

Finding Your Way Around the System

You've bought your Portégé 620CT computer and taken everything out of the box. Now you may be asking yourself, "OK, what do I do?" This chapter explains how to set up your computer, gives you tips on working comfortably and takes you on a tour of the computer's features.

Make Sure You Have Everything

Your Portégé 620CT computer comes with everything you need to get up and running quickly. However, before you rush off, it's a good idea to make sure you received everything you were supposed to. This information is listed on the Quick Start Card at the top of the box.

If any items are missing or damaged, notify your dealer immediately. For additional help, contact Toshiba as described in "If You Need Further Assistance" on page 279.

Select a Place to Work

Your Portégé 620CT is a portable computer, designed to be used in a variety of circumstances and locations. However, by giving some thought to your work environment, you can protect the computer and make your work hours more comfortable.

Keep the Computer Comfortable

Use a flat surface with enough room to operate comfortably. If you're planning to use a printer or other external device, make sure there's enough space for it as well.

To keep your computer in prime operating condition, make sure your work area is free from:

- ❖ dust, moisture and direct sunlight.
- ❖ liquids and corrosive chemicals.



Don't spill liquids into the computer. If you spill a liquid into the keyboard, turn the computer off, unplug it from the AC power source, and let it dry completely before turning it on again.

If the computer does not operate correctly after you turn it back on, contact a Toshiba authorized service provider.

- ❖ objects that generate a strong electromagnetic field, such as stereo speakers or speakerphones.
- ❖ rapid changes in temperature or humidity and sources of temperature changes such as air conditioner vents or heaters.
- ❖ extreme heat, cold or humidity. Operate the computer within a temperature range of 40 to 95 degrees Fahrenheit (5 to 35 degrees Celsius) and a relative humidity of 20 to 80 percent.

Keep Yourself Comfortable

Strain and stress injuries are becoming more common as people spend more time using their computers. However, with a little care and proper use of the equipment, you can work comfortably throughout the day.



Using the computer keyboard incorrectly can result in discomfort and possible injury. If your hands, wrists, and/or arms bother you while typing, discontinue using the computer and rest. If discomfort persists, consult a physician.

In addition to the hints provided in the following sections, there are a number of books available on ergonomics, repetitive strain injury, and repetitive stress syndrome.

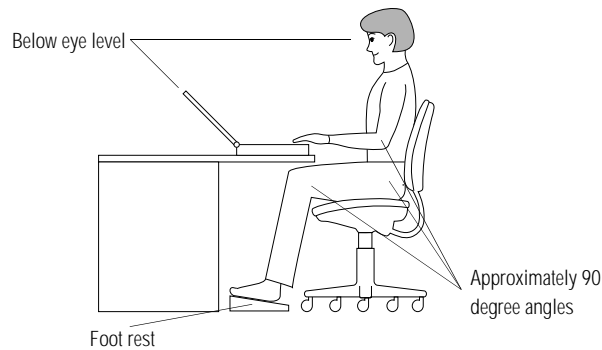
Placement of the Computer

Proper placement of the computer and external devices is important to avoid stress-related injuries:

- ❖ Place the computer on a flat surface at a comfortable height and distance. Your arms and hands should be in a relaxed position with your forearms parallel to the floor. The top of the LCD display should be no higher than eye level.
- ❖ Maintain good posture with your body relaxed and your weight distributed evenly. You should be able to type without twisting your torso or neck, and see the display panel without slouching.
- ❖ Adjust the display panel to avoid glare.
- ❖ If you use a paper holder, set it at about the same height and distance as the computer.

Seating and Posture

Proper seating is one of the primary factors in reducing work strain. Some people find an ergonomic (backless) chair more comfortable than a conventional chair. Whichever type you choose, refer to the following guidelines to adjust your chair for maximum computing comfort.



Correct posture and positioning of the computer

- ❖ Position your chair so the keyboard is at or slightly below the level of your elbow. You should be able to type comfortably with your shoulders relaxed.

If you are using a conventional chair:

- ❖ Your knees should be slightly higher than your hips. If necessary, use a foot rest to raise the level of your knees and ease the pressure on the back of your thighs.
- ❖ Adjust the back of your chair so it supports the lower curve of your spine. If necessary, use a cushion to provide extra back support. Lower back support cushions are available at many office supply stores.
- ❖ Sit with your back straight so that your knees, hips and elbows form approximately 90 degree angles when you work. Do not slump forward or lean back too far.

Lighting

Proper lighting can improve the legibility of the display and reduce eye strain.

- ❖ Position the display panel so that sunlight or bright indoor lighting does not reflect off the screen. Use tinted windows or shades to reduce glare.
- ❖ Avoid placing your computer in front of a bright light that could shine directly in your eyes.
- ❖ If possible, use soft, indirect lighting in your computer work area.

Arms and Wrists

- ❖ Avoid bending, arching, or angling your wrists. Keep them in a relaxed, neutral position while typing.
- ❖ Exercise your hands, wrists and arms to improve circulation.

Work Habits

The key to avoiding discomfort or injury from repetitive strain is to vary your activities. If possible, schedule a variety of tasks into your work day. Finding ways to break up the routine can reduce stress and improve your efficiency.

- ❖ Take frequent breaks to change position, stretch your muscles, and relieve your eyes.
- ❖ Avoid performing repetitive activities for prolonged periods of time. Vary activities from one task to another.
- ❖ Focusing your eyes on your computer screen for long periods of time can cause eye strain. Look away from the computer frequently and focus your eyes on a distant object.

Find Out Where Everything's Located

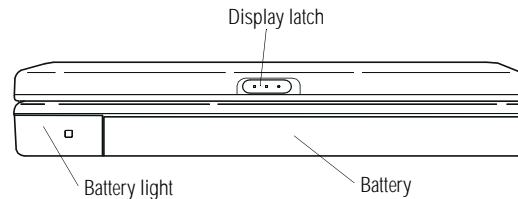
If you've never used a notebook computer before, you're probably wondering how an entire computer can fit into so small a case.

The next few pages take you on a guided tour of the computer and its components.

Rather than reading through this section, you may prefer to use it as a reference as you move through the remainder of the manual and need to locate specific parts of the computer. This information is also available in the electronic form of this manual, described in “Using Online Documentation” on page 227.

Don't worry if you don't know what some parts of the computer do. Some items in this tour support more advanced computing functions that you may want to use as your computing needs and skills increase.

The Front with the Display Closed



The front with the display closed

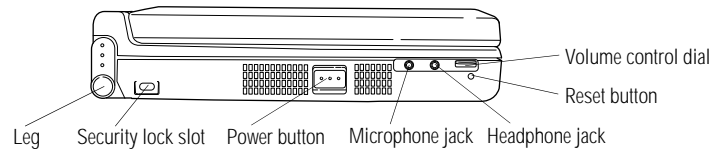


The **battery light** tells you about the current battery charge. For more information, see “Monitoring Battery Power” on page 112.

Sliding the **display latch** to the right opens the computer's display panel. For more information, see “Open the Display” on page 26.

The **battery** powers the computer when the AC adapter is not attached. To remove and replace the battery, see “Replacing Batteries” on page 123.

The Left Side



The left side

There are **legs** on the left and right sides of the computer. Using the legs together lets you adjust the angle of the computer.



Attaching a special cable to the **security lock slot** lets you anchor your computer to your desk or other large, heavy object. For more information, see “Applying Physical Restraints” on page 205.



Pressing the **power button** turns the computer on and off. For more information, see “Turn the Computer On” on page 27.



The 3.5 mm monaural **microphone jack** lets you connect an external monaural microphone or other audio input device. Connecting a microphone or other device to this jack disables the internal microphone automatically.



The 3.5 mm **headphone jack** lets you connect stereo headphones or other audio output devices, such as external speakers. Connecting headphones or another device to this jack disables the internal speaker automatically.



Pressing the **reset button** restarts the computer. Use this button only if all other attempts at restarting the computer have failed.

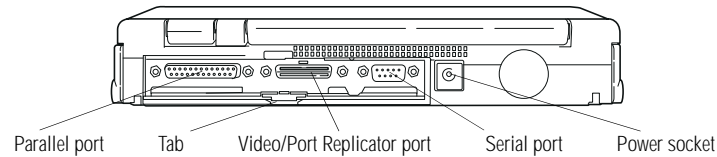


Do not use a pencil to press the reset button. Pencil lead can break off inside the computer and damage its circuitry.



The **volume control dial** lets you adjust the loudness of the system speaker.

The Back



The back

To uncover the ports, open the port cover by pulling down on its center **tab**, and slide the cover into the slot at the lower edge of the computer.



Use the **parallel port** to connect a printer or other parallel device. For more information, see “Connecting a Parallel Printer” on page 24.



Use the 72-pin **video/Port Replicator port** to connect an adapter for an external monitor or the Port Replicator (optional). The Port Replicator provides all the ports of the Portégé 620CT computer and additional video, PS/2 mouse and keyboard ports. For more information, see “Using the Port Replicator” on page 191.

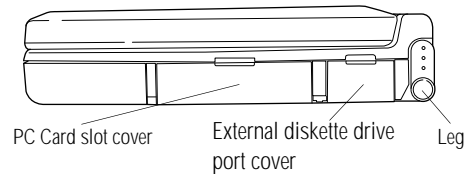


Use the **serial port** to connect a serial mouse, printer or other serial device. For more information, see “Connecting Your Modem” on page 162.



The **power socket** is where you plug in the AC adapter. For more information, see “Connect to a Power Source” on page 15.

The Right Side



The right side



The **PC Card slot cover** protects the PC Card slot. This slot lets you install up to two Type I or Type II PC Cards or one Type III PC Card. For more information, see “Little Cards that Do Big Things” on page 149.

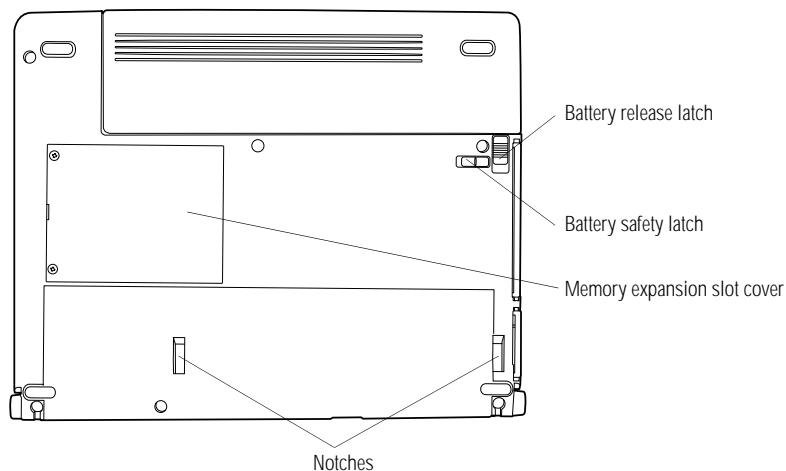


The **external diskette drive port cover** protects the port to which you connect the external diskette drive. The diskette drive is compatible with 1.44MB and 720KB 3.5-inch diskettes. For more information on the external diskette drive, see “Connect the External Diskette Drive” on page 21.




The **legs** on either side of the computer let you adjust the angle of the computer.

10 Finding Your Way Around the System *Find Out Where Everything's Located*

The Underside

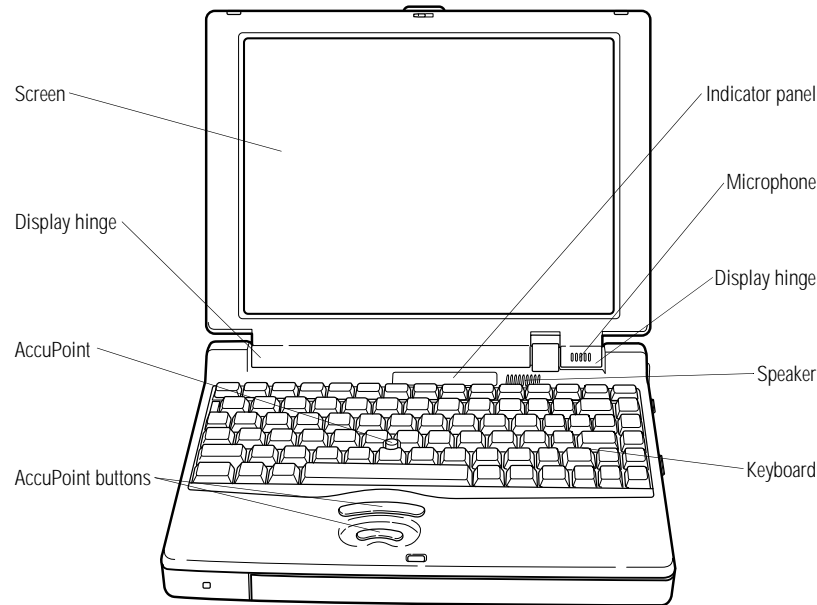


The underside

-  The spring-loaded **battery release latch** releases the battery.
-  The **battery safety latch** prevents accidental release of the battery.
-  The **memory expansion slot cover** protects a slot for adding extra memory to your computer. For more information, see “Adding Memory (Optional)” on page 17.

The Port Replicator **notches** align the computer with the optional Port Replicator. For more information, see “Using the Port Replicator” on page 191.

The Front with the Display Open



The front with the display open

To open the display, slide the display latch on the front panel to the right as you lift the display. Position the display at a comfortable viewing angle.

The computer's **screen** is a liquid crystal display (LCD) that provides clear, sharp color images.

The **display hinges** attach the display panel to the computer.

The **AccuPoint** pointing device combines the function of a mouse with the convenience of never having to remove your hands from the keyboard. For more information, see “Using the AccuPoint Pointing Device” on page 28.

Use the **AccuPoint buttons** with the AccuPoint to access commands in your programs. The larger (primary) button acts as the left button on a mouse. The smaller (secondary) button acts as the right mouse button. For more information, see “Using the AccuPoint Pointing Device” on page 28.

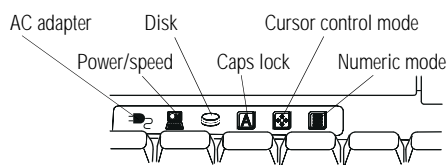
The lights on the **indicator panel** provide information about various system functions. The next section discusses the indicator panel lights.

The built-in **microphone** lets you record sounds.

The **speaker** lets you hear system alarms and sounds associated with your software. For more information, see “Different Ways to Turn the Computer On and Off” on page 222.

The 82-key **keyboard** provides all the functionality of a full-sized 101-key keyboard. For more information, see “How to Save Your Work” on page 83.

The Indicator Panel



The indicator panel



The **AC adapter** light glows green when the AC adapter is providing power to the computer. If the adapter's output voltage is abnormal or if the power supply malfunctions, this indicator flashes orange.



The **power/speed** light glows when the computer is on and shows the speed at which the computer is processing information. Green indicates high speed and orange indicates low speed.



The **disk** light indicates the hard disk is currently in use.



Do not turn the computer off if this light is on. Doing so may damage the computer, the drive or both.



The **caps lock** light comes on when you press the Caps Lock key. When this light is on, pressing a letter key on the keyboard produces an uppercase (capital) letter. For more information, see “The Character Keys” on page 79.



The **cursor control mode** light glows when the cursor control overlay is on. When the overlay is on, pressing an overlay key moves the cursor in the direction shown by the white indicator printed on the left front of the key instead of the letter printed on the top of the key. For more information, see “The Cursor Control Overlay” on page 220.



The **numeric mode** light glows, when the numeric overlay is on. When the overlay is on, pressing an overlay key displays the white number printed on the right front of the key instead of the letter printed on the top of the key. For more information, see “Typing Numbers” on page 80.

Let's Start at the Very Beginning...

Now that you know where everything is, it's time to get to work. If you're new to computers or have never used a notebook computer before, this chapter provides easy-to-follow steps for getting the computer up and running.

Connect to a Power Source

Your computer requires power to operate. By connecting the computer to a power source you can provide power to run the computer and charge the battery. To provide power to your computer, use the AC adapter and power cord to connect the computer to a live power outlet.

Before you can use the battery to power the computer, you must charge it. Leave the computer plugged in for at least three hours

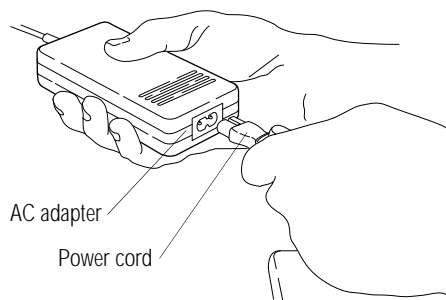
with the computer turned off. After that the battery will be completely charged and ready to power the computer.



NOTE

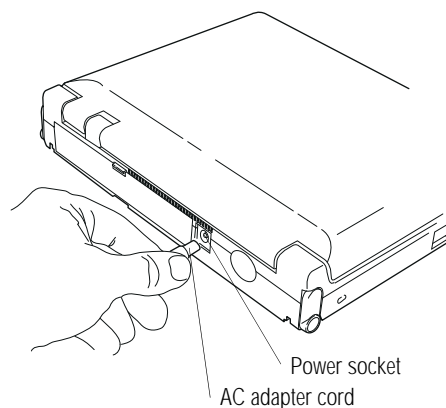
Once the battery is charged for the first time, don't leave the computer plugged in and turned off for several hours at a time.

To connect your computer to a power source, follow these steps:



Connecting the power cord to the AC adapter

1 Connect the socket end of the power cord to the AC adapter.



Connecting the AC adapter cord to the computer

2 Connect the DC OUT end of the AC adapter cord to the power socket on the back of the computer.

3 Insert the plug end of the power cord into a live wall outlet.

The AC adapter light on the indicator panel glows green.

Adding Memory (Optional)

Your computer comes with enough memory to run most of today's popular applications. However, you may want to increase the computer's memory.

With additional memory, the computer:

- ❖ can run more programs and open more documents at the same time.
- ❖ runs Windows 95 and Windows applications faster.

By installing extra memory now, you'll be able to operate your computer at its maximum capacity from the start. Of course, you can always come back to this section if you decide to add memory at a later time.

Sizes of Memory Modules

Additional memory is easy to install. Memory modules, available from your dealer, come in the following sizes:

<i>Memory Module</i>	<i>Total Memory</i>
8MB	16MB
16MB	24MB
32MB	40MB

Install the Memory Module

The memory module installs into the memory expansion slot on the bottom of the computer. You'll need a Phillips screwdriver to install the memory module.

1 Click Start, then click Shut Down.

Windows 95 displays the Shut Down Windows dialog box.

2 Click the button next to Shut down the computer, then click Yes.

3 Windows 95 shuts down and turns the computer off automatically.



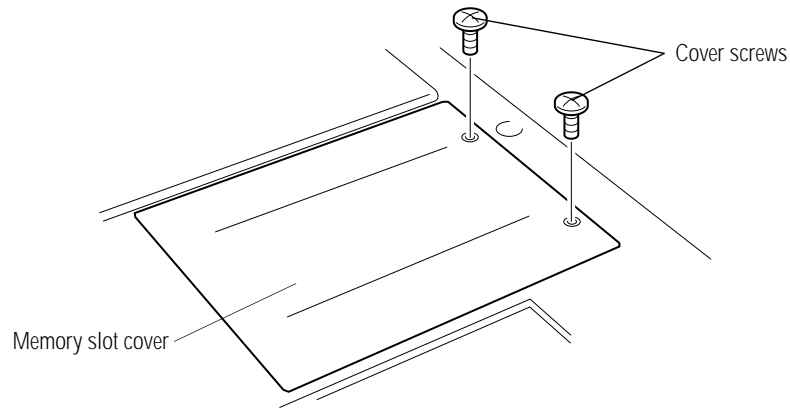
Installing a memory card with the computer's power on may damage the computer, the card or both.

4 Unplug the computer.

5 Close the display and remove any cables you may have connected.

If you're following the steps in this chapter, you haven't connected any yet.

6 Turn the computer upside down.



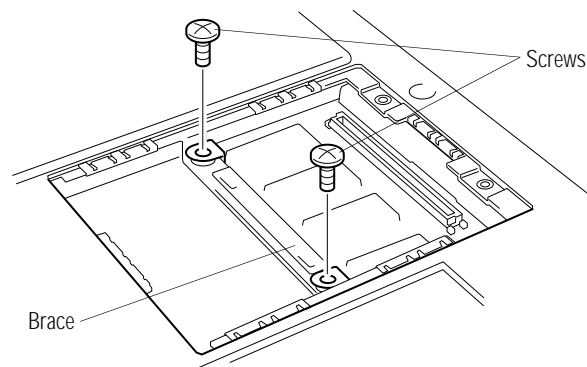
Removing the memory slot cover

- 7 Use a small Phillips screwdriver to remove the two cover screws that secure the memory slot cover.**



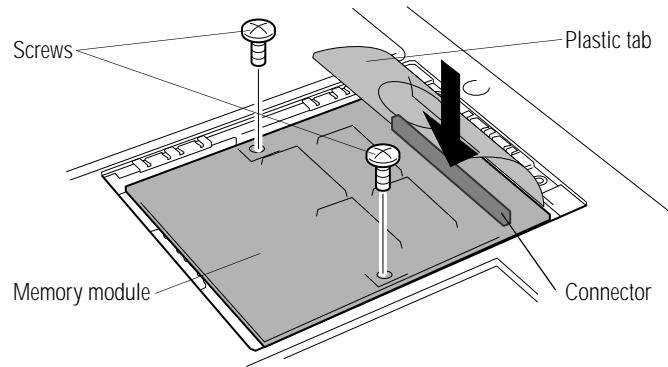
The cover screws are slightly longer than the screws inside the memory expansion slot. To facilitate reassembly, make sure to keep the two sets of screws separate.

- 8 Remove the memory slot cover.**



Removing the screws from the brace

- 9 Remove the two screws from the brace at the center of the memory expansion slot.**



Inserting a sample 8MB memory module

- 10 Carefully place the memory module in the slot with the card connector facing down and aligned with the corresponding connector on the computer.**

Your memory module may or may not have a **plastic tab**, as shown in the illustration above.



Do not touch the connectors on the memory module or on the computer. Debris on the connectors may cause memory access problems.

- 11 Make sure the holes in the memory module are aligned with the holes in the brace.**
- 12 Gently press down on the memory module connector.**

When the module is fully seated, it clicks into place. Do not force the module into position. The memory module should be level.
- 13 Secure the module to the brace, using the two screws you removed in step 9.**
- 14 If your memory module has a plastic tab, fold it down and replace the memory slot cover.**

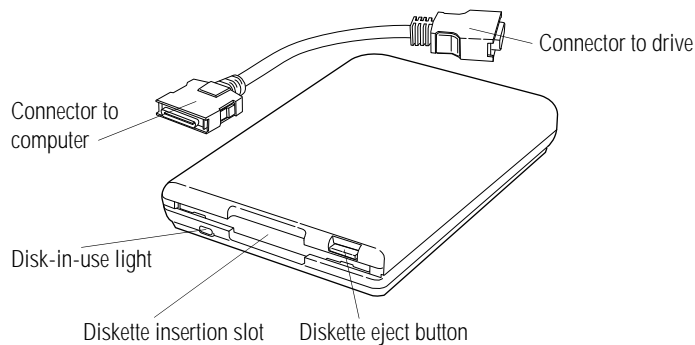
15 Replace the cover screws and tighten them.

16 Turn the computer over.

When you turn your computer on, it recognizes the additional memory automatically.

Connect the External Diskette Drive

The Portégé 620CT's external 3.5-inch disk drive is useful for installing software on the hard disk, exchanging information with other systems, and making backup copies of the files stored on your hard disk.

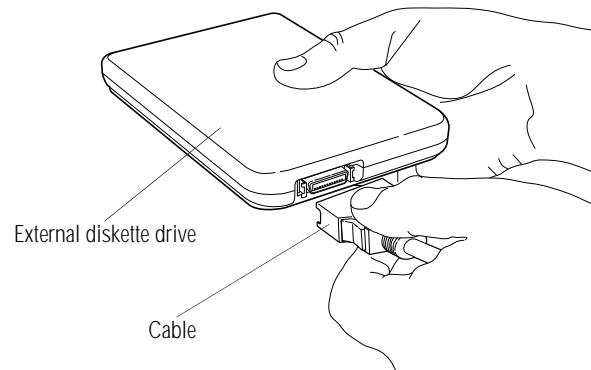


The external diskette drive and connector cable

A protective flap inside the **diskette insertion slot** automatically retracts when you insert a disk. Push the **diskette eject button** to remove a diskette from the drive.

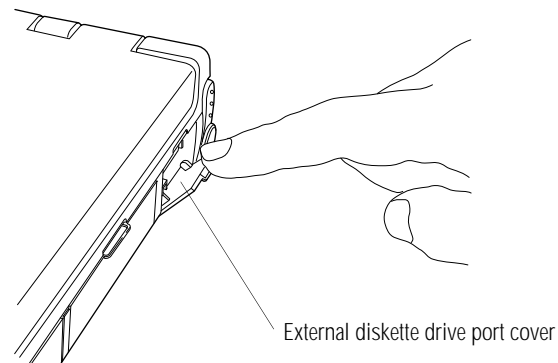
The **disk-in-use light** goes on when the computer is accessing a diskette.

To attach the external diskette drive to the computer, follow these steps:



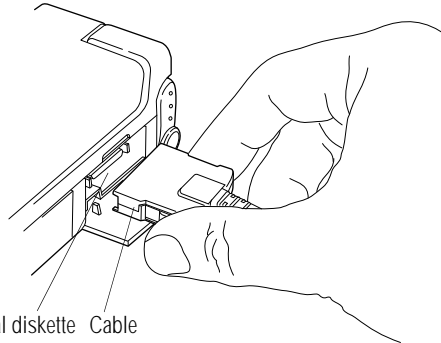
Attaching the cable to the external diskette drive

1 Connect the cable to the external diskette drive.



The external disk drive port cover

2 Open the external diskette drive port cover, located on the right side of the computer.



External diskette
Cable
drive port

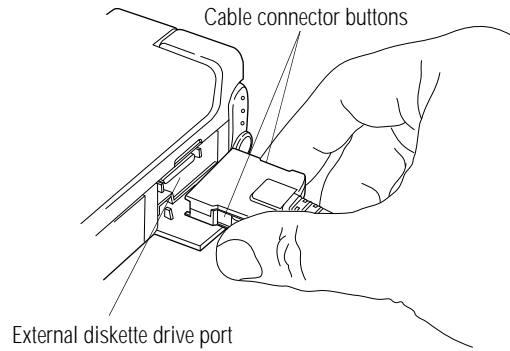
Attaching the external diskette drive

- 3 Attach the cable from the external diskette drive to the external diskette drive port.**



You may attach the external diskette drive with the computer on or off. If you attempt to use the diskette drive when it is not attached to the computer, the computer displays an error message.

The computer automatically recognizes the external diskette drive and calls it the A drive.



Disconnecting the external diskette drive

To detach the external diskette drive from the computer, press the **cable connector buttons** (on each side of the cable connector) and gently pull the connector out of the **external diskette drive port**. Close the external diskette drive port cover.



NOTE

If you try to access a diskette in the external diskette drive after disconnecting the drive, you will get a disk error message.

Connecting a Parallel Printer

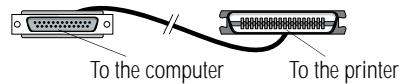
If you've already purchased a printer, now is a great time to connect it to the computer. If you don't have or don't wish to connect a printer yet, don't worry. You can always connect one later.

The most common type of printer is a parallel printer. To connect a parallel printer, you'll need a standard parallel printer cable. You may have received a cable when you purchased your printer. Otherwise, printer cables are available at most computer and electronics stores.

To connect the printer to the computer, follow these steps:

- 1 Make sure the computer is off.**
- 2 Identify the two ends of the printer cable.**

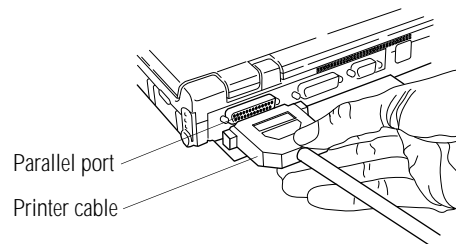
One end (with the male DB-25 connector) connects to the computer. The other end connects to the printer.



Identifying the ends of the printer cable

- 3 Connect the printer cable to your printer.**

If you're unsure how to do this, your printer's documentation will tell you how.



Connecting the printer cable to the parallel port

- 4 Connect the printer cable to the computer's parallel port.**
- 5 Plug the printer's power cable into a live AC outlet.**

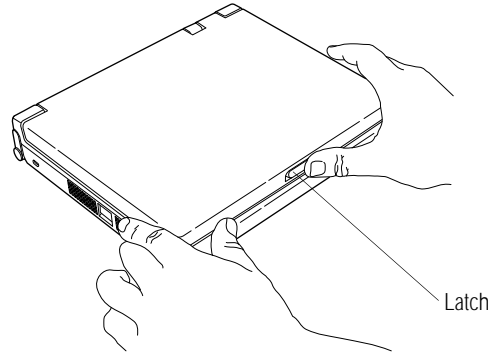


NOTE

The printer must be connected, turned on, and ready (online) before you turn the computer on.

Open the Display

The final step before you turn your computer on is to open the display.



Opening the display panel

- 1 Facing the front of the computer, locate the latch on the front center of the display panel.**
- 2 Slide the latch to the right and lift the display panel.**
- 3 Adjust the display panel to a comfortable viewing angle.**



To avoid damaging the display panel, do not force the panel beyond where it moves easily, and never lift the computer by the display panel.

Fill In Your Registration Card and Mail It

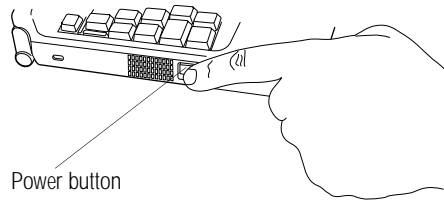
Take a few minutes now to fill in and mail your product registration card. The card was on the keyboard of your computer when you first opened the display panel. Sending in your product registration card lets Toshiba keep you up to date with information about new products and upgrades.

Registering your computer also extends your Toshiba warranty world-wide at no charge to you. See the registration card and warranty information for details about the warranty options available from Toshiba.

Turn the Computer On

Finally, the preparation is over. It's time to turn the computer on and get to work. To turn the computer on, follow these steps:

- 1 Make sure there's no diskette in the external diskette drive.**
- 2 If you have a printer connected to your computer, turn the printer on and wait until it's ready (on line).**
- 3 Locate the power/speed light on the indicator panel.**



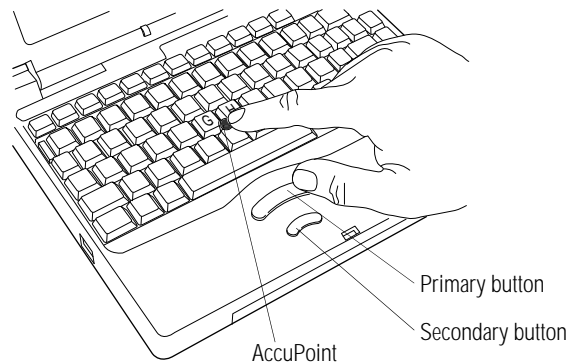
Turning the power on

- 4 Press and hold the power button on the left side of the computer until the power/speed light turns on.**

Using the AccuPoint Pointing Device

The AccuPoint enables you to move the cursor and to select items on the screen. If you're familiar with desktop computers, you may have used a mouse or trackball for this purpose. The AccuPoint provides all the functionality of a mouse or trackball without your hands ever leaving the keyboard.

If you would rather use a mouse or trackball, you can connect one to the serial port or PS/2 port. You may also use the mouse port on the optional Port Replicator.



The AccuPoint pointing device

To move the pointer, gently push the **AccuPoint** in the direction you want the pointer to move. Pushing harder on the AccuPoint moves the pointer faster.

When a step instructs you to click on or choose an item, move the cursor to the item, then press and release the **primary button**. To double-click, press the primary button twice in rapid succession. The primary button corresponds to the left button on a mouse.

The function of the **secondary button** depends on the program you are using. It corresponds to the right button on a mouse. Check your programs' documentation to find out whether it uses the right mouse button.

When You Turn the Computer on the First Time...

The first time you turn the computer on, it displays several messages and leads you through four welcome screens. Read each welcome screen carefully, then press Enter. These screens explain the procedures for creating master program diskettes and selecting an operating system (Windows 95 or Windows for Workgroups).

After you read the welcome screens, the system displays the Welcome to Windows 95 Setup screen. Complete the following steps to set up your system:



If you plan to choose Windows for Workgroups, be aware that you'll need to complete about eight Windows 95 Setup screens before the setup program gives you the opportunity to choose your operating system. Read each screen carefully to avoid installing Windows 95 accidentally.

1 In the Welcome to Windows 95 Setup screen, click Next.

Setup displays the Regional Settings screen.

2 Select your Regional Settings and click Next. The default is English (American).

Setup displays Keyboard Layout screen.

3 Select the keyboard layout and click Next. The default is United States.

Setup displays the User Information screen.

4 Type your name and company in the appropriate fields, then click Next.

Setup displays the License of Windows 95 screen.

5 Read the license information, then click Next.

Setup displays the License Agreement screen.

6 Read the license agreement, then click the button next to "I accept the agreement."

7 Click Next.

Setup displays the Certificate of Authenticity screen.

8 Type in the number from the Certificate of Authenticity, affixed to the Windows 95 manual that came with your computer, then click Next.

Setup displays the Windows Version screen.

9 Choose your operating system:



Please consider your choice carefully. Once you choose Windows 95 or Windows for Workgroups, the setup program automatically (and permanently) deletes the unselected operating system from your system.

- ❖ To choose Windows 95 (the default), click Next.
- ❖ To choose Windows for Workgroups, click Change. Setup displays the Operating System Choice screen. Click “No, I want to install MS-DOS 6.22 and Microsoft Windows for Workgroups 3.1,” then click OK.

Setup displays a Windows 95 Setup Wizard screen (even if you chose Windows for Workgroups) and installs the devices it found on your system.



This screen displays the message “Please wait while Setup prepares your Windows 95 computer” whether you chose Windows 95 or not. If you chose Windows for Workgroups and still see this message, don't be alarmed.

Setup displays the Finishing Setup screen, prompting you to restart your computer.

10 Click Finish to restart the computer.

The computer restarts and loads the operating system you selected. If you chose Windows for Workgroups, follow the instructions in the following section, "Finish the Windows for Workgroups Setup Procedure" to complete the setup procedure. If you chose Windows 95, follow the instructions in "Finish the Windows 95 Setup Procedure" on page 33 to complete the setup procedure.

Finish the Windows for Workgroups Setup Procedure

After the computer restarts and loads Windows for Workgroups, the system displays a Windows Setup screen, prompting you for your name, company, and product number:

1 Type your name and company in the appropriate fields. You may leave the product number field blank, or type in the Windows 95 Certificate of Authenticity number.

2 Click Continue.

Setup prompts you to verify the information you just entered.

3 If the information is correct, click Continue.

To change any of the information displayed, click Change.

Setup displays the Printer Installation screen.

4 If you have a printer, use the ↑ and ↓ keys to select your printer from the list and click Install.

If you don't have a printer, choose No Printer from the list and click Install.

The computer restarts, loads Windows for Workgroups, and displays the Windows Program Manager screen.

How to Use this Guide with Windows for Workgroups

The instructions in this guide are specific to Windows 95. If you chose Windows for Workgroups, a number of things will be different, including:

- ❖ The tutorial provided in “Getting to Know Windows 95” on page 43 refers to Windows 95 only.
- ❖ The instructions in this manual for starting MaxTime[®], Hardware Setup, and Fn-esse[™] are for Windows 95 only. In Windows for Workgroups, start these programs by double-clicking their icons in the Toshiba Utilities group in Program Manager. Once started, these programs function in Windows for Workgroups much the same as they do in Windows 95.
- ❖ Windows for Workgroups does not include a Suspend command. Use Resume Mode instead.
- ❖ Windows 95 contains the files your computer needs to communicate with optional PCMCIA-compatible PC Cards. If you're using Windows for Workgroups, use CardWizard with your optional PC Cards.
- ❖ The steps in “Changing the Display Mode” on page 224 are for Windows 95. To change the display mode in Windows for Workgroups, double-click the Chips CPL icon in the Control Panel.

Read “Using Windows for Workgroups” on page 377 for more information about using your computer with Windows for Workgroups.

Finish the Windows 95 Setup Procedure

After the computer restarts and loads Windows 95, the system configures your system, displays several messages, then starts the Add Printer Wizard.

Set Up Windows 95 to Work With Your Printer

If you already have a printer, click Next when the system prompts you to set up your printer. If you plan to purchase a printer later, click Cancel now and see “Setting Up Windows 95 to Work with Your Printer” on page 85 when you’re ready to connect it.

To set up Windows 95 to work with your printer now, follow these steps:

- 1 When Windows 95 opens the Printers dialog box, scroll through the lists of manufacturers and printers until you find yours.**

If your printer is not listed, it probably came with its own diskette. Insert this diskette into the diskette drive and click Have Disk. When Windows 95 displays the Install From Disk dialog box, click OK.

- 2 Select your printer and click Next.**
- 3 Set the port to LPT1: for a parallel printer (or COM1: for a serial printer) and click Next.**
- 4 Type in a new name for your printer or accept the default and click Next.**
- 5 If your printer is connected and turned on, click Finish to print a test page.**

To finish the setup procedure without printing a test page, click No, then Finish.

Select Date/Time Properties

As Setup continues, Windows 95 displays the Date/Time Properties dialog box. This dialog box has two tabs. Click on a tab to bring it to the front.

- 1 On the Time Zone tab, select your time zone from the drop-down list box.**
- 2 On the Date and Time tab, set the correct date and time, if necessary.**
- 3 When you're done, click Close.**

Create Windows 95 Diskettes

The Microsoft Create System Disks program creates program diskettes for the Windows 95 operating system. To run this program, click Next when prompted during the initial startup procedure.

If you don't want to take the time to make these diskettes now, click Cancel. When you're ready to make the diskettes, refer to "Running Microsoft Create System Disks" on page 37.



NOTE

You must create your own set of Microsoft Windows 95 diskettes. If your hard disk ever crashes, you'll need the diskettes to reinstall Windows 95 on your system. If this occurs and you haven't made these diskettes, you will have to buy a new copy of Microsoft Windows 95.

Complete the Initial Startup Procedure

Windows 95 completes its setup procedure and displays the Welcome to Windows 95 screen. This screen provides the following options:

- ❖ The Windows 95 Tour gives you a brief overview of Windows 95. For a more complete introduction, see “Getting to Know Windows 95” on page 43.
- ❖ Select What’s New for answers to common questions about Windows 95.
- ❖ Online Registration lets you register Windows 95 with Microsoft®.

Once you’ve finished looking at any or all of the above options, click Close to finish the initial startup procedure and open Windows 95.

Create or Purchase Master Diskettes

When you buy a program at a computer store, you receive one or more program diskettes. These program diskettes contain the files necessary to install the program on your computer's hard disk. You can also use them to reinstall your software if necessary.

However, your Portégé 620CT computer comes with Microsoft Windows 95 and a number of programs already installed on the hard disk. If any of these programs is ever damaged or deleted, you'll need program diskettes to reinstall it.

You must buy blank diskettes and run Microsoft's Create System Disks program to make a set of Microsoft Windows 95 diskettes.

There are two ways to obtain program files for your other pre-installed software (not including Microsoft Windows 95):

- ❖ Buy blank diskettes and run Toshiba's Master Disk Creator programs.
- ❖ Purchase the Toshiba drivers/utilities using the order form that came with your computer.

Preparing to Create Master Diskettes

Disk image files on your hard disk contain all the information to create program diskettes for the factory pre-installed programs on your computer. Microsoft Create System Disks and Master Disk Creator copy these disk images to the diskettes.

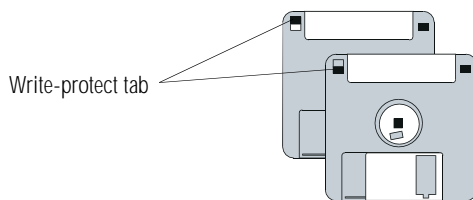


NOTE

You cannot reinstall programs from the disk image files on the hard disk. You must use program diskettes created with Create System Disks or Master Disk Creator to reinstall any of the pre-installed programs.

To run these programs, you need:

- ❖ a few hours.
- ❖ up to 64 blank 3.5-inch high-density (1.44MB) diskettes. This includes approximately 32 for Microsoft Windows 95 and 32 for your other pre-installed programs. These diskettes must be write-enabled (the write-protect tab at the upper left corner of the diskette must cover the square hole).



Write-protected and write-enabled diskettes

Although you can run these programs at any time, it's a good idea to create your program diskettes the first time you start the computer. If you decide to put off the process until later, make sure you don't forget. You don't want to accidentally delete a program and have no master diskettes available from which to reinstall it quickly.

Running Microsoft Create System Disks

If you chose not to create Windows 95 diskettes when you turned the computer on the first time, you should do so now. Since Microsoft Create System Disks requires you to make all the Microsoft Windows 95 diskettes at one time, make sure you have at least 32 new, formatted high-density diskettes before you start the program. Label the diskettes using the pre-printed Microsoft Windows 95 diskette labels provided with your computer.



NOTE

You can run Create System Disks only once. After you create the diskettes, the program deletes the images from your hard disk.

To run Create System Disks, follow these steps:

- 1 Click Start, then point to Programs.**
- 2 Point to Accessories, then point to System Tools.**
- 3 Click Create System Disks.**

Windows 95 opens the Create System Disks program. Follow the instructions on the screen to create the program diskettes.

Running Master Disk Creator

Master Disk Creator creates program diskettes for the rest of the programs pre-installed on your computer. It is a very simple program to use. Once you've started it, follow the instructions on the screen, inserting and removing diskettes as prompted. Make sure you label the diskettes as indicated by Master Disk Creator.

To run Master Disk Creator, follow these steps:

1 Make sure the diskette drive is connected to the computer.

If you're unsure how to do this, see "Connect the External Diskette Drive" on page 21.

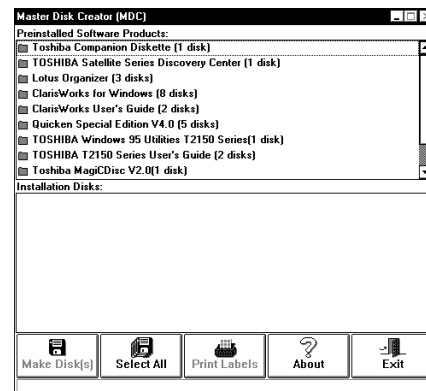
2 Click Start, then point to Programs.

3 Point to Toshiba Utilities, then click Master Disk Creator.

Master Disk Creator displays a welcome screen.

4 Choose OK by using the AccuPoint to move the pointer to it and clicking with the primary button.

Master Disk Creator displays a list of the available disk images similar to the following:



A sample list of disk images

5 To create a complete set of program diskettes, choose Select All.

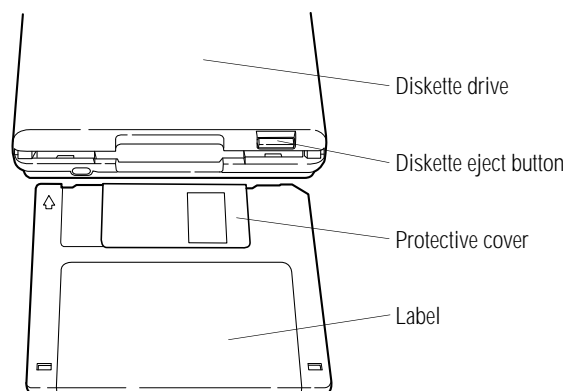
To create program diskettes for only some of the available programs, select the program(s) for which you want to create program diskettes.

6 Label the diskettes with the names shown on the screen, or click Print Labels to print the labels automatically.

If you choose to print the labels automatically, make sure the computer is connected to a printer and you have enough printer diskette labels.

7 Choose Make Disks.

Master Disk Creator displays the MDC Disk Creation Confirmation screen.



Inserting a diskette

8 Insert a blank diskette when Master Disk Creator prompts you for one.

The illustration above shows the correct insertion procedure. Make sure your fingers are touching the **label** and that the **protective cover** points toward the **diskette drive**. When the diskette is almost completely in the drive, you will feel a slight resistance. Push the diskette gently to secure it. When the diskette is completely in place, the **diskette eject button** pops out.

9 In the MDC Disk Creation Confirmation screen, choose a Write method and click Create Disk.

Master Disk Creator begins copying files to the diskette and displays a meter monitoring the copying process.

10 When Master Disk Creator prompts you to, press the diskette eject button to remove the diskette.

If the disk-in-use light is on, do not remove a diskette. Doing so could destroy the information on the diskette and damage the diskette and/or the drive.

11 Write-protect the diskette by moving the tab on the back of the diskette to expose the write-protect hole.

Write-protecting a diskette prevents you from erasing or overwriting the information on the diskette, but doesn't protect the diskette from damage caused by outside sources.

