

Notice

The information in this guide is subject to change without notice.

COMPAQ COMPUTER CORPORATION SHALL NOT BE LIABLE FOR TECHNICAL OR EDITORIAL ERRORS OR OMISSIONS CONTAINED HEREIN; NOR FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM THE FURNISHING, PERFORMANCE, OR USE OF THIS MATERIAL.

This guide contains information protected by copyright. No part of this guide may be photocopied or reproduced in any form without prior written consent from Compaq Computer Corporation.

© 1997 Compaq Computer Corporation.
All rights reserved. Printed in the U.S.A.

Compaq, LTE, and SpeedPaq are registered in the U.S. Patent and Trademark Office. Armada is a trademark of Compaq Computer Corporation.

Microsoft, MS-DOS, and Windows are registered trademarks of Microsoft Corporation.

The software described in this guide is furnished under a license agreement or nondisclosure agreement. The software may be used or copied only in accordance with the terms of the agreement.

Product names mentioned herein may be trademarks and/or registered trademarks of their respective companies.

REFERENCE GUIDE

Armada 7300 Family of Personal Computers

Second Edition November 1997

First Edition June 1997

Part Number 247738-002

Compaq Computer Corporation

CONTENTS

preface

USING THIS GUIDE

chapter 1

GETTING STARTED

Unpacking the Computer	1-2
Taking the Battery Pack Out of Ship Mode.....	1-3
Setting Up the Computer.....	1-4
Setting Up the Software	1-7
Where to Go from Here.....	1-9
Registering the Computer	1-9
Backing Up the System.....	1-9
Finding Online Help	1-10
Customizing Computer Settings	1-10
Finding Optional Equipment	1-10

chapter 2

TAKING A LOOK AT THE COMPUTER

Features Overview.....	2-1
Exterior Components	2-2
Top Components.....	2-2
Front and Right Side Components.....	2-4
Rear and Left Side Components	2-6
Bottom Components	2-7
Interior Components.....	2-8
Preinstalled Software.....	2-8

chapter 3

USING THE KEYBOARD AND POINTING DEVICE

Using the Pointing Device and Mouse Buttons.....	3-1
Changing Mouse Settings.....	3-2
Identifying Keyboard Components	3-2
Hotkeys	3-3
Embedded Numeric Keypad.....	3-4
Programmable Keys.....	3-4
Opening the Programmable Keys Dialog Box.....	3-4
Assigning Programmable Keys.....	3-5
Unassigning Programmable Keys	3-5
Adding Schemes.....	3-6
Removing Schemes	3-6

chapter 4

USING POWER AND POWER MANAGEMENT

Power Sources.....	4-1
Power Controls and Light.....	4-2
Turning the Computer On and Off	4-3
Turning the Computer On	4-3
Shutting Down the Computer.....	4-3
When to Shut Down the Computer	4-3
Power Management	4-4
Initiating Suspend.....	4-4
Initiating Hibernation	4-5
Power Management Settings.....	4-6

chapter 5

USING BATTERY PACKS

Battery Gauges.....	5-1
Ensuring Battery Gauge Accuracy	5-1
Battery Gauge Hotkey	5-2
Battery Status in Power Properties.....	5-2
Battery Meter on Taskbar.....	5-3
Gauge on the Battery Pack.....	5-3
Charging Battery Packs	5-4
Identifying and Resolving a Low-Battery Condition.....	5-5
Replacing a Discharged Battery Pack	5-6
Extending Battery Pack Operating Time.....	5-7
Storing Battery Packs.....	5-8

chapter 6

WORKING WITH REMOVABLE DRIVES

Caring for Removable Drives 6-2
Placing Drives in Their Carrying Cases..... 6-3
Removing/Inserting a Hard Drive in the Hard Drive Bay 6-4
 Removing a Hard Drive from the Hard Drive Bay 6-4
 Inserting a Hard Drive into the Hard Drive Bay 6-6
Using MultiBay Adapters 6-8
 Inserting a Hard Drive into
 the Armada 7300 Hard Drive MultiBay Adapter 6-8
 Removing/Inserting a Drive in
 the Armada 7000 Removable Drive MultiBay Adapter..... 6-9
Removing/Inserting Drives in the Computer MultiBay 6-14
 Removing a Drive from the Computer MultiBay..... 6-14
 Inserting a Drive into the Computer MultiBay..... 6-15
 Inserting the MultiBay Weight Saver..... 6-16
Opening the CD-ROM Tray..... 6-17
Changing the Drive Boot Order 6-18

chapter 7

CONNECTING EXTERNAL DESKTOP EQUIPMENT

Identifying External Connectors 7-2
External Mouse or Other Pointing Device,
Keyboard, or Numeric Keypad 7-3
Parallel and Serial Devices..... 7-3
External Monitor/Overhead Projector..... 7-4
 Display Settings 7-4
 Energy-Saving Monitor 7-6
Docking Connector 7-6

chapter 8

USING THE INTERNAL MODEM

Finding Online Modem Help 8-1
Running the Communications Program..... 8-2
Connecting the Modem to a Telephone Wall Jack 8-2
 Connecting the Modem in North America,
 Latin America, Japan, or Hong Kong..... 8-3
 Connecting the Modem in Europe or Australia..... 8-4
Connecting the Modem to a Cellular Phone
(Available Only in North America) 8-5

chapter 9

USING THE INFRARED PORT

Infrared Software	9-2
Infrared Monitor	9-2
Direct Cable Connection	9-2
Preparing for an Infrared Connection	9-3

chapter 10

USING PC CARDS

Supported PC Cards	10-1
Compaq PC Card Solutions List	10-2
Configuring PC Cards	10-2
Inserting a PC Card	10-3
Removing a PC Card	10-4
When the Computer Is Off	10-4
In Windows 95, When the Computer Is On	10-4

chapter 11

USING AUDIO FEATURES

Identifying the Audio Components	11-2
Using the Built-In Audio Components	11-3
Microphone	11-3
Volume Control	11-3
Stereo Speakers	11-3
Connecting External Audio Equipment	11-4
Stereo Line-In Jack	11-4
Stereo Speaker/Headphone Jack	11-4
Microphone Jack	11-4

chapter 12

UPGRADING RAM MEMORY

Installing a Memory Expansion Board	12-2
Removing the Memory Compartment Cover	12-2
Removing an Existing Memory Board	12-4
Inserting a Memory Expansion Board	12-5

chapter 13

MAINTENANCE AND TRAVEL GUIDELINES

Routine Care.....	13-1
Replacing the Pointing Device Cap	13-2
Traveling and Shipping Guidelines	13-2
Air Travel.....	13-3
International Travel.....	13-3
Shipping	13-4

chapter 14

SECURITY FEATURES

Software Security	14-2
Establishing a Power-On Password	14-2
Enabling QuickLock and QuickBlank.....	14-3
Establishing a Setup Password	14-3
Changing or Deleting a Password	14-4
Disabling Devices	14-4
Hardware Security.....	14-5
Hard Drive Security Plate	14-5
Memory Compartment Security Screws.....	14-6
Cable Lock	14-7

chapter 15

INTELLIGENT MANAGEABILITY

Inventory Management	15-1
Fault Management.....	15-2
Security Management.....	15-2

chapter 16

COMPUTER SETUP AND DIAGNOSTICS UTILITIES

Computer Setup.....	16-2
Help button.....	16-2
View Menu.....	16-2
Tools Menu	16-3
Computer Checkup (TEST)	16-3
View System Information (INSPECT)	16-5
Prepare Computer for a Compaq Service Call (RemotePaq)	16-6
Create Diagnostics Diskette	16-6
Manage Diagnostics Partition	16-6

chapter 17

TROUBLESHOOTING

Minor Problems Checklist	17-2
Solving Audio Problems	17-3
Solving Battery and Battery Gauge Problems	17-4
Solving Diskette and Diskette Drive Problems	17-7
Solving Hard Drive Problems	17-9
Solving Hardware Problems	17-10
Solving Infrared Problems	17-11
Solving Keyboard and Numeric Keypad Problems	17-12
Solving Memory Problems	17-13
Solving Modem Problems	17-14
Solving PC Card Problems	17-16
Solving External Pointing Device Problems	17-18
Solving Power Problems	17-18
Solving Printer Problems	17-20
Solving Screen Problems	17-21

appendix A

COMPAQ CUSTOMER SUPPORT

Preparing for a Technical Support Call	A-1
Worldwide Telephone Numbers	A-2

appendix B

REGULATORY NOTICESB-1

appendix C

ELECTROSTATIC DISCHARGE

Preventing Electrostatic Discharge	C-1
When Handling Removable Drives	C-1
When Installing Internal Components	C-1
Grounding Methods	C-2

appendix D

SPECIFICATIONS D-1

INDEX I-1

USING THIS GUIDE

Some or all of the following format conventions are used in this guide to distinguish elements of text:

- Names of keys are shown in bold type as they appear on the keyboard, for example, **Ctrl**, **Backspace**, **Tab**.
- Keys that you should press at the same time are represented by the key names and the plus (+) symbol, for example, **Ctrl+Alt+Delete**.
- Commands are presented in lowercase, bold type as shown here: **install** or **a:\install**.
- An arrow symbol is used to separate icons or menu options that you should select in succession, for example, click the Start button → Settings → Control Panel.
- When you need to type information without pressing the **Enter** key, you are directed to “type” the information.
- When you need to type information *and* press the **Enter** key, you are directed to “enter” the information.

NOTE: Text set off in this manner presents commentary, sidelights, or interesting points of information.

IMPORTANT: Text set off in this manner presents clarifying information or specific instructions.



WARNING: Text set off in this manner indicates that failure to follow directions could result in bodily harm or loss of life.



CAUTION: Text set off in this manner indicates that failure to follow directions could result in damage to equipment or loss of information.

chapter 1

GETTING STARTED

This chapter describes the steps (shown on the graphical poster) to set up the computer, and includes the following:

- Unpacking the computer and verifying that all items were received.
- Taking the battery pack out of ship mode so that it can be charged and used.
- Setting up the computer and connecting the AC adapter.
- Setting up the preinstalled Windows operating system and Compaq value-add software.

This chapter also offers some tips on what to do after setting up the computer and software.

Unpacking the Computer

You should have the following items in the packing box:

- ❶ Computer with hard drive, diskette drive, battery pack, and preinstalled software (some models have an integrated modem)
- ❷ Slipcase
- ❸ Hard drive carrying case
- ❹ MultiBay device carrying case
- ❺ MultiBay weight saver (inside MultiBay device carrying case)
- ❻ AC Adapter
- ❼ Power cord
- ❽ Bag with two spare pointing device caps
- ❾ Bag with a screwdriver, two memory compartment security screws, and a tamper-resistant hard drive security plate

Items not illustrated vary by model and geographical region:

- Printed documentation
- CD-ROM drive and Armada 7000 Removable Drive MultiBay Adapter
- 25-pin (country-specific) modem cable for models with an integrated modem purchased in Europe or Australia
- 3-to-2-prong plug adapter for models purchased in Japan



Unpacking the Computer

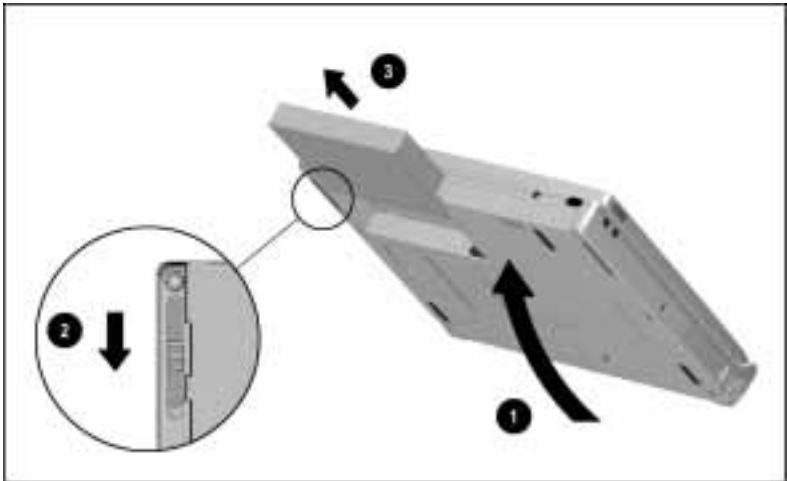
Taking the Battery Pack Out of Ship Mode

When the computer is shipped from the factory, the battery pack in the battery bay is in ship mode. You must take the battery pack out of ship mode before the battery pack can be charged and used.

NOTE: Ship mode is used only when the computer is shipped from the factory. It is not needed when you travel or ship the computer.

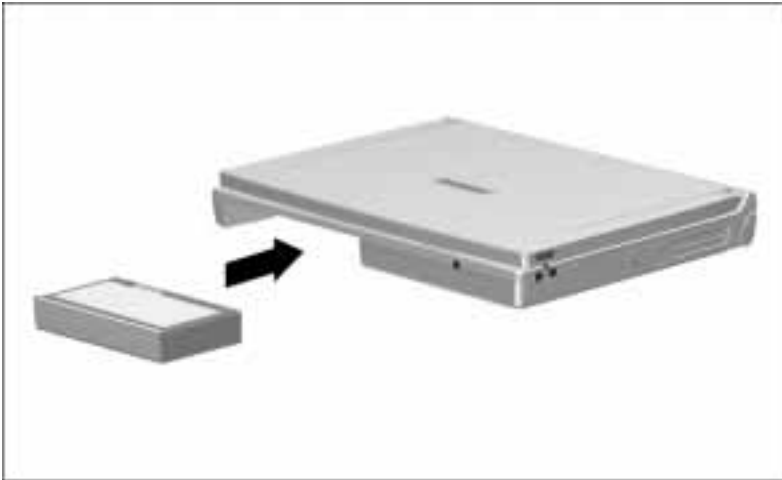
Take the battery pack out of ship mode by removing the battery pack from the battery bay and then reinserting it:

1. Tilt the computer up **1** to locate the battery release latch.
2. Slide the battery release latch toward the back of the computer **2**.
3. Place your hand under the battery pack and pull the battery pack out of the battery bay **3**.



Removing the Battery Pack from the Battery Bay

4. With the label on the battery pack facing up and the battery contacts facing in, reinsert the battery pack into the battery bay until it clicks into place.

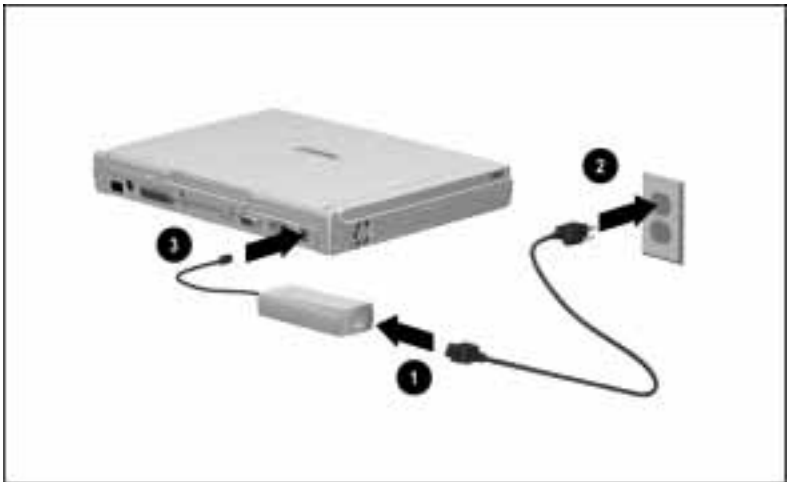


Reinserting the Battery Pack into the Battery Bay

Setting Up the Computer

1. Place the computer on a flat surface near a grounded electrical outlet.
2. Plug one end of the power cord into the AC Adapter ❶ and the other end into a grounded electrical outlet ❷. Plug the AC Adapter into the power connector on the rear panel of the computer ❸.

NOTE: If the battery light does not turn on to indicate the battery pack is charging, remove and reinsert the battery pack. Allow the battery pack to fully charge (the battery light turns off) before disconnecting external power or removing the battery pack. You can use the computer while it charges the battery pack.



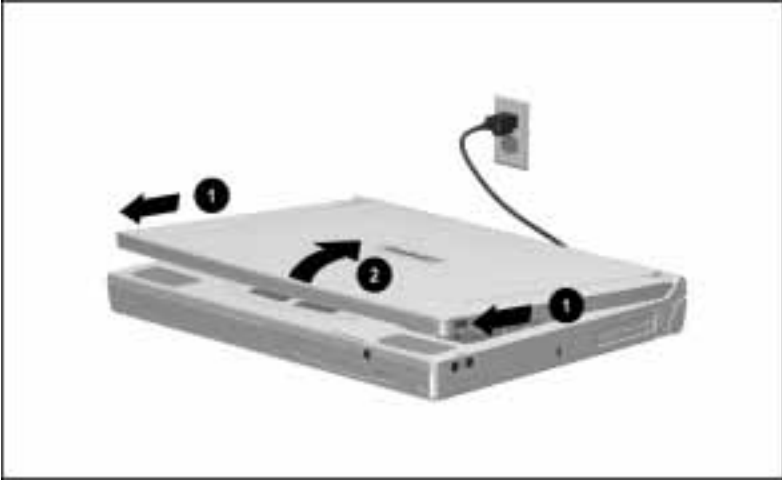
Connecting the Computer to External Power



WARNING: To reduce the risk of personal injury, electric shock, fire, or damage to the equipment:

- Do not disable the power cord grounding plug. The grounding plug is an important safety feature.
- Plug the equipment into a grounded (earthed) electrical outlet that is easily accessible at all times.
- Disconnect power from the equipment by unplugging the power cord from the electrical outlet.
- Do not place anything on power cords or cables. Arrange them so that no one may accidentally step on or trip over them. Do not pull on a cord or cable. When unplugging from the electrical outlet, grasp the cord by the plug.

3. Open the computer by sliding forward the release latch ❶ on each side of the display and then raising the display ❷ to a comfortable viewing angle.



Opening the Computer

4. If you prefer the back of the computer tilted up, swivel the tilt feet back and under the keyboard.



Swiveling the Tilt Feet

Setting Up the Software

When you turn on the computer the first time, the Compaq setup screen appears. After you select to begin software setup, you must complete the entire process, which may require up to 20 minutes.

NOTE: The Windows operating system is selected on some models at the time of purchase and on other models during software setup. If your model has both Windows 95 and Windows NT, during software setup you will be prompted to choose the operating system that you want to use. The other operating system will be deleted from the computer.

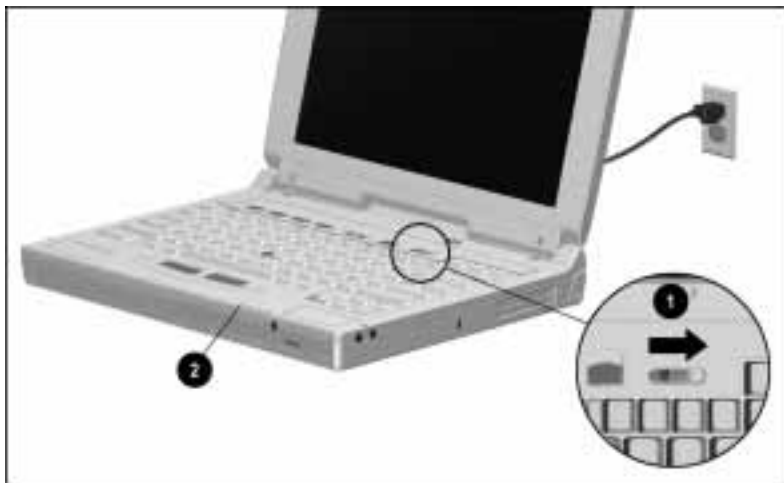


CAUTION: To prevent file corruption and ensure the correct software drivers are installed:

- Before you begin software setup, be sure the diskette drive is in the computer and that the computer is *not* docked in the optional expansion base or convenience base.
- During software setup, do not turn off or unplug the computer or remove a drive.

1. Slide the power switch ❶ to the right and release it to turn on the computer.

The power/suspend light ❷ on the front of the computer turns on to indicate that power is turned on.



Turning On the Computer

2. Follow the instructions on the screen to complete the setup of the Windows operating system and the Compaq value-add software.
3. When prompted to select your language (and Windows operating system on some models), choose carefully.

IMPORTANT: The languages (and operating system on some models) that you do not choose will be deleted and cannot be recovered.

4. When prompted to select a keyboard, if you are not sure which keyboard to select, accept the highlighted choice for your country. (The keyboard language and layout can be changed at any time in Windows Keyboard Properties.)

When making selections and filling in information, you can move around the screen by pressing the Tab key, pressing the keyboard up and down arrow keys, or by moving the onscreen pointer and clicking the mouse button. View all options in a drop-down list by clicking the arrow to the right of the list.

The pointing device (between the letters G, H, and B) and the buttons (in front of the spacebar) are used as you would use a mouse. Push the pointing device in the direction that you want to move the onscreen pointer. Press the left mouse button to click or double-click, and press the right mouse button to right-click.

If the screen saver function blanks the screen during a period of keyboard and mouse inactivity, press the Shift key to restore the screen.

5. When the software setup is complete, the computer restarts and the Welcome to Windows screen appears.

Where to Go from Here

Registering the Computer

To protect your investment, be sure to follow the instructions to register your computer.

Backing Up the System

The hard drive preinstalled in your computer is partitioned into two or more logical drives, depending on the size of the hard drive. All the preinstalled software is in the primary partition, drive C. Compaq recommends that you use a backup program to create a backup of the preinstalled software.

If you prefer, for an additional cost, you can order a backup of the preinstalled software on a CD-ROM or diskettes. If an order form was included with the computer, complete the form and return it, or call one of the numbers listed on the order form. If an order form was not included with the computer, refer to the Compaq worldwide telephone numbers in Appendix A, “Compaq Customer Support.”

NOTE: Have the computer serial number available when you call Compaq. The serial number is on the bottom of the computer.



CAUTION: Replacing the preinstalled Windows operating system with a retail version will result in the loss of the Compaq value-add software and certain hardware functionality, such as PC Card support and enhanced power management, and may result in system lockups and loss of unsaved information.

Finding Online Help

To access the online *Reference Guide*:

- Click the Start button, point to Compaq Information Center, then click *Reference Guide*, or
- Click the Start button, then click Help.

If you are new to the Windows operating system, double-click the introductory topics on the Help menu to get started quickly.

For help using one of the preinstalled Windows programs, click the Help menu within that program.

For help using the preinstalled MS-DOS real mode drivers for older MS-DOS based programs or games that require an MS-DOS real mode session, click the Start button, point to Programs, point to MS-DOS Real Mode, then click RealMode.doc.

Customizing Computer Settings

If you are using Windows 95, you can change most factory-default settings through icons in Control Panel. To open Control Panel, click the Start button, point to Settings, then click Control Panel. To view settings available in Control Panel, double-click an icon in Control Panel, then click the tabs at the top of the Properties dialog box that appears.

If you are using Windows NT, some settings, such as power management, are available through icons in Control Panel. Other settings are available only in Computer Setup. See Chapter 16, “Computer Setup and Diagnostics Utilities,” for information about running Computer Setup.

Finding Optional Equipment

To see the many Compaq options designed to enhance the computer, click the Start button, point to Compaq Information Center, then click *Options Catalog*. Use the catalog part number to order options from your Compaq authorized dealer, reseller, or service provider.

chapter 2

TAKING A LOOK AT THE COMPUTER

This chapter provides an overview of the computer features and components. Illustrations identify exterior components and give brief descriptions of their functions.

Features Overview

All models of the computer include the following features:

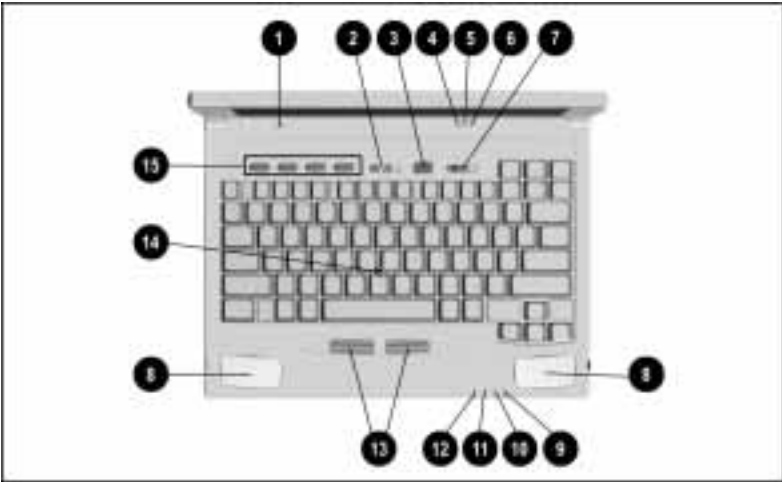
- Intel Mobile Pentium processor
- 64-bit EDO DRAM memory (expandable through memory upgrades)
- Level 2 cache memory
- Upgradable flash ROM BIOS
- 64-bit high-performance PCI bus dual-graphics controller with hardware video acceleration
- Removable hard drive in a hard drive bay
- Removable diskette drive in a MultiBay, which also supports an optional CD-ROM drive or second hard drive
- Two CardBus slots that support 16- and 32-bit PC Cards, including Zoomed Video cards
- IrDA-compliant infrared port (4 Mbps standard) for wireless file transfer, file synchronization, and printing

- Built-in speakers, microphone, and jacks for 16-bit stereo sound with electronic equalization and wave table synthesis
- Energy Star–compliant power saving features
- Ports and connectors for external equipment, including serial, parallel, external monitor, and an external PS/2-compatible pointing device or keyboard
- Desktop functionality with the optional ArmadaStation expansion base or the Armada MiniStation convenience bases

Some models include an integrated modem and/or a CD-ROM drive.

Exterior Components

Top Components



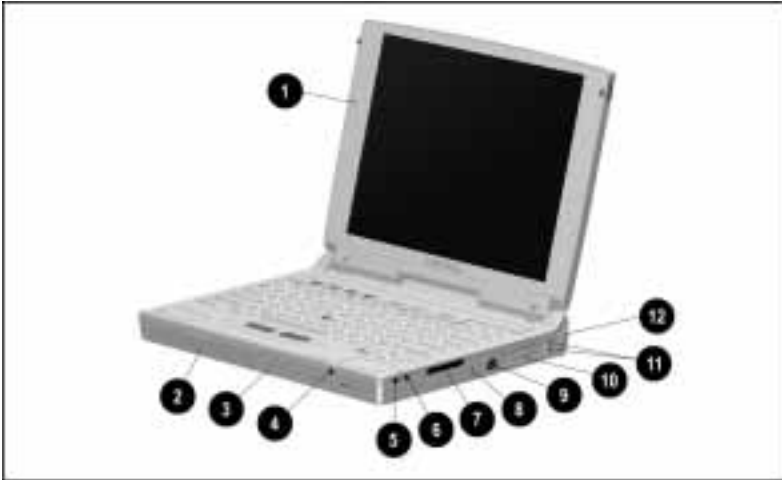
Top Components

Top Components

Component	Function
❶ Display switch	Turns computer display off if display is closed while the computer is on.
❷ Volume control buttons	Adjusts volume of internal speakers, or of external speakers or headphones if connected.
❸ Suspend button	Initiates and exits Suspend. (When pressed simultaneously with the Fn key, initiates Hibernation.)
❹ Caps lock light	Indicates when caps lock is on, which capitalizes all newly typed text.
❺ Scroll lock light	Indicates when scroll lock is on.
❻ Num lock light	Indicates when num lock is on, which enables the embedded numeric keypad.
❼ Power switch	Turns computer on (and off if Shut Down does not turn power off).
❽ Stereo speakers (2)	Produce high-quality stereo sound.
❾ MultiBay drive light	Turns on when a drive in the MultiBay is being accessed.
❿ Battery light	Turns on when battery pack in the computer is charging; turns off when fully charged; blinks to indicate a low-battery condition.
⓫ Hard drive light	Turns on when the hard drive in the hard drive bay is being accessed.
⓬ Power/suspend light	Turns on when power to the computer is turned on; turns off when computer is off or in Hibernation; blinks when computer is in Suspend.
⓭ Left and right mouse buttons*	Function the same as the left and right buttons on a mouse.
⓮ Easy Point III pointing device*	Moves the onscreen pointer.
⓯ Programmable keys*	Open frequently used documents or programs.

*For more information about keyboard components, see Chapter 3, "Using the Keyboard and Pointing Device."

