Compaq Professional Workstation XP1000 Installation and Setup Guide

Part Number EK-CPWXP-SI. B01

Second Edition (July 1999)
Compaq Computer Corporation

Notice

The information in this publication 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 INFORMATION IS PROVIDED “AS IS” AND COMPAQ COMPUTER CORPORATION DISCLAIMS ANY WARRANTIES, EXPRESS, IMPLIED OR STATUTORY AND EXPRESSLY DISCLAIMS THE IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR PARTICULAR PURPOSE, GOOD TITLE AND AGAINST INFRINGEMENT.

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

© 1999 Compaq Computer Corporation.

All rights reserved. Printed in the U.S.A.

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.

Compaq, Deskpro, Fastart, Compaq Insight Manager, Systempro, Systempro/LT, ProLiant, ROMPaq, QVision, SmartStart, NetFlex, QuickFind, PaqFax, ProSignia, and Tru64 UNIX registered United States Patent and Trademark Office.

Neoserver, Netelligent, Systempro/XL, SoftPaq, QuickBlank, QuickLock are trademarks and/or service marks of Compaq Computer Corporation.

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

Pentium is a registered trademark and Xeon is a trademark of Intel Corporation.

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

Compaq Professional Workstation XP1000 Installation and Setup Guide
Second Edition (July 1999)
Part Number EK-CPWXP-SI. B01

Contents

About This Guide

Text Conventions vii
Symbols in Text viii
Symbols on Equipment viii
Rack Stability ix
Getting Help ix
Compaq Technical Support x
Compaq Website x
Compaq Authorized Reseller xi

Chapter 1

Getting Started

Before You Begin 1-2
Initial System Inventory 1-2
Pre-Startup Checklist 1-2
Precautions 1-2
Creating a Comfortable Work Environment 1-3
Installing Your System 1-3
Connecting External System Devices 1-5
Starting your System 1-7
Sleep Mode 1-7
Preloaded Operating System Software 1-8
Turning Off Your System 1-8
Microsoft Windows NT 1-8
Compaq Tru64 UNIX 1-9
System Security 1-9
Chassis Lockdown Hasp 1-9
Kensington Lock 1-10
Passwords 1-10

Chapter 2
Setting Up an Operating System

Starting a Windows NT Installation 2-2
Starting an Installation of Compaq Tru64 UNIX 2-8
Updating Firmware 2-9
Microsoft Windows NT Operating System Firmware/Software 2-10
Compaq Tru64 UNIX Operating System Firmware 2-11

Chapter 3
Troubleshooting

Battery Guidelines 3-1
ISA Restrictions 3-2
PCI Restrictions 3-2
AlphaBIOS Restrictions 3-2
Tips 3-3
Logging Equipment 3-4
System Troubleshooting 3-4

Chapter 4
Customer Support

Product Information 4-1
Support Resources/Checklist 4-2

Appendix A
Regulatory Compliance Notices

Federal Communications Commission Notice A-1
Class A Equipment A-2
Class B Equipment A-2
Declaration of Conformity for Products Marked with FCC Logo, United States Only A-2
Modifications A-3
Cables A-3
Canadian Notice (Avis Canadien) A-3
Class A Equipment A-3
Class B Equipment A-3
European Union Notice A-4
Acoustic Declaration A-5

Appendix B
Power Cord Requirements

General Requirements B-1
Country-Specific Requirements B-2

Appendix C

Electrostatic Discharge Guidelines

Grounding Methods C-1

Index

List of Tables

Table 2-1 Starting a Microsoft Windows NT Installation 2-3
Table 2-2 Setting Up Partitions for a Windows NT Installation 2-7
Table 2-3 Starting an Installation of Compaq Tru64 UNIX 2-8
Table 3-1 System Troubleshooting 3-4
Table 3-2 Disk Drive Troubleshooting 3-11
Table 3-3 Audio Troubleshooting 3-13
Table 3-4 Monitor Troubleshooting 3-14
Table 4-1 Customer Support Checklist 4-2
Table A-1 Acoustics - Declared values per ISO 9296 and ISO 7779 ..... A-5
Table B-1 Power Cord Set Requirements - By Country B-2

About This Guide

This guide is designed to be used as step-by-step instructions for installation and as a reference for operation, troubleshooting, and future upgrades.

Text Conventions

This document uses the following conventions to distinguish elements of text:

Keys	Keys appear in boldface. A plus sign (+) between two keys indicates that they should be pressed simultaneously.
USER INPUT	User input appears in a different typeface and in uppercase.
FILENAMES	File names appear in uppercase italics.
Menu Options, Command Names, Dialog Box Names	These elements appear in initial capital letters.
COMMANDS, DIRECTORY NAMES, and DRIVE NAMES	These elements appear in uppercase.
Type	When you are instructed to *type* information, type the information **without** pressing the **Enter** key.
Enter	When you are instructed to *enter* information, type the information and then press the **Enter** key.

Symbols in Text

These symbols may be found in the text of this guide. They have the following meanings.

WARNING: Text set off in this manner indicates that failure to follow directions in the warning 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.

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

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

Symbols on Equipment

These icons may be located on equipment in areas where hazardous conditions may exist.

Any surface or area of the equipment marked with these symbols indicates the presence of electrical shock hazards. Enclosed area contains no operator serviceable parts.
WARNING: To reduce the risk of injury from electrical shock hazards, do not open this enclosure.

Any RJ-45 receptacle marked with these symbols indicates a Network Interface Connection.
WARNING: To reduce the risk of electrical shock, fire, or damage to the equipment, do not plug telephone or telecommunications connectors into this receptacle.

Any surface or area of the equipment marked with these symbols indicates the presence of a hot surface or hot component. If this surface is contacted, the potential for injury exists.
WARNING: To reduce the risk of injury from a hot component, allow the surface to cool before touching.

Power Supplies or Systems marked with these symbols indicate the equipment is supplied by multiple sources of power.

WARNING: To reduce the risk of injury from electrical shock, remove all power cords to completely disconnect power from the system.

Rack Stability

WARNING: To reduce the risk of personal injury or damage to the equipment, be sure that:

- The leveling jacks are extended to the floor.
- The full weight of the rack rests on the leveling jacks.
- The stabilizing feet are attached to the rack if it is a single rack installations.
- The racks are coupled together in multiple rack installations.
- A rack may become unstable if more than one component is extended for any reason. Extend only one component at a time.

Getting Help

If you have a problem and have exhausted the information in this guide, you can get further information and other help in the following locations.

Compaq Technical Support

You are entitled to free hardware technical telephone support for your product for as long you own the product. A technical support specialist will help you diagnose the problem or guide you to the next step in the warranty process.

In North America, call the Compaq Technical Phone Support Center at 1-800-OK-COMPAQ[1]. This service is available 24 hours a day, 7 days a week.

Outside North America, call the nearest Compaq Technical Support Phone Center. Telephone numbers for world wide Technical Support Centers are listed on the Compaq website. Access the Compaq website by logging on to the Internet at http://www.compaq.com.

Be sure to have the following information available before you call Compaq:

- Technical support registration number (if applicable)
- Product serial number (s)
- Product model name(s) and numbers(s)
- Applicable error messages
- Add-on boards or hardware
- Third-party hardware or software
- Operating system type and revision level
- Detailed, specific questions

Compaq Website

The Compaq website has information on this product as well as the latest drivers and Flash ROM images. You can access the Compaq website by logging on to the Internet at http://www.compaq.com.

Compaq Authorized Reseller

For the name of your nearest Compaq Authorized Reseller:

- In the United States, call 1-800-345-1518.
- In Canada, call 1-800-263-5868.
- Elsewhere, see the Compaq website for locations and telephone numbers.

[1] For continuous quality improvement, calls may be recorded or monitored.

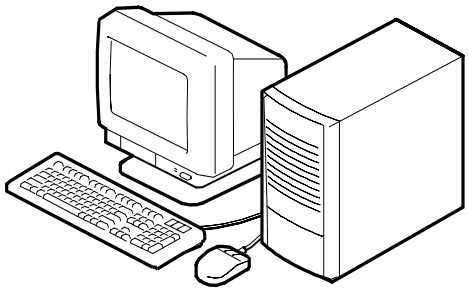
Chapter 1

Getting Started

This chapter includes an inventory of the items shipped with your system and tells you how to start, install, restart, and turn off your system. Information about preloaded software and guidelines for system security are included as well.

