Dell™ OptiPlex™ Systems

SETUP AND QUICK REFERENCE GUIDE

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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About This Guide

This document contains getting started/setup; solving problems; and safety and regulatory information about your Dell™ OptiPlex™ computer.

To obtain the latest versions of the documents on your hard drive, go to the Dell support website at **support.dell.com**.

Regulatory model numbers appear throughout this document; their chassis type equivalents are shown below:

Regulatory Model Numbers and Chassis Types
DHS = small desktop (SD) chassis
DHP = small form-factor (SF) chassis
DHM = small mini-tower (SMT) chassis

Finding Information and Assistance

Resources and Support Tools

Resource	Contents	Using the Resource
	Dell OptiPlex ResourceCD • Dell Diagnostics • Drivers • Utilities • Computer and device documentation	See the main menu on the *ResourceCD* that was shipped with your computer. Use the pull-down menu to make selections appropriate for your computer. You can perform the following tasks: • Diagnose a problem • Install or reinstall drivers • Obtain information on your computer and devices **NOTE:** User documentation and drivers are already installed on your computer when shipped from Dell. You can use this CD to access documentation, reinstall drivers, or run diagnostics tools.
	Service and Registration Labels—located on the front or side of your Dell computer. • Express Service Code and Service Tag Number • Product Key (also called the Product ID or Certificate of Authenticity [COA])	The Express Service Code and Service Tag Number are unique identifiers for your Dell computer. You may need the Product Key (or Product ID) number to complete the operating system setup.

Resources and Support Tools *(continued)*

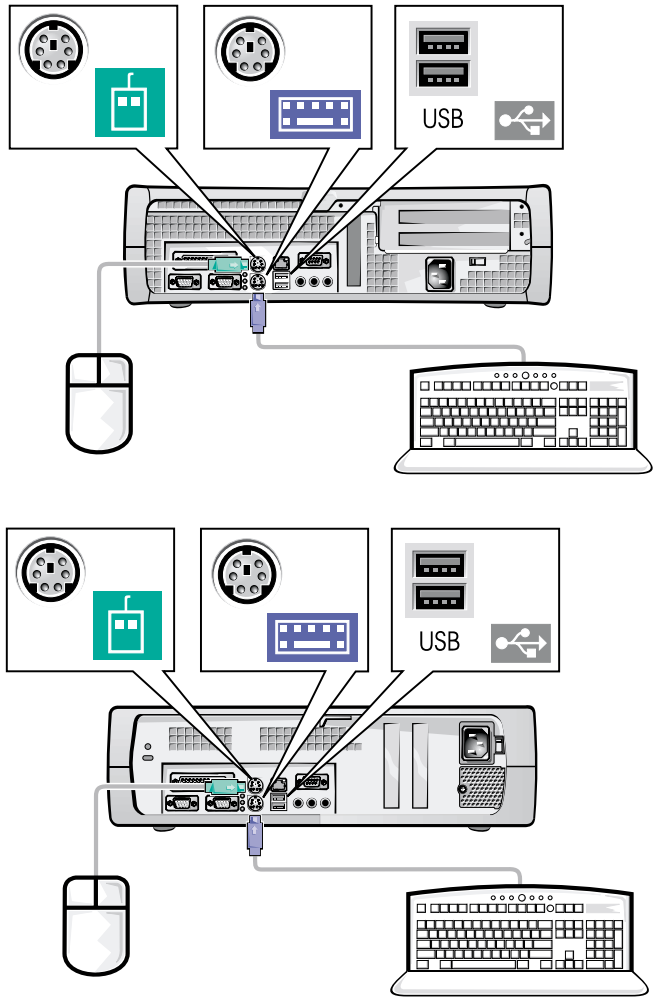
Resource	Contents	Using the Resource
	Operating system CD	To reinstall your operating system, use the operating system CD that was shipped with your computer. **NOTE:** The operating system CD may not include all the latest drivers for your computer. If you reinstall your operating system, use the *ResourceCD* to reinstall drivers for the devices shipped with your computer. For more information about reinstalling your operating system, see the operating system installation documentation that was shipped with your computer.
	Operating system installation guide	See the operating system installation guide for information on reinstalling and configuring your operating system. Click the **Start** button and select **Help** or **Help and Support**, depending on your operating system, to obtain more information on your operating system.
 User's Guides	User's guides for your computer and devices	Depending on your operating system, double-click the **User's Guides** icon on your desktop, or click the **Start** button and then select **Help and Support** to access the electronic documentation stored on your hard drive. Obtain information on the following: • Using your computer • Configuring system settings • Removing and installing parts • Installing and configuring software • Diagnosing a problem • Technical specifications • Device documentation (on selected operating systems) • Getting technical assistance