Front and Right Side Components



Front and Right Side Components

Front and Right Side Components

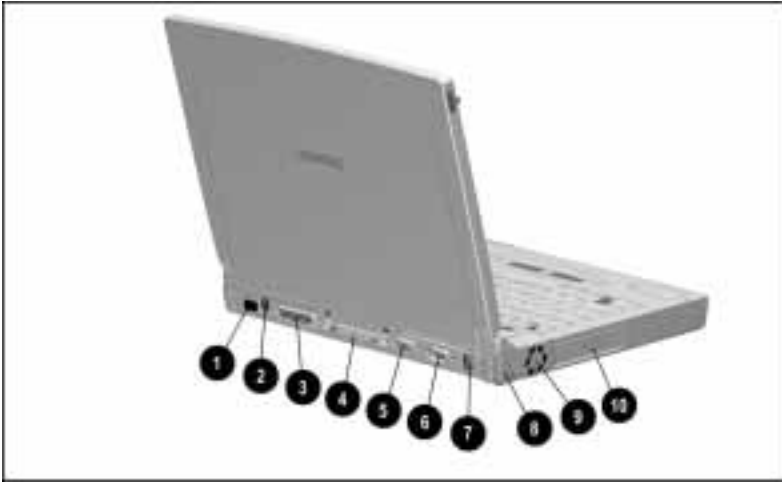
Component	Function
❶ Microphone	Located on the inside and outside of the display; can be used whether the computer is open or closed.
❷ Battery bay	Accepts a lithium ion battery pack to power the computer, or to charge when connected to an external power source.
❸ MultiBay	Supports a removable diskette drive, CD-ROM drive, or second hard drive.
❹ Stereo line-in jack	Connects an external stereo player such as a CD player, tuner, or tape deck.
❺ Stereo speaker/headphone jack	Connects stereo speakers, headphone, or headset.
❻ Microphone jack	Connects a monaural microphone.
❼ Modem 25-pin connector	Connects country-specific modem cable in supported countries in Europe or in Australia, or connects a cellular phone in North America.

Continued

Front and Right Side Components *Continued*

Component	Function
⑧ Security cable slot	Attach an optional security cable to lock the computer to an immovable object.
⑨ Modem RJ-11 jack (not on models sold in Europe or Australia)	Connects a standard telephone cable in North America, Latin America, Japan, or Hong Kong.
⑩ CardBus slots	Supports 16- and 32-bit PC Cards (one Type III or any combination of two Type I and Type II).
⑪ PC Card eject buttons	Top button ejects a card in the top slot, and bottom button ejects a card in the bottom slot.
⑫ Tilt feet (2)	Raise the back of the computer.

Rear and Left Side Components

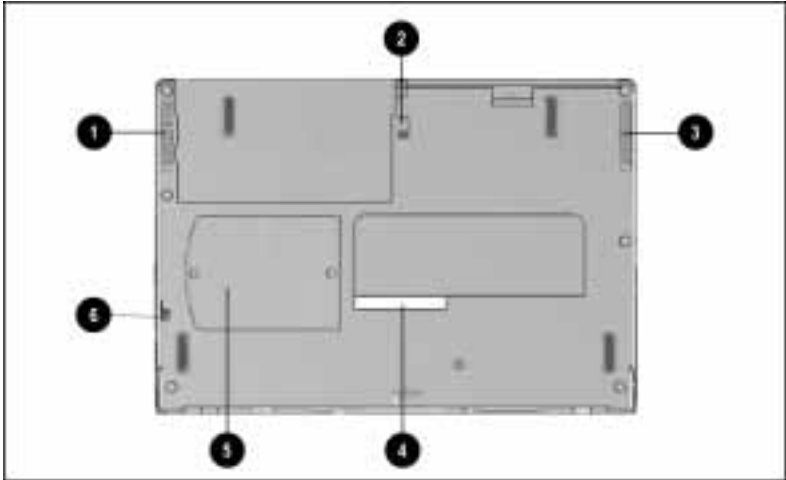


Rear and Left Side Components

Rear and Left Side Components

Component	Function
❶ Infrared port	Provides for wireless IrDA communication.
❷ Keyboard/mouse connector	Connects an external PS/2-compatible keyboard, numeric keypad, mouse, or other pointing device. (An optional splitter/adaptor provides two PS/2-compatible connectors.)
❸ Parallel connector	Connects an optional parallel device.
❹ Docking connector	Connects the optional ArmadaStation or Armada MiniStation.
❺ External monitor connector	Connects an external monitor or overhead projector.
❻ Serial connector	Connects an optional serial device.
❼ Power connector	Connects the AC Adapter.
❽ Tilt feet (2)	Raise the back of the computer.
❾ Airflow exhaust	Fan circulates air through the computer to cool internal components.
❿ Hard drive bay	Supports a removable hard drive.

Bottom Components



Bottom Components

Bottom Components

Component	Function
❶ Battery release latch	Releases battery pack for removal from the bay.
❷ Docking restraint latch recess	Helps secure the computer when docked in the optional ArmadaStation or Armada MiniStation.
❸ MultiBay release latch	Releases a drive in the MultiBay for removal from the bay.
❹ Serial number	Computer identification number; needed whenever you call Compaq customer support.
❺ Memory compartment	Contains system memory and an empty slot for memory expansion.
❻ Hard drive security plate	Factory-installed security plate secures the hard drive in the hard drive bay. When replaced with the tamper-resistant plate, also helps prevent unauthorized removal of the hard drive.

Interior Components

Interior components vary by model, and some components are upgradable. To view information about your system components, double-click the Compaq Diagnostics icon in Control Panel.

Preinstalled Software

In addition to the Windows operating system, the computer has preinstalled software drivers, utilities, and programs.



CAUTION: Replacing the preinstalled operating system with a retail version will result in the loss of the Compaq value-add software and certain hardware functionality, such as PC Card support and enhanced power management, and may result in system lockups and loss of unsaved information.

chapter 3

USING THE KEYBOARD AND POINTING DEVICE

This chapter describes the computer keyboard features, including the EasyPoint III pointing device and mouse buttons, hotkeys, embedded numeric keypad, and programmable keys.

Using the Pointing Device and Mouse Buttons

The EasyPoint III pointing device and mouse buttons are built into the keyboard for convenient, easy use. The pointing device is between the letters G, H, and B, and the mouse buttons are in front of the spacebar.

With either index finger, push the pointing device in the direction that you want to move the onscreen pointer. Click the mouse buttons with either thumb. When instructed to click or double-click, press the left mouse button. When instructed to right-click, press the right mouse button.

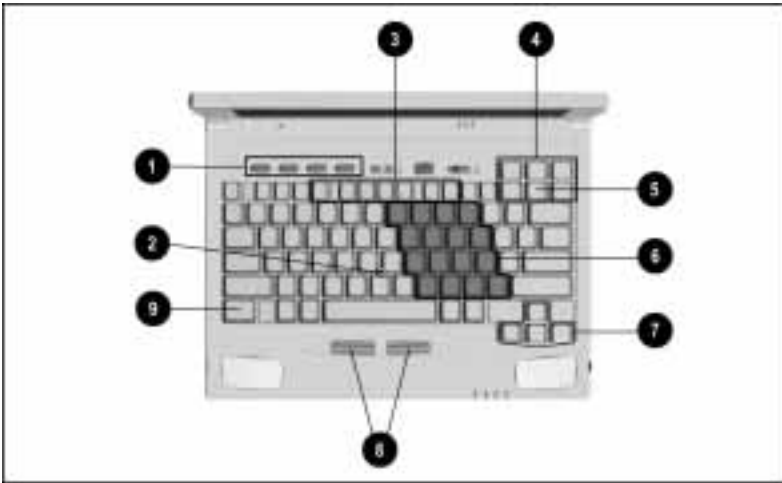
NOTE: If the pointing device cap becomes soiled or damaged, see Chapter 13, “Maintenance and Travel Guidelines,” for steps to install one of the spare caps included with the computer.

Changing Mouse Settings

You can change settings, such as click speed, pointer speed, and pointer shape. Click the Start button, point to Settings, click Control Panel, then double-click the Mouse icon to open Mouse Properties. To see the available settings, click the tabs at the top of the Mouse Properties dialog box.

Identifying Keyboard Components

The illustration below identifies some important components and keys on the keyboard.



Keyboard Components

Keyboard Components

❶ Programmable keys	❹ Embedded numeric keypad
❷ EasyPoint III pointing device	❺ Cursor keys
❸ Hotkeys	❻ Left and right mouse buttons
❹ Screen control keys	❼ Fn key
❺ NumLk key	

Hotkeys

Hotkeys are key combinations on the computer keyboard for performing functions quickly. To use a hotkey, press the **Fn** key simultaneously with another key. Function keys used in hotkey combinations have a blue icon representing the function.

Hotkey	Function
Fn+F1	Popup window location. After pressing the hotkey, press the left, right, up, and down arrow keys to change the screen location where hotkey popup windows appear.
Fn+F4	Display. While an external monitor or overhead projector is connected, press the hotkey to switch between simultaneous display, external display, and internal computer display.
Fn+F5	System beeps. After pressing the hotkey, press an arrow key to adjust or test the volume of system beeps, including low-battery warning beeps. The right arrow key increases the volume, the left arrow key decreases the volume, and the down arrow key tests the volume.
Fn+F6	QuickLock/QuickBlank. Press the hotkey to initiate QuickLock (disable keyboard and pointing device) and QuickBlank (blank the screen) until the power-on password is entered. (To establish a power-on password and enable QuickLock and QuickBlank, see Chapter 14, "Security Features.")
Fn+F7	Battery conservation. Press the hotkey to view or change the battery conservation level. (For more information, see Chapter 4, "Using Power and Power Management.")
Fn+F8	Battery gauge. Press the hotkey to see the charge status of battery packs in the system, including the expansion base when docked. (For more information, see Chapter 5, "Using Battery Packs.")
Fn+F10	Display brightness. Press the hotkey and then the right arrow key to increase display brightness or the left arrow key to decrease brightness.
Fn+T	Image centering/expanding. After centering/expanding is enabled (by settings in Display Properties), press the hotkey to toggle between centering with a black border around or expanding to fill the screen. (For more information, see "Image Panning or Expanding" in Chapter 7.)
Fn+Esc	BIOS. Press the hotkey, then the down arrow key to view BIOS dates for the system, video, keyboard, and expansion (when docked in a base). (The upgradable system BIOS provides basic functional instructions to the computer.)
Fn+Suspend	Hibernation. Press Fn simultaneously with the suspend button to manually initiate Hibernation. (For more information, see Chapter 4, "Using Power and Power Management.")

Embedded Numeric Keypad

The embedded numeric keypad is a section of the main keyboard that converts to a numeric keypad when the num lock function is enabled. Press **Fn+NumLk** to toggle the num lock function on and off. The num lock light turns on to indicate when num lock is on.

When num lock is on, the blue numbers and symbols on top of the keys within the embedded numeric keypad are active.

To type the black letters and symbols that are within the keypad area when num lock is on, do the following:

- For lowercase, press **Fn** and the letter.
- For uppercase, press **Fn+Shift** and the letter.

Programmable Keys

The four programmable keys at the top left of the keyboard can be programmed to quickly open frequently used documents or programs or to emulate a Windows Logo key or Application Logo key. The programmable keys are numbered one through four, left to right.

By assigning the programmable keys to schemes, you can create multiple sets of key assignments tailored for various tasks or for more than one user.

Opening the Programmable Keys Dialog Box

To open the Programmable Keys dialog box:

- In Windows 95, click Start→Settings→Control Panel→Keyboard→Programmable Keys.
- In Windows NT, click Start→Settings→Control Panel→Programmable Keys.

NOTE: Pressing an unassigned programmable key opens Keyboard Properties in Windows 95 and the programmable keys dialog box in Windows NT.

The option in the dialog box to Show Key Assignments in the System Tray enables the programmable keys icon on the taskbar. When this option is enabled, you can click the taskbar icon to quickly view key assignments for the current scheme.

When Show Advanced Options is enabled, the Assign button changes to a Browse button.

Assigning Programmable Keys

To assign a program, document, or logo key to a programmable key:

1. Open the Programmable Keys dialog box as described earlier in this chapter.
2. Click the button next to the number of the programmable key that you want to assign in the current scheme.

NOTE: If you have never created a scheme, the default scheme is current. To select a previously created scheme, click Show Advanced Options, then select the scheme from the drop-down list.

3. Click the Assign button or click the Browse button. (The Browse button shows when the Show Advanced Options box is checked.)
 - The Assign button displays a list of programs from the Programs menu and the Windows logo keys.
 - The Browse button allows you to look in drives and folders to find a program or document.
4. Highlight the program, document, or Logo key that you want to assign and click OK. (The name and icon of the file you selected appears next to the programmable key.)
5. Click Apply, or click OK to apply and close the dialog box.

When you press the programmable key, it activates the program, document, or Logo key that you assigned to that key.

Unassigning Programmable Keys

To remove a programmable key assignment:

1. Open the Programmable Keys dialog box as described earlier in this chapter.
2. Click the button next to the number of the programmable key that you want to unassign in the current scheme.

NOTE: If you have never created a scheme, the default scheme is current. To select a previously created scheme, click Show Advanced Options, then select the scheme from the drop-down list.

3. Click the Assign button. (A dialog box appears showing a list of programs.)
NOTE: If the Browse button shows instead of the Assign button, click to remove the check mark from Show Advanced Options.
4. Highlight Unassigned in the list and click OK. (The word “Unassigned” appears next to the programmable key.)
5. Click Apply, or click OK to apply and close the dialog box.

Adding Schemes

Schemes are a collection of programmable key assignments. You can create multiple schemes. For example, you can create a scheme called “home” for programs and documents that you use at home and a scheme called “work” for programs and documents that you use at work.

To add a new scheme:

1. Open the Programmable Keys dialog box as described earlier in this chapter.
2. Click to select Show Advanced Options.
3. Click the Add button.
4. Type the name of your new scheme in the popup dialog box and press **Enter**.
5. Assign programmable keys as described earlier.
6. Click Apply, or click OK to apply and close the dialog box.

Removing Schemes

To remove a scheme:

1. Open the Programmable Keys dialog box as described earlier in this chapter.
2. Click to select Show Advanced Options.
3. Select the scheme you want to remove from the drop-down list. The default scheme is not removable.
4. Click the Remove button.
5. Click Apply, or click OK to apply and close the dialog box.

chapter 4

USING POWER AND POWER MANAGEMENT

This chapter describes power sources, power controls and indicators, turning on and shutting down the computer, and power management (including Suspend and Hibernation).

Power Sources

You can power the computer with a rechargeable battery pack.

You can power the computer and charge the battery pack by connecting to an external power source.

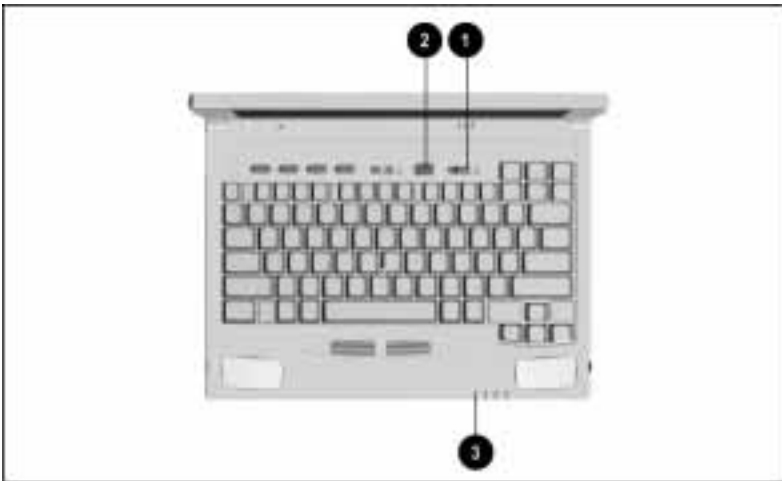
An external power source can be the AC Adapter, the Automobile Adapter option, the ArmadaStation, or the Armada MiniStation.

NOTE: For information about using and charging battery packs, see Chapter 5, “Using Battery Packs.”

Power Controls and Light

The computer has two power controls and a power/suspend light:

- ❶ Power switch. Turns the computer on (and off, if Shut Down does not turn power off).
- ❷ Suspend button. Initiates and exits Suspend. Initiates Hibernation when pressed simultaneously with the **Fn** key.
- ❸ Power/suspend light. Turns on when computer is turned on; blinks when computer is in Suspend; turns off when computer is turned off.



Power Controls and Light

When the computer is on or in Suspend, ensure that the fan on the left side of the computer and the air vents in the PC Card slot doors on the right side of the computer are clear of all obstructions.



CAUTION: If airflow is blocked, the computer may overheat and unexpectedly initiate Suspend (or turn off when docked).

Turning the Computer On and Off

Turning the Computer On

After you have connected the computer to an external power source or inserted a charged battery pack, turn on the computer by sliding the power switch to the right and releasing it. The power/suspend light turns on.

Shutting Down the Computer

Follow these steps to shut down the computer:

1. Save your work and close applications.
2. Click the Start button.
3. Click Shut Down.
4. Click Yes to shut down the computer. (The computer automatically turns power off when it is safe to do so.)

IMPORTANT: Do not turn off the computer without shutting down Windows, unless you experience a system lockup. If the system stops responding (locks up), press **Ctrl+Alt+Del**. If the system does not respond to **Ctrl+Alt+Del**, turn off the computer by sliding the power switch to the right. Wait about 10 seconds before turning the computer on again.

When to Shut Down the Computer

Consider the following guidelines when deciding whether to shut down the computer:

- If you use the computer frequently during the day, you do not have to shut it down; you can initiate Suspend to conserve power.
- If you will not be using the computer for long periods, such as overnight, you may want to initiate Hibernation or shut down the computer to conserve power.
- If the computer has a fully charged battery pack, it can be left in Suspend for up to a week. However, each additional discharge/recharge cycle shortens the life of the battery pack.
- If the computer will be disconnected from an external power source for more than two weeks, shut down the computer and remove the battery pack to reduce battery discharge and extend the life of the battery pack.

Power Management

Power management settings conserve power by shutting down components, initiating Suspend, or initiating Hibernation after a specified period of inactivity called a timeout.

Initiating Suspend

Suspend turns off power to system components when they are not being used. While operating on battery power, the system automatically initiates Suspend after a specified timeout, the factory-default is five minutes. (You can change the Suspend timeout on the Battery Conservation Settings tab in Power Properties.) Suspend is also automatically initiated by a critical low-battery condition if Hibernation has been turned off.

NOTE: Suspend does not automatically initiate when the Infrared Monitor utility in Windows 95 is searching for an infrared device (see “Infrared Software” in Chapter 9), or when a CD-ROM drive is in the system and CD-ROM Auto Insert Notification is enabled (see “Battery Conservation Settings Tab” later in this chapter).

You can manually initiate Suspend by pressing the Suspend button or by clicking Start→Suspend. (In Windows 95, the option to show Suspend on the Start menu is on the Power tab in Power Properties.)

When Suspend is initiated, the screen blanks, the system beeps twice, and the power/suspend light begins blinking slowly. Information remains in system memory until you exit Suspend.

With a fully charged battery pack, the computer can be left in Suspend for up to a week. However, if you will not be using the computer for long periods, it is best to save your work before Suspend is initiated.

Exit Suspend by pressing the suspend button or by sliding the power switch. The system beeps once, the power/suspend light stops blinking, and your information returns to the screen at the point where Suspend was initiated.

IMPORTANT: The computer may not exit Suspend if it is in a critical low-battery condition. If the power/suspend light and the battery light are both blinking, resolve the low-battery condition and then exit Suspend.

Initiating Hibernation

Hibernation saves all information in memory to a Hibernation file on the hard drive and shuts down the computer. When you turn on the computer again, your information returns to the screen at the point where Hibernation was initiated.

NOTE: Hibernation is not available when the computer is docked in the optional ArmadaStation or Armada MiniStation.

The factory-default setting initiates Hibernation only during a critical low-battery condition. If you change the setting on the Hibernation tab in Power Properties to Suspend or to a timeout, that setting is in addition to the low-battery setting.

You can manually initiate Hibernation by pressing **Fn** and the suspend button.

When Hibernation is initiated, the system beeps twice, the screen blanks while the Hibernation file is being saved, then power is automatically turned off to the system. Because the computer is off, there is no limit to the amount of time it can remain in Hibernation.

Hibernation can be used in the following ways:

- As a safeguard to automatically save information when the computer reaches a critical low-battery condition.
- As a bookmark to save your place for longer periods than can be done in Suspend.
- To save power by turning off the computer after a specified period of time in Suspend.

If the battery pack does not have enough charge to exit Hibernation when you turn on the computer, insert a fully charged battery pack or connect an external power source.

If you need to stop the restoration from Hibernation, press **Fn+Ctrl+Break**.

Power Management Settings

You can access power management settings within Windows or by running Computer Setup.

- To run Computer Setup, turn on or restart the computer and press **F10** when the cursor appears near the upper-right corner of the screen. Select Computer Setup→System Features→Power Management.
- In Windows, double-click the Power icon in Control Panel to open Power Properties, then click a tab (listed below) to view or change settings:

NOTE: You can also open Power Properties from the power/battery icon in the notification area (system tray) on the taskbar. In Windows 95, right-click the icon, then click Adjust Power Properties. In Windows NT, single or double-click the icon.

Windows Power Properties

Tab	Settings
Power (Windows 95 only)	Enable/disable allowing Windows to manage power, show battery meter on the taskbar, and other Advanced power features.
Disk Drives (Windows 95 only)	Set timeouts for drives when using battery power or AC power.
PC Card Modems (Windows 95 only)	Turn off PC Card modems when not in use.
AC Energy Saver (Windows NT only)	Enable/disable AC Energy Saver and set hard drive and screen timeouts to conserve power when connected to an electrical outlet.
Hibernation	Set Hibernation timeout, drive for Hibernation file, enable/disable Hibernation.
Battery Conservation Settings	Set battery conservation level and enable/disable low-battery warning beeps. In Windows NT, enable/disable CD-ROM Auto Insert Notification.
Resume Timer	Enable/disable Resume Timer and set date and time to exit (resume) from Suspend.
Battery Status	Display the charge status and location of each battery pack in the system.

AC Energy Saver Tab

In Windows NT, the AC Energy Saver tab allows you to turn on or off power conservation settings when connected to an electrical outlet. When AC Energy Saver is on, you can enable/disable Energy Save Monitor and set timeouts for the hard drive idle and screen save.

If you enable the Energy Save Monitor feature and your external monitor is not Energy Star-compliant, the display may become distorted when the screen save timeout expires.

NOTE: In Windows 95, the hard drive timeout is on the Disk Drives tab, and the Energy Save Monitor and screen timeout are in Display Properties.

Hibernation Tab

The factory-default Hibernation setting is low-battery, which means the system initiates Hibernation when the battery pack reaches the critical low-battery condition. If you change the setting to Hibernate on Standby (Suspend) or after a specified timeout in Suspend, that setting is in addition to Hibernation on low-battery.

You can turn Hibernation off. However, it is *not* recommended. If Hibernation has been turned off and the computer reaches a critical low-battery condition, Suspend is initiated. If the critical low-battery condition is not resolved, unsaved information is lost when the computer shuts down.



CAUTION: To prevent losing unsaved work if you have turned off Hibernation, quickly resolve a low-battery condition.

You can change the drive for the Hibernation file, but the drive choices are partitions on the hard drive in the hard drive bay. The system reserves space on that drive for the Hibernation file based on the amount of system memory, so that all data in memory can be saved at Hibernation.

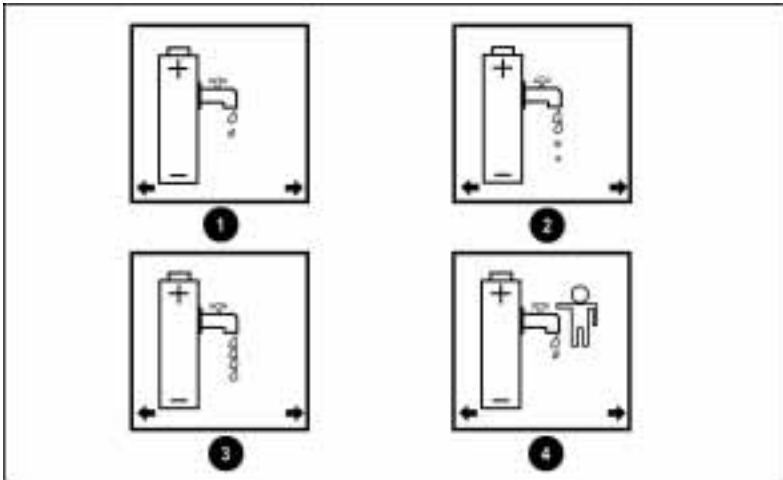
Battery Conservation Settings Tab

In addition to the battery conservation settings, this tab also has an option to turn off or on the low-battery warning beeps and, in Windows NT, an option to disable or enable CD-ROM auto insert notification.

Conservation Level and Settings: View or change the level of battery conservation and the Custom conservation settings:

- ❶ High—provides maximum battery conservation and the most battery life from a single charge.
- ❷ Medium—factory-default setting; provides a balance between system performance and battery life.
- ❸ None (Drain)—turns off battery conservation, so that the system runs at full power.
- ❹ Custom—allows you to specify timeout settings for Suspend, system idle, hard disk idle, screen save, processor speed, and brightness.

NOTE: To view or change conservation levels quickly, press the battery conservation hotkey **Fn+F7**. Press the left or right arrow keys to select a different level in the popup window.



Fn+F7 Battery Conservation Hotkey Popup Window

Low Battery Warning Beeps: You can turn off or on the low-battery warning beeps. However, if you turn them off, the only indication of a low-battery condition may be the blinking battery light.

CD-ROM Auto Insert Notification: In Windows NT, the Battery Conservation Settings tab includes an option to disable or enable CD-ROM Auto Insert Notification. If you have a CD-ROM drive and are operating on battery power, you may want to disable Auto Insert Notification.

NOTE: In Windows 95, you can disable or enable CD-ROM Auto Insert Notification from the Device Manager tab in System Properties. Click Start→Settings→Control Panel→System→Device Manager→CD-ROM→[drive]→Settings tab.

When Auto Insert Notification is enabled, the system constantly polls the CD-ROM drive so that it can automatically start a CD-ROM when inserted. This constant polling prevents the system from initiating Suspend after a specified timeout. (You can, however, initiate Suspend by pressing the suspend button.)

If you want the system to automatically initiate Suspend while a CD-ROM drive is in the system, disable the CD-ROM Auto Insert Notification. You can then either enable it before inserting a CD-ROM, or start the CD-ROM by using the Start→Run command.

chapter 5

USING BATTERY PACKS

This chapter contains guidelines for using and storing battery packs, ensuring battery gauge accuracy, and extending battery pack operating time.

For used battery recycling requirements, see “Battery Notice” in Appendix B.



WARNING: To reduce the risk of injury or damage to the battery pack, do not crush, puncture, or incinerate the battery pack or short the metal contacts. Do not attempt to open or service the battery pack.

Battery Gauges

Ensuring Battery Gauge Accuracy

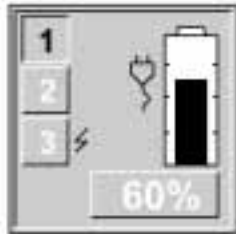
The computer uses a rechargeable lithium ion battery pack with a built-in battery gauge. Follow these guidelines to ensure battery gauge accuracy:

- Allow new battery packs and battery packs that have been unused for two weeks or more to fully charge before you disconnect the external power source.
- Allow a battery pack to fully charge as often as practicable before removing the external power source.
- Allow a battery pack to discharge to the low-battery warning level as often as practicable—at least every 90 days.

Battery Gauge Hotkey

The battery gauge hotkey, **Fn+F8**, displays the popup window illustrated below, which shows the charge status of batteries in three possible positions:

1. Computer battery bay
2. Right MultiBay in the ArmadaStation or battery charging bay in the Armada MiniStation EX.
3. Left Multibay in the ArmadaStation (with the Armada 7000 Half-Height MultiBay Adapter) or in the Armada MiniStation EX.



In the illustration above, the black number 1 on the depressed button indicates that the remaining charge displayed (60%) is for the battery pack in the computer battery bay. The lightning bolt to the right of button 3 indicates that a battery pack in the left MultiBay of the ArmadaStation or Armada MiniStation EX is charging.