Your Compaq Professional Workstation XP1000 is a high-performance system that uses the latest Alpha 21264A microprocessor and core logic technology. Housed in a mini-tower box, the system can stand alone or function as a client in an office network environment.

A typical Compaq Professional Workstation configuration is shown here.



Before You Begin

Initial System Inventory

Check to be sure you received the following components with your system, and note the items in a safe place for later reference:

☐ Monitor	☐ System box	☐ Mouse	☐ Video cable
☐ Power cords	☐ Microphone	☐ Keyboard	☐ Headphones

Your system may include different components from those listed. Consult the shipping list for an accurate listing of parts. If you think something is missing, contact your distributor or Compaq Computer Corporation representative.

Pre-Startup Checklist

Before you start your system, perform the following checks:

- Review the information supplied with your system, including user documentation.
- Select a well-ventilated site for your system near a grounded power outlet and away from sources of excessive heat. The site also should be isolated from electric noise (for example, spikes, sags, and surges) produced by devices such as air conditioners, large fans, radios, and televisions.
- Save all shipping containers and packing material for repackaging or moving the system later.

Precautions

NOTE: Do not install optional hardware or application software until you have started your system and verified that the base system is working correctly.

CAUTION: Do not move your Professional Workstation XP1000 with removable media (for example, CD disk in the drives. This may cause damage to the media and/or the drives.

WARNING: When unpacking and moving system components, be aware that some components (such as the monitor) may be too heavy for you to lift alone safely. If you are doubtful about whether you can lift these items alone, please get assistance

Creating a Comfortable Work Environment

To learn how Compaq recommends setting up your work environment, refer to the Comfort Guide that you received with your system keyboard.

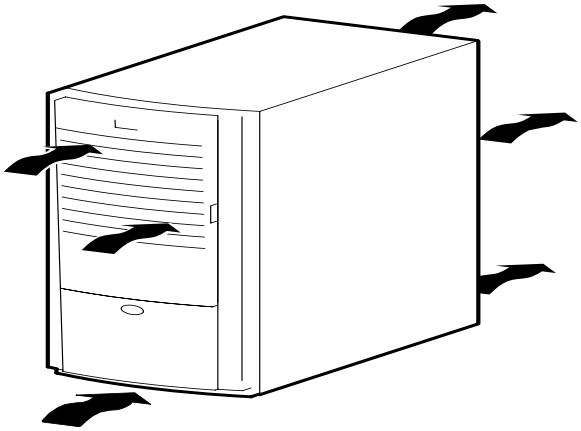
Alternatively, you can refer to the online version of the Comfort Guide at: http://www.compaq.com .

Installing Your System

This section shows the installation and connection steps for your system.

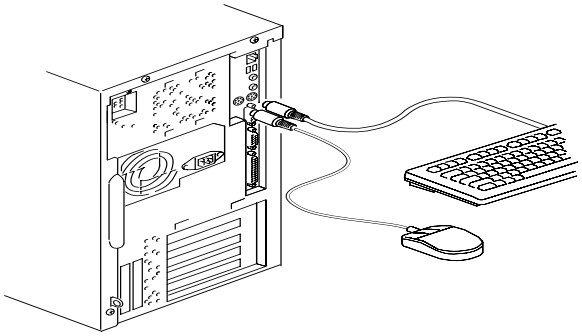
NOTE: All connectors are keyed with icons on the back of the system box.

CAUTION: To ensure proper cooling, verify that air can flow freely into the system front and out the rear of the system. Position your system so that air can flow freely to and from the vents, as shown. Do not block any of the vents, especially those on the system rear or bottom front.

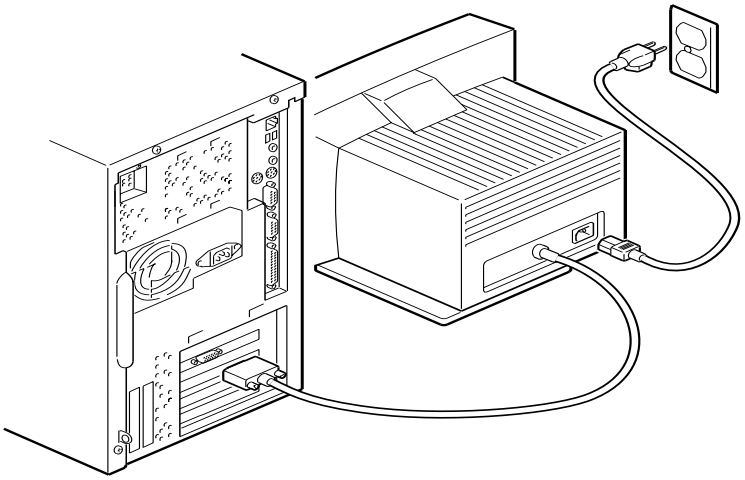


To connect system components, follow these steps:

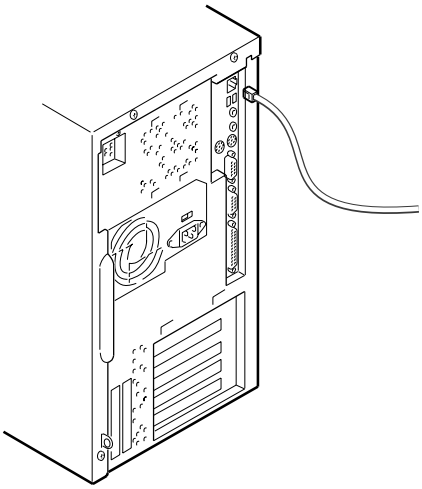
1. Connect the mouse (green connector on your system) and keyboard (orange or red connector on your system), as shown.



2. Connect the monitor, as shown.



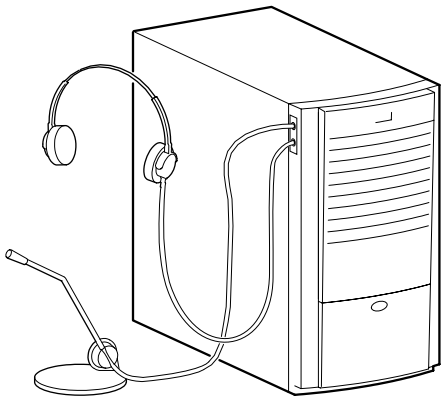
3. The internal network cables for your system are installed already, as the figure shows. If this is a BNC connection, twisted pair is on board. There are no cables. Optional network kits are available. Contact your Compaq Computer Corporation representative for more information about these options.



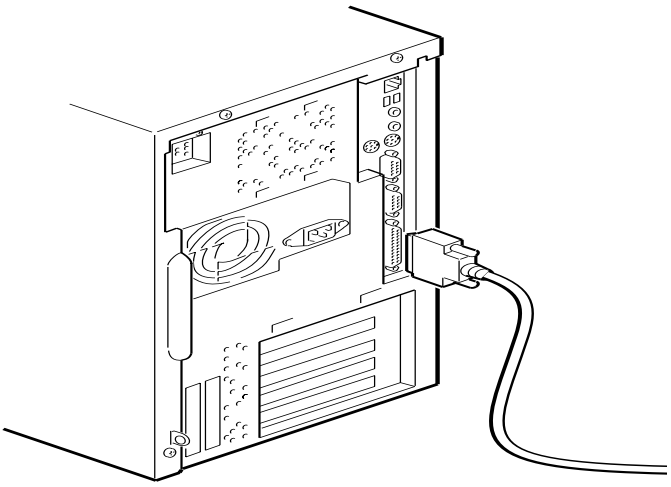
Connecting External System Devices

To install external devices into; your system, connect the microphone and headphones into the icon-keyed connectors on the side of the system box, as shown.

NOTE: Sound, including CD-ROM-related audio, is not audible unless either external speakers or headphones are plugged in. The speaker plays beeps only for firmware warning codes. Because beeps are not sent through the audio device, they are not audible.



