Dell™ Latitude™ D800 User's Guide

Click the links to the left for information on the features and operation of your computer. For information on other documentation included with your computer, see "Finding Information."

CAUTION: Follow the safety instructions in the *System Information Guide* to help protect computer from damage and ensure your own personal safety.

Notes, Notices, and Cautions

- NOTE: A NOTE indicates important information that helps you make better use of your
- NOTICE: A NOTICE indicates either potential damage to hardware or loss of data and tells you how to avoid the problem.

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

Abbreviations and Acronyms

For a complete list of abbreviations and acronyms, see the Glossary.

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

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Model PP02X

February 2003 P/N 4Y332 Rev. A00

Finding Information

- Safety Instructions
- Documentation Updates
- Using Microsoft® Windows®
- Using Devices
- Using the Dell[™] Drivers and Utilities CD
- Fixing Problems
- Installing Parts

Safety Instructions

CAUTION: For precautions on safely handling and using your computer and preventing electrostatic discharge, see the safety instructions in the *System Information Guide*.

Documentation Updates

Documentation updates are sometimes included with your computer to describe changes to your computer or software. Always read these updates before consulting any other documentation because the updates contain the latest information.

Readme files, which may be installed on your hard drive or located on CDs such as the *Drivers and Utilities* CD, provide last-minute updates about technical changes to your computer or advanced technical reference material intended for experienced users or technicians.

Using Microsoft® Windows®

Windows Help

Your operating system provides complete online instructions for using it:

- In Windows XP, click the Start button and click Help and Support. For more information, see "Using Microsoft® Windows® XP."
- In Windows 2000, click the **Start** button and click **Help**.

Microsoft Windows Guide

For more information on using the Windows operating system, see the Windows documentation that came with your computer.

Using Devices

Device User's Guides

For help with using your computer devices (such as a modem) and options you purchase separately from your computer, see the device user's guide.

- In Windows XP, click the Start button and click Help and Support. In the Help and Support window, click User and system guides.
- In Windows 2000, click the Start button, point to Programs, and then click User's Guides.

Using the Dell[™] Drivers and Utilities CD

The *Drivers and Utilities* CD contains drivers and utilities, the Dell Diagnostics, and user's guides for your computer and optional devices. Dell ships your computer to you with required drivers and utilities already installed—no further installation or configuration is needed. If you ever need to *reinstall* a driver or utility, diagnostics tests on your computer, or access the user's guides, use the *Drivers and Utilities* CD. See "Reinstalling Software" and "Using the Dell Diagnostics."

Fixing Problems

For help with fixing computer problems, see "Solving Problems" and "Using the Dell Diagnostics."

Microsoft Windows Guide

For more information on troubleshooting problems, see the Windows documentation that came with your computer.

Dell Support

For personalized online support, driver updates, and instant answers to your questions, access Dell Support at **support.dell.com**.

Installing Parts

For help with adding parts to your computer, see "Adding and Replacing Parts"

For detailed information on the computer's parts and assemblies and how to remove and replace them, see computer *Service Manual* on **support.dell.com**.

About Your Computer

- Front View
- Left View
- Right View
- Back View
- Bottom View

Front View



1	display latch	8	<u>speakers</u>
2	<u>display</u>	9	track stick/touch pad buttons
3	power button	10	track stick
4	device status lights	11	volume control buttons
5	<u>keyboard</u>	12	<u>mute button</u>
6	touch pad	13	keyboard status lights
7	display latch button		

display latch — Keeps the display closed.

display — For more information about your display, see "<u>Using the Display</u>."

power button — Press the power button to turn on the computer or to enter or exit a <u>power management</u> <u>mode</u>.

NOTICE: To avoid losing data, turn off your computer by performing a Microsoft® Windows® 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



Ċ	Turns on when you turn on the computer and blinks when the computer is in a power management mode.		
٥	Turns on when the computer reads or writes data.		
	Solution NOTICE: To avoid loss of data, never turn off the computer while the \Box light is		
ß	Turns on steadily or blinks to indicate battery charge status.		
*	Turns on when Bluetooth ^{M} is enabled. To enable or disable Bluetooth, prest <i>Fn</i> $\mathbb{F}^{\mathbb{Z}}$.		
	NOTE: Bluetooth is an optional feature, so the <i>icon turns on only if you ordered Bluetooth with computer. For more information, see the documentation that came with your Bluetooth wireless technology.</i>		

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

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

- $\circ~$ Off: The battery is adequately charged, the computer is turned off, or the battery is not installed the computer.
- 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 Microsoft® Windows® logo ke For information on supported keyboard shortcuts, see "Using the Keyboard and Touch Pad."

touch pad — Touch pad and touch pad buttons provide the functionality of a mouse. See "Using the Keyboard and Touch Pad" for more information.

display latch button – Press this button to release the display latch and open the display.

speakers — To adjust the volume of the integrated speakers, press the volume control buttons or volumecontrol keyboard shortcuts. For more information, see "<u>Using the Keyboard and Touch Pad</u>."

track stick/touch pad buttons — Track stick and touch pad buttons provide the functionality of a mouse. "Using the Keyboard and Touch Pad" for more information.

track stick — Track stick and track stick buttons provide the functionality of a mouse. See "Using the and Touch Pad" 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 View



1	<u>air vents</u>	5	infrared sensor
2	IEEE 1394 connector (4-pin)	6	audio connectors
3	PC Card slot	7	hard drive
4	smart card slot	8	security cable slot

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 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.

IEEE 1394 connector (4-pin) — Use to attach devices supporting IEEE 1394 high-speed transfer rates, such as some digital video cameras.

PC Card slot — Supports one PC Card, such as a modem or network adapter. The computer ships with a blank installed in the slot. For more information, see "<u>Using PC Cards</u>."

smart card slot — Supports one smart card. For more information, see "Using Smart Cards."

