Dell™ Inspiron™ 1420

Owner's Manual

Model PP26L

www.dell.com | support.dell.com

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.

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Model PP26L

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Finding Information

NOTE: Some features may be optional and may not ship with your computer. Some features 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 • Device documentation • Notebook System Software (NSS)	**Drivers and Utilities Media** Documentation and drivers are already installed on your computer. You can use the *Drivers and Utilities* media to reinstall drivers (see "Reinstalling Drivers and Utilities" on page 120) or run the Dell Diagnostics (see "Dell Diagnostics" on page 91). Readme files may be included on your *Drivers and Utilities* media 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**
• Service Tag and Express Service Code • Microsoft® Windows® Product Key	**Service Tag and Microsoft Windows Product Key** These labels are located on your computer. • Use the Service Tag to identify your computer when you use **support.dell.com** or contact support. • Enter the Express Service Code to direct your call when contacting support. **NOTE:** As an increased security measure, the newly designed Microsoft Windows license label incorporates a "security portal," which looks like a missing portion of the label, to discourage removal of the label.

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 the memory, hard drive, and operating system • Customer Care — Contact information, service call and order status, and warranty and repair information • Service and support — Service call status, support history, service contract, and online discussions with support • Dell Technical Update Service — Proactive e-mail notification of software and hardware updates for your computer • Reference — Computer documentation, details on my computer configuration, product specifications, and white papers	**Dell Support Website — support.dell.com** **NOTE:** Select your region or business segment to view the appropriate support site.
• Downloads — Certified drivers, patches, and software updates • Notebook System Software (NSS) — If you reinstall the operating system on your computer, you should also reinstall the NSS utility. NSS automatically detects your computer and operating system, and installs the updates appropriate for your configuration, providing 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.	To download Notebook System Software: **1** Go to **support.dell.com**, select your country/region, and then click **Drivers & Downloads**. **2** Enter your Service Tag or product model, and then click **Go**. **3** Select your operating system and language, and then click **Find Downloads**, or under **Downloads Search**, search for the keyword *Notebook System Software*. **NOTE:** The **support.dell.com** user interface may vary depending on your selections.

What Are You Looking For?	Find It Here
• 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 on the taskbar. For more information, see "Dell Support Utility" on page 95.
• How to use Windows Vista™ • How to work with programs and files • How to personalize my desktop	**Windows Help and Support** 1 Click the Windows Vista Start button , and then click **Help and Support**. 2 In *Search Help*, type a word or phrase that describes your problem, and then press <Enter> or click the magnifying glass. 3 Click the topic that describes your problem. 4 Follow the instructions on the screen.
• Information on network activity, the hotkeys, and other items controlled by Dell QuickSet	**Dell QuickSet Help** To view *Dell QuickSet Help*, right-click the Dell QuickSet icon in the Windows notification area. For more information on Dell QuickSet, see "Dell™ QuickSet Features" on page 155.

What Are You Looking For?	Find It Here
• How to reinstall my operating system	**Operating System Media** 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. • Operating System Installation Media — If you received operating system media with your computer, you can use it to restore your operating system. For more information, see "Restoring Your Operating System" on page 122. After you reinstall your operating system, use the *Drivers and Utilities* media to reinstall drivers for the devices that came with your computer. Your operating system product key label is located on your computer. **NOTE:** The color of your operating system installation media varies according to the operating system you ordered.