If you purchased speakers for your workstation, follow the instructions for installation provided with the speakers.



Perform the following steps to connect a local printer to your workstation:

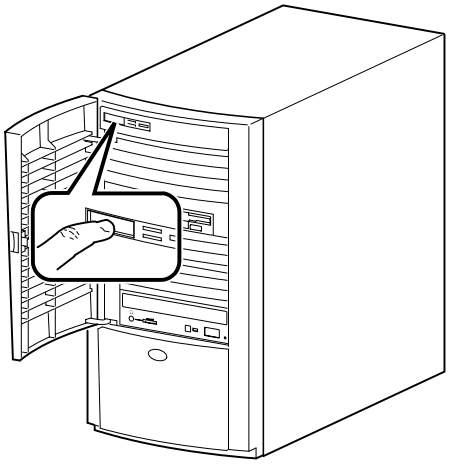
1. Review your printer documentation and perform any pre-installation instructions before attempting to connect it to your workstation.
2. Make sure your printer and workstation are turned off.
3. Plug the printer cable into the appropriate printer port (the parallel port for a parallel printer, in figure, or a serial port for a serial printer).
4. Turn on your printer and workstation.
5. Configure your printer for operation with your workstation.

IMPORTANT: Refer to your operating system online Help and printed documentation for instructions on installing your printer's device driver.

Starting your System

Perform the following steps to start (boot) your Compaq Professional Workstation:

1. Make sure the system is on.
2. Plug the power cord into the system and then into the wall outlet.
3. Turn on any external devices, monitor power, and system unit power button (shown in figure).
4. After waiting for the monitor to warm up, adjust the contrast and brightness to obtain a readable screen display, if necessary.
5. Allow your system to complete the power-on self-test (POST) and device initialization. This takes approximately one [1] minute.



IMPORTANT: Refer to the information supplied with your monitor for adjustment instructions.

Sleep Mode

The Compaq Professional Workstation XP1000 system is industry-compliant with standard ACPI specifications and provides support for several sleep modes. Sleep mode for your system is operating system-dependent. The power LED blinks during some sleep modes. An advantage of sleep mode is

that your system uses lower levels of power and does not require a reboot, which saves system context for you. To get your system out of sleep mode, press the power button.

IMPORTANT: Refer to your operating system documentation for details.

Some operating system versions (including Microsoft Windows 2000) turn the system power off automatically when the shutdown process is complete. In fact, users also can configure Windows 2000 so that the power button can be either a standby button or a shutdown and power off button.

Preloaded Operating System Software

Your system was preloaded with the operating system that you specified when ordering your system (i.e., Microsoft Windows NT or Compaq Tru64 UNIX). See Chapter 2, Setting Up an Operating System, for instructions on reinstalling an operating system.

Turning Off Your System

Before turning off your system, save and close all open files according to the steps outlined for your specific operating system. If you turn the system off without saving and closing files, you might lose some or all of your work.

CAUTION: Do not turn off power to your system or peripherals until the shutdown sequence has completed.

WARNING: Always disconnect the power cord from the wall before servicing your system.

Microsoft Windows NT

Perform the following steps, in order, to turn off your system:

1. Close any application data files you have open as well as any applications you have running. Most application programs prompt you to save the information before closing.
2. To shut down your operating system:
   - Click on Start on the Windows NT toolbar.
   - Select Shut Down.

- The Shut Down Windows menu displays. You are asked to confirm the shutdown.
- Select Shut Down and click the Yes button.

3. Wait for the operating system to complete the shutdown process. Your system displays a message indicating it is safe to turn off or restart the system.
4. To turn off power, press the system unit power button.
5. Disconnect the power cord from the wall before servicing your system.

Compaq Tru64 UNIX

Perform the following steps, in order, to turn off your system:

1. Close any open application data files as well as any running applications. Most application programs prompt you to save the information before closing.
2. To shut down your operating system:

NOTE: You must be a super user to shut down the system

- Open a terminal window.
- Type shutdown -h now.
- The system returns to the SRM console.

3. Your system displays >>> indicating it is safe to turn off or restart the system.
4. To turn off power, press the system unit power button.
5. Disconnect the power cord from the wall before servicing your system.

System Security

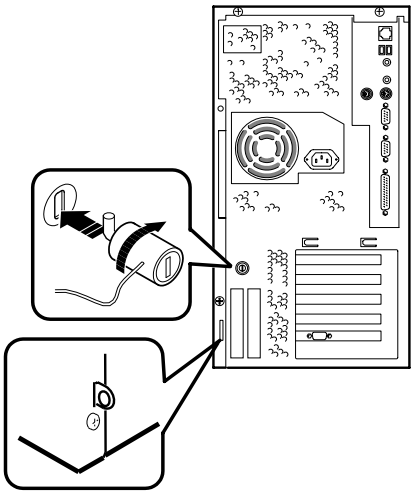
Chassis Lockdown Hasp

The system is equipped with a lockdown hasp welded onto the back of the chassis. To use this security feature, use a lock of your choice to attach the system to a secured surface such as a table, cabinet, and so forth.

Kensington Lock

If you ordered an optional Kensington lock (order number PCP3H-AG), refer to the figure, secure the lock onto your system as shown, and then follow these steps:

1. Insert the lock into the opening at the back of the system.
2. Turn the lock clockwise to secure it.
3. Connect the power cord and plug it into the wall outlet.
4. Turn on the system.



Passwords

For additional security, most screen saver and pause screen displays have password protection enabled. See Chapter 3, Troubleshooting

Chapter 2

Setting Up an Operating System

IMPORTANT: Refer to the specific operating system information you received for details.

NOTE: This information provides what you need to begin an operating system installation. Once you have started an installation, follow the on-screen instructions, which may differ slightly form what is documented here.

NOTE: You will need the following media, which was shipped with you system with your system, to perform a Windows NT installation: backup CD (either QC-07QAA-H8, for English, Dutch, French, Italian, German, and Spanish kits or QC-07QJA-H8, for Japanese kits); 1.44-MB diskette containing the ATAPI driver and the HAL (hardware abstraction layer), (AK-REQP*-CA). You will need a diskette with an ESS driver. It is not mandatory that you have the ESS diskette driver for the NT installation. You can add the ESS driver after you complete the installation.

IMPORTANT: In the part number AK-REQP*-CA, the "*" refers to Rev A or higher.

This chapter describes how to install an operating system; set up partitions for a Microsoft Windows NT installation; and update firmware.

Refer to Table 2-1 for instructions on installing the Microsoft Windows NT operating system on a properly partitioned and formatted disk; see Table 2-2 for instructions on setting up partitions for an NT installation. Refer to Table 2-3 for instructions on installing the Compaq Tru64 UNIX operating system.

CAUTION: If you boot from a Compaq Tru64 UNIX disk and also occasionally boot Microsoft Windows NT from another disk, use caution when you run the Windows NT Disk Administrator. When the Disk Administrator detects additional disks, it updates the system configuration. The Disk Administrator prompts you for permission to write a signature to the additional disks. Writing the signature to any disk used by Compaq Tru64 UNIX ***destroys*** the boot block on that disk and makes the operating system on that disk no longer bootable. Select **NO** when you are asked if you want to write a signature to your Compaq Tru64 UNIX disk. To be completely safe, you can also disconnect the Compaq Tru64 UNIX drive from the system before you boot Windows NT.

Starting a Windows NT Installation

Compaq partitions and formats disk 0 in non-RAID Windows NT systems. The partitions are set up as described next.

- Partition 1 (typically, the “C” drive) is the size of the disk less 6MB and formatted FAT (e.g., a 3.2-GB drive minus 6MB equals a 3.194-GB “C” drive). Normally, you select “convert to NTFS” during the Windows NT installation.
- Partition 2 (typically, the “D” drive) is 6MB, formatted FAT, and identified as the system partition.

Table 2-1describes how to install Microsoft Windows NT operating system on a properly partitioned and formatted disk. See Table 2-2 if you need to set up partitions.