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 <u>system setup program</u> to enable the sensor. For information on transferring data, see Windows *Help* (Windows 2000), the <u>Windows Help and</u> <u>Center</u> (Windows XP), or the documentation that came with your infrared-compatible device.

audio connectors



Attach a microphone to the ${igstarrow}$ connector.	
Attach headphones or speakers to the $oldsymbol{\Omega}$	

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



Right View



2 module bay
3 device latch release
4 Dell[™] D/Bay connector

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



module bay — You can install devices such as an optical drive or Dell TravelLite[™] module in the module bay. For more information, see "<u>Using the Module Bay</u>."

device latch release – Releases a device. See "<u>Using the Module Bay</u>" or "<u>Using a Battery</u>" for instructions.

Dell™ D/Bay connector



Connects the Dell D/Bay, which is an external media bay that accommodates an optical drive, floppy drive, or second hard drive.

Back View



1	S-video TV-out connector	6	parallel connector
2	USB connectors (2)	7	serial connector
3	network connector (RJ-45)	8	video connector
4	modem connector (RJ-11)	9	AC adapter
5	air vent	10	air vents

S-video TV-out connector



Connects your computer to a TV. Also connects digital-audio capable devices using TV/digital-audio adapter cable. For more information, see "<u>Connecting a Television to</u> the Computer."

USB connectors (2)



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, shown below.



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 in to the network connector.

물	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 online network-adapter documentation supplied with your computer. See "Finding Information."

modem connector (RJ-11) (optional)

2	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 "Finding Information."

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

parallel connector



video connector

serial connector

	Connects serial devices, such as a mouse or handheld
10101	

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 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 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 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



1	<u>hard drive</u>	5	battery charge gauge
2	Mini PCI card/modem	6	docking device slot
3	battery-bay latch release	7	memory module
4	<u>battery</u>	8	<u>fan</u>

hard drive — Stores software and data.

Mini PCI card/modem cover — Covers the compartment that contains the optional modem and optional PCI card. See "<u>Adding and Replacing Parts</u>."

battery-bay latch release - Releases the battery. See "Using a Battery."

battery — When a battery is installed, you can use the computer without connecting the computer to an electrical outlet. See "<u>Using a Battery</u>."

battery charge gauge - Provides information on the battery charge. See "Using a Battery."

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

memory module cover — Covers the compartment that contains the memory modules. See "<u>Adding and</u> <u>Replacing Parts</u>."

fan — The computer uses an internal fan to create airflow through the vents, which prevents the computer 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 fans or the computer.

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

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.

Using Microsoft® Windows® XP

- Help and Support Center
- Switching to Classic View
- Desktop Cleanup Wizard
- User Accounts and Fast User Switching
- Files and Settings Transfer Wizard
- Program Compatibility Wizard
- Home and Small Office Networking
- Internet Connection Firewall

Help and Support Center

The Help and Support Center provides help with the Windows XP operating system and other support and educational tools. To access the Help and Support Center, click the **Start** button and click **Help and Support**.

Switching to Classic View

You may change the appearance of the Control Panel, the **Start** menu, and the Windows desktop to the *classic view* of previous Windows operating systems.

Control Panel

The Control Panel presents information as task-oriented categories. If you are accustomed to performing a particular task with the icon-oriented classic Control Panel, you can switch to the classic icon view.

- 1. Click the Start button and click Control Panel.
- 2. Click **Switch to Classic View** or **Switch to Category View** in the upper-left area of the **Control Panel** window.

Start Menu

- 1. Right-click the empty area on the taskbar.
- 2. Click Properties.
- 3. Click the **Start Menu** tab.
- 4. Select Classic Start Menu and click OK.

Window and Button Appearance

1. Right-click anywhere on the main desktop screen and click Properties.

- 2. Click the **Appearance** tab.
- 3. From the Windows and buttons drop-down menu, select Windows Classic style.
- 4. To customize color, font, and other classic desktop options, click **Advanced**.
- 5. When you have completed your appearance selections, click **OK**.

Desktop Cleanup Wizard

By default, the Desktop Cleanup Wizard moves program icons that you don't frequently use from your desktop to a designated folder 7 days after you first start your computer and every 60 days after that. The appearance of the **Start** menu changes as program icons are moved.

To turn off the Desktop Cleanup Wizard:

- 1. Right-click an empty spot on the desktop and click **Properties**.
- 2. Click the **Desktop** tab and click **Customize Desktop**.
- 3. Click Run Desktop Cleanup Wizard every 60 days to remove the check mark.
- 4. Click **OK**.

To run the Desktop Cleanup Wizard at any time:

- 1. Right-click an empty spot on the desktop and click **Properties**.
- 2. Click the **Desktop** tab and click **Customize Desktop**.
- 3. Click Clean Desktop Now.
- 4. When the Desktop Cleanup Wizard appears, click Next.
- 5. In the list of shortcuts, deselect any shortcuts you want to leave on the desktop and then click Next.
- 6. Click **Finish** to remove the shortcuts and close the wizard.

User Accounts and Fast User Switching



After Windows XP is installed, the administrator or a user with administrator rights can create additional user accounts.

- 1. Click the Start button and click Control Panel.
- 2. In the **Control Panel** window, click **User Accounts**.

- 3. Under **Pick a task**, click **Create a new account**.
- 4. Under Name the new account, type the name of the new user and click Next.
- 5. Under Pick an account type, click one of the following options:
 - **Computer administrator** You can change all computer settings.
 - Limited You can change only your own personal settings, such as your password. You cannot install programs or use the Internet.
- 6. Click Create Account.

Fast User Switching

NOTE: Fast User Switching is unavailable if the computer is running Windows XP Professional and is a member of a computer domain, or if the computer has less than 128 MB of memory.

Fast User Switching allows multiple users to access one computer without requiring the previous user to log

- 1. Click the Start button and click Log Off.
- 2. In the Log Off Windows window, click Switch User.

When you use Fast User Switching, programs that previous users were using remain running in the so you might experience slower computer activity. Also, multimedia programs, such as games and DVD software, might not work with Fast User Switching. For more information, see the Windows <u>Help and Center</u>.

Files and Settings Transfer Wizard

The Files and Settings Transfer Wizard allows you to transfer files and settings from one computer to another (for instance, when upgrading to a new computer), even if the old computer is running an earlier operating system. The time required to collect and transfer data depends on the amount of data collected. Times can from just a few minutes to several hours.

You can transfer the data to the new computer over a network or direct serial connection, or you can store it a removable medium such as a floppy disk or writable CD. If a CD drive is not available, the wizard allows you to create a wizard disk to run on your old computer.