1

About Your Computer

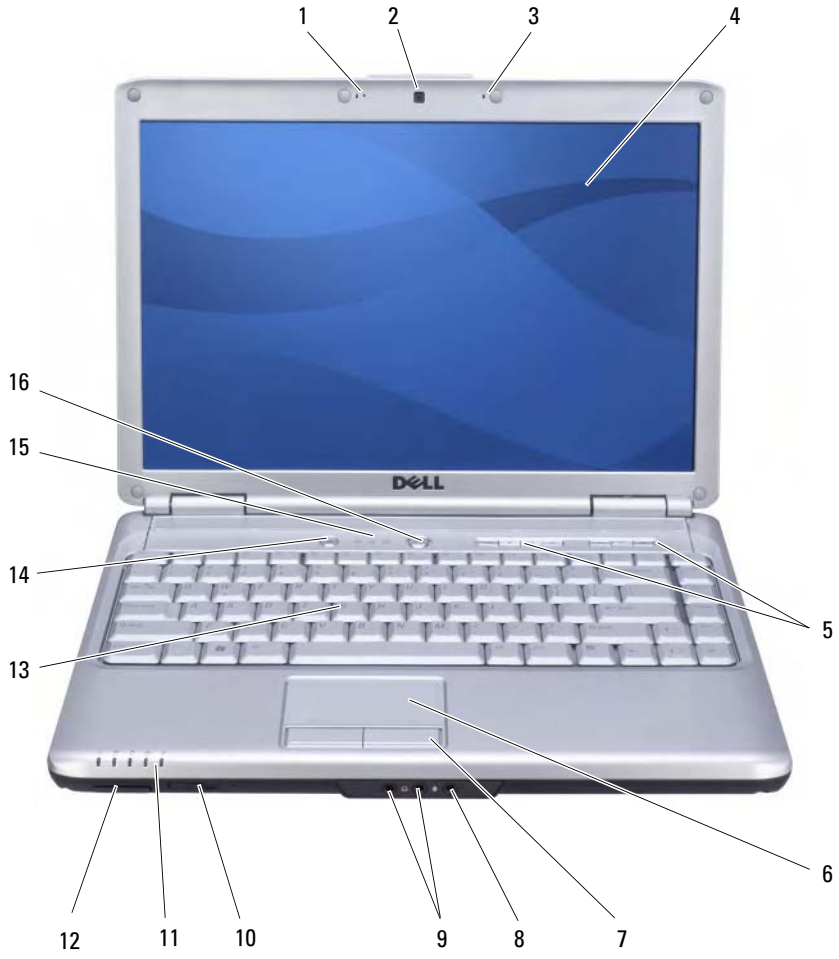
Determining Your Computer's Configuration

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. Click **Start** , and then click **Help and Support**.
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 indicator	2	camera (optional)
3	digital microphones (2)	4	display
5	media control buttons	6	touch pad
7	touch pad buttons	8	microphone connector
9	headphone connectors (2)	10	wireless switch
11	device status lights	12	8-in-1 memory card reader
13	keyboard	14	Dell™ MediaDirect™ button
15	keyboard status lights	16	power button

CAMERA INDICATOR — Indicates camera ON/OFF status.

CAMERA — Built-in camera for video capture, conferencing, and chat. Based on configuration selections you made when ordering your computer, your computer may not include a camera.

DIGITAL MICROPHONES — Digital directional microphones for conferencing and chat.

DISPLAY — For more information about your display, see "Using the Display" on page 37.

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

	Mute the sound.	⏮	Play the previous track.
	Turn the volume down.	⏭	Play the next track.
	Turn the volume up.	■	Stop.
▶/II	Play or pause.		

TOUCH PAD — Provides the functionality of a mouse (see "Touch Pad" on page 41).

TOUCH PAD BUTTONS — Use these buttons much like the buttons on a mouse when you use the touch pad to move the cursor on the display (see "Touch Pad" on page 41).

HEADPHONE CONNECTORS — Dual headphone connectors for attaching headphones.

MICROPHONE CONNECTOR — Attach a microphone to this connector.

WIRELESS SWITCH — When enabled through Dell QuickSet, this switch can scan for a wireless LAN (WLAN) in your vicinity. You can also use it to rapidly turn off or on any wireless devices such as WLAN cards and internal cards with Bluetooth wireless technology.

DEVICE STATUS LIGHTS

The lights located on the palm rest towards the front of the computer indicate the following:

⏻	Power light – Turns on when you turn on the computer, and blinks when the computer is in a power management mode.
🛢	Hard drive activity light – 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.