12 Continue inserting and removing diskettes according to the instructions on the screen.

Since creating program diskettes will take some time, now is a good time to:

- ❖ fill in your registration card (if you haven't yet done so).
- ❖ skim through the rest of this manual.
- ❖ fill in and mail the reader response card. Toshiba welcomes your comments and suggestions for improving the documentation.

13 When you've finished making master diskettes, store them together in a safe place.

Getting to Know Windows 95

This chapter is a tutorial showing you how to work with the desktop, which is the Windows 95 term for the screen.

When you have finished this tutorial you will have:

- ❖ learned how to use the AccuPoint
- ❖ explored the Windows 95 desktop
- ❖ created a new document and folder
- ❖ started and closed programs
- ❖ resized, reshaped and moved windows on the desktop
- ❖ created and used shortcuts
- ❖ changed the properties of various objects on the desktop
- ❖ set the date and time
- ❖ used Windows Help
- ❖ turned your computer off properly

If you're new to computers or have never used Windows 95 before, the skill and confidence you'll gain going through these lessons will more than offset the small amount of time you will spend.



If you chose Windows for Workgroups and this your first notebook computer, read Lesson 1, then go on to Chapter 4.

If you've used an earlier version of Windows, you'll notice that Windows 95 is very different. So you should find the information in this chapter helpful. You'll probably want to work through some of the lessons and skim others.

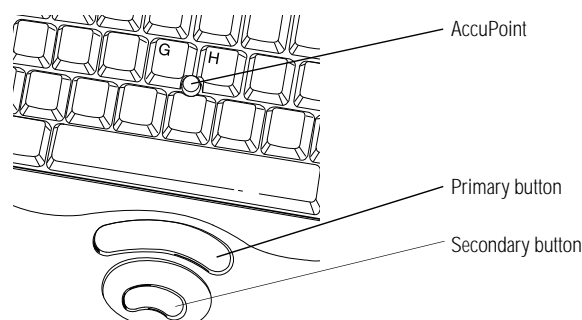
In addition, Windows 95 Help discusses a number of the major differences in an easy question-and-answer format. Click Start, then Help to open the online Help, click the Index tab, then type tips and double-click "for Windows 3.1 users."

If you've used the Macintosh operating system, you'll find Windows 95 is similar in many ways. For instance, the Recycle Bin works like the Trash Can. Skim through this chapter to get a feel for the differences.

The aim of this tutorial is to help you start doing useful work quickly. It shows you one way of doing various basic tasks. As you gain experience with Windows 95 you will discover that there are often other ways of accomplishing a particular task. One of the most useful things about Windows 95 is its flexibility.

Lesson 1: Using the AccuPoint

The AccuPoint is a pointing device located between the G and H keys.



The AccuPoint and buttons

The **AccuPoint** is the basic tool for moving around the screen. It works together with the **primary** and **secondary buttons**. In this lesson you will learn how to use the AccuPoint.

Follow these steps to learn what you can do with the **AccuPoint**:

1 Push gently against the left side of the AccuPoint.

Notice how the pointer moves to the right edge of the desktop.

2 Push a bit harder against the right side of the AccuPoint.

Notice that the pointer moves faster as you increase the pressure on the AccuPoint.

3 Practice moving around the screen.

Experiment by moving in different directions and at different speeds.

Now that you are familiar with the AccuPoint, continue to read the next lesson. You will learn about the objects on the desktop and their uses.

Lesson 2: Exploring the Desktop

Windows 95 organizes the display on your computer screen as if it were a desktop. Objects sit on the computer desktop like objects that sit on top of your desk. It is easy to move objects around, open them, close them and store them.

In this lesson you will learn the names and functions of the various parts of the desktop, you will also learn some simple organizing principles for your desktop.

Each icon on the desktop represents a single object, such as a program a folder or a device.

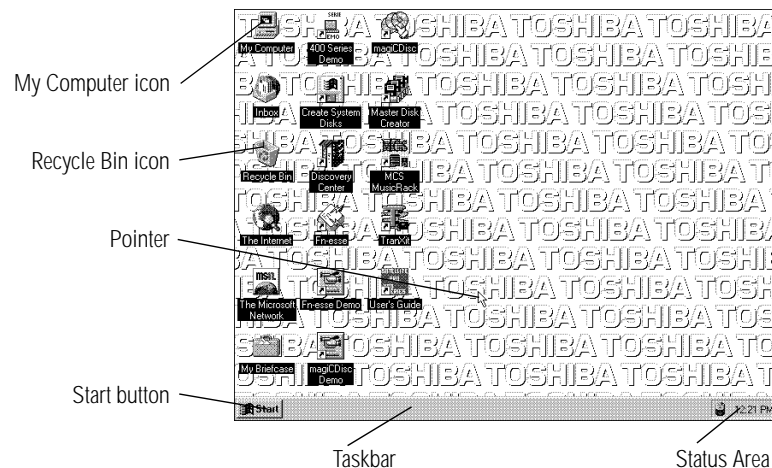


Programs are sets of instructions for the computer system.

Folders are containers to store documents, programs and other folders.

Devices are disk drives, printers and other peripherals connected to your computer.

This is what your computer screen looks like.



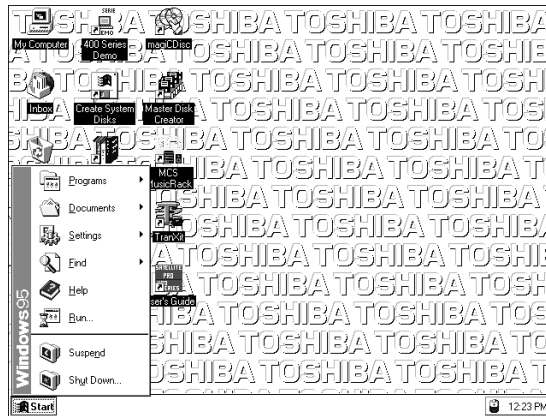
A sample Windows 95 desktop

Follow these steps to explore the desktop.



1 Move the pointer to the Start button and click once.

Windows 95 displays a menu (a list of options) that contains everything you need to begin using your computer.



The Desktop with Start menu open

Here's what your system does when you point to each of the items on the Start menu.

When You Point to The System

- | | |
|-----------|---|
| Programs | displays a list of programs you can start. |
| Documents | displays a list of documents you've opened previously. |
| Settings | displays a list of system components for which you can change settings. |
| Find | allows you to find a folder, document, shared computer, or mail message. |
| Help | allows you to use the Help program to find out how to do a task in Windows. |

<i>When You Point to</i>	<i>The System</i>
Run...	starts a program or opens a folder when you type a program or folder name.
Suspend	saves the current system settings and turns the power off.
Shut Down...	shuts down or restarts your computer, or logs you off a network.



NOTE

The "..." following a menu item tells you a dialog box is coming.

The "▶" symbol on the menu tells you a submenu appears when you point to this item.

- 2 Click Start again to close the menu.**
- 3 To access an additional menu, called the shortcut menu, click Start with the secondary button.**

Clicking most objects with the secondary button displays a shortcut menu of options specifically applicable to that object. The shortcut menu for the Start button provides three options.

<i>When You Point to</i>	<i>The System</i>
Open	opens the Start menu.
Explore	starts the Windows Explorer.
Find	opens the Find dialog box and allows you to search for a document, folder, or program.

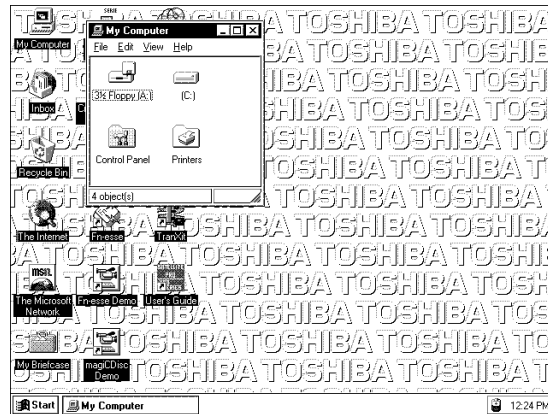
4 Click an empty space in the desktop to close the menu.

Every time you start a program, open a folder or open a document, the system displays a button on the taskbar that reminds you the object is open or running. You can switch between the programs, folders or documents by clicking the object's button on the taskbar. When you close an object, its button disappears from the taskbar. Right now, the taskbar is blank because you haven't started anything. You'll put a button on the taskbar when you create a new document in the next lesson.

There are other icons on the taskbar in the status area, such as a speaker that represents your sound system or an electric plug that represents the status of your battery. To view or change settings for an object in the status area, double-click its icon.

5 Move the pointer to the My Computer icon in the upper left corner of the desktop.

6 To open the My Computer window, double-click the icon.



The desktop with the My Computer window open

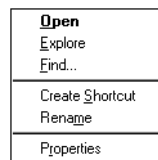
When you double-click the My Computer icon, Windows 95 displays a window with icons for each of the computer's drives, along with the Control Panel Folder and the Printers Folder.

The Control Panel folder contains the programs used to configure the computer.

The Printers Folder contains the tools necessary to configure or control printers connected to your computer.

Double-clicking any of the icons in the My Computer window opens the window associated with a drive or device. You will use this window when you connect to a printer, or the diskette drive.

7 Click the My Computer icon with the secondary button to display a shortcut menu.



The My Computer shortcut menu

The system displays a menu of actions or options applicable to the My Computer icon. Most objects on the desktop display the main menu when you click them with the primary button and the shortcut menu when you click them with the secondary button.

You can use this menu to create shortcuts to programs, documents, folders, system features and components. A shortcut is an icon that opens a program or a document directly from your desktop (or anywhere else). You will learn how to create shortcuts in “Lesson 8: Making Shortcuts” on page 61.

You can also use this menu to rename a folder or document. You’ll learn how to do this in “Lesson 3: Creating a New Document” on page 52.

You can view an object’s properties by clicking Properties in the object’s shortcut menu. You will learn about properties in “Lesson 9: Changing the Wallpaper” on page 62.

8 Close the menu by clicking once in an empty area of the desktop.

One special icon is the Recycle Bin. You use the Recycle Bin to delete documents and remove objects from the desktop.

You'll learn more about the Recycle Bin in "Lesson 10: Changing the Date and Time" on page 65.

You can move the taskbar to the other sides of the window.

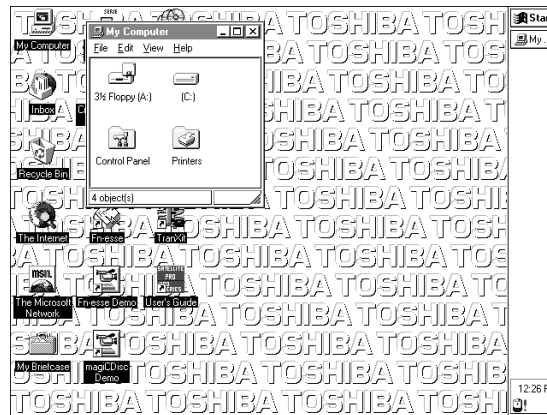
- 9 Click the taskbar at the bottom of the desktop and, while holding the primary button, drag the pointer to the right edge of the desktop, then release the primary button.



NOTE

You can move an object on the desktop by clicking the object, holding the primary button and dragging the object.

The taskbar moves from the bottom to the right edge of the desktop.



The desktop with the taskbar on the right

You may move the taskbar to any of the desktop's four edges.

- 10 Click the taskbar once again and drag it back to the bottom of the desktop.

Now that you have explored the desktop, continue to the next lesson where you will learn how to quickly create new documents.

Lesson 3: Creating a New Document

When you work in Windows 95 with a word processor, a data base, a graphic design tool, or a spreadsheet, you are working in a document. To see how quick and easy creating new documents can be, follow these steps.

1 Click an empty area of the desktop with the secondary button.

Windows 95 displays a menu of commands applicable to the desktop.



The Desktop shortcut menu

2 Point to New, then click Text Document.

Windows 95 creates an icon on the desktop called New Text Document.txt with the icon name highlighted.

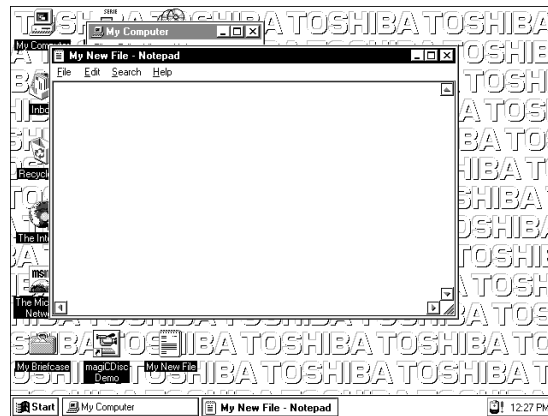
3 Click the document name.

The name changes color.

4 Give your document a meaningful name, like My New File and press Enter.

5 Double-click the icon.

Your document opens in Notepad, the word processing program that comes with Windows 95.



The Notepad window

Notice that as you open the document there's a new button on the taskbar that reads My New File - Notepad (the name may be too long to fit into the taskbar space, but if you point to the name, the system displays all of it).

To learn more about Notepad, click the Help menu in Notepad. Leave Notepad open for now and follow the steps in the next lesson to create a new folder in which to store your document.

Lesson 4: Creating a New Folder

Windows 95 stores documents, tools, devices and programs in folders. It even stores other folders in folders. In this lesson you will learn how easy it is to create folders to store your documents. To create a new folder, follow these steps.

- 1 With the secondary button, click an empty area of the desktop outside the Notepad window.**

Windows 95 displays a menu.

- 2 Point to New and click Folder.**

Windows 95 creates a new folder icon with the name highlighted.

3 Click the highlighted “New Folder” text in the frame under the folder icon.

4 Type a name for the folder and press Enter.

 **5 Close your Notepad document by clicking the close button (the small x) on the right side of the Notepad title bar.**

Windows 95 displays the document as an icon on the desktop.

6 Click the document icon and drag it to your new folder.

The outline of the document icon moves across the desktop.

7 Drop the document icon onto the folder icon.

The document disappears. The folder now contains the document.

8 To see your document, double-click the folder.

The folder window opens and displays the document icon.

Now that you have created a folder to store your document, go on to the next lesson to learn how to start programs.

Lesson 5: Starting Programs

Another way to begin working on the desktop is to start a program. After you've gained some experience, you'll know exactly which program to use for each type of document.

This lesson demonstrates how to start programs from the desktop, using Paint and Windows Explorer, two of the programs that come with Windows 95.

Follow these steps:

1 Click Start, then point to Programs.

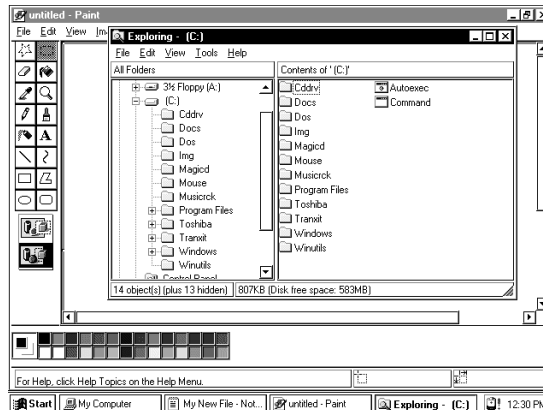
Windows 95 displays the list of program folders.



The Start menu

2 To open the drawing program called Paint, point to Accessories, then click Paint.

Paint, a simple drawing program, opens and the taskbar displays a new button.



The desktop with Paint open

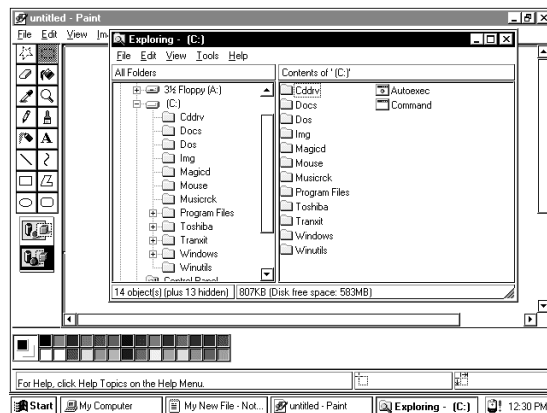
You can use Paint to draw simple pictures, logos, maps and symbols. Paint allows you to create, edit, move and size a drawing. You can also print the drawing and save it on your

disk for later use. The tools for Paint are in the tool box. To learn more about Paint, click Help in the Paint menu bar.

3 To open a second program, click Start, then click Programs.

4 Click Windows Explorer.

Windows Explorer opens and the taskbar displays a new button.



Windows Explorer open on the desktop

Windows Explorer provides access to all your computer's resources. For example, it lets you see all the icons in a particular folder on the computer's hard drive.

Notice the taskbar now has buttons for both Paint and Windows Explorer.

5 Click the Paint button on the taskbar.

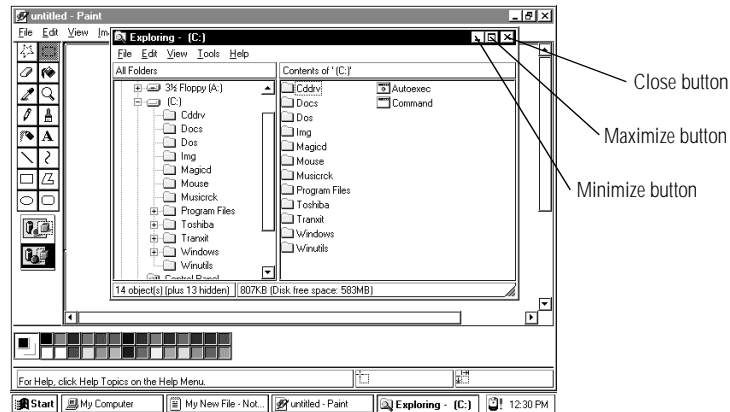
Windows 95 displays the Paint program. You can move back and forth between the two programs by clicking their buttons alternately.

Windows 95 places the active window on top of other windows on the desktop unless you have resized the windows.

Now that you have learned how to open programs, leave these two open on the desktop, each in its own window. Go on to the next lesson where you'll learn how to change the size, shape and position of these windows.

Lesson 6: Resizing and Reshaping Windows

If you've been following the steps in this chapter, you now have several windows open on your desktop. You can resize windows so you can see more than one of them at a time. You can also hide windows by removing them from the desktop without actually closing your document or program. In this lesson you will learn how to do both of these things.



Windows Explorer open on the desktop

First, notice the three buttons on the right side of the title bar on the Windows Explorer window and the Paint window. From left to right these are the minimize, maximize and close buttons. Most windows have these three buttons.

To learn how to use these buttons, follow these steps:

- 1 To make the Windows Explorer window the active window, click the Windows Explorer button on the taskbar.**

Windows displays Windows Explorer on top of other windows on the desktop and highlights the menu bar to show it is the active window.



- 2 To remove Windows Explorer from the desktop, click the minimize button at the top right of the Explorer window.**

Windows Explorer disappears from the desktop. However, it's still open, as you can see from the taskbar.

Minimizing program windows is a good way to clean up the desktop without actually closing programs.

- 3 Minimize the Paint window by clicking the minimize button.**

The Paint window disappears.

- 4 Open the Paint window by clicking the Paint button on the taskbar.**

Windows 95 opens the Paint window.



- 5 To cause the Paint window to fill the entire screen, click the maximize button at the top right of the Paint window.**

Paint expands to the full size of the desktop, except for the taskbar. Notice that the maximize button has changed. It's now called the restore button.

Maximizing a program is a good way to work when you're only using that program and don't want any other distractions on the desktop.

 **6 To return Paint to its previous size, click the restore button.**

The Paint window returns to its previous size and location. Notice how the restore button has changed back into the maximize button.

Now assume that you want to be able to see both the Paint window and the Windows Explorer window at the same time.

7 To open the Windows Explorer window, click the Windows Explorer button on the taskbar.

If the Windows Explorer is maximized (covering the entire screen), click the restore button to reduce the size of the window.

8 Move the pointer to the right side of the Paint window.

The pointer changes to a two-headed arrow.

9 Click and, while holding the primary button, drag the edge of the window back and forth.

The size and shape of the window change as you move the pointer.

10 When the window takes up just less than half the width of the desktop, drop the edge of the window by lifting your thumb from the button.

11 Click the title bar of the Paint window and, while holding the primary button, drag the window to the right side of the desktop.

You can move any window by clicking its title bar and dragging it.

12 Adjust the size and position of the Windows Explorer window in the same way, placing it at the left side of the desktop.

Now that you have the windows side-by-side, you can see how you could refer to one window while working in the other.

When you are working with documents and programs, resizing and moving windows allows you to rearrange the desktop to suit what you are doing. Experiment with different sizes and placements of windows to discover the most comfortable and efficient arrangement for your work.

In this lesson you learned how to change the size and position of windows on the desktop. You still have programs open on the desktop. Go on to the next lesson to learn how to close them.

Lesson 7: Closing Programs and Documents

Once you're finished working with a document, folder or program, you may close it to free up the space in memory for something else. While you can run several programs at the same time, a large number of programs and documents open simultaneously can slow down your system. This lesson teaches you how to close the programs you opened in Lesson 5.

Follow these steps:

-  **1 Click the close button at the top right of the Windows Explorer title bar.**

That's all there is to it. The Windows Explorer program closes, removing its button from the taskbar.

- 2 Close Paint, and any other windows, folders or programs that might be open by clicking their close buttons.**

You can close all folders, programs, documents and most windows by clicking the close button on the title bar.

Now that you know how to close programs and folders, go on to the next lesson to learn how to save time when you are working on the desktop.

Lesson 8: Making Shortcuts

In this lesson you will learn how to make shortcuts and to use Find. Shortcuts are icons you can click to open a program, a folder, or a document directly from the desktop. They are a quick and convenient way of accessing programs and documents you use frequently.

To make a shortcut, follow these steps:

- 1 Click the folder you created in Lesson 4 with the secondary button.**

Windows 95 highlights the folder and displays the menu.

- 2 Click Create Shortcut.**

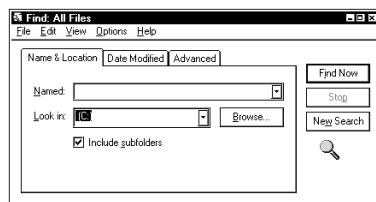
Windows 95 creates a shortcut icon. This icon is similar to the object's icon with the addition of a small arrow on the left side.

You can drag this shortcut icon into any folder on the desktop. This feature will be more helpful when you actually begin working. It allows you to go directly from the desktop or any open folder to your destination.

You will probably want to create shortcuts for programs you use frequently. The remainder of this lesson shows you how to create shortcuts to two accessories in Windows 95, the Calculator and the Character Map.

- 3 Click Start, point to Find, then click Files or Folders.**

Windows 95 displays the Find dialog box.



The Find dialog box

- 4 On the Name and Location tab, type Calculator in the Named box.**

5 Click the Find Now button.

Windows 95 displays a list of all the files with “Calculator” in their names.

6 Click the Calculator file with the secondary button and drag it to the desktop.

A menu appears.

7 Click Create Shortcut(s) here.

A shortcut to the calculator appears on your desktop.

8 Create a shortcut to the Character Map on your computer by following steps 3 through 7 substituting “character map” for “calculator.”

You can also create a shortcut by clicking on an object with the secondary button, then clicking Create Shortcut in the menu that appears.

Clicking the shortcut opens the program or folder immediately. Place as many shortcuts on your desktop as you find useful.

Continue to the next lesson where you will discover the meaning of object properties in Windows 95 by changing the wallpaper on your desktop.

Lesson 9: Changing the Wallpaper

Windows 95 treats all objects—windows, icons, programs, disk drives, documents, folders, printers, and so on—as self-contained objects. Typical object properties include things such as the object’s name, size, position on-screen, and color. One of the properties of the desktop is the wallpaper. Your computer came with the Toshiba wallpaper selected.

In this lesson you will learn how to view the properties associated with the objects on the desktop. First, you will look at the properties of the folder you created. Then you will look at the properties of the desktop and change the wallpaper.

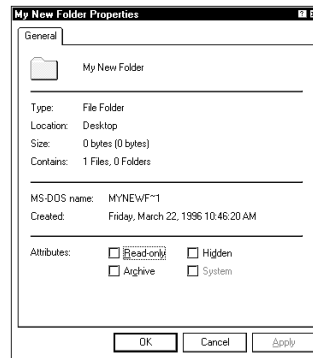
To view and change the properties of the folder you created, follow these steps.

1 With the secondary button, double-click the New Folder you created in Lesson 4.

Windows 95 displays a menu which includes Properties.

2 Click Properties.

Windows 95 displays the properties dialog box for the folder.



The My New Folder Properties dialog box

The dialog box shows the various properties of the object, such as the icon, type, location, size, and the time the document was created.

3 Click OK.

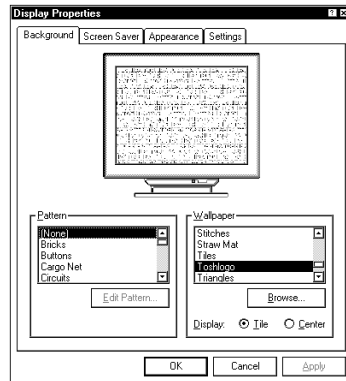
Windows 95 closes the properties dialog box.

4 With the secondary button, click any empty space on the desktop.

Windows 95 displays a menu.

5 Click Properties.

Windows 95 displays the Display Properties dialog box.



The Display Properties dialog box

By clicking the tabs below the title bar, you can select properties for backgrounds, screen savers, appearances or settings. If you tried the other tabs, return to the Background tab by clicking it.

- 6 Scroll through the wallpaper options by clicking the scroll arrows in the wallpaper list box.**
- 7 Try a different wallpaper pattern by clicking a name in the list box.**

Windows 95 displays a sample of the wallpaper selection in the monitor above the list box. Try several patterns.

- 8 To apply any of these patterns to your desktop, click Apply.**
- 9 After you have chosen a wallpaper and applied it to your desktop, click OK.**

Windows 95 returns you to the desktop.

Now that you have seen lists of properties for two objects and experimented with options for your desktop wallpaper, continue with the next lesson where you will learn how set two other properties: the date and time.

Lesson 10: Changing the Date and Time

In this lesson you will learn how to change the date and time on your computer. You set the computer's date and time properties when you turned the computer on the first time and set up your operating system. To change the date and time settings now, follow these steps:

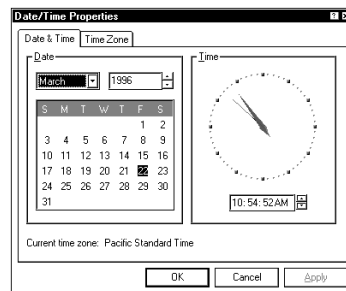
- 1 **Click Start, then point to Settings.**
- 2 **Click Control Panel.**

The Control Panel opens.

- 3 **Double-click the Date/Time icon.**

The system displays the Date/Time Properties dialog box.

This dialog box has two tabs. Click on a tab to bring it to the front.



The Date/Time Properties dialog box



NOTE

To open this dialog box more quickly, right-click the time display on the taskbar, then click Adjust Date/Time.

- 4 **On the Date and Time tab, select the correct month, year, day, and time.**

5 On the Time Zone tab, select your time zone from the drop-down list box.

6 When you're done, click OK.

Now that you have learned how to change the date and time properties of your computer, continue with the next lesson to learn how to remove objects from your desktop.

Lesson 11: Removing Objects from the Desktop

Back in “Lesson 4: Creating a New Folder” on page 53, and “Lesson 8: Making Shortcuts” on page 61 you created new icons on the desktop. Since everything you’ve done to this point has been just practice, you may want to return the desktop to its original uncluttered state. This lesson explains how to remove objects from the desktop with the Recycle Bin.

To remove the icons you created from the desktop, follow these steps:

1 Point to the icon for the new folder you created, then click and hold the primary button.

2 Drag the icon until it's over the Recycle Bin.

Windows 95 highlights the Recycle Bin icon when the object you are dragging is over the Recycle Bin.

3 Release the primary button.

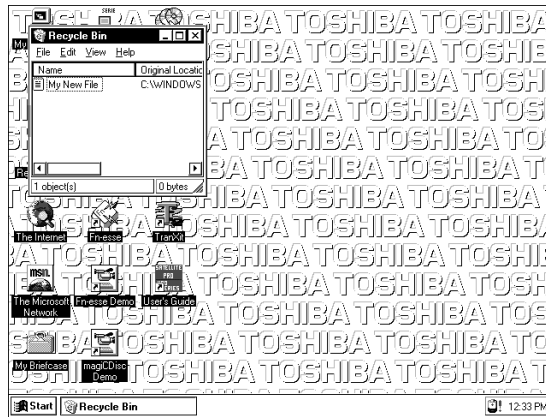
The My New Folder icon disappears. But it hasn't really gone. It is stored in the Recycle Bin folder where you can restore it or delete it completely later.

4 Repeat steps 1 through 3 with any other icons you created during this tutorial.

Each icon disappears as you drop it on the Recycle Bin icon.

5 Double-click the Recycle Bin icon.

The Recycle Bin window opens.



The Recycle Bin window

Notice that all the icons you dropped on the Recycle Bin are listed.

6 To completely remove an object from the Recycle Bin, click it and click File, then click Delete.

The object is gone forever.

You can delete all the objects in the Recycle Bin at once by clicking Empty Recycle Bin in the File menu.

Later on—in your real work, not in this tutorial—you'll use the Recycle Bin to delete other objects such as folders, documents and even programs. The process is still the same. Drag an item's icon to the Recycle Bin and drop it in. When you're absolutely certain that you never want to see the item again, delete it from there.

If you change your mind and want to restore something you sent to the Recycle Bin, click the object with the secondary button and

click Restore. Windows 95 restores the object to the place from which it was deleted.



NOTE

To delete all objects from the Recycle Bin when the Recycle Bin window isn't open, right-click the Recycle Bin icon, then click Empty Recycle Bin from the menu.

You have almost finished the tutorial. You now know how to remove icons and objects from the desktop. Continue reading to learn how to use the Help features if you get lost.

Lesson 12: If I'm Lost, What Do I Do?

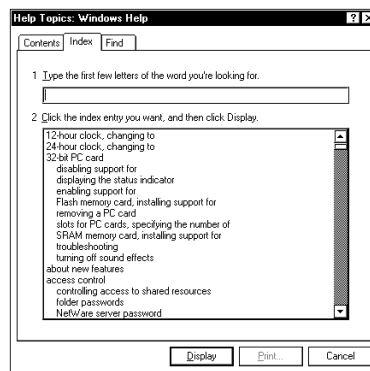
Your computer has an excellent help facility. If you can't figure out how to do something, the answer is probably only a few clicks away. This lesson teaches you how to use some of the help features available to you.

Assume that you want to draw a picture but don't know how.

Follow these steps:

1 Click Start, then click Help.

The Help window opens.



The Help window on the Index page

Most of the window contains a list of topics. The upper part of the window, where the pointer is flashing, lets you type in a topic.

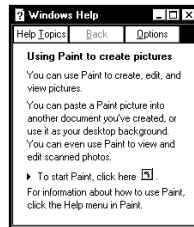
2 Type picture.

Notice as you type that the topic list adjusts to locate what you typed. When you type the letter p, the topic list moves to the first entry that begins with P, and so on.

There are a number of topics listed under Picture. One of them, drawing, looks promising.

3 Double-click drawing.

Help opens a topic window that gives a brief description of how to draw pictures, including an icon to start the Paint program.



The Drawing help window

4 Click the click here icon.

The Paint program opens.

Not every help topic window contains an icon to start a program. However, when you do encounter one, it's a great way to move from reading about your question to an instant solution.

5 Just to clean up the desktop, close both Help and Paint by clicking their close buttons.

You're almost done! The next (and last) lesson tells you how to turn your computer off with the Start button.

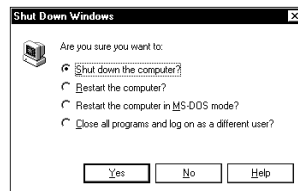
Lesson 13: Turning Your Computer Off

It's very important that you shut down your computer with the Start button. When you click Shut Down on the Start menu the system closes all open documents and system files while it puts everything in place. The next time you turn the computer on the operating system will restore the desktop to the way you left it.

To turn your computer off, follow these steps:

1 Click Start, then click Shut Down.

The system displays a dialog box similar to the following:



The Shut Down Windows dialog box

2 Make sure the button next to Shut Down the computer is highlighted. If it isn't, click it now.

3 Click Yes.

The system displays a message that it is shutting down and turns the computer off. When the power is off, the power/speed light goes out.

You have completed the tutorial. You should be familiar with the desktop and the objects on it. You should be able to open and close programs, create documents and folders and delete them, and work with the properties of objects on the desktop. You also know how to find help if you get lost. Continue to use what you have learned in these lessons and you will soon feel completely at home with your computer.

Learning the Basics

The information in this chapter is intended for the novice computer user. Simple steps describe many day-to-day computer operations. There are also lists of helpful computing tips. By the end of the chapter, you'll have developed many of the basic skills that more advanced users take for granted.

Computing Tips

It seems that everybody's grandmother has a list of rules that will make your life better. This section presents a few rules that your grandmother would include if she were teaching you how to use your computer.

Two Things Every User Learned the Hard Way

- ❖ Save your work frequently.

Both novice and experienced computer users forget to save their work. If you work on a network and the network suddenly goes down, you could be looking at a screen of unsaved changes that contained an entire afternoon's work. You too will say, "I wish I had saved!"

See the instructions in "How to Save Your Work" on page 83.

- ❖ Back up your files on a regular basis.

It's easy to put off backing up because it takes time. However, when your hard disk fails (it is a mechanical device and sooner or later it is bound to have a problem) and you can't access the data on your hard disk, you'll wish you had taken the time to back it up.

See the instructions in "How to Back Up Your Work" on page 91.

Six Things Every Portégé 620CT Computer User Should Do

- ❖ Take frequent breaks to avoid repetitive strain injuries and eye strain.

As indicated in "Keep Yourself Comfortable" on page 3, it's important to stay comfortable while you're working at your computer.

- ❖ Shut down Windows 95 before turning the computer off, unless Resume Mode is on. See "How to Start Where You Left Off" on page 77 for information about Resume Mode.

Windows 95 records information, such as your desktop setup, during its shutdown procedure. If you don't let Windows 95 shut down, it can forget things such as new icon positions.

- ❖ Set up your computer to fit your tastes and needs.

You're the one that's going to be looking at the screen while you work. If you don't like the colors or the fonts on the screen, go ahead and change them by clicking a blank area of the desktop with the secondary button, then clicking Properties. This causes Windows 95 to open the Display Properties dialog box. The Appearance tab of this dialog box allows you to choose the colors you see on the screen.

- ❖ Save your work frequently.

For more about this topic, see "How to Save Your Work" on page 83.

- ❖ Scan all new files for viruses.

This precaution is especially important for files you receive from your friends or download from the Internet. It's unlikely, but possible, that even new programs you buy from your local computer store may contain a computer virus. See "Viruses and How to Cure Them" on page 206 for information about detecting and removing computer viruses.

- ❖ Create or purchase master program diskettes.

At some point, you may need installation diskettes for the programs that came pre-installed on your computer's hard disk. See "Create or Purchase Master Diskettes" on page 35 for more information.

Five Things You Should Never Do

- ❖ **Don't** spill a drink into the computer's keyboard.

If you do spill a drink that gets into the keyboard, turn the computer off immediately. Leave the system off overnight to give the computer time to dry out before you return to work.

- ❖ **Don't** format a diskette that contains valuable information.

Formatting removes all the information that's currently on the disk. If your files are important to you, always double-check a diskette before you format it.

- ❖ **Don't** turn the computer off when a drive indicator light is on.

Turning the computer off while it's reading from or writing to a disk may damage the disk, the drive or both.

- ❖ **Don't** expose diskettes or the computer to magnetic fields, such as the field generated by large stereo speakers.

Information on disks is stored magnetically. Getting a magnet too close to a disk can erase important files.

- ❖ **Don't** be afraid to use your computer, it's just a machine.

Many people are so nervous with their first computer that they forget it's merely a tool. Provided you follow the advice in this chapter, you are unlikely to do your computer any harm. So use it and have fun with it.

When You Turn the Computer On...

Between the time you press the power button and the time you get to work, the computer goes through its normal self-test and startup procedure. Skip these steps by using Windows 95's Suspend command or Toshiba's Resume Mode to save time and battery power.

All Those Messages...

When you turn the computer on, it flashes a number of messages across the screen before it loads Windows 95. Don't worry if you don't understand any of these messages. They indicate that the computer's going through its normal startup procedure.

If you're really interested in what's going on, read "What Really Happens When You Turn the Computer On?" on page 245. This section describes the messages you see when you turn the computer on. It also tells you how to get to work immediately without waiting for all the messages to appear.

How to Start Where You Left Off

Many times, you'll turn your computer off, intending to continue a bit later. Then, when you're ready to return to work, you turn the power on and wait while the computer displays messages and loads Windows 95, before you can get back to work.

There's an easier way. By using Windows 95's Suspend command or Toshiba's Resume Mode, you can start your computer and have everything back to where it was when you turned the power off. These methods provide a sort of electronic bookmark. They use the computer's backup battery to store its current state in memory while the power is off and, when you turn the computer back on, to restore the state the system was in before you turned the power off. The system maintains this information until the backup battery loses its charge (after approximately eight hours).

Using the Suspend command or Resume Mode is energy efficient. Avoiding the startup procedure extends the amount of work you can get done before recharging your battery.

Both the Windows 95 Suspend command Toshiba's Resume Mode allow you to turn the computer off and return to where you left off when you restart it. However, Toshiba's Resume Mode includes additional power saving features. To conserve power by automatically shutting the system down when you are not using it or by shutting the power to the display off when you shut the cover, use the System Auto Off and Panel Power On/Off options in Toshiba's MaxTime. For more information about options to save time and power, refer to "MaxTime ®" on page 295.

Using the Suspend Command

To turn the computer off using the Windows 95 Suspend command:

1 Save any files you are using over a local area network.

Your network connection may be lost when you suspend your computer.

2 Click Start.

3 Click Suspend.

The Suspend command saves the current system settings, shuts down Windows 95, and turns the computer off.

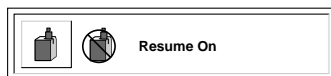
Using Resume Mode

There are several ways to turn Resume Mode on and off. This section describes how to use a key combination, called a hotkey, to select Resume Mode. This is the quickest method. Turn to “Suspending the Computer” on page 121 for the other methods.

To select Resume Mode, follow these steps:

1 Start MaxTime, if it’s not already running.

2 Press Fn + F3 to display the Resume Mode pop-up window.



The Resume Mode pop-up window

3 While continuing to hold Fn, press F3 until Resume Mode is highlighted.

4 Release the Fn key.

The system is now in Resume Mode. The next time you turn your computer off and back on, you'll be right back where you left off.



NOTE

It's always a good idea to save your files before turning the computer off (even when you're suspending the computer).

How to Use the Keyboard

If you've never used a computer before, you're probably asking yourself, "is this keyboard just like a typewriter? And if it is, what are all those extra keys for?" This section describes the keys on the keyboard and the differences between typing on a computer and using a typewriter.

The Character Keys

For these keys, typing on a computer keyboard is very much like typing on a typewriter. However, there are some exceptions:

- ❖ When you press the spacebar, a computer does not simply pass over an area of the page like a typewriter does. Although you may not see anything on the screen, each time you press the spacebar, the computer creates a space character just as it creates characters representing letters or symbols.
- ❖ The lowercase l (el) and the number 1 are not interchangeable.
- ❖ The uppercase O and the number 0 are not interchangeable.
- ❖ On a typewriter, the shift lock key locks all the keys into their uppercase positions. On a computer keyboard, pressing the Caps Lock key changes only the alphabet keys to uppercase—the number and symbol keys aren't affected.

The Other Keys

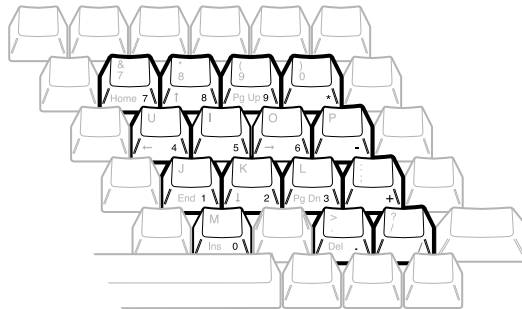
In addition to the character keys, the computer keyboard contains a number of keys that carry out special computer tasks. This section describes these special keys.

- ❖ The 12 function keys (F1, F2, etc.) across the top of the keyboard carry out program-specific tasks. To find out what these keys do, refer to the program's documentation.
- ❖ The function of the Ctrl key (Control key) also varies according to the program you're using.
- ❖ If you're in Windows 95, pressing the Alt key lets you open menus.
- ❖ Pressing the Fn key simultaneously with one of the specially marked keys allows you to emulate a 101-key keyboard, turn keyboard overlays on and off (page 217) and control various system functions.

Toshiba's powerful Fn-esse program allows you to assign your own Fn key combination to launch a Windows program or document quickly. Instructions for using this program are given in "Starting Programs Faster" on page 209.

Typing Numbers

The keys with white numbers on the right front form the numeric overlay. This overlay lets you enter numeric data as you would using a ten-key numeric keypad. The following illustration highlights the keys in the numeric overlay.



The numeric overlay

To turn the numeric overlay on and off, press Fn + F11. The numeric lock light on the indicator panel shows whether the numeric overlay is on or off.

You can still use the overlaid keys to type alphabetic characters while the numeric overlay is on. To do so:

- ❖ for lower-case letters, press and hold Fn while you type the letters.
- ❖ for upper-case letters, press Fn + Shift while you type the letters.

To use the cursor control keys when the numeric overlay is on, press and hold Shift while you use the overlay keys. To return to the numeric overlay, release Shift.

How to Start a Program

Starting a program in Windows 95 is as easy as clicking the Start button, pointing to Programs and choosing the program's icon from the Programs menu. Of course, this only works if there is an icon for the program in the Programs menu.

Starting an MS-DOS™ program from a system prompt is a little more complex. Refer to “Starting Some MS-DOS Programs” on page 83.

Starting a Program from an Icon

This section demonstrates how to start a program from an icon, using Wordpad as an example:

1 Click Start, then point to Programs.

Windows 95 displays the Programs menu.

2 Point to Accessories.

Windows 95 displays the Accessories menu.

3 Click Wordpad.

Windows 95 opens Wordpad. Wordpad is a text editor—a scaled-down word processor without the frills.

That's really all there is to it. To close Wordpad, click the close button at the upper right corner of the window.

Starting a Program from the Explorer

These steps demonstrate how to start a program if it is not in the Start menu. To use this method, you need to know the file name and directory of the program you want to start.

This example, like the one above, opens Wordpad, using its file name of WORDPAD.EXE.

To start a program from the Explorer, follow these steps:

1 Click Start, then point to Programs.

2 Click Windows Explorer.

Windows 95 opens the Explorer window.

3 In the left part of the window, under the C: icon, double-click Program Files.

The Explorer shows the contents of the Program Files folder on the right side of the window. The left side of the window shows all the folders contained within the Program File folder.

4 Click Accessories.

The Explorer shows the Accessories files on the right side of the window.

5 Double-click Wordpad.exe.

Windows 95 opens Wordpad.

Starting Some MS-DOS Programs

To start an MS-DOS program, follow these steps:

1 Click Start, then click Shut Down.

Windows 95 displays the Shut Down Windows dialog box.

2 Click Restart the computer in MS-DOS mode, then click Yes.

Windows 95 shuts down the computer, then restarts it in MS-DOS mode and displays a system prompt.

3 Refer to the program's documentation for the command that starts the program.

4 At the system prompt, type the command and press Enter.

How to Save Your Work

When you're working on a document, all your work exists in the computer's temporary memory. When you turn the computer off, everything in memory is lost. Therefore, it's important to save your files to the hard disk or to a diskette before turning the power off.

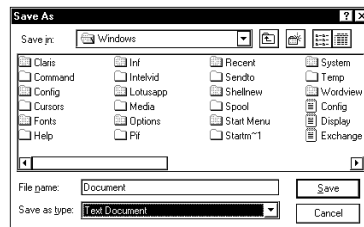
Saving documents is quick and easy, and it's a good idea to get in the habit of saving frequently. That way, if you run into trouble, you won't lose many long hours of work.

Many programs offer a feature that saves documents after a set period of time. Check your programs' documentation to see if they have an automatic save feature.

You use the same procedure to save files in all Windows programs. This section describes this procedure.

1 Choose Save from the File menu.

If you're working with a previously existing document, one that already has a file name, that's all there is to it. If you've created a new document, your program displays a Save As dialog box.



A sample Save As dialog box

You use this dialog box to specify where to store the document and to give it a file name.

