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Important Safety Instruction

Read all of these instructions, and save these instructions for later use.

- •Follow all warnings and instructions marked on the product.
- •Unplug this product from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.
- •Do not use this product near water. Never spill liquid of any kind on the product.
- •Do not place this product on an unstable cart, stand, or table.
- •Slots and openings in the cabinet are provided for ventilation. To ensure reliable operation of the product on a bed, sofa, rug, or other similar surface. This product should never be placed near or over a radiator or heat register. This product should not be placed in a built-in installation unless proper ventilation is provided.
- •Before connecting this product to a power source, check the required voltage and frequency match the available power source.
- •This computer is powered by an internal battery pack or by an external AC power source, Which is supplied with the computer. Use of another battery pack or AC power source may present risk of fire or explosion. To disconnect the AC power cord and remove the battery packs.
- •This product is equipped with a 2-wire type plug. If you are unable to insert the plug into the outlet, contact your electrician to replace your obsolete outlet.
- •Do not allow anything to rest on the power cord.
- Do not place this product in a location where someone may trip over the cord.
- •If an extension cord is used with this product, make sure that the total of the ampere ratings on the products plugged into the extension cord do not exceed the extension cord ampere rating. Also, make sure that the total of all products plugged into the wall outlet does not exceed 15 amperes.
- •Never push objects of any kind into this product through the cabinet slots, as they may touch dangerous voltage points or short out parts; that could result in a risk of fire or electric shock.
- Except as explained elsewhere in this manual, do not attempt to service this
 product yourself.
- •Handle battery with care. If dropped, they may damaged.
- Do not allow the battery to be exposed to direct sunlight for extended periods of time.

- •Do not attempt to disassemble the battery. If the battery is disassembled and the electrodes are exposed to outside, the battery may generate eat and smoke by chemical reaction.
- •Do not expose the battery to moisture or chemicals.
- •Charge the battery only as described in this document.
- •Do not short circuit the battery terminals as the resulting high currents can damage the battery.
- •The battery should not be used to power other products.
- •Do not dispose of a used battery in a fire or incinerator, as an explosion may result.
- •The battery should be recycled.
- •Do not subject the battery to temperature should not less than -20 degrees Centigrade or greater than 50 degrees Centigrade.
- •Unplug this product from the wall outlet and refer problems to the service representative under the following conditions:
 - When the power cord or plug is damaged or frayed.
 - If liquid has been spilled into product.
 - If the product has been exposed to rain or water.
 - If the product does not operate normally when the operating instructions are followed, adjust only those controls that are covered by the operating instructions. Improper adjustment of other controls may result in damage.
 - If the product exhibits a distinct change in performance.

Battery Disposal

Warning: Do not put rechargeable batteries or products powered by non-removable rechargeable batteries in the garbage.

Contact your customer service representative for information on how to dispose of batteries that you cannot use or recharge any longer. Follow all local regulations when old batteries.

Federal Communications Commission (FCC)

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

NOTE:

This equipment has been tested and found to comply with the limits for a Class B digital device pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generate uses and can radiate radio frequency energy and if not installed and used in accordance with the instructions may cause harmful interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

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

If necessary, the user should consult the dealer or an experienced radio/television technician for additional suggestions. The user may find the following booklet helpful: "Something About Interference." This is available at FCC local regional offices. Our company is not responsible for any radio or television interference caused by unauthorized modifications of this equipment or the substitution or attachment of connecting cables and equipment other than those specified by our company. The correction will be the responsibility of the user. Use only shielded data cables with this system.

Canadian Radio Interference Regulations

This apparatus does not exceed the class B limits for radio noise emissions set out in the radio interference regulations of the Canadian Department of Communications.

Le présent appareil n'émet pas de bruits radioélectriques dépassant les limites applicable aux appareils de la classe B prescrites par le règlement de brouillage radioélectrique dicté par le Ministère des Communictions du Canada.

Introducing Your Computer

Your computer is a lightweight portable computer that includes features to meet your computing needs at home or on the road.

Your computer is one of 3-spindle type computer and 2-spindle type computer. These computers are basically same, but the device arrangement is different.