Press the down arrow key to view the charge status of the next battery pack. Press the up arrow key to view the charge status of the previous battery pack. Bays that do not contain a battery pack are not selectable.

If you do not press an arrow key within five to seven seconds, the battery gauge shows the average charge of all battery packs in the system.

Battery Status in Power Properties

The Battery Status tab in Power Properties shows a list of batteries in the system and the amount of charge remaining for each. Click **Start→Settings→Control Panel→Power→Battery Status**.

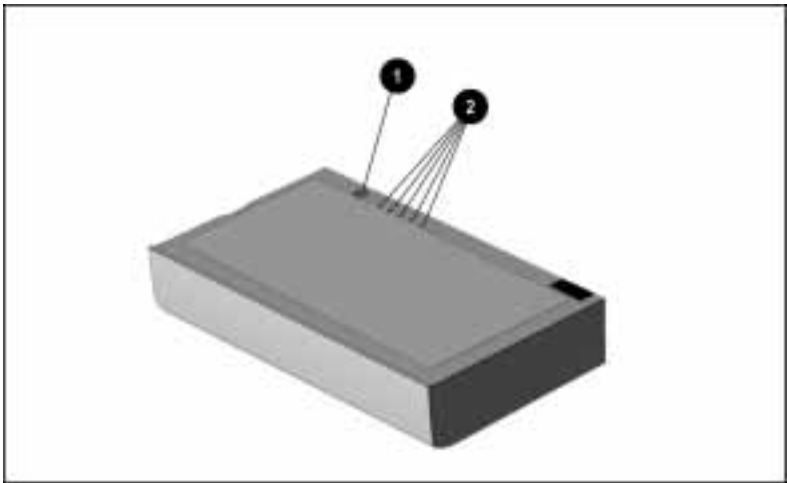
Battery Meter on Taskbar

The battery icon in the notification area (system tray) on the taskbar is a quick way to view the remaining battery charge. The icon changes appearance to indicate when the charge is getting low. Hold the onscreen pointer over the icon to see the charge in a tool tip. In Windows 95, double-click the icon to open the battery meter.

Gauge on the Battery Pack

To see how much charge remains in a battery pack before inserting it into the computer, press the button ❶ on top of the battery pack to activate the charge level lights ❷.

Each light represents 20 percent of a full charge. If all five lights are on, the battery pack is fully charged. If two yellow lights are on, only 40 percent of a full charge remains.



Battery Charge Level Lights on a Battery Pack

Charging Battery Packs

You can charge the battery pack in the battery bay by connecting the computer to an external power source. When the battery pack begins charging, the battery light on the front of the computer turns on. When the battery pack completes its charge, the battery light turns off.

NOTE: A battery pack begins charging if the remaining charge is approximately 93 percent or less.

The battery pack in the computer will charge when the computer is off or when it is on and in use. A fully discharged battery pack fully charges in approximately 1.5 hours if the computer is off, and approximately 3 hours if the computer is on and in use.

NOTE: You can also charge battery packs in the optional Battery Charger, ArmadaStation, or Armada MiniStation EX.



Battery Light on Computer

Identifying and Resolving a Low-Battery Condition

When a battery pack powering the computer reaches a low-battery condition, the battery light begins blinking and the system begins beeping three times about every minute.

NOTE: If you have disabled the low-battery warning beeps, the blinking battery light may be the only indication of a low-battery condition.

To resolve a low-battery condition, save your work, then take one of the following steps:

- Initiate Suspend and immediately replace the discharged battery pack with a fully charged battery pack.
- Connect to an external power source to charge the battery pack in the computer.
- Initiate Hibernation or shut down the computer until an external power source or a charged battery pack is available.

If you do not resolve the low-battery condition and the computer reaches a *critical* low-battery condition, the computer beeps twice, saves data to a Hibernation file, and shuts down.

If you have turned off Hibernation, the computer beeps twice, initiates Suspend, and the power/suspend light begins blinking along with the battery light. If you do not resolve the *critical* low-battery condition, unsaved work is lost when the computer shuts down.

Replacing a Discharged Battery Pack

Removing a Battery Pack

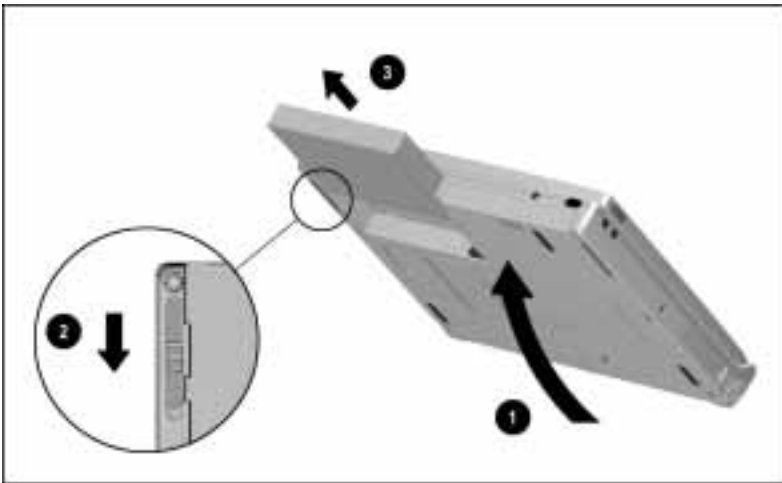
To remove a discharged battery pack from the battery bay:

1. If the computer is on, save open files and initiate Suspend. The power/suspend light begins blinking.



CAUTION: To prevent loss of unsaved information when the computer is on, save open files, initiate Suspend, then immediately replace the discharged battery pack.

2. Tilt the computer up ① to locate the battery release latch.
3. Slide the battery release latch toward the back of the computer ②.
4. Place your hand under the battery pack and pull the battery pack out of the battery bay ③.



Removing the Battery Pack from the Battery Bay

Inserting a Battery Pack

To insert a battery pack into the battery bay:

1. With the label on the battery pack facing up and the battery contacts facing in, insert the battery pack into the battery bay until it clicks into place.
2. Turn on the computer or, if the computer is in Suspend, press the suspend button to return your information to the screen.

Extending Battery Pack Operating Time

The operating time of battery packs can vary depending on the options and applications used and the conservation settings selected. To get the maximum operating time from battery packs, follow these guidelines:

- Select the High battery conservation level (see Chapter 4, “Using Power and Power Management”).
- Initiate Suspend or Hibernation or turn off the computer when you will not be using it for several hours.
- Reduce the brightness of the display and select a shorter screen save timeout.
- Exit modem programs when not in use.
- Remove PC Cards when not in use.
- Disconnect external equipment not in use that does not have its own power source.
- Use an external power source when available.
- If the computer will be disconnected from external power for more than two weeks, remove the battery pack to reduce the discharge.

Storing Battery Packs

Store the battery pack in a cool, dry place. High temperatures reduce the life of the battery pack and cause it to lose its charge more quickly. The following are recommended storage temperatures:

- Less than one month, 32°F to 122°F (0°C to 50°C)
- No more than three months, 32°F to 104°F (0°C to 40°C)
- An unlimited time, 32°F to 86°F (0°C to 30°C)



CAUTION: To prevent permanent damage to a battery pack, do not expose it to high temperatures for extended periods of time.

chapter 6

WORKING WITH REMOVABLE DRIVES

This chapter describes how to remove, insert, and care for removable drives and how to change the factory-default boot order.

The computer has one hard drive bay that supports a removable hard drive and one MultiBay that supports a diskette drive, CD-ROM drive, or second hard drive.

The hard drive in the hard drive bay when the computer is purchased is partitioned into two or more logical drives, depending on the size of the hard drive. All the preinstalled software is in the primary partition, drive C.

The diskette drive in the MultiBay when the computer is purchased accepts 3.5-inch diskettes with the following formats: 1.44 MB, 720 KB, or 1.2 MB (Japanese format).

The 20X Max CD-ROM drive included with CD-ROM drive models accepts both 8-cm and 12-cm CD media and supports the following formats: ISO-9660, CD-XA, Photo CD, Video CD, CD-DA, and CD-I.

NOTE: To remove the hard drive from the hard drive bay, as described in this chapter, you will need a Torx T-8 screwdriver to remove the factory-installed security plate. If you want to replace the factory-installed security plate with the tamper-resistant security plate, see Chapter 14, “Security Features.”

Caring for Removable Drives

Removable drives are fragile components that must be handled with care. A hard drive carrying case and a MultiBay device carrying case are supplied with the computer to protect drives when they out of the drive bays.

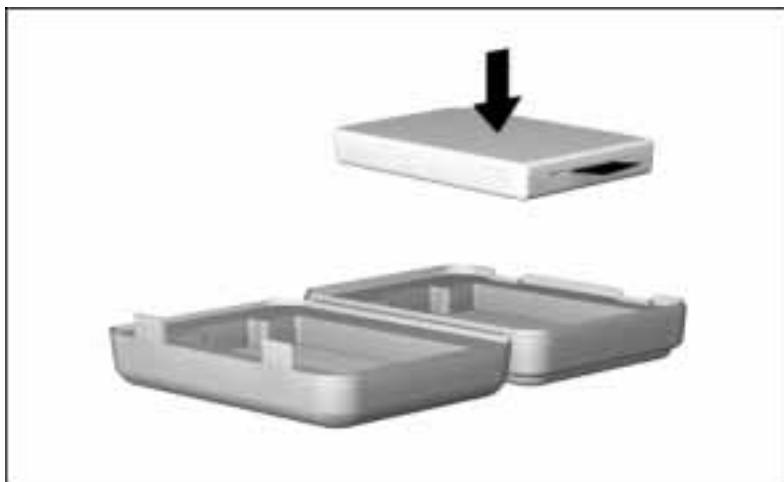


CAUTION: To prevent damage to the computer, damage to a removable drive, or loss of information, observe these precautions:

- Before removing or inserting a hard drive, shut down the computer. If you are unsure whether the computer is off or in Hibernation, turn the computer on, then shut it down.
 - Before removing a diskette drive, ensure that no diskette is in the drive.
 - Before removing a CD-ROM drive, ensure that no CD is in the drive and that the CD tray is closed.
 - Before handling a drive, ensure that you are discharged of static electricity. While handling a drive, avoid touching the connector. For more information about preventing electrostatic damage, refer to Appendix C.
 - Handle a drive carefully; do not drop it.
 - After removing a hard drive, immediately place it into the hard drive carrying case. Do not place a hard drive into the MultiBay device carrying case.
 - After removing a CD-ROM drive or a diskette drive, immediately place it into the MultiBay device carrying case.
 - Do not use excessive force when inserting a drive into a drive bay.
 - After inserting a hard drive into the hard drive bay, always reinsert either the original hard drive security plate or the tamper-resistant security plate to prevent the hard drive from accidentally disconnecting.
 - Avoid exposing a hard drive to products that have magnetic fields such as monitors or speakers.
 - Avoid exposing a drive to temperature extremes.
 - Avoid exposing a drive to liquids. Do not spray it with cleaners.
 - If a drive must be mailed, do the following. Place the drive into its carrying case. Place the carrying case into a bubble pack mailer or other suitable form of protective packaging. Label the package "Fragile: Handle With Care."
-

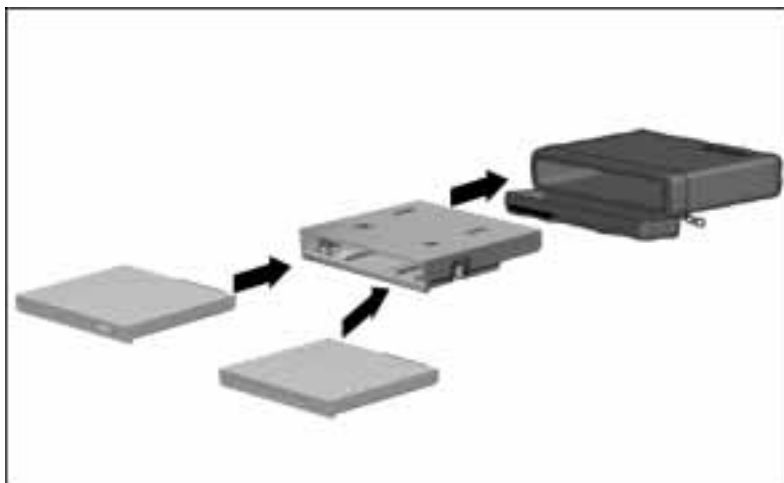
Placing Drives in Their Carrying Cases

A hard drive carrying case is supplied with the computer to protect a hard drive when it is out of the drive bay. Do not place a hard drive into a MultiBay device carrying case.



Placing a Hard Drive into a Hard Drive Carrying Case

A MultiBay device carrying case is supplied with the computer to protect a diskette drive or CD-ROM drive when it is out of the MultiBay. Insert the drive into the Armada 7000 Removable Drive MultiBay Adapter, then into the carrying case.



Placing a CD-ROM Drive or Diskette Drive into a MultiBay Device Carrying Case

Removing/Inserting a Hard Drive in the Hard Drive Bay

Removing a Hard Drive from the Hard Drive Bay

The original hard drive in the computer hard drive bay has the software and drivers necessary for the computer to start (boot) and operate properly. The computer must start from a bootable drive.

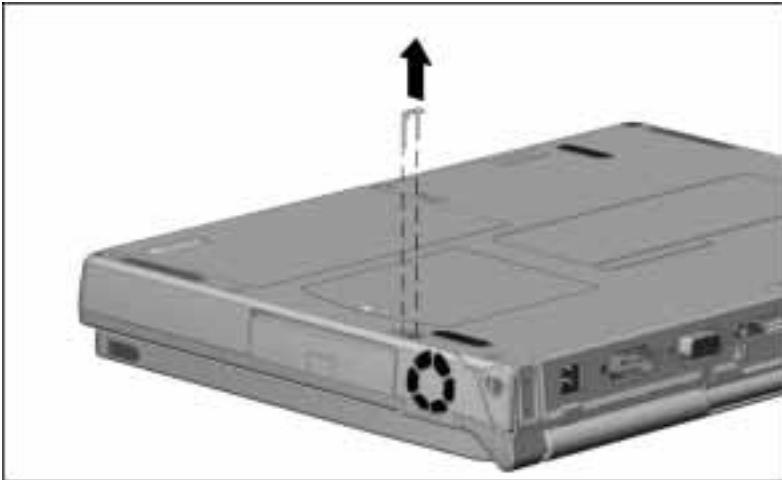
Before removing a hard drive, Compaq recommends that you back up all information on the hard drive.

IMPORTANT: Before handling a removable drive, read the cautions under “Caring for Removable Drives” earlier in this chapter.

To remove a hard drive from the hard drive bay:

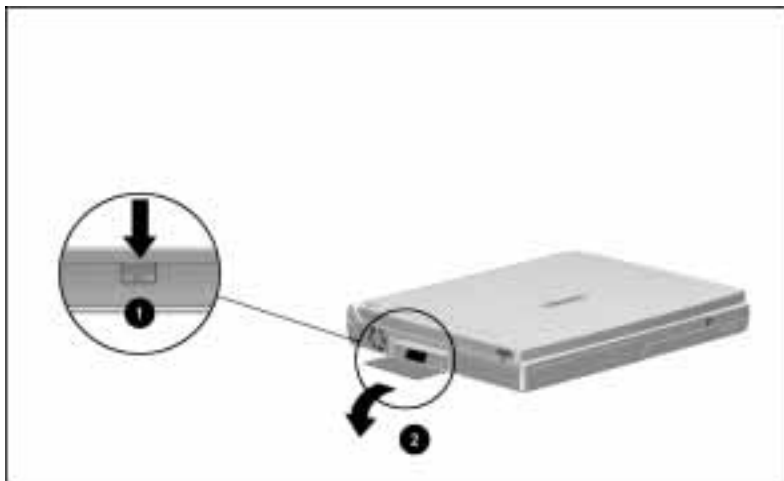
1. Save your work and shut down the computer.
2. Close the display and turn the computer upside down.
3. Remove the hard drive security plate from the bottom of the computer. Then turn the computer right side up.

NOTE: Use a Torx T-8 screwdriver to remove the factory-installed security plate. If the tamper-resistant security plate has been installed, use the screwdriver supplied with the computer to remove it.



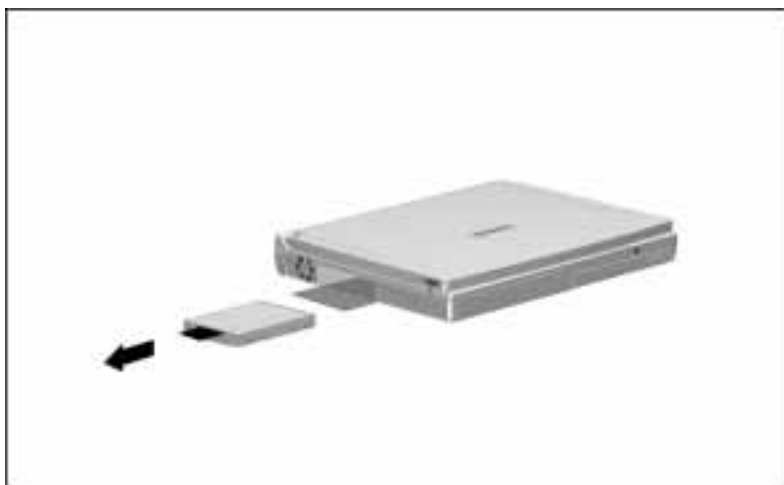
Removing the Hard Drive Security Plate

4. Open the hard drive door by sliding the door latch down ❶ and pulling the door open ❷.



Opening the Hard Drive Door

5. Grasp the hard drive tab and pull the drive from the drive bay.



Removing the Hard Drive from the Hard Drive Bay

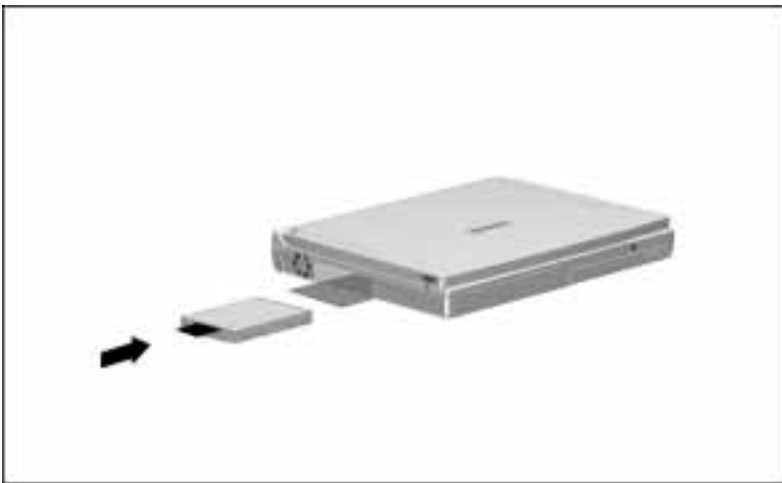
6. Place the hard drive into the hard drive carrying case.
7. Push the hard drive door in to close it, or follow the steps in this chapter to insert another hard drive into the bay.

Inserting a Hard Drive into the Hard Drive Bay

IMPORTANT: Before handling a removable drive, be sure you have read the cautions under “Caring for Removable Drives” earlier in this chapter.

To insert a hard drive into the hard drive bay:

1. If the computer is on, shut it down.
2. If the hard drive security plate is installed, turn the computer upside down and remove the security plate. Then turn the computer right side up.
3. Open the hard drive door by sliding the door latch down and pulling the door open.
4. With the connector near the lower edge of the drive facing in and the hard drive tab facing out, insert the drive into the hard drive bay until it clicks into place.



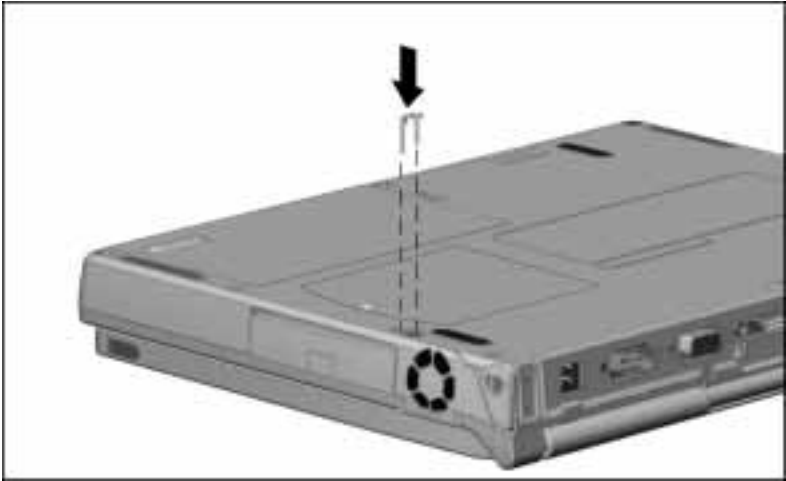
Inserting a Hard Drive into the Hard Drive Bay

5. Tuck the hard drive tab inside the hard drive door as you close the door.

6. Close the computer if it is open and turn it upside down.
7. Use a Torx T-8 screwdriver to insert the original hard drive security plate, or use the screwdriver supplied with the computer to insert the tamper resistant security plate.



CAUTION: To prevent damage to the hard drive or loss of data, always reinsert either the original hard drive security plate or the tamper-resistant security plate to prevent the hard drive from accidentally disconnecting.



Inserting the Hard Drive Security Plate

Using MultiBay Adapters

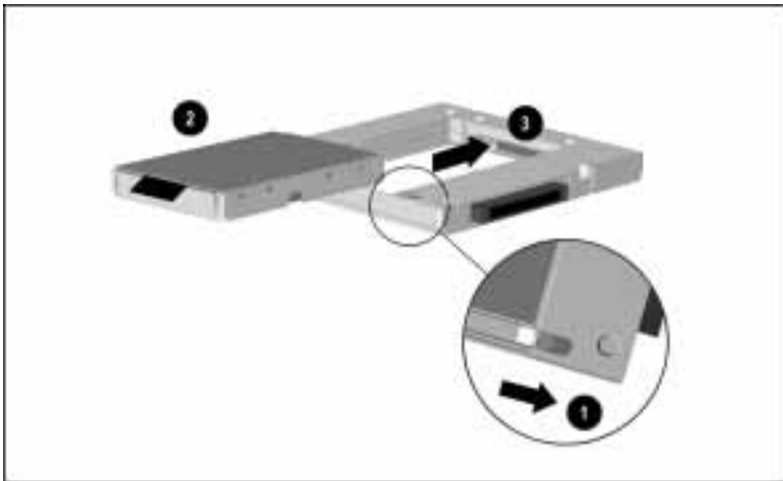
Inserting a Hard Drive into the Armada 7300 Hard Drive MultiBay Adapter

Before inserting a hard drive into the computer MultiBay, insert it into the Armada 7300 Hard Drive MultiBay Adapter. The adapter is included with an Armada 7300 hard drive option kit and is also available as a separate option.

IMPORTANT: Before handling a removable drive, be sure you have read the cautions under “Caring for Removable Drives” earlier in this chapter.

To insert a hard drive into the Hard Drive MultiBay Adapter:

1. Push the slide tab in the Hard Drive MultiBay Adapter toward the back of the adapter ❶.
2. Hold the hard drive with the connector near the lower edge of the drive facing the connector inside the adapter ❷.
3. Slide the drive toward the connector inside the adapter until it is seated ❸.



Placing a Hard Drive into the Hard Drive MultiBay Adapter

4. Release the adapter slide tab. (The tab returns to its original position if the drive is seated.)
5. Tuck the hard drive tab inside the adapter.
6. Follow the steps under “Inserting a Drive into the MultiBay.”

NOTE: The computer must be off before inserting or removing a hard drive.

Removing/Inserting a Drive in the Armada 7000 Removable Drive MultiBay Adapter

An Armada 7000 Removable Drive MultiBay Adapter is supplied with the computer CD-ROM drive models and with Armada 7300 20X Max CD-ROM drive option kits.

There are two models of the MultiBay adapter. One model has a release latch on the right side, and the other model has two release latches on the bottom. You may have either model.

The adapter is *not* needed to insert an Armada 7300 removable drive into the Armada 7300 computer MultiBay. Before inserting a removable drive into the computer MultiBay, follow the steps in this chapter to remove the drive from the adapter model that you have.

NOTE: When the adapter is not being used, protect it by placing it into the MultiBay device carrying case. When a CD-ROM drive or diskette drive is out of a MultiBay, protect it by inserting it into the MultiBay adapter, then into the MultiBay device carrying case.

The adapter *is* needed to insert an Armada 7300 removable drive into a MultiBay of the ArmadaStation, Armada MiniStation EX, or Armada 7700 computer. With the adapter, the following Armada 7300 removable drives can be used in Armada 7000 MultiBays:

- Diskette drive in the ArmadaStation, Armada MiniStation EX, or Armada 7700 computer
- 20X Max CD-ROM drive in the ArmadaStation or Armada MiniStation EX

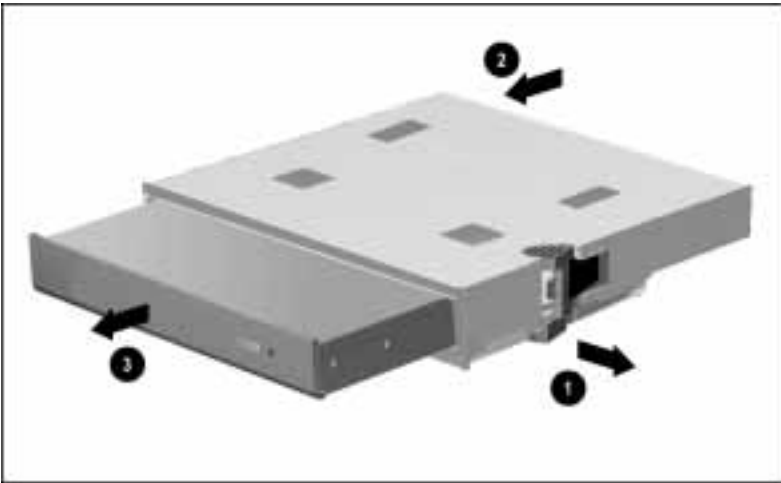
Before inserting a removable drive into one of the Armada 7000 MultiBays listed above, follow the steps in this chapter to insert the drive into the adapter model that you have.

Removing a Drive from the MultiBay Adapter That Has One Release Latch

To remove a drive from the Armada 7000 Removable Drive MultiBay Adapter that has one release latch on the right side:

1. Apply light pressure to both the top and bottom of the release latch on the right side of the adapter and pull it out slightly ❶.
2. Push forward on the back of the drive ❷ (without touching the connector) until you can grasp the front of the drive.
3. Slide the drive out of the adapter ❸.

NOTE: Store the adapter in the MultiBay device carrying case.



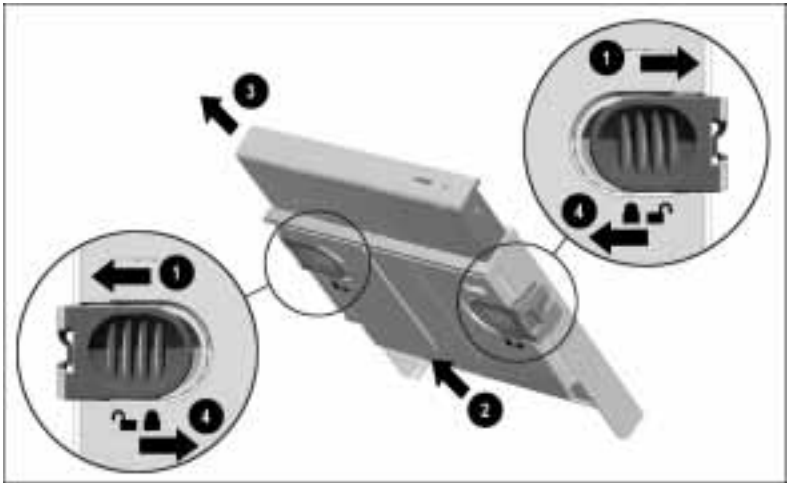
Removing a Drive from a MultiBay Adapter That Has One Release Latch

Removing a Drive from the MultiBay Adapter That Has Two Release Latches

To remove a drive from the Armada 7000 Removable Drive MultiBay Adapter that has two release latches on the bottom:

1. Slide the two release latches on the bottom of the adapter away from the center of the adapter until they click into the unlocked position ❶.
2. Push forward on the back of the drive ❷ (without touching the connector) until you can grasp the front of the drive.
3. Remove the drive from the adapter ❸.
4. Slide the two release latches toward the center of the adapter until they click into the locked position ❹.