For more information, see the Windows <u>Help and Support Center</u>.

Program Compatibility Wizard

If you encounter problems running a program designed for an earlier Windows operating system, you can use the Program Compatibility Wizard to help resolve the problem. The Program Compatibility Wizard allows you configure a program to run in an environment closer to that of Windows 95, Windows 98, Windows Millennium Edition (Me), Windows NT® 4.0 with Service Pack 5, or Windows 2000.

If you experience problems with your operating system or other programs after performing an installation, can use the <u>system restore</u> feature to return your computer to a previous stable condition.

For more information, see the Windows <u>Help and Support Center</u>.

Home and Small Office Networking

The Network Setup Wizard provides online documentation and support for setting up a home or small office network. The new wizard automatically enables the personal firewall (see "<u>Internet Connection Firewall</u>").

The Network Setup Wizard includes a checklist and steps to guide you through the process of sharing such as files, printers, or an Internet connection, between computers in a home or small office. For more information, see the Windows <u>Help and Support Center</u>.

Internet Connection Firewall

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

Note that enabling the Internet Connection Firewall does not reduce the need for virus-checking software.

For more information, see the Windows <u>Help and Support Center</u>.

Dell™ QuickSet Features

- Clicking the QuickSet Icon
- Double-Clicking the QuickSet Icon
- Right-Clicking the QuickSet Icon

Dell[™] QuickSet runs from the I icon located in the taskbar and functions differently when you click, click, or right-click the icon.

Clicking the QuickSet Icon

Click the 💕 icon to perform the following tasks:

- Adjust power management settings using the **<u>Power Management Wizard</u>**.
- Adjust the size of icons and toolbars.
- Select a power scheme that you set in the <u>Power Management Wizard</u>.
- Turn presentation mode on or off.

Double-Clicking the QuickSet Icon

Double-click the **W** icon to adjust power management settings using the **Power Management Wizard**.

Right-Clicking the QuickSet Icon

Right-click the 🍱 icon to perform the following tasks:

- Enable or disable the **<u>Brightness Meter</u>** on the screen.
- Enable or disable the <u>Volume Meter</u> on the screen.
- Turn <u>wireless activity</u> on or off.
- View Dell QuickSet Help.
- View the version and copyright date of the QuickSet program installed on your computer.

For more information about QuickSet, right-click the \mathbf{W} icon in the taskbar and click **Help**.

Using the Keyboard and Touch Pad

- Numeric Keypad
- Keyboard Shortcuts
- Touch Pad
- Customizing the Touch Pad and Track Stick

Numeric Keypad



The keypad numbers and symbols are marked in blue on the right of the keypad keys. To type a number or

symbol, ensure that the keypad is enabled and press n and the desired key. The n light indicates that keypad is active.

Keyboard Shortcuts

System Functions

Ctrl 1 Shift Esc Suspend	Opens the Task Manager window
Num Lk Scroll Lk	Enables and disables the numeric
Fn Num Lk Scroll Lk	Enables and disables the scroll lock

Battery

Fn F3	Displays the <u>Dell™ QuickSet Battery</u>
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CD or DVD Tray

Fn FIO Requires Dell QuickSet to function. Ejects the tray out of the

Display Functions

Fn F8 CRT/LCD	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, external DVI monitor only, and external CRT monitor and external DVI monitor simultaneously.
Fn 🕇 🔅	Increases brightness on the integrated display only (not on an external monitor).
Fn↓♀	Decreases brightness on the integrated display only (not on an external monitor).

Radios (Including Wireless Networking and Bluetooth™)

F_n F_2 The Enables and disables radios, including wireless networking and
--

Power Management

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

End X

Speaker Functions

If no sound comes from the speakers, press

and adjust the volume.

Fn Page Up	Increases the volume of the integrated speakers and external speakers, if
Fn Page Dn Φ	Decreases the volume of the integrated speakers and external speakers, if
Fn End	Enables and disables the integrated speakers and external speakers, if attached

Fn

Microsoft® Windows® Logo Key Functions

	Minimizes all open windows
「 Shift M ₀	Maximizes all windows
E E	Runs Windows Explorer
R R	Opens the Run dialog box
F F	Opens the Search Results dialog box
Etri F	Opens the Search Results-Computer dialog box (if the computer is connected to a network)
Pause Brook	Opens the System Properties dialog box

To adjust keyboard operation, such as the character repeat rate, open the Control Panel, and click **Printers Other Hardware** (*Windows XP*) or double-click the **Keyboard** icon (*Windows 2000*).

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	track stick	
3	track stick buttons	
4	touch pad buttons	

- 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 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.

You can also use the track stick to move the cursor. Press the track stick left, right, up, or down to change the direction of the cursor on the display. Use the track stick and track stick buttons as you would use a mouse.

Customizing the Touch Pad and Track Stick

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

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

Changing the Track Stick Cap

Your computer came with an additional track stick cap. You can purchase additional caps by visiting the Dell website at **www.dell.com**. You may need to change the track stick cap if it wears down from prolonged use.



- 1. Pull the cap off the track stick.
- 2. Align the new cap over the square track-stick post and gently press the cap down onto the post.
- 3. Test the track stick to ensure that the cap is seated properly.

Using the Display

- Adjusting Brightness
- Switching the Video Image
- Setting Display Resolution

Adjusting Brightness

When the Dell^{\mathbb{M}} computer is running on battery power, you can conserve power by setting the brightness to lowest comfortable setting using the appropriate <u>keyboard shortcuts</u> for the display.

The Dell QuickSet **Brightness Meter** shows the current brightness setting for the display. Right-click the icon in the taskbar to enable or disable the **Brightness Meter** on the screen.



Brightness Meter

NOTE: By default, the **Brightness Meter** appears in the lower-right corner of the display. You can click and drag the meter to a new location, and the meter subsequently always appears at the new

NOTE: Brightness keyboard shortcuts only affect the display on your portable computer, not monitors that you attach to your portable computer or docking device. If your computer is in **CRT only** mode you try to change the brightness level, the **Brightness Meter** appears, but the brightness level on the monitor does not change.