- 2 Choose the drive and folder where you want your file to be stored.**
- 3 Type a file name and choose OK.**

Windows 95 supports file names of up to 255 characters, and the names can include spaces.

If you plan on sharing your files with a computer using MS-DOS or an older version of Windows, the file name must be limited to up to eight characters followed by a period and a three-character extension. You may use all the letters and numbers on the keyboard plus the following characters: `_`, `^`, `$`, `~`, `!`, `#`, `%`, `&`, `{`, `}`, `(`, `)`, `@` and `'`. An MS-DOS file name must not contain a space.

Most programs assign an extension that identifies the file as being created in that program with a particular format. For example, Microsoft Word saves files with a .DOC extension. While you can create your own extension, this is usually unwise. Using the default for your program is a helpful reminder of where your file came from. Also the program is unlikely to recognize a strange extension and may refuse to handle your file correctly.

How to Print Something You've Created

By this time, you've probably created a document and saved it—if not, save it now. Naturally, you want to see the results of your work by printing your file.

Before you can print your work, you need to have:

- ❖ connected the printer to the computer (discussed in “Connecting a Parallel Printer” on page 24)
- ❖ set up Windows 95 to work with the printer (discussed below)

These steps must be done only once. If you'll be using more than one printer or changing printers, you'll need to set up Windows 95 to run with the additional printer(s).

Setting Up Windows 95 to Work with Your Printer

When you turned your computer on for the first time, the Windows 95 Setup program offered you the opportunity to define a printer. Read this section if you didn't have a printer at that time, or want to set up a different printer.

Setting up a printer involves choosing a printer driver. This special program acts as a translator that turns your work into a form the printer can understand. This section describes how to select a printer driver in Windows 95. If you're using any non-Windows programs, you'll need to set up a printer driver for each of those programs. Refer to your program's documentation for more information.

You set up a printer with the Add Printer Wizard. Follow these steps:

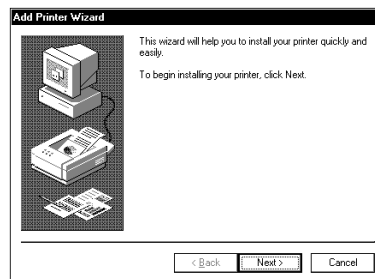
1 Click Start, then point to Settings.

2 Click Printers.

Windows 95 opens the Printers dialog box.

3 Double-click Add Printer.

Windows 95 opens the Add Printer Wizard.



The Add Printer Wizard

4 Click Next.

The Add Printer Wizard asks you to select your printer.



NOTE

If your printer is Plug and Play, Windows 95 recognizes it automatically. You can ignore the remainder of this section.

5 If the printer you're setting up isn't connected to a network, select Local printer and click Next.

If the printer is connected to a network, select Network printer and click Next.

The Add Printer Wizard asks you to select your printer.

6 From the list of manufacturers and printers, select your printer and click Next.

The Add Printer Wizard asks for the printer port.

- 7 Select the port settings according to the instructions in your printer's documentation and to port to which your printer is connected, then click Next.**

The Add Printer Wizard asks you to enter a "friendly" printer name.

- 8 Enter a name for your printer and click Next.**

If you're using more than one printer, make sure the name is descriptive enough to help you tell the difference.

- 9 If you want this printer to be the default printer for Windows 95, click Yes, then click Next.**

If you don't want this printer to be the default printer, click No, then click Next.

Windows 95 prompts you to print a test page.

- 10 If your printer is connected and turned on, choose Finish to print a test page.**

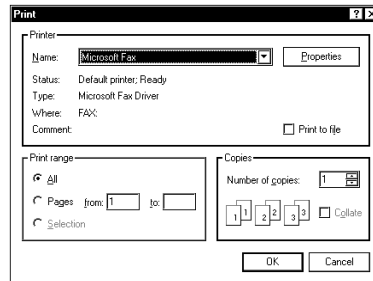
To finish the setup procedure without printing a test page, choose No, then Finish.

You're ready to print.

Printing Your Work

Once you have set up your printer and software correctly, it requires only a simple action to print a file from within a Windows application. Follow these steps:

- 1 Turn your printer on, if it's not already on.**
- 2 Choose Print from the File menu of your Windows application.**



A sample Print dialog box

3 Choose OK to print.

That's all there is to it. Depending on your application, you may see different messages indicating the status of your print job.

How to Prepare Diskettes for Use

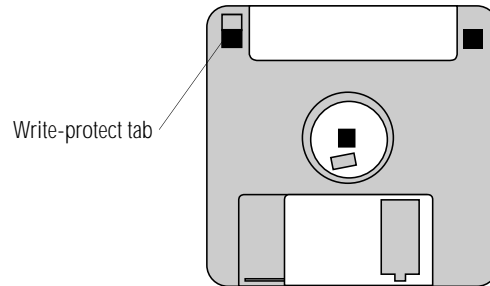
Formatting makes it possible to use a diskette. You don't really need to know what's going on when you format a diskette, but if you're interested, the details are covered in “How Does a Disk Store Information?” on page 240.

You can buy two types of diskettes: preformatted and unformatted. If you've purchased preformatted diskettes, you don't need the information in this section because the diskette manufacturer has taken care of the process for you. If the package doesn't say anything about formatting, your diskettes are probably unformatted.

This section describes the simplest way to format a diskette. For more options, and an explanation of the other items in the Format dialog box, see Windows 95 Help or your Windows 95 documentation.

To format a diskette, follow these steps:

- 1 Make sure the external diskette drive is connected.**
- 2 Insert a write-enabled diskette into the diskette drive.**



A write-enabled diskette

The tab at the left corner of the diskette should cover the square hole.



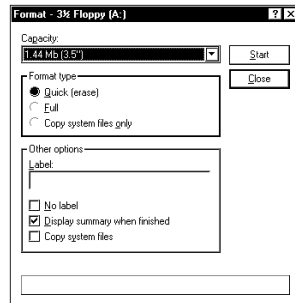
Formatting a diskette erases all information currently on the diskette. Do not format a diskette unless you're sure it's blank or contains only files you no longer need.

3 Double-click My Computer.

Windows 95 opens the My Computer window.

4 Click the drive A: icon with the secondary button, then click Format.

Windows 95 opens the Format dialog box.



The Format dialog box

The options in the Format dialog box are already set to format your diskette.

5 Click Start.

Windows 95 formats the diskette, displaying the Format Results screen when it's finished.

6 Click Close.

7 Close the My Computer window.

How to Copy Something To a Diskette

Diskettes provide an easy means of transferring files from one computer to another. Copying a file to a diskette also gives you a backup copy in case something happens to the original on your hard disk. This section describes how to copy a file from the hard disk to a diskette.

To copy a file from the hard disk to a diskette, follow these steps:

1 Make sure the external diskette drive is connected.

2 Insert a formatted diskette into the diskette drive.

If you're unsure how to format a diskette, refer to "How to Prepare Diskettes for Use" on page 88.

3 Double-click My Computer.

Windows 95 opens the My Computer window.

4 Double-click the drive that contains the file you want to copy.

Windows 95 displays the contents of the drive.

5 Double-click the folder that contains the file, then click the file you want to copy.

6 Click File, then click Send To.

7 Click the icon for the diskette drive (drive A).



You can also copy a file to diskette by clicking the file (or files) you want to copy with the secondary button, then pointing to Send To and clicking 3.5-inch Floppy (A).

Windows 95 copies the files.

How to Back Up Your Work

Murphy's law applies to everything—even computers. Therefore, it's a good idea to make periodic copies of everything on your computer's hard disk and store them in a safe place. This is called backing up your files. That way, if you somehow press the Delete key accidentally, you'll be able to recover your files quickly and easily.



Murphy's Law: If anything can go wrong, it will, at the worst possible moment.

Your computer comes with Microsoft's Windows 95 backup program pre-installed on the hard disk. Other backup programs are available at many computer stores.

This section explains how to use the backup program to back up all the files on your hard disk. Making backup copies of your computer's hard disk is not a one-time event. You should develop a regular habit of making backup copies of your hard disk. Complete information on the backup program, including instructions for backing up only a portion of the files on your hard disk, is in Help and your Windows 95 documentation.

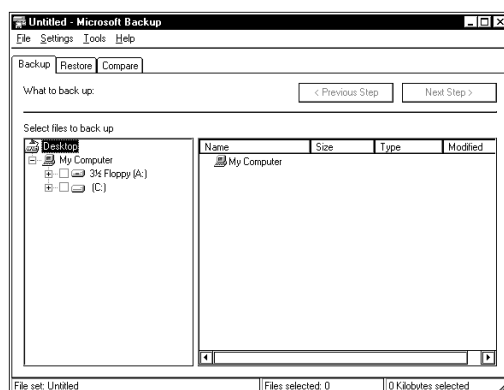


Backing up all the files on your hard disk takes a considerable amount of time and lots of diskettes. However, in the unlikely event that you lose some or all of the information on your hard disk, you'll be glad you spent the time.

To back up your files, follow these steps:

- 1 Connect the backup drive (external diskette drive, tape drive, etc.) to the computer, following the instructions provided with the drive.**
- 2 Click Start, then point to Programs.**
- 3 Point to Accessories, then point to System Tools.**
- 4 Click Backup.**

Windows 95 opens the Backup window.



The Backup window

5 Click the files and folders you want to back up.

When you select a file or folder, an X appears in the check box next to it.

6 Click Next Step.

7 Click the drive to which you are backing up your files (the external diskette drive or any drive you connected in step 1).

8 Click Start Backup.

9 Type a name for the backup and press Enter.

10 Insert new diskettes as Backup instructs you to do so.

To restore information from your backup diskettes to your hard drive, use the Restore page in the backup program. Check Windows 95 Help or your Windows 95 documentation for information on restoring files.



When you're restoring files, the backup program prompts you if you try to overwrite a file that already exists on the hard disk. Make sure the backup version is the one you want before overwriting the existing file.

How and When to Turn the Computer Off

It's a good idea to turn your computer off when you're not using it for an extended length of time. However, there are several things to keep in mind when you turn off the power:

- ❖ Use either Windows 95 Shut Down or Suspend command to turn the computer off. To automatically return to where you left off after shutting down the computer, use the Windows 95 Suspend command instead of Shut Down. If you're using battery power, this also saves power.
- ❖ Don't turn the power off if the disk light on the indicator panel or the disk-in-use light on the external diskette drive is on. Doing so may damage your hard disk or diskette drive.
- ❖ If you close the display panel while the computer is on, it beeps loudly. To prevent this alarm from going off in the future, use MaxTime or TSETUP to set the Panel Close Alarm option to Disabled. See "The Alarms Dialog Box" on page 299 or "Making Changes in TSETUP" on page 324 for more information.

To turn the computer off, press and hold the power button until you hear a beep.

Caring for Your Computer

This section offers easy tips on looking after your computer. For information about taking care of your computer's battery, refer to "Look After Your Battery" on page 130.

Cleaning the Computer

To keep your computer clean, perform the following tasks regularly:

- ❖ Clean the exterior case of the computer with a lightly dampened cloth.
- ❖ To clean the LCD, gently wipe the screen with a slightly damp cloth.



Keep liquid, including cleaning fluid, out of the computer's keyboard, speaker grill and other openings. Never spray cleaner directly onto the computer. Never use harsh or caustic chemical products to clean the computer.

- ❖ Ask your Toshiba dealer for suggestions for appropriate cleaning products.

Moving the Computer

As a notebook computer, the Portégé 620CT is built to withstand reasonable shock and vibration. Before carrying or transporting your computer, follow these steps:

- 1 Make sure all disk activity has ended (the disk light stops glowing).**
- 2 Shut down Windows 95 and turn the computer off.**
- 3 Disconnect the AC adapter.**
- 4 Disconnect the external diskette drive.**

5 Disconnect all external optional devices.

6 Close the display panel.



NOTE

Do not pick up the computer by its display panel or by the back (where the ports are located).

For long trips, transport the computer in a carrying case. You can purchase a carrying case from your Toshiba dealer or through the Toshiba Accessory Catalog.

Before You Go to a Computer Store...

If you're new to computers, buying computer equipment (hardware) and programs (software) can be a confusing experience. There is an enormous range of entertainment, business and personal programs you can buy.

To eliminate some of the confusion, this chapter provides advice about buying programs and equipment that work with your Portégé 620CT computer.

Buying Programs

Before you buy a computer program, it helps to understand:

- ❖ the different types of programs you can buy
- ❖ the decision between buying integrated programs, such as Microsoft Office[®], versus individual programs
- ❖ the information on the program's box

The following section describes some types of programs that you are likely to find at the computer store.

Word Processing Programs

Almost everyone uses their computer to write, so they need a word processor. This includes professional writers as well as others who use computers for daily correspondence.

Most word processors are designed to help you write, edit and spell check your work. They also assist you in creating different types of letters, memos and resumes. You really can't go wrong in choosing a word processor. Ask a friend or colleague which one they prefer and try it.

If you want to create a book, advertisement or newsletter, you'll need a desktop publishing program. In addition to word processing, these programs are equipped with referencing, indexing and page layout capabilities. Desktop publishing programs are more sophisticated than word processing programs and are typically more expensive.

If you want to create professional presentations, a presentation package is the kind of program you need. These programs help create slide shows, handouts with charts and graphics, and computer presentations with sounds, music and video clips.

Graphics Programs

If you want to work with computer graphics, there are two types of programs available to you.

Drawing programs allow you to create line art as you would with a pen and paper. They also include a large library of clipart (created line art) you can use in your own illustrations.

Painting programs allow you to work with photographs and create graphics on your computer pixel by pixel. These programs combine many tiny colored squares together to create an image or photograph on the computer screen. Paint programs typically include a large library of photographs and paintings you can use freely.

Accounting or Financial Programs

There are a number of outstanding spreadsheet programs on the market. In addition, personal and professional accounting software programs can help you manage money, create budgets, forecast expenses and help prepare income taxes.

Design Programs

Your computer dealer can introduce you to a variety of sophisticated design programs including programs to design a garden, or to build or remodel a house, as well as the more common Computer Aided Design (CAD) tools.

On-line Programs

Online services such as CompuServe, America Online and Prodigy provide access to the Internet as well as useful information, entertainment, and research.

Reference Programs

Many reference publications such as dictionaries, encyclopedias, atlases and language programs are available to add to your own personal library.

Database Programs

If you need to keep track of and update a set of records, such as a list of addresses or a catalogue of items, database programs are designed to help with these tasks. You could use a database to hold details of a stamp collection or provide an overall index to the recipes in various cook books and magazines.

Should I Buy the Diskette or the CD-ROM Version?

Many programs are available either on diskette or CD-ROM.

If you have a CD-ROM drive, loading programs from CD-ROM is faster and more convenient. It saves you the trouble of inserting and removing all those installation diskettes, and eliminates the possibility of encountering a damaged diskette in the middle of a multi-diskette software installation.

Provided you have a CD-ROM drive, buy the CD-ROM version whenever you have the choice.

Individual vs. Integrated Packages

When you have decided which types of programs you are interested in, you may find that you can buy some of the programs as an integrated package. This applies particularly to programs that are widely used in business.

The combination of word processor, drawing program and spreadsheet is the most common type of integrated package. Some of these also include a database program and/or a communications program.

An integrated package usually provides the same functionality as the manufacturer's individual programs. Although, there are less expensive packages available that do not include all of the features installed on the individual programs. Be sure to read the information on the program's box so you know which program version you are buying.

Individual programs have their advantages too. No single manufacturer produces the best program in each category. So you may prefer to buy A's word processor, B's drawing program and C's spreadsheet.

Finally, integrated packages require a lot of space on your hard disk. If you are only going to use a word processor and a drawing program, buying just the two programs you need is the best option.

Understanding the Information on the Box

In addition to listing the features of the program on the box, the manufacturer usually gives its system requirements.

Below is an actual example of the system requirements for a multimedia program. Your Portégé 620CT computer meets all of these requirements.

“Minimum Requirements: Microsoft Windows 95, 8MB of RAM, VGA video adapter, mouse or other pointing device, 55MB free hard disk space”

“Recommended: SVGA video adapter and monitor, sound card”

The following sections explain each of the characteristics above.

Windows Compatibility

The Portégé 620CT computer comes with Microsoft Windows 95. Windows 95 can run programs written for Windows (version 3.0 or later) or Windows for Workgroups 3.11 (all versions), and MS-DOS. When possible, use programs written specifically for Windows 95.

Processor

The Portégé 620CT computer has a 100MHz (megahertz) Intel Pentium microprocessor. It will run programs designed for a 286, 386, 486 or Pentium processor.

Memory

The Portégé 620CT computer comes with 8MB of Random Access Memory (RAM). Unless you've added additional memory, use this number when evaluating program requirements. Some programs may have two memory numbers: an amount which is essential for running the program and a recommended amount for better performance.

To check your system's RAM, follow these steps:

- 1 Click the My Computer icon with the secondary button, then click Properties.**

Windows 95 displays the System Properties window.

- 2 Click the Performance tab.**

Windows 95 displays your computer's performance status, including the amount of memory installed in your computer.

Hard Disk

The Portégé 620CT computer comes with a 1.3 billion byte (1.26GB) hard disk drive. Although this capacity well exceeds the 55MB stated in the system requirements example, it is the amount of available hard disk that matters. Much of your hard disk may be filled with programs and data.

To determine the available space on your hard disk, follow these steps:

- 1 Double-click the My Computer icon on the desktop.**

Windows 95 opens the My Computer window.

- 2 Click (don't double-click) the C: icon.**

Windows 95 displays the space remaining (Free Space) and total capacity of the drive at the bottom of the My Computer window. These numbers are listed in megabytes (MB). See "How Big is a Megabyte, Anyway?" on page 241 for more information on megabytes.

If you can't see these numbers, widen the window until you can see them. To resize a window, see "Lesson 6: Resizing and Reshaping Windows" on page 57.

Graphics Card

A graphics card is also called a display adapter. It may be a board installed in a desktop computer or a chip, as in the Portégé 620CT. Program requirements are generally listed by the type of adapter or the maximum resolution the adapter supports.

The Portégé 620CT display adapter is compatible with the VGA (Video Graphics Array) and SVGA (Super VGA) standards. The adapter has a maximum resolution of 1024 x 768 pixels. For programs requiring resolutions higher than 800 x 600, you may want to use an external monitor. See “Using an External Monitor” on page 181 for more information.

Sound Card

Your computer has a SoundBlaster/Pro compatible sound card that provides microphone and headphone jacks and a volume control dial.

Pointing Device

The AccuPoint is a pointing device that performs all the functions of a mouse.

If a program requires a joystick, you'll have to add one, and possibly an adapter, to your system. Talk to your dealer to find out which joysticks are compatible with your Portégé 620CT computer.

Tips on Buying Programs

Before you buy:

- ❖ It's a good idea to see a demonstration of the program.
- ❖ Talk to friends and your company's computer experts about the programs they recommend.
- ❖ Get on the Internet and find out what's new.
- ❖ Make sure you have enough space available on the hard disk.

For more information, see “Hard Disk” on page 104.

- ❖ Make sure your computer has enough memory.

For more information, see “Memory” on page 103.

Installing Programs

Windows 95 makes installing programs onto your computer's hard disk easy. Most programs come with installation programs on diskette. By following the steps in this section, you'll ensure that your installation program installs the program files completely and sets them up to run with Windows 95.

More and more programs are being written specifically for Windows 95 all the time. If you purchase a program designed for Windows 95, follow the installation instructions in the program's documentation.

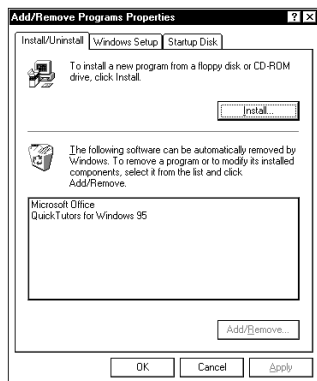
To install a new program in Windows 95, follow these steps:

- 1 Click Start, then point to Settings.**
- 2 Click Control Panel.**

Windows 95 opens the Control Panel.

- 3 Double-click the Add/Remove Programs icon.**

Windows 95 opens the Add/Remove Programs Properties dialog box.



The Add/Remove Programs Properties dialog box

- 4 Click the Install/Uninstall tab.**

The Install/Uninstall page moves to the front of the dialog box.

- 5 Click Install.**

6 Insert the program's installation diskette into the drive.

7 Click Next.

Windows 95 searches the installation diskette for the installation program.



If Windows 95 doesn't find the installation program or searches the wrong drive, click the Browse button and find the installation program manually.

8 Click Finish to run the installation program.

9 Continue with the program's normal installation process.

Creating a Backup Copy of Program Diskette(s)

It's important to create backup diskettes for any programs you install on your computer, in case you accidentally damage or lose the original program diskettes. You'll need one blank, formatted diskette for each program diskette you have to copy.

Follow these steps:

- 1 Make sure the external diskette drive is connected.**
- 2 Place the original diskette into the diskette drive.**
- 3 From the desktop, double-click the My Computer icon.**

Windows 95 opens the My Computer window.

- 4 Click the A: icon.**
- 5 Click File, then click Copy Disk.**
- 6 In the Copy Disk dialog box, click Start.**

Windows 95 copies the files on the diskette into memory and displays a message asking you to insert the destination diskette (the one you're copying to) into the diskette drive.

- 7 Remove the original diskette from the diskette drive and replace it with your blank one.**
- 8 Click OK.**

Windows 95 copies the files onto the new diskette.

- 9 Repeat steps 1 through 8 for each diskette you want to back up.**
- 10 Store the original diskettes in a safe place.**

Buying Hardware

In addition to the basic system requirements, some programs require devices such as a modem or printer. These items are available as add-on devices for your Portégé 620CT computer.

What Kind of Devices Can I Buy?

Many devices, such as fax/modems, removable hard disk drives, and network adapters are available as PC Cards. For more information about these cards, see “Little Cards that Do Big Things” on page 149.

The Toshiba Accessories Catalog lists the add-on devices you can purchase from Toshiba. Talk to your dealer about these Toshiba options and other third-party devices.

This manual also lists a large number of available options. To find these, try looking in the Index under “devices.”

Tips on Buying Hardware

- ❖ If a device is cheaper than you think it should be, it may be an older version. On the other hand, depending on your needs, an older version may suit you just fine.
- ❖ Check the warranty and support policy.
- ❖ Make sure the device is supported by Windows 95, or that Windows 95 drivers are provided with the device.
- ❖ If you have access to the Internet, check the World Wide Web and relevant newsgroups for information about the product.
- ❖ Access Toshiba’s BBS or the Toshiba Forum on CompuServe (refer to “Contacting Toshiba” on page 280 for instructions) and search for information about using the new hardware with your computer.

Taking Your Computer on the Road

Probably the main reason you bought your Portégé 620CT computer was so you could use it in a variety of places. Of course, some of the places you'll be using it may not have a convenient power source.

This chapter describes all the aspects of running your computer while traveling.

Toshiba's Energy-Saver Design



Toshiba is a partner in the Environmental Protection Agency's (EPA) Energy Star Program. As an Energy Star Partner, Toshiba has designed this product to meet the Energy Star guidelines for energy conservation.

The Portégé 620CT computer enters a low-power standby state when it is not being used, thereby conserving energy and saving money in the process. Many of the computer's energy-saving features have been set by Toshiba. By leaving these features active, your computer will operate at its maximum energy efficiency.

Running the Computer on Battery Power

The Portégé 620CT computer contains a removable lithium ion battery pack that provides power when you are away from an AC outlet. You can recharge the battery many times. If you spend a lot of time on the road, you may purchase additional batteries, giving you the potential of many more working hours away from a power source.

To charge the battery, use the AC adapter to plug the computer into a live wall socket. The battery charges when the computer is on or off. It takes approximately three hours to charge the battery with the computer off, or approximately eight to ten hours when the computer is on.

There is also an optional battery charger that charges up to three batteries at the same time. See “Charging More than One Battery at a Time” on page 131 for more information about the battery charger.

Aside from the battery pack that powers the computer, there are two additional batteries: the backup battery and the real-time clock (RTC) battery. These batteries quietly go about their business in the background, you never have to worry about them. If you're really curious about these batteries, see “What Other Batteries Does the Computer Have?” on page 240.

Monitoring Battery Power

The computer's battery light gives you an indication of the current battery charge. The possible states of the battery light are:

- ❖ Green indicates a full charge.
- ❖ Orange indicates the battery is charging.
- ❖ Flashing orange indicates that the charge is running low.

Toshiba's MaxTime program also contains a battery gauge that lets you check how much time you have before the power runs out. You can set the MaxTime gauge so that it is always visible, providing a constant reminder of your current battery state.

This section describes how to use MaxTime to monitor the battery charge. To learn more about MaxTime, read the description of MaxTime features, which starts on page 295.

The computer calculates the remaining battery charge as it operates, based on your current rate of power use.



The computer drains battery power more quickly at low temperatures. Check your remaining charge frequently if you're working in temperatures below 50 degrees Fahrenheit.

Displaying the Battery Gauge

The battery gauge window is the first window you see when you open MaxTime. If MaxTime isn't open, follow these steps:

- 1 **Click Start, then point to Programs.**
- 2 **Point to Toshiba Utilities, then click MaxTime.**

MaxTime displays a window that shows the battery gauge.



The MaxTime battery gauge window

The illustration above shows the battery gauge in two different forms: as a bar graph and as a percentage. The next section describes how to choose which forms the battery gauge window displays.

Changing the Appearance of the Battery Gauge

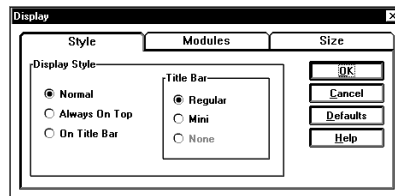
The battery gauge comes in three different flavors, called modules. Each provides the same information in a different way:

- ❖ The Bargraph module displays the current battery charge as a horizontal bar graph.
- ❖ The Percent Remaining module displays the current battery charge as a percentage of battery capacity.
- ❖ The Time Remaining module displays the length of time remaining before the battery discharges completely.

To set the module(s) you want displayed, follow these steps:

1 Choose Display from the MaxTime Options menu.

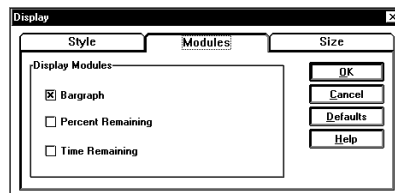
MaxTime opens the Display dialog box.



The Display dialog box

2 Choose the Modules page by clicking on the Modules tab.

MaxTime displays a window that shows the available modules.



The Modules page

3 Click the check box next to each of the modules you wish to include in the battery gauge.

You may select any or all of these modules. If you don't select a module, MaxTime displays the Bargraph module.

4 Choose OK to save your changes, exit the dialog box and return to the battery gauge.

The battery gauge now shows the module(s) you selected.

Keeping the Battery Gauge Visible at All Times

When you first open the MaxTime battery gauge, it acts as a normal Windows program. Opening other programs may cover the battery gauge. If you prefer to see the battery gauge at all times, change the Style setting in MaxTime.

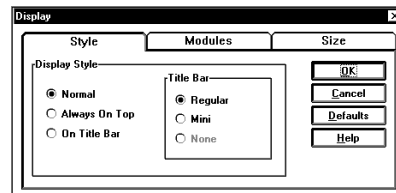
The Style option has these settings:

- ❖ Normal sets the battery gauge to act as a normal Windows program. Other programs may display on top of the battery gauge.
- ❖ Always on Top displays the battery gauge on top of all other Windows programs. This gives you a constant reminder of how long you have before running out of power.
- ❖ On Title Bar places the battery gauge on the title bar of the active window. This also displays the battery gauge at all times.

To set the battery gauge to display above all your other Windows programs, follow these steps:

1 Choose Display from the MaxTime Options menu.

MaxTime opens the Display dialog box.



The Display dialog box

2 Click the check box next to the option you want.

If you don't select any of the options, the computer selects Normal.

3 Choose OK to save your changes, exit the dialog box and return to the battery gauge.

MaxTime displays the battery gauge in the way you selected.

What to Do When Your Computer Doesn't Know the Battery Charge

When you insert a fresh battery, your computer may not be able to calculate the battery's charge immediately. In this case, you may want to estimate the battery charge yourself. To do this, follow these steps:

1 Click Start, then point to Programs.

2 Point to Toshiba Utilities, then click MaxTime.

MaxTime displays the battery gauge window.



The MaxTime battery gauge window

3 Choose Set Battery Charge from the MaxTime Options menu. This menu item is only available if the system does not know the current battery charge.

MaxTime opens the Set Battery Charge dialog box.

4 Click and drag the slider left or right to set the estimated battery charge.

5 Choose OK to accept your change and exit the dialog box.

The battery gauge window changes to reflect the charge you set.

What to Do When the Battery Alarm Sounds

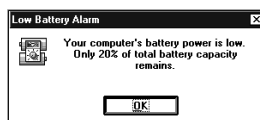
Don't panic.

The Portégé 620CT computer has three alarms, designed to give you sufficient warning before your battery becomes fully discharged. Two of the alarms, the Low Battery Alarm and the Critical Battery Alarm, function only when you're running Windows 95 and MaxTime is open (although MaxTime may be minimized). The third, the Emergency Battery Alert, operates at all times.

This section describes the three battery alarms, what they mean and how to set each one to fit your personal computing style.

Going. . . the Low Battery Alarm

If MaxTime is open, it warns you when you're beginning to get low on battery power. MaxTime beeps once and displays the Low Battery Alarm warning. This means you have less than 20% battery capacity remaining, unless you've changed this level.



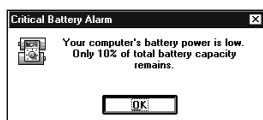
The Low Battery Alarm warning

This warning is just a reminder that the battery charge is a finite resource that can eventually run out. Unless you've told the system to display this message at a really low power level, you don't need to do anything at this point.

To close the warning box, choose OK. To change the level of charge that sets off this warning, see "Setting the Alarms" on page 119.

Going. . . the Critical Battery Alarm

If MaxTime is open, it warns you when you're getting fairly low on battery power. MaxTime beeps once and displays the Critical Battery Alarm warning. This means you have less than 10% battery capacity remaining, unless you've changed this level.



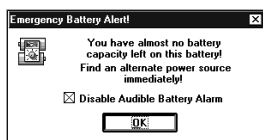
The Critical Battery Alarm warning

When this alarm goes off, start planning your remaining battery time carefully. No frantic actions are required yet, but it's a good idea to begin to think about what you absolutely must do before you find a place to plug in the AC adapter or turn the computer off.

To close the warning box, choose OK. To set the level of charge that sets off this warning, see "Setting the Alarms" on page 119.

Gone. . . the Emergency Battery Alert

OK. Now it's serious. When the battery runs down and you have only about five minutes of time left, the computer starts beeping continuously. If MaxTime is open, it also displays the Emergency Battery Alert.



The Emergency Battery Alert

When you reach this point, plug the computer into a live power outlet or save all your files and turn the computer off immediately. Doing this ensures that you won't lose any work and also provides relief to everybody around you who's getting tired of the beeping sound from your computer.

If you don't manage to plug the computer in or turn it off before the battery completely runs out of power, the computer turns off automatically. Don't panic, all is not lost. Before shutting down, the computer automatically turns on Resume Mode (more fully described on page 121). Resume Mode keeps track of where you were so, when you turn the power on again, you can continue where you left off.

The computer's backup battery stores this information in memory for about eight hours before it too runs out of power.

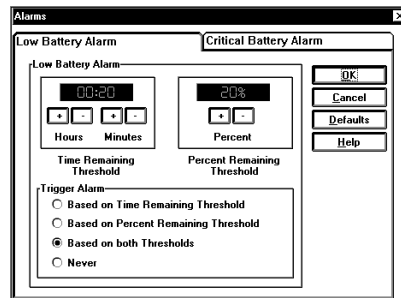
Setting the Alarms

The Low Battery and Critical Battery alarms sound when the remaining battery charge reaches threshold power levels. The Low Battery Alarm is initially set to 20% of battery capacity. The initial threshold for the Critical Battery Alarm is 10% of battery capacity.

If these threshold levels don't fit your needs, you can use MaxTime to change them. To set the threshold levels for the Low Battery and Critical Battery alarms, follow these steps:

1 Choose Alarms from the MaxTime options menu.

MaxTime displays the Alarms dialog box.



The Alarms dialog box

2 Switch to the desired page by clicking the tab for the alarm you want to set.

3 To change the Time Remaining or Percent Remaining Threshold, click the + or - buttons.

4 Select a Trigger Alarm setting:

- ❖ To set the alarm to sound when the battery reaches the Time Remaining Threshold, choose Based on Time Remaining Threshold.
- ❖ To set the alarm to sound when the battery reaches the Percent Remaining Threshold, choose Based on Percent Remaining Threshold.
- ❖ To set the alarm to sound when the battery reaches either threshold, choose Based on both Thresholds.
- ❖ To turn off the alarm, choose Never.

5 Choose OK to save your settings and return to the Max-Time battery gauge window.

Adjusting the Alarm Volume

You can change the volume at which the system alarms sound by using the Alarm Volume hotkey, Fn + F4.

To adjust the alarm volume, press and hold Fn, then press F4. Continue pressing F4 to cycle through the alarm volume settings: Off, Low, Medium, and High (in that order). The system beeps for each setting to demonstrate the volume. When you have selected the desired volume, release Fn.



Make sure to continue holding Fn while you press F4. Each time you press Fn + F4 once and release, the alarm volume is set to Off.

Suspending the Computer

If you want to turn your computer off and on again without spending all the time it normally takes to start your computer up again, Windows 95's Suspend command and Toshiba's Resume Mode are for you. These features provide a sort of electronic bookmark, storing the current state of the computer, including all your open files and programs, in memory until you turn the computer on again.

Suspending the computer uses power supplied by the backup battery to store this information. However, the backup battery will eventually discharge completely, if it is left unplugged for more than eight hours. When the backup battery discharges, your information is lost. So, although suspending your computer temporarily stores your work in memory, you should still save all your work before you turn the computer off.

There are four ways to suspend the computer:

- ❖ Click the Start button, then click Suspend.
- ❖ Use a special key combination (hotkey) to turn on Resume Mode from the keyboard, then turn the computer off by pressing the power button.
- ❖ Use MaxTime to turn on Resume Mode in Windows 95.
- ❖ Use TSETUP to turn on Resume Mode in MS-DOS. TSETUP is described in "TSETUP" on page 323.

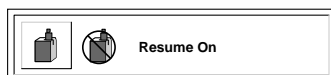
The Windows 95 Suspend command is the easiest way to suspend the computer, however, if you want to use the Panel Power On/Off and System Auto Off options, you must suspend the computer using Toshiba's Resume Mode. These options are described in "MaxTime ®" on page 295.

The following sections describe how to turn Resume Mode on and off with a hotkey and in MaxTime.

Using a Hotkey

To select Resume Mode with a hotkey, follow these steps:

- 1 Start MaxTime, if it's not already running.
- 2 Press Fn + F3 to display the Resume Mode pop-up window.



The Resume Mode pop-up window

- 3 While continuing to press Fn, press F3 until you select Resume Mode.
- 4 Release the Fn key.

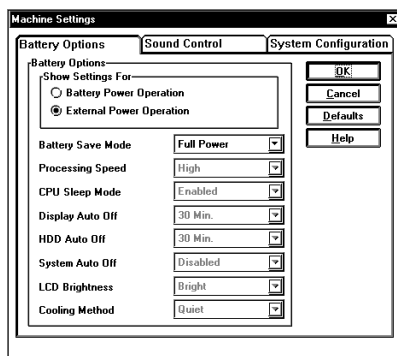
You're now in Resume Mode.

Using MaxTime

MaxTime lets you select Resume Mode when you're using Windows 95. Follow these steps:

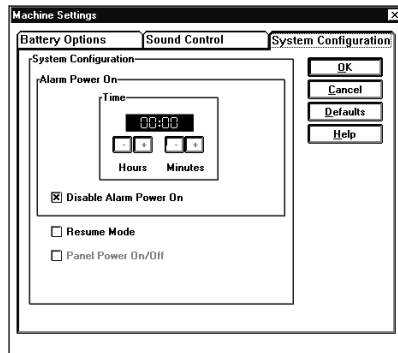
- 1 From the MaxTime battery gauge window, choose Machine Settings from the MaxTime Options menu.

MaxTime displays the Machine Settings dialog box.



The Machine Settings dialog box

- 2 **Switch to the System Configuration page by clicking the System Configuration tab.**



The System Configuration page

- 3 **Click the check box next to Resume Mode.**

An X in this box turns Resume Mode on. An empty box turns Resume Mode off.

- 4 **Choose OK to save your settings and return to the Max-Time battery gauge window.**

Replacing Batteries

When your battery runs out of power, you have two options: plug in the computer or replace the battery with a charged spare, if you have one. You may need to replace the battery if it becomes damaged or wears out after long years of use.

To replace the battery, follow these steps:

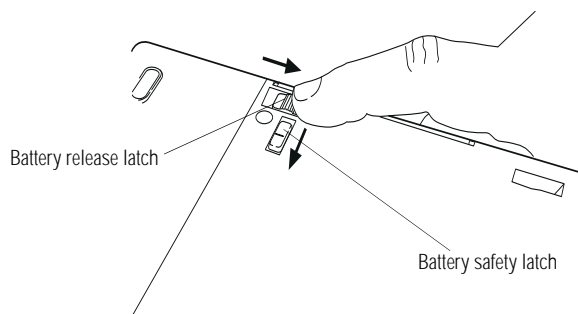
- 1 **If you're in Windows 95, click Start, then click Shut Down. (If you're not in Windows 95, turn the computer off and continue with step 3.)**

Windows 95 displays the Shut Down Windows dialog box.

- 2 **Click the button next to Shut down the computer, then click Yes.**

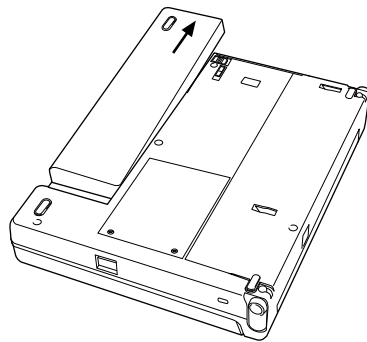
Windows 95 shuts down and turns the computer off automatically.

- 3 Close the display.
- 4 Turn the computer over.



Releasing the battery

- 5 Locate the battery safety latch and slide it towards the center of the computer.
- 6 Locate the battery release latch next to the PC Card slot cover and slide it towards the back of the machine.



Removing the battery

- 7 The battery moves to the right enough for you to pull it out of the computer by grasping it at the right edge.
- 8 Wipe the battery terminals of the charged battery with a clean cloth to ensure a good connection.

- 9 Carefully place the charged battery in the slot, aligning it with the guides.**
- 10 Slide the battery into the computer.**
- 11 Push gently until you hear a click, indicating the battery is connected.**
- 12 If the battery does not have a full charge, plug in the computer.**

Disposing of Used Batteries Safely

Eventually, after years of faithful service, you'll need to retire each battery and replace it with a new one. Under federal, state and local laws, it may be illegal to dispose of old batteries by placing them in the trash.

The materials that came with your computer may include an insert regarding the disposal of batteries. If not, check with your local government for information on where to recycle or dispose of old batteries.

If you cannot find the information you need, contact Toshiba for assistance. See "Contacting Toshiba" on page 280 for information on contacting Toshiba offices around the world.

Conserving Power

It's a fact: if you're running your computer on battery power, your battery will eventually discharge. However, by using Toshiba's power-saving options, you can greatly increase the amount of time before you need to recharge the battery.

These options have been combined into preset battery save modes. Using one of these modes lets you choose between maximum power savings and peak system performance. You may also set individual power-saving options to suit your own needs.

The following sections describe how to choose a battery save mode and discuss each power-saving option.

The Easy Way—Choosing a Battery Save Mode

There are two battery save modes:

- ❖ Full power provides maximum system performance, while using the most power.
- ❖ Low power preserves battery charge by reducing overall system performance.

The following table shows the battery save option settings for both battery save modes:

<i>Battery Save Options</i>	<i>Full Power</i>	<i>Low Power</i>
HDD Auto Off	30 Min.	3 Min.
Display Auto Off	30 Min.	3 Min.
System Auto Off	Disabled	30 Min.
Processing Speed	High	Low
CPU Sleep Mode	Disabled	Enabled
LCD Brightness	Bright	Semi-Bright

There is also a User Setting that lets you set the power-saving options individually.

You may set the battery save mode with a hotkey, in MaxTime (if you're working in Windows 95) or in TSETUP (if you're working in MS-DOS). This chapter covers setting the battery save mode with a hotkey and in MaxTime. Using TSETUP to set the battery save mode is discussed in “TSETUP” on page 323.

Using a Hotkey

To select a battery save mode with a hotkey, follow these steps:

- 1 Start MaxTime, if it's not already running.**
- 2 Press Fn + F2 to display the battery save pop-up window.**



The battery save pop-up window

3 While continuing to press Fn, press F2 until you select the desired battery save mode.

4 Release the Fn key.

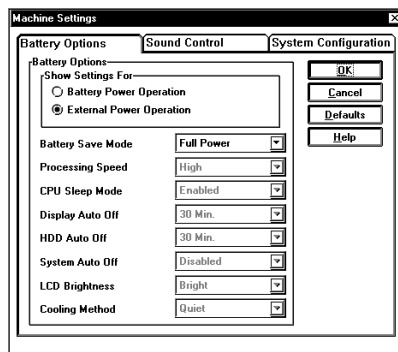
You're now in the selected mode.

Using MaxTime

To select a battery save mode in MaxTime, follow these steps:

1 In the MaxTime battery gauge window, choose Machine Settings from the MaxTime Options menu.

MaxTime displays the Machine Settings dialog box, with the Battery Options page on top.



The Machine Settings dialog box

2 Click the arrow next to the Battery Save Mode option list box to view the available settings.

3 Click the desired setting to highlight it.

4 Choose OK to save your settings and return to the MaxTime battery gauge window.

Setting Battery Save Options on Your Own

If you set the battery save mode to User Settings, you can set your computer's power-saving options individually. For example, if you want the computer's processing speed set to its maximum level but want to take advantage of all the other power-saving features, this is the way to do it.

This section describes each of the power-saving options. Settings that save power are indicated with an Energy Star logo.

HDD Auto Off

This option saves power by temporarily shutting down the hard disk if it hasn't been accessed for a set period of time. The drive turns back on the next time the computer reads from or writes to it. You have seven choices:



1 Min, 3 Min, 5 Min, 10 Min, 15 Min, 20 Min and 30 Min turn the hard disk drive off if the computer hasn't accessed the hard disk for the time set.

Display Auto Off

This option saves power by temporarily shutting down the display if you have not used the keyboard or AccuPoint for a set period of time. To turn the display back on, press a key or move the AccuPoint. You have eight choices:

Disabled turns the option off.



1 Min, 3 Min, 5 Min, 10 Min, 15 Min, 20 Min and 30 Min blank the display if you haven't used the keyboard or AccuPoint for the set time.

If you're using an external monitor, Display Auto Off blanks the monitor after the selected time.

System Auto Off

This option saves power by turning the computer off if it hasn't been used for a set period of time. This option is available only if Resume Mode is turned on. You have seven choices:

Disabled leaves the computer on until you use the power button to turn it off.



10 Min, 20 Min, 30 Min, 40 Min, 50 Min and 60 Min turn the computer off if you haven't used it for the time set.

Processing Speed

This option sets the speed at which the computer processes information. You have two choices:



Low sets a lower processing speed and saves power.

High sets the computer to its maximum processing speed.

CPU Sleep Mode

This option temporarily shuts down the computer's central processing unit (CPU) when it is inactive. Pressing a key, moving the AccuPoint or a signal from a device returns the processor to its normal operating speed. You have two choices:



Enabled turns CPU Sleep Mode on.

Disabled turns CPU Sleep Mode off.

LCD Brightness

This option saves power by reducing the brightness of the computer's display. You have two choices.



Semi-bright reduces the brightness of the display.

Bright sets the display to its maximum brightness.

Look After Your Battery

It doesn't take much effort, but by treating your battery right you can make sure it provides maximum power storage for a long time. To take care of your battery, remember the following tips:

- ❖ Don't leave the computer plugged in and unused for more than five hours at a time. When you're not going to use the computer for a long period, disconnect the AC adapter and let the battery discharge completely.
- ❖ Alternate between batteries if you have a spare.
- ❖ Don't touch the metal terminals on the battery with another metal object.
- ❖ Always turn your computer off when you're replacing the battery.

Additional Power Options

Depending on the amount of time you spend away from external power sources, the capacity of one battery pack may be sufficient for your needs. However, if you need more portable power, Toshiba provides two options:

- ❖ You can buy extra battery packs.
- ❖ You can buy a battery charger that charges more than one battery at a time.

Additional Battery Packs Extend Battery Time

Having one or more extra batteries gives you the opportunity to replace a discharged battery with a charged spare. This can greatly increase the amount of time you can work without having to find a power outlet.