NOTE: Store the adapter in the MultiBay device carrying case.

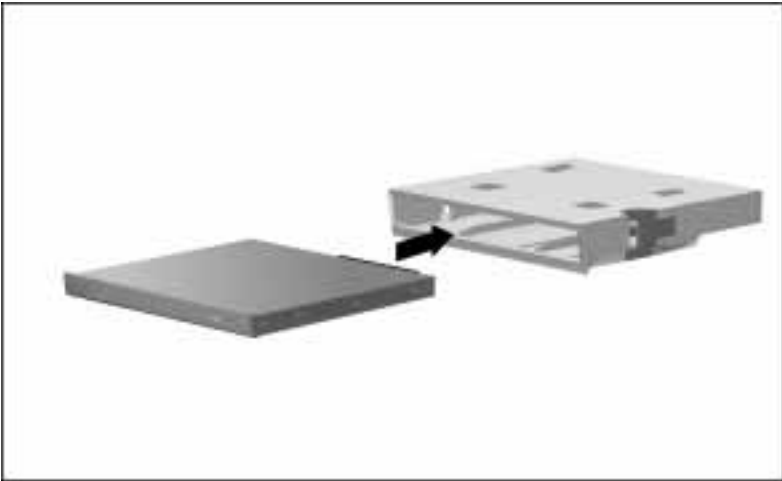


Removing a Drive from a MultiBay Adapter That Has Two Release Latches

Inserting a Drive into the MultiBay Adapter That Has One Release Latch

To insert a CD-ROM drive or diskette drive into the Armada 7000 Removable Drive MultiBay Adapter that has one release latch on the right side:

1. Hold the drive with the connector on the right facing the front of the adapter.
2. Slide the drive into the adapter until the front of the drive is flush with the front of the adapter.

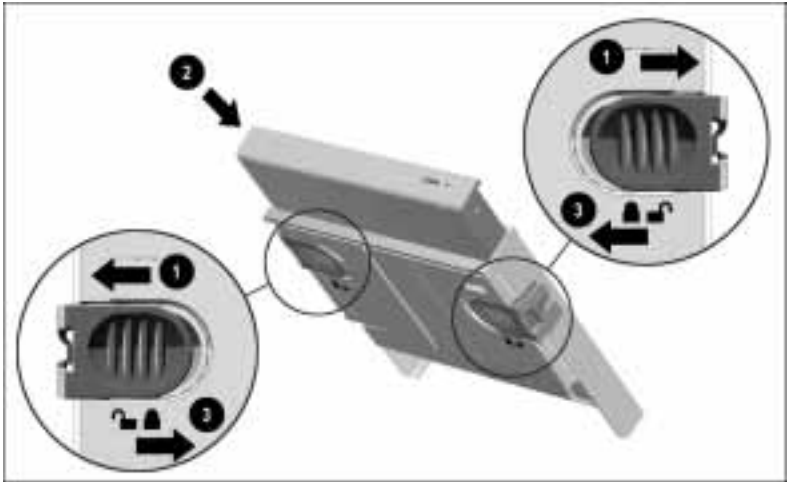


Inserting a Drive into the a MultiBay Adapter That Has One Release Latch

Inserting a drive into the MultiBay Adapter That Has Two Release Latches

To insert a CD-ROM drive or diskette drive into the Armada 7000 Removable Drive MultiBay Adapter that has two release latches on the bottom:

1. Slide the two release latches on the bottom of the adapter away from the center of the adapter until they click into the unlocked position ❶.
2. Hold the drive with the connector on the right facing the front of the adapter.
3. Slide the drive into the adapter until the front of the drive is flush with the front of the adapter ❷.
4. Slide the two release latches toward the center of the adapter until they click into the locked position ❸.



Inserting a Drive into a MultiBay Adapter That Has Two Release Latches

Removing/Inserting Drives in the Computer MultiBay

Removing a Drive from the Computer MultiBay

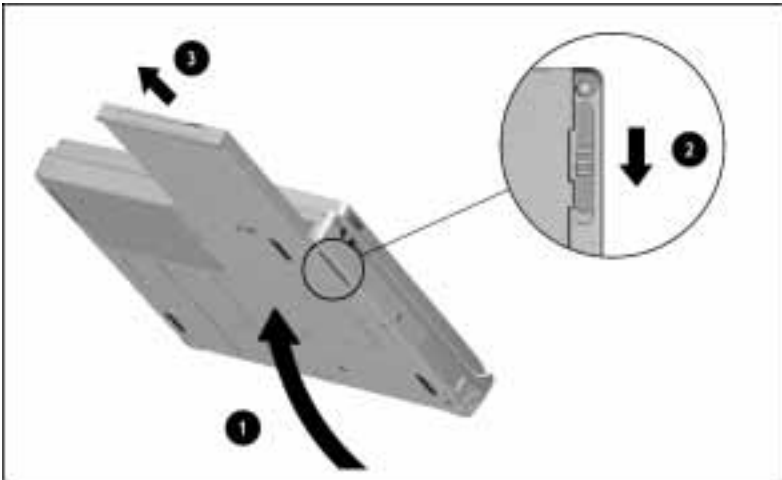
IMPORTANT: Before handling a removable drive, be sure you have read the cautions under “Caring for Removable Drives” earlier in this chapter.

To remove a drive from the MultiBay:

1. In Windows 95, save your work and shut down the computer to remove or insert a hard drive or a CD-ROM drive. Do not remove or insert any drive when the computer is in Hibernation.

In Windows NT, shut down the computer to remove or insert a hard drive. You can remove or insert a diskette drive or a CD-ROM drive when the computer is on, in Suspend, or off. Do not remove or insert any drive when the computer is in Hibernation.

2. Tilt the computer up ① to locate the MultiBay release latch and the notch underneath the outside edge of the MultiBay.
3. Grasp the edge of the drive at the notch.
4. Slide the MultiBay release latch toward the back of the computer ② and pull the drive out of the MultiBay ③.



Removing a Drive from the Computer MultiBay

5. Place the drive into its carrying case, then insert another drive or the MultiBay weight saver into the MultiBay.

Inserting a Drive into the Computer MultiBay

IMPORTANT: Before handling a removable drive, be sure you have read the cautions under “Caring for Removable Drives” earlier in this chapter.

NOTE: For the steps to insert a hard drive into the hard drive MultiBay adapter or to remove a diskette drive or CD-ROM drive from the removable drive MultiBay adapter, see “Using MultiBay Adapters” earlier in this chapter.

To insert a drive into the MultiBay:

1. In Windows 95, save your work and shut down the computer to remove or insert a hard drive or a CD-ROM drive. Do not remove or insert a drive when the computer is in Hibernation.

In Windows NT, shut down the computer to remove or insert a hard drive. You can remove or insert a diskette drive or a CD-ROM drive when the computer is on, in Suspend, or off. Do not remove or insert a drive when the computer is in Hibernation.

2. With the drive connector on the right facing in, slide the drive into the MultiBay until it clicks into place.



Inserting a Drive into the Computer MultiBay

Inserting the MultiBay Weight Saver

The MultiBay weight saver included with the computer covers the MultiBay opening without adding the weight of a drive.

When a MultiBay device is not needed, insert the MultiBay weight saver to protect the MultiBay from dust and debris and to lessen the weight of the computer.



Inserting the MultiBay Weight Saver

Remove the MultiBay weight saver from the MultiBay as you would remove a drive:

1. Tilt the computer up to locate the MultiBay release latch and the notch underneath the outside edge of the MultiBay.
2. Grasp the edge of the weight saver at the notch.
3. Slide the MultiBay release latch toward the back of the computer and pull the weight saver out of the MultiBay.

Opening the CD-ROM Tray

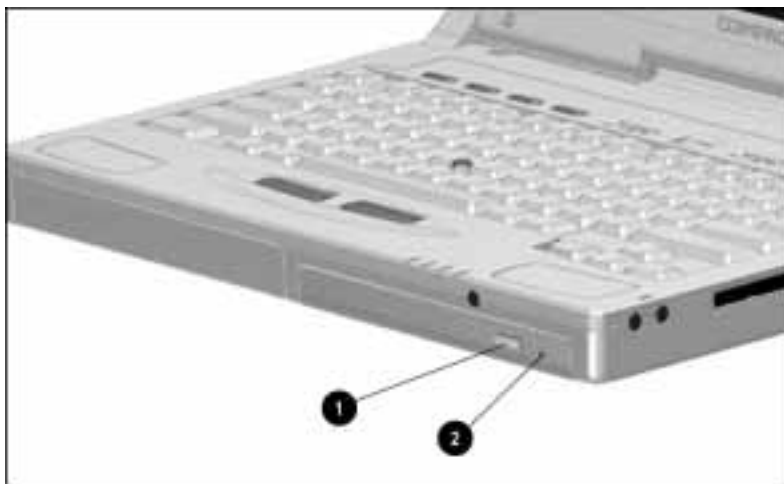
The CD-ROM drive, included with the computer or purchased as an option, has a retractable tray for inserting and removing CDs.

To open the CD-ROM tray, press the release button on the front of the drive ❶ when the computer is on.

If a condition such as a power failure prevents you from opening the tray with the release button, you can open it manually. Ensure that power is turned off to the computer, then open the CD-ROM tray by gently inserting a straightened paper clip or metal rod into the small hole ❷ to the right of the release button.

NOTE: The paper clip or metal rod should be approximately 1/16 inches (1.6 mm) in diameter and at least 1 3/8 inches (34.9 mm) in length.

Close the CD-ROM tray by pushing on the front panel of the tray.



Opening the CD-ROM Tray

IMPORTANT: Handle a CD by the edges; do not touch the flat surface of the CD. Do not touch the lens in the CD-ROM tray.

Changing the Drive Boot Order

When the computer is turned on, it searches for a drive to start (boot) from in a particular order. The default order is the first bootable CD-ROM, the first bootable diskette, then the first bootable hard drive.

A bootable drive contains files needed by the computer to start and operate properly. The bootable drive can be in the computer or, when the computer is docked, in the optional ArmadaStation or Armada MiniStation EX.

Boot Management in Computer Setup provides a way to change the default boot order. To view or change Boot Management settings, turn on or restart the computer and press **F10** when the cursor appears near the upper-right corner of the screen. Select Computer Setup→System Features→Boot Management.

The Properties tab contains an option to disable the diskette boot ability.

The MultiBoot tab contains an option to enable MultiBoot and to specify the order the computer will follow when searching for a bootable drive. When MultiBoot is enabled, the default boot order is:

- First Computer MultiBay
- Second Computer hard drive bay
- Third Left bay in ArmadaStation or Armada MiniStation EX
- Last Right bay in ArmadaStation

To change the MultiBoot order, move the bay label up or down in the list. When the computer searches for a bootable drive, it will consider only the first drive of the same type. For example, the computer will not start from a bootable hard drive if a non-bootable hard drive precedes it in the boot order.

IMPORTANT: Be aware that if you change the boot order, you also change the logical drive designations. For example, if you boot from a hard drive in the expansion base, it becomes drive C, and the computer hard drive becomes drive D. If you boot from a diskette drive in the expansion base, it becomes drive A, and the computer diskette drive becomes drive B.

chapter 7

CONNECTING EXTERNAL DESKTOP EQUIPMENT

This chapter describes connecting the following widely used external options:

- PS/2-compatible keyboard, numeric keypad, mouse, or other pointing device
- Parallel device, such as a printer or SCSI adapter
- Serial device, such as a serial mouse or printer
- External monitor or overhead projector

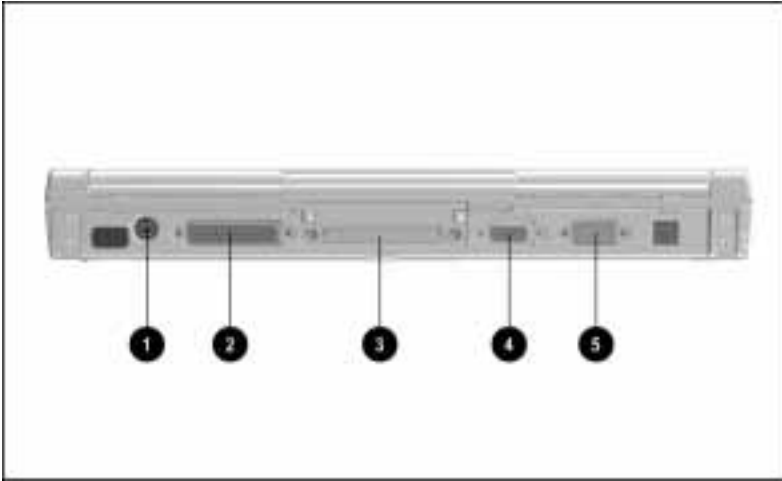
NOTE: For information about connecting and using other equipment, see Chapter 8 for the integrated modem, Chapter 9 for the infrared port, Chapter 10 for PC Cards, and Chapter 11 for audio equipment.

For a complete list of external options available for the computer, see the online *Options Catalog*, or contact your local Compaq authorized dealer, reseller, or service provider.

Identifying External Connectors

The illustration below identifies connectors for the equipment discussed in this chapter.

- ❶ Keyboard/mouse connector (PS/2-compatible)
- ❷ Parallel connector
- ❸ Docking connector
- ❹ External monitor/overhead projector connector
- ❺ Serial connector



Identifying Connectors for External Desktop Equipment

NOTE: An arrow on a device connector or plug indicates the cable should be connected with the arrow facing up.

External Mouse or Other Pointing Device, Keyboard, or Numeric Keypad

You do not have to shut down the computer to connect an external PS/2-compatible mouse or other pointing device, keyboard, or numeric keypad. After connecting an external PS/2-compatible device, you can use either the external or the integrated device.

Parallel and Serial Devices

Windows 95 automatically detects most new devices and installs device drivers. If a new device does not work correctly, double-click the Add New Hardware icon or Printer icon in Control Panel and follow instructions to install device drivers.

In Windows NT, refer to the documentation included with a new device for instructions to install NT drivers and to configure the device.

NOTE: The parallel port supports the faster bidirectional communications of ECP (Extended Capabilities Port) and EPP (Enhanced Parallel Port).

External Monitor/Overhead Projector

The computer can support an external display with a resolution up to 1280 × 1024 in 256 colors.

When an external monitor or overhead projector is connected, the factory-default is to simultaneously display on both screens. The **Fn+F4** hotkey switches between simultaneous display, the external display, and the internal computer display.

If the external display remains blank after it warms up, press the **Fn+F4** hotkey to switch displays.

Display Settings

Refer to the documentation included with the external monitor or overhead projector for the settings it supports.

You can verify or change the external monitor (CRT) or overhead projector resolution and refresh rate either through the CRT/Overhead Projector icon or the Display icon:

- Double-click the CRT/Overhead Projector icon in the notification area (system tray) on the taskbar for a pop-up menu of resolution/refresh rates.
- Double-click the Display icon in the taskbar system tray or in Control Panel to open Display Properties. Click the Compaq tab to verify or change the external display (CRT) Resolution and Refresh (Hz). To see how the settings will affect the displayed image, click the Test button.

NOTE: In simultaneous mode, a setting for the external display different from the internal display is not selectable unless the Color Palette is set to 256 colors in Display Properties.

To verify or change the Color Palette and/or Desktop Area in Display Properties, click the Settings tab. The Desktop Area can be set equal to, larger than, or smaller than the display Resolution. Setting the Desktop Area larger or smaller than the Resolution enables image panning or centering/expanding respectively.

Image Panning or Expanding

Image panning is automatically enabled when the Desktop Area setting is *larger* than the Resolution setting. The image pans to the larger desktop area when you move the onscreen pointer to the edges of the screen.

Image centering/expanding is automatically enabled when the Desktop Area setting is *smaller* than the Resolution. The image can be toggled between centered (with a black border around it) or expanded (to fill the screen) by pressing the **Fn+T** hotkey or by selecting it on the Compaq tab.

Dual Display Settings

When in simultaneous mode, the computer's dual display technology (two graphics controllers) allows an external display resolution and/or refresh rate different from the fixed internal display settings. Before the external display settings can be changed, the Color Palette on the Settings tab must be set to 256 colors.

When the external and internal displays have different resolution and/or refresh rate settings in simultaneous mode, the following conditions are true:

- When the Desktop Area on the Settings tab is the same as the *larger* Resolution setting, panning is enabled on the display with the smaller setting.
- When the Desktop Area on the Settings tab is the same as the *smaller* Resolution setting, centering/expanding is enabled on the display with the larger setting.
- Optional Zoomed Video PC Cards cannot be used.
- Hotkey popup windows will appear on only one screen, usually the internal display.

Energy-Saving Monitor

If the external monitor is an energy-saving monitor, you can enable the monitor energy-saving features either in Computer Setup or within Windows:

- In Windows 95, double-click the Display icon in Control Panel, then click Screen Saver→Energy Saving Features.
- In Windows NT, double-click the Power icon in Control Panel, then click AC Energy Saver→Energy Save Monitor.

NOTE: If you enable the monitor energy-saving features and the external monitor is *not* an energy-saving monitor, the display may become distorted when the screen timeout occurs.

Docking Connector

The docking connector is used for the optional ArmadaStation expansion base or one of the Armada MiniStation convenience bases. For docking procedures, see the documentation included with the optional docking base.

chapter 8

USING THE INTERNAL MODEM

If your computer has an integrated modem, this chapter tells you how to find online help and the preinstalled modem software program, how to connect the modem in different geographical regions, and how to connect the modem to a cellular phone in North America.

NOTE: If your computer does not have an integrated modem, you can contact your Compaq authorized dealer, reseller, or service provider to learn whether a modem option is available for your computer model and geographical region.

The integrated 33.6 Kbps (kilobits per second) data/fax modem has telephony features, including speakerphone and telephone answering, which Windows 95 supports.

Windows NT 4.0 supports data/fax mode only. It does not support the telephony features of the modem.

Finding Online Modem Help

The online Modem Help topics include more detailed information than this chapter.

1. Click Start→Help, then double-click Modem.
2. Double-click a modem topic on the Contents tab, or click the Index tab to search for a topic.

NOTE: In most cases, the modem is controlled by a communications program. However, if you need to use AT commands, you can access the AT command set on the Compaq Internet site at <http://www.compaq.com>.

Running the Communications Program

A communications program has been preinstalled on the computer for Windows 95 or for Windows NT. Online Help is available within the program.

NOTE: In Japan, if the computer does not have the preinstalled communications program, contact your Compaq authorized dealer, reseller, or service provider for information about a communications program to use.

To run the preinstalled communications program:

- In Windows 95, click Start→Programs→Just Connect. Refer to the program Help to use the modem's data/fax mode and telephony features, including speakerphone, telephone answering, and VoiceView.
- In Windows NT, click Start→Programs→Trio Communications. Refer to the program Help to use the modem's data/fax mode.

Connecting the Modem to a Telephone Wall Jack

Before connecting the modem, refer to the *Safety & Comfort Guide* included with the computer and to Appendix B of this guide for modem safety information.

To ensure safe and reliable operation, use only UL LISTED modem cables.

NOTE: The modem is equipped with Digital Line Guard, which protects the modem if it is accidentally plugged into a digital PBX system. If excessive current or voltage is detected, **DIGITAL LINE NO DIALTONE** displays on the screen. If a digital line is no danger to the modem, automatic timeout occurs and **NO DIALTONE** displays on the screen.

Connecting the Modem in North America, Latin America, Japan, or Hong Kong

If your computer has an RJ-11 modem jack on the right side of the computer, you will connect a standard telephone cable to that RJ-11 jack. (The 25-pin modem connector is for connecting the modem to a cellular phone in North America or to a wall jack in Europe or Australia.)

NOTE: If you purchased the computer in Europe or Australia, it does not have an RJ-11 jack. It has only a 25-pin modem connector. Contact your Compaq authorized dealer, reseller, or service provider for information about purchasing an international modem cable for the country you are visiting.

To connect the modem to a telephone wall jack in North America, Latin America, Japan, or Hong Kong:

1. Connect a standard telephone cable to the RJ-11 jack ❶ on the right side of the computer.

NOTE: If you purchased the computer in Europe or Australia, connect the international modem cable to the 25-pin connector.

2. Connect the opposite end of the telephone cable to a standard telephone wall jack ❷.



Connecting the Modem to a Telephone Wall Jack in North America, Latin America, Japan, or Hong Kong

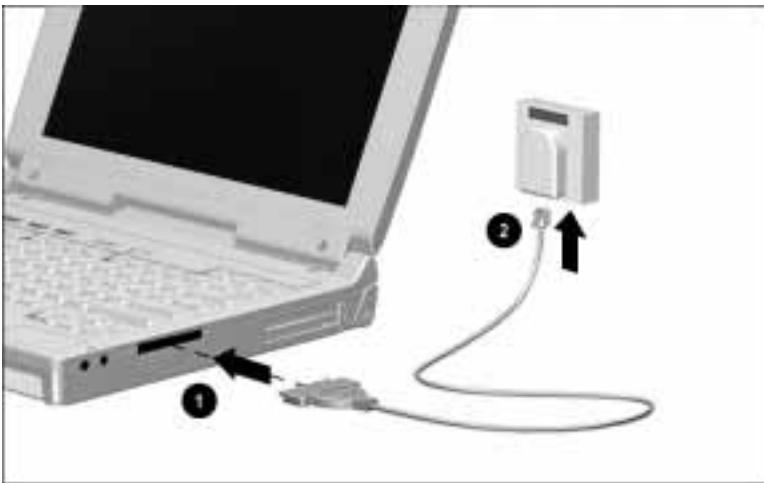
Connecting the Modem in Europe or Australia

If you purchased the computer in Europe or Australia, a country-specific modem cable was included with the computer. You will use that 25-pin cable to connect the modem to a telephone wall jack in the country where you purchased the computer.

NOTE: If are traveling to a country other than the country where you purchased the computer, contact your Compaq authorized dealer, reseller, or service provider for information about purchasing country-specific (25-pin) modem cables.

To connect the modem to a telephone wall jack in supported countries in Europe or in Australia:

1. Connect the country-specific modem cable to the 25-pin connector ❶ on the right side of the computer.
2. Connect the opposite end ❷ of the cable to a standard telephone wall jack.



Connecting the Modem to a Telephone Wall Jack in Europe or Australia

Connecting the Modem to a Cellular Phone (Available Only in North America)

In North America, the modem can be used with a cellular phone that is compatible with the modem. Refer to the online Modem Help for a list of compatible cellular phones and associated Compaq cellular phone cables. (Contact a cellular carrier in your area for cellular air time.)



CAUTION: Using the wrong cable could cause permanent damage to the modem. Contact your Compaq authorized dealer, reseller, or service provider for information about purchasing a cellular cable designed for this modem.

To connect the modem to a compatible cellular phone in North America:

1. With the computer turned off, plug the cellular phone cable into the 25-pin connector **1** on the right side of the computer.
2. Turn on the computer.
3. Insert the opposite end of the cellular phone cable into the cellular phone **2**. (Size and shape of the connector varies depending on the cellular phone manufacturer.)
4. Turn on the cellular phone.



Connecting the Modem to a Cellular Phone in North America

Registering the Cellular Phone with the Modem

The modem does not look for a cellular phone connection until you enter a command to register the phone with the modem. Thereafter (unless the &J command is changed), the modem will look for the presence of the cellular phone and dial through it if it is connected.

NOTE: If you want to change the setting for the &J command (telephone interface control), refer to the online Modem Help for more information.

You can use the Windows HyperTerminal Command Mode to register the cellular phone with the modem. Click Start→Programs→Accessories→HyperTerminal. At the prompt enter **AT** and the command for the brand of cellular phone that you have:

\$M1 Motorola, JVC, or Pioneer

\$M2 Nokia, Technophone, AT&T (selected models), or Tandy

\$M4 GE or Ericsson

Placing Cellular Calls with the Modem

After you have registered the cellular phone with the modem, you can use the communications program to place calls just as you would over a standard phone line.

To improve a cellular phone connection, place the phone upright near a window. Do not lay the phone on a metal surface, and do not move the computer or phone while transmitting or receiving data. For more information about conditions that may affect data being sent over cellular networks, see the online Modem Help.

NOTE: While a registered cellular phone is connected, the modem low-power mode will not automatically initiate, but the computer Suspend mode will not be affected.

chapter 9

USING THE INFRARED PORT

The IrDA-compliant infrared port on the rear of the computer provides for cable-free communication with other IrDA-compliant computers and printers. The infrared port supports both high-speed connections up to 4 megabits per second (Mbps) and low-speed connections up to 115 kilobits per second (Kbps).

NOTE: Microsoft Windows NT Workstation 4.0 does not include infrared communications capability.

An infrared port sends an invisible beam of infrared light for point-to-point communication with another infrared port.



Wireless Infrared Communication

NOTE: Infrared performance may vary depending on performance of infrared peripherals, distance between devices, and application used.

Infrared Software

Infrared Monitor

The Infrared Monitor utility configures and monitors serial infrared communication. To run Infrared Monitor, double-click the Infrared icon in Control Panel. For help using the utility, click the Help button.

When you run Infrared Monitor, it searches for an infrared device within range; the default is every three seconds. When you close Infrared Monitor, its icon remains in the taskbar system tray until you restart the computer. To reopen the utility, click its icon in the system tray.

NOTE: The computer cannot automatically initiate Suspend while Infrared Monitor is searching for an infrared device. To disable the search, click the Options tab, then click to remove the check mark beside “Search for and provide status for a device in range.” Remember to reenable that option when you next want to establish an infrared connection.

Direct Cable Connection

The Direct Cable Connection program provides for a connection between two computers via infrared ports, a serial cable, or a high-speed parallel cable.

To run Direct Cable Connection, click Start→Programs→Accessories→Direct Cable Connection. The program guides you through establishing a connection. When prompted to select a port for an infrared connection, select Serial cable on COM4.

When two computer are connected, the guest computer has access to shared resources on the host computer and to any network the host computer is connected to.

Preparing for an Infrared Connection

To establish a direct infrared connection between the computer and another IrDA-compliant device, follow these steps:

- If the connection is between two computers, ensure that each computer has a different computer name, according to Microsoft conventions.
- Ensure that the infrared ports on both devices are enabled and facing each other at a distance no greater than 1.5 feet (0.5 meter).
- Aim the ports directly at each other. The maximum capture angle is 30 degrees, each port aligned no more than 15 degrees off the center line between ports.
- Avoid interference from other infrared or audio remote control devices, such as wireless headphones, by keeping such devices away from the infrared connection.
- Avoid direct sunlight or flashing incandescent light close to the infrared ports. Some energy-saving fluorescent lights may also interfere with infrared transmissions.
- Keep the path between ports clear of objects that might interfere with data transmission.
- Do not move the computers during data transmission.

NOTE: Because infrared equipment varies among manufacturers, it may be necessary to place the two devices closer together and in more direct alignment than recommended above.



chapter 10

USING PC CARDS

PC Cards (PCMCIA) are credit card–sized options that you can quickly insert to perform various tasks and remove when not needed. A few of the PC Card options available are fax/modems, network cards, hard drives, and memory.

PC Cards are available in three types: Type I, Type II, and Type III. They are all about the same length and width, but vary in thickness. Type III is the thickest, at less than one-half inch (10.5 mm).

Supported PC Cards

The computer has two PC Card slots that support CardBus/32-bit and 16-bit PC Cards. Two Type I and/or Type II cards are supported, or one Type III or Zoomed Video card is supported. A Type III or Zoomed Video card is supported in the bottom slot only. A telephony card is supported in the top slot only.

NOTE: The Compaq PC Card Solutions List includes compatible CardBus and Zoomed Video cards and the operating systems with which those cards work.

Compaq PC Card Solutions List

Compaq offers a list of PC Cards, including CardBus and Zoomed Video PC Cards, that are compatible with Compaq computers and meet rigorous Compaq quality standards.

PC Cards in the first category, Premier, are comprehensively tested by Compaq. PC Cards in the second category, Standard, are vendor tested and supported on specific Compaq computers and operating systems.

The Compaq PC Card Solutions List is updated quarterly and is available on the Compaq Internet site at <http://www.compaq.com>. You may also be able to obtain the list from your Compaq authorized dealer.



PC Cards with this logo on their packaging and advertising are compatible with most Compaq portable computers.

Configuring PC Cards

Windows 95 automatically configures Plug and Play cards.

In Windows NT, refer to Help within the preinstalled CardWare program to configure cards. To run CardWare, double-click the PC Card icon in the system tray on the taskbar, or click Start→Programs→CardWare.