You can enable or disable the **Brightness Meter** from the QuickSet taskbar menu. When the meter is press the following keys to adjust brightness:

- Press In to increase brightness on the integrated display only (not on an external monitor).
- Press In to decrease brightness on the integrated display only (not on an external monitor).

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

Switching the Video Image

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

Press for the switch the video image to the integrated display only, the integrated display and an external CRT monitor simultaneously, an external CRT monitor only, the integrated display and external DVI monitor simultaneously, external DVI monitor only, and external CRT monitor and external DVI monitor simultaneously.

Setting Display Resolution

To display a program at a specific resolution, both the video controller and the display must support the program, and the necessary <u>video drivers must be installed</u>.

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

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 possible setting.

Microsoft® Windows® XP

- 1. Click the **Start** button and click **Control Panel**.
- 2. Under Pick a category, click Appearance and Themes.
- 3. Under **Pick a task...**, click the area you want to change, or under **or pick a Control Panel icon**, click **Display**.
- 4. Try different settings for **Color quality** and **Screen resolution**.

Windows 2000

- 1. Click the Start button, point to Settings, and then click Control Panel.
- 2. Double-click the **Display** icon and click the **Settings** tab.
- 3. Try different settings for **Colors** and **Screen area**.

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

If the video resolution setting is higher than that supported by the display, the computer enters *pan mode*. pan mode, the screen cannot be completely displayed. For example, the taskbar that usually appears at the bottom of the desktop may no longer be visible. To view the rest of the screen, use the touch pad or track to move the cursor past the top, bottom, left, and right borders of the screen.



Using the Module Bay

- About the Module Bay
- Checking the Charge on the Second Battery
- Removing and Installing Devices While the Computer Is Turned Off
- Removing and Installing Devices While the Computer Is Running
- Using the CD or DVD Tray

About the Module Bay

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

NOTE: All devices that you install in the module bay, except a second battery, can also be installed in Ø Dell D/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.



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

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 no charge.



Removing and Installing Devices While the Computer Is Turned Off

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

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

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

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.



device latch release

1

2. Pull the device out of the module bay.



3. Insert the new device into the bay, and push the device until you feel a click.

If the Device Screw Is Installed

- 1. Save and close any open files, exit any open programs, and 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.



device latch release

1

6. Pull the device out of the module bay.



NOTICE: Insert devices into the module bay before you dock and turn on the

- 7. Insert the new device into the bay, and push the device until you feel a click.
- 8. Replace the device screw.

9. Turn on the computer.

Removing and Installing Devices While the Computer Is Running

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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).

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



If the Device Screw Is Not Installed

Microsoft® Windows® XP

- 1. Double-click the **Safely Remove Hardware** icon on the taskbar.
- 2. 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.
- 3. Press the device latch release.



device latch release

4. Pull the device out of the module bay.



5. Insert the new device into the bay, and push the device until you feel a click.

Windows XP automatically recognizes the new device.

6. If necessary, enter your password to unlock your computer.

Windows 2000

- 1. Click the **Unplug or Eject Hardware** icon on the taskbar.
- 2. Click the device you want to eject and click **Stop**.
- 3. Press the device latch release.



1 device latch release

4. Pull the device out of the bay.



- 5. Insert the new device into the bay, and push the device until you feel a click.
- 6. When the operating system recognizes the new device, click **Close**.

If the Device Screw Is Installed

Windows XP

- 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.



6. Pull the device out of the module bay.



7. Insert the new device into the bay, push the device until you feel a click, and replace the screw.

Windows XP automatically recognizes the new device.

8. If necessary, enter your password to unlock your computer.

Windows 2000

- 1. Click the **Unplug or Eject Hardware** icon on the taskbar.
- 2. Click the device you want to eject and click **Stop**.
- 3. Use a #1 Phillips screwdriver to remove the device screw from the bottom of the computer.

4. Press the device latch release.



- 5. Pull the device out of the module bay.
- 6. Insert the new device into the bay, push the device until you feel a click, and then replace the screw.
- 7. When the operating system recognizes the new device, click **Close**.

Using the CD or DVD Tray

NOTICE: Do not press down on the drive tray when opening or closing it. Keep the tray closed when are not using the drive.

NOTICE: Do not move the computer while playing CDs or

- 1. Press the eject button on the front of the drive.
- 2. Pull the tray out.
- 3. Place the disc, label side up, in the center of the tray.
- 4. Snap the disc onto the spindle.



5. Push the tray back into the drive.

NOTE: If you use a module bay that shipped with another computer, you need to install the drivers and software necessary to play DVDs or write data. For more information, see the *Drivers and Utilities* CD.

You can play a DVD on your computer if the computer shipped with a DVD drive or a CD-RW/DVD combo You can write data to a blank CD on your computer if the computer shipped with a CD-RW or CD-RW/DVD combo drive.

For more information on playing CDs or watching movies, click **Help** on the CD player or DVD player (if available).

Adjusting the Volume

NOTE: If the speakers are muted, you do not hear the CD or DVD

- 1. Click the **Start** button, point to **All Programs**→ **Accessories**→ **Entertainment** (or **Multimedia**), and then click **Volume Control**.
- 2. In the **Volume Control** window, click and drag the bar in the **Volume Control** column and slide the up or down to increase or decrease the volume.

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

The **Volume Meter** displays the current volume level, including mute, on your computer. Either right-click the **volume** icon in the taskbar or press the <u>volume control buttons</u> to enable or disable the **Volume Meter** on the screen.



1	volume icon	
2	Volume Meter	
3	mute icon	

NOTE: By default, the **Volume Meter** appears in the lower-right corner of the display. You can click drag the meter to a new location, and the meter subsequently always appears at the new location.

When the meter is enabled, adjust the volume using the volume control buttons or by pressing the following keys:

- Press Fn Press to increase volume.
- Press Fn Page Dn to decrease volume.
- Press Fn (m) to mute volume.

For more information about QuickSet, right-click the 5 icon in the taskbar, and click **Help**.