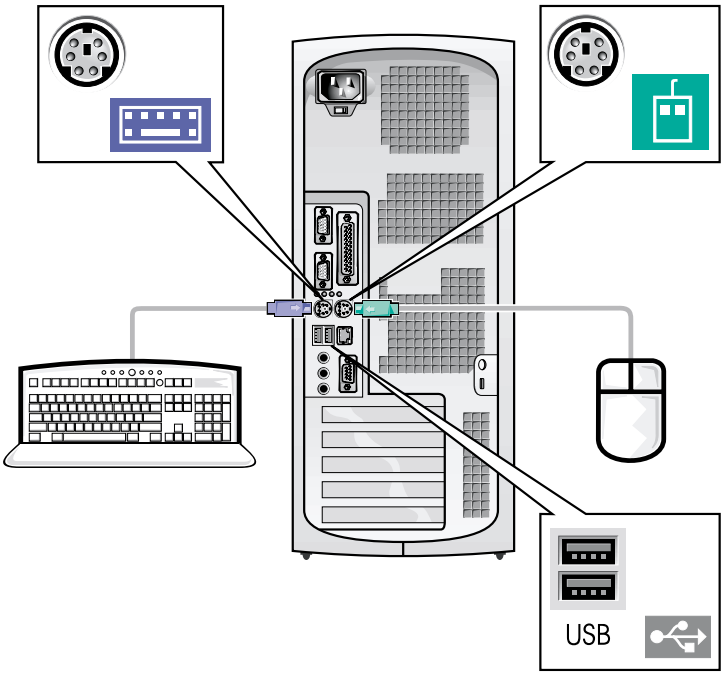
Resource	Contents	Using the Resource
support.dell.com	Dell support website • Technical support and information • Downloads for your computer • Order or delivery status • Hints and tips, technology papers, service information	Go to **support.dell.com** and complete the one-time registration. • Get help with general usage, installation, and troubleshooting questions • Obtain answers to technical service and support questions • Get the latest versions of the drivers for your computer • Access documentation about your computer and devices • Join online discussions with other Dell customers and Dell technical professionals • Explore a list of online links to Dell's primary vendors
Premier Support.Dell.com	Dell Premier Support website • Service call status • Top technical issues by product • Frequently asked questions by product number • Customized service tags • System configuration detail	Go to **premiersupport.dell.com**: The Dell Premier Support website is customized for corporate, government, and education customers. This site may not be available in all regions.

Getting Started/Setup

Use the following steps to connect external devices to your computer via the input/output (I/O) panel. The back of your Dell system, including the I/O panel, may look different from the examples shown here.

