the integrated display only (not on an external monitor).
 	Decreases brightness on the integrated display only (not on an external monitor).

Radios (Including Wireless Networking and Bluetooth™)


 	Enables and disables radios, including wireless networking and Bluetooth.
---	---

Power Management



Activates the power management mode of your choice. You can program this keyboard shortcut on the **Advanced** tab in the **Power Options Properties** window.

Speaker Functions

If no sound comes from the speakers, press  and adjust the volume.



Increases the volume of the integrated speakers and external speakers, if attached.



Decreases the volume of the integrated speakers and external speakers, if attached.



Enables and disables the integrated speakers and external speakers, if attached.

Microsoft® Windows® Logo Key Functions



Minimizes all open windows.



Maximizes all windows.



Runs Windows Explorer.



Opens the **Run** dialog box.



Opens the **Search Results** dialog box.



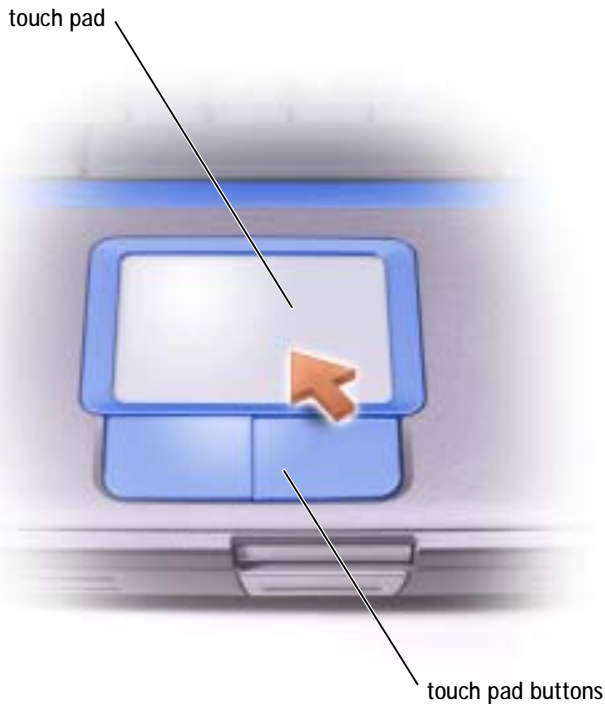
Opens the **Search Results-Computer** dialog box (if the computer is connected to a network).



Opens the **System Properties** dialog box.

To adjust keyboard operation, such as the character repeat rate, open the Control Panel, and click **Printers and Other Hardware**.

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.



- To move the cursor, lightly slide your finger over the touch pad.
- To select an object, 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 down-up-down on the touch pad. On the second down motion, leave your finger on the touch pad and move the selected object by sliding your finger across the surface.
- To double-click an object, position the cursor on the object and then tap twice on the touch pad, or use your thumb to press the left touch-pad button twice.

Customizing the Touch Pad

You can disable the touch pad or adjust their settings by using the **Mouse Properties** window.

- 1 Click the **Start** button, click **Control Panel**, and then double-click the **Mouse** icon.
- 2 On the **Mouse Properties** window:
 - Click the **Device Select** tab to disable the touch pad.
 - Click the **Pointer** tab to adjust touch pad settings.
- 3 Select the desired settings and click **Apply**.
- 4 Click **OK** to save the settings and close the window.

Touch Pad or Mouse Problems

CHECK THE TOUCH PAD SETTINGS —

- 1 Click the **Start** button, click **Control Panel**, and then click **Printers and Other Hardware**.
- 2 Click **Mouse**.
- 3 Try adjusting the settings.

TO VERIFY THAT THE PROBLEM IS WITH THE MOUSE, CHECK THE TOUCH PAD —

- 1 Shut down the computer (see "Turning Off Your Computer" on page 43).
- 2 Disconnect the mouse.
- 3 Turn on the computer.
- 4 At the Windows desktop, use the touch pad to move the cursor around, select an icon, and open it.

If the touch pad operates correctly, the mouse may be defective.

REINSTALL THE TOUCH PAD DRIVER — See "Reinstalling Drivers and Software" on page 105.

External Keyboard Problems

CHECK THE KEYBOARD CABLE — Shut down the computer (see "Turning Off Your Computer" on page 43). Disconnect the keyboard cable and check it for damage.