- 3-spindle type computer has CD-ROM drive and floppy drive within the computer.
- 2-spindle type computer has CD-ROM drive and external floppy disk drive with its connectable cable. And different Status lights position from 3-spindle type computer.

Figure 1 through 4 show you the features of your computer.

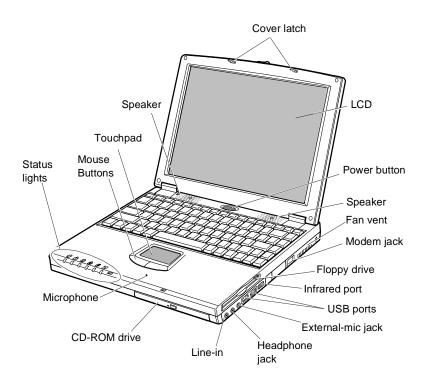


Figure 1. Front View of Computer (3-spindle type computer)

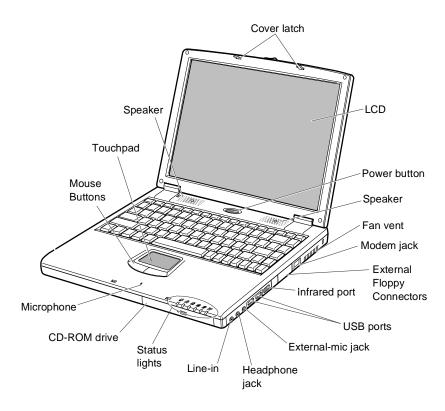


Figure 2. Front View of Computer (2-spindle type computer)

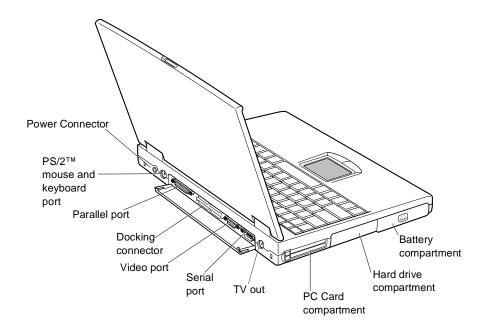


Figure 3. Back View of Computer

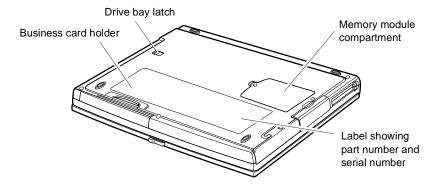


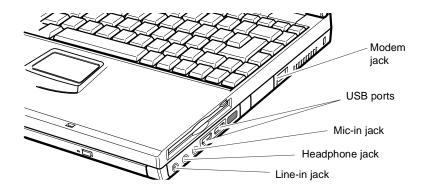
Figure 4. Bottom View of Computer

Connecting Peripheral Devices

The connectors on your computer enable you to attach peripheral devices to the computer (Figure 12). The system in Figure 12 is based on 3-spindle type computer, 2-spindle type computer has no internal floppy disk drive, but external floppy connectors instead.



Turn off your computer before you connect a peripheral device. Connecting a peripheral device with your computer turned on may seriously damage the device or your computer.



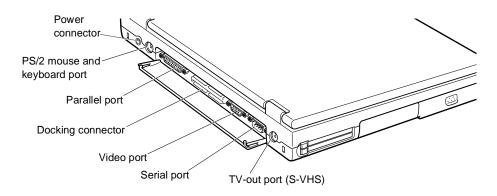


Figure 12. Peripheral Connectors

Table 4 shows the icons located near each connector and tells you the devices that you can attach to the connectors.

Table 4. Connecting Peripheral Devices

Icon Connector Line-in jack: An input for external audio. Headphone jack: Connect stereo headphones or speakers to this jack. Speakers connected to this jack override the internal speakers. Microphone jack: Connect an external microphone to this jack. USB (universal serial bus) port: Connect USB devices to this port. USB input/output devices include keyboards, pointing devices, and monitors. *Modem jack:* Connect telephone line to connect to internet. Power cord connector: Plug in the power cord to run the computer and charge the battery. PS/2 (Personal System/2) mouse and keyboard port: Connect a PS/2-compatible mouse or external keyboard or keypad to this port. Make sure your computer is turned off when you attach peripherals to the port. You can use the computer's touchpad and a PS/2 keyboard at the same time. Docking connector: Connect a docking option to this connector.