Charging More than One Battery at a Time

The optional battery charger provides an alternative to charging the battery in your computer. This is especially useful if you have one or more extra batteries. You can charge your spare(s) in the battery charger while continuing to work on the computer. While the battery charger requires a power source, it provides an easy way for you to take more than one charged battery with you when you travel.

Charging the Computer's Battery in Your Car

The Noteworthy Auto Adapter (NW801L) lets you plug the computer into the cigarette lighter of your car. This is a great way to charge the computer's battery while driving to your next appointment.

How About a Carrying Case?

When you're on the road, you'll probably want a way to carry your computer with you. Toshiba offers several choices of carrying cases for the Portégé 620CT computer, including:

- ❖ a sturdy twin fabric carrying case (NWCCAFB)
- ❖ a leather attaché (PC-PA1050L)
- ❖ a woven fabric case in black, gray, or green (NWCCUF-B-GY-GN)
- ❖ a backpack-style case (PC-PA180B)

All of these cases help protect the computer from the bumps and bruises of normal travel. They also provide plenty of extra space for manuals, AC adapters and diskettes.

Ask your dealer to order your Noteworthy case directly from Toshiba. You can also order it through the *Accessories Catalog* that came with your computer.

The Wide World of Multimedia

Multimedia is the product of different media elements such as text, graphics, sound, animation, and video working together. A multimedia *title* is a computer presentation of two or more media elements that are experienced simultaneously. You may purchase a multimedia title on compact disc or access one over the Internet.

Unlike television programs or audio tapes, multimedia titles allow you to interact with the information by choosing what to view or listen to and when to see or hear it.

Your Portégé 620CT is well-equipped with a high-speed Pentium processor, a color display, and advanced stereo sound capabilities that enhance your multimedia enjoyment. However, to take full advantage of your Portégé 620CT's multimedia capabilities, you need to purchase an external CD-ROM drive and a pair of stereo speakers.

This chapter provides some options for connecting additional hardware, and introduces the multimedia elements you can experience without investing in additional hardware or software.

In addition to the information in this chapter, there is a wide variety of helpful books that explain multimedia. You'll find a selection of them at your local computer or book store.

Connecting a CD-ROM Drive

Your Portégé 620CT is equipped with several expansion features that provide a means of connecting a CD-ROM drive to your computer. This section describes some of the options available to you, but you should consult your dealer or Toshiba support for the option that is best for you.

Connecting a CD-ROM Drive to a PC Card Slot

You can connect a CD-ROM drive to your Portégé 620CT through a PC Card slot. Typically, this type of connection uses a SCSI (pronounced *scuzzy*) PC Card interface that connects to a PCMCIA Type II Card slot. There are two ways to connect a CD-ROM drive to a PC Card slot.

- ❖ You can purchase a portable CD-ROM drive that is equipped with a PCMCIA Interface (PC Card) that inserts into your computer's Type II slot.

Most likely, this option is the easiest and fastest way to connect a CD-ROM drive to your computer. All the hardware, drivers, and instructions you need to connect the drive come packaged together. Your local computer store carries a selection of portable CD-ROM drives designed to connect to portable computers.

- ❖ You can purchase a SCSI interface PC Card that provides a connection for any SCSI CD-ROM drive.

SCSI refers to the type of connection the device requires. With a SCSI interface PC Card, you can connect any SCSI device to your computer. In addition to CD-ROM drives, tape drives and Syquest drives usually use a SCSI connection. Using the SCSI interface connection gives you more connection options, but it also requires special consideration in selecting a SCSI device and PC Card that are compatible. If you have any questions concerning this type of connection, consult your dealer.

Connecting a CD-ROM Drive to the Parallel Port

A CD-ROM drive can also connect to the parallel port on your Portégé 620CT with a parallel interface. A parallel interface is an electrical cable with a connector that matches the parallel port on the computer. The parallel port is typically used for printer connections but can be used for any device that uses a parallel connection.

To connect your CD-ROM drive using a parallel interface, you need to purchase a parallel connector cord and a CD-ROM drive that supports a parallel interface. Consult your dealer for the type of hardware you need for this option.

What Type of CD-ROM Drive Should You Buy?

There are many CD-ROM drives on the market today. Dual-speed (2x), quad-speed (4x), and 6-times speed (6x) are terms that refer to the speed at which the drive spins the compact disc. Generally, a drive that spins faster can find and transfer data faster. This translates into better overall performance.

4x CD-ROM drives operate almost twice as fast as 2x CD-ROM drives. If you want to use your drive to install large software programs, or use multimedia applications, the faster the drive the better.

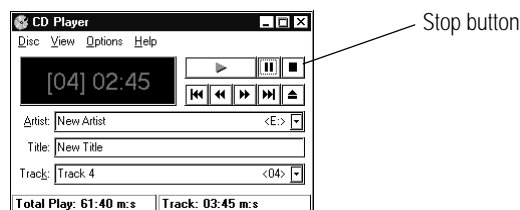
Playing an Audio CD

If you insert an audio CD into your CD-ROM drive, Windows 95 loads CD Player, a program that automatically plays the CD.



To play audio CDs through your Portégé 620CT, you must connect the line out jack on the CD-ROM drive to the line in or microphone jack on the computer. Consult your dealer for the necessary connector cord you need to make this connection.

To view the CD Player window, click CD Player on the task bar.



CD Player playing a CD

To increase or decrease the volume, turn the dial on the computer's chassis (located above the keyboard and below the LCD).

To stop the CD, click the **stop button**.

The Help menu of CD Player explains in detail how to use each component including how to store the name of each track.

If you exit from CD Player and want to start the program again, follow these steps:

- 1 **Double-click the My Computer icon.**
- 2 **Click the Audio CD icon with the secondary AccuPoint button.**
- 3 **Click Play with the primary or secondary button.**

Windows 95 opens the CD Player and starts playing your audio compact disc.

Playing Back Sound, Video and Animation Files

Multimedia files are stored in a variety of formats depending on the type of file.

Sound Files

Traditionally, sound is recorded in an analog form. For example, a magnetic tape recorder uses electrical signals to create a single model of a given sound or *waveform*.

Most multimedia computers support two types of sound files, wave files and MIDI files.

Digital Audio Wave Files

Digital audio uses computer-based technology to record, handle and recreate sound. Digital audio systems sample the waveform at fixed time intervals, for example, at 30 times per second, and reduce the sound to a sequence of numbers.

When you play back a digital waveform or wave file, the software transforms the numeric data back into its original acoustic waveform.

If you use the microphone to record sounds, the computer stores them as wave files.

Wave files have the extension .WAV.

MIDI Files

Musical Instrument Digital Interface (MIDI) is a standard language used by composers to create music to be played by a synthesizer. MIDI songs consist of commands, not actual digital sounds. For this reason, the size of a MIDI file is much smaller than a .WAV file.

You can connect an external MIDI device, such as a keyboard with a built-in synthesizer, or you can play MIDI files using the computer's internal synthesizer.

To learn more about the system's MIDI capabilities, look up MIDI in the Windows 95 help index.

MIDI files have the extension .MID.

Video and Animation Files

Full-motion video includes both traditional film and animation. A video plays back on your VCR at 30 frames per second. To play back the same video on your computer would require 9 megabytes of data per second at 640 x 480 resolution.

Since playing back video requires so much data, multimedia applications that use film or animation normally play back at 15 frames per second with a resolution of 320 by 200 pixels. This is why video images are less smooth on a computer than on television.

To reduce the storage required, all video files must be compressed before they can be distributed and decompressed when you view them. Two compression and decompression techniques are in general use.

AVI Files

The most common technique for storing and playing back video on personal computers is Microsoft's Audio Video Interleaved (AVI) format. This software technique displays video using up to 15 frames per second in a small window.

AVI files have the extension .AVI.



DEFINITION

A frame is a still picture that, when combined with thousands of others, makes a motion picture.

Full-motion video means motion pictures played back at 30 frames per second.

Interleaving video is the process of displaying every other row of pixels each time the computer refreshes the screen. This increases the rate at which the system updates the screen.

A pixel is the smallest dot on your screen that can be controlled by software.

Resolution is the number of pixels on the screen.

MPEG Files

Fifteen frames per second is not adequate for the games and multimedia titles the industry wants to produce. The Motion Picture Expert Group (MPEG) has developed compression and decompression standards that are capable of delivering true full-motion video on your computer.

MPEG files have the extension .MPG.

Play Back Programs

Windows 95 comes with three programs for playing multimedia files:

- ❖ CD Player is used to play an audio CD. The section “Playing an Audio CD” on page 137 explains how to use this program.
- ❖ Media Player is used to play back audio, video and animation files.
- ❖ Volume Control lets you adjust the volume.

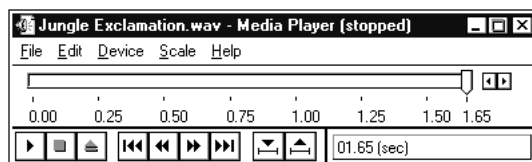
Using Media Player

You can use Media Player to play back .WAV and Video for Windows files in addition to playing back several other formats such as MIDI and Quick Time for Windows files.

To play a file, follow these steps:

- 1 Click Start and point to Programs.**
- 2 Point to Accessories, then point to Multimedia.**
- 3 Click Media Player.**

Windows 95 displays the Media Player window.



Media Player ready to play a .WAV file

- 4 Choose Open from the File menu.**
- 5 Locate the file you want to play in the Look in box.**
- 6 To display the list of file types Media Player can play, click the down arrow next to the Files of type list box.**
- 7 Click the name of the file you want to play.**



Another way to play a multimedia file is to click on the file name with the secondary button. This opens a list that includes the Play command.

Adjusting the Volume

You can set the volume in two ways:

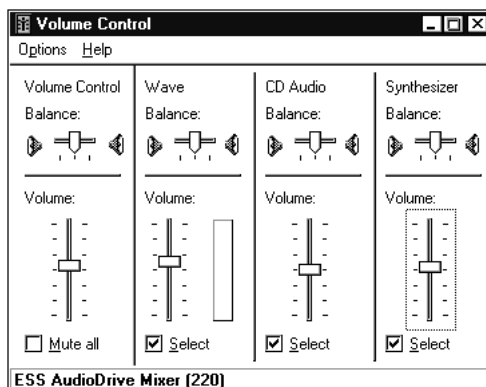
- ❖ by using the Volume Control program
- ❖ by turning the volume dial

The Volume Control program sets the volume and balance for playing both CDs and multimedia files that contain sound.

To access this program, follow these steps.

- 1 Click Start and point to Programs.**
- 2 Point to Accessories, then point to Multimedia.**
- 3 Click Volume Control.**

Windows 95 displays the Volume Control mixer window.



The Volume Control mixer window

4 Move the sliders to adjust the volume for the various types of sound files.



To avoid confusion, set all the mixer sliders in the Volume Control program to their medium settings and adjust the volume with the volume dial.

Recording Sounds as Wave Files

You may record sounds through the built-in microphone or, using the microphone jack, from an outside source. This section describes how to record sounds.

Using the Built-In Microphone

The easiest way to record is through the computer's built-in microphone. To do this, follow these steps:

- 1 Click **Start**, then point to **Programs**.
- 2 Point to **Accessories**, then point to **Multimedia**.
- 3 Click **Sound Recorder**.

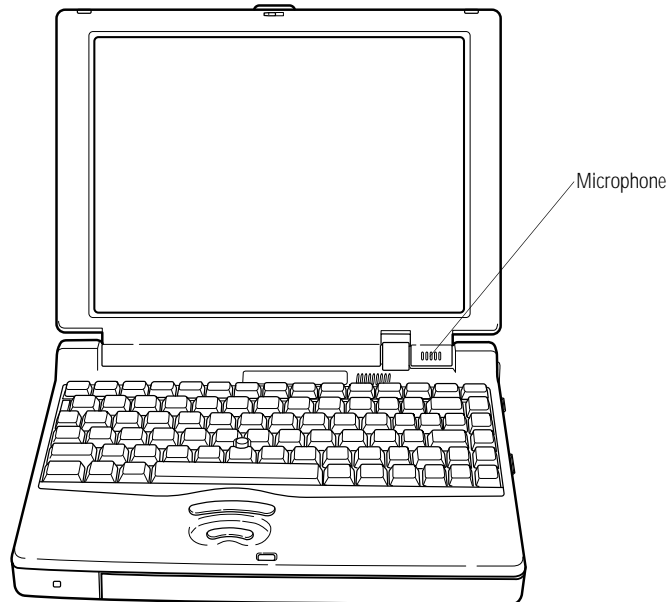
Windows 95 opens the Sound Recorder window.



4 Click the record button.

(It's the red circle at the bottom right of the window.)

5 Speak normally into the microphone.



Locating the built-in microphone



6 When you've finished recording, click the stop button.

The Audio Recorder window displays a graphical representation of the new sound file as a waveform display.



7 To hear what you just recorded, click the play button.

8 To save the file, choose Save from the File menu.

Adjusting Recording Quality

You can adjust the quality of your recordings. However, the better the quality of the recording, the more disk space the sound file will require. Experiment to find a balance that fits your needs.

To adjust the recording quality, follow these steps:

- 1 If you already have the Sound Recorder open, skip to step 5.**
- 2 Click Start, then point to Programs.**
- 3 Point to Accessories, then point to Multimedia.**
- 4 Click Sound Recorder.**

Windows 95 opens the Sound Recorder window.

- 5 Click Edit, then click Audio Properties.**

Sound Recorder opens the Audio Properties dialog box.

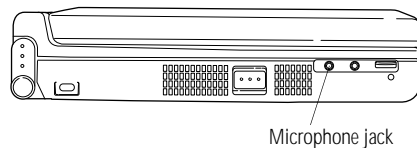
- 6 Adjust the Recording Volume, Preferred device and Preferred quality according to your needs.**

- 7 Click OK.**

Your new settings will take effect the next time you record.

Using an External Microphone

The computer has a built-in microphone for recording sounds. To record higher quality sounds, you may wish to use an external microphone. To attach an external microphone, follow these steps:



The microphone jack



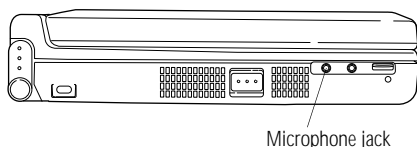
- 1 Locate the microphone jack on the left side of the computer.**
- 2 Plug the microphone cord into the microphone jack.**
- 3 Turn the microphone on.**

The internal microphone is automatically disabled.

Once the external microphone is connected, the recording process is the same as with the built-in microphone. See “Using the Built-In Microphone” on page 143 for instructions.

Using an External Audio Input Device

To record sounds from an external audio device, such as a stereo amplifier, tape deck, or CD player, follow these steps:



The microphone jack



- 1 Locate the microphone jack on the left side of the computer.**
- 2 Using any necessary adapters, plug the cord from the audio device into the microphone jack.**

Once the external audio device is connected, the recording process is the same as with the built-in microphone. See “Using the Built-In Microphone” on page 143 for instructions. To adjust the quality of the recording, see “Adjusting Recording Quality” on page 144 for information.

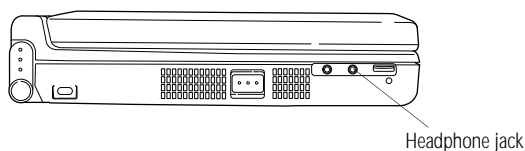
Using External Speakers or Headphones

Your Portégé 620CT is equipped with a SoundBlaster Pro compatible sound system with an internal monaural system speaker. Since the sound system supports a 16-bit stereo format, you may want to connect a pair of external stereo speakers to take full advantage of this feature.



Be sure to use amplified speakers that require an external power source. Using another type of speaker will be inadequate to produce sound from the computer.

To play back sound files through an external device such as stereo speakers or headphones, follow these steps:



The headphone jack



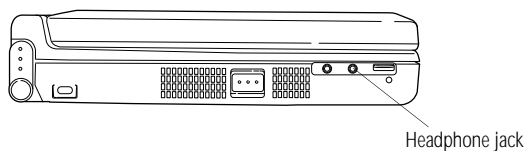
- 1 Locate the headphone jack on the left side of the computer.**
- 2 Using any necessary adapters, plug the cord from the external speakers into the headphone jack.**

The headphone jack requires a 16-ohm stereo mini-jack.

- 3 To adjust the volume, follow the steps in “Adjusting the Volume” on page 142.**

Using an External Audio Device

You can record or play back sounds from the computer by connecting the computer to an external audio device, such as a tape recorder or stereo amplifier. To connect an external audio device, follow these steps:



The headphone jack



- 1 Locate the headphone jack on the left side of the computer.**
- 2 Using any necessary adapters, plug the cord from the external audio device into the headphone jack.**

- 3 To adjust the volume, follow the steps in “Adjusting the Volume” on page 142.**

Little Cards that Do Big Things

PCMCIA-compatible PC Cards greatly increase the capabilities of your computer. These cards pack all the performance of full-sized expansion cards into a case the size of a credit card.

Your computer comes with one PC Card slot that lets you take advantage of these little cards. You can install up to two Type I or Type II cards, or one Type III card. Type III cards, such as hard disk drive PC Cards, require extra thickness. When you buy a PC Card, check the package for the Type of card you're buying.

This chapter describes the different types of PC Cards, tells you how to install PC Cards and provides general tips on using them. Since each card is different, you'll have to read your cards' documentation to use the card, but this chapter will help you get started.



If your PC Card came with a diskette, read "Programs that Make Your PC Card Work" on page 151 before installing any of its programs. The programs on the diskette may conflict with built-in Windows 95 drivers.

What Do PC Cards Do?

New PC Cards are being introduced every day. Among the PC Cards currently available are:

- ❖ Modems and fax/modems
- ❖ Network adapters
- ❖ Removable hard disk devices
- ❖ Memory
- ❖ SCSI adapters
- ❖ Global Positioning System (GPS) receivers
- ❖ ZV Port cards (not available for all models)

Some PC Cards combine the functions of several different cards. One popular example is a PC Card that combines a fax/modem with a network adapter. These are handy if you want to get the most out of your PC Card slots.



PC Card technology has changed considerably over the last few years and it's important that your card is current with the times. Check the package to make sure the PC Card you buy conforms to the PCMCIA (Personal Computer Memory Card International Association) 2.1 standard (or later). Cards that do not conform to this standard may work with your computer, but they are likely to be much more difficult to set up and use.

Cards You Can Buy from Toshiba

Toshiba's Noteworthy PC Cards are specifically designed to work with your Portégé 620CT computer and are available from your Toshiba dealer. Noteworthy PC Cards include:

- ❖ Fax/Modems
- ❖ Token ring network adapters
- ❖ Ethernet network adapters
- ❖ SCSI-II adapters
- ❖ Removable hard disk drives

Programs that Make Your PC Card Work

PC Cards require Card and Socket Services software—a set of programs that acts as a translator between the PC Card and the computer, and that makes hot swapping (switching cards while the computer is on) possible.

Windows 95 comes with all the Card and Socket Services programs already installed. Rather than using a version of these programs that may have come with your PC Card, using the Windows 95 versions ensures complete compatibility with all the features of Windows 95.

If you do use another manufacturer's Card and Socket Services software instead, the system may not recognize your PC Card when you turn the computer on after suspending. Shut down and restart the computer and the system will recognize the card.

To set up the Card and Socket Services programs for your PC Card, see "Setting Up Your PC Card for Your Computer" on page 155.

Hot Swapping

One of the really great things about PC Cards is that you can exchange one PC Card for another card even while the computer is on. This is called “hot swapping.” For example, if you want to switch between a hard disk and a modem PC Card, you can do it while you’re working without turning the computer off and back on again.

Hot Swapping Cautions

While you can insert a PC Card at any time, applying a bit of common sense about when you remove a card will make your computing life much happier. Just remember not to remove a card while it’s in use. You probably won’t break anything, but you could lose valuable information. For example:

- ❖ Do not remove a modem card while it is communicating.
- ❖ Do not remove a hard disk card while the system is accessing the card.
- ❖ Do not remove a SCSI card while any of the SCSI devices connected to it are operating.
- ❖ Do not remove a network card while you are connected to the network.

Before removing a PC Card, stop the card by clicking the PC Card (PCMCIA) icon on the taskbar.

Inserting PC Cards

OK. You've bought your first PC Card and want to install it. This section describes what to do.

Before you insert your PC Card, read through the documentation that comes with the card to see if you need to do anything before you insert it.

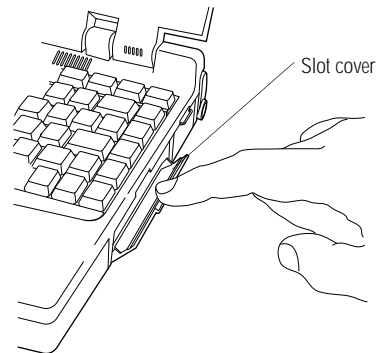


Windows 95 provides the Card and Socket Services for your PC Card. Even if your PC Card comes with its own version of Card and Socket Services, you should use the files included in Windows 95.

Your PC Card slot has two card sockets. You may insert a Type I or Type II card into either socket. You may insert only one Type III card into the lower socket. Inserting a Type III card takes up all the space for both sockets—you cannot have a Type III card installed with any other card.

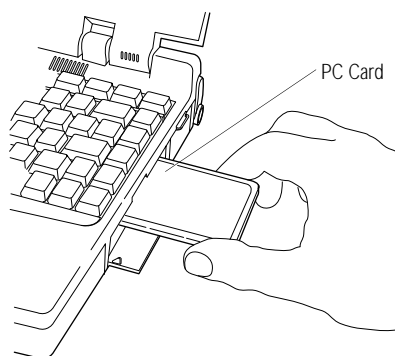
To insert a PC Card, follow these steps:

- 1 Locate the PC Card slot cover on the right side of the computer.**



Opening the PC Card slot cover

- 2 Open the slot cover.**



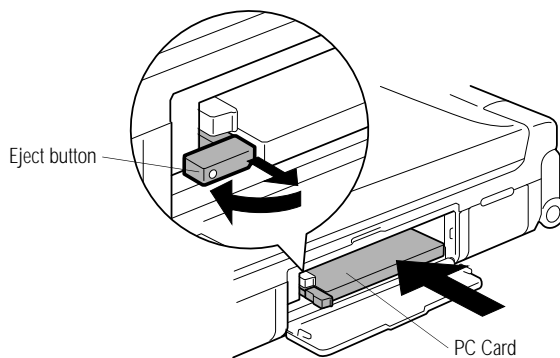
Inserting a Type II PC Card into the PC Card slot

3 Insert the PC Card.

If you have a Type III card, insert the connector into the lower part of the socket. If you have a Type I or Type II card, insert it into either the top or bottom half of the slot.

4 When the card is almost all the way into the slot, push firmly, but gently, to ensure a firm connection with the computer.

Do not force the card into position. When the card is fully seated, an eject button will pop out: the top button for the top socket and the bottom button for the bottom socket.



Folding the eject button

5 Pull the eject button out slightly and fold it to the left.

6 Close the slot cover.

Setting Up Your PC Card for Your Computer

Some PC Cards, such as many fax/modems and hard disk (AT) cards, are ready to use as soon as you install them. Others, such as hard disk cards, network cards and SCSI adapters, require additional steps to work with your computer.

Setting Up PC Card Support in Windows 95

When you insert your PC Card, Windows 95 should display the New Hardware Found dialog box. Follow the instructions on the screen to set up your PC Card.

If Windows 95 doesn't detect your card automatically, follow these steps:

- 1 Click the My Computer icon with the secondary button, then click Properties.**

Windows 95 opens the System Properties dialog box.

- 2 Click the Device Manager tab to access the Device Manager page.**

The Device Manager page should contain a PC Card (PCMCIA) icon. If it doesn't, refer to the steps under "The system does not recognize your PC Card or PCMCIA socket controller" on page 272 to set up PC Card support.

- 3 Click the "+" to the left of the PCMCIA Socket icon in Device Manager.**

Device Manager lists the controller(s).

- 4 The controller icon(s) appears in one of the following ways:**

- ❖ If it appears normally, PC Card support is set up correctly. Close the System Properties dialog box.
- ❖ If there is a red X over the icon, you need to set up the PC Card drivers. Continue with the remainder of this section.
- ❖ If there is a yellow exclamation point (!) over the icon, you need to configure the PC Card drivers. Continue with the remainder of this section.

5 Click OK to close the System Properties dialog box.

6 Click Start, then point to Settings.

7 Click Control Panel.

Windows 95 opens the Control Panel.

8 Double-click the PC Card (PCMCIA) icon.

Windows 95 opens the PCMCIA Wizard.

9 Follow the instructions on the screen to set up PC Card support.

Removing a PC Card

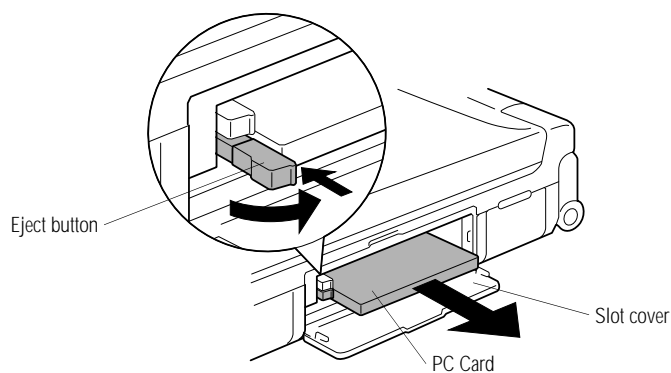
To remove a PC Card, follow these steps:

1 Click the PC Card button on the taskbar.

2 Click Stop xxxx, where xxxx is the identifier for your PC Card.

Windows 95 displays a message that you may safely remove the card.

3 Open the PC Card slot cover on the right side of the computer.



Ejecting a PC Card

- 4 Unfold and press the eject button that corresponds to the slot in which your PC Card is installed.**

The top button releases a card in the upper slot. The bottom button releases a card in the lower slot.

- 5 Grasp the edges of the PC Card and slide it out of the slot.**
- 6 Close the PC Card slot cover.**

Connecting with the World

On its own, your Portégé 620CT computer is an extremely powerful tool. However, not until you connect it to one or more additional computers, through a modem or network connection, can you begin to recognize its full potential.

This chapter explains how to install and set up a modem or fax/modem and to fax a document directly from your computer. It describes the many ways you can use your modem to connect to other computers and services, such as the Internet.

If You're Ready to Go

This section provides a brief overview of the steps contained in the remainder of the chapter. If you're an experienced computer user, this may be enough for you. If you need more help, each step tells you where to go for more information. Follow these steps:

1 Install the fax/modem or modem.

You may use a PC Card or an external serial fax/modem or modem. For more information, see "Setting Up" on page 160.

2 Determine the COM port.

You'll need to know this to set up your communications program. If you're using a communications program designed for Windows 95, your program may determine the COM port automatically. For more information, see "Determining the COM Port" on page 165.

3 Install the communications program.

This may be a general-purpose communications program or one supplied by a specific service provider. For more information, see "Choosing the Communications Program" on page 166.

4 Sign up.

If you're planning to use an online service or the Internet, you'll need to register with a service provider. For more information, see "Logging On to an Online Service or the Internet" on page 173.

Setting Up

To communicate with the outside world you'll need:

- ❖ a modem (see the next section for information).
- ❖ a telephone line.
- ❖ a communications program (see "What Do You Need?" on page 174 if you're planning on using an online service or the Internet, or "Connecting Directly to Another Computer" on page 178 for information about general communications programs).
- ❖ if you're planning on using the Internet, you'll need an access provider (see "Gaining Access to the Internet" on page 173).

Choosing a Modem

A modem converts the digital signals from a computer into the analog signals required by a voice-grade telephone line. Two types of modems work with your Portégé 620CT computer. You can use either:

- ❖ a PCMCIA-compatible PC Card modem that slips into one of your computer's PC Card sockets. PC Cards that support the cellular network let you communicate from your car or a cellular telephone.
- ❖ an external modem connected to the computer through the serial port.

Which Modem is for Me?

You would use an external modem only while in your office or at home. For traveling you need a PC Card modem. Really, the only reason to use an external modem is if you already own one and don't want to invest in a PC Card modem right now.

Faster is Better

Modems support a variety of speeds from 300 bits per second (bps) to 28.8 megabits per second (for use on regular telephone lines). In general, you should buy the fastest modem you can afford.

The faster the modem, the quicker you'll be able to send and receive messages, files and information. Transmission speed has a lot to do with how convenient the modem is to use.

Where to Buy a Modem

Toshiba sells PC Card fax/modems specifically designed to work with your computer. Refer to the Toshiba Accessories Catalog for more information on how to purchase one. Your dealer may be able to sell you other fax/modem and fax/voice/modem PC Cards.

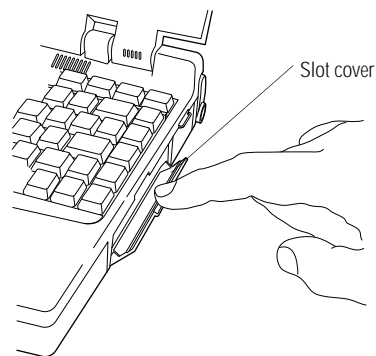
Connecting Your Modem

Once you've purchased your modem and taken it out of its box, this section describes how to make it ready to use.

Installing a PC Card Modem

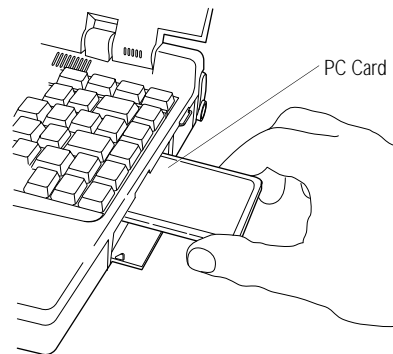
If you purchased a PC Card modem, follow these steps:

- 1 Locate the PC Card slot cover on the right side of the computer.**



Opening the PC Card slot cover

- 2 Open the slot cover.**



Inserting a Type II PC Card into the PC Card slot

- 3 Insert the PC Card.**

If you have a Type III card, insert the connector into the lower part of the socket. If you have a Type I or Type II card, insert it into either the top or bottom half of the slot.

- 4 When the card is almost all the way into the slot, push firmly, but gently, to ensure a firm connection with the computer.**

Do not force the card into position. When the card is fully seated, an eject button will pop out: the top button for the top socket and the bottom button for the bottom socket.



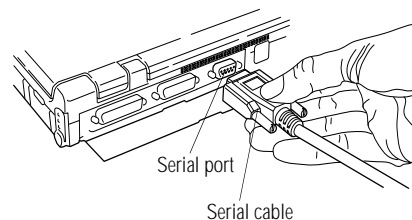
NOTE

For more information about using PC Cards, see "Little Cards that Do Big Things" on page 149.

After you've installed the card, connect the telephone cable from the card to the wall jack.

Connecting an External Modem

To connect an external modem to the computer, follow these steps:



Connecting the cable to the serial port

- 1 Plug one end of the serial cable into the modem and the other end into the computer's serial port.**
- 2 Plug one end of the modem's power cable into the modem and other end into a live wall outlet.**

- 3 Plug one end of the telephone cable into the line out jack on the modem and the other end into the wall jack.**

Make sure you turn the modem's power on before you attempt to use it.

Setting Up the Modem

Before you can use your modem, you must tell Windows 95 the model number of your modem, who manufactured it and which COM port it is connected to. If you don't know which COM port your modem is using, follow the steps in "Determining the COM Port" on page 165 before continuing.

- 1 Click the Start button and point to Settings.**

- 2 Click Control Panel.**

Windows 95 displays the Control Panel.

- 3 Double-click the Add New Hardware icon.**

Windows 95 opens the Add New Hardware Wizard.

- 4 Click Next.**

The Add New Hardware Wizard asks if it should detect the new hardware for you.

- 5 Select No, then click Next.**

The Add New Hardware Wizard displays a menu of different hardware types.

- 6 Select Modem, then click Next.**

The Add New Hardware Wizard asks if it should detect the modem for you.

- 7 Click Next. If it finds a modem, go to step 11.**

- 8 Click Next.**

The Install New Modem window displays a list of manufacturers and their respective model numbers.

- 9 **Select the manufacturer and model number of your modem, then click Next.**
- 10 **Select the port the modem is connected to (typically COM2), then click Next.**
- 11 **Input the location information requested, then click Next.**
- 12 **Click Finish.**

Determining the COM Port

Your modem is connected to one of the computer's COM (communications) ports.



Although the terms are often used interchangeably, the serial port and COM port are really two different things. The serial port is the physical port on the back of the computer. The COM port is a unique identifier the computer uses to communicate with the serial port or other serial devices.

If you're using a Windows 95 communications program, such as HyperTerminal, it determines the COM port automatically. Skip to the following section.

If you are going to install and set up a non-Windows 95 communications program, you must tell it which COM port your modem is using.

To find out which port your modem is connected to, follow these steps:

- 1 **Click the My Computer icon with the secondary button.**
- 2 **Choose Properties.**
Windows 95 displays the System Properties dialog box.
- 3 **Click the Device Manager tab.**

4 Double-click the modem you're checking.

Windows 95 displays a properties dialog box for the modem you selected.

5 Click the Modem tab.

The COM port is listed under Port.

6 Make a note of the port number.

7 Click OK twice to close the System Properties dialog box.

Choosing the Communications Program

The communications program you use depends on what you're planning to do. For example, to access the Internet, you'll need some form of Internet access program. To transfer files from your office network, you'll need a remote access program.

To log on to an online service or the Internet, see "What Do You Need?" on page 174. General-purpose programs are discussed in "Connecting Directly to Another Computer" on page 178.

Connecting to a Telephone Line

You need to connect the modem to a voice-grade telephone line. Normally you do this using a telephone cable and a standard modular phone jack. As the business world becomes more accustomed to busy executives and their portable computing needs, phone jacks are becoming available in more locations. For example, many hotels that cater to business travelers have one or more phone jacks in each room.



If you are using the telephone line at home, disable call waiting before you connect through the modem. Call waiting interrupts transmission.

If you have a modem that is capable of transmitting over the cellular network you can use any cellular line. You need to remain stationary while transmitting data over a cellular phone. Transmitting data while you are moving will cause problems when the cellular network hands off the call to the next cell.

Now that you're set up it's time to communicate. You're ready to send a fax (see the following section) or use the modem to connect to the exciting virtual world of the Internet or an online service (see "The Internet and Other Fascinating Places" on page 168).

Faxing a Document

Sending a fax through your computer's fax/modem is almost as simple as printing a document. All you need is a fax program, such as MS Fax, included with Windows 95.

Windows 95 treats your fax program as if it is another printer. To send a fax:

- 1 Set up your fax/modem, following the steps in "Connecting Your Modem" on page 162.**
- 2 Choose Print Setup from within the program you're using to prepare your document.**
- 3 Select your fax printer driver from the list of available printers.**

If you're using MS Fax, set the printer to MS Fax. For more information about using MS Fax, refer to the MS Fax online Help program.

- 4 Choose Print.**

If you're using MS Fax, it prompts you for a telephone number and gives you the opportunity to attach a standard cover sheet.

Other fax programs will operate in much the same way. If you're using a different fax program, refer to the program's documentation for more information.

- 5 Choose Send to send the fax.**

The Internet and Other Fascinating Places

If you've never used a modem before, you may not be aware of the array of possibilities that await you. There are four basic options. You can:

- ❖ Subscribe to an online service.
- ❖ Explore the vastness of the Internet.
- ❖ Log on to an electronic Bulletin Board Service (BBS).
- ❖ Communicate directly with another computer, such as one owned by a friend or one in your office.

The following sections describe each of these options, discuss some of the factors to consider when choosing which ones to use and provide a brief overview of how to access them.

Online Services

Online services, such as America Online (AOL) and CompuServe, provide easy access to home shopping, travel arrangements, stock quotes, and forums on a wide variety of topics. You can send electronic mail (e-mail) to other subscribers, ask questions on almost any subject, and access a variety of reference materials. Information on most of these services is available through an easy-to-use interface. Most online services also provide full access to the Internet. Information about the Internet is contained in the following section.

Other online services are aimed at a much more specific audience. For example, the Dow Jones Personal Journal delivers an electronic version of the Wall Street Journal, containing only articles that match conditions you set up to suit your interests.

Exploring the World of the Internet



This section contains only a brief overview of the Internet. For more information, look through the books on the Internet that are available at your local book or computer store.

The Internet is a network of computer networks located all around the world. Information available on the Internet is actually contained on one or more of the member networks. The Internet's origins trace back to the ARPANET, a system created by the U.S. Defense Department. The National Science Foundation (NSF) greatly expanded the system, providing researchers at various sites, such as universities, access to one large body of information.

Since then, the Internet has grown like a mutant being in a science fiction film. Its users range from individuals in their homes to large multinational corporations.

An online service, such as CompuServe and AOL, is operated by a governing corporate body. The Internet, on the other hand, is much more random. No governing body controls who may access its resources or what information may be published on it. Every user is free to contribute and participate without restriction. As more users log on, contributing their own personal styles, the Internet continues to change. The open, international nature of the Internet makes it impossible to regulate or control effectively.

Here are some of the things you can do on the Internet:

- ❖ Send and receive electronic mail (e-mail).
- ❖ Join a written conversation in progress with one or more other people.
- ❖ Shop and do your banking.
- ❖ Get computer programs and other information files.

- ❖ Search for information on any topic.
- ❖ Publish your own articles, books and multimedia works.
- ❖ Listen to the radio.
- ❖ Play games with people from around the world.
- ❖ Watch live concerts and interviews.

Types of Internet Sites

Each network that belongs to the Internet is a “site” on the Internet. There are different types of Internet sites:

- ❖ Mail servers store and forward electronic mail (e-mail). In many ways, e-mail is like regular mail, but it can be much faster and more convenient.
- ❖ FTP sites store computer files. You can download files from an FTP site or upload your files to it. For example, many computer companies distribute minor upgrades to their programs through FTP sites.



When you download a file you transfer the file from another computer (or an FTP site) to your computer. Uploading is sending one or more files from your computer to another.

- ❖ Usenet sites maintain newsgroups, lists of messages dedicated to a particular topic. Subscribers to a newsgroup can read and respond to messages posted by others, and post messages of their own.
- ❖ LISTSERV sites administer mailing lists, which are lists of people who are interested in the same topics. Individuals send their message to the centralized LISTSERV site. The LISTSERV server “broadcasts” the message to all the members of the mailing list. This way one person can correspond with lots of people all at once. Mailing lists are different from newsgroups in that you receive all messages automatically.

- ❖ Chat sites allow people to “talk” in real time. Whereas you send your written message to a newsgroup to be read later, in a chat session you type your message and other people in the virtual chat session can respond immediately.
- ❖ Gopher sites provide lists of what is available elsewhere on the Internet. Searching a gopher site is a good way to look for specific information.
- ❖ Telnet sites let you log on to a computer somewhere else in the world and use its resources as if it were on your own local network.
- ❖ A World Wide Web (WWW) site is a place where people can publish their own home pages. Each page has a unique address, in the form of a Universal Resource Locator (URL). You can locate a specific home page by entering its URL or you can click on a hypertext link—indicated by a different color of text or some other obvious means—and jump to the connecting page.

Understanding Internet Addresses

Every Internet user and site has an address. The first type of address is the individual address, used for e-mail. A sample e-mail address is:

user@host.subdomain.domain,

where:

user is the name you select when you first subscribe to your online service or Internet access provider. See “What Do You Need?” on page 174 for information about Internet access providers.

host is the computer on which your Internet account is located.

<i>subdomain</i>	is a local network or computer within the host's system. Many addresses do not include a subdomain.
<i>domain</i>	indicates the type of host. In the United States, there are six domains: com is for commercial hosts gov is for hosts in government institutions edu is for educational institutions mil is for military organizations net is for network and service companies org is for other organizations

The second type of address is the Universal Resource Locator (URL), used to locate specific sites on the Internet. A sample URL is:

http://aaa.bbb.ccc/dir1/dir2/dir3,

where:

<i>http://</i>	is the resource type, indicating that the site is designed in hypertext markup language. HTTP stands for Hypertext Transfer Protocol and indicates a site on the WWW. Other resource types you might see in a URL include Gopher, FTP and Telnet.
<i>aaa.bbb.ccc/</i>	is the address of the actual computer where the information is stored.
<i>dir1/dir2/dir3</i>	is the folder (directory on the host computer) in which the information is located.

Logging On to an Online Service or the Internet

This section gives some tips for logging on to an online service or the Internet.

Choosing What Is Best for You

Deciding which option is best for you may not be easy. Fortunately, you can always change your mind. In making a decision, consider the following:

- ❖ Online services combine an easy-to-use interface and a wide range of useful services with full Internet access. Each online service has a different flavor. Look at advertising material for more than one service to see what each provides. Then decide which service seems most suitable for you.
- ❖ If you don't need the special services offered by an online service, logging directly on to the Internet may be best for you. Because of the enormous size and number of options on the Internet, and the lack of the easy interface of the online services, it can be more difficult for a beginner to find your way around. If possible, ask a knowledgeable friend to help you.

Gaining Access to the Internet

To log directly on to the Internet, you need an access provider. Some access providers, such as NetCom and Pipeline provide service to a large area. Others may serve an area as small as a single county. To find out about Internet access providers in your area, check with your computer store, look in computer magazines and local newspapers, or ask a friend who's already connected.

What Will it Cost?



When you call to sign up to an online service or Internet access provider, make sure you have a credit card handy. Even if your service offers an initial free period, your credit card will be billed for use beyond that time.

When you sign up with an Internet service provider or online service, make sure you understand the costs involved. Most services charge a monthly rate that includes a certain amount of use. An hourly rate applies to additional time online. If you don't have a local telephone access number, long distance call charges also apply.

If your service charges by the hour, make sure you know how long you've been online. It's easy to lose track of time and run up the costs when you're exploring the Internet or an online service.

What Do You Need?

To subscribe to an online service or log on to the Internet directly, you need a suitable communications program. If you intend using:

- ❖ An online service or one of the large Internet access providers, such as NetCom or Pipeline, you need the startup kit for the service. The startup kit includes everything you need to set up your account along with the program you use to access the service. It may be supplied free, as an incentive to use that service, or you may need to buy it.
- ❖ A local Internet access provider, you need one or more third-party commercial programs. Your access provider may supply a collection of shareware programs for accessing the Internet. You may also purchase a separate program, such as Netscape

Navigator, that combines the functions of the entire collection into one consistent interface.



Shareware programs are copyrighted programs that you can try out free of charge. If you decide you like the program, you must send in a small registration fee. Upon registering some shareware programs, you may receive additional benefits, such as a printed manual or free future upgrades.

Etiquette Online

When you use the Internet, it's important to remember that you're dealing with people. You should give other people and "local" customs the same respect online as you would face-to-face.

Keep the following points in mind:

- ❖ If you're unsure about what might or might not be proper behavior, most newsgroups have a list of FAQs (Frequently Asked Questions). There's also a list of general Internet FAQs on the news.announce.newusers newsgroup.
- ❖ If you're still unsure, read the offerings from others before you post something of your own (this is called "lurking"). This way you can get a feel for what's going on without letting anybody know you're there or making a social blunder.
- ❖ Whenever you post something on the Internet, include your name and e-mail address. It's a common courtesy to let others know who they're dealing with, and gives them a chance to respond.
- ❖ Be considerate. Just as nobody likes being insulted face-to-face, it's no fun online either. This isn't to say you can't disagree with anybody on the Internet. A wide variety of differing viewpoints is one of the things that keeps the Internet so vital and alive.

Some Interesting Places to Start

If you're new to the Internet and don't know where to start, this section gives you a few sites you might find interesting.



The Internet is constantly changing. It's possible that some of these sites have changed addresses or disappeared altogether.

Some Interesting WWW Sites

- ❖ Toshiba's home pages are:
 - <http://www.toshiba.com/tais/> (America)
 - <http://www.toshiba.co.jp/> (Japan)
 - <http://www.toshiba.tice.com/> (Europe)
- ❖ <http://river.ihs.gov/> has some great information and pictures about Grand Canyon river running.
- ❖ <http://snow.water.ca.gov/> gives information about the California snow pack
- ❖ <http://www.irs.ustreas.gov/prod/cover.html> is the site operated by the U.S. Internal Revenue Service.
- ❖ <http://nwsfo.atmos.albany.edu/www/otherwx.html> provides a complete list of WWW sites dedicated to weather information and forecasts.
- ❖ <http://www.epicurious.com/> presents a delicious array of recipes and information on food and drink.

A Few Newsgroups

- ❖ alt.comedy.british is for fans of British humor.
- ❖ alt.sports.badminton lets you keep current with information about badminton.
- ❖ news.newusers.questions is dedicated to information for new users of the Internet.

- ❖ rec.backcountry contains information about outdoor activities, such as backpacking and camping.
- ❖ sci.anthropology provides discussions on anthropology.

Additional Places of Interest

- ❖ president@whitehouse.gov is the e-mail address of the U.S. President.
- ❖ marvel.loc.gov is the gopher for the Library of Congress.