1



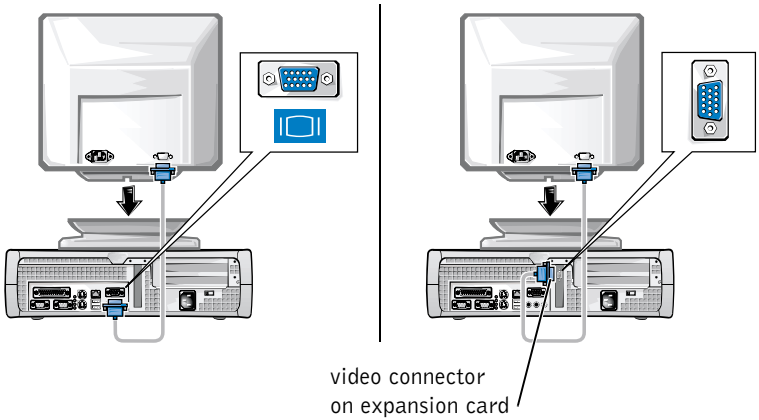


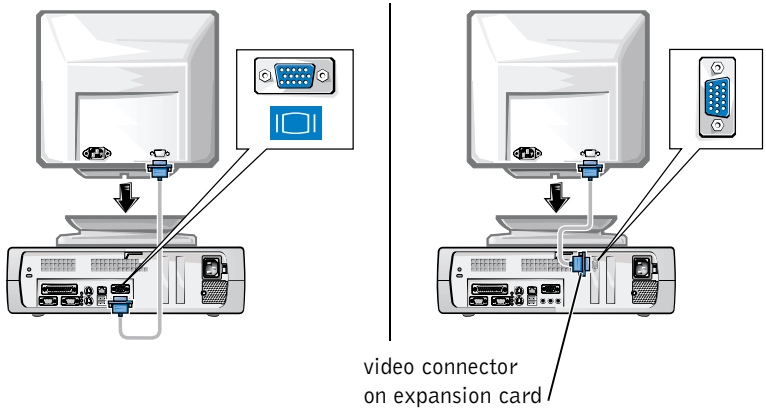
NOTE: Connect only one keyboard and one mouse.

NOTE: If you have a Universal Serial Bus (USB)-compliant mouse or keyboard, use the USB connectors on the back of your system.

2 **System with one video connector**

System with two video connectors

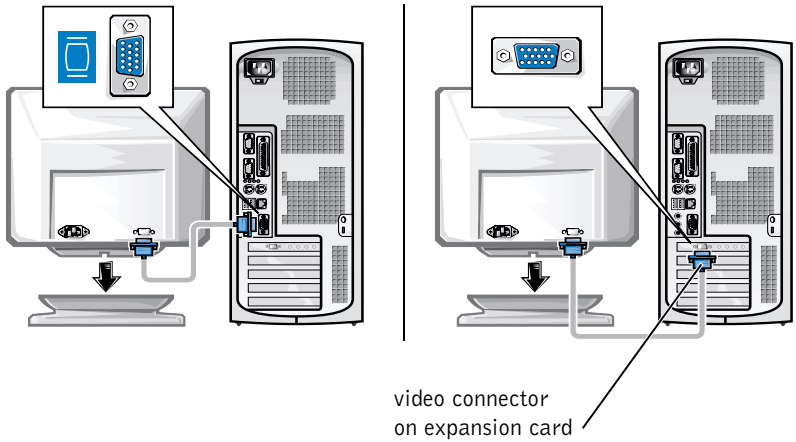




NOTE: If your system has two video connectors, the integrated video connector is disabled and has a protective cap on it. Use the expansion card connector, as shown in the illustrations on the right in step 2.