Parallel port: Plug a parallel device, such as a parallel printer or network adapter, into this 25-pin port.



Serial port: Plug a serial device, such as a serial mouse, into this 9pin port. If the device has a 25-pin connector, you need a 25-to-9pin serial adapter.



Video port: Plug the interface cable of an external monitor into this 15-pin connector and then plug the monitor power cord into a grounded outlet.



TV-out port: plug a S-VHS jack into this port and the other side of the jack into an external TV. No audio is transmitted via this port.

If your computer's operating system is Windows 98, you can enable and use the USB port. The Windows NT 4.0 operating system does not support USB.

Changing the Video Configuration

Your computer includes a TFT LCD or active-matrix display. The capabilities of the screen plus the video drivers installed on the computer determine the quality of the image your LCD can display.

The following sections describe the display capabilities of your computer.

Resolution and Color Depth

The resolution of the LCD is the sharpness of the image it can display. Resolution is measured by the number of pixels (individual dots) displayed on the entire screen. In general, the more pixels the LCD can display, the better the image.

Your LCD screen is either SVGA or XGA:

- The maximum display for the SVGA LCD screen is 800x600, about 480,000 pixels.
- The maximum display for the XGA LCD screen is 1024x768, about 800,000 pixels.

The number of colors the LCD can display is measured by how many bits the LCD uses to represent each pixel:

- 8-bit color can support 256 different colors.
- 16-bit color can support 64 K (65,536) colors.
- 24-bit color can support 16 M (16.8 million) colors.
- 32-bit color can support 16 M (16.8 million) colors.

24-bit color uses the RGB color model.

32-bit color uses the CMYK color model which gives better printed color matching.

Table 8 lists the basic video mode capabilities and maximum colors supported by your computer.

Table 8. Video Driver Capabilities

Software Drivers	Resolution Supported with 4MB(8MB) GRAM	Number of Colors
Windows 98	640x480, 720x480, 800x600, 848x480, 1024x768, 1152x864, 1280x1024, 1600x1200	256
	640x480, 720x480, 800x600, 848x480, 1024x768, 1152x864, 1280x1024, 1600x1200	65,536
	640x480, 720x480, 800x600, 848x480, 1024x768, 1152x864, 1280x1024, (1600x1200)	16.8 million (24 bit)
	640x480, 720x480, 800x600, 848x480, 1024x768, 1152x864, (1280x1024)	16.8 million (32 bit)
Windows NT® 4.0	640x480, 800x600, 1024x768, 1152x864, 1280x1024, 1600x1200	256
	640x480, 800x600, 1024x768, 1152x864, 1280x1024, 1600x1200	65,536
	640x480, 800x600, 1024x768, 1152x864, 1280x1024, (1600x1200)	16.8 million (24 bit)
	640x480, 800x600, 1024x768, 1152x864, (1280x1024)	16.8 million (32 bit)

All these video modes can be displayed on an external monitor. However, if you disconnect an external monitor that was attached to your computer and then start the computer, the LCD may revert to a different resolution than the one you chose for the external monitor.

Configuring Display Features

The following sections describe how to configure the display settings on your computer.

Selecting a Monitor Type

When you attach an external monitor to your computer, Windows 98 automatically selects display settings for it (this feature is not available in Windows NT). If you wish, you can adjust the display settings by selecting a monitor type:

1. Click the *Start* button on the Windows 98 taskbar.

- 2. Select Settings.
- **3.** Click *Control Panel*. The Control Panel window appears.
- **4.** Double-click the *Display* icon. The Display Properties window appears.
- **5.** Click the *Settings* tab. The Settings screen appears.
- **6.** Click the *Advanced* button. The Advanced Properties screen appears.
- **7.** Click the *Monitor* tab.
- **8.** Click the *Change* button. The *Update Device Driver Wizard* screen appears.
- **9.** Click the *Next* button.
- 10. Select the Display a list of all the drivers in a specific location radio button and click the Next button.
- **11.** Select the *Show all hardware* radio button.
- 12. Select a manufacturer and model setting that matches your external monitor. Your computer has an intelligent video chip set that automatically matches your LCD panel resolution and frequency when an external monitor is not present.
- **13.** Click the *Next* button.
- **14.** The *Update Device Driver Wizard* screen appears showing the driver location of the device you have selected. Click the Next button.
- **15.** Follow any prompts that appear on the screen.