Using Bulletin Board Services

Local electronic bulletin board services (BBSs), like their mundane counterpart hanging on your wall, let you post messages for friends, or questions to which a wide variety of people can respond. Many BBSs also offer software (programs) that you can copy to your computer (called downloading).

Most BBSs serve a particular interest group and are run by an individual or small group of people. For example, a science fiction BBS may have messages from people looking for out-of-print books and offer a few sample sections of new works.

Most computer companies offer a BBS as one way to provide customers with software updates and answers to their questions. Toshiba's 24-hour BBS offers Toshiba computing information and is a good source of Toshiba utilities files and technical bulletins. Complete information about accessing Toshiba's BBS is found in "Toshiba's Bulletin Board Service" on page 281.

To access a BBS, you'll need a general-purpose communications program. See the following section for information about using such programs.

Connecting Directly to Another Computer

If you're connecting directly to another computer, you'll need a general-purpose communications program, such as the HyperTerminal program included with Windows 95. This section describes some of the things you'll need to know to connect to another computer, but does not contain specific instructions for any communications programs. Refer to HyperTerminal's Help for information about using HyperTerminal.

There are two things you need to know before you can connect to another computer:

- ❖ The communications parameters
- ❖ The file transfer protocol (if you're downloading or uploading files)

The following sections explain what these mean.

Communications Parameters

There are four communications parameters:

- ❖ Modem speed is the speed at which the modem transfers information. Speeds are measured in bits per second. Your modem manual documents the speed of your modem.
- ❖ Data bits is the number of bits in one character. This number is usually seven or eight.
- ❖ Stop bits indicate the end of a character. This number is usually one or two.
- ❖ Parity is an error-checking method and will be set to even, odd or none.

These parameters, except for the modem speed, are usually abbreviated and combined. Common examples are N81 (no parity, eight data bits and one stop bit) and E72 (even parity, seven data bits and 2 stop bits).

You set each of these in your communications program. Each parameter must be set the same on both computers or you won't be able to connect.

File Transfer Protocols

File transfer protocols are standards that govern how computers transfer files between modems over a telephone line. Protocols determine what type of error checking and data compression, if any, occur during transfer. Based on a number of factors, some protocols are faster than others. Popular protocols include XMODEM (one of the earliest and still one of the most reliable protocols) and ZMODEM (about the fastest available these days).

You don't really need to know anything about specific protocols—just make sure you're using the same protocol as the computer with which you're communicating. If you would like to know more, protocols are described in any book on telecommunications, available at your local book or computer store.

Discovering Toshiba's Online Resources

Toshiba maintains a number of online sites to which you can connect. These sites can provide information about Toshiba products, help with technical questions and keep you up to date with future upgrades.

- ❖ On CompuServe, type go toshiba
- ❖ On the Microsoft Network, type go toshiba
- ❖ On the Internet World Wide Web, type <http://www.toshiba.com/tais/>
- ❖ To access Toshiba's BBS, set your modem to N81 and call either 714-837-4408 or 714-837-4409

Using Your Computer on Your Desktop

Your Portégé 620CT computer was designed to be easy to carry around and use while you travel. However, it's also powerful enough to use as your primary desktop computer.

This chapter describes how to connect several optional devices that can make your Portégé 620CT computer at home on your desk.

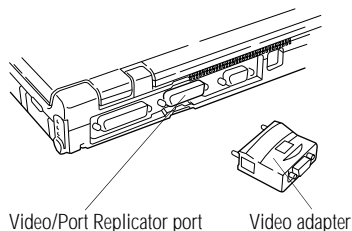
Using an External Monitor

You can easily attach an external monitor to your computer. External monitors that support video modes greater than 600 x 800 resolution can display more information than the computer's built-in screen. Also, having an external monitor makes the entire display bigger.

Connecting an External Monitor

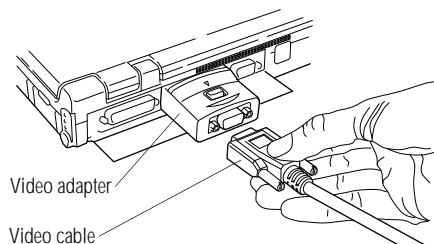
To connect an external monitor, follow these steps:

1 Turn the computer off.



Connecting the video adapter

2 Connect the video adapter that came with your computer to the 72-pin video/Port Replicator port on the back of the computer.



Connecting the video cable

3 Connect the monitor's video cable to the video adapter.

4 Turn the external monitor on.

5 Turn the computer on.

The computer uses the external monitor.

If your external monitor can display high-resolution video modes (greater than 600 x 800), you can take advantage of this feature by changing the video mode. To do this, see "Changing the Display Mode" on page 224.

Directing the Display when You Turn the Computer On

When you turn the computer on, it sends information to the external monitor. To send information to the built-in display as well, you'll need to change the Power On Display option in Hardware Setup or TSETUP. The Power On Display option has two settings:

- ❖ **Internal/External** sends the display to the external monitor. If no external monitor is attached, it sends information to the computer's built-in display. (This is the default.)
- ❖ **Simultaneous** sends display output to both the external monitor and the built-in display. This is especially useful if you're making a presentation and wish to guide the discussion from your notebook.



NOTE

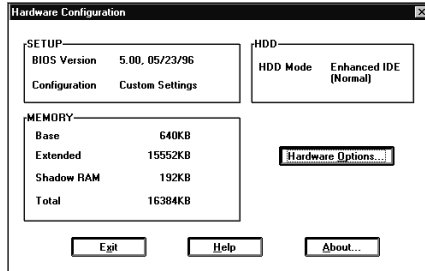
Simultaneous mode won't work if your external monitor can't display resolutions higher than 640 x 480.

This section explains how to change the Power On Display option using Hardware Setup. To change this option using TSETUP, see "TSETUP" on page 323.

The Hardware Setup program lets you set configuration options in Windows 95. To set the Power On Display option in Windows 95, follow these steps:

- 1 Click Start, then point to Programs.**
- 2 Point to Toshiba Utilities, then click Hardware Setup.**

Hardware Setup displays the Hardware Configuration dialog box.

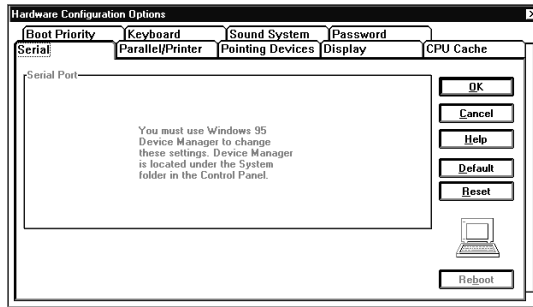


The Hardware Configuration dialog box

This box contains information about the system.

3 Click Hardware Options.

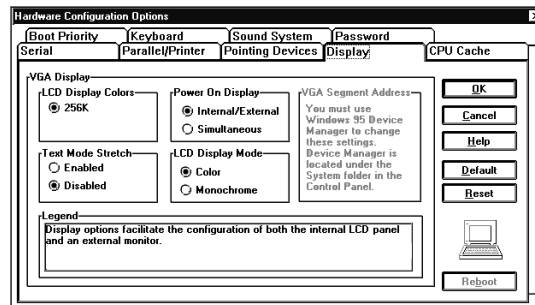
Hardware Setup displays the Hardware Configuration Options dialog box.



The Hardware Configuration Options dialog box

4 Click the Display tab.

Hardware Setup displays a page of display options.



The Display page

5 Click the circle to the left of the desired Power On Display setting.

6 Click OK.

Hardware Setup displays a dialog box that asks if you want to reboot (restart) the computer.

7 Click Yes or No:

- ❖ Yes restarts the computer immediately with your changes in effect.
- ❖ No allows you to save open files. After you save, restart the computer pushing the reset button to ensure your changes take effect.

Your changes will not take effect until you restart the computer.

Using an External Keyboard

If you prefer to use a standard desktop keyboard, you can attach one to your computer through the optional Port Replicator. The Port Replicator's keyboard port supports any PS/2-compatible keyboard.

Connecting the Keyboard

To connect an external keyboard, follow these steps:

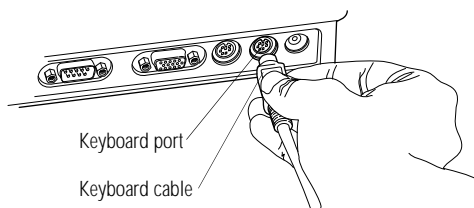
- 1 **Follow the steps in “Connecting the Computer to the Port Replicator” on page 192 to attach your computer to the Port Replicator.**
- 2 **Press Alt + F3.**
- 3 **If Resume Mode is on, press F3 again to turn Resume Mode off.**

If you connect a keyboard while the computer is in Resume Mode, the computer will not recognize the keyboard.

- 4 **Turn the computer off.**



Make sure the computer is off before you attach the keyboard. Connecting a keyboard with the computer's power on may damage the keyboard, the computer or both.



Connecting an external keyboard

- 5 **Attach the keyboard cable to the keyboard port on the back of the Port Replicator.**

- 6 See the keyboard's documentation for additional configuration steps.
- 7 Turn the computer on.

Making Your External Keyboard Pretend it Has the Fn Key

An external keyboard doesn't have the Fn key provided by the Portégé 620CT built-in keyboard. If you use the computer's hot-keys or have set up key combinations in Fn-esse, you'll probably miss these features when using an external keyboard. Don't worry: with the Fn Key Emulation option in Hardware Setup or TSETUP, you can make your external keyboard act as if it had a Fn key of its own.

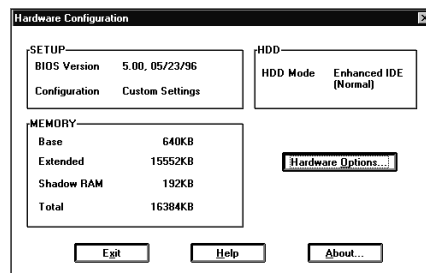
For more information about Fn-esse, see "Starting Programs Faster" on page 209.

To find out how to set the Fn Key Emulation option using TSETUP, see "TSETUP" on page 323.

To set the Fn Key Emulation option in Hardware Setup, follow these steps:

- 1 Click Start, then point to Programs.
- 2 Point to Toshiba Utilities, then click Hardware Setup.

Hardware Setup displays the Hardware Configuration dialog box.

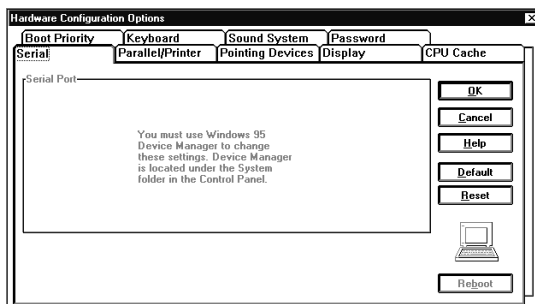


The Hardware Configuration dialog box

This box displays information about the system.

3 Click Hardware Options.

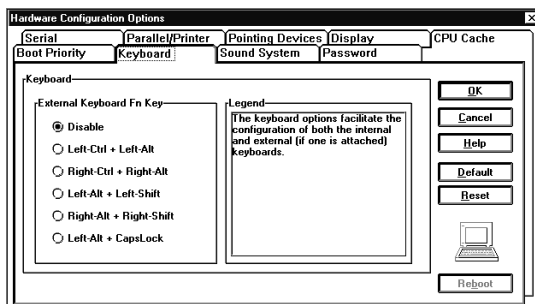
Hardware Setup displays the Hardware Configuration Options dialog box.



The Hardware Configuration Options dialog box

4 Click the Keyboard tab.

Hardware Setup displays a page with the External Keyboard Fn Key option.



The Keyboard page

5 Click the circle to the left of the desired External Keyboard Fn Key setting.

6 Choose OK to close Hardware Setup with your setting in effect.

Using a Serial Mouse

You may want to use a mouse instead of the AccuPoint. If you do, make sure you buy a serial mouse. You may use a PS/2 mouse if you're using an optional Port Replicator. See "Using the Port Replicator" on page 191 for more information.

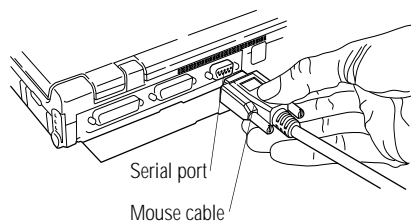
If you connect a serial mouse, the AccuPoint is disabled.

To connect a serial mouse, follow these steps:

1 Turn the computer off.



Only connect a serial mouse when the computer is off. Connecting a serial mouse with the computer on may damage the mouse, the computer or both.



Connecting the cable to the serial port

2 Plug the mouse cable into the computer's serial port.

3 Turn the computer on.

The mouse is ready to use.



Your computer comes with mouse/AccuPoint drivers pre-installed. If you have purchased another type of pointing device, such as a mouse, the pre-installed drivers may not work properly with the new device. Also, the drivers included with the mouse may not work properly with the AccuPoint. If a conflict occurs between two pointing devices and their drivers, follow the instructions in "If You Need Further Assistance" on page 279 to contact Toshiba Product Support.

Before you use the serial mouse for the first time, you will need to complete the following steps:

1 Click Start and point to Settings.

2 Click Control Panel.

Windows 95 displays the Control Panel.

3 Double-click Add New Hardware.

Windows 95 starts the Add New Hardware Wizard.

4 Click Next.

The Add New Hardware Wizard asks if it should search for new hardware.

5 Select No, then click Next.

The Add New Hardware Wizard prompts you to choose a hardware type.

6 Select Mouse, then click Next.

The Add New Hardware Wizard prompts you to choose your mouse.

7 Select your mouse from the list provided and click Next.

Typically, you'll select Standard Serial Mouse.

8 Click Finish, then Yes to load the new settings.

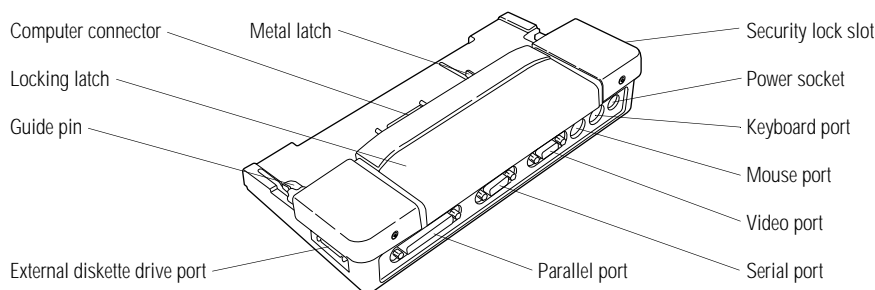
Using the Port Replicator

The computer's 72-pin video/Port Replicator port allows you to connect your Portégé 620CT computer to an optional Port Replicator. The Port Replicator is an excellent investment if you're using your computer both in and out of the office.

Imagine that you're a salesperson who frequently works away from the office. When you return to your desk, you want to be able to print reports from your computer, and use a mouse instead of the AccuPoint. Connecting cables for each of these devices every time you return to the office is time-consuming and inconvenient.

By connecting external devices to the Port Replicator instead of directly to your computer, you can leave the devices connected while you are using your computer away from your desk. When you return, you can quickly connect your computer to the Port Replicator and have immediate access to the devices.

Port Replicator Features



The ports of the Port Replicator

The above illustration identifies the various Port Replicator features:

The **computer connector** connects to the 72-pin video/Port Replicator port on the back of your computer.

The **locking latch** and **metal latches** secure the computer to the Port Replicator.

The **guide pins** help align the computer with the Port Replicator, ensuring a proper connection.



Use the **external diskette drive port** to connect the external diskette drive.



Use the **security lock slot** to attach a security cable to the Port Replicator. This cable is discussed in “Applying Physical Restraints” on page 205.



Use the **power socket** to connect the Port Replicator to AC power, using a power cord and AC adapter.



Use the **keyboard port** to connect a PS/2 keyboard.



Use the **mouse port** to connect a PS/2-compatible pointing device.



Use the **video port** to connect an external monitor. This port replaces the computer’s video port.



Use the **serial port** to connect a serial device, such as a serial printer. This port replaces the computer’s serial port.

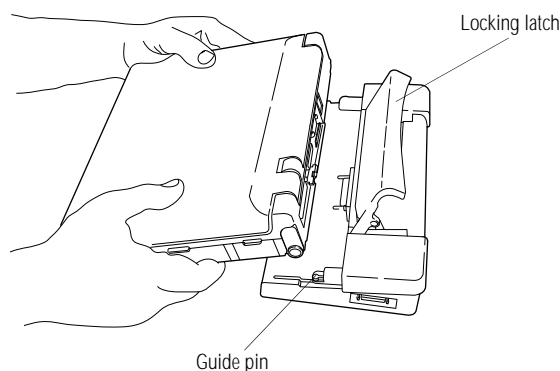


Use the **parallel port** to connect a parallel printer or other parallel device. This port replaces the computer’s parallel port.

Connecting the Computer to the Port Replicator

To attach the computer to the Port Replicator, follow these steps:

- 1 **Turn the computer off.**
- 2 **Detach the external diskette drive, if it is connected.**
- 3 **Remove all cables from the back of the computer.**



Attaching the computer to the Port Replicator

- 4 Open the computer's port cover and slide it into the slot at the lower edge of the computer.**
- 5 Lift the locking latch on the Port Replicator.**
- 6 Align the two notches on the bottom of the computer with the guide pins on the Port Replicator.**
- 7 Slide the computer onto the Port Replicator.**
- 8 Gently press the locking latch down to secure the computer to the Port Replicator.**
- 9 Attach the AC adapter to the Port Replicator's power socket.**
- 10 Connect the power cord to the AC adapter and then to the wall socket.**

To disconnect the computer from the Port Replicator, turn the computer's power off, lift the locking latch and remove the computer.

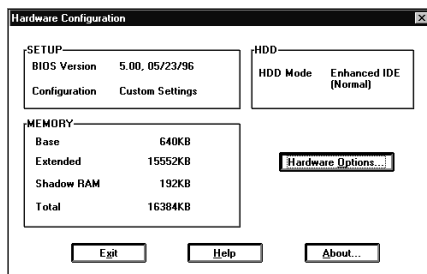
Using a PS/2 Mouse

The Port Replicator has a port for a PS/2 mouse. If you connect a mouse to this port, you may use the mouse, the AccuPoint or both.

To set how the PS/2 mouse works with the AccuPoint, follow these steps:

- 1 Click Start, then point to Programs.
- 2 Point to Toshiba Utilities, then click Hardware Setup.

Hardware Setup displays the Hardware Configuration dialog box.

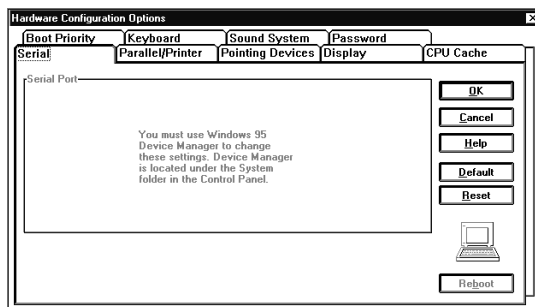


The Hardware Configuration dialog box

This box contains information about the system.

- 3 Choose Hardware Options.

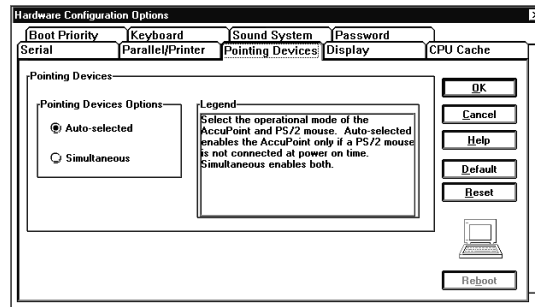
Hardware Setup displays the Hardware Configuration Options dialog box.



The Hardware Configuration Options dialog box

4 Click the Pointing Devices tab.

Hardware Setup displays a page of pointing device options.



The Pointing Devices page

5 Choose the desired option.

Auto-selected checks for a PS/2 mouse. If one is connected, Hardware Setup makes the mouse active and disables the AccuPoint. If no PS/2 mouse is connected, the AccuPoint is active.

Simultaneous lets you use both the AccuPoint and the PS/2 mouse.

6 Click OK.

Hardware Setup displays a dialog box asking if you want to reboot (restart) the computer.

7 Choose:

- ❖ Yes to restart the computer immediately with your changes in effect.
- ❖ No allows you to save open files. After you save, restart the computer pushing the reset button to ensure your changes take effect.

Your changes will not take effect until you restart the computer.

Keeping Your Files Safe

At some time, you'll almost certainly have files on your computer that you want to keep private. Your Portégé 620CT computer comes with several options that can help you keep your computer and files safe from unwanted intrusion.

This chapter describes the security options for your Portégé 620CT notebook computer.

Using a Password

Setting a password lets you leave your computer, secure in the knowledge that nobody can access your files. When you set a password, you must enter the password before you can work on your computer again.

Toshiba supports two types of passwords on the Portégé 620CT computer:

- ❖ A power-on password requires you to enter the password every time you start or restart the computer.
- ❖ An instant password lets you get up and walk away from your computer for a few moments without having to turn the computer off.

Creating a Password

You may create a password in either Hardware Setup or TSETUP. This section describes how to create a user-level password in Hardware Setup and how to use it as an instant and power-on password. For more information about TSETUP, see “TSETUP” on page 323.

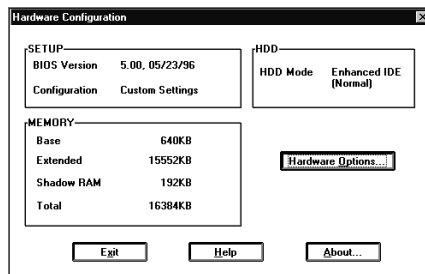


When you register a password in Hardware Setup you cannot create a password service diskette. If you forget your password, you must contact Toshiba (US telephone number 800-999-4273) before you can start your computer again. To register a password and create a password service diskette, follow the steps in “Protecting Against Forgetfulness” on page 200 to use TSETUP.

To create (register) a password in Hardware Setup, follow these steps:

- 1 Click Start, then point to Programs.**
- 2 Point to Toshiba Utilities, then click Hardware Setup.**

Hardware Setup displays the Hardware Configuration dialog box.

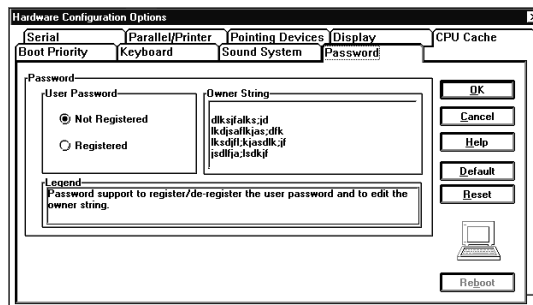


The Hardware Configuration dialog box

3 Click Hardware Options.

Hardware Setup opens the Hardware Configuration Options dialog box.

4 Click the Password tab to access the Password page.



The Password page

5 Click Registered.

Hardware Setup asks you to enter a password.

6 Type a password of one to 16 characters and press Enter.

You may use any combination of letters and numbers in your password.

7 When Hardware Setup prompts you to do so, verify the password by typing it again and pressing Enter.

If the two passwords match, Hardware Setup displays:
Registered.

If the two passwords don't match, Hardware Setup displays an error message. Repeat steps 6 and 7 to enter the password again.

8 If you would like, you may also enter an Owner String.

The Owner String will appear with the password message any time you start or restart the computer.

9 Continue with the next section to create a password service diskette.

Protecting Against Forgetfulness

If you ever forget your password, a password service diskette lets you bypass the password when starting your computer. You create a password service diskette in TSETUP.



If you forget your password and have lost your password service diskette, contact Toshiba service (US telephone number 800-999-4273).

To create a password in TSETUP and create a password service diskette, follow these steps:

- 1 Make sure you've attached the external diskette drive.**
- 2 Insert a diskette into the diskette drive.**



Run TSETUP outside of Windows 95, at a system prompt. If you try to run TSETUP from an MS-DOS session under Windows 95, results can be unpredictable.

3 Click Start, then click Shut Down.

Windows 95 displays the Shut Down Windows dialog box.

4 Click the button next to Restart the computer in MS-DOS mode, then click Yes.

Windows 95 shuts down the computer, then restarts it in MS-DOS mode and displays a system prompt.

5 Type c:\dos\setup.

TSETUP displays a screen similar to the following:

```

                                SYSTEM SETUP                                BIOS version = x.xx
----- MEMORY -----
Total           = 8192KB
Base           = 640KB
Extended       = 7360KB
Shadow BIOS ROM = 192KB

----- DISPLAY -----
Display Adaptor = VGA compatible
LCD Display Mode = Color
VGA Segment Address = E000H
LCD Display Colors = 256K Colors
Power On Display = Internal/External
Text Mode Stretch = Disabled

----- HARD DISK -----
HDD Mode       = Enhanced IDE (Normal)

----- I/O PORTS -----
Serial Port    = COM1 (IRQ4/3F8H)
Parallel Port  = LPT1 (378H)
Sound System   = Address/IRQ/DMA

----- PASSWORD -----
Not Registered

----- OTHERS -----
Power-up Mode   = Resume
CPU Cache      = Enabled
Battery Save Mode = Full Power
Alarm Volume    = High
System Beep     = Enabled
Panel Power On/Off = Disabled
Alarm Power On  = Disabled
Keyboard        = Fn
Pointing Devices = Auto-Selected
Boot Priority    = FDD -> HDD

↑←→:Select items      Space, Bksp : Change values
Esc: Exit without saving  Home: Set default values      End: Save changes and Exit
    
```

A sample TSETUP screen

6 Press P to move to the PASSWORD section of the screen.

7 Press the spacebar.

TSETUP asks you to enter a new password.

8 Type a password of one to 16 characters and press Enter.

You may use any combination of letters and numbers in your password.

9 When TSETUP prompts you to do so, verify the password by typing it again and pressing Enter.

If the two passwords match, TSETUP displays: Registered.

If the two passwords don't match TSETUP displays an error message. Repeat steps 8 and 9 to enter the password again.

10 Press End to save your change and close TSETUP.

TSETUP asks you to confirm your choice.

11 Press Y to confirm you want to quit.



The computer overwrites all existing information on the password service diskette. Make sure the diskette you use does not contain any important information.

TSETUP prompts you to select the type of diskette you inserted.

12 Press 2 if you're using a 1.44MB diskette or press 1 if you're using a 720KB diskette.

TSETUP creates the password service diskette and displays a message when it's finished.

13 Remove the diskette and press any key to continue.

TSETUP closes, returning you to the system prompt. The next time you start the computer your password will be in effect.

14 Place your password service diskette in a safe place, away from the computer.



Do not use your password service diskette for any other purpose. If you try to access the diskette, you'll receive an error message, and will have to reset your password and create a new password service diskette.

Power-On Password

Whenever you start or restart your computer with a power-on password in effect, the computer prompts you to enter the password before it goes through its normal startup procedure. The power-on password operates whether or not the computer is operating in Resume Mode.

When your computer prompts you to enter your password, type it in and press Enter. If you enter the password correctly, the computer continues with its normal startup procedure. If you enter an incorrect password, the computer beeps. After three incorrect attempts, the system turns off automatically.

If you've forgotten your password, follow these steps:

- 1 Make sure you've attached the external diskette drive.**
- 2 Turn the computer on with Resume Mode turned off.**

The system prompts you for your password.

- 3 Insert the password service diskette into the diskette drive and press Enter.**

The system prompts you, "Set Password Again (Y/N)?"



The password service diskette is not reusable. Once you use it, you must create a new diskette, even if you set the same password.

- 4 To enter TSETUP and reset your password, press Y. Follow the instructions in "Creating a Password" on page 198 to reset your password.**

To remove your password, press N. It will no longer be registered.

Instant Password

An instant password secures your system with a single keystroke. Use this feature when you need to leave your desk for a few minutes and don't want to turn the computer off.

To use an instant password, press Fn + F1. Pressing this hotkey freezes the keyboard and AccuPoint and blanks the screen. An instant password has no effect on an optional serial mouse or trackball.

If you have not registered a power-on password, press Enter to unlock your system.

If you have registered a power-on password, follow these steps to unlock your system:

- 1 **Press** Enter.
- 2 **Enter your password and press** Enter.

If you enter the password correctly, the computer returns to where it was when you pressed the hotkey.

Disabling a Password

To disable your password, follow these steps:

- 1 **Click Start, then point to Programs.**
- 2 **Point to Toshiba Utilities, then click Hardware Setup.**

Hardware Setup displays the Hardware Configuration dialog box.

- 3 **Click Hardware Options.**

Hardware Setup opens the Hardware Configuration Options dialog box.

- 4 **Click the Password tab to access the Password page.**
- 5 **Click Not Registered.**

Hardware Setup asks you to enter the current password.

6 Type the existing password and press Enter.

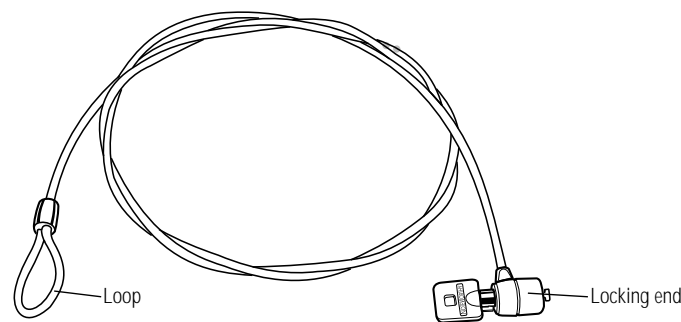
If you entered the correct password, Hardware Setup displays Not Registered.

If you entered an incorrect password, Setup displays an error message. Repeat steps 5 and 6 to enter the password again.

If you enter an incorrect password three times, Hardware Setup displays an Access Denied message indicating that you cannot change the password. The password remains registered.

7 Click OK to restart the computer with the password disabled.

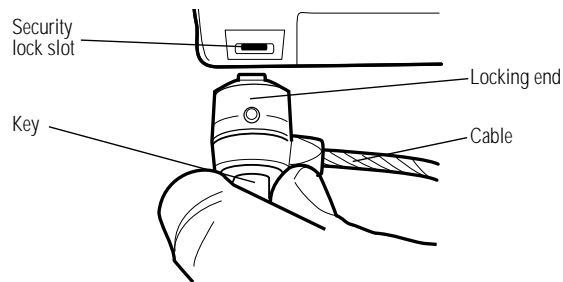
Applying Physical Restraints



Noteworthy Computer Lock

You can connect the optional Noteworthy Computer Lock cable to deter theft. Follow these steps:

- 1 Wrap the cable around the leg of your desk or other heavy object.**
- 2 Pass the locking end through the loop.**



Inserting the locking end into the security lock slot

- 3 Insert the cable's locking end into the security lock slot on the left side of the computer.**
- 4 Turn the key a quarter turn and remove.**

The computer is securely locked.

If you're using an optional Port Replicator, you'll want to purchase two of these cables: one for the computer and another for the Port Replicator.

Viruses and How to Cure Them

Over the last few years, there have been a number of computer virus scares. Immoral pranksters seem to enjoy unleashing these potentially destructive programs on the general public.

Viruses, while a potential problem, need not have a devastating effect on your computer. By taking a few simple precautions, you can avoid infection. And, by making sure you have a complete backup of all your programs and data files, you can ensure a speedy recovery if you do run into problems.

There are many virus detection/removal programs available. Ask your dealer for help in selecting one that adequately meets your needs.

Making Life Easier

Your Portégé 620CT computer is already a computing powerhouse that can run all your business programs and work for hours away from an external power source. By adding extras and using the additional built-in features of your computer, you can make your life even easier.

This chapter discusses some convenient options that are available on your computer.

Starting Programs Faster

Normally, when you have a Windows program open and want to open a different program, you need to click the Start button, point to Programs, then click the appropriate icon. Toshiba's Fn-esse program provides a quick way to open programs and documents within any Windows program.

By assigning a key combination with the Fn key, you can:

- ❖ open a Windows program or document from a different Windows program.
- ❖ display a pop-up list of Windows programs and/or documents from which to choose.
- ❖ switch between open programs and documents.

You can assign any key that is not associated with a hotkey or a keyboard overlay. This section explains how to assign your Fn key combinations and use them to open programs and documents quickly.

Starting Fn-esse

To start Fn-esse, follow these steps:

- 1 Click Start, then point to Programs.**
- 2 Point to Toshiba Utilities, then click Fn-esse.**

Fn-esse displays the Fn-esse window.



The Fn-esse window

The keys are color coded as follows:

- ❖ available keys are black
- ❖ assigned keys are highlighted
- ❖ unavailable keys are dark gray
- ❖ keys associated with a pop-up list have a small dot on the upper left corner of the key

Assigning a Key to a Program or Document

There are three ways to assign a key to open a program or document:

- ❖ drag-and-drop
- ❖ the Fn-esse Browser dialog box
- ❖ the Application Explorer dialog box

The following sections describe each of these methods. Experiment with each to find the one that best suits your tastes.

Using Drag-and-Drop

To use the drag-and-drop method of assigning a key to a program or document, follow these steps:

- 1 Open both Fn-esse and the Windows Explorer.**
- 2 Resize the Explorer window so you can see both the Fn-esse keyboard and the Explorer at the same time.**

If you're unsure how to do this, refer to "Lesson 6: Resizing and Reshaping Windows" on page 57.

- 3 In Explorer, highlight the program or document file you wish to assign to a key.**
- 4 Click and hold the primary button as you drag the highlighted item from the Explorer to the key on the Fn-esse keyboard to which you wish to assign it.**
- 5 Release the primary button.**

Fn-esse displays the Add/Edit Command dialog box completely filled in to reflect the selected program or document.

- 6 Choose OK to close the Add/Edit Command dialog box with your key assignment in place.**

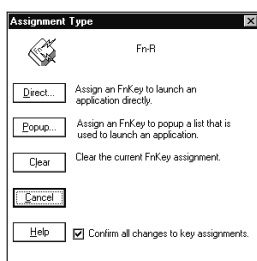
The program or document is now associated with the key you just selected. To open the program or document, press Fn plus the appropriate key from within any Windows program.

Using the Fn-esse Browser Dialog Box

To use the Fn-esse Browser dialog box to assign a key to a program or document, follow these steps:

- 1 Click the desired key in the Fn-esse keyboard with the secondary button.

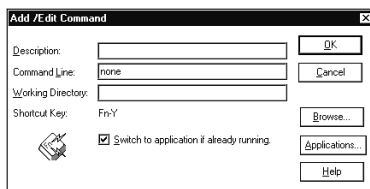
Fn-esse displays the Assignment Type dialog box.



The Assignment Type dialog box

- 2 Choose Direct.

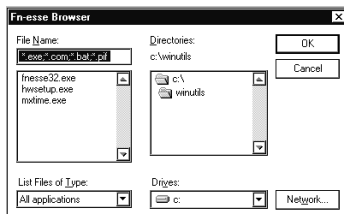
Fn-esse displays the Add/Edit Command dialog box.



The Add/Edit Command dialog box

- 3 Choose Browse.

Fn-esse displays the Fn-esse Browser dialog box.



The Fn-esse Browser dialog box

4 Locate your file. You may narrow down your search with the List Files of Type list box.

5 In the File Name field, highlight the file you wish to assign to the key and choose OK.

Fn-esse displays the Add/Edit Command dialog box completely filled in to reflect your choice.

6 Choose OK to save your key assignment and exit the dialog box.

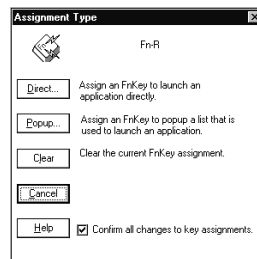
The program or document is now associated with the key you just selected. To open the program or document, press Fn plus the appropriate key from within any Windows program.

Using the Application Explorer Dialog Box

To use the Application Explorer dialog box to assign a key to a program or document, follow these steps:

1 Click the desired key in the Fn-esse keyboard with the secondary button.

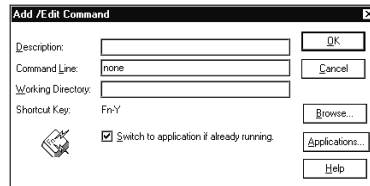
Fn-esse displays the Assignment Type dialog box.



The Assignment Type dialog box

2 Choose Direct.

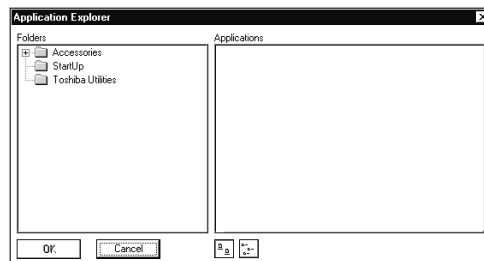
Fn-esse displays the Add/Edit Command dialog box.



The Add/Edit Command dialog box

3 Choose Applications.

Fn-esse displays the Application Explorer dialog box.



The Application Explorer dialog box

4 Select the desired program folder.

5 Select the desired program or document and choose OK.

6 Fn-esse displays the Add/Edit Command dialog box again with everything filled in to reflect your choice.

7 Choose OK.

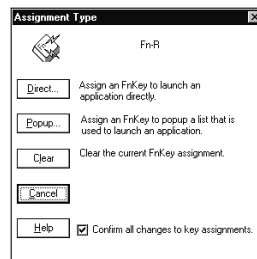
The program or document is now associated with the key you just selected. To open the program or document, press Fn plus the appropriate key from within any Windows program.

Defining a Pop-up Key Assignment

To assign a key to open a program or document from a pop-up list, follow these steps:

- 1 **Click the desired key in the Fn-esse keyboard with the secondary button.**

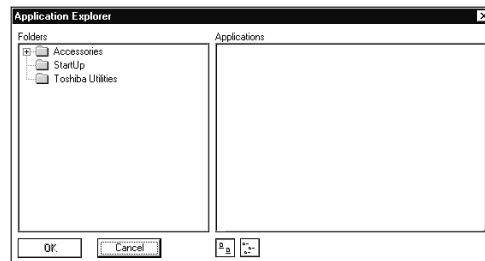
Fn-esse displays the Assignment Type dialog box.



The Assignment Type dialog box

- 2 **Choose Popup.**

Fn-esse displays the Application Explorer dialog box.



The Application Explorer dialog box

- 3 **Select the desired folder.**

The left side of the Application Explorer displays the folders in the Programs menu. The right side lists the programs and documents in the folder. These are the items that will appear in the pop-up list.

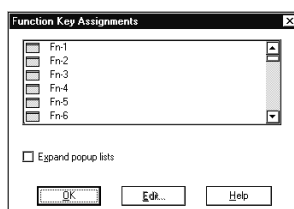
To create a pop-up list with specific items from various folders, or to pick only a few items from a folder, create a new folder containing only the desired programs and documents. If you're unsure how to do this, refer to your Windows 95 documentation.

4 Choose OK.

The folder is now associated with the key you just selected. To open a pop-up list showing the items in that folder, press Fn plus the appropriate key from within any Windows program.

Viewing Existing Key Assignments

To view the existing key assignments, choose Assignments from the Fn-esse keyboard. Fn-esse displays the Function Key Assignments dialog box.



The Function Key Assignments dialog box

This box lists all the key assignments and the program or document to which they're assigned. To view items in a pop-up list, select the Expand pop-up lists check box.

The buttons at the bottom of the dialog box operate as follows:

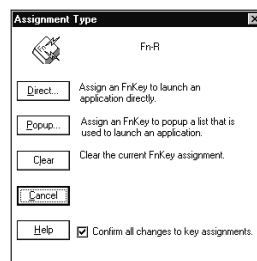
- ❖ OK exits the dialog box.
- ❖ Edit opens the Assignment Type dialog box, allowing you to change a key assignment.
- ❖ Help displays context-sensitive online help.

Changing or Removing Existing Key Assignments

To change or remove an existing key assignment, follow these steps:

- 1 In the Fn-esse keyboard, click the key you wish to change with the secondary button.**

Fn-esse displays the Assignment Type dialog box.



The Assignment Type dialog box

- 2 To change the key assignment, choose Direct or Popup and continue as if you were creating a new assignment.**

To remove the key assignment, choose Clear.

Options

This section describes additional Fn-esse options. All of these are accessed through the Fn-esse Options menu.

Setting Colors

Choosing Colors opens an additional menu with the following choices:

- ❖ Assigned Keys sets the color for the assigned keys.
- ❖ Mark Popups sets the color for the dot indicating a key assigned to a pop-up list.
- ❖ Hints sets the background color for pop-up hints.

Keeping Fn-esse On Top

Choosing (checking) Always on Top keeps the Fn-esse keyboard on top of your currently active window.

Marking Pop-ups

Choosing (checking) Mark Popups marks keys assigned to pop-up lists with a small dot on the Fn-esse keyboard.

Automatically Minimizing the Fn-esse Window

Choose (check) Minimize on Use to minimize the Fn-esse window automatically when you use it to open or switch to a program or document.

Displaying Hints

Pop-up hints appear on the Fn-esse keyboard whenever you move the pointer slowly over the keys. Hints show you what program, group or document is associated with a particular key.

If a key is unassigned, the hint reads “~NONE~.”

Choosing Hints from the Options menu turns pop-up hints on and off.

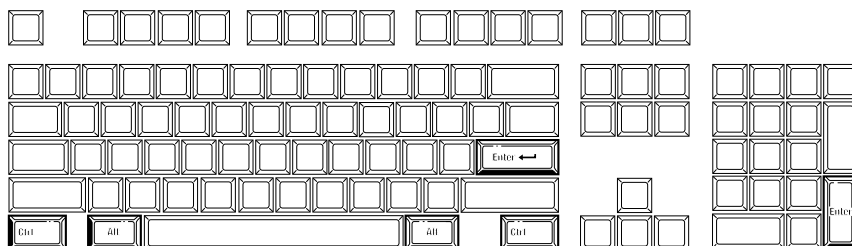
Confirming Key Assignment Changes

If you choose Confirm Changes from the Options menu, Fn-esse asks you to confirm changes in existing key assignments.

Working with the Keyboard

This section introduces additional keyboard options.

Making Your Keyboard Pretend it Has More Keys



The IBM 101-key enhanced keyboard

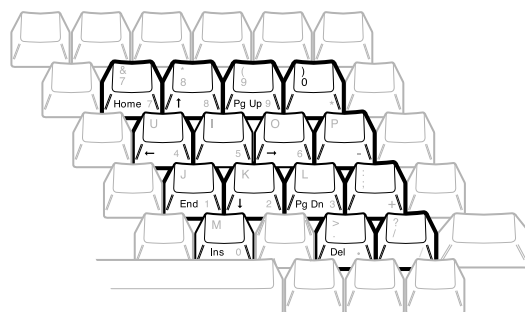
The 101-key enhanced keyboard, shown above, has two Enter, Ctrl and Alt keys. The Portégé 620CT keyboard has only one of each.

Most of the time there's no difference between the two keys. However, some programs assign separate functions to the right and left Ctrl and Alt keys, or to the regular and numeric pad Enter keys on the enhanced keyboard. The Fn key allows the Portégé 620CT keyboard to simulate these separate keys, as follows:

- ❖ Press Fn + Ctrl to simulate the Ctrl key on the right side of the enhanced keyboard.
- ❖ Press Fn + Alt to simulate the Alt key on the right side of the enhanced keyboard.
- ❖ Press Fn + Enter to simulate the Enter key on the numeric pad of the enhanced keyboard.

The Cursor Control Overlay

The keys with the white arrows and symbols on the left front are the cursor control overlay. This illustration highlights the keys in the cursor control overlay:



The cursor control overlay

You can use these keys to:

- ❖ move the cursor up, down, left and right on the screen.
- ❖ move up or down one page.
- ❖ move to the beginning or end of a document.
- ❖ delete or insert characters.

How these keys function may vary with the program you're using. Check your program's documentation for information on how the cursor keys function.

To turn the cursor control overlay on and off, press Fn + F10. The cursor control light on the indicator panel shows whether the cursor control overlay is on or off.

You can use the overlaid keys to type alphabetic characters while the overlay is on. To do this:

- ❖ for lower-case letters, press and hold Fn while you type the letters
- ❖ for upper-case letters, press Fn + Shift while you type the letters

To use the numeric keys when the cursor control overlay is on, press and hold Shift while you use the overlay keys. To return to the cursor control overlay, release Fn.

Using Device Manager to Configure Your System

The Windows 95 Device Manager lets you set up many of the individual components of your system. You'll need to use it if, for example, you want to change the COM port name assigned to the serial port or the range of memory reserved for the display adapter. This section gives a brief overview of how to use Device Manager.

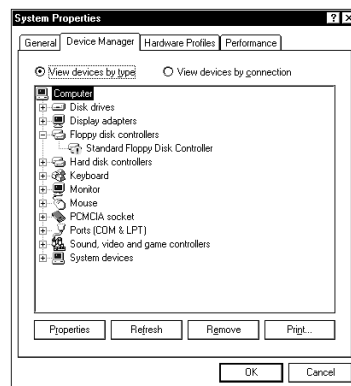
To change a component's setting in Device Manager, follow these steps:

- 1 Click the My Computer icon with the secondary button, then click Properties.**

Windows 95 opens the System Properties dialog box.