	Battery status light – Turns on steadily or blinks to indicate battery charge status.
	WiFi status light – Turns on when wireless networking is enabled. To enable or disable wireless networking, use the wireless switch.
	Bluetooth® status light – Turns on when a card with Bluetooth wireless technology is enabled. **NOTE:** The card with Bluetooth wireless technology is an optional feature. 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 then click **Disable Bluetooth Radio**. To quickly enable or disable all wireless devices, use the wireless switch.

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

– Solid blue: The battery is charging.

– Flashing blue: The battery is almost fully charged.

– Off: The battery is adequately 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 amber: The battery charge is low.

– Solid amber: The battery charge is critically low.

8-IN-1 MEMORY CARD READER — –Provides a fast and convenient way to view and share digital photos, music, and videos stored on a memory card. The 8-in-1 media memory card reader reads the following digital media memory cards:

- Secure Digital (SD)
- SDIO
- MultiMediaCard (MMC)
- Memory Stick
- Memory Stick PRO
- xD-Picture Card
- Hi Speed-SD
- Hi Density-SD

KEYBOARD — The keyboard includes a numeric keypad as well as the Microsoft Windows logo key.

DELL™ MEDIADIRECT™ BUTTON — Press the Dell MediaDirect button to launch Dell MediaDirect (see "Using Dell MediaDirect™" on page 57).

KEYBOARD STATUS LIGHTS

The blue lights located above the keyboard indicate the following:

	Turns on when the numeric keypad is enabled.
	Turns on when the uppercase letter (caps lock) function is enabled.
	Turns on when the scroll lock function is enabled.

POWER BUTTON — Press the power button to turn on the computer or exit a power management mode (see "Configuring Power Management Settings" on page 46).

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

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

Left Side View

1	security cable slot	2	AC adapter connector
3	air vents	4	IEEE 1394a connector
5	USB connectors (2)	6	ExpressCard slot

SECURITY CABLE SLOT — Lets you attach a commercially available antitheft device to the computer (see "Security Cable Lock" on page 89).

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 on or off.

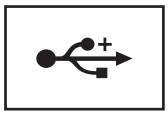
CAUTION: The AC adapter works with electrical outlets worldwide. However, power connectors and power strips vary among countries. Using an incompatible cable or improperly connecting the cable to the power strip or electrical outlet may cause fire or equipment damage.

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.

AIR VENTS — The computer uses an internal fan to create airflow through the vents, which prevents the computer from overheating. The computer turns the fan on when the computer gets hot. Fan noise is normal and does not indicate a problem with the fan or the computer.

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

USB CONNECTORS



Connect USB devices, such as a mouse, keyboard, or printer.

EXPRESSCARD SLOT — Supports one ExpressCard. The computer ships with a plastic *blank* installed in the slot. For more information, see "ExpressCards" on page 73.

Right Side View

1	optical drive	2	eject button
3	S-video TV-out connector	4	USB connectors (2)
5	video connector (VGA)		

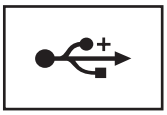
OPTICAL DRIVE — For more information about the optical drive, see "Using Multimedia" on page 51.

EJECT BUTTON — Press the eject button to open the optical drive.

S-VIDEO TV-OUT CONNECTOR

	Connects your computer to a TV. Also connects digital audio-capable devices using the TV/digital audio adapter cable.

USB CONNECTORS

	Connect USB devices, such as a mouse, keyboard, or printer.

VIDEO CONNECTOR

	Connects video devices, such as a monitor.

Back View

1 modem connector (RJ-11) 2 network connector (RJ-45)

MODEM CONNECTOR (RJ-11)

Connects the telephone line to the modem connector.

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

NETWORK CONNECTOR (RJ-45)

Connects the computer to a network. The two lights next to the connector indicate status and activity for wired network connections.

For information on using the network adapter, see the device user's guide supplied with your computer.