Changing Color Depth and Resolution

To change the color depth and resolution of your LCD or external monitor:

- 1. Click the *Start* button on the Windows taskbar.
- **2.** Select *Settings*.
- **3.** Click *Control Panel*. The Control Panel window appears.
- **4.** Double-click the *Display* icon. The Display Properties window appears.
- **5.** Click the *Settings* tab. The Settings screen appears.
- **6.** To change the color depth, click the arrow next to *Color palette* and select the color depth you want.

- **7.** To change the resolution, click and drag the knob under the *Screen area* until you select the resolution you want.
- **8.** Click the OK button.
- **9.** Follow the prompts that appear on the screen.

Changing the Video Driver

It is possible that you may want to update your video driver or that your installed video driver has become corrupt so that the display is unusable.

In Windows 98:

- **1.** Click on the *Start Button*. The Start Menu appears.
- **2.** Select *Settings* and click on *Control Panel*, double click on *Display*. The Display Properties window appears.
- **3.** Click the *Advanced* button. The properties screen for your currently installed video driver appears
- **4.** Select the *Adapter* menu.
- **5.** Click the *Change* button. The Update Device Driver Wizard window appears.
- **6.** Click the *Next* button.
- **7.** Select *Display a list of all the drivers in a specific location, so you can select the driver you want.* Click the *Next* button.
- **8.** Click the *Have disk* button. If the driver is on a floppy disk insert it into the floppy drive or if you want to use the original factory driver insert the Restore CD-ROM into the CD-ROM drive. Click the *Browse* button and locate driver you want to install. Click the OK button.
- **9.** Select the new driver in the *Select Device* screen and click the *Ok* button.
- **10.** Click the *Next* button to install the new driver and follow any directions on the screen to finish setting the display properties.

In Windows NT 4.0:

1. As the computer starts, select *Windows NT Workstation Version 4.00 [VGA mode]* as the operating system and press <Enter>.

- 2. Log on to the computer as supervisor. The Invalid Display Settings window appears.
- **3.** Click the *OK* button. The Display Properties window appears.



If the Change Display window appears, go to step 6.

- **4.** Select the *Settings* menu.
- **5.** Click the *Display Type* button. The Display Type window appears.
- **6.** Click the *Change* button. The Change Display window appears.
- 7. Click the *Have disk* button. If the driver is on a floppy disk insert it into the floppy drive or if you want to use the original factory driver insert the Restore CD-ROM into the CD-ROM drive. Click the Browse button and locate driver you want to install. Click the OK button.
- **8.** A line similar to the following line appears under the *Display* option: *ATI* Technologies Inc. 3D Rage LT Pro.
- **9.** Click OK. The Third-Party Driver window appears.
- 10. Click Yes. The driver is copied. A window appears telling you the driver has been successfully copied.
- 11. Click OK. Remove the disk from the floppy drive. Close the open windows on the screen.
- 12. Click Yes when prompted to restart the computer. As the computer restarts, select Windows NT Workstation Version 4.00 as the operating system and press <Enter>.
- **13.** Log on as supervisor. The Invalid Display Settings window appears.
- 14. Click the OK button. Click the Test button at the Display Properties window and follow any directions on the screen to finish setting the display properties.

Working with PC Cards

By installing PC Cards, you can add functions to your notebook computer similar to those found on add-in boards for desktop computers. Available PC Cards include:

- Input/output, such as modem, network, pager, video capture, and SCSI cards.
- Storage, such as hard drive cards.
- Combo cards, such as a combination modem and network card.

Your computer includes the following PC Card support:

- Two PC-Card slots: You can install Type I, II, or III cards in the slots. Type III cards are thicker than Types I and II. If you install a Type III card in the bottom slot, you cannot install a card in the top slot.
- CardBus hardware and software: CardBus enables the computer to use 32-bit PC Cards. Windows 98 supports 32-bit and 16-bit PC Cards. The SystemSoft[®] CardWizardTM for Windows NT program, provided with systems that ship from the factory with Windows NT installed, also supports both 16-bit and 32-bit cards.
- Zoomed video: Two PC Card slots and the video chip on your computer support zoomed video. When you install a zoom video PC Card in the upper or lower slot, data can be transferred directly from the PC Card to video and audio systems without going through the microprocessor. Video conferencing and real-time multimedia devices, such as video cameras, are supported by zoomed video.