Adjusting the Picture

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

Windows XP

- 1. Click the **Start** button and click **Control Panel**.
- 2. Under Pick a category, click Appearance and Themes.
- 3. Under Pick a task..., click Change the screen resolution.
- 4. In the **Display Properties** window, click and drag the bar in **Screen resolution** to change the setting **1280 by 800 pixels**.
- 5. Under Color quality, click the drop-down menu and click Medium (16 bit).
- 6. Click **OK**.

Windows 2000

- 1. Click the **Start** button, point to **Settings**, and then click **Control Panel**.
- 2. Double-click the **Display** icon and click the **Settings** tab.
- 3. Click and drag the bar in **Screen area** to change the setting to **1280 by 800 pixels**.
- 4. Under **Color quality**, click the drop-down menu and click **High Color (16 bit)**.
- 5. Click Apply.
- 6. Click **OK** to save the settings and close the window.

Using a Battery

- Battery Performance
- Checking the Battery Charge
- Charging the Battery
- Removing a Battery
- Installing a Battery
- Storing a Battery

Battery Performance

NOTE: Batteries for portable computers are covered only during the initial one-year period of the warranty for your computer. For more information about the Dell warranty for your computer, see the *System Information Guide*.

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

Battery operating time varies depending on operating conditions. With average usage, you may expect from 3 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 "<u>Using the Module</u> <u>Bay</u>."

NOTE: The module bay in your computer supports a second battery. The Dell D/Bay does not support a second battery.

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

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

- 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 games
- Running the computer in maximum performance mode

You can <u>check the battery charge</u> before you <u>insert the battery</u> into the computer. You can also set power management options to alert you when the <u>battery charge is low</u>.

NOTE: You can conserve battery life by setting the **Maximum Power Savings** option for your graphics card. For more information, see the documentation that came with your graphics card.

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 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 of a lithium-ion battery. See "Battery Disposal" in your *System 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 Keep the battery away from children. Handle damaged or leaking batteries with extreme Damaged batteries may leak and cause personal injury or equipment damage.

Checking the Battery Charge

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

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

Dell QuickSet Battery Meter



by to display the QuickSet **Battery Meter**.

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

NOTE: You can use your docking device to charge a computer battery. However, a battery in a docking device does not power the docking device or computer.

In addition, when your computer is connected to a docking device (docked), the **Battery Meter** screen a **Dock Battery** tab, which displays the charge level and current status of the docking device battery.

The following icons appear in the Battery Meter screen:

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

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

Microsoft Windows Power Meter

The Windows power meter indicates the remaining battery charge. To check the power meter, double-click the icon on the taskbar. For more information on the **Power Meter** tab, see "<u>Power Management</u>."

If the computer is connected to an electrical outlet, \mathbf{k} icon appears.

Charge Gauge

Before you <u>insert a battery</u>, 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 has 80 percent of its charge remaining, four of the lights are on. If no lights appear, the battery has no

Health Gauge

The battery operating time is largely determined by the number of times it is charged. After hundreds of and discharge cycles, batteries lose some charge capacity, or battery health. To check the battery health, and hold the status button on the battery charge gauge for at least 3 seconds. If no lights appear, the battery in good condition, and more than 80 percent of its original charge capacity remains. Each light represents incremental degradation. If five lights appear, less than 60 percent of the charge capacity remains, and you should consider replacing the battery. See "Specifications" 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, or install a second battery in the module bay. If 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 at a critically low level. For more information on low-battery alarms, see "Power Management."

Charging the Battery

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 computer as long as you like. The battery 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 electrical outlet, the computer checks the battery charge and temperature. If necessary, the AC adapter then charges the battery and maintains the battery charge.

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

The battery is too hot to start charging if the 🖸 light flashes alternately green and orange. Shut down the computer, disconnect the computer from the electrical outlet, and allow the computer and the battery to cool 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."

Removing a Battery

For more information about removing the second battery, see "Using the Module Bay."

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, suspended in a power management mode, or connected to an electrical outlet.
- 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 from the bay.



Installing a Battery

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

For information about installing the second battery, see "Using the Module Bay."

Storing a Battery

Remove the battery when you store your computer for an extended period of time. A battery discharges prolonged storage. After a long storage period, <u>recharge the battery</u> fully before you use it.

Power Management

- Power Management Tips
- Power Management Wizard
- Power Management Modes
- Power Options Properties

Power Management Tips

NOTE: See "Using a Battery" for more information on conserving battery

- Connect the computer to an electrical outlet when possible because battery life is largely determined by the number of times the battery is charged.
- Place the computer in <u>standby mode</u> or <u>hibernate mode</u> when you leave the computer unattended for long periods of time.

Esc Suspend

- To enter a power management mode, close the display or press
- To exit a power management mode, open the display or press the power button.

Power Management Wizard

NOTE: The **Power Management Wizard** is not available if you have restricted access

Click or double-click the Contonic open the Power Management Wizard.

The first two screens of the wizard—**Welcome** and **What is Power Management?**—describe and define various power management options.

NOTE: On the **What is Power Management?** screen, you can select **Do not show this page again.** When you select this option, the **Welcome** screen also does not appear again.

Use the following screens of the **Power Management Wizard** to set various power management options, including sleep modes, power schemes, and low battery charge alarms.

Setting Sleep Modes

The screen defines standby and hibernate modes. From the screen you can:

- Set standby-mode password options.
- Enable or disable hibernate mode.

- Select how the computer will respond when you close the display:
 - Choose no action.
 - Enter standby mode.
 - \circ Enter hibernate mode.
- Select how the computer will respond when you press the power button:
 - Choose no action.
 - $\circ~$ Enter standby mode.
 - Enter hibernate mode.
 - $\circ~$ Shut down the Microsoft® Windows® operating system and turn off the computer.

Esc Suspend

- Prompt a user for an action (**Ask me what to do**).
- Select how the computer will respond when you press
 - $\circ~$ Choose no action.
 - Enter standby mode.
 - Enter hibernate mode.
 - $\circ~$ Shut down Microsoft Windows and turn off the computer.
 - Prompt a user for an action (**Ask me what to do**).

Selecting a Power Scheme

NOTE: When your computer is running on battery power, the **Network Disabled** power scheme your internal network and wireless activity. When your computer is connected to an electrical outlet docking device, the **Network Disabled** power scheme disables only your wireless activity. You must the power scheme through QuickSet (not Microsoft® Windows®) for **Network Disabled** to work.