- 2 Click the Device Manager tab.**

The System Properties dialog box moves to the Device Manager page.



The Device Manager

This page lists all of the components of the system you can change through Device Manager.

3 Double-click the type of device you want to modify.

For example, if you want to modify the serial port settings, double-click Ports.

Device Manager extends the branch to display all devices of that type.

4 Double-click the device you want to modify.**5 Click the Resources tab to move to the Resources page.****6 Make the desired changes.**



If you're unused to working with the computer's configuration, it's a good idea to leave the Use Automatic Settings box checked. These settings were set to work together within the system and with most available optional devices.

7 Click OK when you've finished your changes.

Different Ways to Turn the Computer On and Off

Now that you've mastered turning your computer on by pressing the power button, it's time to learn some new tricks. This section explains how to:

- ❖ set the computer to turn on automatically at a time you choose (the Alarm Power On option). This option is helpful if you are expecting to receive files by modem and want to do the transfer at night, when the rates are cheaper. You can set the computer to turn on and receive the files while you are asleep.
- ❖ turn the computer on and off by opening and closing the display panel (the Panel Power On/Off option). This option not only makes it easier to turn the computer's power on, but makes it impossible to close the display panel while the computer is on. This option is only available if you turn Resume Mode on.

- ❖ set the computer to turn off automatically after a set amount of time in which no computing activity has occurred (the System Auto Off option). This option is only available if you turn Resume Mode on.

You can set the Alarm Power On, Panel Power On/Off, and System Auto Off options using either MaxTime or TSETUP. This section shows you how to change the options using MaxTime. For information on using TSETUP, refer to “TSETUP” on page 323.

Follow these steps:

- 1 Click Start, then point to Programs.**
- 2 Point to Toshiba Utilities, then click MaxTime.**

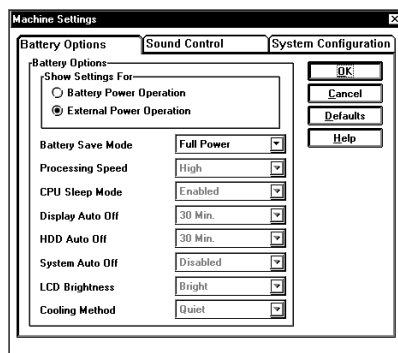
MaxTime displays the battery gauge window.



The MaxTime battery gauge window

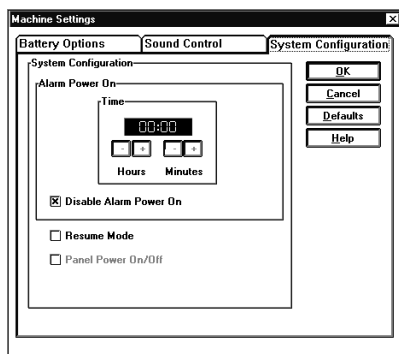
- 3 Choose Machine Settings from the Options menu.**

MaxTime displays the Machine Settings dialog box.



The Machine Settings dialog box

- 4 Switch to the System Configuration page by clicking the System Configuration tab.**



The System Configuration page

- 5 To turn on the computer at a particular time, click the check box next to **Disable Alarm Power On**. This box is blank when Alarm Power On is turned on. Choose the **Alarm Power On Time Format** you wish to use, then click the **+** and **-** buttons until the **Time** field displays the time at which you want the computer to turn on.**

An X in the check box turns off the Alarm Power On feature.

- 6 To set the computer to turn on or off when you open or close the display panel, click the check box next to **Panel Power On/Off**.**

This option is only available if Resume Mode is turned on.

- 7 Choose OK to exit the dialog box and save your changes.**

Changing the Display Mode

Perhaps you would like to change how much information your screen displays, or adjust the amount of colors it uses. You can control these options by using the screen display program. Any changes you make using this program affect Windows 95 only and will not change how your screen looks in DOS.

To open the program, follow these steps:

1 Click Start, then point to Settings.

2 Click Control Panel.

Windows 95 displays the Control Panel.

3 Double-click the Display icon.

Windows 95 opens the Display Properties dialog box.

4 Click the Settings tab to move to the Settings page.

5 Change the number of colors the display can show by changing the Color palette setting.

6 Change the screen resolution by clicking and dragging the Desktop area slider.

7 When you've made all your changes, click OK.

To close the Display Properties dialog box without enabling your changes, click Cancel.

Using Online Documentation

Your Portégé 620CT computer comes with this guide in electronic form on your hard disk. The best thing about electronic books is that they are stored on the computer so you don't have to take the printed documentation with you when you travel.

The electronic *User's Guide* is a copy of this printed book. This chapter explains how to use the electronic version of the guide.

Opening the Book

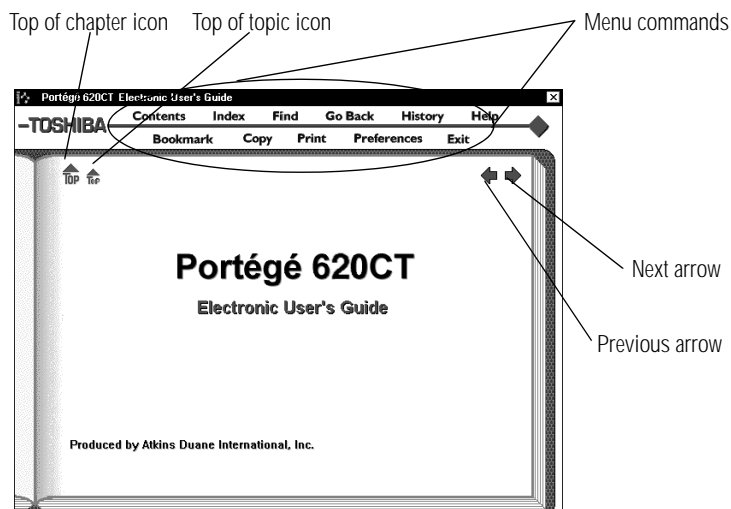
To open the book, follow these steps:

- 1 Click Start, then point to Programs.**
- 2 Point to Toshiba Utilities, then click User's Guide.**

Windows 95 opens the guide.

The Parts of the Window

The electronic book opens at the title page.



The title page

The **menu commands** above the book provide these options:

- ❖ **Contents** displays the table of contents for the entire book.
- ❖ **Index** displays the index you normally find at the back of the book.
- ❖ **Find** lets you type in a term and search for it in the book.
- ❖ **Go Back** retraces your steps through the book.
- ❖ **History** shows a list of all the places you've been.
- ❖ **Help** explains how to use the book's features.
- ❖ **Bookmark** marks a topic so you can return to it in the future.
- ❖ **Copy** copies selected text to the clipboard.
- ❖ **Print** prints the current topic.
- ❖ **Preferences** lets you customize the book's features.
- ❖ **Exit** closes the book.

- ❖ Clicking the **Top of chapter icon** returns you to the beginning of the current chapter.
- ❖ Clicking the **Top of topic icon** returns you to the beginning of the current topic.
- ❖ The **previous** and **next** arrows allow you to move forward or backward from topic to topic.

Finding a Topic Quickly

As in a printed book, to find a particular topic you can either search the index or use the table of contents.

In addition to providing an index and table of contents, the electronic *User's Guide* maintains a list of all the words in the book. If the index and table of contents do not contain the word you're looking for, try the Find option. You can search the current topic or the entire *User's Guide*. Follow these steps:

1 Click Find.

The book displays a box for you to enter the word or phrase.

2 Type the word or phrase and press **Enter** or click **Search**.

Find displays a list of all the sections that contain this term.

3 Select the section you wish to read and press **Enter**.

Find displays the section.

Reading a Topic

If the topic contains more text than will fit on the screen, use the scroll bar to read the additional text.

When you get to the end of the topic, click the next arrow to go to the next topic or the previous arrow to go to the previous topic. Clicking the next arrow takes you through the topics in the same sequence as the printed book.

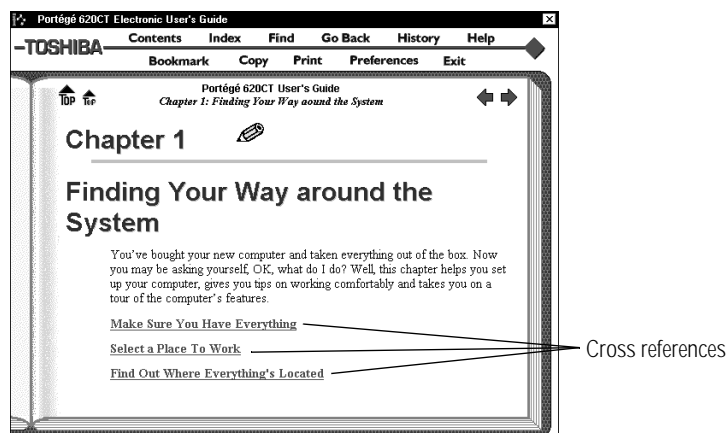
Using Cross-References

The topic you located using the Index, Contents or Find may still not be the one you are looking for but, as you read the text a cross-reference may point you to the section you need.

Cross-references are shown in green underlined text. To view a cross-reference, follow these steps:

1 Position the pointer over the cross-reference.

The pointer changes to a pointing hand symbol.



Using a cross reference

2 Click the cross-reference.

The program displays the section that contains the information relating to the cross-reference you selected.

When you have finished reading the cross-referenced material, click Go Back to return to the original topic.

Using Bookmarks

Creating a bookmark allows you to mark a portion of the text that you want to be able to find quickly in the future.

Creating a New Bookmark

To create (or define) a bookmark, follow these steps:

- 1 Position the pointer at the beginning of the text you want to find again.**
- 2 Click Bookmark.**

The program displays the bookmark dialog box.

Add a bookmark (enter name):				X
Entry Up	Entry Down	Remove Entry	Clear List	

The bookmark dialog box

- 3 Type a name for the bookmark.**

This can be any name you choose.

- 4 Press Enter or click the X in the upper right corner of the box.**

The program places a small mark at the bottom of the window.

Viewing the Topic Marked by a Bookmark

To view a marked topic, click its bookmark. Moving the pointer over the bookmark displays the name you assigned.

Another way to locate the topic you marked is through the bookmark list. Follow these steps:

- 1 Click Bookmark.**
- 2 Select the bookmark name you wish to find.**
- 3 Click the box above the list to go to the topic.**

Deleting a Bookmark

To delete a previously defined bookmark, follow these steps:

- 1 **Enter the name of the bookmark or locate it in the drop-down list box.**
- 2 **Click Remove Entry.**

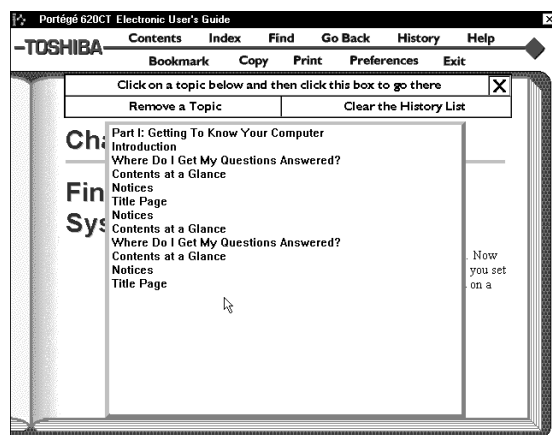
The program deletes the bookmark.

Keeping Track of Where You've Been

Unlike a printed book, an electronic book can keep track of what you've already read. If you wish you could go back to the page you read five minutes ago, but you don't remember where you were, follow these steps:

- 1 **Click History.**

The program displays a list of all the topics you've viewed in this session.



A history list

2 Click the topic's title.

3 Click the top box and you're back where you were before.

You can delete topics from this list or clear the list entirely by clicking the appropriate boxes.

Getting Help

The electronic guide comes with its own help text. If you are not sure about a feature, click Help.

Help is context sensitive. If you keep the Help window open, the Help text changes to describe the feature you are currently pointing at with your pointer.

Using Material from the Book

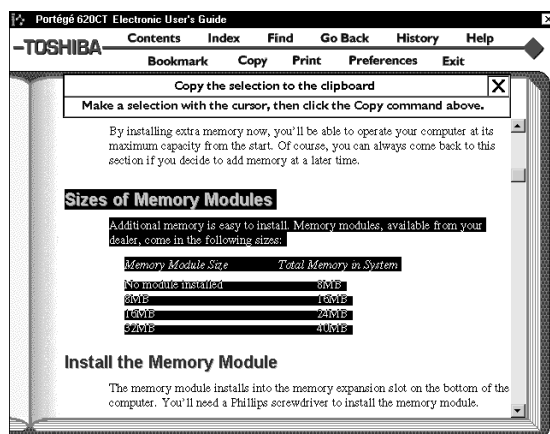
Though this book is copyrighted, you may select text and copy it to the clipboard for use in your own projects. You may also print individual topics or selected text.

Copying a Selection

To copy a selection, follow these steps:

1 Click Copy.

The book displays the Copy dialog box.



Selected text ready to copy

- 2 **Select the text to copy.**
- 3 **Click “Copy the selection to the clipboard.”**
You can insert this text into another document.

Printing a Selection or Topic

Follow these steps to print:






- 1 **Click Print.**
- 2 **Select the text you wish to print.**
Do not select any text if you wish to print the entire topic.
- 3 **Click “Print a Selection” to print the text you selected.**

Click “Print the Current Topic” to print the whole topic.

The program prints to the current printer. Before you click Print, make sure the printer is on line (ready) and the printer has paper.

Changing How the Book Works

The Preferences command lets you customize the electronic book's features to meet your preferences.

Click below to change preferences:		X
Audible Alerts		
Bookmark Icons		
Checkpoints		
Top Icons		
Text Size	2	
Match Color for Find		

The preferences dialog box

Audible Alerts sound for various functions. To turn these off, click the Audible Alerts option.

If you would rather not see the **Bookmark Icons**, click here to turn them off. If the bookmark icons are off, click Bookmark to view a list of the bookmarks.

Checkpoints are dialog boxes that appear when you are about to do something that may be destructive.

You can control the size of the text in the book window by clicking the **Text Size** option.

The **Match Color for Find** option changes the color the book uses to highlight the text you are searching for.

Reinstalling the Electronic User's Guide

If for any reason you need to restore this book to the hard drive, you must use the master program diskette that contains the book files. For more information about master program diskettes, see "Create or Purchase Master Diskettes" on page 35.

Follow these steps to reinstall online documentation:

- 1 Be sure you have connected the external diskette drive to the external diskette drive port.**

To connect the external diskette drive, see “Connect the External Diskette Drive” on page 21.

- 2 Insert the master program diskette in the diskette drive.**

- 3 Click Start, then click Run.**

Windows 95 displays the Run dialog box.

- 4 In the Run dialog box, type the command line `a:\install` and click OK.**

Always install the book into the C:\DOCS folder.

- 5 When the installation is complete, eject the diskette from the drive.**

What's Really Going On?

By now, you've probably become pretty good at using your computer. However, you may be curious as to what is really going on while your fingers fly over the keyboard. This chapter gives you all the details of how your computer works.

What Is a Computer?

In one sense, your Portégé 620CT is a computer. Technically speaking however, the processor chip, where the actual computing takes place, is the computer. Everything else either provides information to the processor or receives the results of the processor's computations.

What Other Batteries Does the Computer Have?

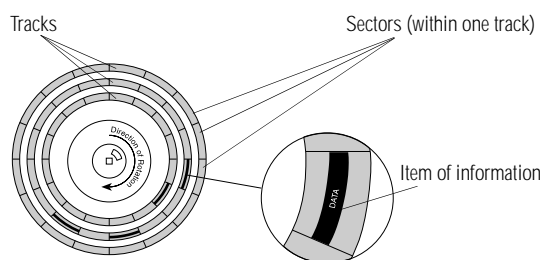
In addition to the main battery that powers your system when you're away from an AC outlet, your Portégé 620CT computer has two other batteries:

- ❖ The backup battery supports Resume Mode. When you turn the computer off in Resume Mode, a non-volatile memory powered by the backup battery keeps track of everything for the next time you turn the computer on. The backup battery gets its charge from the main battery.
- ❖ The RTC (real-time clock) battery maintains the computer's configuration information, which is stored in the RTC memory. When you make changes in TSETUP or Hardware Setup, this memory keeps track of those settings. The RTC battery also operates the computer's internal clock.
- ❖ The main battery charges the backup and RTC batteries.

How Does a Disk Store Information?

Like a tape recorder, a disk drive reads and writes magnetically encoded information on magnetic media. The drive positions a read/write head above the surface of the disk when it records and retrieves information.

Before a drive can read from or write to a disk, the disk must have a specific structure. Formatting a disk creates this structure.



Tracks and sectors of a disk

Formatting divides each side of the disk into concentric circles called tracks. Each track is divided into sectors. Each item of information stored on a disk has a specific address composed of its side, track and sector number. This address makes it possible for the computer to locate the information on the disk.

How Big is a Megabyte, Anyway?

When you read about the size of your hard disk, you may be confused by the discrepancy between megabytes and millions of bytes. “Wait a minute,” you say, “doesn’t a megabyte equal one million bytes?” Well, not exactly...

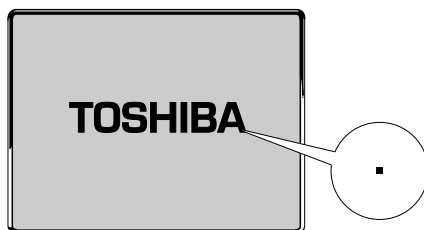
Computers use base two arithmetic, also called binary arithmetic. Because of this, all numbers in computing are based on powers of two. One megabyte is actually equal to 1,048,576 bytes (2^{20}), the closest binary number to 1,000,000.

In the early days of personal computers, the difference was very minor because hard disks were small and computers didn’t have much memory. As hard disk capacities and memory sizes have increased, the difference has become much more significant.

One hard disk that comes with the Portégé 620CT computer holds approximately 1.26 gigabytes. You can convert this to millions of bytes by multiplying the number of megabytes (1,260) by the number of bytes in a megabyte (1,048,576). The result is 1,321,205,760 approximately 1.3 billion bytes.

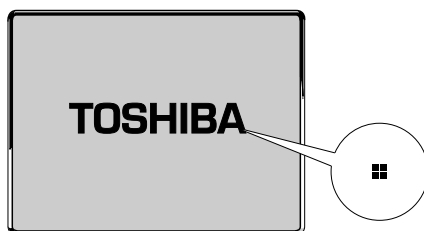
How Does the Screen Display Information?

Images on the Portégé 620CT computer’s built-in liquid crystal display (LCD) are created by turning individual dots on the screen on or off in various combinations. These dots are called pixels.



A pixel on the display

A pixel is the smallest element on the screen. On a color display, each pixel is made up of three subpixels: one red, one green and one blue (RGB). Each subpixel may be either on or off. Mixing on and off subpixels is like blending the primary colors to create other colors.



A pel formed by several pixels

The smallest element that your programs can control is called a pel. Pels are arranged on the screen in a grid-like fashion. Depending on the video mode a program selects, a pel may be a single pixel or several pixels.

The pel size determines the clarity of the image—called screen resolution. Larger individual pels reduce the total number of available pels, resulting in lower resolution. Smaller pels increase the number of pels that can fit on the screen, resulting in higher resolution and a clearer image.

Displaying Colors

The pel size also determines how many colors the display can produce. By combining pixels of different colors within a pel, the display can produce many more colors than are available within a single pixel. Therefore, larger individual pels increase the number of colors available to the display.

Video Modes

Video modes are sets of industry-standard rules about resolution and the maximum number of distinct colors that can be displayed simultaneously on the screen. Programs that adhere to the rules of a video mode will run on any system that supports that mode.

Most display adapters provide several video modes. The Portégé 620CT SVGA-compatible display adapter supports all VGA modes and some SVGA modes.

The video mode required by a program depends on:

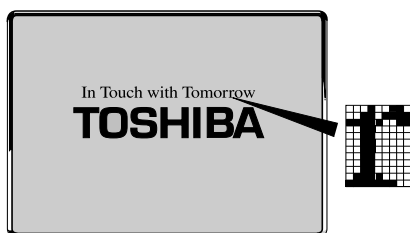
- ❖ whether the program displays graphics or text.
- ❖ the resolution required for the text or graphics.
- ❖ the number of colors used.
- ❖ the font size (in pixels) of the text.

Based on these requirements, computers recognize two categories of video modes: graphics modes and text modes.

In a graphics mode, programs can turn on and off individual pels to display a variety of images. The computer controls every pel on the screen individually. This provides maximum display flexibility while somewhat reducing the speed at which the display produces images.

An image produced this way could be a drawing or picture, like a pie chart, graph or photograph. It could also be an icon or a variation on a text character, like italics or bold type.

Windows 95 and Windows programs use graphics modes.



Character cell in a text mode

In a text mode, a character cell is the smallest element a program can control. A character cell is a grid of pels. All cells are the same size. Each cell displays a single letter or symbol. Character cells are arranged in rows and columns. In a text mode, only characters from a predefined set are available. If your program uses a text mode, refer to the program's documentation for a list of available characters.

What Is Plug and Play?

Plug and Play is a clever name for a new technology developed jointly by Intel and Microsoft that seeks to make upgrading a computer system easy.

Computer systems, such as the Portégé 620CT, operating software and add-on products that are designed according to this standard work together the first time you connect them. Plug and Play eliminates the time-consuming frustration of figuring out which IRQ and memory addresses to assign.

Since it's not possible to open a Portégé 620CT computer and add on devices, the fact that the system supports the Plug and Play standard is important for future software developments.

What Really Happens When You Turn the Computer On?

When you press the power button, the following occurs:

1 The computer's BIOS (Basic Input/Output System) loads a bootstrap program.

This program, named from the expression “pull yourself up by your bootstraps,” checks and displays the amount of memory in the system before proceeding.

2 The bootstrap program attempts to load Windows 95.

It looks first for a diskette in the diskette drive and then at the hard disk. If a diskette without the necessary startup files is in the drive, the bootstrap program displays an error message.

3 As Windows 95 loads, it configures the system.

4 Windows 95 loads the desktop.

If Something Goes Wrong

Some problems you may encounter when using the Portégé 620CT computer are relatively easy to identify and solve. Others may require help from your dealer or the manufacturer of a software program.

This chapter aims to help you solve many problems yourself without needing additional help. It covers the problems you are most likely to encounter.

Read the section headings on the opposite page, then turn to the section that covers the type of problem you are having. Read the section and see if it describes your problem. If so, follow the steps for solving it.

If all else fails, contact Toshiba. You will find information on Toshiba's support services at the end of this chapter.

Problems that are Easy to Fix

The more you work with your computer, the more likely you are to encounter one or more of the following problems. Don't panic! You can solve them relatively easily.

Software Problems

Your program stops responding.

If you are working with a program that suddenly freezes all operations, the program has probably stopped responding. Don't worry. You can exit the failed program without shutting down Windows 95 or closing other programs.

To close a program that has stopped responding, follow these steps:

1 Press Ctrl + Alt + Del once.

Windows 95 displays the Close Program dialog box. The box lists all the programs and processes currently in operation. If a program has stopped responding, the words "not responding" appear beside its name in the list.

2 Select the program you want to close, then click End Task.

Closing the failed program should allow you to continue working. If it does not, continue with step 3.

3 Close the remaining programs by clicking End Task.

4 Click Shut Down.

Windows 95 displays the Shut Down Windows dialog box.

5 Select Restart the computer, then click Yes.

Your computer shuts down and restarts Windows 95, thus restoring operations.



Typing Ctrl + Alt + Del twice to restart your computer is not recommended. By closing all open programs prior to shutting down Windows 95 you ensure that all data is saved.

Your program performs an illegal operation.

If you receive the message, “Your program has performed an illegal operation,” you should record the details of the message and consult the software manufacturer.

To record the details:

- 1 Click the Details button and select the text Windows 95 displays.**

The Details button displays information that the software manufacturer needs to help you solve your problem.

- 2 Press Ctrl + c to copy the text to the clipboard.**
- 3 Open Notepad (click the Start button, point to Programs, then point to Accessories and click Notepad).**
- 4 Press Ctrl + v to paste the details into Notepad.**
- 5 Add a paragraph break and type some notes describing what you were doing when you received the message.**
- 6 Save the file and refer to it when you contact the software manufacturer.**

You receive a “Non-System Disk” error message.

A diskette is in the diskette drive while the computer is starting Windows 95. Remove the diskette from the drive and press any key to continue.

You open a program that immediately stops responding.

If CPU sleep mode is on (enabled), it may stop a program from responding. Close the program you are trying to open and turn off (disable) sleep mode. Then, try to run the program again.

To close the program:

- 1 Press Ctrl + Alt + Del.**

The Close Program dialog box displays, listing all the programs and processes currently in operation. If the program has stopped responding, the words “not responding” appear beside it.

- 2 Click End Task, then click Cancel.**

You disable sleep mode in MaxTime or TSETUP. Continue with these steps to disable sleep mode using MaxTime:

- 3 Click Start, then point to Programs.**

- 4 Point to Toshiba Utilities, then click MaxTime.**

MaxTime displays the MaxTime battery gauge window.

- 5 Select Machine Settings from the MaxTime Options menu.**

MaxTime displays the Machine Settings dialog box.

- 6 Click Battery Options.**

MaxTime displays the battery options.

- 7 Set the Battery Save Mode to User Settings.**

- 8 Select Disabled for Sleep Mode.**

- 9 Select OK or press Enter to save your changes and exit the dialog box.**

- 10 Minimize MaxTime or close the program by choosing Exit from the File menu.**

You don't have to restart the computer for this change to take effect.

If the problem continues, contact the manufacturer of the program.

You cannot load a software package.

The diskette or CD-ROM may be damaged, or the program may be corrupted. Try loading another copy of the software.

An error message displays while you are using a program.

Refer to the program's documentation. Typically this includes a troubleshooting section or a summary of error messages.

Hardware Problems

If your computer or one of the devices connected to it isn't working properly, try this procedure first:

1 Turn off the computer and any peripheral devices connected to it.

This includes your printer and any other external devices.

2 Test the wall outlet for power by plugging in another electrical device such as a lamp.

3 Check that the power cords are firmly plugged in.

4 Check that all cables connecting peripheral devices to the computer are correctly and firmly attached.

Loose cables can cause signal errors.

5 Turn the peripheral devices on.

6 Turn the computer on.

7 If you are running the computer on battery power, check that the battery is sufficiently charged.

If the equipment still isn't working properly, refer to the device-specific sections of this chapter.

Problems When You Turn the Computer On

These problems may occur when you turn the power on.

The computer won't start.

Make sure you attached the AC adapter properly or installed a charged battery.

Press and hold the power button for a few seconds.

The computer starts, but then shuts down and the power/speed light glows orange and blinks.

The computer is too hot, so it has automatically entered Resume Mode and shut down. Leave the computer turned off until its interior has reached room temperature.

The computer starts, but when you press a key on the keyboard or touch the AccuPoint, nothing happens.

You are probably in Resume Mode and have a software or resource conflict. When this happens, turning the power on returns you to the problem instead of restarting the system. To clear the condition, press Ctrl + Alt + Del or press the reset button.

Clearing the condition may get you running by disabling Resume Mode, but it won't solve a resource conflict. Read the documentation that came with the conflicting device and "Resolving a Hardware Conflict" on page 259.

You press the power button and hear the system start, but you receive a hard disk drive (HDD) error message.

There is a problem starting Windows 95 from your hard disk. Follow these steps:

- 1 Insert a Toshiba Companion Diskette into the diskette drive.**

2 Restart your computer and press F10 when the system starts.

Pressing F10 changes the Boot Priority option setting in TSETUP. This command instructs the computer to start from the diskette drive.

The message “Welcome to Toshiba Companion Diskette” displays on your screen.

3 Press Enter.

The Toshiba Companion Diskette Main Menu displays a list of options.

4 Choose “Exit to DOS,” and press Enter.

The MS-DOS prompt, a:> appears.

5 Type sys c:, then press enter.

The computer processes the command and displays the message “system transferred” when complete.

6 Remove the diskette from the diskette drive.

7 Restart your computer.

Your system should start Windows 95 from the hard drive. If you receive another error message, there is a problem with Windows 95 on your hard disk. To fix the problem, run Windows 95 setup by following these steps:

1 Insert a startup diskette into the diskette drive.



NOTE

A startup diskette is one containing the files needed to start the computer and load Windows 95. You created a startup diskette when you ran the Microsoft Create System Disks program.

2 Restart your computer and press F10 when the system starts.

Pressing F10 changes the Boot Priority option setting in TSETUP. This command instructs the computer to start from the diskette drive.

The message “Starting Windows 95” displays, followed by the MS-DOS prompt, a:>.

3 Remove the startup diskette from the diskette drive and insert Windows 95 disk #1.**4 Type setup, then press Enter.**

If your hard disk is intact, Setup installs Windows 95 again without removing information you have saved on the hard disk. Follow the messages that appear on your screen.

If you receive another error message, contact Toshiba technical support. See “If You Need Further Assistance” on page 279.

Windows 95 Isn't Working

Once you are familiar with the desktop and the way Windows 95 responds to your work routine, you can easily detect if Windows 95 isn't working correctly. For example:

- ❖ Windows 95 fails to start after the Starting Windows 95 message displays.
- ❖ Windows 95 takes a long time to start.
- ❖ Windows 95 responds differently from the normal routine.
- ❖ Your display doesn't look right.

Unless a device has failed, problems usually occur when you change the system configuration, add a device, install a new program, or do something that changes the system's established routine.

If you experience any of the above problems, use the startup options in the Windows 95 Startup Menu to fix them.

Using Startup Options to Fix Problems

If Windows 95 fails to start properly, you may have to change your system's configuration or verify the startup procedure to fix the problem. To do this, use the startup options in the Windows 95 Startup menu. This section describes each startup option and when to use the procedure.

To open the Windows 95 Startup menu:

- 1 Restart your computer.**
- 2 Press F8 when your computer starts.**

The Windows 95 Startup Menu displays the following options:

- ❖ Normal
- ❖ Logged (BOOTLOG.TXT)
- ❖ Safe Mode
- ❖ Step-by-Step Confirmation
- ❖ Command Prompt Only
- ❖ Safe Mode Command Prompt Only



NOTE

If your computer is connected to a network, the Startup Menu may display different versions of Safe Mode.

Normal

Selecting Normal starts Windows 95 under normal conditions. Start the computer in Normal mode when there are no apparent problems with the system.

Logged (BOOTLOG.TXT)

Selecting Logged starts Windows 95 under normal conditions and creates a hidden startup log file named C:\BOOTLOG.TXT. This records every step of the system's startup process.

You or a qualified Windows 95 expert can use this log file to check the loading and initializing of Windows 95 device drivers.



A device driver is a file that contains information to help the system BIOS (Basic Input/Output System) control the operations of devices connected to the system.

Safe Mode

Selecting Safe Mode bypasses basic startup files and starts Windows 95 with only the mouse, keyboard, and standard VGA display drivers loaded.

Running Safe Mode allows you to undo any changes you made to the system configuration that may have caused Windows 95 or a device to fail. For example, if you choose a resolution that is not supported by the display, Windows 95 will have a problem starting correctly. Safe Mode bypasses the setting and allows you to change the resolution to one supported by the display. Once you have done this, Windows 95 will start correctly.

Other problems may involve a device driver. See “Windows 95 Can Help You” on page 258 to fix the problem.



Windows 95 automatically starts in Safe Mode if it detects that system startup failed or the Windows 95 Registry (the file that defines how Windows 95 is set up) is corrupted.

Step by Step Confirmation

When you turn your computer on, Windows 95 processes the startup directory. With Step by Step Confirmation, the system asks you to confirm each line of the startup process as it displays on the screen. Use this option when:

- ❖ The startup process fails while loading the startup files.
- ❖ You need to verify all drivers are being loaded.
- ❖ You need to temporarily disable one or more specific drivers.
- ❖ You need to check for errors in the startup files.

Windows 95 uses a file called IO.SYS, which contains all the information needed to start the computer. Although your computer does not need the CONFIG.SYS and AUTOEXEC.BAT files to start, it does process these files to support backward compatibility with some programs and device drivers. The same holds true for the SYSTEM.INI and WIN.INI files.



Backward-compatible programs and devices are designed to work with older operating systems and other programs. For example, many features of Windows 95 are backward-compatible with earlier versions of Windows. This lets you use older programs in Windows 95.

Most of the information in these files is now stored in the Windows 95 Registry. However, they are still processed during startup. BOOTLOG.TXT file contains a record of all the components and drivers being loaded during startup and the status of each. When you select Step by Step Confirmation, you can view all these files in the startup directory line by line to solve a problem.

Command Prompt Only

Selecting Command Prompt Only runs all the commands in the startup files and device drivers and displays the command prompt.

Use this option when you want to run MS-DOS or Windows 95 commands. This option is for advanced users who are familiar with MS-DOS and know what these commands do.

Safe Mode Command Prompt Only

Selecting Safe Mode Command Prompt Only bypasses the system startup files and displays the command prompt.

Use this option under the following conditions:

- ❖ Windows 95 fails to start even in Safe Mode.
- ❖ You want to run MS-DOS commands such as EDIT to make changes to your startup files.
- ❖ You want to avoid loading HIMEM.SYS (extended memory manager), or IFSHLP.SYS (file system manager).

Windows 95 Can Help You

If Windows 95 has started properly, but you still have a problem using your computer, Windows 95 Help can assist you in solving the problem.

To open the Windows 95 troubleshooting aid, follow these steps:

- 1 Click the Start button and click Help.**
- 2 Click the Contents tab and double-click Troubleshooting.**
- 3 Double-click a problem with which you would like help, and follow the instructions on the screen.**

Resolving a Hardware Conflict

If you receive an error message telling you there is a device driver conflict or a general hardware problem, try using Windows Help to solve the problem first.

- 1 Click Start, then click Help.**
- 2 Click the Contents tab and double-click Troubleshooting.**
- 3 Double-click “If you have a hardware conflict” and follow the instructions on the screen.**

If there is still a problem, for example, if one of your devices isn't Plug-and-Play, Windows 95 may display a message that explains where the conflict is. Use Device Manager, following the steps in “Fixing a Problem with Device Manager” on page 261, to determine the resource assignments for each device and to resolve the conflict.

A Plan of Action

The smooth operation of the system depends on the interaction of all devices, programs and features. If the system or one of its attached devices isn't working, resolving the problem can be time consuming and frustrating.

The recommended procedure for getting multiple devices to work together is to add and set up one device at a time. After you add each device, test it to make sure it and all previously connected devices work.

The device most recently connected to the system is the one most likely to be causing the conflict.



NOTE

A word to the wise: if you get too tired, take a break. Having a meal or a good night's sleep refreshes you mentally as well as physically. Talking the problem over with a friend can help too.

Resolving Hardware Conflicts on Your Own

Just as a business person needs a telephone and a computer to get the job done, so computer components need resources to accomplish a task. A device, such as a CD-ROM drive or a modem, needs a channel to the computer's Central Processing Unit (CPU). It also needs a direct channel to the computer's memory to store information as it works. These channels of communication are commonly referred to as system resources.

What are IRQ and DMA System Resources?

The channel to the CPU is called an Interrupt ReQuest (IRQ) because it interrupts what the processor is doing and requests some of the processor's time. If two or more devices use the same IRQ, the processor doesn't know which device is asking for attention. This causes a problem.

Similarly, the data required by the device is stored in a specific place or address in memory called the Direct Memory Address (DMA). If two or more devices use the same DMA, the data required by one device overwrites the data required by the other. If either of these situations occur, you have a hardware conflict.

Avoiding Conflicts with Plug and Play

With Plug and Play and Windows 95, avoiding hardware conflicts is easy. Plug and Play is a computer standard that helps the system BIOS (basic input/output system) and Windows 95 to automatically assign system resources to Plug and Play-compliant devices. In theory, if every device connected to the computer is Plug and Play-compliant, no two devices will compete for the same system resources. You simply plug in the device and turn your computer on. Windows 95 automatically configures your system to accommodate the new device.

Resolving Conflicts with Non-Plug and Play Devices

If you install an older, non-Plug and Play device that Windows 95 cannot automatically identify, Windows 95 may have difficulty assigning system resources to it. As a result, a hardware conflict can occur. To find out what resources Windows 95 has assigned to a device, see “Checking Device Properties” on page 262. If Windows 95 is unable to provide the information you need, the pre-assigned settings for IRQs, DMAs and I/O assignments are listed in “System Resources” on page 365 for your reference.

There are three things you can do to resolve hardware conflicts.

- ❖ Disable the device causing the conflict.

To disable a legacy device, remove it from the computer. For a Plug and Play device, see “Fixing a Problem with Device Manager” on page 261.

- ❖ Disable another system component and use its resources for the new device.

See “Fixing a Problem with Device Manager” on page 261.

- ❖ Reconfigure the device so its requirements do not conflict.

Refer to the device’s documentation for instructions about changing settings on the device.

Fixing a Problem with Device Manager

Device manager provides a way to check and change the configuration of a device.



Using Device Manager to change the default settings can cause other conflicts that make one or more devices unusable. Device Manager is a tool for advanced users who understand configuration parameters and the ramifications of changing them.

Disabling a Device in Windows 95

To disable a device, follow these steps:

- 1 Click the My Computer icon with the secondary button, then click Properties.**

The System Properties dialog box appears.

- 2 Click the Device Manager tab.**
- 3 Double-click the device type to display the device installed.**
- 4 Select the device and click Properties.**

A dialog box displays the device's properties.

- 5 In the Device usage section of the dialog box, clear the check box next to the current configuration.**
- 6 Click OK.**

Checking Device Properties

Device Manager provides a way to view the properties of a device. Properties include the name of the manufacturer, the type of device, the drivers installed, and the system resources assigned to the device. To check a device's properties follow these steps:

- 1 Click the My Computer icon with the secondary button, then click Properties.**

Windows 95 displays the System Properties dialog box.

- 2 Click the Device Manager tab.**
- 3 To view the device installed, double-click the device type.**
- 4 To view:**

- ❖ the device installed, double-click the device type.
- ❖ the properties, double-click the device.

Windows 95 displays the Device Properties dialog box, which provides up to three tabs to choose from:

- ❖ The General tab provides basic information about the device.
- ❖ The Resources tab lists the resources assigned to the device. If you have a device conflict, it is shown in the Conflicting device list.
- ❖ The Drivers tab displays the drivers being used by the device.

For further information about Device Manager, refer to Windows 95 on-line help.

Fixing Device-Related Problems

If you don't have a hardware conflict, but you think your problem could be related to one of your computer's devices, the first thing to do is run a system verification test. A system verification test confirms that all the devices connected to the computer are working. This includes testing the memory, hard disk, diskette drive, display, and additional devices you may have connected to the system.

Then read the relevant parts of this section, which describes problems and solutions related to specific devices.

Running the System Verification Test

To verify the system, follow these steps:

- 1 Turn the computer off.**
- 2 Hold the spacebar while you press the power button.**

To verify the system when Resume Mode is on, hold the spacebar as you press the reset button.

System verification displays the following message for a few seconds as the computer tests memory:

```
(C) Copyright 19>xx Toshiba Corp. All rights reserved.  
MEMORY TEST xxxxB
```

Successful Test Results

If the test verifies that all components connected to the system are working properly, the computer beeps once, then starts Windows 95.

Unsuccessful Test Results

If the system verification test fails, the computer does one of the following:

- ❖ Stops updating the memory counter and does not proceed to display information or messages.
- ❖ Beeps but displays no new messages.
- ❖ Displays random characters and does not function normally.
- ❖ Displays an error message.

Verify the system again. Before you do so, turn the computer off and make sure all optional devices are connected properly and turned on. Then, turn the computer on and run the test again. If the test fails a second time, you have demonstrated that you can reproduce the problem and it's time to contact a trained technician.

Other Circumstances

The computer normally beeps at the conclusion of a successful system verification. If the system speaker is set to Disabled in MaxTime or TSETUP, this beep will not occur.

If the speaker is turned on (enabled) and the system verification completes but you don't hear a beep, the speaker may be faulty. Though this does not affect the computer's operation, you may wish to contact your dealer and have it repaired.

If the system verification is successful but the operating system won't load, refer to "Problems When You Turn the Computer On" on page 252. If all seems correct, treat this as a hardware error and contact your dealer.

Where Do You Go from Here?

If you determined that you have a problem with a specific device, the following section lists problems related to specific devices and offers some solutions.

Memory Card Problems	265
Power and the Batteries	266
The Keyboard	267
The Display	269
The AccuPoint	268
The Disk Drives	270
Optional Devices	272
PC Cards	272
Printers	276
Modems	277

Memory Card Problems

Incorrectly connected or faulty memory cards may cause errors that seem to be device-related. So it's worthwhile checking for these first:

1 Make sure the computer isn't in Resume Mode.

For information about turning Resume Mode off, See "How to Start Where You Left Off" on page 77.

2 Turn the computer off.

3 Refer to "Install the Memory Module" on page 18 to remove the memory card.

4 Reinstall the memory card, making sure it's seated properly.

5 Replace the memory expansion slot cover.

6 Check for the error again.

7 If the error reoccurs, remove the memory card entirely and check for the error again.

If removing the memory card eliminates the error, the memory card may be faulty. If the error reoccurs without the memory card installed, the error is not caused by the memory card.

Power and the Batteries

Your computer receives its power through the AC adapter or from the system batteries (main battery, real-time clock (RTC) battery and backup battery). Power problems are interrelated. For example, a faulty AC adapter will neither power the computer nor recharge the batteries.

Here are some typical problems and how to solve them:

The AC adapter light doesn't come on when you plug in the AC adapter.

Make sure the AC adapter is firmly plugged into both the wall outlet and the computer.

If the AC adapter light still does not come on, check that the wall outlet is working properly by plugging in an electrical device such as a lamp.

The AC adapter works correctly, but the battery won't charge.

The main battery may not be inserted correctly in the computer. Turn off the computer, remove the battery, clean the battery contacts with a soft cloth dipped in alcohol and replace the battery.

The battery may be too hot or too cold to charge properly. Its temperature needs to be in the range of 50°-88°F (10°-30°C). If you think this is the probable cause, let the battery reach room temperature and try again.

If the battery has completely discharged, it will not begin charging immediately. Leave the AC adapter connected, wait 20 minutes and see whether the battery is charging.

If the battery light is glowing after 20 minutes, allow the computer to continue charging the battery for another 20 minutes before you turn the computer on.

If the battery light doesn't glow after 20 minutes, the battery may have reached the end of its useful life. Try replacing it.

The battery appears not to power the computer for as long as it usually does.

Check the power-saving features in MaxTime or TSETUP. Have you added a device? Is your program using the hard disk more heavily? Is the display power set to turn off automatically? Was the battery fully charged to begin with? All these conditions affect how long the charge lasts.



If you frequently recharge a partially charged battery, it may not charge fully. Always let the battery discharge completely, then charge it again.

For more information on maximizing battery power, refer to “Look After Your Battery” on page 130 and “Conserving Power” on page 125.

The Keyboard

If, when you type, strange things display on your screen or nothing happens, the problem may be related to the keyboard itself.

The keyboard produces unexpected characters.

A keypad overlay may be on. If the numeric keypad or cursor control light is on, press Fn + F10 to turn off the cursor control light or Fn + F11 to turn off the numeric keypad light.

If the problem occurs when both the keypad overlays are off, make sure the software you are using is not remapping the keyboard. Refer to the software's documentation and check that the program does not assign different meanings to any of the keys.

You've connected an external keyboard and Windows 95 displays one or more keyboard error messages.

The keyboard you connected may be incompatible with the computer. Try using a different make of keyboard.

You are using an external keyboard and the Fn key combinations don't work.

Make sure the external keyboard's Fn key equivalent is set to the combination you are using.

Nothing happens when you press the keys on the external keyboard.

Make sure the PS/2 keyboard is plugged into the PS/2 port.

You may have plugged the external PS/2 keyboard in while the computer was turned on. Press Ctrl + Alt + Del or press the reset button to restart the computer so it recognizes the device.

The keyboard locks and the computer will not start.

Make sure the power is on and press the reset button.

The AccuPoint

Some of the keyboard conditions listed above may also affect the AccuPoint. In addition, consider the following:

Your finger easily slides off the AccuPoint.

The AccuPoint cap may be oily. Remove the cap and clean it with a cotton swab dipped in rubbing alcohol.

Or the cap may have become worn. Replace the cap with one of the spares that come with your computer. Follow these steps:

1 Remove the AccuPoint cap by grasping it firmly and pulling it straight up.

The AccuPoint spindle is now visible.

2 Position the new cap on the spindle and press it into place.

The Display

Here are some typical display problems and their solutions.

The display is blank.

Display Auto Off may have taken into effect. This feature saves battery charge by turning off the display. Press any key to activate the LCD.