NOTE: You must have the AlphaBIOS console installed and running in order to install the Windows NT operating system.

Table 2-1
Starting a Microsoft Windows NT Installation

Step	Action	Result or Displayed Text
1	From the AlphaBIOS boot screen, press the [F2] key.	AlphaBIOS setup screen displays.
2	Insert the Microsoft Windows NT Workstation CD-ROM into the CD drive.	CD-ROM drive is ready.
3	Select Install Windows NT. Press [Enter].	Windows NT setup procedure starts. The following message is displayed: Setup could not determine the type of computer you have, or you have chosen to manually specify the computer type. Select the computer type from the following list, or select "Other" if you have a device support disk provided by your computer manufacturer. . . . => Other
4	Select Other.	"Please insert the disk labeled Manufacturer-supplied hardware support disk into drive A:. Press Enter when ready."
5	Insert the 1.44-MB diskette labeled Hardware Support Disk for Microsoft® Windows NT® 4.0 (AK-REQP*-CA) into the 1.44-MB drive. Press [Enter].	You have chosen to configure a computer for use with Windows NT using a device support disk provided by the computer's manufacturer. Select the computer type from the following list, or press [Esc] to return to the previous screen. =>Compaq Professional Workstation XP1000 (NT 4.0 or NT 5.0). (Your screen may show a different series name.)

continued

Table 2-1
Starting a Microsoft Windows NT Installation *continued*

Step	Action	Result or Displayed Text
6	Select Compaq Professional Workstation XP1000 (Your screen may show a different series name.) Press [Enter].	"Please insert the disk labeled Manufacturer-supplied hardware support disk into Drive A:. Press Enter when ready."
7	Insert the 1.44-MB diskette labeled Hardware Support Disk for Microsoft® Windows NT® 4.0 (AK-REQP*-CA) into the 1.44-MB drive. Press [Enter].	Setup could not determine the type of one or more mass storage devices installed in your system, or you have chosen to manually specify an adapter. Currently, Setup will load support for the Qlogic PCI SCSI Host adapter and the Symbios Logic PCI (53c8xx), if SN-KZPCA-AA is present. To add the SN-KZPCA-AA card, type "S".
8	Type "S" to select additional devices.	Select the SCSI adapter you want from the following list, or select "Other" if you have a device support disk provided by an adapter manufacturer. . . . =>Other
9	Select Other.	"Please insert the disk labeled Manufacturer-supplied hardware support disk into Drive A:. Press Enter when ready."

continued

Table 2-1
Starting a Microsoft Windows NT Installation *continued*

Step	Action	Result or Displayed Text
10	Insert the 1.44-MB diskette (AK-REQP*-CA) Need new part number in drive A. Press [Enter] to select the driver.	You have chosen to configure a SCSI adapter for use with Windows NT, using a device support disk provided by an adapter manufacturer. Select the SCSI) adapter you want from the following list, or press [Esc] to return to the previous screen. =>e.g., ATAPI (IDE)
11	Press [Enter] to load the driver.	Follow the screen prompts for mass-storage device-loading support.
12	If you have the SN-KZPCA-AA option, repeat steps 8-10 using driver floppy built from the *SDMS Software Device Driver and Utilities* CD as recommended on page 2-11 to load the SN-KZPCA-AA driver.	
Note: During the installation you may need to keep changing the diskettes in order for the setup to load the right files because the diskette that contains the HAL and ATAPI.sys does not contain the SN-KZPCA-AA driver.		
13	To continue, Press [Enter].	Setup will load support for the following mass storage devices: Qlogic PCI SCSI Host Adapter Microsoft ATAPI driver Symbios Logic PCI (53c8xx)
Note: During the installation you may need to keep changing the diskettes in order for the setup to load the right files because the diskette that contains the HAL ATAPI.sys does not contain the SN-KZPCA-AA driver.		

continued

Table 2-1
Starting a Microsoft Windows NT Installation *continued*

Step	Action	Result or Displayed Text
14	Press [Enter] to continue with Setup.	Welcome to Setup. The Setup program for the Microsoft® Windows NT® operating system version 4.0 prepares Windows NT to run on your computer. To learn more about Windows NT Setup before continuing, press [F1]. To set up Windows NT now, press [Enter]. To repair a damaged Windows NT version 4.0 installation, press [R]. To quit Setup without installing Windows NT, press the [F3] key.
15	Press [Enter].	Setup has recognized the following mass storage devices in your computer: Qlogic PCI SCSI Host Adapter Microsoft ATAPI driver Symbios Logic PCI (53c8xx), if you have SN-KZPCA-AA option in your system.
16	Press [Enter].	The Microsoft Windows NT licensing agreement displays.
17	Use the [Page Down] keypad to scroll through the Windows NT licensing agreement.	A message indicating your choices displays.
18	Press the [F8] key to indicate your acceptance of the licensing agreement.	A message indicating your choices displays.
19	Press [Enter] to confirm your choice.	Setup has found Windows NT on your hard disk in the directories shown below.

Note: Follow the screen prompts to choose a partition, to confirm a partition, and to decide whether or not to format the partition.

continued

Table 2-1
Starting a Microsoft Windows NT Installation *continued*

Step	Action	Result or Displayed Text
20	Press [Enter] to accept the choice.	Setup will now examine your hard disks.
21	Insert the 1.44-MB diskette (AK-REQP*-CA) into drive A. Press [Enter].	"Please insert the disk labeled Compaq Alpha 21264A Systems Installation Disk."
22	Insert the 1.44-MB diskette labeled Microsoft ATAPI Driver, Disk 1 of 1 (AK-REQP*-CA) into drive A.	The system copies the HAL and Microsoft ATAPI driver files. Once you insert the diskette, setup will copy the HAL and ATAPI.sys file because they are on the same diskette.
23	Follow screen prompts to load the Symbios Logic PCI (53c8xx) driver from the SN-KZPCA-AA drive diskette.	Please wait while Setup copies files to the hard disk.
24	Press [Enter] to restart your computer.	This portion of Setup has completed successfully.
25	Follow the screen prompts to set up the reinstalled Windows NT operating system.	The Windows NT operating system loads and starts.

NOTE: The 1.44-MB diskette (AK-REQP*-CA) includes the following information: HAL, the Microsoft ATAPI driver, and the Compaq Alpha 21264A systems NT4 installation.

If you are installing the operating system on a disk that has not been partitioned and formatted, refer to Table 2-2.

Table 2-2
Setting Up Partitions for a Windows NT Installation

Step	Action	Result
1	From the AlphaBIOS boot screen, press the [F2] key.	AlphaBIOS setup screen displays.
2	Select Hard Disk Setup... Press the [F6] key to format the disk. Press the [F7] key for express Hard Disk Setup.	If disk 0 is not partitioned, a message asking if you would like to proceed with default disk partitioning displays.

continued

Table 2-2
Setting Up Partitions for a Windows NT Installation *continued*

Step	Action	Result
3	Press the [F10] key to continue.	Express Setup Complete screen displays.
4	Press [Enter].	A list of disks, including partitions, displays.
5	Press [Esc].	AlphaBIOS setup screen displays. Refer to Table 2-1 to re-attempt a Windows NT installation.

Starting an Installation of Compaq Tru64 UNIX

To start an installation of Compaq Tru64 UNIX, follow the steps in Table 2-3.

NOTE: The SRM console must be installed and running in order to install Compaq Tru64 UNIX. If the AlphaBIOS console is running, refer to the Compaq Professional Workstation XP1000 System Reference and Maintenance Guide for instructions on loading the SRM firmware.

WWW See http://www.compaq.com/ for more information.

Table 2-3
Starting an Installation of Compaq Tru64 UNIX

Step	Action	Result
1	At the SRM prompt, type: `>>>set boot_osflags " "`	Clears the *boot_osflags* variable.
2	At the SRM prompt, type: `>>>set auto_action halt`	Halts the system at the console prompt each time the system is turned on, crashes, or when the reset button is pushed.