To use the CardBus and zoomed video technology with Windows NT, install the CardBus and zoomed video drivers provided with your PC Card. If no drivers were supplied with your card, contact the PC Card manufacturer. ATA (AT attachment) and modem PC Cards do not require extra drivers.

Maintaining PC Cards

To maintain your PC Cards, follow these guidelines:

• Keep cards away from excessive heat, direct sunlight, and liquids.

- Do not drop, bend, flex, or crush cards when handling.
- Keep dust, magnets, and static electricity away from PC Cards.
- When a card is not in use, carry it in its protective carrying case.
- Some PC Cards include cables that extend from the back of the cards. Be careful not to bend or put excessive strain on these cables.

Using PC Cards

You can install PC Cards while the computer is on.

To insert a PC Card into a slot:

- 1. Push the slot door with a PC Card.
- 2. Align the card with a slot and insert the card into the slot until it locks in place (Figure 21).

The eject button for the card slot operates in two steps.

To remove a PC Card:

- 1. push the eject button once to pop it outward.
- 2. Push the eject button again, then the card will be ejected.

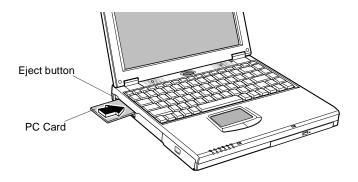


Figure 21. Inserting a PC Card

Windows 98

Windows 98 automatically assigns computer resources (such as communication ports and memory addresses) to a PC Card installed in your computer. For further information on configuring a PC Card in Windows 98, see the index entry *PC card* in the Windows Help. Windows 98 also handles power management for PC Cards.

To remove a PC Card from your computer if your operating system is Windows 98:



Use the following procedures to remove PC Cards, or you may lose data that is being stored to a card.

- 1. Click the PC Card icon on the taskbar.
- 2. Select the name of the card you want to remove, and then click the Stop button.
- 3. Push the card eject button on the side of the PC Card slot when prompted to do so.
- 4. Pull the card out of the PC Card slot.

Windows NT

Systemsoft Card Wizard is shipped with this notebook computer that use Windows NT as the operating system. When you install a PC Card, CardWizard attempts to configure it automatically. If Card Wizard successfully assigns system resources to your card, the computer beeps twice.

If CardWizard cannot automatically configure your PC Card, the computer beeps once and a message appears telling you that the card has not been configured. Click the Wizard button on the CardWizard window. CardWizard then analyzes why the card was not configured and fixes the problem or gives you information to help fix the problem.

CardWizard works with the PowerProfiler program to manage PC Cards when the computer enters or resumes from rest mode. CardWizard gives you instructions to prevent loss of data before the computer enters rest mode or may stop the computer from entering rest mode. ATA and modem cards can enter rest mode.

Follow these guidelines when using PC Cards with CardWizard:

- Some of LAN (local-area network) cards can be inserted while the computer is on but should be removed only when the system is turned off.
- SCSI cards should be inserted at startup to enable Windows NT to find the device attached to the SCSI card. SCSI cards can be removed when the computer is turned off. If you restart your computer without the SCSI card

installed, a message may appear telling you that a service did not start. You can ignore this message.

• Modem and ATA cards can be inserted and removed while the computer is



Before you remove a modem or ATA card from your computer, stop the card through the CardWizard program or you may lose data.

To stop and remove a PC Card from your computer:

- 1. In the SystemSoft CardWizard screen, click with the right mouse button on the name of the card you want to remove.
- 2. Click Stop in the Actions menu. A red stop sign appears on the main screen when the card is stopped.
- 3. Click OK.
- **4.** Push the card eject button on the side of the PC Card slot.
- **5.** Pull the card out of the slot compartment.

For more information on using the CardWizard program, see the CardWizard Help.