Bottom View

1	battery-bay latch releases (2)	2	hard drive
3	battery	4	battery charge/health gauge
5	processor and thermal module cover	6	memory module/coin-cell battery/bluetooth/modem compartment cover

BATTERY-BAY LATCH RELEASES — Releases the battery (see "Replacing the Battery" on page 48 for instructions).

HARD DRIVE — Stores software and data.

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 43).

BATTERY CHARGE/HEALTH GAUGE — Provides information on the battery charge (see "Checking the Battery Charge" on page 44).

PROCESSOR AND THERMAL MODULE COVER — Covers the processor and thermal module.

MEMORY MODULE/COIN-CELL/BLUETOOTH/MODEM BATTERY COMPARTMENT —

Compartment that contains the memory modules, modem, bluetooth, and the coin-cell battery. For additional information, see "Adding and Replacing Parts" on page 127.

NOTE: Bluetooth is optional and may not be included in your computer.

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:

- DSL connections that provide high-speed Internet access through your existing telephone line or cellular telephone service. 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.
- Satellite modem connections that provide high-speed Internet access through a satellite television system.
- Dial-up connections that provide Internet access through a telephone line. Dial-up connections are considerably slower than DSL, cable, and satellite modem connections.
- Wireless Wide Area Network (WWAN) or Mobile Broadband technology provides a connection to the Internet using cellular technology at broadband rates.
- Wireless Local Area Network (WLAN) connections use high-frequency radio waves to communicate. Typically, a wireless router is connected to the broadband cable or DSL modem that broadcasts the Internet signal to your computer.

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, cable, or satellite modem connection, contact your ISP or cellular telephone service 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.

NOTE: If you are having problems connecting to the Internet, see "E-Mail, Modem, and Internet Problems" on page 98. If you cannot connect to the Internet, but have successfully connected in the past, the ISP may have a service outage. Contact your ISP to check the service status, or try connecting again later.

NOTE: Have your ISP information ready. If you do not have an ISP, the **Connect to the Internet** wizard can help you obtain one.

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 **Start**, and then click **Control Panel**.
3. Under **Network and Internet**, click **Connect to the Internet**.

   The **Connect to the Internet** window appears.
4. Click either **Broadband (PPPoE)**, **Wireless**, or **Dial-up**, depending on how you want to connect:
   - Choose **Broadband** if you will use a DSL modem, cable TV modem, or satellite modem.
   - Choose **Wireless** if you will use a wireless connection through a WLAN card.
   - Choose **Dial-up** if you will use a dial-up modem or ISDN.

   NOTE: If you do not know which type of connection to select, click **Help me choose** or contact your ISP.
5. Follow the instructions on the screen and use the setup information provided by your ISP to complete the setup.

Transferring Information to a New Computer

You can transfer the following types of data from one computer to another:

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

Use one of the following methods for transferring data:

- Windows Easy Transfer wizard, an Easy Transfer Cable, and a USB port
- Over a network
- Removable media, such as a writable CD

Windows Easy Transfer

1. Click **Start** → **All Programs** → **Accessories** → **System Tools** → **Windows Easy Transfer**.
2. In the **User Account Control** dialog box, click **Continue**.
3. Click **Next**.
4. Click **Start a new transfer** or **Continue a transfer in progress**.
5. Follow the instructions in the Windows Easy Transfer wizard.

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.