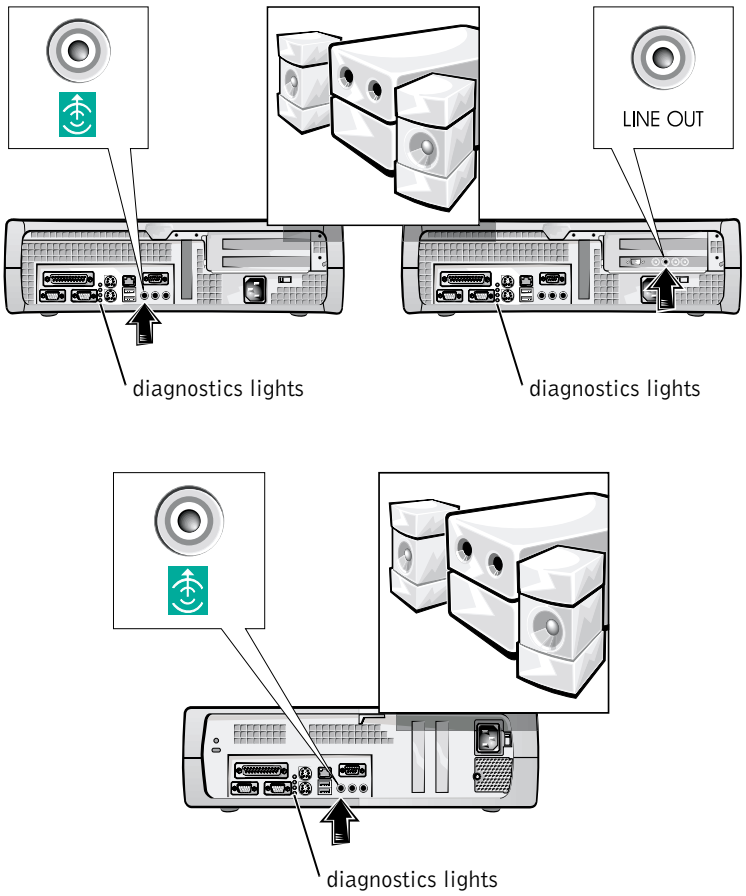
System with one video connector

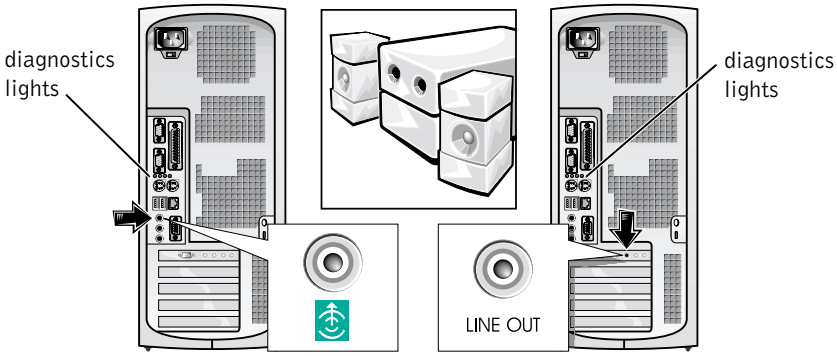
System with two video connectors



NOTE: If your system has two video connectors, the integrated video connector is disabled and has a protective cap on it. Use the expansion card connector, as shown in the illustrations on the right in step 2.

3

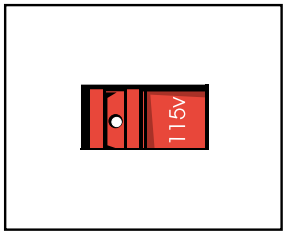

LINE OUT
diagnostics lights
diagnostics lights
diagnostics lights

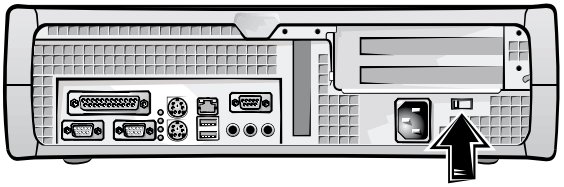


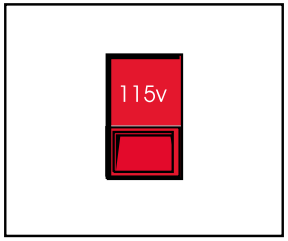
NOTE: If your system has two audio connectors, use the one on the expansion card, as shown in the illustrations on the right in step 3.

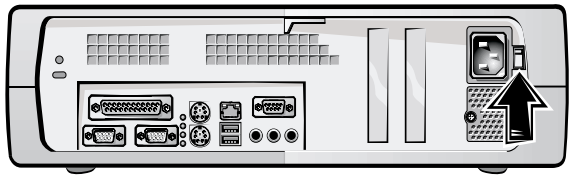
Verify that the voltage selection switch is set correctly for your location. For more information, see "When Using Your Computer System" found later in this document.