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

CHECK THE EXTERNAL KEYBOARD —

- 1 Turn off 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 **All Programs**, point to **Accessories**, and 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 Turn off the computer.
- 2 Disconnect the external keyboard.
- 3 Turn on the computer.
- 4 From the Windows desktop, click the **Start** button, point to **All Programs**, point to **Accessories**, and click **Notepad**.
- 5 Type some characters on the external 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 129).

Unexpected Characters

DISABLE THE NUMERIC KEYPAD —

Press  to disable the numeric keypad if numbers are displayed instead of letters. Verify that the numbers lock light is not lit.



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

SECTION 5

Using CDs, DVDs, and Other Multimedia

Using CDs and DVDs

CD and DVD Problems

Sound and Speaker Problems

Copying CDs

Connecting a Television to the Computer

Using CDs and DVDs

For information about using CDs and DVDs in your computer, see the *Tell Me How* help file. To access the help file, see "Accessing Help" on page 88.


CD and DVD Problems

If you cannot play a CD or DVD

High-speed CD drive vibration is normal and may cause noise. This noise does not indicate a defect with the drive or the CD.



NOTE: Because of different worldwide file types, not all DVD titles work in all DVD drives.

ENSURE THAT WINDOWS® RECOGNIZES THE DRIVE — Click the **Start** button and click **My Computer**. If the 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. Insert a bootable disk and restart the computer. Verify that the  light is blinking, indicating normal operation.

TRY ANOTHER DISC — Insert another disc to eliminate the possibility that the original disc is defective.

ENSURE THAT THE CD IS SNAPPED TO THE SPINDLE.

ADJUST THE WINDOWS VOLUME CONTROL — Double-click the speaker icon in the lower-right corner of your screen. Ensure that the volume is turned up and that the sound is not muted.

REINSTALL THE DRIVE —

- 1 Save and close any open files, exit any open programs, and shut down the computer.
- 2 Remove the drive. See "Using the Module Bay" in the *Tell Me How* help file for instructions. To access the help file, see "Accessing Help" on page 88.
- 3 Reinstall the drive.
- 4 Turn on the computer.

CLEAN THE DRIVE OR DISC — See "Cleaning Your Computer" in the *Tell Me How* help file for instructions. To access the help file, see "Accessing Help" on page 88.

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

- 1 Ensure that the computer is shut down and turned off (see page 43).
- 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.

If the CD-RW drive stops writing

DISABLE STANDBY MODE IN WINDOWS BEFORE WRITING TO A CD-RW — Search for the keyword *standby* in the Help and Support Center. To access help, see "Accessing Help" on page 88.

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

EXIT ALL OTHER OPEN PROGRAMS — Exiting all other open programs before writing to the CD-RW may alleviate the problem.

Sound and Speaker Problems

If you have a problem with integrated speakers

ADJUST THE WINDOWS[®] VOLUME CONTROL — Double-click the speaker icon in the lower-right corner of your screen. Ensure that the volume is turned up and that the sound is not muted. Adjust the volume, bass, or treble controls to eliminate distortion.

ADJUST THE VOLUME USING THE VOLUME CONTROL BUTTONS — Press the volume control buttons and mute button, which are located above the keyboard.

REINSTALL THE SOUND (AUDIO) DRIVER — See "Reinstalling Drivers and Software" on page 105.

If you have a problem with external speakers

CHECK THE SPEAKER CABLE CONNECTIONS — See the setup diagram supplied with the speakers.

TEST THE ELECTRICAL OUTLET — Ensure that the electrical outlet is working by testing it with another device, such as a lamp.

ENSURE THAT THE SPEAKERS ARE TURNED ON — See the setup diagram supplied with the speakers.

ADJUST THE WINDOWS VOLUME CONTROL — Double-click the speaker icon in the lower-right corner of your screen. Ensure that the volume is turned up and that the sound is not muted. Adjust the volume, bass, or treble controls to eliminate distortion.



NOTE: The volume control in some MP3 players overrides the Windows volume setting. If you have been listening to MP3 songs, make sure that you did not turn the player volume down or off.

TEST THE SPEAKERS — Plug the speaker audio cable into the line-out connector on the computer. Ensure that the headphone volume control is turned up. Play a music CD.