The screen allows you to select, create, and edit power scheme settings. In addition, you can delete power schemes that you create, but you cannot delete Dell[™] QuickSet predefined power schemes (**Maximum Battery**, **Maximum Performance**, **Presentation**, and **Network Disabled**).

NOTE: QuickSet automatically adds the word **(QuickSet)** after the names of power schemes created using QuickSet.

All QuickSet power schemes are displayed in a drop-down menu near the center of the screen. The power settings for each scheme in the menu are listed below the menu. The power settings are listed separately when the computer is running on battery or connected to an electrical outlet.

The **Power Management Wizard** also allows you to associate the display brightness level with a power scheme. You must enable brightness-level power schemes through QuickSet in order to set the brightness

The display brightness, internal network card activity, and wireless activity features are not available the Microsoft® Windows® **Control Panel** power schemes. In order to make use of these value-added you must set them through QuickSet power schemes.

IJ

NOTE: Brightness shortcut keys only affect the display on your portable computer, not monitors that attach to your portable computer or docking device. If your computer is in **CRT only** mode and you change the brightness level, the **Brightness Meter** appears, but the brightness level on the monitor not change.

Setting Battery Alarms and Actions

The screen allows you to enable the low-battery and critical-battery alarms and to change settings for the alarms. For example, you can set the low-battery alarm to 20% to remind you to save work and switch to AC power, and you can set the critical-battery alarm to 10% to enter hibernate mode. From the screen, you can:

- Select whether the alarm will notify you by sound or text.
- Adjust the power level at which you want the alarm to notify you.
- Select how the computer will respond when the alarm notifies you:
 - Choose no action.
 - Enter standby mode.
 - $\circ~$ Enter hibernate mode.
 - Shut down Windows and turn off the computer.

Completing the Power Management Wizard

The screen summarizes the QuickSet power scheme, sleep mode, and battery alarm settings for your Review the settings you have selected and click **Finish**.

For more information about QuickSet, right-click th

icon in the taskbar and click **Help**.

Power Management Modes

Standby Mode

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

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

To enter standby mode:

• In the Microsoft® Windows® XP operating system, click the **Start** button, click **Turn off computer**, then click **Stand by**.

In Windows 2000, click the Start button, click Shutdown, click Standby, and then click OK.

or

- Depending on how you set the power management options on the **Advanced** tab in the **Power Properties** window, use one of the following methods:
 - Close the display.

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

Hibernate Mode

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



NOTICE: You cannot remove devices or disconnect your computer from a docking device while your computer is in hibernate mode.

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

To manually enter hibernate mode:

1 Shift • In Windows XP, click the **Start** button, click **Turn off computer**, press and hold , and then click **Hibernate**.

In Windows 2000, if hibernate support is enabled, click the Start button, click Shutdown, click Hibernate, and then click OK.

or

- Depending on how you set the power management options on the Advanced tab in the Power **Properties** window, use one of the following methods to enter hibernate mode:
 - Close the display.

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NOTE: Some PC Cards may not operate correctly after the computer exits hibernate mode. <u>Remove</u> reinsert the card, or simply restart (reboot) your computer.

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

Power Options Properties

The **Power Options Properties** window helps you to manage power consumption and monitor battery status. To access the Microsoft Windows **Power Options Properties** window:

- In Windows XP, click the Start button, click Control Panel, click Performance and Maintenance, then click Power Options.
- In Windows 2000, open the Control Panel and double-click the **Power Options** icon.

Power Schemes Tab

Windows XP controls the performance level of the processor depending on the power scheme you select. You not need to make any further adjustments to set the performance level. For information on setting processor performance for other operating systems, see "Intel SpeedStep™ Technology Tab."

Each preset power scheme has different time-out settings for entering standby mode, turning off the and turning off the hard drive. For more information on power management options, see the <u>Help and</u> <u>Center</u> (Windows *Help* in Windows 2000).

Alarms Tab

NOTE: To enable audible alarms, click each **Alarm Action** button and select **Sound**

The **Low battery alarm** and **Critical battery alarm** settings alert you with a message when the battery charge falls below a certain percentage. When you receive your computer, the **Low battery alarm** and **battery alarm** check boxes are selected. It is recommended that you continue to use these settings. See "<u>Using a Battery</u>" for more information on low-battery warnings.

Power Meter Tab

The **Power Meter** tab displays the current power source and amount of battery charge remaining.

Advanced Tab

The Advanced tab allows you to:

- Set power icon and <u>standby mode</u> password options.
- Program the following functions (depending on your operating system):
 - Prompt a user for an action (**Ask me what to do**).
 - Enter standby mode.
 - Enter hibernate mode.
 - $\circ~$ Shut down Windows and turn off the computer.
 - Choose no action (None or Do nothing).

To program these functions, click an option from the corresponding drop-down menu and then click **OK**.

Hibernate Tab

The **Hibernate** tab lets you enable hibernate mode by clicking the **Enable hibernate support** check box.

Intel SpeedStep[™] Technology Tab

NOTE: Windows XP controls the performance level of the processor depending on the power scheme you select. See "Power Schemes Tab."

NOTE: To use Intel SpeedStep technology, a Windows operating system must be

Depending on your operating system and microprocessor, the **Power Options Properties** window includes **Intel SpeedStep™ technology** tab. Intel SpeedStep technology allows you to set the performance level of processor according to whether the computer is running on battery or AC power. Depending on your system, typical options are:

- Automatic The processor runs at its highest possible speed (Maximum Performance mode) when the computer is running on AC power. When the computer is running on battery power, the processor Battery Optimized mode.
- Maximum Performance The processor runs at its highest possible speed even if the computer is running on battery power.
- Battery Optimized Performance Processor speed is optimized for battery power even if the computer is connected to an electrical outlet.
- Maximum Battery The processor runs at a slower speed to extend battery life.

To change additional Intel SpeedStep options:

- 1. Click Advanced and click one of the following options:
 - Disable Intel SpeedStep technology control
 - **Remove flag icon** (from the notification area)
 - Disable audio notification when performance changes
- 2. Click **OK** to accept any changes and click **OK** to close the **Intel SpeedStep[™] technology** window.