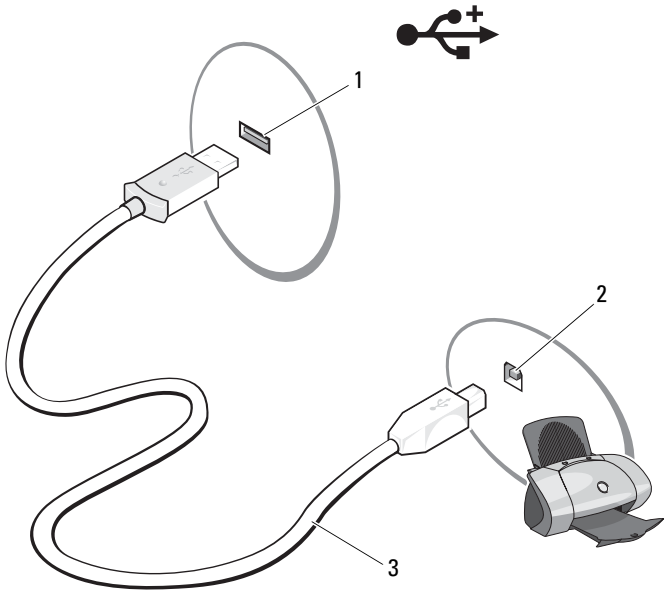
Printer Cable

Your printer connects to your computer with a USB 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 computer's shipping box.

Connecting a USB Printer

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 connector on printer
3 USB printer cable

3 Turn on the printer, and then turn on the computer.

If the **Add New Hardware Wizard** window appears, click **Cancel**.

4 Click **Start**, and then click **Network**.

5 Click **Add a printer** to start the Add Printer Wizard.

NOTE: To install the printer driver, see "Reinstalling Drivers and Utilities" on page 120 and the documentation that came with your printer.

6 Click **Add a local printer** or **Add a network, wireless, or Bluetooth printer**.

7 Follow the instructions in the Add Printer Wizard.

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 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.

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 display brightness to the lowest comfortable level.

- 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).

NOTE: Brightness key combinations only affect the display on your portable computer, not monitors or projectors that you attach to your portable computer. 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.

Switching the Video Image From Your Computer Display To a Projector

When you start the computer with an external device attached (such as an external monitor or projector) 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.

Setting Display Resolution and Refresh Rate

NOTE: If you change the display resolution from the current settings, the image may appear blurry or text may be hard to read if you change the resolution to one not supported by your computer and display. Before you change any of the display settings, make a note of the current settings so you can change back to the previous settings if needed.

You can enhance the legibility of text and change the appearance of images on the screen by adjusting display resolution. As you increase resolution, items appear smaller on the screen. In contrast, lower resolution causes text and images to appear larger and can benefit people with vision impairments. To display a program at a specific resolution, both the video card and the display must support the program, and the necessary video drivers must be installed.

NOTE: Use only the Dell-installed video drivers, which are designed to offer the best performance with your Dell-installed operating system.

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

To set the display resolution and refresh rate for your display:

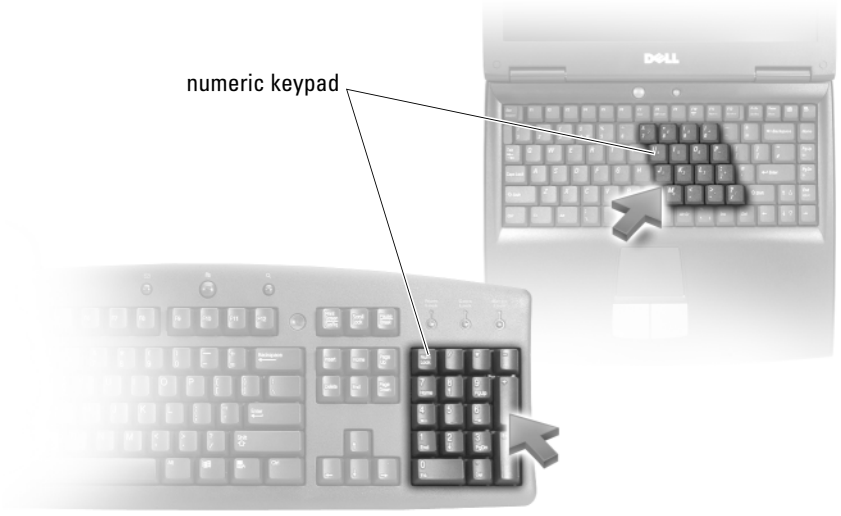
1. Click **Start** → **Control Panel**.
2. Under **Appearance and Personalization**, click **Adjust screen resolution**.
3. In the **Display Settings** window, under **Resolution**, move the slide bar to the left or right to decrease/increase the screen resolution.