You may have activated the instant security feature by pressing Fn + F1. Enter your password if you have registered one, or press Enter to return to work.

If you are using the built-in display, try changing the display option to make sure the computer is not set for an external monitor. To do this, press Fn + F5.

If you are using an external monitor:

- ❖ Check that the monitor is turned on.
- ❖ Check that the monitor's power cord is firmly plugged into a working power outlet.
- ❖ Check that the cable connecting the external monitor to the computer is firmly attached.
- ❖ Try adjusting the contrast and brightness controls on the external monitor.
- ❖ Press Fn + F5 to make sure that the display priority is not set for the built-in display.

The screen doesn't look right.

See "Changing the Display Mode" on page 224 to adjust your screen resolution or color settings.

The built-in screen flickers.

Some flickering is a normal result of the way the screen produces colors. To reduce the amount of flickering, try using fewer colors.

Windows 95 displays a message that there is a problem with your display settings and that the adapter type is incorrect or the current settings don't work with your hardware.

Reduce the size of the color palette to one that is supported by the computer's internal display. See "Changing the Display Mode" on page 224 for instructions.

Nothing displays on the external monitor screen.

Make sure the monitor's cable is plugged in.

Check the monitor connector for any bent or broken pins that may be preventing the monitor cable from connecting fully. If any pins are damaged, you will need to replace the monitor cable.

Make sure the monitor is capable of displaying at resolutions higher than 640 x 480. Low-resolution monitors only work in Internal/External mode.

The Disk Drives

Problems with the hard disk or with a disk drive usually show up as an inability to access the disk or as sector errors. Sometimes a disk problem may damage one or more files.

You are having trouble accessing a diskette, or one or more files appear to be missing.

Make sure you're identifying the drive by its correct name (A or C).

Run ScanDisk, which analyzes the directories, files and File Allocation Table (FAT) on the disk and repairs any damage it finds. To start ScanDisk, follow these steps:

- 1 Click Start, then point to Programs.**
- 2 Point to Accessories, then point to System Tools.**
- 3 Click ScanDisk.**

Windows 95 opens the ScanDisk window.

- 4 Click the drive you want to test.**

5 Choose the type of test you want to use.

A thorough test is more complete but takes much more time than a standard test.

6 Click Start.

ScanDisk tests the disk.

You can't access the external diskette drive.

Make sure the diskette drive cable is connected securely to the external diskette drive port.

Your data files are damaged or corrupted.

Refer to your program documentation for file recovery procedures. Many programs automatically create backup files.

You may also be able to recover lost data by using a disk utility program, which is available from your dealer. (If the Explorer window doesn't display all the files you think should be stored in the directory, recovering data is unlikely.)

Some programs run correctly, but others do not.

This is probably a configuration problem. When a program doesn't run properly, refer to its documentation and check that the hardware configuration meets its needs.

A diskette won't go into the external diskette drive.

You may already have a diskette in the drive. Make sure the drive is empty.

You may be inserting the diskette improperly. Hold the diskette by the label with the hub side facing down, and insert it so the metal head window cover goes into the drive first.

The metal cover or a loose label may be obstructing the path into the drive. Carefully inspect the diskette. If the metal cover is loose, replace the diskette. If the label is loose, replace the label and try inserting the diskette again.

A diskette won't format properly.

Make sure you've chosen the correct diskette capacity in the Format dialog box. You can't format double-density diskettes as high-density diskettes and vice versa.

Try using a different diskette. If the computer completes the formatting of the new diskette, run ScanDisk to check the diskette. If the drive formats properly and ScanDisk doesn't report any errors during the test, the problem was probably a faulty original diskette.

The drive can't read a diskette.

Try another diskette. If you can access the second diskette, the first diskette (not the diskette drive) is probably causing the problem. Run ScanDisk on the faulty diskette.

If the problem occurs with each diskette you attempt to access, run the diagnostic test to check the diskette drive. Refer to "The Diagnostic Test" on page 339.

Optional Devices

Optional devices can include a printer, PC Cards, an external monitor, or any other device you connect to your computer to expand its capabilities. This section begins with some general comments and continues with sections for specific devices.

For an external monitor, see "The Display" on page 269.

PC Cards

Most PC Card problems occur during installation and setup of new cards. If you're having trouble getting one or more of these devices to work together, several sections in this chapter may apply.

- ❖ Resource conflicts can cause problems when using PC Cards. Refer to "Resolving a Hardware Conflict" on page 259.
- ❖ If the device is a modem, see "Modems" on page 277.

Card Information Structure

When you insert a PC Card into a slot, the computer attempts to determine the type of card and the resources it requires by reading its Card Information Structure (CIS). Sometimes the CIS contains enough information for you to use the card immediately. Other cards must be configured before you can use them.

If the system doesn't automatically recognize your PC Card, and the PCMCIA socket icon isn't present in Device Manager, use the Windows 95 PC Card (PCMCIA) Wizard to set up the card. See "Setting Up PC Card Support in Windows 95" on page 155 for information about the PC Card Wizard.

Some card manufacturers use special software called enablers to support their cards. Enablers result in nonstandard configurations that can cause problems when installing another PC Card.

If Windows 95 doesn't have built-in drivers for your PC Card and the card didn't come with a Windows 95 driver, it may not work under Windows 95. Contact the manufacturer of the PC Card for information about operating the card under Windows 95.

PC Card Checklist

- ❖ Make sure the card is inserted properly into the slot.
Refer to "Inserting PC Cards" on page 153 for how to insert PC Cards.
- ❖ Make sure all cables are securely connected.
- ❖ Make sure the computer has only one version of Card and Socket Services loaded.
- ❖ Occasionally a defective PC Card slips through quality control. If another PCMCIA-equipped computer is available, try the card in that machine. If the card malfunctions again, it may be defective.

Resolving PC Card Problems

Here are some common problems and their solutions.

The slots appear to be dead. PC Cards that used to work no longer work.

Follow these steps to view the PC Card status:

- 1 Click the My Computer icon with the secondary button, then click Properties.**

Windows 95 displays the System Properties dialog box.

- 2 Click the Device Manager tab.**

- 3 Double-click the device listed as your PC Card.**

Windows 95 displays your PC Card's Properties dialog box.

This dialog box contains information about your PC Card configuration and status.

The computer stops working (hangs) when you insert a PC Card.

The problem may be caused by an I/O (input/output) conflict between the PCMCIA socket and another device in the system. Make sure each device has its own I/O base address. See "Resolving a Hardware Conflict" on page 259 to resolve device conflicts.

Since all PC Cards share the same socket, each card is not required to have its own address.

Hot swapping (removing one PC Card and inserting another without turning the computer off) fails.

Follow this procedure before you want to remove a PC Card:

- 1 Click the PC Card icon on the taskbar.**
- 2 Click Stop .xxx, where .xxx is the identifier for your PC Card.**

Windows 95 displays a message saying you may safely remove the card.

- 3 Remove the card from the slot.**

The system does not recognize your PC Card or PCMCIA socket controller.

Windows 95 may not have built-in drivers for your PC Card. Follow these steps to install PC Card support:

1 Click Start, then point to Settings.

2 Click Control Panel.

Windows 95 opens the Control Panel.

3 Double-click Add New Hardware.

Windows 95 opens the Add New Hardware Wizard.

4 Click Next.

5 Follow the instructions on the screen to install support for your PC Card or PCMCIA socket controller.

There is still a yellow exclamation point (!) over the PCMCIA controller icon in Device Manager.

You've gone through the PCMCIA Wizard in Windows 95 as described in "Setting Up PC Card Support in Windows 95" on page 155, but the system still reports the controller with a yellow <!>.

Your computer may not be firmly attached to the optional Port Replicator. To fix the problem:

1 Click Start, then click Shut Down.

Windows 95 displays the Shut Down Windows dialog box.

2 Click Yes.

Windows 95 shuts down and turns the computer off.

3 Lift the locking latch on the Port Replicator.

4 Gently lift the computer and slide it off of the Port Replicator.

5 Reconnect the computer and Port Replicator, making sure to press them together firmly.

Refer to “Connecting the Computer to the Port Replicator” on page 192 for instructions.

6 Turn the computer on and try setting up PC Card support again.

A PC Card error occurs.

Reinsert the card to make sure it is properly connected.

If the card is attached to an external device, check that the connection is secure.

Refer to the card’s documentation, which should contain a troubleshooting section.

Printers

This section lists some of the most common printer problems.

The printer won’t print.

Check that the printer is connected to a working power outlet and is turned on.

Check that the printer has plenty of paper. Some printers won’t start printing when there are just two or three sheets of paper left in the tray.

Make sure the printer cable is firmly attached to both the computer and the printer.

If your printer is ECP- or IEEE 1284-compliant, make sure you have an IEEE 1284 printer cable.

Run the printer’s self test to check for any problem with the printer itself.

Make sure you installed the proper printer drivers, as shown in “Set Up Windows 95 to Work With Your Printer” on page 33.

You may have connected the printer with the computer on. Disable Resume Mode, turn off the computer, and turn off the printer. Turn the printer back on, make sure it's ready (online), then turn the computer back on.

The printer doesn't print what you see on the screen.

Many programs display information on the screen differently than the way they print it. See if your program has a print preview mode. This mode lets you see your work exactly as it will print.

Modems

A modem, fax/modem or fax/voice/modem is a serial device. This section lists common modem problems.

The modem won't receive or transmit properly.

Make sure the RJ-11 cable (the one that goes from the modem to the telephone line) is firmly connected to the modem's RJ-11 jack and the telephone line socket.

Check the serial port setting to make sure the hardware and software are referring to the same COM port (in Device Manager under modem for a PC Card modem or Hardware Setup or TSETUP for an external modem).

Check the communications parameters (baud rate, parity, data length and stop bits) specified in the communications software. It should be configured to transmit at 300, 1200, 2400, 4800, 9600 or 14400 bps (bits per second).

Refer to the program documentation and modem manual for information on how to change these settings.

The modem is on, configured properly and still won't transmit or receive data.

Make sure the line has a dial tone. Connect a telephone handset to the line to check this.

The other system may be busy or off-line. Try making a test transmission to someone else.

The PC Card modem used to work, but doesn't anymore.

Check in Device Manager to see if the modem is listed.

If it is listed but has an X next to it, the modem is disabled. Double-click the device and then click the Undocked and Docked (if present) options before clicking OK.

If the modem is listed and has an exclamation point next to it, there may be a conflict with another device that Windows 95 is unable to resolve. See "Develop Good Computing Habits" below for suggestions on solving the conflict.

Develop Good Computing Habits

Sometimes we're in such a hurry to use a computer that we fail to adequately prepare for the problems that inevitably occur. This section suggests some good habits to develop so you are prepared when things go wrong.

Save your work frequently.

You can never predict when your computer will lock, forcing you to close a program and lose unsaved changes. Many software programs build in an automatic backup, but you shouldn't rely solely on this feature. Save your work!

On a regular basis, back up the information stored on your hard disk.

Here are a few ways you can do this:

- ❖ Copy files to diskettes in Windows 95, following the steps in "How to Copy Something To a Diskette" on page 90 or "How to Back Up Your Work" on page 91.
- ❖ Connect a tape drive to the system and use specialized software to copy everything on the hard disk to a tape.

Some people use a combination of these methods, backing up all files to tape weekly and copying critical files to diskette on a daily basis.

If you've added your own programs to your system, you should back up the programs as well as the data. If something goes wrong that requires you to format your hard disk and start again, reloading all your programs and data from a backup will save time.

Read the manuals.

It's very difficult to provide a fail-safe set of steps you can follow every time you experience a problem with the computer. Your ability to solve problems will improve as you learn about how the computer and its software work together.

Get familiar with all the manuals provided with your computer, as well as the manuals that come with the programs and devices you purchase.

Your local computer store or book store sells a variety of self-help books you can use to supplement the information in the manuals.

If problem solving is taking a long time, take a break.

If you've been fighting to solve a problem for a long period of time, you're probably frustrated by now. Stand up and take a deep breath and do something else—make some coffee, look out the window, phone a friend. Often, you can find a new solution to a problem just by stepping away from it for a few moments.

If You Need Further Assistance

If you have followed the recommendations in this chapter and are still having problems, you may need additional technical assistance. This section contains the steps to take to ask for help.

Before You Call

Since some problems may be related to the operating system or the program you're using, it's important to investigate other sources of assistance first. Try the following before contacting Toshiba:

- ❖ Review the troubleshooting information in your Windows 95 documentation.
- ❖ If the problem occurs while you are running a program, consult the program's documentation for troubleshooting suggestions. Contact the software company's technical support group for their assistance.
- ❖ Consult the dealer from whom you purchased your computer and/or program. Your dealer is your best source for current information.

For the number of a Toshiba dealer near you in the United States, call 1-800-457-7777.

Contacting Toshiba

If you still need help and suspect that the problem is hardware related, Toshiba offers a variety of resources to help you.

Start with the Automated Fax Service. Chances are you are not the only person to experience this problem. Toshiba has prepared useful information that can be faxed to you automatically. For instructions see "Toshiba's Automated Fax Service" on page 281.

Next, try one of Toshiba's on-line services. The Toshiba Forum can be accessed through CompuServe, and the Toshiba Bulletin Board Service (BBS) can be reached free of charge from any PC with a modem.

If you still can't find a solution to your problem, you can call Toshiba directly. See "Toshiba Voice Contact" on page 282 for details.

Toshiba's Automated Fax Service

Toshiba's Automated Fax Service System (AUTOFAX) provides useful information about Toshiba computers and accessories. You select documents using your touch-tone telephone. Toshiba's AUTOFAX System sends the requested information to your fax machine. Follow these steps to activate the system:

- 1 Dial the Toshiba AUTOFAX System at (714) 583-3800.**
- 2 To have an index of available documents faxed to you, press 1.**
- 3 If you know the document number of the information you need, press 2.**
- 4 Follow the automated instructions provided by the system.**



NOTE

When entering the area code for your fax number, do not include the "1" prefix.

The AUTOFAX System automatically calls your fax number and sends the requested information. The process usually takes minutes, but load conditions can vary. So please allow up to 24 hours to receive the information.

If your fax machine telephone number is busy or otherwise unavailable, the system makes up to three attempts to complete a transaction.

Toshiba's Bulletin Board Service

Toshiba's Bulletin Board Service (BBS) is available 24-hours a day, and is free of charge to anyone with a PC and a modem. From Toshiba's BBS, you can download files and obtain other useful information to keep your computer running at peak performance.

Be sure you set your modem to Toshiba's BBS protocol:

Data Bits: 8
Parity: None
Stop Bits: 1

You may use the following telephone numbers:

714-837-4408
714-837-4409

The Toshiba Forum on CompuServe

Toshiba's Forum on CompuServe (CIS) gives you the opportunity to ask questions of system operators, to download information, and to access several Toshiba libraries that contain product information, user to user tips, and much more.

To access the Toshiba Forum:

- 1 Log on to Compuserve.**
- 2 From the CIS prompt type** go Toshiba.

Toshiba's World Wide Web Site

To access the Toshiba World Wide Web site:

- ❖ Use any World Wide Web browser to access the World Wide Web, then type <http://www.toshiba.com/tais/csd/support/>.

Toshiba Voice Contact

To aid Toshiba, make sure you have:

- ❖ The computer and any optional devices related to the problem.
- ❖ The Microsoft Windows 95 diskettes, the Toshiba Companion disk and the rest of the master diskettes. You created Microsoft Windows 95 diskettes using Microsoft Create System Diskettes and created other diskettes using Master Disk Creator or purchased diskettes containing the Toshiba drivers/utilities directly from Toshiba.

- ❖ Name and version of the program involved in the problem along with its installation diskettes.
- ❖ Information about what you were doing when the problem occurred.
- ❖ Exact error messages and when they occurred.

In the United States, you can reach Toshiba PC Product Support at:

800-999-4273

From outside the United States, call Toshiba PC Product Support at:

714-859-4273

Toshiba's Worldwide Offices

For additional help, contact one of these Toshiba offices:

Argentina

Smart, S.A.
Mexico (Street) 630
Buenos Aires, 1097
Argentina

Australia

Toshiba (Australia) Pty. Limited
Information Systems Division
84-92 Talavera Road
North Ryde NSW 2113
Sydney
Australia

Austria

A&D
Lindenrabengasse 21
A 1238 Wien
Austria

Belgium

Toshiba Information Systems
Benelux (Belgium) B.V.
Excelsiorlaan 40
B-1930 Zaventem
Belgium

Brazil

Sistema Operacional
Rua Helena 170; 8 Andar
V. Olimpia, CEP 04552-050
Sao Paulo
Brasil

Canada

Toshiba Canada Ltd.
191 McNabb Street
Markham, Ontario
L3R - 8H2
Canada

Czech Republic

CHG Toshiba, s.r.o.
Sumavska 31
612 54 Brno

Finland

Scribona System OY
Sinimäentie 14
P.L. 83
02630 ESPOO
Finland

Germany

Toshiba Europe (I.E.) GmbH
Leibnizstraße 2
D-93055 Regensburg
Germany

Hungary

Technotrade Kft.
Ov utca 185
1147 Budapest
Hungary

Italy

Pregetto Elettronica 92 s.r.l.
Via Galliari 1/A
20156 Milano
Italy

Luxembourg

Same as Belgium

Denmark

Scribona System A/S TPC Service
Naverland 27
DK2600 Glostrup
Denmark

France

Toshiba Systèmes (France) S.A.
7, Rue Ampère
92804 Puteaux Cédex
France

Greece

Ideal Electronics S.A.
109 Syngrou Avenue
176 71 Kalithea
Athens
Greece

Ireland

Same as United Kingdom

Japan

Toshiba Corporation
International Operations-
Personal Computers
1-1, Shibaura 1-Chome
Minato-KU, Tokyo, 105-01
Japan

Mexico

Toshiba de Mexico
Paseo de la Reforma no. 30, 4-Piso
Centro 06048 D.F.
Mexico City
Mexico

Morocco

C.B.I.
22 Rue de Bethune
Casablanca
Morocco

New Zealand

Toshiba (New Zealand) Pty. Limited
Level 4, 3 Ferncroft Street
Grafton Auckland
New Zealand

Papua New Guinea

Fujitsu (PNG) Pty. Ltd.
P.O. Box 4952 Boroko
NCD, Papua
New Guinea

Portugal

Quinta Grande Assistencia Tecnica
Informatica, Lda.
Av. Moinhos no. 15A
Ur. Quinta Grande
2720 Alfragide
Portugal

Slovenia

INEA d.o.o.
Ljudljanska 80
61230 Domzale
Slovenia

The Netherlands

Toshiba Information Systems
Benelux B.V.
Rivium Boulevard 41
2909 LK, Capelle a/d Ijssel
The Netherlands

Norway

Scribona Norge A/S
Toshiba PC Service
Stalfjaera 20
Posboks 51/Kalbakken
N-0901 OSLO 9
Norway

Poland

Wittelsbach Service Polska
ul. Okopowa 47
01-059 Warszawa
Poland

Slovakia

HTC s.r.o.
Kukucinova 26
831 03 Bratislava
Slovakia

Spain

Toshiba Information Systems
(España) S.A.
Parque Empresarial San Fernando
Edificio Europa, Planta 1
Escalera A
28831 Madrid
Spain

Sweden

Scribona TPC AB
Sundbybergsväegen 1
Box 1374
Solna 171 27
Sweden

United Kingdom

Toshiba Information Systems
(U.K) Ltd.
Toshiba Court
Weybridge Business Park
Addlestone Road
Weybridge/Surrey KT15 2UL
United Kingdom

Switzerland

Ozalid AG
Herostrasse 7 Postfach
8048 Zürich
Switzerland

United States

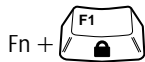
Toshiba America Information
Systems, Inc.
9740 Irvine Boulevard
Irvine, California 92718
United States

For the most recent list of addresses, access Toshiba's AUTOFAX system (see page 281).

The Hotkeys

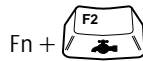
Hotkeys are keys that, pressed in combination with the Fn key, turn system functions on and off. Hotkeys have a white legend on the front of the key indicating the option or feature the key controls.

Instant Password Security



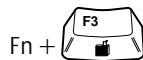
This hotkey locks the keyboard and blanks the display. You must enter your password, if registered, or press Enter to begin work again.

Power



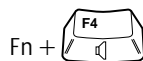
This hotkey displays the battery save pop-up window (in Windows 95 with MaxTime running) and switches among battery save modes: Full Power, Low Power, and User Settings.

Resume Mode



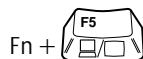
This hotkey displays the Resume Mode pop-up window (in Windows 95 with MaxTime running) and turns Resume Mode on and off.

Sound



This hotkey cycles the alarm volume through Off, Low, Medium and High. Off is always first.

Display



This hotkey alternates among the following display options: built-in display only, external monitor only and simultaneous display.

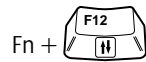
Keyboard



This hotkey turns the cursor control overlay on and off.



This hotkey turns the numeric overlay on and off.



This hotkey turns the scroll lock feature on and off.

MaxTime®

MaxTime® opens automatically each time you start Windows 95.
If MaxTime is not already open, follow these steps:

- 1 Click Start, then point to Programs.**
- 2 Point to Toshiba Utilities, then click MaxTime.**

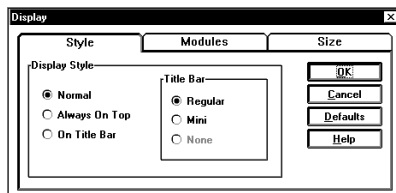
MaxTime displays the MaxTime battery gauge.



The MaxTime battery gauge

The Display Dialog Box

To open the Display dialog box, choose Display from the MaxTime Options menu.



The Display dialog box

This dialog box controls the appearance of the MaxTime window. It provides three pages of display options, arranged like a stack of file folders. Each page of options has its own file folder tab.

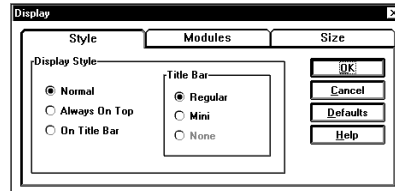
To view or change these options, click the corresponding tab.

Buttons

The following table summarizes the buttons on the Display dialog box:

<i>Button</i>	<i>Function</i>
OK	saves current settings and exits the dialog box.
Cancel	ignores current settings and exits the dialog box.
Defaults	returns to the default settings.
Help	accesses online help.

The Style Page



The Style page

This page controls the Display Style and Title Bar options.

The Display Style option controls where the MaxTime window appears on your screen. The available settings are:

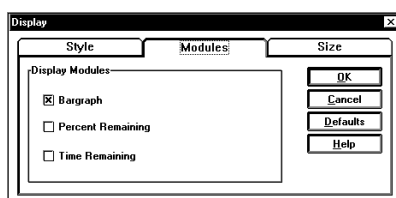
<i>Settings</i>	<i>Description</i>
Normal (default)	allows the MaxTime window to be covered by other active windows.
Always On Top	keeps the MaxTime window on top of all other windows.
On Title Bar	places the MaxTime window on the title bar of the currently active window.

The Title Bar option controls the size of the MaxTime window's title bar. The available settings are:

<i>Settings</i>	<i>Description</i>
Regular (default)	displays the MaxTime title bar at full size.
Mini	reduces the size of the MaxTime title bar. This setting is only available when you have the Display Style option set to Normal or Always On Top.

<i>Settings</i>	<i>Description</i>
None	hides the MaxTime title bar. This setting is only available when you have the Display Style option set to On Title Bar.

The Modules Page

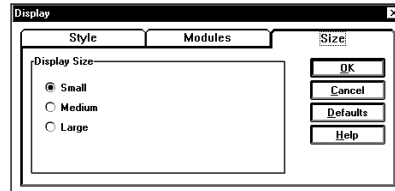


The Modules page

This page controls how the battery gauge is displayed in the MaxTime window. The available modules are:

<i>Module</i>	<i>Description</i>
Bargraph (default)	displays the current battery charge as a horizontal bar graph.
Percent Remaining	displays the current battery charge as a percentage.
Time Remaining	displays the current battery charge as the amount of time remaining.

The Size Page

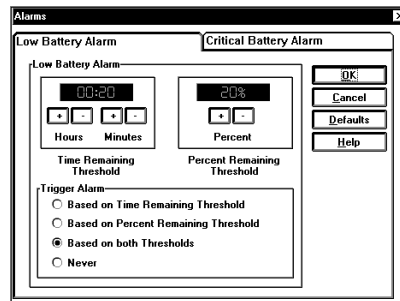


The Size page

This page controls the size of the modules in the MaxTime window. The available settings are Small, Medium and Large.

The Alarms Dialog Box

To open the Alarms dialog box, choose Alarms from the MaxTime Options menu.



The Alarms dialog box

This dialog box displays the options for the Low Battery Alarm and the Critical Battery Alarm on two separate pages, arranged like a stack of file folders. Each page of options has its own file folder tab. The options for these alarms are identical.

To view or change these options, click the corresponding tab.

Buttons

The following table summarizes the buttons on the Alarms dialog box:

<i>Button</i>	<i>Function</i>
OK	saves current settings and exits the dialog box.
Cancel	ignores current settings and exits the dialog box.
Defaults	returns to the default settings.
Help	accesses online help.

Alarm Options

The following table summarizes the options you can set in the Alarms dialog box:

<i>Option</i>	<i>Settings</i>	<i>Usage</i>
Percent Remaining Threshold	xx% (where xx is a percentage you set)	allows you to set a trigger point for the battery alarm.
Time Remaining Threshold	xx:xx (where xx:xx is the time threshold in hours and minutes)	allows you to set a trigger point for the battery alarm.

<i>Option</i>	<i>Settings</i>	<i>Usage</i>
Trigger Alarm	Based on Percent Remaining Threshold	enables the battery alarm.
	Based on Time Remaining Threshold	
	Based on both Thresholds	
	Never	disables the battery alarm.

The Set Battery Charge Dialog Box

To open the Set Battery Charge dialog box, choose Set Battery Charge from the MaxTime Options menu. You may only choose this option when the battery charge is unknown to the system.

This dialog box allows you to estimate the battery charge.

Buttons

The following table summarizes the buttons on the Set Battery Charge dialog box:

<i>Button</i>	<i>Function</i>
OK	saves current settings and exits the dialog box.
Cancel	Cancels current settings and exits the dialog box.
Help	accesses online help.

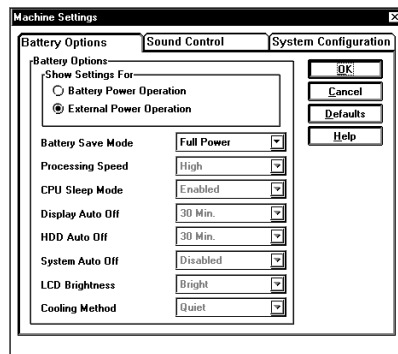
Battery Charge Options

The following table summarizes the battery charge options:

<i>Option</i>	<i>Settings</i>	<i>Usage</i>
Battery Charge	xx% (where xx is a percentage you set)	allows you to estimate the percentage of battery charge remaining.
Disable automatic battery charge inquiry	Enabled (check) Disabled (no check)	enables and disables the system's automatic battery charge inquiry.

The Machine Settings Dialog Box

To open the Machine Setting dialog box, choose Machine Settings from the MaxTime Options menu.



The Machine Settings dialog box

This dialog box controls the battery options, sound control options, and system configuration options. It provides three pages of options, arranged like a stack of file folders. Each page of options has its own file folder tab.

To view or change these options, click the corresponding tab.

The Battery Options Page

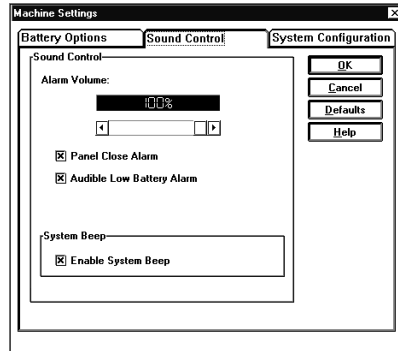
This page controls the battery options. The available options are:

<i>Option</i>	<i>Settings</i>	<i>Usage</i>
Show Settings For	Battery Power Operation External Power Operation	shows settings for use with battery power operation or external power operation.
Battery Save Mode	Full Power Low Power User Settings	allows you to select a preset battery save mode or customize the battery save options.
HDD Auto Off	1 Min. 3 Min. (Low Power default) 5 Min. 10 Min. 15 Min. 20 Min. 30 Min. (Full Power default)	turns the hard disk drive off if it is not used for the time set.

<i>Option</i>	<i>Settings</i>	<i>Usage</i>
Display Auto Off	Disabled	turns the display off if it is not used for the time set.
	1 Min.	
	3 Min. (Low Power default)	
	5 Min.	
	10 Min.	
	15 Min.	
	20 Min.	
	30 Min. (Full Power default)	
System Auto Off	Disabled (Full Power default)	turns the system off if you haven't used the computer for the time set.
	10 Min.	
	20 Min.	
	30 Min. (Low Power default)	
	40 Min.	
	50 Min.	
	60 Min.	
Processing Speed	Low (Low Power default)	sets the speed at which the Central Processing Unit (CPU) processes information.
	High (Full Power default)	

<i>Option</i>	<i>Settings</i>	<i>Usage</i>
Sleep Mode	Disabled (Full Power default) Enabled (Low Power default)	when enabled, temporarily shuts down the processor when there are no processing requests, such as keyboard input or pointing device movement.
LCD Brightness	Bright (Full Power default) Semi-Bright (Low Power default)	sets the brightness of the display.
Cooling Method	Quiet	displays the cooling method. You cannot change this setting.

The Sound Control Page

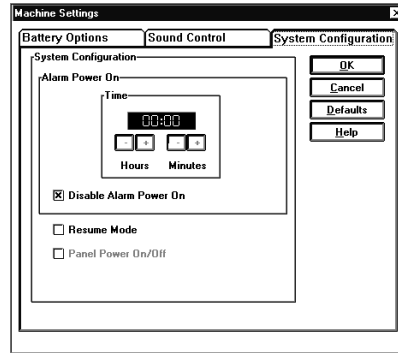


The Sound Control page

This page sets the sound control options. The available options are:

<i>Option</i>	<i>Settings</i>	<i>Usage</i>
Speaker Volume	(user selectable)	sets the volume of the speaker. Choose the Test button to check the selected volume.
Panel Close Alarm	Enabled (check) Disabled (no check)	enables and disables the alarm that sounds when you close the display panel while the computer is on.
Audible Low Battery Alarm	Enabled (check) Disabled (no check)	enables and disables the system's built-in audible battery alarm.
System Beep	Enabled (check) Disabled (no check)	enables and disables your software's use of the system speaker.

The System Configuration Page



The System Configuration page

This page controls the system configuration options. The available options are:

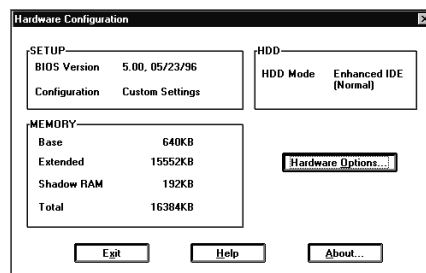
<i>Option</i>	<i>Settings</i>	<i>Usage</i>
Alarm Power On	hour:minute	sets the system to turn on at the time set.
Disable Alarm Power On	Enabled (check)	when enabled, turns off the Alarm Power On Feature.
	Disabled (no check)	
Resume Mode	Resume Mode (check)	turns Resume Mode on and off.
	Boot Mode (no check)	
Panel Power On/Off	Enabled (check)	turns the computer on/off when you open/close the computer's display panel. This option is only available when Resume Mode is selected.
	Disabled (no check)	

Hardware Setup

To open Hardware Setup, follow these steps:

- 1 Click Start, then point to Programs.
- 2 Point to Toshiba Utilities, then click Hardware Setup.

Hardware Setup displays the following dialog box:



The Hardware Configuration dialog box

The Hardware Configuration Dialog Box

This dialog box displays system information. The values are calculated by the system and cannot be changed. It is for reference only.

Buttons

The following table summarizes the buttons on the Hardware Configuration dialog box:

<i>Button</i>	<i>Function</i>
Exit	exits the dialog box.
Help	accesses online help.
About	displays information about the Hardware Setup program.
Hardware Options	opens the Hardware Configuration Options dialog box.

The SETUP Section

This section of the Hardware Configuration dialog box displays general information about the system:

<i>Information</i>	<i>Discussion</i>
BIOS Version	indicates the version and date of the computer's Basic Input/Output System (BIOS).
Configuration	indicates whether you're using the default configuration settings (Default Settings), or have changed any of the configuration settings (Custom Settings).

The MEMORY Section

This section shows how the computer's memory is allocated. These values are calculated automatically by the system and cannot be changed.

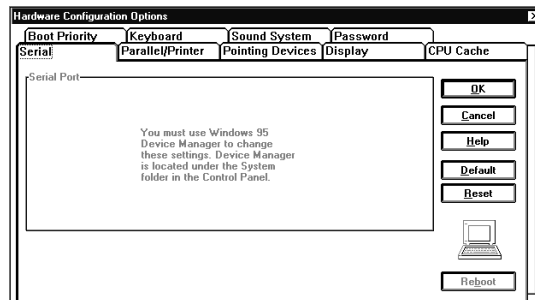
<i>Memory Type</i>	<i>Description</i>
Base	displays the amount of conventional memory available to the computer.
Extended	displays the amount of extended memory available.
Shadow RAM	displays the amount of memory available for Shadow RAM. Shadow RAM copies (shadows) the computer's BIOS functions from ROM into faster RAM to improve system speed.
Total	displays the total amount of memory installed.

The HDD Section

This section shows that the hard disk is set to Enhanced IDE mode. This is for your information only and cannot be changed.

The Hardware Configuration Options Dialog Box

To open this dialog box, choose Hardware Options in the Hardware Configuration dialog box.



The Hardware Configuration Options dialog box

This dialog box controls the hardware configuration options. It provides seven pages of options, arranged like a stack of file folders. Each page of options has its own file folder tab.

To view or change these options, click the corresponding tab.

Restart Indicators

When you change an option that does not require the system to restart, Hardware Setup displays a small gray triangle to the left of the tab caption.

When you change an option that requires the system to restart, Hardware Setup displays a small lightning bolt icon to the left of the tab caption and in the computer screen at the lower right corner of the dialog box.

The Legend Field

Each page of hardware configuration options has a Legend field. This field displays information to help you choose option settings. For example, when you choose the Pointing Devices page, the Legend field displays the following message: “Select the operational mode of the AccuPoint and PS/2 mouse. Auto-selected enables the AccuPoint only if a PS/2 mouse is not connected at power on time. Simultaneous enables both.”

Buttons

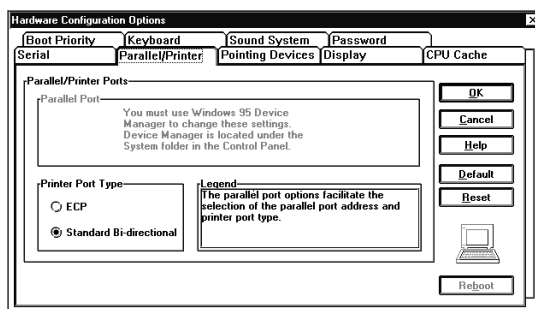
The following table summarizes the buttons on the Hardware Configuration Options dialog box:

<i>Button</i>	<i>Function</i>
OK	accepts your changes and exits the dialog box.
Cancel	ignores the changes you made and exits the dialog box.
Help	accesses online help.
Default	returns all options to their default settings. To make the defaults permanent, you must click OK.
Reset	returns all options to the settings in effect when you opened the dialog box.
Reboot	immediately restarts the computer. This button is available only if you change an option that requires a restart.

The Serial Page

The options on this page are grayed out and cannot be changed. Use the Windows 95 Device Manager to change the Serial Port setting. Refer to “Using Device Manager to Configure Your System” on page 221 for instructions.

The Parallel/Printer Page



The Parallel/Printer page

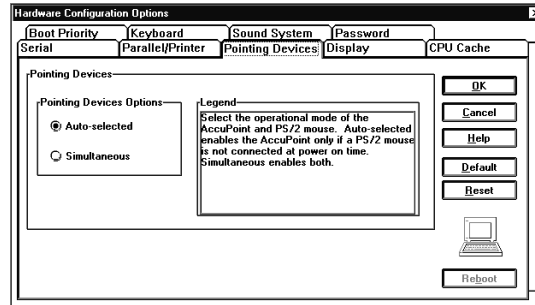
This page controls the computer's parallel port.

<i>Option</i>	<i>Settings</i>	<i>Usage</i>	<i>Restart</i>
Printer Port Type	ECP (default) Standard Bi-directional	configures the parallel port to be used with a printer or other parallel device. Refer to the device's documentation to determine the setting it requires.	Y



The Parallel Port option is grayed out and cannot be changed. Use the Windows 95 Device Manager to change this setting. Refer to “Using Device Manager to Configure Your System” on page 221 for instructions.

The Pointing Devices Page

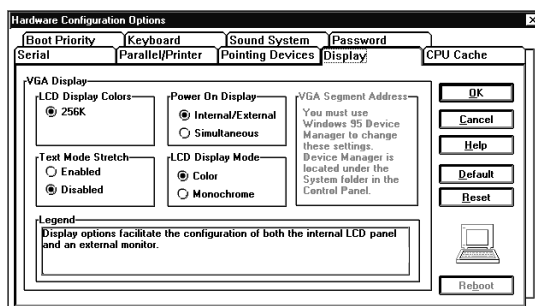


The Pointing Devices page

This page controls the pointing devices option.

<i>Option</i>	<i>Settings</i>	<i>Usage</i>	<i>Restart</i>
Pointing Devices	Auto-selected (default) Simultaneous (This option does not affect serial pointing devices.)	sets which pointing device is active when you connect an external PS/2 pointing device to the computer through the optional Port Replicator.	Y

The Display Page



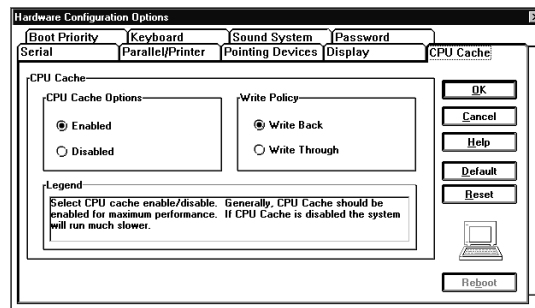
The Display page

This page contains the display options.

<i>Option</i>	<i>Settings</i>	<i>Usage</i>	<i>Restart</i>
LCD Display Colors	256K colors	displays the number of colors available to the display.	N/A
Power On Display	Internal/External (default) Simultaneous	controls whether the system sends output to the internal display, the external display or both when you turn the computer on.	Y
Text Mode Stretch	Enabled (default) Disabled	The screen has a height of 600 pixels. In a text mode, this leaves a small amount of space above and below the text on the screen. Enabling this mode stretches the text to fill the entire screen.	N

<i>Option</i>	<i>Settings</i>	<i>Usage</i>	<i>Restart</i>
LCD Display Mode	Color (default) Monochrome	controls whether the computer displays images in color or in black and white.	Y

The CPU Cache Page



The CPU Cache page

This page controls the CPU Cache option.

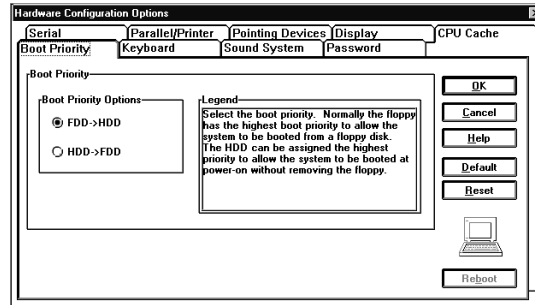
<i>Option</i>	<i>Settings</i>	<i>Usage</i>	<i>Restart</i>
CPU Cache Options	Enabled (default) Disabled	improves system performance when enabled. Disable this option only if your software requires you to do so.	Y

318 Hardware Setup

The Hardware Configuration Options Dialog Box

<i>Option</i>	<i>Settings</i>	<i>Usage</i>	<i>Restart</i>
Write Policy	Write Back (default)	Write Back provides maximum performance.	Y
	Write Through	Write Through reduces performance to offer compatibility with older programs that may not run on a fast system. This option is available only if CPU Cache Options is set to Enabled.	

The Boot Priority Page

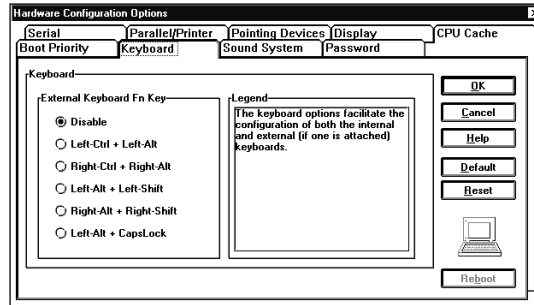


The Boot Priority page

This page controls the Boot Priority option.

<i>Option</i>	<i>Settings</i>	<i>Usage</i>	<i>Restart</i>
Boot Priority	FDD→HDD (default) HDD→FDD	determines whether the system looks for the operating system first on the hard disk (HDD) or the diskette drive (FDD) when you turn the computer on.	N

The Keyboard Page



The Keyboard page

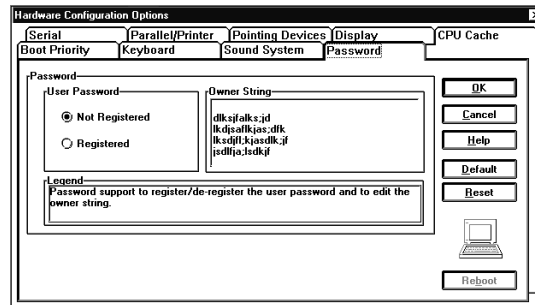
This page controls the External Keyboard Fn Key option.

<i>Option</i>	<i>Settings</i>	<i>Usage</i>	<i>Restart</i>
External Key-board Fn Key	Disabled (default) Left-Ctrl + Left-Alt Right-Ctrl + Right-Alt Left-Alt + Left-Shift Right-Alt + Right-Shift Left-Alt + CapsLock	allows you to use the selected key combination to emulate the computer's Fn key on an external keyboard.	N

The Sound System Page

The options on this page are grayed out and cannot be changed. Use the Windows 95 Device Manager to change the sound system I/O Address, DMA Channel, and Interrupt Level settings. Refer to “Using Device Manager to Configure Your System” on page 221 for instructions.

Password



The Password page

This page controls the password feature. For complete information about the Portégé 620CT’s password security, see “Using a Password” on page 197.

<i>Option</i>	<i>Settings</i>	<i>Usage</i>	<i>Restart</i>
User Password	Not Registered (default) Registered	registering a password helps prevent unauthorized use of your computer.	Y
Owner String		identifies the owner of a particular password whenever it’s used.	Y

TSETUP



NOTE

TSETUP only runs outside of Windows, at a system prompt.

To open TSETUP, follow these steps:

1 Click Start, then click Shut Down.

Windows 95 displays the Shut Down Windows dialog box.

2 Click the button next to Restart the computer in MS-DOS mode, then click Yes.

Windows 95 shuts down the computer, then restarts it in MS-DOS mode and displays a system prompt.

3 Type `c:\dos\tsetup` and press Enter.

TSETUP displays a screen similar to the following:

```

SYSTEM SETUP                                BIOS version = x.xx
----- MEMORY -----
Total          = 8192KB
Base           = 640KB
Extended      = 7360KB
Shadow BIOS ROM = 192KB

----- DISPLAY -----
Display Adaptor = VGA compatible
LCD Display Mode = Color
VGA Segment Address = E000H
LCD Display Colors = 256K Colors
Power On Display = Internal/External
Text Mode Stretch = Disabled

----- HARD DISK -----
HDD Mode = Enhanced IDE (Normal)

----- I/O PORTS -----
Serial Port = COM1 (IRQ4/3F8H)
Parallel Port = LPT1 (378H)
Sound System = Address/IRQ/DMA

----- PASSWORD -----
Not Registered

----- OTHERS -----
Power-up Mode = Resume
CPU Cache = Enabled
Battery Save Mode = Full Power
Alarm Volume = High
System Beep = Enabled
Panel Power On/Off = Disabled
Alarm Power On = Disabled
Keyboard = Fn
Pointing Devices = Auto-Selected
Boot Priority = FDD -> HDD

↑←→:Select items      Space, Bksp : Change values
Esc: Exit without saving  Home: Set default values      End: Save changes and Exit
  
```

A sample System Setup screen

Making Changes in TSETUP

This table lists the keys to use in TSETUP.

<i>Key(s)</i>	<i>Result</i>
← and →	Moves between the two columns.
↑ and ↓	Moves between items in a column.
Spacebar and BkSp	Changes the selected item.
Esc	Quits TSETUP without saving changes.
End	Saves your changes and quits TSETUP, restarting the computer if necessary.
Home	Resets each option to its factory preset value.