RUN THE SPEAKER SELF-TEST — Some speaker systems have a self-test button on the subwoofer. See the speaker documentation for self-test instructions.

ELIMINATE POSSIBLE INTERFERENCE — Turn off nearby fans, fluorescent lights, or halogen lamps to check for interference.

REINSTALL THE SOUND (AUDIO) DRIVER — See "Reinstalling Drivers and Software" on page 105.

Copying CDs

This section applies only to computers that have a CD- or DVD-recording device.

The information in this section is based on the Roxio Easy CD Creator Basic documentation that came with your computer. See "Using Easy CD Creator Basic" on page 73 for instructions on how to locate that documentation.

To burn CDs, you need to use CD-burner software. Roxio Easy CD Creator Basic is your computer's CD-burner software. The software includes the following project programs that enable you to record specialty CDs for different types of uses:

- DirectCD allows you to format a blank CD-R or CD-RW disc so that you can use Microsoft® Windows® Explorer to drag and drop data files to the CD-RW drive. You can use a DirectCD-formatted CD-RW disc like another hard drive on your computer because CD-RW discs are fully rewritable (CD-R discs can be used with DirectCD, but that media type has overwriting limitations—see "Using Blank CD-R Discs or Blank CD-RW Discs" on page 73 for recording media differences).
- MusicCD allows you to burn custom music CDs.
- DataCD allows you to copy a variety of your documents, such as spreadsheet or accounting files, to a CD for permanent storage.



NOTE: To "burn" a CD means to copy or create your own custom CD. Ensure that you follow all copyright laws when you create CDs.



NOTE: The information in this section also applies to using Easy CD Creator Basic with a DVD+RW or a DVD+R drive.

- Disc Copier allows you to make a backup copy of almost any type of CD. This program allows you to make a copy of a CD for everyday use so that you can archive and save the original copy. (Disc Copier is titled "CD Copier" in some versions of Roxio CD Creator Basic.)

All four project programs are available on the Easy CD Creator Basic **Select a Project** menu screen. To view the **Select a Project** menu screen, click the **Start** button, point to **All Programs**→**Roxio Easy CD Creator**, and then click **Project Selector**.

Using Easy CD Creator Basic

See the Easy CD Creator Basic documentation for instructions on how to use the program, information about different recording techniques, and CD media limitations. The Easy CD Creator Basic documentation is located in the Help and Support Center (see "Accessing Help" on page 88). The documentation is also provided on the Roxio reinstallation CD, which is included with your computer. Each Easy CD Creator Basic project program also has thorough online help files.

Using Blank CD-R Discs or Blank CD-RW Discs

Your CD-RW drive writes to two different types of recording media—CD-R and CD-RW discs. Use blank CD-R (CD-Recordable) disks to record music or permanently store data files. After creating a CD-R disc, you cannot write to that disc again without changing your method of recording (see the Roxio documentation for more information). Use blank CD-RW (CD-ReWritable) discs when you want to write, erase, rewrite, and update your files onto CDs.

Helpful Tips

- You must use the Easy CD Creator Basic project programs to copy and record all music and data CDs. You can use Windows Explorer to drag and drop files to a CD-R or CD-RW disc only after you first use DirectCD to format the disc.
- You must use CD-R discs to burn music CDs that you want to play in regular stereos. CD-RW discs do not play in most home or car stereos.



NOTE: Some music and game CDs are copy-protected. If you have a CD that cannot be copied, you must use the original CD for everyday use.

- If you want to copy files from the Internet or files from a floppy or Zip drive, copy those files to your hard drive first, and then burn your CD. Your CD-RW drive requires a steady stream of data to properly record. Direct Internet downloads, floppy drives, and Zip drives may not be able to provide a steady data stream to your CD-RW drive.
- Music MP3 files can be played only on MP3 players or on computers that have MP3 software installed.
- Ensure that you set the sampling rate to at least 128 Kbps when you burn MP3 files to a CD. Otherwise, recording errors may occur.
- Do not burn a blank CD-R or CD-RW disc to its maximum capacity; for example, do not copy a 650-MB file to a 650-MB blank CD. The CD-RW drive needs 1 or 2 MB of the blank CD to finalize the recording.
- Use a blank CD-RW disc to practice CD recording until you are familiar with CD recording techniques. If you make a mistake, you can erase the CD-RW disc and try again. You can also use blank CD-RW discs to test music file projects before you record the project permanently to a blank CD-R disc.
- See the Roxio support website at support.roxio.com for additional helpful tips.