Upgrading Memory

You can increase system memory by installing optional memory modules. You can install a 16, 32, 64, 128, or 256 MB module.



To avoid possible system problems, use only approved memory modules in your computer. Use the only one type memory module, either EDO or SDRAM.

Before You Install Memory



To prevent personal injury and damage to the equipment, follow the precautions listed here before installing a memory module.

Take the following precautions when installing a memory module:

- Before you remove the memory module compartment door, turn off the computer, unplug the power cord, and remove the battery. Also, disconnect any peripheral devices.
- Before handling a memory module, discharge any static electricity by touching a grounded surface or using a grounding wrist strap.
- Do not insert objects with conductive material, such as metal screwdrivers or graphite pencils, into the memory-module compartment.
- Be careful in handling the metal plate of the memory door.

Installing a Memory Module



Handle a memory module carefully. Hold them only by the edges.

To install a memory module:

1. Turn the computer over so that the bottom faces up.

2. Using a screwdriver, remove the screw that holds the memory-module compartment door in place (Figure 22).

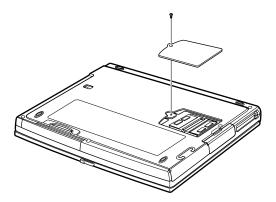


Figure 22. Removing the Memory Module Compartment Door

- **3.** Grasp the edge of the door and pull the door off the chassis.
- **4.** Remove installed modules if necessary:



When removing modules, pull on the plastic portion of the connector slots tabs only. Do not pull on the metal part of the tabs, or you may damage the tabs.

a. Pull the tabs on the connector slot outward slightly, until the edge of the memory module pops up (Figure 23).

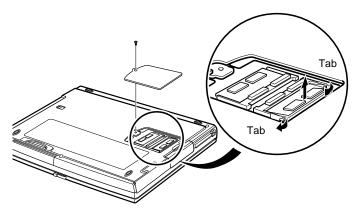


Figure 23. Removing a Memory Module

- **b.** Hold the memory module by the edges and pull it forward out of the compartment.
- **5.** Align the connector on the memory module with the connector of the slot.
- **6.** Push the memory module into the slot at a slight angle until the connectors are fully engaged (Figure 24).
- **7.** Push down on the edge of the memory module until the module snaps into place.

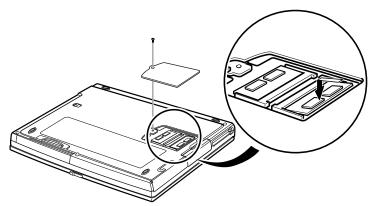


Figure 24. Installing a Memory Module

- **8.** Align the memory module compartment door with the compartment and push the door down until it snaps into place.
- **9.** Reinstall the screw you removed in step 2.
- **10.** Turn on the computer and perform a complete POST to check the memory integrity.

About Drivers and System Resources

This section gives you basic information about drivers and system IRQs.

Drivers

A driver is a program that enables the operating system to work with a hardware device. Your computer includes drivers for the audio, video, infrared, touchpad, keyboard, CD-ROM drive, hard drive, floppy drive, and PC Card controller. When you add a device to your computer, such as a printer, you install a driver for that device. Different drivers are used by different operating systems.

IRQs

Most of the devices in your computer or connected to your computer need their own IRQ (interrupt request line). The IRQ is a hardware line that a device can use to send signals to the microprocessor. When the device needs the microprocessor's service, the device sends an interrupt request signal to the microprocessor.

The number of IRQs available for any computer is limited by industry standards. Because it ships with numerous features, this computer uses most of the available IRQs. If you add another device to your computer, you may need to disable an existing device to free up an IRQ for the new device. IRQ resources are of particular concern when the computer is attached to a docking device.

The default IRQ settings that are used by your computer are listed in Table 9 and Table 10.