NOTE: For additional instructions, click **How do I get the best display?**

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, hold down <Fn> and press the desired key.

- To enable the keypad, press <Num Lk>. The 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 (display only, external monitor or projector only, both display and projector, etc). 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).

Battery

<Fn><F3>	Displays the Dell™ QuickSet Battery Meter (see "Dell QuickSet Battery Meter" on page 44).

Power Management

<Fn><Esc>	Activates a power management mode. See "Configuring Power Management Settings" on page 46.

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 key combination functions as a toggle to restore minimized windows following the use of the Windows logo key and <m> combination.
Windows logo key and <e>	Starts 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.

Dell™ QuickSet Key Combinations

If Dell QuickSet is installed, you can use other shortcut keys for functions such as the Battery Meter. For more information about Dell QuickSet key combinations, right-click the QuickSet icon in the notification area, and then click **Help**.

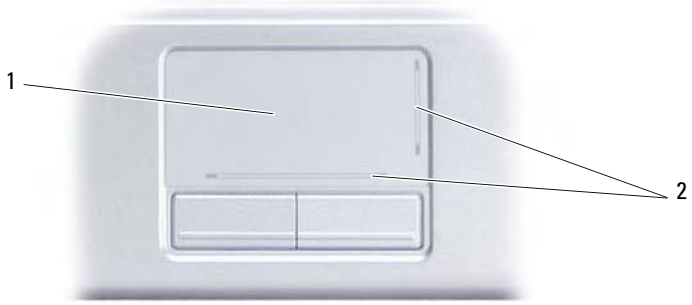
Adjusting Keyboard Settings

To adjust keyboard operation, such as the character repeat rate:

1. Click **Start** , and then click **Control Panel**.
2. Click **Hardware and Sound**.
3. Click **Keyboard**.

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 silk screen depicting scrolling capabilities

- 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 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.

Customizing the Touch Pad

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

1. Click **Start** , and then click **Control Panel**.
2. Click **Hardware and Sound**.
3. Click **Keyboard**.
4. In the **Mouse Properties** window:
   - Click the **Device Select** tab to disable the touch pad.
   - Click the **Touch Pad** tab to adjust touch pad settings.
5. 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 main 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, place the mouse cursor over the battery icon in the Windows notification area.

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.

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

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 46 for information about accessing Windows Power Options Properties, which you can use to configure power management settings).

You can check the battery charge before you insert the battery into 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 battery is designed to work with your Dell computer. Do not use batteries 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

You can check the battery charge on your computer using any one of the following methods:

- Dell QuickSet Battery Meter
- Microsoft Windows battery meter icon located in the notification area
- Battery charge/health gauge located on the battery
- Low-battery warning pop-up window

Dell QuickSet Battery Meter

To view the Dell QuickSet Battery Meter:

- Double-click the Dell QuickSet icon in the taskbar, and then click **Battery Meter**

or

- Press <Fn><F3>

The Battery Meter displays the status, battery health, charge level, and charge completion time for the battery in your computer.

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

Microsoft® Windows® Battery Meter

The battery meter indicates the remaining battery charge. To check the battery meter, double-click the icon in the notification area.

Charge Gauge

By either pressing once or pressing and holding the status button on the battery charge gauge, 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. Therefore, 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 indicator 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 are on, 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, and by using the Battery Meter in Dell QuickSet. For information about QuickSet, right-click the QuickSet icon in the notification area, and then 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 to illuminate the health indicator lights. Each light represents incremental degradation. If no lights appear, the battery is in good condition, and more than 80 percent of its original charge capacity remains. If five lights appear, less than 60 percent of the charge capacity remains, and you should consider replacing the battery (see "Battery" on page 170 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, then connect the computer to an electrical outlet. If the battery runs completely out of power, Sleep state begins automatically.

A pop-up window warns you when the battery charge is approximately 90 percent depleted. The computer enters Sleep state when the battery charge is at a critically low level.