How to Copy a CD



NOTE: If you have a DVD/CD-RW combo drive and you experience recording problems, first check for available software patches on the Dell Support website at support.dell.com and if necessary, the Roxio support website at support.roxio.com.

The procedure assumes that your computer is equipped with a single CD-RW drive (without an additional CD drive). If your computer is equipped with both types of drives, see the Roxio documentation for instructions on how to copy CDs from a CD drive to a CD-RW drive.

- 1 Click the **Start** button, point to **All Programs**→ **Roxio Easy CD Creator**, and then click **Project Selector**.

The **Select a Project** window appears.

- 2 Click **Disc Copier**. (Disc Copier is titled "CD Copier" in some versions of Easy CD Creator Basic.)

The **Disc Copier** window appears and displays your CD-RW drive in the **Copy from** and the **Record to** lists.

- 3 Insert the source CD that you want to copy into the CD-RW drive.

The Disc Copier project program briefly checks the source CD in the CD-RW drive to ensure that it is a readable CD.

- 4 Click **Copy**.

Depending on the size of the files that are being copied, the copy process may take a few minutes.

- 5 After the source CD is copied, remove the source CD from the CD-RW drive tray.

The CD-RW drive tray opens automatically after the source CD is copied.

- 6 Insert a blank CD into the CD-RW drive and close the tray.

The recording starts automatically.

- 7 After the recording completes, click **OK**.

Connecting a Television to the Computer

Your computer has an S-video TV-out connector that enables you to connect the computer to a television. Using a commercially available S-video cable or composite video cable, you can connect the computer to a television in one of two ways:

- S-video (for a television with S-video input)
- Composite video (for a television with only a composite video input; also uses the Dell-supplied composite TV-out adapter cable)

The audio connector on the side of the computer enables you to connect the computer to your television or audio device, using a commercially available audio cable.

When you complete the cable connection, see "Enabling the Display Settings for a Television" on page 80 to ensure that the computer recognizes and works properly with the television.

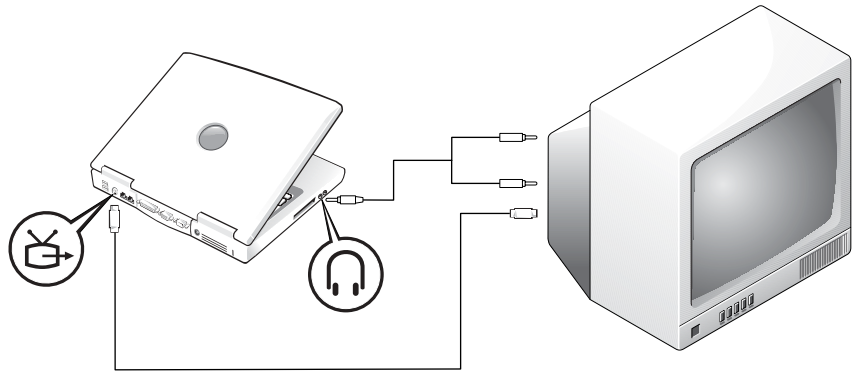


NOTE: Video and audio cables for connecting your computer to a television are not included with your computer. Cables may be purchased at most consumer electronics stores.

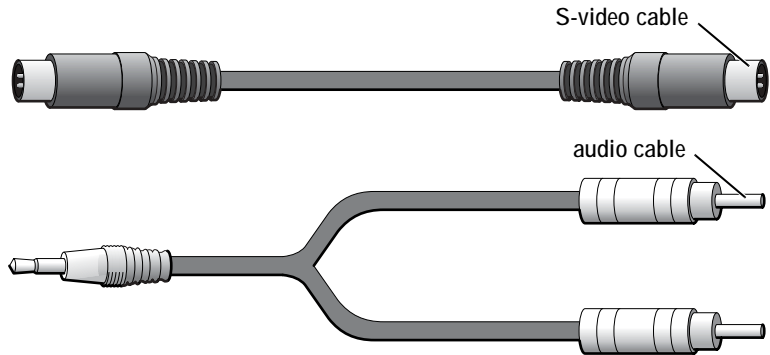


NOTE: Diagrams for each connection combination appear at the beginning of each subsection to help you determine which method you should use.