For Windows 95 or Windows NT help, click Start→Help→Index, type PC Card, then double-click a PC Card topic. Or click Help→Contents→Troubleshooting→[problem].

If instructed to install card-specific device drivers provided by the card manufacturer, be sure to install only device drivers for Windows 95 (or Windows NT). Do not install card and socket services or enablers. If diskettes are not clearly labeled or the instructions are unclear, call your PC Card manufacturer for more specific instructions.



CAUTION: If you install card and socket services or enablers provided by a PC Card manufacturer, you may not be able to use other PC Cards.

Inserting a PC Card

In Windows 95, you do not have to shut down or restart the computer to insert and use a PC Card.

In Windows NT, you must restart the computer after inserting some cards, for example, LAN and SCSI. Refer to the online Help in CardWare and to the documentation included with the card to learn whether you must restart the computer after inserting your card.

To insert a PC Card:

1. With the connector facing in and the label facing up, align the PC Card with the guide rails in the PC Card slot.
2. Gently push the card into the slot until it is seated.



CAUTION: Forcing a PC Card into the slot can damage the connectors.



Inserting a PC Card

In Windows 95, the computer beeps twice when the card is ready for use.

In Windows NT, the computer beeps three times in ascending tones when the card is recognized and may be ready for use.

NOTE: If the system beeps volume has been turned down, you may not hear the beeps.

Removing a PC Card

When the Computer Is Off

NOTE: In Windows NT, you must shut down the computer to remove some cards, for example, LAN and SCSI. Refer to the online Help in CardWare and to the documentation included with the card to learn whether you must shut down the computer before removing the card.

1. Push the eject button that corresponds to the slot. The eject button pops out slightly.
2. Push the eject button a second time ❶.
3. Pull the PC Card out of the slot ❷.

In Windows 95, When the Computer Is On

In Windows 95, when the computer is on, stop and then remove the PC Card:

1. Click the PC Card icon in the notification area on the taskbar. A list of PC Cards in the system appears.
2. Click the PC Card that you want to stop.
IMPORTANT: Always stop a LAN, ATA, or SCSI card before removing.
3. When the message appears that it is safe to remove the card, push the eject button that corresponds to the slot. The eject button pops out slightly.
4. Push the eject button a second time ❶. The computer beeps twice to indicate card removal.
5. Pull the PC Card out of the slot ❷.



Removing a PC Card

chapter 11

USING AUDIO FEATURES

This chapter describes the internal and external audio features of the computer. These features allow you to take advantage of the newest multimedia programs for business, presentations, education, and entertainment.

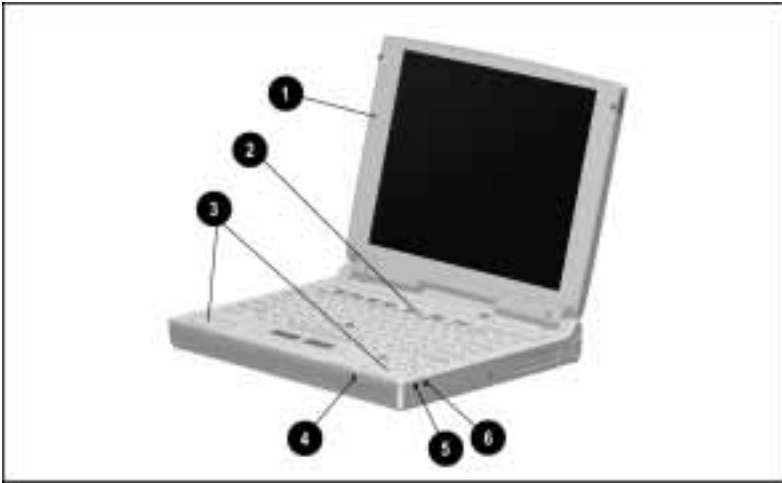
The computer has an industry-standard 16-bit stereo sound system. You can record, edit, and play voice, music, and other sounds in digital audio files.

Windows includes CD Player, Sound Recorder, and Media Player. CD Player plays audio CDs. Sound Recorder records, plays, and edits sound files. Media Player plays audio, video, and animation files and controls the settings for multimedia equipment. Refer to the online Help for more information.

Identifying the Audio Components

The following audio components are located on the front and right side of the computer:

- ❶ Microphone
- ❷ Volume control buttons
- ❸ Stereo speakers
- ❹ Stereo line-in jack
- ❺ Stereo speaker/headphone jack
- ❻ Microphone jack



Audio Components

Using the Built-In Audio Components

Microphone

The internal microphone on the front of the computer has a standard sensitivity of -50dB, which supports audio input whether the display is open or closed. The internal microphone is disabled if an external microphone is connected.

Volume Control

The volume control buttons adjust the volume of the internal speakers or, if connected, the external speakers, headphones, or headset. Press the right button to increase the volume, the left button to decrease the volume, and both buttons to mute the volume.

Volume can also be controlled in Multimedia Properties. If the speaker icon does not appear in the lower-right corner of the taskbar, double-click the Multimedia icon in Control Panel. Click the option to show volume control on the taskbar.

Whenever you want to adjust volume, you can press the volume control buttons or click the speaker icon on the taskbar. Maximum volume occurs when both volume controls are adjusted to their highest point.



WARNING: To reduce the risk of personal injury, turn down the volume control before putting on headphones.

Stereo Speakers

The internal stereo speakers provide quality audio playback for multimedia applications.

The internal speakers are disabled if headphones, a headset, or external speakers are connected or if the computer is docked in the optional ArmadaStation, which has its own internal speakers.

Connecting External Audio Equipment

Stereo Line-In Jack

The stereo line-in jack is the input line for an external stereo player such as a CD player, stereo tuner, or tape deck. The input device must have a 3.5-mm stereo plug and must supply line input levels of 0.5 to 4.25 volts. The line output of most stereo players meets this specification.



CAUTION: Use only a 3.5 mm stereo plug in the stereo line-in jack. A monaural plug in the stereo line-in jack may damage the input device.

Stereo Speaker/Headphone Jack

The stereo speaker/headphone jack supports stereo speakers, headphones, or a headset. You can connect external speakers to provide more separation for the left and right audio channels, more volume, and higher quality sound.

Use only a 3.5-mm stereo plug. For best sound quality, headphones should be 32 ohms, and external speakers should be a minimum of 8 ohms.



WARNING: To reduce the risk of personal injury, turn down the volume control before putting on headphones.



CAUTION: Use only a 3.5-mm stereo plug in the stereo speaker/headphone jack. A monaural plug in the stereo speaker/headphone jack may damage the computer.

Microphone Jack

The microphone jack supports a monaural microphone with a 3.5-mm plug. A powered electret condenser microphone is recommended.

Other types of microphones, such as stereo or dynamic, are not recommended. A stereo microphone will record the left channel on both the left and right channels. A dynamic microphone does not have the recommended sensitivity.

chapter 12

UPGRADING RAM MEMORY

This chapter describes the steps to install a memory expansion board to increase the amount of random access memory (RAM). See the online *Options Catalog* for a list of the available memory expansion boards.

The computer has two memory slots. One slot contains the original system memory board. You can increase RAM by adding a memory expansion board and also by replacing the original memory board. For example, you can increase RAM up to 128 megabytes by installing two 64-megabyte boards.

To view the amount of existing RAM memory in the computer, double-click the Compaq Diagnostics icon in Control Panel.

IMPORTANT: When RAM memory is increased, the disk space reserved for the Hibernation file is also increased. If you experience problems with Hibernation after adding a memory board, verify that your hard drive has enough free space for the Hibernation file. Double-click the Power icon in Control Panel, then click the Hibernation tab.



WARNING: The memory compartment is the only user-accessible internal compartment on the computer. All other areas that require a tool to access should be opened only by a Compaq authorized service provider.

Installing a Memory Expansion Board

If you have not replaced the original factory-installed screws in the memory compartment cover, you will need a Torx T-8 screwdriver to remove the screws.

If you have replaced the original factory-installed screws in the memory compartment cover with the two security screws supplied with the computer, you must use the screwdriver supplied with the computer to remove and reinsert the screws.

Removing the Memory Compartment Cover



CAUTION: Electrostatic discharge (ESD) can damage electronic components. Before beginning this procedure, ensure that you are properly grounded. For more information, refer to Appendix C, “Electrostatic Discharge.”

To remove the memory compartment cover:

1. Save your work and shut down the computer.

NOTE: If the computer is off and you are unsure whether it is in Hibernation, turn the computer on, then shut it down.

2. Disconnect all external devices connected to the computer.
3. Disconnect the power cord and remove the battery pack from the computer.

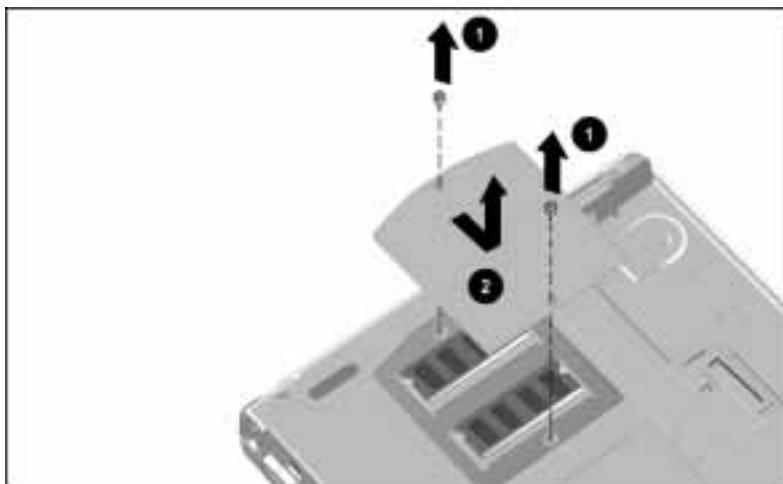


WARNING: Failure to unplug the power cord and remove the battery pack before installing a memory expansion board can damage the equipment and expose you to the risk of electrical shock.

4. Turn the computer upside down.
5. Remove the two screws from the memory compartment cover ❶.

NOTE: The tamper-resistant screws supplied with the computer have a post in the middle of the screw head. Only the screwdriver supplied with the computer removes those screws. A Torx T-8 screwdriver removes the factory-installed screws.

6. Slide and lift the memory compartment cover to remove it ❷.



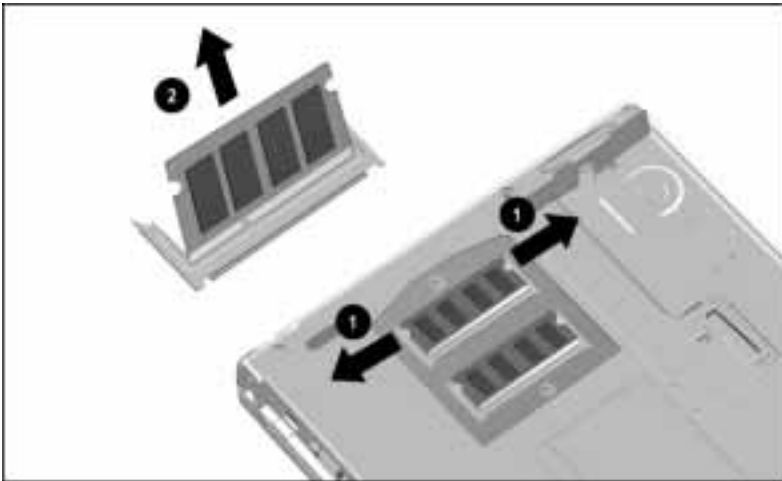
Removing the Memory Compartment Cover

Removing an Existing Memory Board

It is not necessary to remove an existing memory board unless both slots contain boards and you are upgrading one or both of them. If one slot is empty, skip this procedure and go to “Inserting a Memory Expansion Board.”

To remove an existing memory board:

1. Push the metal spring retention tabs away from both sides of the memory board to release the board ❶.
2. Lift up the edge of the memory board and gently slide the board out of the slot at a 45-degree angle ❷.
3. Place the removed memory board in an electrostatic-safe container.



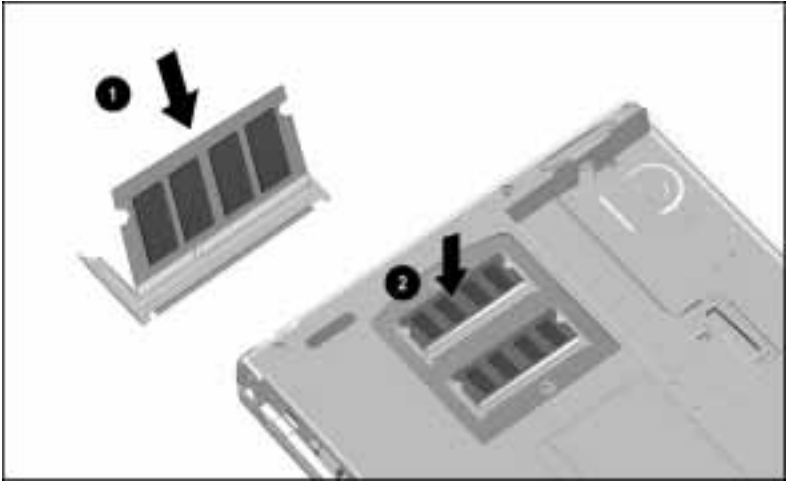
Releasing and Removing a Memory Board

Inserting a Memory Expansion Board

The memory expansion board is keyed (notched) slightly off center to help you position it correctly. The notch is left of center, facing in, as you insert the board.

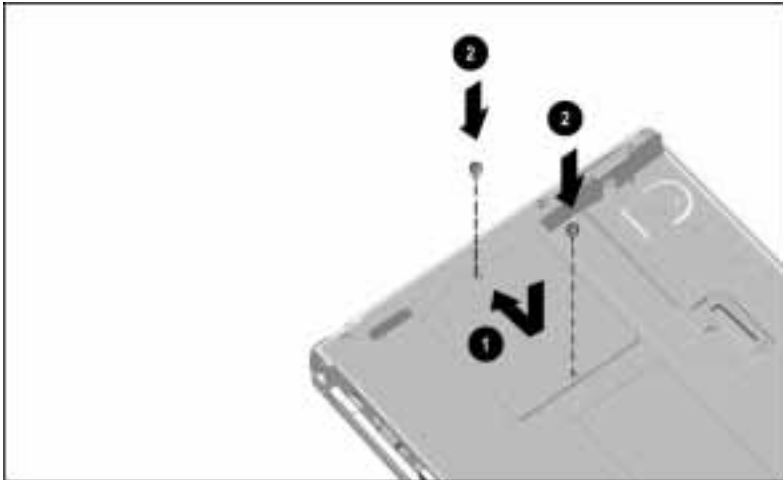
To insert a memory expansion board:

1. Gently slide the memory expansion board into the memory slot at a 45-degree angle until it is seated ❶.
2. Push the memory board down until it snaps into place ❷.



Inserting a Memory Expansion Board

3. Replace the memory compartment cover ❶.
4. Use the screwdriver supplied with the computer to insert the two tamper-resistant screws in the cover, or use your Torx T-8 screwdriver to reinsert the original screws ❷.



Replacing the Memory Compartment Cover

chapter 13

MAINTENANCE AND TRAVEL GUIDELINES

This chapter provides guidelines for routine care, steps to replace the pointing device cap, and preparations for traveling with or shipping the computer.

Routine Care

A few precautions and a little routine care will keep the computer in good condition and working properly:

- Avoid exposing the computer to direct sunlight or strong ultraviolet light for extended periods of time.
- Keep the computer away from excessive moisture and temperature extremes. Do not expose the computer to liquids or precipitation.
- Occasionally wipe the exterior of the computer and screen with a soft, damp cloth moistened only with water. Avoid scratching the surface of the screen.
- Do not spray liquid directly on the computer screen or allow excess liquid to drip down inside the computer.



CAUTION: Damage to internal components may result if liquids drip inside the computer. Soap or other cleaning products can damage the screen and discolor the plastic.

- Do not place anything on top of the computer display.



CAUTION: To prevent possible damage to the display, do not place anything on top of the computer when it is closed. Do not store any items on top of the computer when it is in the slipcase.

- Carry the computer in the slipcase, and avoid bumping the computer against hard objects.



CAUTION: The slipcase is for carrying convenience. It does not provide shock or vibration protection for the computer.

Replacing the Pointing Device Cap

If the rubber cap on the pointing device becomes soiled or worn, you can replace it with one of the two spare rubber caps included with the computer.

To replace the pointing device cap, follow these steps:

1. Exit all applications and shut down the computer.
2. Gently pull the rubber cap up from the keyboard. If the plastic cap underneath also comes off, replace it before installing the new rubber cap.
3. Gently push the new rubber cap onto the plastic cap.

Traveling and Shipping Guidelines

For safety and convenience, follow these steps when traveling with or shipping the computer:

1. Back up all important hard drive files onto diskettes or tape media. When traveling, take an extra backup copy with you.

NOTE: Be sure that diskettes or tapes are not exposed to electrical or magnetic impulses while stored or in transit.

2. Remove any PC Card, diskette, or CD that is in the computer.
3. Shut down the computer and turn off external devices.
4. Disconnect all external devices from the computer.

5. Close the display and all exterior doors on the computer. Do not close objects between the keyboard and display.
6. Disconnect the AC Adapter from the computer. When traveling, take the AC Adapter or an extra fully charged battery pack with you.
7. Place the computer in the slipcase supplied with the computer. Do not place objects on top of the computer in the slipcase.

Air Travel

- Check with the airline if you plan to use the computer on the plane. In-flight computer use is permitted at the discretion of the airline.
- Hand carry the computer with you in the slipcase; do not check it with your luggage.
- You can send your computer and diskettes through an airport X-ray machine, and it will not harm the computer or diskettes.

IMPORTANT: Compaq recommends that you do not take the computer or diskettes through an airport magnetic detector (device you walk through) or expose them to a magnetic wand (hand-held device used by security personnel).

International Travel

- Check local customs regulations of the countries you will be visiting.
- Be sure that you have the correct modem cable for the country you will be visiting. Telephone line standards and protocols differ from country to country. Contact your Compaq authorized dealer or reseller for a list of available cables.
- Purchase a power cord from a Compaq authorized dealer or reseller for the countries you will be visiting. These cords are designed to meet the voltage, frequency, and plug configuration requirements of each country.



WARNING: To reduce the risk of electric shock, fire, or damage to the equipment, do not attempt to power the computer with a voltage converter kit sold for appliances.

Shipping

- Follow the same steps to prepare the computer for shipping that you follow for traveling.
- Pack the computer and external devices in their original packing boxes or similar boxes with sufficient packing material to protect them.
- If a drive must be mailed, do the following. Place the drive into its carrying case. Place the carrying case into a bubble pack mailer or other suitable form of protective packaging. Label the package “Fragile: Handle With Care.”

chapter 14

SECURITY FEATURES

This chapter describes the following software and hardware security features:

- Software security
 - Power-on password
 - QuickLock/QuickBlank
 - Setup password
 - Device disabling
- Hardware security
 - Hard drive in hard drive bay
 - Memory compartment
 - Optional cable lock

Software Security

Establishing a Power-On Password

The power-on password prevents unauthorized use of the computer. After you establish a power-on password, you must enter it each time you turn on the computer. You can establish a power-on password within Windows or in Computer Setup.

- In Windows, double-click the Passwords icon in Control Panel, click the Computer Security tab, then click the Set button.
- To run Computer Setup, turn on or restart the computer and press F10 when the cursor appears in the upper-right corner of the screen. Select Computer Setup → System Features → Security Management.

Type your password carefully because it does not display as you type. If you want, you can use the same password for power-on and for setup.

The password can be up to seven alphanumeric characters. It is not case sensitive; however, you must use the same keys each time. For example, the system will not accept numbers typed with the top row of keys if your password was typed with numbers within the embedded numeric keypad.

After you enter a power-on password, you can select to enable the options QuickLock, QuickBlank, and QuickLock when in Suspend.

IMPORTANT: Record your password and put it in a safe place. If you forget your password, you cannot use the computer until the computer memory is cleared of the password. Contact your Compaq authorized dealer, reseller, or service provider for assistance.

The next time you start the computer, a password prompt appears. If you enter the password incorrectly, you are prompted to reenter it. After three unsuccessful attempts, you must turn off the computer, then turn it on again before you can continue.

Enabling QuickLock and QuickBlank

If you enable QuickLock when you establish a power-on password, the keyboard and pointing device are disabled at power-on until you enter your power-on password. If you enable QuickBlank, the screen is blank at power-on until you enter your password. Type your power-on password on the blank screen to exit QuickBlank.

After enabling QuickLock/QuickBlank, you can initiate them at any time by pressing the **Fn+F6** hotkey from the computer keyboard or **Ctrl+Alt+L** from the computer or external keyboard.

Establishing a Setup Password

The setup password protects the system from unauthorized Computer Setup changes. After you establish a setup password, you must enter it before you can run Computer Setup.

To establish a setup password, turn on or restart the computer and press **F10** when the cursor appears in the upper-right corner of the screen. Select Computer Setup → System Features → Security Management → Setup Password.

Type your password carefully because it does not display as you type. If you want, you can use the same password for setup and for power-on.

The password can be up to seven alphanumeric characters. It is not case sensitive; however, you must use the same keys each time. For example, the system will not accept numbers typed with the top row of keys if your password was typed with numbers within the embedded numeric keypad.

IMPORTANT: Record your password and put it in a safe place. If you forget your password, you cannot change the system configuration until the computer memory is cleared of the password. Contact your Compaq authorized dealer, reseller, or service provider for assistance.

The next time you try to run the Compaq Utilities by pressing **F10**, a setup password prompt will appear. If you enter the password incorrectly, you are prompted to reenter the password.

Changing or Deleting a Password

After establishing a power-on password or setup password, you can change or delete that password only in the password prompt window. To change the password, type the old password once and the new password twice, separated by the password delimiter for your keyboard, for example

old password/newpassword/newpassword

NOTE: To delete your password, do not type a new password after the password delimiter.

The character used for the password delimiter varies according to the language of the keyboard. The following table lists the password delimiter to use for each country keyboard:

Password Delimiters	
Country Keyboard	Symbol
Belgian	=
Danish, German, Italian, Latin American, Norwegian, Portuguese, Spanish, Swedish/Finnish, Swiss, Taiwanese	- (hyphen)
French	!
French/Canadian	é
Japanese, Korean, United Kingdom, United States	/

NOTE: The password delimiter is the lower character on the key to the left of the right **Shift** key on all keyboards except the Japanese. On the Japanese keyboard, the password delimiter is the second key to the left of the right **Shift** key.

Disabling Devices

Disabling devices in Computer Setup prevents unauthorized use of those devices. Turn on or restart the computer, press **F10** when the cursor appears near the upper-right corner of the screen, then select Computer Setup.

- To disable the diskette drive controller or the diskette drive write ability, click Storage → Resources or → Properties.
- To disable the diskette drive boot ability, click System Features → Boot Management → Properties.
- To disable the serial port, infrared port, or parallel port, click Communications → [port] → Resources.

Changes take effect when you restart the computer.

Hardware Security

A screwdriver, two tamper-resistant screws for the memory compartment cover, and a tamper-resistant hard drive security plate are supplied with the computer. The tamper-resistant Torx screw heads have an additional post in the middle, which the supplied screwdriver fits.

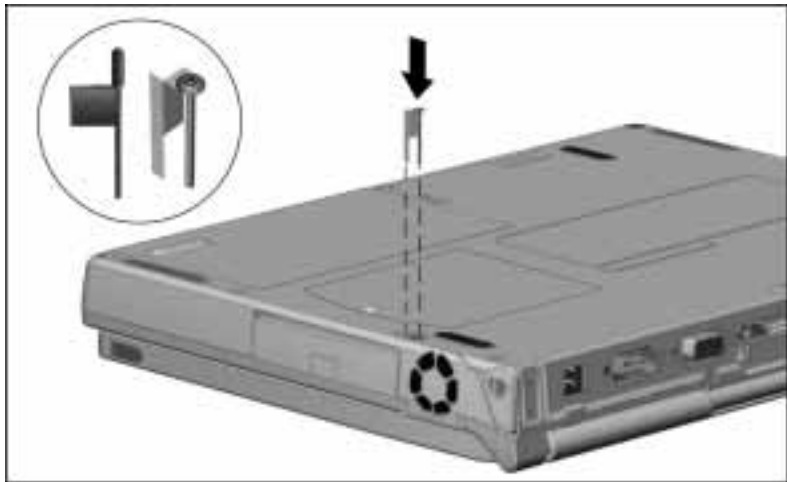
You will need a Torx T-8 screwdriver to remove the factory-installed memory compartment screws and/or hard drive security plate.

Hard Drive Security Plate

The tamper-resistant hard drive security plate supplied with the computer secures the hard drive in the hard drive bay and helps prevent unauthorized removal of the hard drive.

To install the tamper-resistant hard drive security plate:

1. Shut down the computer and turn it upside down.
2. Use a Torx T-8 screwdriver to remove the factory-installed hard drive security plate from the bottom of the computer near the hard drive bay.
3. Place the removed security plate in a safe location.
4. Insert the tamper-resistant security plate and tighten the screw with the supplied screwdriver.



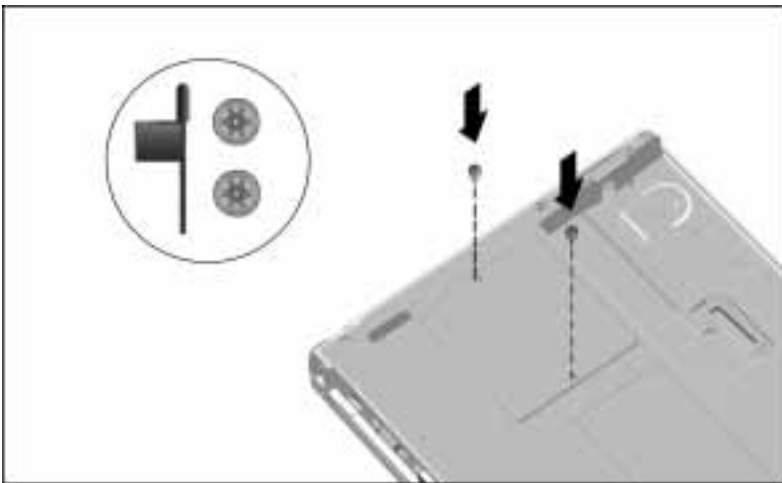
Installing the Tamper-Resistant Hard Drive Security Plate

Memory Compartment Security Screws

Two tamper-resistant screws are supplied with the computer to provide security for the original system memory board and/or optional memory expansion board(s).

To install the memory compartment security screws:

1. Shut down the computer and turn it upside down.
2. Use a Torx T-8 screwdriver to remove the two factory-installed screws from the memory compartment cover.
3. Use the screwdriver supplied with the computer to insert the two tamper-resistant screws.



Inserting the Memory Compartment Security Screws

Cable Lock

A security cable slot is provided on the right side of the computer for an optional cable to lock the computer to an immovable object.

A cable lock can be purchased from Kensington Microware Limited and major dealers worldwide. Ask for the Kensington MicroSaver Security System Model 64068.

To attach a cable lock to the computer:

1. Loop the cable around a heavy, fixed object.
2. Insert the lock end of the cable through the loop end of the cable.
3. Insert the lock into the security cable slot on the right side of the computer.
4. Insert the key into the lock, turn it to the locked position, and remove the key.



Securing the Computer with an Optional Cable Lock

chapter 15

INTELLIGENT MANAGEABILITY

Intelligent Manageability combines innovative hardware and software technology from Compaq and other leading vendors to make Compaq computers easier to inventory, troubleshoot, and protect.

Intelligent Manageability provides Inventory Management, Fault Management, and Security Management. The lowercase *i* in the notification area (system tray) on the taskbar indicates that Intelligent Manageability is installed on the computer.

Inventory Management

The inventory management utility, AssetControl, makes it easy and inexpensive to maintain an accurate, up-to-date inventory of personal computers, components, and monitors that support VESA DDC (Video Electronics Standards Association Data Display Channel) and EDID (Extended Display Identification Data) standards.

For AssetControl information about your computer, double-click the Insight Personal Edition icon in Control Panel, then click the AssetControl button.

Detailed inventory information—including manufacturer, model, serial number, asset tag, and ROM revision level—can be viewed, printed, or saved to a file using Compaq Insight Personal Edition or Compaq Insight Manager.