3	At the SRM prompt, type:
	`>>>set os_type unix`
	`>>>init`
		Sets the operating system (Compaq Tru64 UNIX).

continued

Table 2-3
Starting an Installation of Compaq Tru64 UNIX *continued*

Step	Action	Result
4	Insert the CD-ROM for Compaq Tru64 UNIX into the CD ROM drive.	CD-ROM drive is ready.
5	At the SRM prompt, type: `>>>show device`	List of devices displays: dka0.0.0.6.1 DKA0 Quantum XP34550W LXTA dkb0.0.0.11.0 DKB0 RZ2DD-KS 0306 (if SN-KZPCA-AA is installed dqa0.0.0.107.0 DQA0 Compaq D VD-TOM SR-8583 A50A dva0.0.0.0.0 DVA0 ewa0.0.0.3.1 EWA0 00-00-F8-71-32-60 pka0.7.0.6.1 PKA0 SCSI Bus ID7 5.57
6	From the SRM console, boot the CD for Compaq Tru64 UNIX. `>>>boot DQA0`	Installation information is displayed, and you are prompted to select an option. For more information, see the *Compaq Tru64 UNIX Installation Guide.*

Updating Firmware

NOTE: The user is responsible for performing system firmware upgrades. When updating firmware, use the firmware CD version 5.4 or higher.

The Compaq Professional Workstation XP1000 system contains flashROM for the console firmware. The flashROM contains the AlphaBIOS console firmware (for the Microsoft Windows NT operating system) and the SRM console firmware (for the Compaq Tru64 UNIX operating system).

This section explains how to use the firmware update utility to install firmware upgrades. Consult the appropriate operating system-specific section (e.g., Microsoft Windows NT or Compaq Tru64 UNIX).

IMPORTANT: Consult your upgrade documentation for more information.

Microsoft Windows NT Operating System Firmware/Software

Using the Flash Update Utility from AlphaBIOS

You may update the firmware by either using the supplied backup CD (QC-07QAA-H8 or QC-07QJA-H8) *or* by copying the firmware from the Internet onto a 1.44-MB diskette.

Updating Firmware from AlphaBIOS

To update the firmware from AlphaBIOS using the firmware CD or 1.44-MB diskette, follow these steps:

1. Shut down the Windows NT operating system and restart the system.
2. Insert the Firmware Update CD-ROM or a 1.44-MB diskette (prepared as the next section describes) into the appropriate drive.
3. From the AlphaBIOS boot screen, press the [F2] key to enter AlphaBIOS setup.
4. From the AlphaBIOS setup screen, select Upgrade AlphaBIOS.

   HINT: AlphaBIOS verifies the system image and displays the old and new firmware versions.
5. Follow the screen prompts to complete the update.

Preparing a Firmware 1.44-MB Diskette

If you have access to the network and have either lost the backup CD supplied with your system or wish to obtain newer firmware, you may use an Internet browser to copy the firmware from http://www.compaq.com. Follow the directions outlined at the site.

Building a SN-KZPCA-AA Windows NT Driver Diskette

Compaq recommends that you use the Symbios *SDMS Software Device Driver and Utilities* CD supplied with the SN-KZPCA-AA SCSI controller to build a driver diskette. This diskette will be necessary if you need to rebuild the disk from scratch.

Using Windows Explorer, locate and follow the instructions on the CD to build a Windows NT driver diskette for 8xx devices on Alpha systems. Label the diskette and store it in a safe place for future use.

Compaq Tru64 UNIX Operating System Firmware

Update Utility

Use the update utility to update your SRM firmware. The update utility contains two images: the update utility itself and the SRM image.

Using the Flash Update Utility from the SRM Console

To update the firmware from the SRM console, do the following:

1. Insert the Firmware Update CD-ROM into the CD-ROM drive.
2. Type the show device command to determine the device ID of the CD-ROM drive.

```
>>>sh dev

dka0.0.0.6.1      DKA0     RZ2CC-KA 4110
dkb0.0.0.11.0     DKB0     FZ2CC-KS 0306
dqa0.0.0.107.0    DQA0     Toshiba CD-ROM XM-6202B 1110
dra0.0.0.12.0     DRA0     3 Member RAID 5
dra1.0.0.12.0     DRA1     2 Member RAID 1
dva0.0.0.0.0      DVA0
ewa0.0.0.3.1      EWA0     00-00-F8-71-BC-9C
pka0.7.0.6.1      PKA0     SCSI Bus ID 7 5.57
```

3. Boot the Firmware Update Utility CD-ROM using the device ID display in step 2. `>>>b dva0`
   `(boot dva0.0.0.0.0 –flags a)` (for Compaq Tru64 UNIX)
   You should see a display that reflects your system's particular hardware configuration and firmware update version while the update utility is loading and executing, for example:

```
bootstrap code read in
base = 1d4000, image_start = 0, image_bytes =
151e00
initializing HWRPB at 2000
initializing page table at 1c6000
initializing machine state
setting affinity to the primary CPU
jumping to bootstrap code
ff.fe.fd.fc.fb.fa.f9.f8.f7.f6.f5.CPU 0 speed is
2.00 ns (500MHz)
ef.ee.ed.ec.eb.f4.ea.e9.e8.e7.e5.e4
Compaq Professional Workstation XP1000
>>>(boot pmem:180000 -flags 0)
bootstrap code read in
base = 180000, image_start = 0, image_bytes =
800000
initializing HWRPB at 2000
initializing page table at FFF0000
initializing machine state
setting affinity to the primary CPU
jumping to bootstrap code
Compaq Professional Workstation XP1000 Firmware
Update
Use HELP or ? for help
Update
VERIfy
List
Show
DUmp
VERBose
NVerbose
DEbug
NDebug
?

Apu->
```

4. Type update at APO prompt to update the SRM Console Firmware. For example,
   Apu->
   Type Update SRM and follow instructions on screen.

Chapter 3

Troubleshooting

This chapter describes guidelines for battery replacement, ISA restrictions, and initial as well as some detailed troubleshooting for your Compaq Professional Workstation XP1000.

IMPORTANT: Refer to the documentation supplied with additional options if you experience problems with specific options that you have installed.

Battery Guidelines

When replacing batteries in this system, use only batteries that are compatible with the product's electrical requirements and recharging circuitry, if applicable. Consult your local Compaq Service Center for information and proper servicing.

WARNING: Lithium batteries are subject to special precautions. There is a danger of explosion if the battery is incorrectly replaced. Replace only with the same or equivalent type recommended by the manufacturer.

Recycle or dispose of batteries contained in this product properly, in accordance with local regulations for the battery type, as marked on the battery. Prior to disposal or recycling, protect batteries against accidental short-circuiting by affixing nonconductive tape across the battery terminals or conductive surfaces.

If the battery is not marked, or if you require further information, consult your nearest Compaq Service Center.

Keep batteries away from children.

ISA Restrictions

There are certain restrictions regarding the use of IRQs in the Professional Workstation XP1000 system.

AlphaBIOS sets up for audio use of IRQ5 at system power-on before it checks for any user-preference selections. Once IRQ5 is set up, it cannot be undone, which means that IRQ5 can only be used for audio. Audio does not work with IRQ7, and it is important that users do not attempt to override the default.

IRQ 3 and IRQ 4 are reserved for communication ports.

IRQ5 is reserved for use with audio. IRQ7 is reserved for use by the parallel port. IRQ10 is reserved for use by the USB controller, regardless of whether it is enabled

IRQ 14 and IRQ 15 are reserved for EIDE.

PCI Restrictions

All 3D30 and 4D20 and Powerstorm 4D51T options must be installed in PCI Bus 0.

In a multi-head environment with ELSA Gloria modules, the VGA-enabled ELSA Gloria must be installed in PCI Bus 0.

Do not use 64-bit cards in 32-bit slots.

Multi-head graphics configuration restriction: The first graphics module in the PCI bus must have its VGA controller enabled. The VGA controllers on the remaining graphics boards m ust have their VGA controller disabled. The one functional VGA controller must be on the first graphics module in the PCI bus.

The PCI-based Token Ring option, SN-KBXNP-AC, must be installed in the PCI-1 Bus (slots 4 and 5, the bottom two slots on a Compaq Professional Workstation XP100).