You can change the settings for the battery alarms in Dell QuickSet or the **Power Options** window (see "Configuring Power Management Settings" on page 46).

Conserving Battery Power

To conserve battery power on your portable computer, do any of the following:

- Connect the computer to an electrical outlet when possible; battery life is largely determined by the number of times the battery is used and recharged.
- Configure the power management settings using Microsoft Windows Power Options to optimize your computer's power usage (see "Configuring Power Management Settings" on page 46).
- Use the Sleep power state when you leave the computer unattended for long periods of time (see "Using the Sleep Power State" on page 47).

Configuring Power Management Settings

You can use Windows Power Options to configure the power management settings on your computer.

To use Windows Power Options, do one of the following:

- Click **Start** → **Control Panel** → **Hardware and Sound** → **Power Options**, and then select a power plan in the **Select a power plan** window.

  or

- Click the icon in the notification area, click **Power Options**, and then select a plan in the **Select a power plan** window.

Using the Sleep Power State

Rather than shutting down your portable computer, use the Sleep power state to conserve power. Sleep automatically saves your work to your hard drive, and then returns you to your previous work session without restarting your computer.

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

To enter Sleep state:

- Click the **Start** , click , and then click **Sleep**.

  or

- Depending on how you set the power management options in the Windows Power Options, use one of the following methods:
  - Press the power button.
  - Close the display.
  - Press <Fn><Esc>.

To exit Sleep state, press the power button.

Charging the Battery

NOTE: Charge time is longer with the computer turned on. You can leave the battery in the computer for 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 battery light flashes alternately blue and amber. 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 112.

Replacing the Battery

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 batteries from other computers with your computer.

CAUTION: Before performing these procedures, turn off the computer, disconnect the AC adapter from the electrical outlet and the computer, disconnect the modem from the wall connector and the computer, and remove any other external cables from the computer.

NOTICE: You must remove all external cables from the computer to avoid possible connector damage.

NOTICE: If you choose to replace the battery with the computer in Sleep state, you have up to 1 minute to complete the battery replacement before the computer shuts down and loses any unsaved data.

To remove the battery:

1. Ensure that the computer is turned off.
2. Turn the computer over.
3. Slide and click the battery release latches to keep them open.
4. Slide the battery out of the bay.

1 battery 2 battery release latches (2)

To replace the battery, follow the removal procedure in reverse order.

Storing a Battery

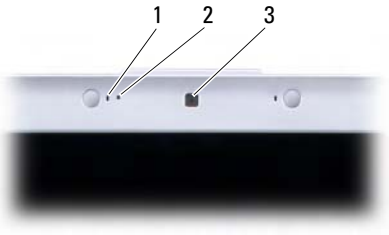
Remove the battery when you store your computer for an extended period of time. A battery discharges during prolonged storage. After a long storage period, recharge the battery fully (see "Charging the Battery" on page 47) before you use it.

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 digital microphones allow you to take photos and videos and to communicate visually and verbally with other computer users. The blue camera light appears when the camera is turned on. For more information about camera features, see "Specifications" on page 165.

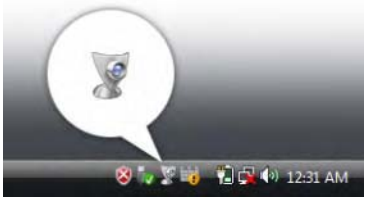
NOTE: It is normal for the camera to feel warm to the touch when the computer is running and when the camera is in use.



1 digital microphones (2) 2 camera indicator 3 camera

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 **Launch Webcam Center**. Click **Help** from the menu and select **Contents**.



Manually Adjusting the Camera Settings

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

1. Right-click the icon in the notification area and click **Launch Webcam Console**.
2. In the **Webcam Console** window:
   - Click the **Camera** tab to adjust video settings, such as contrast and brightness.
   - Click the **Effects** 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 49).

Creating a Picture or a Video

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

   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**.

   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 49).