NOTE: Compaq Insight Manager refers to Intelligent Manageability software on Compaq servers, which provides monitoring, remote maintenance, and asset management of network resources.

The asset tag number can be changed in Computer Setup (see Chapter 16, “Computer Setup and Diagnostics Utilities”).

Fault Management

Fault Management provides the following features to help prevent the loss of critical data:

- IntelliSafe hard drive—Constantly monitors hard drive activity to predict failures before they occur.
- Temperature sensing—Hardware and software that tracks the internal temperature of the computer and displays a warning message when the normal range is exceeded.

A popup message notifies you when a hard drive or system temperature fault is detected. If the computer is connected to a network that is using Compaq Insight Manager, the fault notice can also be seen by the network administrator.

Security Management

Security management provides a set of security features to protect the computer and data from unauthorized access.

- Passwords—Prevents unauthorized access to information stored on the computer or network.
- Drive security—Prevents starting the computer from the diskette drive and writing information to the diskette drive.
- Device disabling—Prevents unauthorized data transfer over fax/modems, serial ports, parallel ports, and infrared ports.

Passwords are set within Windows or in Computer Setup. The drive and device security options are set in Computer Setup. (See Chapter 14, “Security Features,” and Chapter 16, “Computer Setup and Diagnostics Utilities.”)

chapter 16

COMPUTER SETUP AND DIAGNOSTICS UTILITIES

Compaq Utilities help you configure and test the computer and Compaq options. To run Compaq Utilities, follow these steps:

1. Turn on or restart the computer.
To restart the computer, click the Start button → Shut Down → Restart the Computer → Yes.
2. Press **F10** as soon as the cursor appears near the upper-right corner of the screen.
NOTE: You have about two seconds to press **F10**. If you do not press **F10** quickly enough, restart the computer and try again.
3. If prompted, select a language.
4. Select Computer Setup or one of the diagnostics utilities from the following menu that appears:
 - Computer Setup
 - Computer Checkup (TEST)
 - View System Information (INSPECT)
 - Prepare Computer for a Compaq Service Call (RemotePaq)
(Not on menu for all models and geographical regions)
 - Create Diagnostics Diskette
 - Manage Diagnostics Partition
 - Exit from This Utility

Computer Setup

Run Computer Setup to set custom features that are not available within Windows. You may also need to run Computer Setup to configure some new devices.

Help button

For information about options on Computer Setup screens, click the Help button near the lower-right corner of the screen.

View Menu

The View menu in Computer Setup provides two ways to view settings: by type and by connection. The default is by type and includes the following:

- System Features—system management, power management, security management, boot management, Intelligent Manageability asset tag, PCI settings, and PC Card settings

NOTE: Refer to the following chapters for more information about system features:

- Power management—Chapter 4, “Using Power and Power Management”
- Security management—Chapter 14, “Security Features”
- Intelligent Manageability—Chapter 15, “Intelligent Manageability”
- Boot management MultiBoot feature—Chapter 6, “Working with Removable Drives”
- Communication—parallel port, serial port, modems, and other communication devices
- Storage—storage-related devices such as hard drive and diskette drive
- Input devices—keyboard, mouse, and other input device features
- Network—network adapter and other network-related devices
- Audio—sound properties and audio device settings
- Video—monitor timeouts and video device resources
- Other—settings for other devices not categorized

Tools Menu

The Tools menu in Computer Setup includes the following options:

- Set Defaults—reestablishes the factory default settings.
- Resource Priorities—changes the priority of a resource type (IRQ, DMA, I/O address, and memory address).
- Resolve Conflicts—attempts to resolve configuration conflicts.
- Legacy—provides a way to add Legacy (ISA) devices that predate Plug and Play.

Computer Checkup (TEST)

Computer Checkup (TEST) determines whether the various computer components and devices are recognized by the system and functioning properly. You can display, print, and save the information generated by Computer Checkup.

If you have a problem you cannot solve, run Computer Checkup before calling technical support. Save the device list to a file and print or save the log of errors. Also run the View System Information (INSPECT) utility and print or save that information. Have the files or the printed information available when you call technical support.

To run Computer Checkup, follow these steps:

1. Connect AC power. (A low-battery condition could initiate Hibernation and interrupt the program.)
2. Turn on the external devices that you want to test. Connect the printer if you want to print the error messages log.
3. Turn on or restart the computer and press **F10** as soon as the cursor appears near the upper-right corner of the screen.
4. Select Computer Checkup (TEST) from the Compaq Utilities menu.
5. Select the View Device List option. A list of the installed Compaq devices is displayed.

6. Verify that Computer Checkup correctly detected the devices installed.

NOTE: Devices from other manufacturers may not be detected or may be reported inaccurately.

- a. If the list is correct, select OK. The test option menu is displayed again. Go to step 7.
 - b. If the list is incorrect, ensure that any new devices are installed properly. If you do not find an installation problem, call your Compaq authorized service provider.
7. Select one of the following from the test option menu:
 - **Quick Check Diagnostics.** Runs a quick, general test on each device with a minimal number of prompts. If errors occur, they are displayed when the testing is complete.
 - **Automatic Diagnostics.** Runs unattended, maximum testing of each device with minimal prompts. You can choose how many times to run the tests, to stop on errors, or to print or save a log of errors.
 - **Prompted Diagnostics.** Allows maximum control over the device testing process. You can choose attended or unattended testing, decide to stop on errors, or choose to print or save a log of errors.
 8. Follow the instructions on the screen to test the devices.

View System Information (INSPECT)

The View System Information (INSPECT) utility provides information about the system configuration. You can display, print, or save the information.

NOTE: Within Windows, you can double-click Compaq Diagnostics in Control Panel to view similar information.

To run View System Information (INSPECT), follow these steps:

1. Turn on the external devices that you want to inspect. Connect the printer if you want to print error messages.
2. Turn on or restart the computer and press **F10** as soon as the cursor appears near the upper-right corner of the screen.
3. Select View System Information (INSPECT) from the Compaq Utilities menu.
4. Select the item you want to view from the list that appears:

System	Memory
ROM	Audio
Keyboard	Operating system
System ports	System files
System storage	Windows files
Graphics	
5. Follow the instructions on the screen to cycle through the items, to return to the list and choose another item, or to print the information.

Prepare Computer for a Compaq Service Call (RemotePaq)

This utility is only available in certain geographical regions and requires a modem. It allows your Compaq service provider to automatically run diagnostics on the computer. Follow your Compaq service provider's instructions if you are requested to run RemotePaq.

Create Diagnostics Diskette

This utility copies the Computer Setup and diagnostics utilities to two bootable diskettes. These diskettes provide a way to troubleshoot the system if the hard drive cannot be accessed.

Manage Diagnostics Partition

This utility provides a way to create, delete, or upgrade Computer Setup and the Compaq diagnostics utilities.

Creating a diagnostics partition is normally done only to add Compaq Utilities to a replacement hard drive. It involves performing a low-level format on the hard drive.



CAUTION: If utilities in the diagnostics partition are deleted, you will no longer be able to access Computer Setup or the diagnostics utilities from the hard drive.

chapter 17

TROUBLESHOOTING

This chapter provides solutions to some common problems. If you have a problem with the computer, you may be able to easily resolve it with solutions provided in this chapter. In addition to a minor problems checklist, common problems and solutions are provided for the following topics:

- Audio
- Battery/battery gauge
- Diskettes/diskette drive
- Hard drive
- Hardware
- Infrared
- Keyboard/numeric keypad
- Memory
- Modem
- PC Cards
- Pointing Device
- Power
- Printer
- Screen (computer display and external monitor)

NOTE: For online Troubleshooting help, click Start→Help→Contents→Troubleshooting→[the problem], then follow instructions to help identify and solve the problem.

If you are unable to solve a problem with the online Help and solutions provided in this chapter, run the Computer Checkup utility (see Chapter 16). If you find it necessary to call Compaq customer support, you will be asked for the printed Computer Checkup error message log or for a list of the error messages. See Appendix A for information about calling Compaq.

Minor Problems Checklist

If you encounter a minor problem with your computer or software application, go through the following checklist for possible solutions.

- Is the computer connected to an external power source, or does it have a fully charged battery pack installed?
- Is the computer turned on (the power/suspend light is on)?
- Are all cables connected properly and securely?
- Was a nonbootable diskette in the computer diskette drive when you turned on the computer?
- Have you installed all needed device drivers?
- If the problem appears related to a software application, have you looked for a solution in the software documentation?

NOTE: A message on the screen does not necessarily mean that an error condition exists. It may be nothing more than an informational message about what the computer is doing, or a prompt reminding you to enter information or press a key.

Solving Audio Problems

Problem	Possible Cause	Solution
Computer beeps once after you turn it on.	This is normal; it indicates successful completion of the Power-On Self-Test (POST).	No action is required.
Computer does not beep after the Power-On Self-Test (POST).	System beeps have been turned down	Press Fn+F5 , then press the right arrow key to increase the system beeps volume.
Computer beeped three times and battery light is blinking.	Battery charge is low and computer has entered a low-battery condition.	Immediately save open files and resolve the low-battery condition (see Chapter 5).
Computer beeped three times when exiting Suspend, and the battery light is blinking.	Hibernation has been turned off, and the computer is in a critical low-battery condition.	Immediately resolve the low-battery condition to avoid losing unsaved data (see Chapter 4 and Chapter 5).
Computer does not beep to indicate a low-battery condition.	Low-battery warning beeps have been disabled.	Enable low-battery warning beeps on the Battery Conservation Settings tab in Power Properties.
	System beeps have been turned down too low.	Press Fn+F5 , then press the right arrow key to increase the system beeps volume.
Audio playback is too low or too loud.	The computer volume control and/or the software volume control needs to be adjusted.	Adjust the computer volume control buttons and adjust the volume control in Multimedia Properties.
Internal speakers produce no sound.	Volume has been muted.	Press the right volume control button to increase the volume.
	External speakers or headphones are connected to the computer, or the computer is docked in the optional ArmadaStation.	Use the external speakers or headphones or the expansion base speakers. To use the internal speakers, disconnect the external speakers or headphones or undock the computer.

Solving Battery and Battery Gauge Problems

The solutions for “Solving Power Problems” also may be helpful.

Problem	Possible Cause	Solution
Computer will not turn on when battery pack is inserted (and external power is disconnected).	Battery pack is discharged.	Connect the computer to an external power source and charge the battery pack. Replace the battery pack with a fully charged battery pack.
Computer beeped three times and battery light is blinking.	Battery charge is low, and computer has entered a low-battery condition.	If Hibernation has not been disabled, you can let the computer initiate Hibernation. After the computer shuts down, replace the battery pack or connect external power, then turn on the computer. Immediately save open files and do one of the following: <ul style="list-style-type: none">■ Connect the computer to an external power source to charge the battery pack.■ Initiate Suspend and replace the battery pack with a fully charged battery pack.■ Shut down the computer or initiate Hibernation until you can find another power source or charge the battery pack.

Continued

Solving Battery and Battery Gauge Problems *Continued*

Problem	Possible Cause	Solution
After the battery light began blinking, computer beeped twice and the power/suspend light began blinking.	Hibernation has been turned off, and the computer has entered a critical low-battery condition.	To avoid losing unsaved work, immediately connect the computer to an external power source or replace the battery pack.
Battery light blinks to indicate low-battery condition, but computer does not beep.	Low-battery warning beeps have been disabled.	Enable low-battery warning beeps on the Battery Conservation Settings tab in Power Properties.
	System beeps have been turned down too low.	Press Fn+F5 , then press the right arrow key to increase system beeps volume.
Battery light does not turn on to indicate battery pack is charging.	Battery pack is at least 93 percent charged.	No action is necessary.
	Battery pack was exposed to temperature extremes.	Allow time for battery pack to return to room temperature.
	Battery pack is at the end of its life.	Replace the battery pack.
Battery pack is warm to the touch after charging.	Warming occurs due to charging.	No action is required.
Every time the computer is turned on, the date and time have to be set.	Auxiliary battery charge is low because computer was not connected to a power source for extended period of time.	Connect the computer to an external power source for approximately 24 hours to fully charge the auxiliary battery.
	Auxiliary battery is at the end of its life.	Contact your Compaq authorized service provider to replace the auxiliary battery.

Continued

Solving Battery and Battery Gauge Problems *Continued*

Problem	Possible Cause	Solution
Computer shut down and information in memory was lost when a battery pack was being replaced.	Suspend was not initiated, or a charged battery pack was not inserted quickly enough after removing the discharged battery pack.	To prevent loss of information next time, initiate Suspend, remove the discharged battery pack, and immediately insert a fully charged battery pack.
	Auxiliary battery charge is low because the computer was not connected to a power source for an extended period of time.	Connect the computer to an external power source for approximately 24 hours to fully charge the auxiliary battery.
	Auxiliary battery is at the end of its life.	Contact your Compaq authorized service provider to replace the auxiliary battery.
Unsaved data was lost when system did not initiate Hibernation on critical low-battery condition.	Hibernation has been turned off.	Enable Hibernation on the Hibernation tab in Power Properties.
	Hard drive does not have enough free space to save the Hibernation file.	On the Hibernation tab in Power Properties, verify the drive and amount of space required for the Hibernation file. Free at least that amount of space on the drive.
Battery charge does not last as long as expected.	The battery conservation level is set to None (Drain).	Press Fn+F7 or open Power Properties to change the battery conservation level.
	An external device or a PC Card is draining the battery pack.	Turn off or remove external devices and PC Cards when not using them.
	Battery pack discharged while left in an unplugged computer for an extended time.	If the computer will be disconnected from external power for more than two weeks, remove the battery pack.

Continued

Solving Battery and Battery Gauge Problems *Continued*

Problem	Possible Cause	Solution
Battery charge does not last as long as expected. <i>(continued)</i>	Battery pack is being exposed to temperature extremes.	Keep battery pack within the recommended operating or storage temperature ranges (see operating temperature ranges in Appendix D and battery storage ranges in Chapter 5).
Battery gauge is inaccurate	The battery pack is new or was not used for a long time and has not been fully charged.	Fully charge the battery pack until the battery light turns off. <hr/> Allow the battery pack to discharge to the low-battery warning level at least every 90 days, then fully charge.

Solving Diskette and Diskette Drive Problems

Problem	Possible Cause	Solution
Cannot access diskette drive	Diskette drive is not seated properly	Remove and then reinsert the diskette drive until it clicks into place.
Diskette drive cannot write to a diskette.	Diskette is write-protected.	Disable the write-protect feature or use a diskette that is not write-protected.
	Diskette is not formatted.	Format the diskette.
	Not enough space is left on the diskette.	Use a larger diskette.
	Computer is trying to write to the wrong drive.	Verify the drive letter.
	The diskette drive controller or diskette write ability has been disabled.	Run Computer Setup and enable the diskette drive controller or the diskette write ability under Storage.

Continued

Solving Diskette and Diskette Drive Problems *Continued*

Problem	Possible Cause	Solution
Diskette drive cannot write to a diskette. <i>(continued)</i>	Diskette has a bad sector.	Copy files to hard drive or another diskette. Reformat the bad diskette.
	Drive error has occurred.	In Windows 95, click the Device Manager tab in System Properties to verify the diskette drive is recognized and to view settings. Run Computer Checkup to test the drive (see Chapter 16).
Diskette drive cannot read a diskette.	Diskette is not formatted.	Format the diskette.
	Diskette is defective or damaged.	If you can read other diskettes in the drive, try reading this diskette in another diskette drive to verify whether it is damaged.
	Drive error has occurred.	In Explorer, click the drive letter→File→Properties→Error Checking→Check Now button. Run Computer Checkup to test the drive (see Chapter 16).
Cannot boot from a diskette	Bootable diskette is not in computer MultiBay or is not first diskette in the MultiBoot order.	Verify the diskette has the system files necessary to boot. Run Computer Setup and verify the MultiBoot order under Boot Management (see “Changing the Drive Boot Order” in Chapter 6 and Computer Setup in Chapter 16).
	Diskette boot ability is disabled in Computer Setup.	Run Computer Setup and enable Diskette Boot Ability under Boot Management.

Solving Hard Drive Problems



CAUTION: Maintain an up-to-date backup of your hard drive in case of errors or failures.

Problem	Possible Cause	Solution
Cannot access hard drive.	Hard drive is not seated properly.	Shut down the computer, remove and reinsert the hard drive, then turn on the computer.
	Hard drive was inserted while computer was on, in Suspend, or in Hibernation.	Shut down computer; then turn it on again. The hard drive is initialized during power up.
	Hard drive may be damaged.	If the hard drive is in the MultiBay, try inserting another removable drive. Contact your Compaq authorized service provider.
Reading the hard drive takes an unusually long time after restarting the computer.	System is exiting from Hibernation.	Give the system time to restore the previously saved data to its exact state before Hibernation.
Hard drive error occurs.	Hard drive has bad sectors or has failed.	In Explorer, click the drive letter→File→Properties→Error Checking→Check Now button. Run Computer Checkup to test the drive (see Chapter 16).
	Hard drive may be damaged.	Try inserting another removable drive, if the hard drive is in the MultiBay. Contact your Compaq authorized service provider.
Errors occur after booting from an additional hard drive.	Additional hard drive does not have the software and drivers necessary to boot and operate correctly.	Boot from the hard drive supplied with the computer or another hard drive that has the necessary software and drivers.

Solving Hardware Problems

Problem	Possible Cause	Solution
New device is not recognized as part of the computer system.	The system did not automatically configure the new device.	In Windows 95, double-click the Add New Hardware icon in Control Panel. <hr/> Refer to the documentation that came with the new device for installation instructions.
	Cables of new external device are loose or power cord is not plugged in.	Ensure that all cables are properly and securely connected and that the power cord is plugged into an electrical outlet.
	Power switch of external device is not turned on.	Turn on the external device. <hr/> Turn off the computer, turn on the device, then turn the computer on.
Cannot access a removable drive.	A removable drive is not seated properly.	In Windows 95, shut down the computer, remove and reinsert the drive, then turn on the computer. In Windows NT, you do not have to shut down the computer to insert a diskette drive or CD-ROM drive. <hr/> Run Computer Checkup to test the drive (see Chapter 16).
Computer beeps four times when turned on, power/suspend light is on, but screen remains blank.	Memory expansion board(s) has been installed incorrectly or has lost connection.	Follow the steps in Chapter 12 to remove and reinsert the memory expansion board(s).
	Memory board or memory circuitry has failed.	Contact your Compaq authorized service provider.

Solving Infrared Problems

Problem	Possible Cause	Solution
Cannot link with another infrared-equipped computer.	The infrared software is not running on both computers.	Run the infrared software on both computers.
	Interrupt request (IRQ) conflict.	In Windows 95, check for IRQ conflicts in System Properties Device Manager. In Windows NT, run Computer Setup. Select Resolve Conflicts on the Tools menu.
	Baud rate conflict.	Select the same baud rate for both computers.
	# bits conflict.	Select the same # bits setting for both computers.
	Stop byte conflict.	Select the same stop byte for both computers.
Cannot transmit data.	Parity conflict.	Select the same parity setting for both computers.
	Target device is not IrDA-compliant.	Refer to documentation included with target device.
	Physical obstruction is between devices.	Remove objects between the devices that could interfere with point-to-point transmission.
	Devices are too far apart.	Verify that devices are no more than 1.5 feet (0.5 meter) apart. (Some target devices may require a shorter distance.)
	Angle between devices is too wide.	Adjust devices so that they point within 30 degrees of each other. (Some devices may require more direct alignment.)

Continued

Solving Infrared Problems *Continued*

Problem	Possible Cause	Solution
Cannot transmit data <i>(continued)</i>	A device was moved.	Do not move either device during data transmission.
	Direct sunlight, fluorescent light, or flashing incandescent light is close to the infrared connections.	Remove the interfering light source(s).
	Another wireless device is interfering.	Keep other infrared and audio remote-control devices, such as wireless headphones, away from the infrared connection.
	The infrared lens is dirty.	Clean the lens with a lint-free cloth.

Solving Keyboard and Numeric Keypad Problems

Problem	Probable Cause	Solution
Embedded numeric keypad does not work.	Num Lock function is not enabled.	Press Fn+NumLk to enable the embedded numeric keypad (the num lock light turns on).
External keyboard does not work.	Keyboard may not be securely connected or may be connected to the wrong external connector.	Ensure that the external keyboard is securely connected to the external keyboard/mouse connector.
Keyboard and pointing device are locked.	You initiated QuickLock.	Enter your power-on password to exit QuickLock. NOTE: If num lock is on, hold down the Fn key to type a non-numeric password; press Fn+Shift for uppercase.

Solving Memory Problems

Problem	Possible Cause	Solution
Memory count during Power-On Self-Test (POST) is incorrect.	Optional memory expansion boards are installed incorrectly.	Ensure that the memory expansion boards have been installed correctly (see Chapter 12).
"Out of Memory" message is displayed on the screen, or insufficient memory error occurs during operation.	System ran out of memory for the application.	Refer to the application documentation for memory requirements and add more memory if needed.
	Too many programs are open.	Close any programs that you do not need.

Solving Modem Problems

Problem	Possible Cause	Solution
No dial tone.	Phone service is not connected or is temporarily interrupted.	Connect a phone to the wall jack. If the phone has no dial tone, contact your phone company or building manager.
	The modem is not responding to commands from the keyboard.	To verify the modem and computer are communicating: <ol style="list-style-type: none">1. Go to HyperTerminal Terminal Mode, type AT and press Enter.<ul style="list-style-type: none">■ If the modem displays OK, the modem and computer are working together.■ If the modem displays ERROR, or does not respond, restart the computer and repeat step 1.2. Type ATDT and listen for a dial tone.3. Type ATH0 to hang up.
	Speaker Control AT Command (ATM) is set to 0.	To set the Speaker Control to 1: <ol style="list-style-type: none">1. Go to HyperTerminal Command Mode, type ATM1, then press Enter.2. Type ATH1 and listen for the dial tone.3. Type ATH0 to hang up.

Continued

Solving Modem Problems *Continued*

Problem	Possible Cause	Solution
Modem loses connection.	The cable connection is loose.	Verify that the modem cable is securely connected.
	Call Waiting has not been disabled.	To disable Call Waiting within Windows, double-click Modems in Control Panel. Click the General tab→Dialing Properties→My Locations. Contact your local phone company if you do not know the code to disable Call Waiting.
	Hang-up Delay S Register (S10) is set too low and noise on the line is causing the modem to disconnect.	To change S10 default to 150: Go to HyperTerminal Command Mode, type AT+S10=150, then press Enter .
Characters are garbled or transfer rates are slow.	There is noise in the telephone line.	Verify that the modem cable is securely connected. Request a telephone line filter from your local telephone company.
Cellular connection doesn't work (North America only).	Environmental factors are interfering with the connection.	Refer to the online Modem Help.

Solving PC Card Problems

Also refer to the online Windows 95 Troubleshooting Help or the help available within CardWorks for Windows NT.

Problem	Possible Cause	Solution
Computer does not beep when PC Card is inserted but PC Card works correctly.	System beeps are turned down.	Press Fn+F5 , then press the right arrow key to increase the system beeps volume.
	PC Card sound effects have been disabled.	In Windows 95, double-click the PC Card icon in Control Panel, click the Global Settings tab, then click to deselect Disable PC Card Sound Effects.
Computer does not beep when PC Card is inserted and PC Card does not work.	Card is not inserted properly.	Remove and reinsert the card gently, to avoid damaging the pins.
	Card or card driver is not compatible with the computer or with the operating system.	Refer to the documentation supplied with the PC Card and to Chapter 10 of this guide.
Zoomed Video card does not work.	Card or card driver is not compatible with the computer or with the operating system	Refer to the documentation supplied with the PC Card and to Chapter 10 of this guide.
Computer beeps twice when a storage card is inserted, but the card does not work.	You are trying to access the storage card using the wrong drive letter.	Open Windows Explorer and verify the drive letter.

Continued

Solving PC Card Problems *Continued*

Problem	Possible Cause	Solution
Computer beeps twice but modem, fax, or network card does not work.	Telephone cord is not plugged in all the way.	Verify that the telephone connection is secure.
	You are trying to access the card using the wrong COM port.	Verify the COM port assigned to the card and within the application. Click Start→Help→Contents→Troubleshooting→[problem], then follow the instructions.
	Network server is unavailable.	Contact system administrator.

Solving External Pointing Device Problems

The following are common problems with an external mouse, trackball, or other pointing device.

Problem	Possible Cause	Solution
External pointing device does not work	Incorrect device driver is installed.	Refer to the documentation supplied with the device for instructions.
	Device is not properly connected.	Be sure the pointing device is securely connected to the correct connector.
Cursor skips or moves abnormally when using an external pointing device.	Device is not properly connected.	Be sure the pointing device is securely connected to the correct connector.
	Device needs to be cleaned.	Refer to the documentation supplied with the external pointing device to verify whether it should be cleaned.

Solving Power Problems

Solutions for “Solving Battery Problems” may also be helpful.

Problem	Possible Cause	Solution
Computer will not turn on.	Computer is not connected to a power source.	Insert a battery pack or connect to an external power source.
	Power cords to the external power source are unplugged.	Ensure that power cords connecting the computer to the external power source are plugged in properly.
	Battery pack is discharged.	Insert a fully charged battery pack or connect to an external power source.

Continued

Solving Power Problems *Continued*

Problem	Possible Cause	Solution
Computer will not turn on when connected to external power if battery pack is in the computer.	Battery pack may be defective.	Remove battery pack, insert another battery pack, and try again.
Computer turned off while it was left unattended and power/suspend light is off.	System initiated Hibernation after a preset timeout.	Turn on the computer to restore you information at the point where Hibernation was initiated. To change the Hibernation timeout, click the Hibernation tab in Power Properties.
Computer turned off while it was left unattended and will not turn on.	System initiated Hibernation and/or shut down because of a critical low-battery condition.	Replace the battery pack with a fully charged battery pack or connect to an external power source, then turn on the computer.
Computer unexpectedly initiated Suspend, or turned off when it was docked.	The maximum operating temperature was exceeded.	Computer is in an exceedingly hot environment and the fan was not able to cool it adequately. Let the computer cool down, then turn it on again. Make sure the ventilation intake and exhaust are not obstructed. If problem persists, contact your Compaq authorized service provider.

Solving Printer Problems

If you experience problems printing, refer to the printer documentation for instructions to run a printer self-test. If the self-test is successful, it is not a printer-specific problem.

Problem	Possible Cause	Solution
Printer will not turn on.	The signal cable or power cord may not be securely connected.	Ensure that the signal cable is properly connected and that the power cord is connected to the electrical outlet.
	Printer is not turned on or is offline.	Turn the printer on and set it to online.
	Correct printer is not selected.	Select the printer within your software program, or double-click the Printers icon in Control Panel, click the correct printer, then click File→Set as Default.
	Printer driver is not installed.	In Control Panel, double-click Printers→Add Printer, then follow instructions to install the driver for your printer.
	Driver is installed for a network printer that is not connected to the network.	Connect the printer to the network or contact the network administrator.
	Printer cable is too long, unshielded, or defective.	Replace the printer cable.
Printer prints garbled information.	Paper tray is empty.	Fill the paper tray with paper. Set the printer to online, if necessary.
	Correct printer driver is not installed.	In Control Panel, double-click Printers→Add Printer, then follow instructions to install the driver for your printer.
	Cable is not connected properly.	Ensure that the printer signal cable is securely connected to the computer.
	Cable is damaged.	Replace the cable.

Solving Screen Problems

This section lists some common causes and solutions for computer display and external monitor problems

You can perform a monitor self-test on an external VGA color or monochrome monitor by disconnecting the monitor from the computer. To do so, complete the following steps:

1. Switch to the internal display.
2. Turn off the external monitor.
3. Disconnect the external monitor signal cable from the computer.
4. Turn on the monitor and allow it to warm up for one minute.

The screen should be white. A narrow black border may also appear on the left and right sides of the display. Either of these displays indicates that the monitor is working properly.

Problem	Possible Cause	Solution
Characters are dim.	Brightness is not properly set.	Press Fn+F10 , then press the right arrow key to increase brightness.
	Computer screen is in direct light.	Tilt the display or move the computer.
	The Brightness setting may be less than you prefer.	Verify or change setting for Brightness on the Battery Conservation Settings tab in Power Properties (see Chapter 4.)
Screen is blank.	Screen save was initiated after the screen timeout (period of inactivity).	Press any key or click the mouse.
	You initiated QuickLock/QuickBlank.	Enter your power-on password to exit QuickLock/QuickBlank. NOTE: If num lock is on, hold down the Fn key to type a non-numeric password; press Fn+Shift for uppercase.
	Brightness needs adjusting.	Press Fn+F10 then the right arrow key to increase brightness.