AlphaBIOS Restrictions

Under AlphaBIOS, autosensing for the media type does not work. Instead, users must select the media type (e.g., 10BaseT) from the AlphaBIOS menu.

Tips

Use these troubleshooting tips should your computer ever fail to operate correctly.

- Keep it simple; troubleshoot one problem at a time. Also, only make one change at a time. For example, if your SCSI hard disk drive fails to boot, do not try all the suggested actions at once. Instead, start with one suggestion such as checking the cables. After securing the cables, try booting your computer. If it does not work, try another suggestion.
- Look for abnormal computer, keyboard, and monitor light-emitting diode (LED) indications. For example, make sure the power-on LED lights when you turn on your computer and the drive access indicators light when using either the diskette drive or hard disk drive.
- If you installed external devices, make sure all cables are correctly and securely connected to the appropriate devices and that the devices are installed correctly and have power.
- If you installed devices inside the computer, make sure nothing was bumped or jarred loose, and that all cable connections are securely in place.
- Make sure all device drivers are installed correctly.
- For systems running the Windows NT operating system, press the Reset (or Halt) button. Try rebooting your system.
- Pay close attention to any error message that appears on your screen. If the error message is hardware related, refer to the troubleshooting tables later in this chapter for recommended actions.
  If the error message is operating system-related, refer to online Help and the appropriate operating system documentation supplied with your computer.
- Check for README files, which might be factory installed, on the CD disk, or as printed material. This README information can help you setup, configure, and operate your computer.

  NOTE: If Customer Support tells you to return a failed component, pack it in its original container and then return it to Compaq Computer Corporation or your Compaq authorized distributor as instructed.

- Check that the power indicator is on and that the fans (CPU, PCI, and power supply) are running.

- Check the power indicator on the monitor. Also, check the monitor, keyboard, and mouse cables to ensure that they are connected and seated properly.
- Contact Compaq Services or your service provider for software- or hardware-related problems.

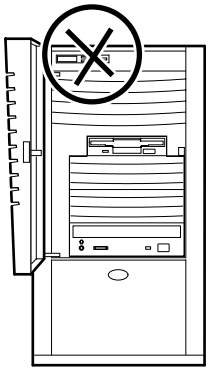
Logging Equipment

Record all model numbers and serial numbers of your hardware components in the Checklist portion of Chapter 4, Customer Support. This will help Customer Support personnel to answer your questions more quickly.

System Troubleshooting

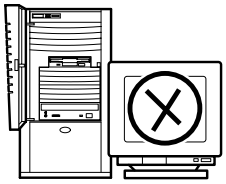
The tables below list how to identify and solve problems that could occur with your system, disk drive, audio, and monitor.

Table 3-1
System Troubleshooting

Problem	Possible Cause	Action
Power indicator not on. 	System is not plugged in.	Plug the system in, and then turn it back on. Check that the power cable is secure, if necessary.
	System is not turned on.	Push the power button.
	No power at the wall outlet.	Use another wall outlet and separate circuit.
	Internal power supply cables not reconnected after installing options.	Reconnect internal power cables.
	CPU and/or PCI fan not connected to the main logic board.	Contact your service representative.
	Fan vents blocked.	Remove obstruction from fan vents.
	Front-panel cable not plugged in to the main logic board.	Plug cable in.

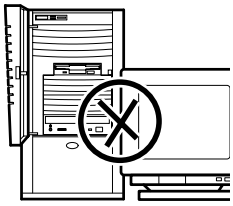
continued

Table 3-1
System Troubleshooting *continued*

Problem	Possible Cause	Action
Power is on, but there is no screen display and no beeps. 	Monitor brightness and contrast controls are not correctly set.	Adjust the brightness and contrast controls.
	Monitor is off	Ensure AC power cord is plugged in and turn on the monitor.
	Monitor cable or power cord is incorrectly installed.	Check all monitor connections.
	Configuration error.	Refer to the video module documentation for more information.
	Monitor is defective.	Try another monitor.
	Bad monitor cable.	Try another cable.
	Defective video controller module.	Replace the video module.
	Keyboard or video controller missing or malfunctioning.	The console firmware tests for keyboard and video before displaying information. Check connections.
	System is in ACPI sleep mode.	Press power button briefly to wake up the system. If that does not work, press power button for 4 seconds to shut down the system fully. Reapply power. If necessary, unplug power cord and then replug power cord.

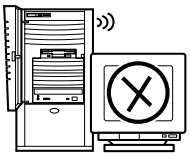
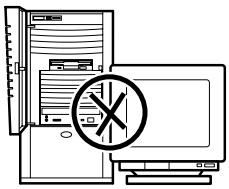
continued

Table 3-1
System Troubleshooting *continued*

Problem	Possible Cause	Action
System does not boot. 	Operating system software is not installed on the hard disk drive.	Install the appropriate operating system.
	Hard drive cable is not connected or there is no power to the drive.	Connect hard drive signal and power cables.
	System cannot find the boot device.	Check the system configuration for correct device parameters. Use the firmware to display system configuration. Look at the hard disk configuration to determine what hard disk is available. Verify the operating system selection information.
	Environment variables incorrectly set.	For AlphaBIOS: From the Boot screen, press the [F2] key to go to setup. From there, go to the desired menu to correctly set the environment variables. For Compaq Tru64 UNIX, type >>>show all to get a list of all environment variables.
	Hard disk drive is not correctly formatted or the requested partition does not exist.	Format the hard disk drive or correctly partition the hard disk drive using the supplied software.
	There is no software on the requested partition.	Install software on the requested partition or point to the correct partition.
	Windows NT overwrote Compaq Tru64 UNIX boot block.	Reinstall the UNIX operating system.

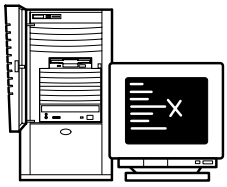
continued

Table 3-1
System Troubleshooting *continued*

Problem	Possible Cause	Action
Power is on, but there s no screen display. 	Various possible causes.	Listen carefully for computer beep codes; record the number of beeps and their patterns and then check the beep codes below: 1 short and 4 long beeps - no usable memory detected. 2 long and 4 or 5 short beeps - Firmware in flash ROM is corrupted.
System boots automatically when you do not want it to. 	System is set to autoboot.	For Compaq Tru64 UNIX users: When the SRM console starts, press [Ctrl/C] to stop the autostart countdown. Type `>>>auto_action halt` to change a variable. For Windows NT users: When AlphaBIOS starts, press a ↓ to stop the autostart countdown. Then press [F2] to enter setup. Use the down arrow key to select CMOS set up. Press [Enter] then [Tab] to "Autostart count" and select the number of seconds that you need.

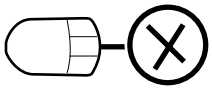
continued

Table 3-1
System Troubleshooting *continued*

Problem	Possible Cause	Action
Target boot device not listed in the SRM display system configuration. 	Loose power and/or data cable.	Secure all signal and power cable connections.
	SCSI bus too long.	First ensure that you are using qualified SCSI cable. Then alter SCSI bus to correct length in compliance with the 1.5-meter limitation for combined cable and signals on the circuit board. If your SCSI bus is longer than 1.5 meters, use shorter cables where possible, remove some devices, or slow down the bus. See the SCSI setup screen in AlphaBIOS or SRM. For Windows NT users: Reset SCSI drive as drive 0.
	SCSI drive not set as drive 0.	Terminate the extreme end of the bus.
	SCSI termination is done incorrectly.	Connect one end of the cable to the SCSI controller and the other end to a terminator. Make sure there is no extra termination, for example, disable termination in drives. Check that there is active termination only.

continued

Table 3-1
System Troubleshooting *continued*

Problem	Possible Cause	Action
No response to keyboard commands.	Keyboard is password protected.	Enter the keyboard password, if supported by your operating system.
	Keyboard is not connected.	Connect the keyboard to the keyboard port. Ensure that cable is seated securely.
	Keyboard is connected to the mouse port.	Connect the keyboard to the keyboard port.
Note: On the back of the CPU there are symbols for both the mouse and the keyboard. Please connect the mouse where you see the symbol for the mouse and the keyboard where you see the symbol for the keyboard.		
No response to mouse commands.	Mouse is not connected.	Connect the mouse and restart the system.
	Mouse is connected to the keyboard port.	Connect the mouse to the mouse port and restart the system.
	Mouse driver not installed.	Install the appropriate mouse driver. Refer to your supplied application software documentation.
	Mouse ball sticking.	Clean the mouse.