4

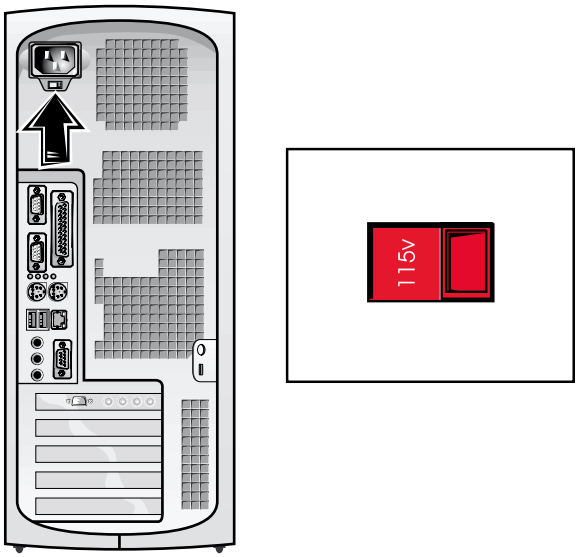






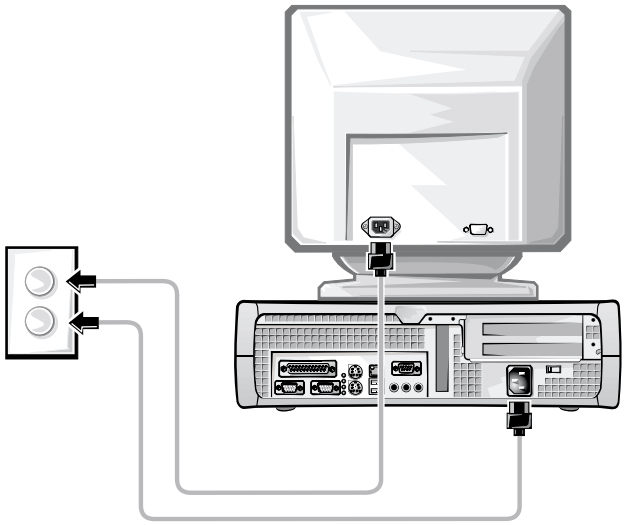


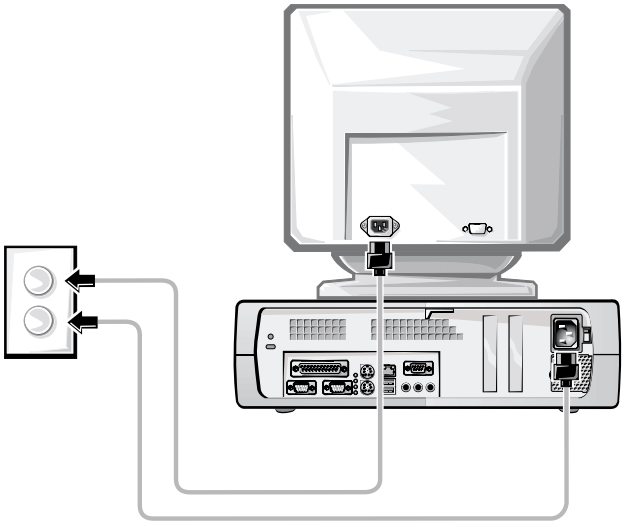
NOTE: Auto-select power supplies do not require a voltage selection switch. Your power supply may not have this switch.

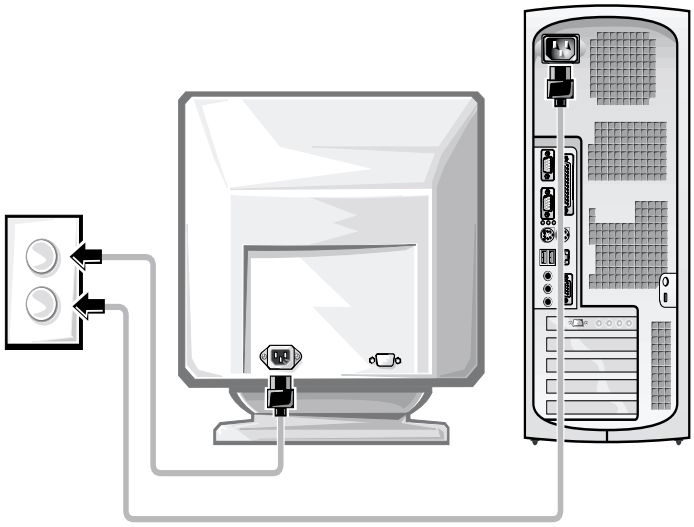

115v

⚠ **CAUTION: To help prevent electric shock, use only the power cable provided and ensure that it is plugged into a properly grounded power source.**