Closing TSETUP

To close TSETUP and keep your changes, press End. When TSETUP asks you to confirm your action, press Y. TSETUP closes with your changes in effect and restarts the computer or returns you to the system prompt, depending on the changes you made.

To close TSETUP without saving your changes, press Esc. When TSETUP asks you to confirm your action, press Y. TSETUP returns you to the system prompt.

MEMORY

This group shows how the computer's memory is allocated.

<i>Memory Type</i>	<i>Description</i>
Total	displays the total amount of memory installed.
Base	displays the amount of conventional memory available to the computer.
Extended	displays the amount of extended memory available.
Shadow BIOS ROM	displays the amount of memory available for Shadow BIOS ROM. Shadow BIOS ROM copies (shadows) the computer's BIOS functions from ROM into faster RAM to improve system speed.

These values are calculated by the system and cannot be changed.

DISPLAY

This group configures the Liquid Crystal Display (LCD) and video port output.

<i>Option</i>	<i>Settings</i>	<i>Usage</i>	<i>Restart</i>
Display AdaptorS	VGA Compatible (default)	automatically turns on the computer's internal display adapter. This setting cannot be changed.	N/A
LCD Display Mode	Color (default) Monochrome	controls whether the computer displays images in color or in black and white.	Y
Display Colors	256K colors	displays the number of colors available to the display. It is set at 256K colors and cannot be changed.	N/A
Power On Display	Internal/External (default) Simultaneous	controls whether the system sends output to the internal display, the external display or both when you turn the computer on in boot mode.	Y

<i>Option</i>	<i>Settings</i>	<i>Usage</i>	<i>Restart</i>
Text Mode Stretch	Enabled (default) Disabled	The screen has a height of 600 pixels. In a text mode, this leaves a small amount of space above and below the text on the screen. Enabling this mode stretches the text to fill the entire screen.	N

HARD DISK

This section shows the HDD Mode setting.

<i>Option</i>	<i>Settings</i>	<i>Usage</i>	<i>Restart</i>
HDD Mode	Enhanced IDE (Normal) Standard IDE	Choose Standard IDE only if you're working with an operating system, such as UNIX or Novell, that cannot handle the Enhanced IDE setting. Microsoft Windows and MS-DOS work with the Enhanced IDE setting.	Y

I/O PORTS

This group allows you to configure communications port settings for the serial and parallel ports.



Changes you make to these settings in TSETUP will not affect Windows 95. To set these options for Windows 95, use Device Manager. Refer to "Using Device Manager to Configure Your System" on page 221.

<i>Option</i>	<i>Settings</i>	<i>Usage</i>	<i>Restart</i>
Serial Port	COM1 (IRQ4/3F8H) (default)	sets the serial port name through which your communications software sends output to the serial port.	Y
	COM2 (IRQ3/2F8H)		
	COM3 (IRQ4/3E8H)		
	COM4 (IRQ3/2E8H)		
	Not Used		
Parallel Port	LPT1 (378H) (default)	sets the parallel port name through which the computer communicates with the parallel port.	Y
	LPT2 (278H)		
	LPT3 (3BCH)		
	Not Used		

<i>Option</i>	<i>Settings</i>	<i>Usage</i>	<i>Restart</i>
Sound System	Address/IRQ/ DMA Disabled	lets you choose a unique I/O address, an Interrupt Request (IRQ) number, and a Direct Memory Address (DMA) channel for the sound system, or turn the sound system off.	Y

The following sound system options are in a drop-down list box that appears when you highlight Address/IRQ/DMA for the Sound System option:

<i>Option</i>	<i>Settings</i>	<i>Usage</i>	<i>Restart</i>
I/O Address	0220H 0230H 0240H 0250H	lets you assign a unique Input/Output (I/O) address to the sound system.	Y
Interrupt Level	IRQ5 IRQ7 IRQ9 IRQ10	allows you to assign a unique interrupt level to the sound system.	Y
DMA	Channel 0 Channel 1 Channel 3	lets you assign a unique Direct Memory Address (DMA) channel to the sound system.	Y

If you set the Parallel Port to anything other than Not Used, a drop-down list box appears offering a choice between ECP and Standard Bi-directional. Set this to Standard Bi-directional only if the documentation for your parallel device instructs you to do so.

PASSWORD

This group lets you set or reset the system password.

<i>Settings</i>	<i>Restart</i>
Password	N (although the password doesn't take effect until you restart the computer)
Not Registered (default)	

If you set a new password, TSETUP offers you the chance to create a password service diskette. This diskette lets you start the computer even if you forget your password. For complete information about creating and using a password service diskette, see "Protecting Against Forgetfulness" on page 200.

OTHERS

This group allows you to set many other configuration options. Whether or not you need to use these options depends primarily on the software and devices you use.

<i>Option</i>	<i>Settings</i>	<i>Usage</i>	<i>Restart</i>
Power-up Mode	Resume Boot (default)	alternates between Resume Mode and Boot Mode.	N

<i>Option</i>	<i>Settings</i>	<i>Usage</i>	<i>Restart</i>
CPU Cache	Enabled (default) Disabled	when enabled, improves system performance. Disable this option only if your software requires you to do so. If you set the CPU Cache to Enabled, a drop-down box lets you choose between Write-back (default) and Write-through. Write-back provides maximum performance. Write-through reduces performance to offer compatibility with older programs that may not run on a fast system.	Y
Battery Save Mode	Full Power (default) Low Power User Settings	allows you to select a pre-set battery save mode or customize the battery save options.	N
Alarm Volume	Off Low Medium High (default)	sets the volume of the system's alarms (such as the low battery alarm). This also affects sounds generated by any PC card modem installed.	N

<i>Option</i>	<i>Settings</i>	<i>Usage</i>	<i>Restart</i>
System Beep	Enabled (default) Disabled	enables and disables your software's use of the system speaker.	N
Panel Power On/Off	Enabled Disabled (default)	turns the computer on/off when you open/close the computer's display panel. This option is only available when Resume Mode is selected.	N
Alarm Power On	xx:xx:xx (hour:minute:second) Disabled (default)	turns the computer on at the time set.	N
Fn		when you highlight this option, TSETUP displays a drop-down box displaying the Ext. Keyboard "Fn" key equivalent option.	

<i>Option</i>	<i>Settings</i>	<i>Usage</i>	<i>Restart</i>
Ext. Keyboard “Fn” key equivalent	Disabled (default) Left Ctrl + Left Alt Right Ctrl + Right Alt Left Alt + Left Shift Right Alt + Right Shift Left Alt + Caps Lock	allows you to use the selected key combination to emulate the computer's Fn key on an external keyboard.	N
Pointing Device	Auto-selected (default) Simultaneous (This option does not affect serial pointing devices.)	sets which pointing device is active when you con- nect an external PS/2 pointing device to the computer through the optional Port Replicator.	Y
Boot Priority	FDD→HDD (default) HDD→FDD	determines whether the system looks for the oper- ating system first on the hard disk (HDD) or the diskette drive (FDD) when you turn the com- puter on.	N

The following battery save options appear in a drop-down list box when you highlight Battery Save Mode. You can change the settings in this box only if the Battery Save Mode is set to User Settings:

<i>Option</i>	<i>Settings</i>	<i>Usage</i>	<i>Restart</i>
Processing Speed	High (Full Power default) Low (Low Power default)	sets the speed at which the Central Processing Unit (CPU) processes information.	N
CPU Sleep Mode	Enabled (Low Power default) Disabled (Full Power default)	when enabled, temporarily shuts down the processor when there are no processing requests, such as keyboard input or pointing device movement.	N
Display Auto Off	01 Min. 03 Min. (Low Power default) 05 Min. 10 Min. 15 Min. 20 Min. 30 Min. (Full Power default) Disabled	turns the display off if it is not used for the time set.	N

<i>Option</i>	<i>Settings</i>	<i>Usage</i>	<i>Restart</i>
HDD Auto Off	01 Min. 03 Min. (Low Power default) 05 Min. 10 Min. 15 Min. 20 Min. 30 Min. (Full Power default)	turns the hard disk drive off if it is not used for the time set.	N
System Auto Off	10 Min. 20 Min. 30 Min. (Low Power default) 40 Min. 50 Min. 60 Min. Disabled (Full Power default)	turns the system off if you haven't used the computer for the time set. This option is available only if Resume Mode is on.	N
LCD Brightness	Bright (Full Power default) Semi-Bright (Low Power default)	sets the brightness of the display.	N

The following sound options are in a drop-down list box that appears when you select Low, Medium, or High for Alarm Volume:

<i>Option</i>	<i>Settings</i>	<i>Usage</i>	<i>Restart</i>
Low Battery Alarm	Enabled (default)	enables and disables the system's built-in audible battery alarm.	N
	Disabled		
Panel Close Alarm	Enabled (default)	enables and disables the alarm that sounds when you close the display panel while the computer is on.	N
	Disabled		

The Diagnostic Test

This chapter explains how to use the diagnostic test program TDIAGS.EXE to determine if your system components are working properly.

Use the diagnostic test if you have a problem you could not identify with the tips listed in the chapter “If Something Goes Wrong.” The test verifies that the following system components (hardware) are in working order:

- ❖ system (the computer's internal hardware)
- ❖ memory
- ❖ video
- ❖ diskette drive
- ❖ hard disk drive
- ❖ printer (if you have one attached)

This chapter explains each of these tests in detail.

Starting the Diagnostic Test

To test hardware, it's important to start the diagnostic test without optional features or programs (for example, without memory-resident programs). To do so, you should run TDIAGS from the Toshiba Companion Diskette using the Toshiba Companion Utility (even though the TDIAGS program is on the hard disk).

Before you start the test, check all cables for loose connections. If any errors occur during the test, check all cable connections again.

To start the test, follow these steps:

1 Make sure the external diskette drive is connected.

2 Click Start, then click Shut Down.

Windows 95 displays the Shut Down Windows dialog box.

3 Click the button next to Restart the computer in MS-DOS mode, then click Yes.

Windows 95 shuts down the computer, then restarts it in MS-DOS mode and displays a system prompt.

4 Put the Toshiba Companion Diskette in the diskette drive and press Ctrl + Alt + Del.

After a moment, the computer displays a Welcome screen.

5 Press Enter.

The Toshiba Companion Utility loads the diagnostic test and displays its main menu:

Main Menu

Install Utilities and Files
View README Documents
Setup Your Computer
Run Diagnostics
Run Master Diskette Creator
Exit to DOS

- 6 Use the arrow keys to select **Run Diagnostics** and press Enter.

TDIAGS asks you to confirm that you want to run the diagnostic test.

- 7 To run the diagnostic test, press **Y (for yes)**, and press Enter.

The following sections explain the diagnostic test options.

Choosing Test Options

Before the test begins, the program asks several questions about which components you wish to test.

- 1 The first question asks if you want to test the diskette drive(s). The computer displays:

Test the FDD (Y/N)?

- 2 To test the diskette drive(s), type **Y** and press Enter. To bypass the test, type **N** and press Enter.

The FDD (floppy disk drive) test checks the internal diskette drive, and the external drive if you have one. Attach the external drive before running this test.



The test writes test patterns on any diskette in the drive. These patterns destroy all information on the diskette(s). Make sure there is no information you want to keep on the diskette(s) you use.

If you choose the FDD test, you must format and write-enable these diskettes before the test. For 3.5-inch diskettes, move the write-protect tab to cover the square hole.

The next prompt asks if you want to test the hard disk drive:

Test the HDD (Y/N)?

- 3 To test the hard disk, type Y and press Enter. Otherwise, type N and press Enter.**
-



The hard disk test overwrites a portion of the information stored on the disk. Back up any important files before you test the hard disk.

The following prompt appears:

Test the printer (Y/N)?

- 4 Type Y to test the printer, or N to skip the test, and press Enter.**

Before beginning the test, make sure the printer is connected to the computer, the power is turned on, and the printer is on line.

If you chose to test the printer, the prompt displays:

Compatible with IBM printer (Y/N)?

- 5 To test an IBM or an IBM-compatible printer, type Y and press Enter. To test a non-IBM-compatible printer, type N and press Enter.**

If you choose an IBM printer when your printer is not an IBM or IBM-compatible printer, the test output will be unintelligible and may cause the printer to eject multiple blank pages. If you're not sure about your printer's compatibility, type N for a non-IBM-compatible printer.

Test Sequence

The diagnostic test checks the computer's components and printer in a predefined sequence as follows:

- 1 **system test**
- 2 **memory test**
- 3 **display test**
- 4 **external diskette drive test**
- 5 **HDD (hard disk drive) test**
- 6 **printer test**

While a test is in progress, the program displays:

```
IN PROGRESS TSSDSS
```

where *T* indicates the test number, the first *SS* indicates the subtest number, *D* indicates the drive (if tested), and the second *SS* indicates the hardware status. This message may remain on the screen for a moment. The following sections describe each subtest.

System Functions and Memory

The system functions and the memory tests run together for approximately two seconds. The system functions test doesn't display any messages. The memory test displays the following message:

```
PROGRESS xxxxxx
```

where *xxxxxx* is the current memory location being tested. The memory test includes conventional and extended memory.

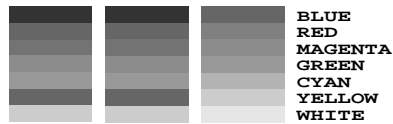
If either test aborts:

- 1 **Write down everything that appears on the screen.**
- 2 **Press Ctrl + Pause to return to the diagnostics menu.**
- 3 **Consult your dealer.**

Character Attributes

When the memory test completes, the diagnostic test displays the following screen:

```
CHARACTER ATTRIBUTES
NEXT LINE SHOWS NORMAL DISPLAY.
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
NEXT LINE SHOWS INTENSIFIED DISPLAY.
IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII
NEXT LINE SHOWS REVERSE DISPLAY.
RRRRRRRRRRRRRRRRRRRRRRRRRRRRRRRRRRR
NEXT LINE SHOWS BLINKING DISPLAY.
BBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBB
```



Press [Enter] key

Character attributes test screen

Look under the message NEXT LINE SHOWS BLINKING DISPLAY to make sure the line is actually blinking.

If your screen doesn't match the diagnostic test display, write down the differences and contact your dealer. If your screen matches the display, press Enter to go to the next test.

320 X 200 Graphic Display

The next test is the 320 x 200 GRAPHIC DISPLAY (13) test. The test screen displays 16 colored horizontal bars with the name of the color.

Go to the next test by pressing Enter.

Character Sets

The next two tests are character set tests. The first checks that the screen can display characters in a 40 column by 25 row format (the characters are wider than normal).

Graphics Capabilities

The next subtests check the screen's graphics capabilities for each of the computer's graphics modes.

During the test, the resolution and mode number appear above an image representing the mode's capabilities. The number inside the brackets is the mode number.

The illustration below shows the test image for one of the 320 x 200 graphics modes (mode 4).

320*200 GRAPHICS DISPLAY : [4]



PRESS [ENTER] KEY

Graphics capabilities test screen

A similar screen appears for each of the computer's graphics modes.

Press Enter to proceed with the next screens. Each screen has a similar image (three boxes of different shades of gray), differing primarily in resolution. If a different image appears on your screen, contact your dealer. If the screens match the display, press Enter to go to the next test.

Diskette Drives

If you selected the diskette drive test, you see a prompt that asks you to insert a diskette into the drive you want to test.

Insert a formatted, write-enabled diskette into the drive.



This test may destroy all information on the diskettes. Make sure there is no information you want to keep on the diskettes you use.

To skip this test and return to the diagnostics menu, press Ctrl + Pause.

After you insert the diskette in the drive, press Enter. The test begins and displays this message:

FLOPPY DISK IN PROGRESS 503000

If an error occurs, the test displays the ABORTED message. Write down the highlighted numbers and return to the main menu by pressing Ctrl + Pause.

If a diskette drive fails the test, check the following:

- ❖ Does the drive contain a diskette?
- ❖ Is the diskette properly formatted?
- ❖ Is the diskette write-enabled?
- ❖ Is the diskette undamaged?

Repeat the test with another diskette. If the test displays the ABORTED message again, see your dealer. If you inserted a write-protected diskette or if you left the drive empty, the test aborts. Return to the main menu by pressing Ctrl + Pause.

If the test completes successfully, and you selected the hard disk test, the diagnostic test begins checking the hard disk. If you did not select the hard disk or printer test, the diskette drive test concludes by displaying the TDIAGS screen. To exit TDIAGS, go to “Exiting the Diagnostic Menus” on page 349.

Hard Disk

If the diskette drive tests successfully and you selected the hard disk drive test, the hard disk test displays this message:

HARD DISK TEST IN PROGRESS 805100

If an error occurs, the test displays the ABORTED message. Write down all messages and highlighted numbers and consult your dealer. Your computer or your drive may need service. To return to the main menu, press Enter.



The hard disk test does not destroy all of the information stored on the hard disk. However, this test overwrites a small portion of the disk. Back up any important files before you test the hard disk.

If the test completes successfully, and you selected the printer test, the diagnostic test begins the printer test. If you did not select the printer test, the hard disk test concludes by displaying the TDIAGS screen. To exit TDIAGS, go to “Exiting the Diagnostic Menu” on page 349.

Printer

If the hard disk drive tests successfully and you selected to test the printer, the printer test displays this message:

PRINTER TEST IN PROGRESS 60xxxx

where xxxx is a counter that shows the test is still in progress. If you specified an IBM-compatible printer, the test sends the following output to the printer:

```
PRINTER TEST
1. THIS LINE SHOWS NORMAL PRINT.
2. THIS LINE SHOWS DOUBLE WIDTH PRINT.
3. THIS LINE SHOWS COMPRESSED PRINT.
4. THIS LINE SHOWS EMPHASIZED PRINT.
5. THIS LINE SHOWS DOUBLE STRIKES PRINT.
6. ALL CHARACTERS PRINT

!*$%&'()*+,-./0123456789:;<=>?@ABCDEFGHIJKLMNQRSTUvwxyz[\]_`abodefghi jklmn
opq rstuvwxyz{|}~
```

IBM-compatible printer output

Features and Specifications

This appendix lists the features of the Portégé 620CT computer and summarizes its specifications.

Built-in Features

This section lists the Portégé 620CT features.

Technology and Processor

Microprocessor	100MHz Intel Pentium with Voltage Reduction Technology
LSI and CMOS	large scale integrated and complementary metal-oxide semiconductor technology, providing minimum size and weight, low power usage and high reliability

ECP the Portégé 620CT parallel port supports Enhanced Capability Port (ECP), providing increased performance when you're using an ECP-compatible parallel device

Power

Computer 15V input voltage (constant voltage)
2.0 amps maximum (constant current)

AC adapter 100 to 240 volts alternating current
50 or 60 hertz (cycles per second)

Main battery removable, rechargeable lithium ion battery pack

Backup battery provides power for special memory features, such as Resume Mode

RTC battery provides power for the internal real-time clock and calendar

Intelligent power supply detects low battery charge and displays the time remaining, in MaxTime

Automatic power off saves battery power by automatically turning off the display and hard disk when either have not been accessed for a set length of time

Storage Capacity

External 3.5-inch diskette drive	accommodates both 1.44MB, high density (2HD) and 720KB, double-density (2DD) diskettes
Hard disk	2.5-inch integrated drive and controller provides nonvolatile storage for 1.3 billion bytes (1.26GB) with an average access time of 13 milliseconds (ms)

Ports

Parallel port	selectable, ECP-compatible parallel port that provides a Centronics-compatible connection to a printer or other parallel device
Serial port	9-pin, RS-232-C-compatible serial port lets you connect an external modem, mouse, serial printer or other serial device
Video/Port Replicator port	72-pin, analog VGA port lets you connect an external VGA adapter for an external monitor, or an optional Port Replicator
External diskette drive port	lets you attach the Toshiba 1.44MB external 3.5-inch diskette drive

Standard Hardware

Memory	8MB EDO that uses 3.3 volt, 4-megabit dynamic RAM chips for 640KB conventional and 7360KB extended memory
Display	the Portégé 620CT has a 10.4 inch (measured diagonally) active matrix Thin Film Transistor (TFT) color LCD that displays up to 64K colors simultaneously at 800x600 resolution
Keyboard	enhanced 82-key (84-key in Europe) keyboard emulates the IBM PS/2 keyboard and includes embedded numeric and cursor control overlays and dedicated cursor control keys
AccuPoint and buttons	provides the complete function of a mouse or other pointing device from within the keyboard
External VGA adapter	provides compatibility between the Video/Port Replicator port and an external monitor
External diskette drive	accommodates both 1.44MB and 720KB 3.5-inch diskettes

Standard Software

Operating System	Microsoft Windows 95
Configuration Programs	Hardware Setup and TSETUP let you change configuration options and set preferences
Power	APM device driver and MaxTime monitor the battery charge and provide access to the Portégé 620CT's power-saving features

Special Features

Resume Mode	electronic bookmark that records what you're doing when you turn the computer off and returns you to the same place when you turn the power back on
Advanced Power Management	determines the system's power needs and automatically configures the computer for maximum power savings
Security	instant and power-on passwords help protect your files

Documentation

User's Guide	explains how to set up the computer, gives instructions for basic computing tasks and documents all system components and features
Online Documentation	provides the <i>Portégé 620CT User's Guide</i> in hypertext form Load this manual into memory and refer to it when you have questions about the computer
Microsoft Windows 95 documentation	documents the Microsoft Windows 95 operating system

Optional Accessories and Devices

This section lists the options available for the Portégé 620CT computer.

Power Devices

Battery charger	charges extra battery packs
Additional battery packs	use as spare or replacement packs to extend the time you can operate the computer away from a live wall outlet

Memory Cards

8MB	expands the computer's memory to 16MB
16MB	expands the computer's memory to 24MB
32MB	expands the computer's memory to 40MB

Expansion Capability

PC Card slot	lets you install up to two Type I or Type II PC Cards, or one Type III PC Card. Maximum slot thickness: 10.5mm
Port Replicator	optional docking station that provides access to the following: parallel port, serial port, video port, PS/2 keyboard port, PS/2 mouse port, external diskette drive port, security lock slot, power socket

Others

Carrying case	sturdy fabric or leather carrying case protects the computer while traveling
---------------	--

Security

Cable	Noteworthy Computer Lock cable to deter computer theft
-------	--

Specifications

Physical Dimensions

Weight	4.8 lbs (2.2 kilograms) including battery
Size	width x depth x height 9.88" x 7.91" x 1.89" (261mm x 208mm x 48mm)

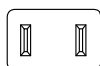
Environmental Specifications

<i>Condition</i>	<i>Ambient Temperature</i>	<i>Relative Humidity</i>	<i>Altitude (From Sea Level)</i>
Operating	41° to 95° F 5° to 35° C	20% to 80% (non- condensing)	-200 to 10,000 feet (-60 to 3,000 meters)
Nonoperating	-4° to 149° F -20° to 65° C	10% to 90% (non- condensing)	-200 to 30,000 feet (-60 to 10,000 meters)
Wet-bulb temperature	79° F 26° C maximum		

Power Cord Connectors

The Portégé 620CT computer features a universal power supply you can use worldwide. This appendix shows the shapes of the typical AC power cord connectors for various parts of the world.

USA and Canada



UL approved
CSA approved

Australia



AS approved

United Kingdom



BS approved

Europe



VDA approved
NEMKO approved

System Resources

This appendix lists the preassigned IRQ levels, DMA channels and I/O port addresses.

IRQ Level Assignments

The direct line to the CPU is called an Interrupt ReQuest (IRQ) level or channel. You'll hear both terms used by technical experts. They mean the same thing. The following table lists the IRQ level assignments for the Portégé 620CT computer:

<i>IRQ</i>	<i>Use</i>	<i>Notes</i>
0	Timer	
1	Keyboard	
2	PIC #2	
3	COM2	

<i>IRQ</i>	<i>Use</i>	<i>Notes</i>
4	COM1	
5	Sound	
6	3.5-inch diskette drive	
7	LPT1	ECP or Sound
8	Real-time clock	
9	Software redirect to INT 0Ah or Sound	ECP
10	Sound	ECP
11	Reserved	
12	PS/2 mouse	
13	Numeric data processor	
14	Hard disk	
15	Reserved	This IRQ is available if Card Services is not loaded

DMA Channel Assignments

Direct Memory Access (DMA) allows some devices to transfer data to and from memory at high speeds, without using the CPU. Such devices are each assigned a unique DMA channel. The Portégé 620CT computer has two DMA controllers with four channels on each controller, a total of eight DMA channels.

The following table lists the Portégé 620CT computer's DMA channel assignments.

<i>DMA</i>	<i>Use</i>
0	Sound
1	Sound or ECP
2	3.5-inch diskette drive
3	Sound or ECP
4	Cascade from DMAC 1
5	Reserved
6	Reserved
7	Reserved

Input/Output Port Address Assignments

The CPU accesses input/output devices, such as modems, by reading from them or writing to them. Each command to read or write must specify the address (in memory) for the port. Each device that communicates with the CPU must have a unique I/O port address.

The following table lists the device names and their assigned I/O port addresses for the Portégé 620CT computer.

<i>Port address(h)</i>	<i>Device/Function</i>	<i>Notes</i>
000-01F	82C37: DMA Controller 1	
020-03F	82C59: PIC 1	
040-05F	82C54: Timer	
060-06F	Keyboard Controller	060 and 064 are KBC 061 is system status port
070	NMI mask register	
070-07F	Real Time Clock	
080-09F	DMA page register	
0A0-0BF	82C59: PIC 2	
0C0-0DF	82C37: DMA Controller 2	
0E0-0EF	Special Register	

<i>Port address(h)</i>	<i>Device/Function</i>	<i>Notes</i>
0F0-0F7	Math Coprocessor	
100-1EF	VGA	
1F0-1FF	Hard Disk Controller	
201	Not used	
202-21F	Not used	
220-22F	Not used	Sound System default
230-23F	Not used	Available for Sound System
240-24F	Not used	Available for Sound System
250-25F	Not used	Available for Sound System
260-277	Not used	
278-27F	Parallel PRT 2	
280-2F7	Not used	
2F8-2FF	Serial Port 2 (COM2)	
300-33F	Not used	
340-35F	Not used	

370 System Resources

Input/Output Port Address Assignments

<i>Port address(h)</i>	<i>Device/Function</i>	<i>Notes</i>
360-377	Not used	
378-37F	Parallel PRT 1	
380-387	Not used	
388-38B	Not used	
38C-38F	Not used	
390-39F	Not used	
3A0-3AF	Bisynchronous 1	
3B0-3BF	Parallel PRT 3	
3C0-3DF	CGA, EGA, VGA,	
3E0-3EF	Not used	
3F0-3F7	3.5-inch diskette drive controller	I/O ports 3F6 and 3F7 are used for the HDC also
3F8-3FF	Serial Port (COM1)	
400-47F	Not used	
480-49F	DMA High-Page Register	

Video Modes

This appendix lists the video modes supported by the Portégé 620CT display adapter, and identifies the characteristics of each mode.

The columns of the following tables are defined as follows:

Mode is the mode number in hexadecimal, and is generally used by programmers to specify video modes in programs.

Type identifies the display adapter that first supported the mode, and specifies whether the mode is text or graphics.

Resolution is the measure of the screen's dimensions in terms of horizontal and vertical pixels (in graphics modes), or rows and columns of characters (in text modes).

Grid is the default number of pels per character.

LCD Colors is the maximum number of simultaneous colors, or shades of gray, that the mode can display on the built-in screen.

CRT Colors is the maximum number of simultaneous colors, or shades of gray, that the mode can display on an external monitor.

Scan Freq hor/vert is the horizontal and vertical scanning frequency in Hertz. This is for external monitors only.

Portégé 620CT Video Modes

This table lists the video modes for the Portégé 620CT computer:

Mode (hex)	Type	Resolution	Internal LCD		External Monitor		Scan Freq hor/vert
			Grid (pel x pel)	Colors	Grid (pel x pel)	Colors	
0, 1	VGA Text	40 x 25	8 x 8	16/256K	8 x 8	16/256K	31.5KHz/ 70Hz
2, 3	VGA Text	80 x 25	8 x 8	16/256K	8 x 8	16/256K	31.5KHz/ 70Hz
0*, 1*	VGA Text	40 x 25	8 x 14	16/256K	8 x 14	16/256K	31.5KHz/ 70Hz
2*, 3*	VGA Text	80 x 25	8 x 14	16/256K	8 x 14	16/256K	31.5KHz/ 70Hz
0+, 1+	VGA Text	40 x 25	9 x 16	16/256K	9 x 16	16/256K	31.5KHz/ 70Hz
2+, 3+	VGA Text	80 x 25	9 x 16	16/256K	9 x 16	16/256K	31.5KHz/ 70Hz
4, 5	VGA Graph	320 x 200	8 x 8	4/256K	8 x 8	4/256K	31.5KHz/ 70Hz
6	VGA Graph	640 x 200	8 x 8	2/256K	8 x 8	2/256K	31.5KHz/ 70Hz
7	VGA Text	80 x 25	9 x 14	Mono	9 x 14	Mono	31.5KHz/ 70Hz
7+	VGA Text	80 x 25	9 x 16	Mono	9 x 16	Mono	31.5KHz/ 70Hz
D	VGA Graph	320 x 200	8 x 8	16/256K	8 x 8	16/256K	31.5KHz/ 70Hz
E	VGA Graph	640 x 200	8 x 8	16/256K	8 x 8	16/256K	31.5KHz/ 70Hz
F	VGA Graph	640 x 350	8 x 14	Mono	8 x 14	Mono	31.5KHz/ 70Hz
10	VGA Graph	640 x 350	8 x 14	16/256K	8 x 14	16/256K	31.5KHz/ 70Hz
11	VGA Graph	640 x 480	8 x 16	2/256K	8 x 16	2/256K	31.5KHz/ 60Hz
12	VGA Graph	640 x 480	8 x 16	16/256K	8 x 16	16/256K	31.5KHz/ 60Hz
13	VGA Graph	320 x 200	8 x 8	256/256K	8 x 8	256/ 256K	31.5KHz/ 70Hz
20	SVGA Graph	640 x 480	8 x 16	16/256K	8 x 16	16/256K	31.5KHz/ 72Hz

<i>Mode (hex)</i>	<i>Type</i>	<i>Resolution</i>	<i>Internal LCD</i>		<i>External Monitor</i>		<i>Scan Freq hor/vert</i>
			<i>Grid (pel x pel)</i>	<i>Colors</i>	<i>Grid (pel x pel)</i>	<i>Colors</i>	
22	SVGA Graph	800 x 600	8 x 8	16/256K	8 x 8	16/256K	37.5KHz/ 72Hz
24	SVGA Graph	1024 x 768	8 x 16	16/256K	8 x 16	16/256K	48.5KHz/ 60Hz
30	SVGA Graph	640 x 480	8 x 16	256/256K	8 x 16	256/ 256K	31.5KHz/ 72Hz
32	SVGA Graph	800 x 600	8 x 16	256/256K	8 x 16	256/ 256K	48.0KHz/ 72Hz
34	SVGA Graph	1024 x 768	8 x 16	256/256K	8 x 16	256/ 256K	48.5KHz/ 60Hz
40	SVGA Graph	640 x 480	8 x 16	32K/32K	8 x 16	32K/ 32K	31.5KHz/ 60Hz
41	SVGA Graph	640 x 480	8 x 16	64K/64K	8 x 16	64K/ 64K	31.5KHz/ 60Hz
42	SVGA Graph	800 x 600	8 x 16	32K/32K	8 x 16	32K/ 32K	37.9KHz/ 60Hz
43	SVGA Graph	800 x 600	8 x 16	64K/64K	8 x 16	64K/ 64K	37.9KHz/ 60Hz
50	SVGA Graph	640 x 480	8 x 16	N/A	8 x 16	16M/ 16M	31.5KHz/ 60Hz

Using Windows for Workgroups

If you selected Windows for Workgroups when you first started your computer, you may be wondering how much of this guide is relevant to you. In fact, many of the instructions for Windows 95 procedures are very similar to those you use in Windows for Workgroups.

This appendix tells you how to carry out the procedures described in this guide if you're using Windows for Workgroups.

Using Windows for Workgroups

This section gives a brief introduction to Windows for Workgroups. For more information, click Help, then click Contents to access the online help.

Starting Windows for Workgroups

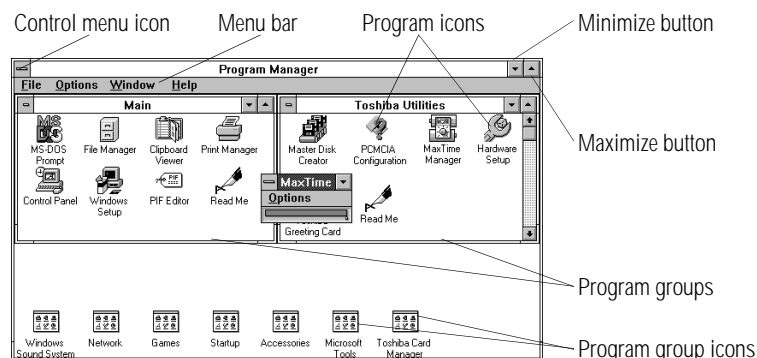
When you turn your computer on, it loads the MS-DOS operating system and displays the command prompt (for example, C:\>). To start Windows for Workgroups, type `c:\windows\win` and press Enter.

Windows for Workgroups loads and displays the Program Manager window.

What's on the Screen?

Program Manager is the gateway to your programs and all the other features of Windows for Workgroups. This section describes the features of Program Manager. Many of these features, such as the menu bar and minimize button, are also present in other programs you run under Windows for Workgroups.

When you start Windows for Workgroups, you see a screen similar to the following:



The Program Manager window

- ❖ Clicking the **control menu icon** opens the control menu. This menu lets you set features such as the size and shape of the current window. Double-clicking this icon closes the current window.
- ❖ Clicking one of the words on the **menu bar** opens a list of related activities.

- ❖ Double-clicking a **program icon** starts the program represented by the icon.
- ❖ Clicking the **minimize button** reduces the current window to an icon. The program in the window is still running—it has just moved out of the way to make room for other windows.
- ❖ Clicking the **maximize button** expands the current window to take up the entire screen. When a program is maximized, the maximize button changes to a double arrow called the restore button. Click the restore button to return the window to its original size.
- ❖ **Program groups** contain one or more icons representing related programs. For example, the Toshiba Utilities program group contains Toshiba programs, such as MaxTime and Hardware Setup.
- ❖ Double-clicking a **program group icon** opens the program group represented by the icon.

There is no close button in Windows for Workgroups.

Starting Programs

To start a program in Windows for Workgroups, double-click its icon in Program Manager.

If the program doesn't have a Program Manager icon, you have the following two choices:

- ❖ In Program Manager, click File, then click Run. Type in the name of your program file or click Browse to locate the program file, then click OK.
- ❖ In File Manager, double-click the icon for the program file. See the next section for information about File Manager.

Working with Files

You use File Manager to copy and move files, and to perform other file operations in Windows for Workgroups. To start File Manager, double-click the File Manager icon in Program Manager's Main program group.

For information about using File Manager, click Help, then click Contents. Type in the subject you wish to explore, or browse through the list of topics provided.

Running Programs Described in the Guide

This guide describes a number of programs that come with your computer. Using these programs under Windows for Workgroups is almost the same as using them under Windows 95. This section lists each of the programs, describes the differences between the Windows 95 and Windows for Workgroups versions and points to the instructions for using them.

Master Disk Creator

Master Disk Creator works as described in "Master Disk Creator" on page 380 with the following exceptions:

- ❖ Master Disk Creator also creates program disks for Windows for Workgroups. There is no Windows for Workgroups equivalent for Microsoft's Windows 95 Create System Disks program.
- ❖ To start Master Disk Creator, go into Program Manager and double-click the Master Disk Creator icon in the Toshiba Utilities program group.

MaxTime

MaxTime opens automatically each time you start Windows for Workgroups. If MaxTime is not already open, go into Program Manager and double-click the MaxTime icon in the Toshiba Utilities program group.

Once you've opened MaxTime, it operates as described throughout this guide. The following table lists where to look for information about specific MaxTime tasks.

Monitoring battery power	See "Monitoring Battery Power" on page 112.
Setting Resume Mode	See "Suspending the Computer" on page 121.
Setting the battery-save mode and power-saving options	See "Conserving Power" on page 125.
Overview of all of MaxTime's features	See "MaxTime®" on page 295.

Hardware Setup

To start Hardware Setup, go into Program Manager and double-click the Hardware Setup icon in the Toshiba Utilities program group.

Once you've opened Hardware Setup, it operates as described throughout this guide, with one exception. Windows for Workgroups doesn't have Device Manager. Instead, you use Hardware Setup to set all options on the Serial, Parallel/Printer, Display and Sound System pages. The following table lists where to look for information about specific Hardware Setup tasks.

Creating an Fn key on an external keyboard	See "Making Your External Keyboard Pretend it Has the Fn Key" on page 187.
Directing display output at system startup	See "Directing the Display when You Turn the Computer On" on page 183.

Setting up a PS/2 mouse	See “Using a PS/2 Mouse” on page 194.
Using user-level passwords	See “Using a Password” on page 197.
Overview of all Hardware Setup’s features	See “Hardware Setup” on page 309.

TSETUP

To open TSETUP, follow these steps:

- 1 Close any programs you are running and exit Windows, if it’s open.**



Run TSETUP outside of Windows, at a system prompt. If you run TSETUP from an MS-DOS session under Windows by clicking the MS-DOS prompt icon, results can be unpredictable.

- 2 At the system prompt, type `c:\dos\tsetup` and press Enter.**

Once you’ve opened TSETUP, it operates as described in “TSETUP” on page 323.

Fn-esse

To open Fn-esse, go into Program Manager and double-click the Fn-esse icon in the Toshiba Utilities program group. Once you’ve opened Fn-esse, it operates as described in “Starting Programs Faster” on page 209, with the following exceptions.

When you're using Fn-esse under Windows for Workgroups, there is no Application Explorer dialog box. Instead, you may select a program in the ProgMan Browser dialog box. To use this box to assign a key to a program or document, follow these steps:

1 Click the desired key in the Fn-esse keyboard with the secondary button.

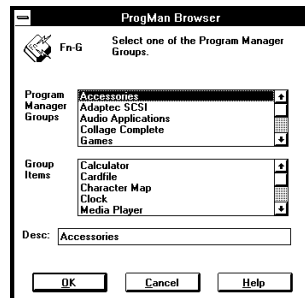
Fn-esse displays the Assignment Type dialog box.

2 Click Direct.

Fn-esse displays the Add/Edit Command dialog box.

3 Click ProgMan.

Fn-esse displays the ProgMan Browser dialog box.



The ProgMan Browser dialog box

4 Select the desired program group in the Program Manager Groups window.

5 Select the desired Group Item and click OK.

Fn-esse displays the Add/Edit Command dialog box again with everything filled in to reflect your choice.

6 Click OK.

Turning the Power Off

This section describes how to turn the computer off correctly.

Using Resume Mode

This guide describes two ways you can turn the computer off and return to the same place in your work when you turn it on again: the Suspend command and Resume Mode. The Suspend command is a feature of Windows 95. With Windows for Workgroups you must use Resume Mode instead. You can turn Resume Mode on in any of the ways described in this guide: MaxTime, a hotkey or TSETUP.

Turning the Computer Off

When you're ready to turn the computer off, assuming Resume Mode isn't turned on, follow these steps:

- 1 Save your files and close any programs you're using.**
- 2 In Program Manager, press Alt + F4 to exit Windows.**
- 3 Wait for MS-DOS to display the command prompt.**



Always wait until you see the command prompt before you turn the computer off. You may get unpredictable results the next time you start Windows if you don't let it shut down completely.

- 4 Turn the computer off.**

Using Optional Devices in Windows for Workgroups

Windows for Workgroups does not support the Plug-and-Play standard described for Windows 95. This means that when you connect an optional device, such as a PC Card, you'll have to set it up yourself. This section provides information you'll need for using optional devices with Windows for Workgroups.

Using PC Cards

"Little Cards that Do Big Things" on page 149 describes the programs required to use PC Cards. These programs are part of Windows 95.

For Windows for Workgroups, the CardWizard software supplied with your computer provides the Card and Socket Services programs you need to use PC Cards on your system. See the CardWizard documentation for instructions for setting up PC Card support.



The CardWizard programs were specifically designed for your Toshiba computer. Even if your PC Card comes with its own Card and Socket Services programs, try CardWizard first.

Resolving Resource Conflicts

If you add a device that uses the resources already assigned to another device your system stops working and you must resolve the resource conflict. For an introduction to the resources used by the system, see "Resolving a Hardware Conflict" on page 259.

Make a list of all the resources used by your optional devices. The documentation for each device will tell you how to determine these.

Once your list is complete, check it against the lists in “System Resources” on page 365. Make sure that none of your optional devices conflicts with the preset system assignments.

If you can’t locate the source of the conflict, remove all optional devices and add them one at a time. Each time you add a device check to see if the conflict reappears.

Getting Help

Your computer comes with an electronic book that documents Windows for Workgroups. It is called *Windows QuickStart 3.11 Edition*. To open this book, follow these steps:

- 1 Open the Toshiba Utilities program group.**
- 2 Double-click the Windows QuickStart 3.11 Edition icon.**

Windows opens the book at the table of contents.

Reading a Selected Topic

To read a section of the *Windows QuickStart 3.11 Edition*:

- ❖ Select a part of the book, click its index tab or click Contents and select the section from the list displayed.
- ❖ To move to the beginning of the table of contents, click Contents.
- ❖ To move up or down in a section, click and drag the scroll box or click the up and down arrows at the right side of the screen.
- ❖ To move forward or backward one section at a time, click the left and right arrow icons at the bottom of the screen.
- ❖ To use the alphabetical index, choose Index and click on a topic name.
- ❖ To get help, choose Help Contents from the Help menu or press F1.

Using Bookmarks

Just as you would with a printed book, you can mark your place with a bookmark.

Creating a New Bookmark

To create (or define) a bookmark, follow these steps:

- 1 Position the pointer at the beginning of the text you want to find again.**
- 2 Choose Define from the Bookmark menu, or click the yellow bookmark icon in the lower-right corner of the screen.**

The dialog box automatically shows the current chapter in the Bookmark Name field as the default name, and displays a list of currently defined bookmarks.

- 3 Type in a name for your bookmark and choose OK.**

If you choose OK without typing a name, the current chapter name becomes the bookmark.

If the name is already assigned to another bookmark, the program displays a message. Type in a new bookmark name and choose OK.

The electronic book program creates a consecutively numbered bookmark and places it in the text at the upper edge of the “book.”

To view a marked section, click its assigned bookmark and the program switches to the corresponding text location.

Deleting a Bookmark

To delete a previously defined bookmark, follow these steps:

- 1 **Choose Define from the Bookmark menu or click the yellow bookmark icon in the lower-right corner of the screen.**

The program displays the Define Bookmark dialog box, which includes the list of currently defined bookmarks.

- 2 **Select the name of the bookmark you wish to delete.**
- 3 **Choose Delete, then choose OK.**

Using Cross-References

Cross-references, which display as underlined text, allow you to move quickly to sections containing information related to the material in the current section. For example, from the batteries section you can go directly to the MaxTime discussion by clicking the cross reference.

To view a cross-reference, follow these steps:

- 1 **Position the pointer over the cross-reference.**

The pointer changes to a pointing hand symbol.

- 2 **Click the cross-reference.**

The program displays the section containing the information that relates to the cross-reference you selected.

When you have finished reading the cross-referenced material, clicking Go Back returns you to the original topic.

Searching for a Topic

The QuickStart book has a full-text search feature, which can locate every topic that contains a word or phrase you are looking for. To use the full-text search feature, follow these steps:

- 1 Choose Search and type the word or phrase in the Search Word field.**

To find all the forms of a word, you can substitute an asterisk (*) for the last characters in the word. For example, typing bat*, would find “batch,” “battery,” “batteries,” “battery-powered” and “battery-save.”

- 2 Choose OK to start the search.**

The program displays the list of topics that contain the text.

- 3 Select the topic to view and choose Go To.**

The program displays the topic with the word or phrase highlighted.

To exit the Search Results dialog box, choose Cancel.

To start a new search, choose To Search.

Reinstalling Online Documentation

To restore a deleted or damaged electronic book, use the master program diskette that contains the electronic book files. For more information about master program diskettes, see “Create or Purchase Master Diskettes” on page 35.

Follow these steps to reinstall the *Windows QuickStart 3.11 Edition*:

- 1 Be sure your diskette drive is connected to the external diskette drive port.**

For more information about connecting the diskette drive, see “Connect the External Diskette Drive” on page 21.

- 2 Insert the diskette containing the *Windows QuickStart 3.11 Edition* files into the diskette drive.**

3 Choose Run from the File menu.

Windows for Workgroups displays the Run dialog box.

4 Type the command line `a:\install` and click OK.

5 Follow the instructions on the screen to define the location of the files.

If the directory does not exist, the installation program creates it for you.