You can also change the Intel SpeedStep settings by right-clicking the flag icon in the notification area.

Using PC Cards

- PC Card Types
- PC Card Blanks
- Extended PC Cards
- Installing a PC Card
- Removing a PC Card or Blank

PC Card Types

See "<u>Specifications</u>" for information on supported PC Cards.



NOTE: A PC Card is not a bootable device.

The PC Card slot has one connector that supports a single Type I or Type II card. The PC Card slot supports CardBus technology and extended PC Cards. "Type" of card refers to its thickness, not its functionality.

PC Card Blanks

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

To remove the blank, see "Removing a PC Card or Blank."

Extended PC Cards

An extended PC Card (for example, a wireless network adapter) is longer than a standard PC Card and extends outside the computer. Follow these precautions when using extended PC Cards:

- Protect the exposed end of an installed card. Striking the end of the card can damage the system board.
- Always remove an extended PC Card before you pack the computer in its carrying case.

Installing a PC Card

You can install a PC Card in the computer while the computer is running. The computer automatically detects

the card.

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

To install a PC Card:

- 1. Hold the card with its orientation symbol pointing into the slot and the top side of the card facing up. latch may need to be in the "in" position before you insert the card.
- 2. Slide the card into the slot until the card is completely seated in its connector.

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



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

Removing a PC Card or Blank

NOTICE: Use the PC Card configuration utility on the taskbar to select a card and stop it from functioning before you remove it from the computer. If you do not stop the card in the configuration utility, you could lose data. Do not attempt to eject a card by pulling its cable, if one is attached.

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

3. Gently remove the card or blank.

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





Using Smart Cards

- About Smart Cards
- Installing a Smart Card

About Smart Cards

Smart cards are small portable credit-card shaped devices with internal integrated circuits. Smart cards come in two varieties: memory and microprocessor. Memory smart cards store data but cannot process information. Microprocessor smart cards can add, delete, and manipulate information in the card memory. The top surface of the microprocessor smart card contains an embedded microprocessor located under the gold contact pad. Microprocessor smart cards can be used for programs such as:

- Secure log-on and authentication of users to PCs and networks
- Secure business-to-business (B2B) and business-to-consumer (B2C) e-commerce
- Storage of digital certificates, credentials, and passwords
- Encryption of sensitive data
- NOTE: To use a smart card for secure PC log-on and authentication, B2B and B2C e-commerce, local file encryption, and storage of digital certificates, additional software is required. To use a smart card for secure network log-on and authentication, file and e-mail encryption, and Virtual Private Network (VPN) log-on, you need to enable Microsoft® Windows® PKI support.

The combination of the small size and integrated circuits make smart cards valuable tools for security, data storage, and special programs. Using smart cards can improve system security by combining something a user has (the smart card) with something only the user should know (a PIN) to provide more secure userauthentication than passwords alone.

Installing a Smart Card

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

To install a smart card:

- 1. Remove the smart card blank from the smart card slot.
- 2. Hold the card face up with the gold contact pad on the top surface and pointing toward the smart card slot.



1	gold contact pad
2	smart card (top)

3. Slide the smart card into the smart card slot until the card is completely seated in its connector. The smart card will protrude approximately 1.27 cm (0.5 inch) from the slot. The smart card slot is located below the PC Card slot.

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



1	PC Card slot (top)	
2	smart card slot (bottom)	
3	smart card	

Traveling With Your Computer

- Identifying Your Computer
- Packing the Computer
- Travel Tips

Identifying Your Computer

- Attach a name tag or business card to the computer, or use a permanent marker or stencil to write a unique identifying mark (such as your driver's license number) on the computer.
- Write down your service tag and store it in a safe place away from the computer or carrying case. Use the service tag if you need to report a loss or theft to law enforcement officials and to Dell.
- Create a file on the Microsoft® Windows® desktop called **if_found**. Place information such as your name, address, and telephone number in this file.
- Contact your credit card company and ask if it offers coded identification tags.

Packing the Computer

- Remove any external devices attached to the computer and store them in a safe place. Remove any cables attached to installed PC Cards, and <u>remove any extended PC Cards</u>.
- To make the computer as light as possible, replace any devices installed in the module bay with the Dell TravelLite[™] module.
- Fully charge the main battery and any spare batteries you plan to carry with you.
- Shut down the computer.
- Disconnect the AC adapter.

- Remove any extraneous items, such as paper clips, pens, and paper, from the keyboard and palm rest and close the display.
- Use the optional Dell[™] carrying case to pack the computer and its accessories together safely.
- Avoid packing the computer with items such as shaving cream, colognes, perfumes, or food.
- Protect the computer, the batteries, and the hard drive from hazards such as extreme temperatures and overexposure to sunlight, dirt, dust, or liquids.

NOTICE: If the computer has been exposed to extreme temperatures, allow it to acclimate to room

NOTICE: When the display is closed, extraneous items on the keyboard or palm rest could damage the display.

temperature for 1 hour before turning it on.

• Pack the computer so that it does not slide around in the trunk of your car or in an overhead storage compartment.

NOTICE: Do not check the computer as

Travel Tips

NOTICE: Do not move the computer while using the optical drive. Doing so can result in loss of

- Consider disabling wireless activity on your computer to maximize battery operating time. To disable wireless activity, press fine fine .
- Consider changing your power management options to maximize battery operating time.
- If you are traveling internationally, carry proof of ownership—or of your right to use the computer if it is company-owned—to speed your passage through customs. Investigate the customs regulations of the countries you plan to visit, and consider acquiring an international carnet (also known as a *merchandise passport*) from your government.
- Ensure that you know which electrical outlets are used in the countries you will visit, and have appropriate power adapters.
- Check with your credit card company for information about the kinds of emergency travel assistance it
 offers to users of portable computers.

Traveling by Air

• Ensure that you have a charged battery available in case you are asked to turn on the computer.

NOTICE: Do not walk the computer through a metal detector. Send the computer through an X-ray machine or have it hand inspected.

• Before you use the computer on an airplane, verify that such usage is permitted. Some airlines forbid use of electronic devices during the flight. All airlines forbid the use of electronic devices during takeoff and landing.