continued

Table 3-1
System Troubleshooting *continued*

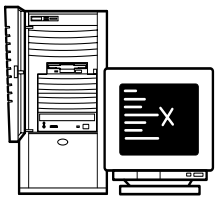
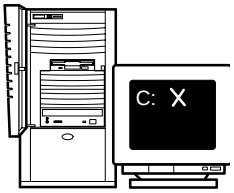
Problem	Possible Cause	Action
System forgets some environment variables or the time-of-day while powered off.	Dead battery.	Replace the lithium battery. Use a DIGITAL (P/N 12-41476-06) or type BR2032 three-Volt DC lithium battery. See the Compaq Professional Workstation XP1000 *System Reference and Maintenance Guide* for details.
	No contact between battery holder and battery.	Carefully adjust metal tab on battery holder to allow contact with battery.
For Compaq Tru64 UNIX users: System starts AlphaBIOS rather than SRM firmware. *Or* System forgets user preference for SRM firmware and starts AlphaBIOS firmware when powered on.		

Table 3-2
Disk Drive Troubleshooting

Problem	Probable Cause	Action
Hard disk drive cannot read or write information. 	Incorrect SCSI drive ID settings.	Set the SCSI ID. Refer to the disk drive installation instructions.
	Loose or incorrectly installed cables.	Make sure all cables are correctly installed.
	Disk drive is not correctly formatted or partitioned.	Format and partition as required using the supplied operating system.
	SCSI bus is terminated improperly.	Ensure that the SCSI bus is terminated properly. The last device on the cable should terminate the bus *or* no devices should have termination and the cable should be terminated with the 12-45538-01 active terminator.

continued

Table 3-2
Disk Drive Troubleshooting *continued*

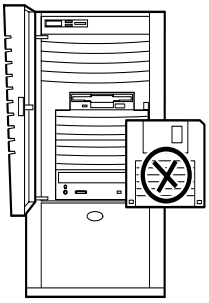
Problem	Probable Cause	Action
1.44-MB drive cannot read or write information.	1.44-MB diskette is not formatted.	Format the 1.44-MB diskette or use preformatted diskettes.
	1.44-MB diskette is wrong density.	Use a 1.44-MB diskette of the proper density for your hard drive.
	1.44-MB diskette is worn or damaged.	Try another 1.44-MB diskette.
	1.44-MB diskette is write protected.	Slide the write-protect switch so the hole is not visible.
	1.44-MB drive is empty.	Insert a 1.44-MB diskette.
	1.44-MB drive power or data cable not connected.	Connect 1.44-MB drive power or data cable.
	1.44-MB drive data cable connector installed backwards. *NOTE: 1.44-MB drive light is on during this condition.*	Install 1.44-MB drive data cable connector correctly.

Table 3-3
Audio Troubleshooting

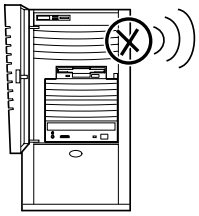
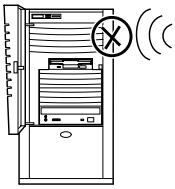
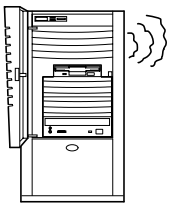
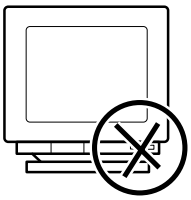
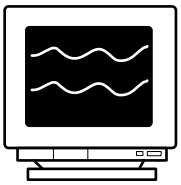
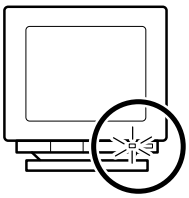
Problem	Possible Cause	Solution
No sound. 	Front-panel internal audio cable not plugged in. Driver not installed. Volume control set low. Headset plugged in. No power to external speakers. Internal speaker not connected.	Plug in the cable. Install the driver. Use an on-screen volume control (if available) to increase the volume. Unplug headset and plug microphone into correct connector. Plug in external speakers. Connect internal speaker. *NOTE*: *Headphone or external speakers must be connected for "sound = Audio."*
Cannot record. 	Front-panel audio cable not plugged in. Record volume level set low.	Plug in the cable. Use the appropriate control to increase the record level.
Distorted sound. 	Record or playback volume level set high.	Reduce the volume level. (Use amplified speakers.)

Table 3-4
Monitor Troubleshooting

Problem	Possible Cause	Action
Monitor power indicator is not on. 	Monitor is turned off.	Turn on the monitor.
	Power cord is not connected.	Connect the power cord to the system or a wall receptacle.
	No power at wall receptacle.	Use another receptacle.
	Monitor is defective.	Try another monitor.
Distorted, rolling, or flickering screen display, or wrong/uneven color. 	Adjustments incorrect.	Adjust accordingly.
	Wrong type of monitor.	Try another monitor.
	Defective monitor.	Try another monitor.
	Monitor signal cable loose or damaged.	Inspect connector pins. Replace cable if damaged.

continued

Table 3-4
Monitor Troubleshooting *continued*

Problem	Possible Cause	Action
Monitor power indicator is flashing. 	Monitor cable not connected.	Connect monitor cable.

Chapter 4

Customer Support

This chapter provides information on obtaining additional product operating instructions as well as ways to obtain advanced troubleshooting assistance.

Product Information

Several resources are available to answer your questions about using and maintaining your system as well as product- and operating-system related updates.

IMPORTANT: Go to http://www.compaq.com/support/workstations/index.html

- Compaq *Professional Workstation XP1000 System Reference and Maintenance Guide* (available at product shipment). Detailed information on service, maintenance, FRUs, and configuration issues.
- Compaq *Professional Workstation XP1000 Technical Information Guide* (available at product shipment). Detailed information on CPU, ISA, PCI, interrupts, registers, addressing, connectors and cables, LEDs, and FRU replacement, among other topics.
- Compaq *Professional Workstation XP1000 Dual Boot Installation Guide* (EK-ALUNX-DB). Instructions on running multiple operating systems.

Also, you may consult your distributor or Compaq representative.

Support Resources/Checklist

In addition to the resources listed above, Compaq provides telephone customer support available at 1-800-354-9000 (in the United States) or 1-800-267-5251 (in Canada). To make the most of your telephone or Web inquiry, please fill in the following checklist prior to placing a call to ensure that the customer support staff have the information necessary to process your request.

Table 4-1
Customer Support Checklist

Before you call, fill in the following information:
Today's date
Customer company name **Address** **Contact name** **Phone number**
System model number **Serial number** **Date of purchase**
Software platform and version

continued

Table 4-1
Customer Support Checklist *continued*

Before you call, fill in the following information:	
Layered software applications	
System configuration	CPU revision: MLB revision: Firmware SROM: PALcode VMS: OSF: BIOS SRM: ARC: Memory/size (in total MB): DIMMs: PCI cards: ISA card: Number of drives/revision: Power supply/revision: Monitor type:
Customer impact	Is the system running? Down?
Solutions attempted so far	What diagnostics have been used for testing? (POST, boot operating system, etc.) What hardware has been replaced?

Appendix A

Regulatory Compliance Notices

NOTE: The Compaq Professional Workstation XP1000 system is a Class B product.

Federal Communications Commission Notice

Part 15 of the Federal Communications Commission (FCC) Rules and Regulations has established Radio Frequency (RF) emission limits to provide an interference-free radio frequency spectrum. Many electronic devices, including computers, generate RF energy incidental to their intended function and are, therefore, covered by these rules. These rules place computers and related peripheral devices into two classes, A and B, depending upon their intended installation. Class A devices are those that may reasonably be expected to be installed in a business or commercial environment. Class B devices are those that may reasonably be expected to be installed in a residential environment (e.g., personal computers). The FCC requires devices in both classes to bear a label indicating the interference potential of the device as well as additional operating instructions for the user.