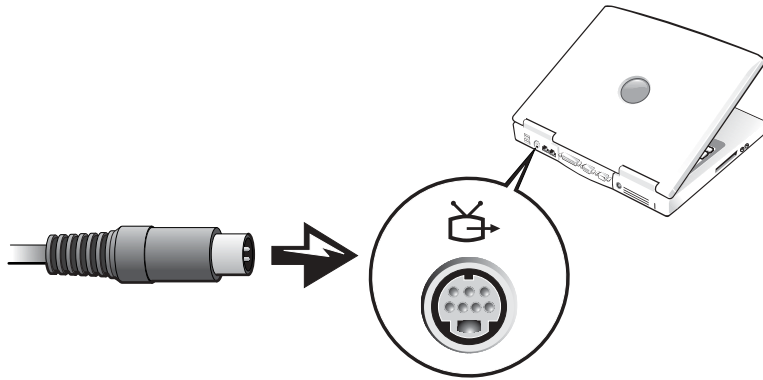
S-Video Connection



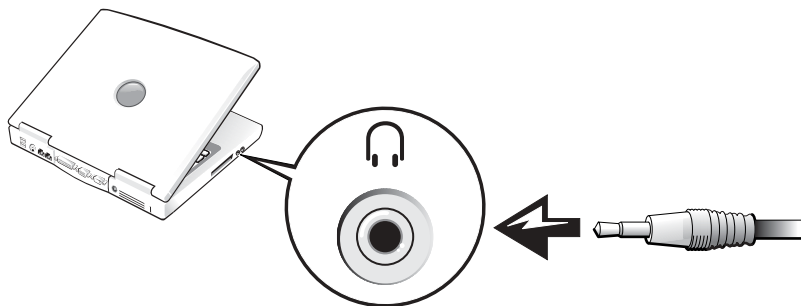
Before you begin, ensure that you have the following cables:



- 1 Shut down the computer and the television and/or audio device you want to connect.
- 2 Plug one end of the S-video cable into the S-video connector on the computer.

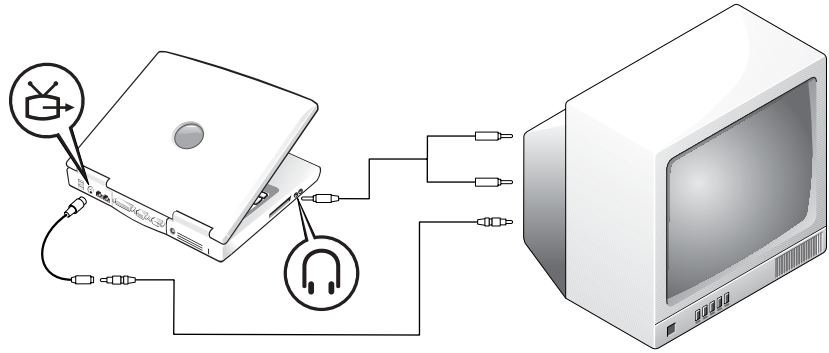


- 3 Plug the other end of the S-video cable into your television.**
- 4 Plug the single-connector end of the audio cable into the headphone connector on your computer.**