If Your Computer Is Lost or Stolen

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

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

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

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

Passwords

- About Passwords
- Using a Primary Password
- Using an Administrator Password
- Using a Hard Drive Password
- Assigning an Asset Tag

About Passwords

NOTE: Passwords are disabled when you receive your

A primary password prevents unauthorized access to the computer at start-up. You can use an administrator password instead of the primary password. A hard drive password helps prevent unauthorized access to data the drive, even when the drive is installed in another computer.

NOTE: Only hard drives purchased from Dell for use with the Dell[™] Latitude[™] D-Family computers support hard drive passwords.

NOTICE: Passwords provide a high level of security for data in your computer or hard drive. However, 0 they are not foolproof. If you require more security, obtain and use additional forms of protection, as smart cards, data encryption programs, or PC Cards with encryption features.

If you forget any of your passwords, contact your system administrator or call Dell. For your protection, Dell technical support staff will ask you for proof of your identity to ensure that only an authorized person can use the computer.

The following table identifies types and features of passwords available on your computer.

Type of Password	Features
Primary	 Protects the computer from unauthorized access
Administrator	 Gives system administrators or service technicians access to computers for repair reconfiguration Allows you to restrict access to the system setup program in the same way a password restricts access to the computer Can be used instead of the primary password
Hard drive	 Helps protect the data on your hard drive or external hard drive (if one is being used) from unauthorized access.

Using a Primary Password

The primary password allows you to protect the computer from unauthorized access.

After assigning a primary password, you must enter it each time you turn on your computer. The following

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message appears each time you turn on the computer:

Please type in the primary or administrator password and press

To continue, enter your password (maximum eight characters).

If you do not enter a password within 2 minutes, the computer returns to its previous state.

If you have assigned an administrator password, you can use it instead of the primary password. The does not specifically prompt you for the administrator password.

NOTICE: If you disable the administrator password, the primary password is also

Using an Administrator Password

The administrator password is designed to give system administrators or service technicians access to computers for repair or reconfiguration. The administrators or technicians can assign identical administrator passwords to groups of computers, allowing you to assign the primary password.

When you set an administrator password, the **Configure Setup** option becomes available in the system setup program. The **Configure Setup** option allows you to restrict access to the system setup program in the same way a primary password restricts access to the computer.

The administrator password can be used instead of the primary password. Whenever you are prompted to the primary password, you can enter the administrator password.

NOTE: The administrator password provides access to the computer, but it does not provide access to hard drive when a hard drive password is assigned.

If you forget the primary password and do not have an administrator password assigned, or if you have primary and an administrator password assigned but forget them both, contact your system administrator contact Dell.

NOTICE: If you disable the administrator password, the primary password is also

Using a Hard Drive Password

The hard drive password helps protect the data on your hard drive from unauthorized access. You can also assign a password for an external hard drive (if one is being used) that can be the same as or different from password for the primary hard drive.

After assigning a hard drive password, you must enter it each time you turn on the computer and each time resume normal operation from standby mode.

If the hard drive password is enabled, the following message appears each time you turn on the computer:

Please type in the hard-disk drive password and press

To continue, enter your password (maximum eight characters). Prese to return the computer to its previous state.

If you do not enter a password within 2 minutes, the computer returns to its previous state.

If you enter the wrong password, the following message appears:

```
Invalid password
[Press Enter to retry]
```

If the correct password is not entered in three attempts, the computer tries to boot from another bootable device if the **Boot First Device** option in the system setup program is set to allow it. If the **Boot First** option is not set to allow booting from another device, the computer returns to the state it was in when you turned it on.

If the hard drive password, the external hard drive password, and the primary password are the same, you prompted only for the primary password. If the hard drive password is different from the primary password, are prompted for both. Two different passwords provide greater security.

NOTE: The administrator password provides access to the computer, but it does not provide access to a hard drive that is protected by a hard drive password.

Assigning an Asset Tag

The Asset Tag utility allows you to enter an asset tag that you or your company assigns to the computer. After you enter an asset tag, the tag appears in the system setup screens.

You can also use the Asset Tag utility to enter an owner tag that appears in the system log-on screen and with the primary password prompt.

Use your *Drivers and Utilities* CD to create a bootable floppy disk, and then use the bootable floppy disk to assign an asset tag:

- 1. Save and close any open files and exit any open programs.
- 2. Connect the Dell[™] D/Bay with a floppy drive to the Dell D/Bay connector on the right side of the computer, or connect a USB floppy drive to one of the two USB connectors on the back of the
- 3. Insert the *Drivers and Utilities* CD.
- 4. When the Welcome Dell System Owner window appears, click Next.
- 5. Select MS-DOS from the Operating System drop-down menu.
- 6. Click **Dell Portables Asset Tag**, click **Extract**, and then click **Setup**.
- 7. Insert a blank floppy disk and press

Follow the instructions on the screen to create a bootable floppy disk.

- 8. Boot the computer using the bootable floppy disk:
 - a. Restart the computer.

b. Press immediately after the DELL[™] logo appears.

If the operating system logo appears, wait until you see the Windows desktop, and then shut the computer and try again.

- c. Press the arrow keys to select **Diskette Drive** and press
- 9. Type asset and a space followed by the new asset tag, and press

For example, type the following command line and pres

asset 1234\$ABCD&

NOTE: An asset tag can have up to 10 characters; any combination of characters excluding spaces is valid.

10. When the computer prompts you to verify the asset tag, type y.

The computer displays the new or modified asset tag and the service tag.

11. Restart your computer to exit the Asset Tag utility.

Viewing Existing Asset and Service Tags

- 1. Boot the computer using the bootable floppy disk you created in "Assigning an Asset Tag."
- 2. Type asset and press

Deleting an Asset Tag

- 1. Boot the computer using the bootable floppy disk you created in "Assigning an Asset Tag."
- 2. Type asset /d and press
- 3. When the computer prompts you to delete the asset tag, type y.

← Enter

Assigning an Owner Tag

An owner tag can have up to 48 characters; any combination of letters, numbers, and spaces is valid.

- 1. Boot the computer using the bootable floppy disk you created in "Assigning an Asset Tag."
- 2. Type asset /o and a space followed by the new owner tag, and press