The rating label on the device shows which class (A or B) the equipment falls into. Class B devices have an FCC logo or FCC ID on the label. Class A devices do not have an FCC logo or ID on the label. Once the class of the device is determined, refer to the following corresponding statement.

Class A Equipment

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. 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. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at personal expense.

Class B Equipment

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.

Declaration of Conformity for Products Marked with FCC Logo, 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. For questions regarding this declaration, contact:

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

Or call (281) 514-3333

To identify this product, refer to the Series number found on the product.

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 in order to maintain compliance with FCC Rules and Regulations.

Canadian Notice (Avis Canadien)

Class A Equipment

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

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

Class B Equipment

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

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

European Union 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.

Acoustic Declaration

Refer to Table A-1 for declared acoustic values for the Compaq Professional Workstation XP1000 system.

Table A-1
Acoustics - Declared values per ISO 9296 and ISO 7779

Sound Power Level L_{WAd}, B			Sound Pressure Level L_{pAm}, dBA (operator position)	
Product	**Idle**	**Operate**	**Idle**	**Operate**
Professional Workstation XP1000 with:				
0 x HDD	5.1	5.1	37	37
1 x 4GB (or 9GB) 10 k rpm HDD	5.2	5.8	37	41
1 x 18GB 10k rpm HDD	5.3	5.6	39	42
1 x 4GB (or 9GB) 7200 rpm HDD	5.2	5.3	38	41

Current values for specific configurations are available from Compaq Computer Corporation representatives. 1 B = 10 dBA.

Appendix B

Power Cord Requirements

The power cord set meets the requirements for use in the country where you purchased your equipment. The voltage selection switch allows you to select the appropriate line voltage for your server.

Power cord sets for use in other countries must meet the requirements of the country where you use the server. For more information on power cord set requirements, contact your Authorized Compaq Dealer.

General Requirements

The requirements listed below are applicable to all countries:

- The length of the power cord must be at least 6.0 feet (1.8 m) and a maximum of 12 feet (3.7 m).
- The power cord set must be approved by an acceptable accredited agency responsible for evaluation in the country where the power cord will be used.
- The power cord set must have a minimum current capacity and nominal voltage rating of 10 A/125 volts AC, or 10A/250 volts AC, as required by each country's power system.
- The appliance coupler must meet the mechanical configuration of an EN60320/IEC 320 Standard Sheet C13 Connector, for mating with the appliance outlet on the computer.

Country-Specific Requirements

Use the following table to identify the appropriate accredited agency in your country.

Table B-1
Power Cord Set Requirements - By Country

Country	Accredited Agency	Applicable Note Numbers
Australia	EANSW	1
Austria	OVE	1
Belgium	CEBC	1
Canada	CSA	2
Denmark	DEMKO	1
Finland	SETI	1
France	UTE	1
Germany	VDE	1
Italy	IMQ	1
Japan	JIS	3
Norway	NEMKO	1
Sweden	SEMKO	1
Switzerland	SEV	1
United Kingdom	BSI	1
United States	UL	2

Notes:

1. Flexible cord must be <HAR> Type HO5VV-F, 3-conductor, 1.0 mm^2 conductor size. Power cord set fittings (appliance coupler and wall plug) must bear the certification mark of the agency responsible for evaluation in the country where it will be used.
2. Flexible cord must be Type SVT or equivalent, No. 18 AWG, 3-conductor. Wall plug must be a two-pole grounding type with a NEMA 5-15P (15A, 125V).
3. Appliance coupler, flexible cord, and wall plug must bear a "T" mark and registration number in accordance with the Japanese Dentori Law. Flexible cord must be Type VCT or VCTF, 3-conductor, 1.0 mm^2 conductor size. Wall plug must be a two-pole grounding type with a Japanese Industrial Standard C8303 (7A, 125V) configuration.

Appendix C

Electrostatic Discharge Guidelines

To prevent damaging the system, be aware of the precautions you need to follow when setting up the system or handling parts. A discharge of static electricity from a finger or other conductor may damage system boards or other static-sensitive devices. This type of damage may reduce the life expectancy of the device.

To prevent electrostatic damage, observe the following precautions:

- Avoid hand contact by transporting and storing products in static-safe containers.
- Keep electrostatic-sensitive parts in their containers until they arrive at static-free workstations.
- Place parts on a grounded surface before removing them from their containers.
- Avoid touching pins, leads, or circuitry.
- Always be properly grounded when touching a static-sensitive component or assembly.

Grounding Methods

There are several methods for grounding. Use one or more of the following methods when handling or installing electrostatic-sensitive parts:

- Use a wrist strap connected by a ground cord to a grounded workstation or computer chassis. Wrist straps are flexible straps with a minimum of 1 megohm ± 10 percent resistance in the ground cords. To provide proper ground, wear the strap snug against the skin.
- Use heel straps, toe straps, or boot straps at standing workstations. Wear the straps on both feet when standing on conductive floors or dissipating floor mats.
- Use conductive field service tools.
- Use a portable field service kit with a folding static-dissipating work mat.

If you do not have any of the suggested equipment for proper grounding, have an Authorized Compaq Reseller install the part

NOTE: For more information on static electricity, or assistance with product installation, contact your Authorized Compaq Reseller.

Index

A

AlphaBIOS 3-2, 3-6, 3-10
console 2-2
AlphiaBIOS 2-10
Audio 1-6, 3-13

B

Battery
Disposal 3-1
type 3-10
Boot 1-7, 3-6
multiple, precautions 2-2
boot straps, using C-2

C

Cables 3-6
Comfort guide 1-3
Console
update utility 2-11
Customer support
checklist 4-2
telephone numbers 4-2

D

Disposal 3-1

E

electrostatic discharge
obtaining additional information C-2
precautions C-1
preventing C-1
storing products C-1
transporting products C-1
types of damage from C-1
ESD *See* electrostatic discharge

F

FCC
Canadian notice A-3
Class A equipment A-2
Class B equipment A-2
declaration of conformity A-2
European Union notice A-4
rules and regulations A-1
Firmware
preparing a floppy diskette 2-10
update utility 2-11
updating 2-9
Flash
update utility 2-11
flashROM 2-9, 3-7

G

Graphics options 3-2
grounding methods C-1
grounding straps
specifications C-2
wearing C-2
grounding, suggested equipment for C-2

H

heel straps, using C-2

I

IRQ 3-2

K

Kensington Lock 1-10
Keyboard 1-4, 3-4, 3-5

L

LEDs 3-3

M

Media Requirements 2-1
Monitor 1-4, 3-4, 3-5
Mouse 1-4, 3-4

O

Operating system 1-8

P

Partitions 2-2
parts
proper handling C-1
storing C-1
transporting C-1
power cord set
agency approval B-1
applicance coupler specifications B-1
cable length B-1
cable specifications B-2
country-specific requirements B-2
current capacity B-1
obtaining additional information B-1
requirements B-1
voltage rating B-1
wall plug specifications B-2
Power on self test (POST) 1-7

R

README files 3-3
Reset button 3-3

S

Security
Kensington lock 1-10
lockdown hasp 1-9
system 1-9
Sleep mode 1-7, 3-5
static-safe containers
storing products in C-1
transporting products in C-1
System
security 1-9
turning off 1-8
turning off 1-8
system, preventing electrostatic damage to C-1

T

tools
conductive field service type C-2
Troubleshooting
boot device not listed 3-8
dead battery 3-10

disk read and write
problem 3-11
display problems 3-14
keyboard 3-9
monitor power indicator
problem 3-14
mouse 3-9
system forgets settings 3-10
Tru64 UNIX 1-9, 3-6

U

UNIX
updating firmware 2-11
Update utility 2-11

V

Video Controller 3-5

W

wall plug specifications B-2
Windows NT 1-8, 2-2, 3-3, 3-8
preparing SN-KZPCA-AA
diskette 2-11
updating
firmware/Software 2-10
wrist straps
specifications C-2
using C-2