Continued

Solving Screen Problems *Continued*

Problem	Possible Cause	Solution
Screen is blank (<i>continued</i>).	Screen has overheated.	If computer is in direct sunlight, move it and allow it to cool off.
Screen is blank and the power/suspend light is blinking.	System is in Suspend.	Press the suspend button to exit Suspend. Enter your power-on password if prompted.
Screen is blank, and the power/suspend light and battery light are both blinking.	System is in Suspend and has entered a low-battery condition.	Immediately connect the computer to an external power source or replace the battery pack.
Computer screen is blank and the external monitor displays information.	Display is switched to the external monitor.	Press Fn+F4 to switch to the computer display.
External monitor does not display information.	External monitor was connected after the computer was turned on.	Press Fn+F4 to switch to the external monitor.
	The external monitor signal cable or power cord is not properly connected.	Verify the cables are properly connected.
Display on an external monitor is distorted.	Incorrect display device drivers are installed or incorrect resolution is set.	Double-click the Display icon in Control Panel, click the Settings tab, and set the correct display type and resolution for the external monitor.

Continued

Solving Screen Problems *Continued*

Problem	Possible Cause	Solution
Display on an external monitor is distorted. <i>(continued)</i>	The external monitor is not Energy Star compliant, but monitor energy saving feature is enabled.	<ol style="list-style-type: none">1. Press any key or move the pointing device to restore the display.2. If display remains distorted, turn off the monitor, then on again.3. Disable the monitor energy saving feature in Windows 95 Display Properties, or in Windows NT on the AC Energy Saver tab in Power Properties.
Small red, green, or blue spots appear on the computer TFT display.	Small spots, called on-pixels, often appear on TFT screens. Compaq limits the number of these on-pixels to 0.003 percent.	This is typical; no action is required.
The image has a black border and does not fill the screen.	The Desktop Area setting is smaller than the Resolution setting.	<p>To adjust settings for the Desktop Area and Resolution, double-click the Display icon in Control Panel, then click the Settings tab and the Compaq tab.</p> <p>Press the Fn+T hotkey to expand the image.</p>



appendix A

COMPAQ CUSTOMER SUPPORT

Preparing for a Technical Support Call

If you cannot solve a problem using the troubleshooting tips in Chapter 17 and the online Troubleshooting help, you may need to call technical support. To receive the fastest possible solution when you call, follow the instructions in Chapter 16 to run the Compaq diagnostics utilities and have the following available when you call:

- The computer
- Serial number (on the bottom of the computer)
- Purchase date on invoice
- Conditions under which the problem occurred
- Error messages that occurred
- Hardware configuration
- Type of printer connected
- Hardware and software you are using
- Product identification number (PIN), which you entered when you set up the computer. (Click Start→Settings→Control Panel→System→General tab. Your PIN number is below your name.)
- Printed error message log from Computer Checkup (TEST), or a list of the devices and error messages received
- Configuration settings in View System Information (INSPECT), including contents of the system files

NOTE: If you take your computer to a Compaq authorized reseller, dealer, or service provider for service, remember to provide the power-on and setup passwords, if they are set.

Worldwide Telephone Numbers

Locate your geographical area in the following table and use one of the telephone numbers for Compaq assistance.

General Information Numbers—Product information, technical assistance, and the location of your nearest Compaq authorized dealer, reseller, or service provider.

Technical Support Numbers—Hardware technical support in analyzing system configuration and diagnostic problems or troubleshooting.

Customer Support Numbers—Information on service and support programs including warranty, product catalogs, and white papers.

PaqFax Numbers—Automatic facsimile response system for technical and product-specific information that is transmitted to any fax machine. PaqFax is available 24 hours a day.

NOTE: Telephone numbers are subject to change without notice.

* Indicates toll-free domestic numbers.

Worldwide Telephone Numbers		
Location	Country Code	Telephone Number
Argentina		
General Information	+54	-1-796-1616
Technical Support	+54	-1-796-1717
Australia		
General Information		61-2-9911-1999
Technical Support		61-2-9911-1955
PaqFax		61-2-9911-1982
Austria		
General Information*		0222/8 78-16-16
Technical Support*		0222/8 78-16-16
Order Software Backup	+31	-55-38-43-39

Continued

Worldwide Telephone Numbers *Continued*

Location	Country Code	Telephone Number
Belgium / Luxembourg		
Compaq Care Center	Bel Lux	0903-99036 (45 BFr/min.) 089/89.232
General Fax	+32	(0)2/725 22 13
Infoline (resellers, brochures)	+32	(0)2/716 96 96
QuickLine (BBS)	+32	(0)2/716 95 92
Order Software Backup	+32	(0)2/716 96 78
Order Software Backup by Fax	+32	(0)2/716 96 79
Brazil		
General Information	+55	-11-246-7866
Canada		
General Information		1-905-707-1715
Technical Support*		1-800-OKCOMPAQ (1-800-652-6672)
Customer Support*		1-800-263-5868
Order Software Backup*		1-800-952-7689
Battery Pack Recycling*		1-800-263-5868
Caribbean		
General Information		1-281-514-4220
Technical Support		1-281-518-2200
Chile		
General Information	+56	-2-274-1911
Technical Support	+56	-2-274-3007
China		
General Information	+86	-10-6831-3399
Technical Support	+86	-10-6834-6721
Colombia		
General Information	+57	-1-312-0201
Technical Support	+57	-1-345-0266
Czech Republic		
General Information	+420	-2-232-8772
Technical Support	+420	-2-232-8772

Continued

Worldwide Telephone Numbers *Continued*

Location	Country Code	Telephone Number
Denmark		
General Information	+45	-45-90-45-90
Technical Support	+45	-45-90-45-45
Finland		
General Information	+358	-0-615 599
Technical Support*		0203-206 720
QuickLine (BBS)	+358	-0-6155 9870
France		
General Information	+33	-1-41-33-41-33
Technical Support	+33	-1-41-33-44-55
Germany		
		0,48 DM/min.
Hotline		0180/5 21 21 11
Hotline Fax		0180/5 21 21 17
Infoline		0180/3 22 12 21
Infoline Fax		0180/3 22 12 20
QuickLine		0180/5 21 21 18
FaxPaq		0180/5 21 21 19
Order Software Backup*		0130/81 10 81
Hong Kong		
General Information		852-28681382
Technical Support		852-90116633
PaqFax		852-28671648
Hungary		
General Information	+36	-1-457-3600
Technical Support	+36	-1-457-3682
India		
General Information		91-80-559-6023
PaqFax		91-80-559-8989
BBS		91-80-559-8900

Continued

Worldwide Telephone Numbers *Continued*

Location	Country Code	Telephone Number
Israel		
General Information	+972	-3-6363-444
Technical Support	+972	-3-6363-444
PaqFax	+972	-3-6396-601
Italy		
General Information	+39	-2-57-59-03-00
Technical Support	+39	-2-57-59-03-00
Japan		
General Information*		0120-101-589
Technical Support*		0120-101-589
Windows 95 Support*		0120-505-589
Order Software Backup *		0120-250-589
FaxStation		81-3-5402-0991
Korea		
General Information		82-2-3470-07001
Technical Support		82-2-523-3575 82-082-902-77774
Malaysia		
General Information		603-717-1188
Technical Support		603-718-1636
Mexico		
General Information	+52	-5-229-7900
Technical Support	+52	-5-229-7910
PaqFax	+52	-5-229-7920
Netherlands		
General Information		0182-565805
Customer Support*		06-91681616 (Dfl. 0.75/min)
Fax*		06-8991116 (Dfl. 0.40/min)
QuickLine Bulletin Board		0182-572366

Continued

Worldwide Telephone Numbers *Continued*

Location	Country Code	Telephone Number
New Zealand		
General Information		64-9-307-3969
Norway		
General Information	+47	-22-07-20-00
Technical Support	+47	-22-07-20-20
Poland		
General Information	+48	-2-630-3535
Technical Support	+48	-2-630-3535
Portugal		
General Information	+351	-1-4128400
Technical Support	+351	-1-4128460
Russia		
General Information	+7	-095-967-1700
Technical Support	+7	-095-967-1700
PaqFax	+7	-095-967-1701
Singapore		
General Information		65-753-6688
Customer Support Center		65-750-3030
PaqFax		65-750-4514
South Africa		
General Information		27-11-728-6999
Technical Support		27-11-728-6999
Spain		
General Information	+34	-902.10.14.14
Technical Support	+34	-1-640-1302
Sweden		
General Information	+46	-8-703-5240
Technical Support	+46	-8-703-5240
PaqFax (hämtfax)	+46	-8-703-5225
QuickLine (BBS)	+46	-8-703-5220

Continued

Worldwide Telephone Numbers *Continued*

Location	Country Code	Telephone Number
Switzerland		
General Information		0844 844 111
Technical Support		01/838 22 22 (German) 01/838 22 23 (French)
QuickLine Bulletin Board		01/838-24 21
Order Software Backup		0800 556 206
Taiwan		
General Information		886-2-7351000
Technical Support		886-2-3761170
BBS		886-2-3761175
Thailand		
General Information		62-2-679-6222
United Arab Emirates (Dubai)		
General Information	+97	14 -818100
United Kingdom		
General Information		0990-134456
FaxPaq		0181-332-3550
QuickLine Bulletin Board		0181-332-9499
United States		
Product Information*		1-800-345-1518
Technical Support*		1-800-OKCOMPAQ (1-800-652-6672)
PaqFax*		1-800-345-1518, Option 1
Download Facility (modem access only)		1-281-518-1418
Order Software Backup*		1-800-952-7689
Battery Pack Recycling*		1-800-524-9859
Venezuela		
General Information	+58	-2-953-6944

appendix **B**

REGULATORY NOTICES

Regulatory Agency Identification Numbers

Regulatory agencies worldwide use agency series numbers for product identification. Each approved product displays the assigned agency series number. To ensure continued safe and reliable operation, the options listed below should be used only with Compaq series 2910, 2910A, and 2910B computers.

Option	Agency Series Number
■ Desktop Expansion Base	2895
■ Convenience Base	2896
■ Battery Pack	2911, 2911A
■ External Battery Charger	2893
■ AC Adapter	2912, 2912A
■ Automobile Adapter	2874

Federal Communications Commission Notice

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio or television technician for help.

Modifications

The FCC requires the user to be notified that any changes or modifications made to this device that are not expressly approved by Compaq Computer Corporation may void the user's authority to operate the equipment.

Cables

Connections to this device must be made with shielded cables with metallic RFI/EMI connector hoods to maintain compliance with FCC Rules and Regulations.

Declaration of Conformity (United States only)

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

To identify this product, refer to the Series number found on the product. For questions regarding this declaration, write

Compaq Computer Corporation
P. O. Box 692000, Mail Stop 510101
Houston TX 77269-2000

or call

(281) 514-3333.

Canadian Notice

This Class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

Avis Canadien

Cet appareil numérique de la classe B respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.

European Notice

Products with the CE Marking comply with both the EMC Directive (89/336/EEC) and the Low Voltage Directive (73/23/EEC) issued by the Commission of the European Community.

Compliance with these directives implies conformity to the following European Norms:

- EN55022 (CISPR 22)—Electromagnetic Interference
- EN50082-1 (IEC801-2, IEC801-3, IEC801-4)—
Electromagnetic Immunity
- EN60950 (IEC950)—Product Safety

Japanese Notice

本装置は、第二種情報装置（住宅地域またはその隣接した地域において使用されるべき情報装置）で住宅地域での電波障害防止を目的とした情報処理装置等電波障害自主規制協議会（VCCI）基準に適合しております。

しかし、本装置をラジオ、テレビジョン受信機に、近接してご使用になると、受信障害の原因となることがあります。本書の説明にしたがって正しい取り扱いをしてください。

German Ergonomics Notice

The Compaq 2910 series of computers have been evaluated and found to comply with the requirements of ZH 1/618, 1980. The computers were evaluated using MS-DOS Version 3.31 or higher, BASICA/T, and the EGA_THIN.CPI character set, as published by Compaq. In order to meet the minimum contrast requirements of ZH 1/618 when used in a negative polarity mode to display light characters on a dark background, the character colors red and blue should be used in the high intensity/bright color mode. Positive polarity displays (dark characters on a light background) do not meet the background reflection requirements of ZH 1/618.

Airline Travel Notice

Use of electronic equipment aboard commercial aircraft is at the discretion of the airline.

Energy Star Compliance

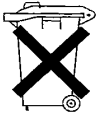
The Compaq 2910 series of computers are compliant with the U.S. Environmental Protection Agency (EPA) Energy Star Computers Program 2.0. The EPA Energy Star logo does not imply endorsement by the EPA. As an Energy Star Partner, Compaq Computer Corporation has determined the product meets the Energy Star guidelines for energy efficiency.

Battery Notice



WARNING: This computer contains an internal lithium auxiliary battery. There is a risk of explosion and injury if the battery is incorrectly replaced or improperly handled. Do not attempt to recharge, disassemble, immerse in water, or dispose of it in fire. Replacement should be done by a Compaq authorized service provider using the Compaq spare part for this computer.

This computer contains a lithium ion battery pack. There is a risk of fire and chemical burn if the battery pack is handled improperly. Do not disassemble, crush, puncture, short external contacts, dispose in water or fire, or expose it to temperatures higher than 60°C (140°F). Replace only with the Compaq battery pack for this computer.



In North America, dispose of nickel metal hydride or lithium ion batteries by taking advantage of the Compaq battery recycling program. You will be provided with a postage-paid battery pack mailer preaddressed to a reclamation facility where the metals are recycled. Call the telephone number listed for your location in Appendix A for more information.

In Europe, do not dispose of batteries with general household waste. Dispose of or recycle them by using the public collection system or returning them to Compaq, your authorized Compaq partners, or their agents.

Power Cords

If you were not provided with a power cord for your computer or for an AC power option intended for use with your computer, you should purchase a power cord that is approved for use in your country.

The power cord must be rated for the product and for the voltage and current marked on the product's electrical ratings label. The voltage and current rating of the cord should be greater than the voltage and current rating marked on the product. In addition, the diameter of the wire must be a minimum of 0.75 mm²/18AWG, and the length of the cord must be between 5 feet (1.5 m) and 6½ feet (2 m). If you have questions about the type of power cord to use, contact your Compaq authorized service provider.

A power cord should be routed so that it is not likely to be walked on or pinched by items placed upon it or against it. Particular attention should be paid to the plug, electrical outlet, and the point where the cord exits from the product.

Laser Safety

All Compaq systems equipped with laser products comply with appropriate safety standards, including IEC 825. With specific regard to the laser, the equipment complies with laser product performance standards set by government agencies for Class 1 laser products. It does not emit hazardous light; the beam is totally enclosed during all modes of customer operation and maintenance.

CDRH Regulations

The Center for Devices and Radiological Health (CDRH) of the U.S. Food and Drug Administration implemented regulations for laser products on August 2, 1976. These regulations apply to laser products manufactured from August 1, 1976. Compliance is mandatory for products marketed in the United States.



WARNING: Use of controls or adjustments or performance of procedures other than those specified herein or in the laser product installation guide may result in hazardous radiation exposure.



This system is classified as a Class 1 laser product. This label appears on the laser product.

Laser Information

Laser Type:	Semiconductor GaAlAs
Wave Length:	$780 \pm 35 \text{ nm}$
Divergence Angle:	$53.5^\circ \pm 1.5^\circ$
Output Power:	Less than 0.2mW or $10,869 \text{ W} \cdot \text{m}^{-2} \cdot \text{sr}^{-1}$
Polarization:	Circular
Numerical Aperture:	0.45 ± 0.04

Only authorized technicians trained by Compaq should attempt to repair this equipment. All troubleshooting and repair procedures are detailed to allow only subassembly/module level repair. Because of the complexity of the individual boards and sub-assemblies, no one should attempt to make repairs at the component level or to make modifications to any printed wiring board. Improper repairs can create a safety hazard.

Safety Precautions for Modems

Always follow these basic safety precautions when using a modem or telephone that is not cordless.



WARNING: To reduce the risk of personal injury, electric shock, or fire:

- Never connect or use a modem or telephone during a lightning storm. There may be a remote risk of electric shock from lightning.
 - Never connect or use a modem or telephone in a wet location.
 - Never use a modem or telephone to report a gas leak in the vicinity of the leak.
 - Always disconnect the modem cable before opening the equipment enclosure or touching an uninsulated modem cable, jack, or internal components.
-

U.S. Regulations Governing the Use of Modems

This equipment complies with Part 68 of the FCC rules. Located on the bottom of the computer is a label that contains, among other information, the FCC Registration Number and Ringer Equivalence Number (REN) for this equipment. Upon request, you must provide this information to your telephone company.

The REN is useful to determine the quantity of devices you may connect to your telephone line and still have all of those devices ring when your telephone number is called. In most areas (but not all), the sum of the RENs of all devices connected to one line should not exceed five (5.0). To be certain of the number of devices you may connect to your telephone line, as determined by the REN, you should contact your local telephone company to determine the maximum REN for your calling area.

The REN for this device is 0.7B.

If your telephone equipment causes harm to the telephone network, the telephone company may discontinue your service temporarily. If possible, they will notify you in advance. But, if advance notice is not practical, you will be notified as soon as possible. You will also be informed of your right to file a complaint with the FCC.

Your telephone company may make changes in its facilities, equipment, operations, or procedures that could affect the proper functioning of your equipment. If they do, you will be notified in advance to give you an opportunity to maintain uninterrupted telephone service.

If you experience trouble with this telephone equipment, contact your local telephone company for information on obtaining service or repairs. The telephone company may ask that you disconnect this equipment from the network until the problem has been corrected or until you are sure that the equipment is not malfunctioning.

This equipment may not be used on coin service provided by the telephone company. Connection to party lines is subject to state tariffs.

For the Compaq Customer Support Center and your nearest Compaq Authorized reseller in North America, call 1-800-345-1518 or write:

Compaq Customer Support Center
P.O. Box 692000
Houston, Texas 77269-2000

Telephone Consumer Protection Act of 1991

The Telephone Consumer Protection Act of 1991 makes it unlawful for any person to use a computer or other electronic device to send any message via a telephone facsimile machine unless such message clearly contains, in a margin at the top or bottom of each transmitted page, or on the first page of the transmission, the date and time it is sent and an identification of the business, or entity, or individual sending the message and the telephone number of the sending machine or such business, or entity, or individual.

Canadian Regulations Governing the Use of Modems

NOTE: The Industry Canada label identifies certified equipment. This certification means that the equipment meets certain telecommunications network protective, operational, and safety requirements. The Department does not guarantee the equipment will operate to the user's satisfaction.

Before installing the equipment, users should ensure that it is permissible to be connected to the facilities of the local telecommunications company. The equipment must also be installed using an acceptable method of connection. In some cases, the company's inside wiring associated with a single line individual service may be extended by means of a certified connector assembly (telephone extension cord). The customer should be aware that compliance with the above conditions may not prevent degradation of service in some situations.

Repairs to certified equipment should be made by an authorized Canadian maintenance facility designated by the supplier. Any repairs or alterations made by the user to this equipment, or equipment malfunctions, may give the telecommunications company cause to request the user to disconnect the equipment.

Users should ensure for their own protection that the electrical ground connections of the power utility, telephone lines, and internal metallic water pipe system, if present, are connected together. This precaution may be particularly important in rural areas.



CAUTION: Users should not attempt to make such connections themselves, but should contact the appropriate electric inspection authority or an electrician.

The Load Number (LN) assigned to each terminal device denotes the percentage of the total load to be connected to a terminal loop which is used by the device to prevent overloading. The termination on a loop may consist of any combination of devices subject only to the requirement that the total of the Load Numbers of all devices does not exceed 100. An alphabetic suffix is also specified in the Load Number for the appropriate ringing type (A or B), if applicable. For example, LN = 20 A designates a Load Number of 20 and an "A" type ringer.

The Load Number for this device is 5B.

For the location of the authorized Canadian maintenance facility nearest you, call 1-800-263-5868 or contact:

Compaq Canada, Inc.
45 Vogell Road
Richmond Hill, Ontario LA5B 3P6

AUSTEL Requirements



CAUTION: Failure to set the modem, and any communications software used with the modem, to the values contained in the Telephone Answering Machine documentation will result in the modem being operated in a non-compliant manner. Consequently, there would be no permit in force for this equipment, and the Telecommunications Act 1991 prescribes a penalty of \$12,000 for the connection of non-permitted equipment.

Auto Dialing with the Modem

1. When entering telephone numbers, ensure that the number that appears on the screen is correct before beginning to dial.
2. Some parameters required for compliance with AUSTEL specifications are dependent on the Telecommunications apparatus provided with the Compaq 2910 series of computers. The Compaq series 577 global modem shall be set to operate within the following limits for compliance with AUSTEL Specifications.

When the user manually initiates a call via equipment connected to the Compaq personal computer, the equipment shall operate within the following restrictions:

- a. Without call progress detection—a maximum of three calls (original plus two retries).
- b. With call progress detection (which ensures the line will be released after detection of tones indicating the call will not be successful)—a maximum of ten calls (original plus nine retries).
- c. If the series of calls noted in a or b are unsuccessful, no further attempts shall be made to obtain the required number within the next 30 minutes (unless manually initiated).

NOTE: Failure to meet the above requirements may negate user rights under the AUSTEL Terms of Service.

U.K. BABT User Information

Safety

The Compaq series 577 global modem is intended for use in the Compaq 2910 series of computers. For the purposes of BABT approval, the Compaq series 577 global modem is classified as a host-independent product.

The following information characterizes the requirements of the host system in order to maintain the reliable use of the Compaq series 577 global modem:

- The fax/voice modem requires a power supply voltage of 5VDC \pm 5%, 12VDC \pm 5%, or -12VDC \pm 5%.
- The host computer must provide a maximum of 950 mW (U.K.) from the +5VDC power supply, and a maximum of 50 mW from the -12VDC power supply and the +12VDC power supply.
- The host apparatus must provide adequate power for the modem and any other auxiliary apparatus drawing power from it.
- Failure to provide modem user's instructions with the host computer will INVALIDATE modem approval.
- The modem is approved only for installation in a host and with host attachments that are either type approved for such apparatus or, if supplied after 1st March 1989, are marked with or supplied with a statement that the host is supplied under General Approval Number NS/G/1234/J/100003.
- Connections to and from the modem card are made via the following port: DTE port (SELV) 80-pin edge connector on modem PCB.
- Ports for SELV circuitry should only be connected to like SELV circuitry ports.

Telephone Network Connection

- The modem is suitable for connection to the Public Switched Telephone Network (PSTN) direct exchange lines and relevant branch systems (PBXs).
- A ringer equivalent number (REN) is a value given to all apparatus to be connected to the PSTN. Its value can be taken and used to calculate the maximum number of equipment items that can be connected in parallel without impairing the performance of the standard bell circuit.
 - $REN = 3/n$ where n is the maximum number of units that may be used in parallel.
 - The maximum REN of a line is 4; therefore, the total REN of all apparatus connected to the line (obtained by summing the individual REN values) should not exceed 4. This value includes any BT-provided instrument, each of which is assumed to have REN value of 1.0 unless otherwise stated. Exceeding the REN 4 = 4 value may cause your telephone(s) to ring weakly or not ring at all.
 - Only one modem should be connected to a telephone line. Connecting a modem in parallel with one or more telephone instruments is not allowed.
 - The REN for this piece of equipment is 1.0.
- The exchange should provide facilities for either loop disconnect (pulse) dialing or multifrequency (tone) dialing. The modem can be configured to operate with either system.
- During dialing, this apparatus may tinkle the bells of other telephones using the same line. This is not a fault, and we advise you not to call the Fault Repair Service.
- The Compaq series 577 global modem specified in this guide is for the Compaq 2910 series of computers.
- This apparatus has been approved for the following facilities:
 - Simple modem
 - Facsimile
 - Telephone answering machine functions
 - Speakerphone functions
 - Automatic call initiation
 - Detection of initial proceed indication

- ❑ Automatic dialing
- ❑ Tone detection of busy tone, dial tone, or number unobtainable tone
- ❑ Auto clear from the call origination end
- ❑ Loop disconnect (pulse) dialing
- ❑ Multifrequency (tone) dialing

Any other usage will invalidate the approval of the apparatus if, as a result, it ceases to conform to the standards against which approval was granted.

All apparatus connected to this modem and, thereby, connected directly or indirectly to the British Telecom Public Switched Telephone Network, must be approved apparatus as defined in Section 16 of the British Telecommunications Act of 1981.

Although this equipment can use either loop disconnect or DTMF signaling, only the performance of the DTMF signaling is subject to regulatory requirements for correct operation. It is therefore strongly recommended that the equipment be set to use DTMF signaling for access to public or private emergency services. DTMF signaling also provides faster call setup.



CAUTION: The series 577 global modem may not be used on extension wiring that makes use of plug pins 1 & 6. If in doubt, advice must be obtained from a competent telecommunications engineer.

Difficulties may occasionally be experienced from other apparatus connected to the BT PSTN via the Compaq series 577 global modem apparatus. Such difficulties may include the following:

- Difficulty in making calls
- Problems in telephone conversation being experienced by both parties to the call



CAUTION: Initially, normal operation will be possible. However, changes to or modernization of the network may result in the apparatus being connected to a network service with which it was not designed to be compatible. Failure of the apparatus to work under these circumstances may not be the responsibility of the network operator.

If the above mentioned difficulties are experienced, please contact your product supplier or your authorized Compaq reseller in the United Kingdom.

This device is intended for auto-answering of incoming calls. Under normal conditions callers will be accustomed to calls being answered within 10 seconds, and a majority of callers will abandon calls that are not answered within 45 seconds.

There are several options available for auto-answering operation. The default setting is for two incoming rings. This is the recommended setting for normal operation by most computer users.

Auto Dialing with the Modem

When entering telephone numbers, ensure that the number that appears on the screen is correct before beginning to dial.

Approval Statements

The following lists the modem approval statements:

- This modem is approved as a host independent product. This approval number is a general approval number.
- APPROVED for connection to the telecommunications systems specified in the instructions for use, subject to the conditions set out in them.
- DGT No. NS/5141/3/V/607050.

appendix C

ELECTROSTATIC DISCHARGE

A discharge of static electricity from fingers or other electrostatic conductors may damage electronic components. Before handling electrostatic-sensitive components, discharge static electricity by one of the methods described in this appendix.

Preventing Electrostatic Discharge

When Handling Removable Drives

To prevent electrostatic damage to removable drives, observe these precautions:

- Before handling a removable drive, discharge static electricity by touching the unpainted metal surface or lug nuts on the connectors on the back of the computer.
- Avoid touching connector pins on the computer and on the removable drive.
- Keep a removable drive in its carrying case until you are ready to insert it into a drive bay.

When Installing Internal Components

To prevent electrostatic damage when installing internal components, observe these precautions:

- Keep components in their electrostatic-safe containers until you are ready to install them.
- Have everything needed for the installation within reach so that you do not have to leave the area after beginning installation.
- Use nonmagnetic tools.

- Before touching an electronic component, discharge static electricity by one of the grounding methods described later in this appendix. If you must leave the area during installation, remember to reground yourself before resuming installation.
- Avoid touching pins, leads, and circuitry. Handle electronic components as little as possible.
- If you remove a component, place it in an electrostatic-safe container.

Grounding Methods

There are several methods for grounding. Use one or more of the following grounding methods when installing components in the computer or expansion base.

- Touch the unpainted metal surface or lug nuts on the connectors on the back of the computer or expansion base. Avoid touching connector pins. If installation instructions direct you to unplug the computer or expansion base, unplug it after being properly grounded and before removing the cover.
- Touch an exterior unpainted metal surface of equipment that is connected to an electrical outlet by a grounding plug.
- Use a wrist strap connected by a ground cord to the computer chassis. Wrist straps are flexible grounding straps with a minimum of 1 megohm \pm 10 percent resistance in the ground cords. To provide proper ground, wear the strap snug against the skin.

NOTE: If you need more information about static electricity or assistance with product installation, contact your Compaq authorized dealer, reseller, or service provider.

appendix **D**

SPECIFICATIONS

The following guidelines provide a safe operating environment for your computer.