Table 9. IRQs, Windows 98 Systems

IRQ	Component	
0	System timer	
1	Keyboard	
2	Internal Controller	
3	IrDA Port	
4	COM 1, COM 3	

IRQ	Component
5	Audio/USB
6	Floppy controller
7	LPT1 (parallel port)
8	CMOS/Clock
9	ACPI bus SCI IRQ
10	Reserved
11	CardBus/Modem
12	Touchpad, PS/2 mouse
13	Numeric data processor
14	IDE 1 (hard drive)
15	IDE 2 (CD-ROM drive)

Table 10. IRQs, Windows NT Systems

IRQ	Component
0	System timer
1	Keyboard
2	Internal Controller
3	COM 2, COM 4
4	COM 1, COM 3
5	Audio/USB
6	Floppy controller
7	LPT1 (parallel port)
8	CMOS/Clock
9	Available
10	Available
11	CardBus/Modem
12	Touchpad, PS/2 mouse
13	Numeric data processor
14	IDE 1 (hard drive)
15	IDE 2 (CD-ROM drive)

In Windows 98, you can configure a device so that the device is disabled when you connect your computer to a docking station but enabled when the computer is not connected to the docking station. With this configuration, an IRQ is available for a peripheral device that you connect to the docking station. See your Windows 98 manual for more information.

Troubleshooting

If you ever have difficulty running your computer, follow these steps:

- 1. Consult the following sections for advice on how to handle system problems.
- 2. If steps 1 does not help you to resolve the problem, contact your reseller for assistance.

Operating Problems

This section tells you what to do if you have problems running your computer. If any problem persists after you take corrective action, contact your reseller for assistance.

The computer does nothing when you turn it on.

Has the battery run down? Connect the power cord to get power and recharge the battery. Try turning on the computer again.

The computer is not behaving as expected.

Operating your computer at high speed with the cache enabled may cause system instability and incompatibility with some operating systems. If your computer is not behaving as expected and no error messages appear, disable the *External Cache* setting in the *Memory Cache* field of System Setup.

Nothing appears on the LCD panel when you turn on the computer.

Adjust the brightness on a TFT LCD. Are you using an external monitor? If so, press <Fn+F5> to return to the LCD panel.

Nothing appears on the external monitor when you switch the display to it.

Is the monitor properly connected to the computer? Is the monitor's power cord connected to an AC wall outlet? Check the brightness and contrast controls on the monitor. Does the program appear on the LCD panel instead of the external monitor? If so, press <Fn+F5> to switch to the monitor. Try turning the monitor off and on again.

The external monitor displays flashes or waves.

Check the cables between the monitor and the computer. Are they properly installed?

Some of the letter keys type numbers instead of the indicated letters.

Is the Num Lock light on? If so, the numeric keypad on the keyboard is active. To return the keypad keys to typing letters, press < Num Lock>.

Battery power seems to run out faster than expected.

If you are running the computer from the battery rather than the power cord, make sure that you set the *Idle Mode* field in System Setup to *On*. This setting enables the microprocessor and the hard drive to slow down when the computer is not

You can also enable other power-saving options through System Setup. Set the timeout times in the Standby Timeout and Rest Timeout fields to the shortest times to ensure maximum power savings.

Certain software programs "hang" during operations when there is no interaction with the keyboard or peripheral devices.

Your computer may be in standby or rest mode. Tap the touchpad to resume from standby or press the power button to resume from rest.

A serial or parallel device attached to a serial or parallel port on the rear panel of the system unit does not work properly.

Check the attached device. Is it turned on? Is the cable properly installed between the device and the port? If you are using an operating system that is not plug and play compliant, make sure the *Plug & Play* O/S field in System Setup is set to *No*. Check to make sure that the port is enabled in System Setup.

A PC Card does not work correctly.

Make sure that the PC Card is inserted left side up in the PC Card slot. Check that the card is inserted fully into the slot. If you are using a PC Card modem, check the modem cable connections. For the Windows 98 operating system, try setting the *Plug & Play OS* field in System Setup to *Yes* to enable Windows 98 to autosense an older PC Card. For the Windows NT operating system, make sure Plug & Play O/S in System Setup is set to No.

The System Setup settings are not retained when you turn off the computer.

The CMOS battery inside the computer may need to be replaced. The CMOS battery provides power to save the system BIOS information when the computer is turned off. Normally, the CMOS battery lasts for several years. Do not attempt to open the chassis and replace this battery yourself or your warranty is void. Have an authorized the manufacturer's service center replace the CMOS battery.

Infrared Problems

If your computer's operating system is Windows 98, you can enable and use the infrared port. The Windows NT 4.0 operating system does not support infrared.