5

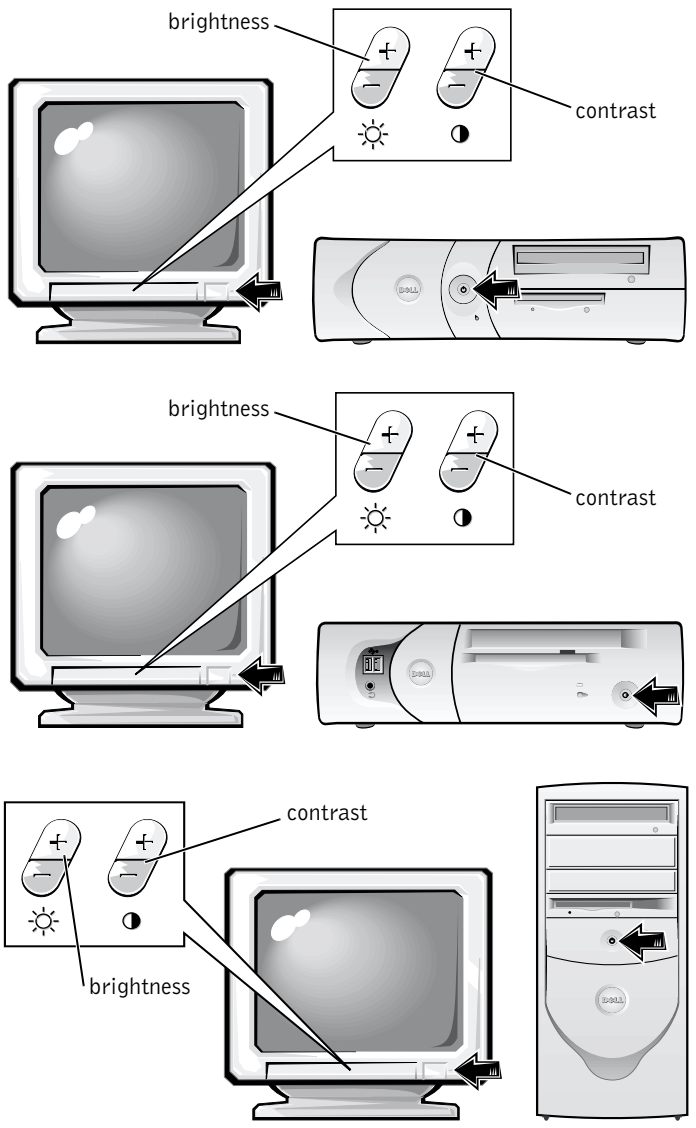






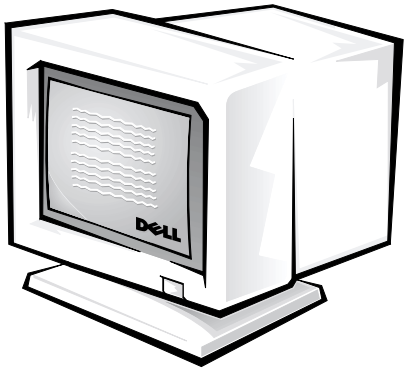
The following illustrations show power button locations and monitor controls.

6



Read the software license agreement and follow the operating system setup instructions on the screen.

7



Congratulations! You have completed your system setup.

Depending on your operating system, double-click the **User's Guides** icon on your desktop (shown below), or click the **Start** button and then select **Help and Support** to access the electronic documentation stored on your hard drive.

Solving Problems

Dell provides a number of tools to help you if your system does not perform as expected. For the latest troubleshooting information available for your system, see the Dell support website at **support.dell.com**. You can also find descriptions of Dell troubleshooting tools in the section titled "Getting Help" in your online *User's Guide*.

If computer problems occur that require help from Dell, write a detailed description of the error, beep codes, or diagnostics light patterns; record your Express Service Code and Service Tag Number below; and then contact Dell from the same location as your computer.

See "Finding Information and Assistance" on page 5 for an example of the express service code and service tag numbers.

Express Service Code: _____

Service Tag Number: _____

Your computer includes the following tools that can help you solve a problem:

DELL DIAGNOSTICS— The Dell Diagnostics test various components in your computer and help to identify the cause of computer problems. For more information, see "Running the Dell Diagnostics" on page 22.