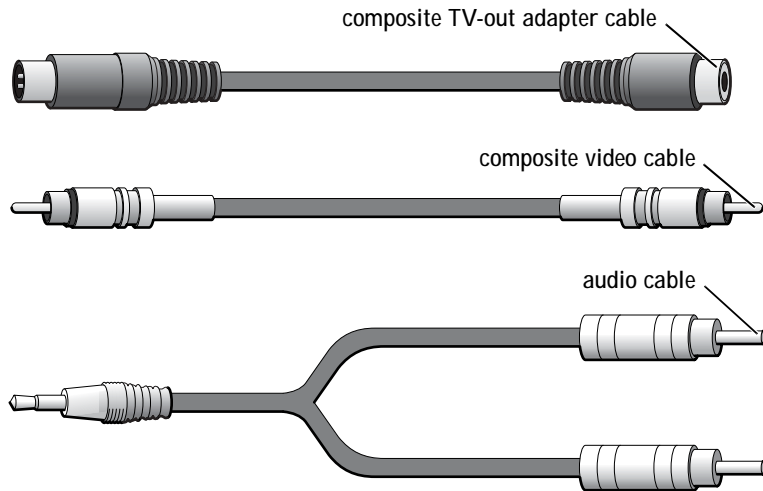


- 5 Plug the two RCA connectors on the other end of the audio cable into the audio input connectors on your television or audio device.**
- 6 Turn on the television, turn on any audio device you connected, and then turn on the computer.**
- 7 See "Enabling the Display Settings for a Television" on page 80 to ensure that the computer recognizes and works properly with the television.**

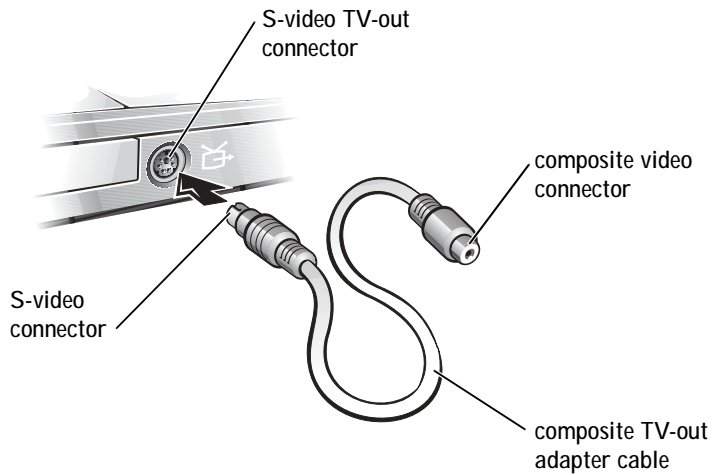
Composite Video Connection



To connect the computer to a television that has a composite video input only, Dell provides a composite TV-out adapter cable. Before you begin, ensure that you have the following cables:



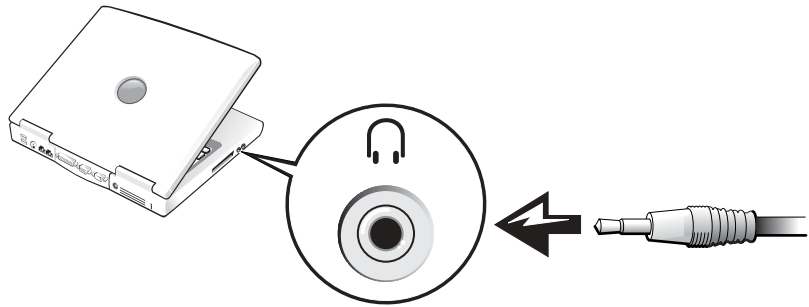
- 1 Turn off the computer and the television and/or audio device you want to connect.
- 2 Connect the composite TV-out adapter cable to the S-video TV-out connector on the computer.



- 3 Plug one end of the composite video cable into the composite video connector on the composite TV-out adapter cable.**




- 4 Plug the other end of the composite video cable into the composite video connector on the television.**
- 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 television or audio device.

Enabling the Display Settings for a Television

ATI Video Controller

 **NOTE:** Ensure that you properly connect the television before you enable the display settings.

- 1 To open the **Control Panel** window, click the **Start** button and then click the **Control Panel** icon.
- 2 Double-click the **Display** icon, click the **Settings** tab, and then click **Advanced**.
- 3 Click the **Displays** tab.
- 4 Click the upper-left corner of the **TV** button to enable the television.
- 5 To play a DVD on the television, click the small "primary" button (resembles a bull's-eye) at the bottom-left under the **TV** picture.
- 6 Click **Apply**.
- 7 Click **Yes** to keep the new settings.
- 8 Click **OK**.

 **NOTE:** Various programs access the hardware in different ways. You may or may not need to click the primary button for operations other than playing DVDs.

DVD video is visible only on the display that is set to primary. While the DVD is playing, the DVD player window on your computer display is blank or (if the DVD player window is set to full-screen mode) the entire computer display screen is blank.