If you are unable to transfer files with the infrared port, check the following:

- Make sure the *COM2 port* field in System Setup is set to *2F8*, *IRQ 3*. The field is in the *I/O Device Configuration* under *Advanced Menu*.
- The receiving device must be positioned properly. There must be no more than three feet of distance between the computer's infrared port and the receiving infrared device.
- The sending and receiving devices need to be on the same level vertically. Place them on the same table if possible.
- Make sure the infrared ports on the sending and receiving devices face each other, with no more than a 30 degree angle between the two infrared ports.
- Make sure that nothing is obstructing the file transfer path between the computer's infrared port and the receiving infrared device.

If you still cannot transfer a file, see the documentation for the infrared software.

Specifications

Table 11 gives the specifications for 3-spindle type computer.

Table 11. System Specifications (3-spindle type computer)

Dimension	
Width	12.2 in (31.0 cm)
Height	1.56 in (3.97 cm)
Depth	9.96 in (25.2 cm)
Weight (with Li-lon battery & 13.3 in TFT LCD & weight saver)	5.84 lb (2656 g)
LCD viewing area (13.3 TFT)	10.6 x 8.0 in (270.3 x 202.8 mm)
LCD viewing area (14.1 TFT)	11.2 x 8.4 in (285.7 x 214.3 mm
Environment	
Ambient temperature, operating	50°-90° F (10°-32°C)
Ambient temperature, storage	23°-104° F (-5°-40° C)
Relative humidity (noncondensing), operating	20–80%
Relative humidity (noncondensing), storage	5–90%
Altitude, operating	0 to 8,000 ft (0 to 2,348 m)
Altitude, storage	0 to 40,000 ft (0 to 12,192 m)
Shock, operating	10 G for 11 ms half sine
Shock, nonoperating	60 G for 11 ms half sine
Litume-Ion Smart Battery	
Weight	0.92 lb (420 g)
Nominal open circuit voltage	11.1 VDC
Capacity, typical	5100 mAhr, 56.6whr
Charging time, approximate, with computer turned off	3.0 hr (Li-lon)
Charging time, approximate, with computer turned on	5.0 hr (Li-lon)

Average battery life, with no power management enabled	3.0 hr	
External AC Adapter		
Operating voltage	100~120 VAC to 200~240 VAC	
Line frequency	50-60 Hz	
Input current	1.5 A 100 V ~ 0.8 A 240 V	
Output current	3.15 A	
Output voltage	19.0 VDC	

Table 12 gives the specifications for 2-spindle type computer.

Table 12. System Specifications (2-spindle type computer)

Dimension	
Width	12.2 in (31.0 cm)
Height	1.3 in (3.29 cm)
Depth	9.96 in (25.2 cm)
Weight (with Li-lon battery & 13.3 in TFT LCD & weight saver)	5.26 lb (2393 g)
LCD viewing area (13.3 TFT)	10.6 x 8.0 in (270.3 x 202.8 mm)
LCD viewing area (14.1 TFT)	11.2 x 8.4 in (285.7 x 214.3 mm)
Environment	
Ambient temperature, operating	50°-90° F (10°-32°C)
Ambient temperature, storage	23°-104° F (-5°-40° C)
Relative humidity (noncondensing), operating	20–80%
Relative humidity (noncondensing), storage	5–90%
Altitude, operating	0 to 8,000 ft (0 to 2,348 m)
Altitude, storage	0 to 40,000 ft (0 to 12,192 m)
Shock, operating	10 G for 11 ms half sine
Shock, nonoperating	60 G for 11 ms half sine

Litume-Ion Smart Battery		
Weight	0.92 lb (420 g)	
Nominal open circuit voltage	11.1 VDC	
Capacity, typical	5100 mAhr, 56.6whr	
Charging time, approximate, with computer turned off	3.0 hr (Li-lon)	
Charging time, approximate, with computer turned on	5.0 hr (Li-lon)	
Average battery life, with no power management enabled	3.0 hr	
External AC Adapter		
Operating voltage	100~120 VAC to 200~240 VAC	
Line frequency	50-60 Hz	
Input current	1.5 A 100 V ~ 0.8 A 240 V	
Output current	3.15 A	
Output voltage	19.0 VDC	