SYSTEM LIGHTS— Located on the front of the computer, these lights can help troubleshoot a computer problem. For more information, see your *User's Guide*.

DIAGNOSTIC LIGHTS— Located on the back of the computer, these lights can help troubleshoot a computer problem. For more information, see your *User's Guide*.

SYSTEM MESSAGES— The computer reports these messages to warn you of current or possible failure. For more information, see your *User's Guide*.

BEEP CODES— A series of audible beep codes emitted by your computer can help identify a problem. For more information, see your *User's Guide*.

Using the *Dell OptiPlex ResourceCD*

To use the *Dell OptiPlex ResourceCD* while you are running the Microsoft® Windows® operating system, perform the following steps.

NOTE: To access device drivers and user documentation, you must use the *ResourceCD* while you are running Windows.

1. Turn on the computer and allow it to boot to the Windows desktop.
2. Insert the *Dell OptiPlex ResourceCD* into the CD drive.

   If you are using the *Dell OptiPlex ResourceCD* for the first time on this computer, the **ResourceCD Installation** window opens to inform you that the *ResourceCD* is about to begin installation.
3. Click **OK** to continue.

   To complete the installation, respond to the prompts offered by the installation program.
4. Click **Next** at the **Welcome Dell System Owner** screen.
5. Choose the appropriate **System Model**, **Operating System**, **Device Type**, and **Topic**.

Drivers for Your Computer

To display a list of device drivers for your computer, perform the following steps:

1. Click **My Drivers** in the **Topic** pull-down menu.

   The *ResourceCD* scans your computer's hardware and operating system, and then a list of device drivers for your system configuration is displayed on the screen.
2. Click the appropriate driver and follow the instructions to download the driver to your computer.

To view all available drivers for your computer, click **Drivers** from the **Topic** pull-down menu.

Running the Dell Diagnostics

The Dell Diagnostics is a program that tests various components in your computer. Run this program whenever you have a computer problem to help you identify the source of the problem.You can run the Dell Diagnostics from your hard drive or the *ResourceCD*.

NOTICE: If your hard drive fails, run the Dell IDE Hard Drive Diagnostics (see "Running the Dell IDE Hard Drive Diagnostics" on page 23).

1. Turn on your computer (if your computer is already on, restart it).
2. When `F2 = Setup` appears in the upper-right corner of the screen, press <Ctrl><Alt><F10>.

   The diagnostics initialization begins immediately; then the **Diagnostics Menu** appears.
3. Select the appropriate diagnostic option for your computer.

   To use the diagnostics, follow instructions on the screen.

Changing the Boot Sequence

To run the Dell Diagnostics from the *ResourceCD*, perform the following steps to enable your computer to boot from the CD:

1. Insert the *Dell OptiPlex ResourceCD* into the CD drive.
2. Turn on (or restart) your computer.
3. When `F2 = Setup` appears in the upper-right corner of the screen, press <Ctrl><Alt><F8>.

NOTE: This feature changes the boot sequence for one time only. On the next start-up, the computer boots according to the devices specified in system setup.

   The **Boot Device Menu** appears.

   If you wait too long and the Windows logo appears, continue to wait until you see the Windows desktop. Then shut down your computer and try again.
4. Select the **CD-ROM Device** option.

Running the Dell IDE Hard Drive Diagnostics

The Dell IDE Hard Drive Diagnostics is a utility that tests the hard drive to troubleshoot or confirm a hard drive failure.

1. Turn on your computer (if your computer is already on, restart it).
2. When `F2 = Setup` appears in the upper-right corner of the screen, press <Ctrl><Alt><D>.
3. Follow the instructions on the screen.

   If a failure is reported, see "Hard Drive Problems" in your *User's Guide*.

Safety Instructions

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

When Working Inside Your Computer

Before you remove the computer cover, perform the following steps in the sequence indicated.

NOTICE: Do not attempt to service the computer yourself, except as explained in your online Dell documentation or otherwise provided to you. Always follow installation and service instructions closely.

CAUTION: There is a danger of a new battery exploding if it is incorrectly installed. Replace the battery only with the same or equivalent type recommended by the manufacturer. Discard used batteries according to the manufacturer's instructions.