Operating Environment		
	U.S.	Metric
Temperature		
Operating	50 to 104°F	10 to 40°C
Nonoperating (excluding battery pack)	-4 to 140°F	-20 to 60°C
Relative Humidity (non-condensing)		
Operating	10 to 90%	
Nonoperating	5 to 90% 38.7°C Maximum Wet Bulb	
Maximum Altitude (unpressurized)		
Operating	0-10,000 ft	3.05 km
Nonoperating	0-30,000 ft.	9.14 km

AC Adapter Power Requirements

Rated Voltage	100–240 Volts AC
Rated Current	1.0 Amp
Rated Frequency Range	50 to 60 Hz

NOTE: This product is designed for IT power systems in Norway with phase-to-phase voltage not exceeding 240Vrms.

Computer Dimensions

	U.S.	Metric
Height	1.54 in	3.91 cm
Width	12.0 in	30.48 cm
Depth	9.27 in	23.55 cm

INDEX

A

- AC Adapter, 1-2, 1-4, 2-6, 4-1, 13-3
- AC Energy Saver, Windows NT, 4-6, 4-7
- adapter
 - AC, 1-2, 1-4, 2-6, 4-1, 13-3
 - automobile, 4-1
 - hard drive MultiBay, 6-8
 - removable drive MultiBay, 6-3, 6-9–6-13
- Add New Hardware icon, Windows 95, 7-3
- agency identification numbers, B-1
- air travel with computer, 13-3
- air vents, 2-6, 4-2
- airport security devices, 13-3
- applications. *See* software
- Armada MiniStation, 2-2, 2-7, 4-1, 4-5, 5-4, 6-9, 6-18, 7-6
- Armada 7000 Removable Drive MultiBay Adapter, 6-3, 6-9–6-13
- Armada 7300 Hard Drive MultiBay Adapter, 6-8
- ArmadaStation, 2-2, 2-7, 4-1, 4-5, 5-4, 6-9, 6-18, 7-6, 11-3
- asset management, 15-1
- asset tag, 15-1, 16-2
- AssetControl, 15-1
- AT commands, 8-1
- audio, 2-2, 2-3, 11-1–11-4, 17-3
- Automobile Adapter, 4-1
- auxiliary battery, 17-5, B-4

B

- backup, 1-9, 6-4, 13-2, 17-9
- bag in shipping box, 1-2
- battery bay, 2-4, 5-4, 5-6, 5-7
- battery charger, 5-4
- battery conservation
 - hotkey, 3-3, 4-8
 - settings, 4-6, 4-8, 5-7
 - timeouts, 4-4
- battery gauge, 5-1–5-3
 - ensuring accuracy, 5-1
 - hotkey, 3-3, 5-2
 - meter on taskbar, 5-3
 - on battery pack, 5-3
 - status in Power Properties, 4-6, 5-2
 - troubleshooting, 17-4
- battery light, 2-3, 5-4, 5-5
- battery pack, 5-1–5-8
 - battery gauge on, 5-3
 - charging, 5-4
 - discharge, 4-3, 5-7
 - disposing of, B-4
 - extending life, 4-3
 - extending operating time, 5-7
 - inserting, 5-7
 - lithium ion, 2-4, 5-1
 - low-battery condition, 5-5
 - low-battery condition, critical, 4-4, 4-5, 5-5
 - recycling, 5-1, B-4
 - release latch, 2-7
 - removing, 5-6, 5-7
 - storing, 5-8
 - taking out of ship mode, 1-3, 1-4
 - troubleshooting, 17-4
 - unused for long time, 4-3, 5-1, 5-7
- battery, auxiliary, 17-5
- beeps
 - Hibernation, 4-5, 17-3
 - hotkey, 3-3
 - low-battery warning, 4-6, 4-9, 5-5, 17-3, 17-4, 17-5
 - memory expansion board, 17-10
 - PC Card, 10-3, 10-4
 - Power-On Self-Test, 17-3
 - Suspend, 4-4, 17-3, 17-5
 - volume, 3-3, 17-3, 17-5, 17-16
- BIOS, 2-1, 3-3
- bookmark, Hibernation, 4-5
- boot management, 6-18, 16-2
- boot order, 6-18
- bootable drive, 6-4, 6-18
- brightness, display, 3-3, 17-21
- button
 - CD-ROM tray, 6-17
 - mouse, 1-8, 2-3, 3-1, 3-2
 - PC Card eject, 2-5, 10-4
 - suspend, 2-3, 4-2
 - volume control, 2-3, 11-2, 11-3, 17-3

C

- cable slot, security, 2-5, 14-7
- cable, modem, 1-2, 2-4, 8-3, 8-4, 13-3
- cache memory, 2-1
- caps lock light, 2-3
- caps, spare pointing device, 1-2, 3-1, 13-2
- card and socket services, 10-2
- CardBus. *See* PC Cards
- CardWare for Windows NT, 10-2, 10-3
- carrying case
 - computer, 1-2, 13-2, 13-3
 - hard drive, 1-2, 6-2, 6-3
 - MultiBay device, 1-2, 6-2, 6-3, 6-9
- CD Player, 11-1
- CD-ROM Auto Insert Notification, 4-4, 4-9
- CD-ROM drive, 2-4
 - caring for, 6-2
 - carrying case, 6-3, 6-9
 - formats supported, 6-1
 - inserting in MultiBay, 6-15
 - MultiBay adapter, 6-3, 6-9–6-13
 - opening, 6-17
 - removing from MultiBay, 6-14
- CD-ROM tray, 6-17
- cellular phone, 8-6
 - connecting to modem, 8-5
 - placing a call, 8-6
 - troubleshooting, 17-14
- charge level lights on battery pack, 5-3
- charging battery pack, 5-4
- cleaners, 6-2
- cleaning computer, 13-1
- communications program, 8-2
- Compaq
 - customer support, A-1
 - Diagnostics for Windows, 2-8, 12-1, 16-5
 - Information Center, 1-10
 - Insight Manager, 15-2
 - Insight Personal Edition, 15-1
 - Internet site, 8-1, 10-2
 - phone numbers, A-2
 - Utilities, 16-1–16-6, A-1
- components
 - audio, 2-2, 2-4, 11-2
 - bottom, 2-7
 - front, 2-4
 - interior, 2-8
 - keyboard, 3-2
 - left side, 2-6
 - rear, 2-6
 - right side, 2-4
 - top, 2-2
- computer
 - caring for, 13-1–13-2
 - features overview, 2-1
 - opening, 1-6
 - plugging in, 1-4
 - registering, 1-9
 - serial number, 2-7, A-1
 - setting up, 1-4
 - shipping, 13-2, 13-4
 - shutting down, 4-3
 - slipcase, 1-2, 13-2, 13-3
 - specifications, D-1
 - tilt feet, 1-6, 2-5, 2-6
 - traveling with, 13-2
 - turning off, 4-3
 - turning on, 1-7, 4-3
 - unpacking, 1-2
 - unused for long time, 4-3
- Computer Checkup (TEST), 16-1, 16-3
- Computer Setup, 7-6, 16-1, 16-2
 - asset tag, 16-2
 - boot management, 6-18
 - customizing settings, 1-10
 - device disabling, 14-4
 - passwords, 14-2, 14-3
 - power management, 4-6
 - security management, 14-2
- configuration conflicts, resolving, 16-3
- connecting external equipment, 7-1–7-6
- connector
 - 25-pin modem, 2-4, 8-3, 8-4
 - docking, 2-6, 7-2, 7-6
 - keyboard/mouse, 2-6, 7-2, 7-3
 - microphone, external, 2-4, 11-2, 11-4
 - monitor, external, 2-6, 7-2, 7-4, 17-21
 - parallel, 2-6, 7-2, 7-3, 14-4, 15-2
 - power, 2-6
 - RJ-11 modem, 2-5, 8-3
 - serial, 2-6, 7-2, 7-3, 14-4, 15-2
 - stereo line-in, 2-4, 11-2, 11-4
 - stereo speaker/headphone, 2-4, 11-2, 11-4
- control
 - power, 2-3, 4-2
 - volume, 2-3, 11-2, 11-3, 17-3

- Control Panel
 - Add New Hardware icon, Windows 95, 7-3
 - Compaq Diagnostics icon, 2-8, 12-1, 16-5
 - customizing settings, 1-10
 - Display icon, 7-4
 - Keyboard icon, 3-4
 - Mouse icon, 3-2
 - Multimedia icon, 11-3
 - Passwords icon, 14-2
 - Power icon, 4-6
 - Programmable Keys icon, 3-4
- conventions used in guide, xi
- cord, power, 1-2, 1-4, 13-3, B-5
- Create Diagnostics Diskette utility, 16-1, 16-6
- critical low-battery condition, 4-4, 4-5, 5-5
- CRT/overhead projector icon on taskbar, 7-4
- Ctrl+Alt+Del, 4-3
- cursor keys, 3-2
- customer support, A-1
- customizing computer settings, 1-10

D

- damage, preventing
 - computer, 13-1–13-2
 - from electrostatic discharge, C-1–C-2
 - internal components, C-1
 - removable drives, 6-2, C-1
- device
 - disabling, 14-4, 15-2
 - Legacy, 16-3
 - parallel, 7-3
 - PS/2-compatible, 7-2, 7-3
 - security, 15-2
 - serial, 7-3
- device drivers
 - installing, 7-3
 - PC Cards, 10-2
 - preinstalled, 2-8
- diagnostics utilities, 16-1, 16-3–16-4, 16-5, A-1
- Direct Cable Connection, 9-2
- disabling devices, 14-4, 15-2
- diskette drive, 2-4
 - caring for, 6-2
 - carrying case, 6-3, 6-9

- formats supported, 6-1
- inserting in MultiBay, 6-15
- MultiBay adapter, 6-3, 6-9–6-13
- removing from MultiBay, 6-14
- security, 14-4, 15-2, 16-2
- troubleshooting, 17-7
- display
 - battery operating time, extending, 5-7
 - brightness, 17-21
 - brightness hotkey, 3-3
 - caring for, 13-2
 - dual settings, 7-5
 - external, 7-4–7-6
 - hotkey, 3-3, 7-4
 - icon in Control Panel, 7-4, 7-6
 - image centering/expanding, 3-3, 7-4, 7-5
 - image panning, 7-4, 7-5
 - resolution, 3-3, 7-4–7-5
 - routine care, 13-1
 - screen saver, 4-7, 7-6
 - settings, 7-4–7-6
 - simultaneous, 7-4
 - switch, 2-3
 - troubleshooting, 17-21
- docking connector, 2-6, 7-2, 7-6
- docking restraint latch, 2-7
- documentation, 1-2, 1-10
- drive boot order, 6-18
- drivers. *See* device drivers
- drives, removable, 2-4, 6-1–6-18, 17-7, 17-9, 17-10, C-1

E

- EasyPoint III pointing device, 1-8, 2-3, 3-1, 3-2
- electrical outlet, 1-4
- electrostatic discharge, 6-2, C-1–C-2
- embedded numeric keypad, 3-2, 3-4
- Energy Star, 2-2, 4-7, 7-6, B-4
- Enhanced Parallel Port (EPP), 7-3
- equipment, adding new, 1-10, 7-1–7-6
- ESD. *See* electrostatic discharge
- expanding screen image, 7-4, 7-5
- Extended Capabilities Port (ECP), 7-3
- external equipment, 5-7, 7-1–7-6
- external monitor, 2-6, 7-2, 7-4–7-6, 17-21
- external power source, 1-4, 4-1, 5-4, 5-5, 5-7

F

- fan, 2-6, 4-2
- fault management, 15-2
- features overview, 2-1
- file transfer, wireless, 2-1, 9-2
- floppy disk drive. *See* diskette drive
- Fn key, 3-2, 3-3

G

- graphics controller, 2-1, 7-5, 16-2
- grounding methods, C-2

H

- hard drive, 2-4
 - backing up, 6-4, 13-2, 17-9
 - caring for, 6-2
 - carrying case, 1-2, 6-2, 6-3
 - door, 6-5, 6-6
 - fault management, 15-2
 - Hibernation file, 4-7, 12-1, 17-6
 - inserting into hard drive bay, 6-6
 - inserting into MultiBay, 6-8
 - light, 2-3
 - MultiBay adapter, 6-8
 - partitions, 1-9, 6-1, 6-18
 - removing from hard drive bay, 6-4
 - removing from MultiBay, 6-14
 - security plate, 1-2, 2-7, 6-2, 6-4, 6-6, 6-7, 14-5
 - tab, 6-5, 6-6, 6-8
 - timeout, 4-6, 4-7
 - troubleshooting, 17-9
- hard drive bay, 2-6, 6-1, 6-4–6-7
 - inserting drive, 6-6
 - removing drive, 6-4
- hardware
 - adding new, 7-1–7-6
 - troubleshooting, 17-10
- headphones, external, 11-2, 11-4
- headset, external, 11-2, 11-4
- help
 - online, 1-10, 10-2
 - troubleshooting, 17-1
 - windows programs, 1-10, 9-2

Hibernation

- battery operating time, extending, 5-7
- described, 4-5
- disabling, 4-7, 5-5
- exiting, 4-5
- file, 4-6, 4-7, 12-1, 17-6
- initiating, 3-3, 4-5
- low-battery condition, critical, 4-5, 4-7, 5-5
- removing/inserting drives, 6-14, 6-15
- restoration, 4-5
- tab in Power Properties, 4-7
- timeout, 4-5, 4-6, 4-7
- unavailability, 4-5
- uses, 4-5

- hotkey, 3-2, 3-3
 - battery conservation, 3-3, 4-8
 - battery gauge, 3-3, 5-2
 - display, 3-3, 7-4
 - display brightness, 3-3
 - image expansion, 3-3, 7-5
 - popup window location, 3-3
 - QuickLock/QuickBlank, 3-3, 14-3
 - system beeps, 3-3
- HyperTerminal, 8-6

I

- I/O address. *See* input/output address
- identification numbers, agency, B-1
- IEEE 1284 specification, 7-3
- image expansion, 3-3, 7-4, 7-5
- image panning, 7-4, 7-5
- Infrared Monitor, 4-4, 9-2
- infrared port, 2-1, 2-6, 9-1–9-3, 14-4, 15-2, 17-11
- input/output address, 16-3
- Insight Manager, 15-2
- Insight Personal Edition, 15-1
- Intelligent Manageability, 15-1–15-2, 16-2
- IntelliSafe, 15-2
- international travel with computer, 13-3
- Internet site, Compaq, 8-1, 10-2
- interrupt request, 16-3
- inventory management, 15-1
- IrDA. *See* infrared port
- IRQ. *See* interrupt request
- items in packing box, 1-2

J

- jack
 - microphone, external, 2-4, 11-2, 11-4
 - RJ-11 modem, 2-5, 8-3
 - stereo line-in, 2-4, 11-2, 11-4
 - stereo speaker/headphone, 2-4, 11-2, 11-4
- Just Connect, 8-2

K

- Kensington lock, 14-7
- keyboard
 - components, identifying, 3-2
 - external connector, 2-6, 7-2, 7-3
 - hotkeys, 3-3
 - icon in Control Panel, 3-4
 - troubleshooting, 17-12
- keypad
 - embedded numeric, 3-2, 3-4
 - external numeric connector, 7-2, 7-3
 - troubleshooting, 17-12
- keys
 - Ctrl+Alt+Del, 4-3
 - hotkeys, 3-3
 - identifying, 3-2
 - NumLk, 3-2, 3-4
 - programmable, 2-3, 3-2, 3-4–3-6

L

- laser safety, B-6
- latch
 - battery release, 2-7
 - docking restraint, 2-7
 - hard drive door, 6-5, 6-6
 - MultiBay release, 2-7, 6-14, 6-16
 - release, 1-6
- Legacy device, 16-3
- light
 - battery, 2-3, 5-4, 5-5
 - caps lock, 2-3
 - charge level on battery pack, 5-3
 - hard drive, 2-3
 - MultiBay drive, 2-3
 - num lock, 2-3
 - power/suspend, 1-7, 2-3, 4-2, 4-3, 4-4, 5-5, 5-6
 - scroll lock, 2-3

- line-in jack, 2-4, 11-2, 11-4
- liquids, 6-2, 13-1
- lithium ion battery pack, 2-4, 5-1
- lock, security cable, 2-5, 14-7
- logical drive designations, 1-9, 6-1, 6-18
- low-battery condition
 - critical, 4-4, 4-5, 5-5
 - Hibernation disabled, 4-4, 5-5
 - resolving, 5-5
 - warning beeps, 5-5, 17-3

M

- magnetic fields, avoiding, 6-2, 13-3
- maintenance, computer, 13-1–13-2
- Manage Diagnostics Partition utility,
 - 16-1, 16-6
- Media Player, 11-1
- memory
 - cache, 2-1
 - compartment, 2-7, 12-1
 - increasing, 12-1–12-6
 - RAM, 2-1
 - security, 1-2, 12-2, 12-6, 14-6
 - troubleshooting, 17-13
 - viewing amount, 12-1
- microphone
 - external, 2-4, 11-2, 11-4
 - internal, 2-4, 11-2, 11-3
- modem, integrated, 8-1–8-6
 - 25 pin connector, 2-4
 - connecting, 8-3, 8-4
 - connecting to cellular phone, 8-5
 - country-specific cable, 2-4, 8-3, 8-4
 - Digital Line Guard, 8-2
 - online help, 8-1
 - registering a cellular phone, 8-6
 - RJ-11 jack, 8-3
 - safety, B-7
 - troubleshooting, 17-14
- monaural microphone, 11-4
- monitor, external, 2-6, 4-7, 7-2, 7-4–7-6, 17-21
- mouse
 - buttons, 1-8, 2-3, 3-1, 3-2
 - external PS/2-compatible, 2-6, 7-2, 7-3
 - external serial, 7-1, 7-2, 7-3
 - settings, 3-2
 - troubleshooting, 17-18
- MS-DOS Real Mode, 1-10

- MultiBay, 2-4, 6-1, 6-14–6-16
 - device carrying case, 1-2, 6-2, 6-3, 6-9
 - drive light, 2-3
 - inserting drive, 6-15
 - release latch, 2-7, 6-14, 6-16
 - removing drive, 6-14
 - weight saver, 1-2, 6-16
- MultiBoot, 6-18, 16-2
- Multimedia icon in Control Panel, 11-3
- mute, 11-3, 17-3

N

- notices, regulatory, B-1
- num lock, 3-4
- num lock light, 2-3
- number, serial, 2-7, A-1
- numeric keypad
 - embedded, 3-2, 3-4
 - external connector, 7-2, 7-3
 - troubleshooting, 17-12
- NumLk key, 3-2, 3-4

O

- online
 - Help, 1-10
 - Reference Guide*, 1-10
 - troubleshooting, 17-1
- onscreen pointer, 1-8, 3-1, 3-2
- opening the computer, 1-6
- operating system, 1-7, 1-8, 1-9, 2-8
- Options Catalog*, 1-10, 7-1
- overhead projector, 2-6, 7-2, 7-4–7-6, 17-21
- overheating, 4-2
- overview of features, 2-1

P

- packing box, items included, 1-2
- panning, image, 7-4, 7-5
- PaqFax, A-2
- parallel connector, 2-6, 7-2, 7-3, 14-4, 15-2
- password
 - changing or deleting, 14-4
 - Intelligent Manageability, 15-2

- power-on, 14-2, A-1
- setup, 14-3, A-1
- PC Card modem
 - turning off, 4-6
- PC Cards, 10-1–10-5
 - CardWare for Window NT, 10-2, 10-3
 - compatibility, 10-2
 - configuring, 10-2
 - device drivers, 10-2
 - eject buttons, 2-5, 10-4
 - icon on taskbar, 10-2, 10-4
 - inserting, 10-3
 - power conservation, 5-7
 - removing, 10-4
 - settings, Computer Setup, 16-2
 - sound effects, 17-16
 - supported, 2-1, 2-5, 10-1
 - troubleshooting, 17-16
 - types, 10-1
 - Zoomed Video, 2-1, 10-1
- PCI bus, 2-1
- PCI settings, 16-2
- PCMCIA. *See* PC Cards
- Pentium processor, 2-1
- phone numbers, worldwide, A-2
- Plug and Play, 10-2
- plug, audio, 11-4
- plugging in computer, 1-4
- pointer, onscreen, 1-8, 3-1, 3-2
- pointing device
 - integrated, 1-8, 2-3, 3-1, 3-2
 - spare caps, 1-2, 3-1, 13-2
 - troubleshooting, 17-18
- popup windows location hotkey, 3-3
- port
 - infrared, 2-1, 2-6, 9-1–9-3, 14-4, 15-2
 - parallel, 2-6, 7-2, 7-3, 14-4, 15-2
 - serial, 2-6, 7-2, 7-3, 14-4, 15-2
- POST. *See* Power-On Self-Test
- power
 - connector, 1-4, 2-6
 - conservation hotkey, 3-3
 - conserving, 4-3, 4-5, 5-7
 - controls, 4-2
 - cord, 1-2, 1-4, 13-3, B-5
 - external, 1-4, 5-4, 5-5, 5-7
 - icon in Control Panel, 4-6
 - management, 4-4–4-9, 16-2
 - sources, 4-1
 - switch, 1-7, 2-3, 4-2, 4-3
 - troubleshooting, 17-18
 - turning off, 4-3

- Power Properties, 4-6
- power/suspend light, 1-7, 2-3, 4-2, 4-3, 4-4, 5-5, 5-6
- power-on password, 14-2, A-1
- Power-On Self-Test, 17-3, 17-13
- printed documentation, 1-2
- printer, 7-1, 7-2, 7-3, 17-20
- problem solving. *See* troubleshooting
- processor, 2-1
- product identification number (PIN), A-1
- programmable keys, 2-3, 3-2, 3-4–3-6
 - assigning, 3-5
 - icon in Control Panel, 3-4
 - icon on taskbar, 3-4
 - identifying, 3-2
 - popup window, 3-4
 - schemes, adding, 3-6
 - schemes, removing, 3-6
 - unassigning, 3-5
- projector, overhead, 7-4–7-6, 17-21
- PS/2-compatible device, 2-6, 7-2, 7-3

Q

- QuickLock/QuickBlank, 3-3, 14-2, 14-3

R

- RAM. *See* random access memory
- random access memory (RAM), 2-1, 2-7, 12-1–12-6
- read only memory (ROM), 2-1, 15-1
- recycling battery packs, 5-1, B-4
- Reference Guide*, online, 1-10
- registering the computer, 1-9
- regulatory notices, B-1
- release latches, 1-6
- RemotePaq, 16-1, 16-6
- removable drives, 2-4, 6-1–6-18, 17-7, 17-9, 17-10, C-1
- resolution, display, 3-3, 7-4–7-5
- Resume Timer, 4-6
- RJ-11 modem jack, 2-5, 8-3
- ROM. *See* read only memory

S

- screen
 - care, 13-1–13-2

- switching displays, 3-3, 7-4
- troubleshooting, 17-21
- screwdriver, 1-2, 6-4, 6-7, 12-2, 12-3, 14-5, 14-6
- screws, tamper resistant, 1-2, 12-2, 12-3, 12-6, 14-6
- scroll lock light, 2-3
- security
 - airport X-ray, 13-3
 - cable slot, 2-5, 14-7
 - device disabling, 14-4, 15-2
 - features, 14-1–14-7
 - hard drive plate, 1-2, 2-7, 6-2, 6-4, 6-6, 6-7, 14-5
 - management, 14-2, 15-2, 16-2
 - memory compartment, 1-2, 12-2, 12-6, 14-6
 - password, changing or deleting, 14-4
 - password, power-on, 14-2, A-1
 - password, setup, 14-3, A-1
 - QuickLock/QuickBlank, 3-3, 14-2, 14-3
- serial connector, 2-6, 7-2, 7-3, 14-4, 15-2
- serial number, computer, 2-7, A-1
- setting up
 - computer, 1-4
 - software, 1-7
- settings
 - Computer Setup, 16-2
 - customizing, 1-10
 - display, 7-4–7-6
 - mouse, 3-2
 - power management, 4-4–4-9, 16-2
 - timeout, 4-4
 - viewing configuration, 2-8, 16-5
- setup password, 14-3, A-1
- shipping
 - computer, 13-2, 13-4
 - drives, 6-2, 13-4
- shutting down computer, 4-3
- simultaneous display, 7-4
- slipcase, 1-2, 13-2, 13-3
- slot
 - memory, 12-1, 12-4, 12-5
 - PC Card, 2-1, 10-1, 10-3
 - security cable, 2-5, 14-7
- software
 - backup, 1-9
 - infrared, 9-2
 - ordering backup, 1-9
 - preinstalled, 1-2, 1-9, 2-8, 6-1, 8-2
 - setting up, 1-7

software drivers. *See* device drivers
solving problems. *See* troubleshooting
Sound Recorder, 11-1
spare caps, pointing device, 1-2, 3-1,
13-2
speakers
 external, 2-4, 11-2, 11-4
 internal, 2-3, 11-2, 11-3
specifications, computer, D-1
static electricity. *See* electrostatic
 discharge
stereo
 headphones, external, 2-4, 11-2, 11-4
 headset, external, 2-4, 11-2, 11-4
 line-in jack, 2-4, 11-2, 11-4
 speakers, external, 2-4, 11-2, 11-4
 speakers, internal, 11-2, 11-3
storage, battery pack, 5-8
support, Compaq, A-1
Suspend
 battery operating time, extending, 5-7
 beeps, 4-4, 17-3, 17-5
 button, 2-3, 4-2
 described, 4-4
 exiting, 4-4
 initiating, 4-4, 4-9, 9-2
 light, 4-2, 4-3
 low-battery condition, 4-4, 5-5, 17-3
Resume Timer, 4-6
time limit, 4-3, 4-4
timeout, 4-4
switch
 display, 2-3
 power, 1-7, 2-3, 4-2, 4-3
symbols used in guide, xi
system beeps, 3-3, 4-4, 4-5, 4-6, 4-9,
5-5, 10-3, 10-4, 17-3, 17-5,
17-10, 17-16
system memory, 2-1, 2-7, 12-1
system tray. *See* taskbar

T

tamper-resistant
 screws, 1-2, 12-2, 12-3, 12-6, 14-5,
14-6
 security plate, 1-2, 6-4, 6-7, 14-5
taskbar
 battery meter, 4-6
 CRT/overhead projector icon, 7-4

display icon, 7-4
Infrared Monitor icon, 9-2
Intelligent Manageability icon, 15-1
PC Card icon, 10-2, 10-4
programmable keys icon, 3-4
volume control icon, 11-3
technical support, A-2
telephone numbers, worldwide, A-2
temperature, 4-2, 5-8, 6-2, 13-1, 15-2
TEST. *See* Computer Checkup (TEST)
tilt feet, 1-6, 2-5, 2-6
timeout
 custom, 4-8
 described, 4-4
 drives, Windows 95, 4-6
 drives, Windows NT, 4-6, 4-7
 Hibernation, 4-5, 4-6
 settings, 4-4, 4-8
 Suspend, 4-4
traveling and shipping guidelines, 13-2
tray, CD-ROM, 6-17
Trio Communications, 8-2
troubleshooting, 17-1
 audio, 17-3
 battery and battery gauge, 17-4
 diskette/diskette drive, 17-7
 display, 17-21
 hard drive, 17-9
 hardware, 17-10
 infrared, 17-11
 keyboard, 17-12
 memory, 17-13
 minor problems checklist, 17-2
 modem, 17-14
 monitor, external, 17-21
 mouse, 17-18
 numeric keypad, 17-12
 overhead projector, 17-21
 PC Cards, 17-16
 pointing device, 17-18
 power, 17-18
 printer, 17-20
 screen, 17-21
turning off computer, 4-3
turning on computer, 1-7, 4-3
typographical conventions, xi

U

unpacking computer, 1-2

utility

 Computer Checkup (TEST), 16-1,
 16-3

 Computer Setup, 16-1, 16-2

 Create Diagnostics Diskette, 16-1,
 16-6

 Manage Diagnostics Partition, 16-1,
 16-6

 RemotePaq, 16-1, 16-6

 View System Information
 (INSPECT), 16-1, 16-5

V

ventilation, 2-6, 4-2

View System Information (INSPECT),
16-1, 16-5

volume control buttons, 2-3, 11-2, 11-3,
17-3

W

wave table synthesis, 2-2

weight saver, MultiBay, 1-2, 6-16

Windows HyperTerminal, 8-6

Windows Logo key, 3-4, 3-5

wireless file transfer, 2-1, 9-2

worldwide phone numbers, A-2

X

X-ray, airport, 13-3

Z

Zoomed Video, 2-1, 7-5, 10-1