1. Turn off your computer and any peripherals.
2. Ground yourself by touching an unpainted metal surface on the chassis, such as the metal around the card-slot openings at the back of the computer, before touching anything inside your computer.

   While you work, periodically touch an unpainted metal surface on the computer chassis to dissipate any static electricity that might harm internal components.

3 Disconnect your computer and peripherals from their power sources. Also, disconnect any telephone or telecommunication lines from the computer.

Doing so reduces the potential for personal injury or shock.

In addition, take note of these safety guidelines when appropriate:

- To avoid shorting out your computer when disconnecting a network cable, first unplug the cable from the network interface controller (NIC) on the back of your computer, and then from the network jack on the wall. When reconnecting a network cable to your computer, first plug the cable into the network jack, and then into the NIC.
- When you disconnect a cable, pull on its connector or on its strain-relief loop, not on the cable itself. Some cables have a connector with locking tabs; if you are disconnecting this type of cable, press in on the locking tabs before disconnecting the cable. As you pull connectors apart, keep them evenly aligned to avoid bending any connector pins. Also, before you connect a cable, make sure both connectors are correctly oriented and aligned.
- Handle components and cards with care. Do not touch the components or contacts on a card. Hold a card by its edges or by its metal mounting bracket. Hold a component such as a microprocessor chip by its edges, not by its pins.

When Using Your Computer System

As you use your computer system, observe the following safety guidelines.

⚠ CAUTION: Do not operate your computer system with any cover(s) (including computer covers, bezels, filler brackets, and front-panel inserts) removed.

- To help avoid damaging your computer, be sure the voltage selection switch on the power supply is set to match the AC power available at your location:
  - 115 volts (V)/60 hertz (Hz) in most of North and South America and some Far Eastern countries such as South Korea and Taiwan

– 100 V/50 Hz in eastern Japan and 100 V/60 Hz in western Japan

NOTE: The voltage selection switch must be set to the 115V position even though the AC supply in Japan is 100 V.

– 230 V/50 Hz in most of Europe, the Middle East, and the Far East

Also be sure your monitor and attached peripherals are electrically rated to operate with the AC power available in your location.

NOTE: Auto-select power supplies do not require a voltage selection switch. Your power supply may not have this switch.

- To help prevent electric shock, plug the computer and peripheral power cables into properly grounded power sources. These cables are equipped with three-prong plugs to help ensure proper grounding. Do not use adapter plugs or remove the grounding prong from a cable. If you must use an extension cable, use a three-wire cable with properly grounded plugs.

- Before working inside the computer, unplug the system to help prevent electric shock or system board damage. Certain system board components continue to receive power any time the computer is connected to AC power.
- To help avoid possible damage to the system board, wait 15 seconds after unplugging the system before disconnecting a device from the computer.

NOTICE: Observe when the auxiliary power light-emitting diode (LED) indicator on the system board turns off to verify that system power is off (see your *User's Guide* for the location of this LED).

- To help protect your computer system from sudden, transient increases and decreases in electrical power, use a surge suppressor, line conditioner, or uninterruptible power supply (UPS).
- Be sure nothing rests on your computer system's cables and that the cables are not located where they can be stepped on or tripped over.
- Do not spill food or liquids on your computer. If the computer gets wet, consult your *User's Guide*.
- Do not push any objects into the openings of your computer. Doing so can cause fire or electric shock by shorting out interior components.
- Keep your computer away from radiators and heat sources. Also, do not block cooling vents. Avoid placing loose papers underneath your computer; do not place your computer in a closed-in wall unit or on a bed, sofa, or rug.

Ergonomic Computing Habits

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

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

For comfort and efficiency, observe the ergonomic guidelines in your *User's Guide* when setting up and using your computer system.

Regulatory Information

Electromagnetic Interference (EMI) is any signal or emission, radiated in free space or conducted along power or signal leads, that endangers the functioning of a radio navigation or other safety service or seriously degrades, obstructs, or repeatedly interrupts a licensed radio communications service.

Your Dell computer system is designed to comply with applicable regulations regarding EMI. Changes or modifications not expressly approved by Dell could void the user's authority to operate the equipment.

NOTE: Additional regulatory information regarding your system can be found in your *User's Guide*.