

**Extensa™ 390 Series  
Notebook Computers  
User's Guide**

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Printed in Taiwan**

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Extensa™ 390 Series Notebook Computer User's Guide  
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**Extensa Notebook Computer**

Model \_\_\_\_\_ Serial No. \_\_\_\_\_ Purchase Date \_\_\_\_\_

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## FCC Notice

This device 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 device generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this device does cause harmful interference to radio or television reception, which can be determined by turning the device 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 device and receiver
- Connect the device into an outlet on a circuit different from that to which the receiver is connected
- Consult the dealer or an experienced radio/television technician for help

### **Notice: Shield Cables**

All connections to other computing devices must be made using shielded cables to maintain compliance with FCC regulations.

### **Notice: Peripheral Devices**

# Notices

Only peripherals (input/output devices, terminals, printers, etc.) certified to comply with the Class B limits may be attached to this equipment. Operation with non-certified peripherals is likely to result in interference to radio and TV reception.

## **Caution**

Changes or modifications not expressly approved by the manufacturer could void the user's authority, which is granted by the Federal Communications Commission, to operate this computer.

## **Use Conditions**

This part 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.

## **Notice: Canadian Users**

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

## **Remarque à l'intention des utilisateurs canadiens**

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

## Important Safety Instructions

1. Read these instructions carefully. Save these instructions for future reference.
2. Follow all warnings and instructions marked on the product.
3. Unplug this product from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.
4. Do not use this product near water.
5. Do not place this product on an unstable cart, stand, or table. The product may fall, causing serious damage to the product.
6. Slots and openings in the cabinet and the back or bottom are provided for ventilation; to ensure reliable operation of the product and to protect it from overheating, these openings must not be blocked or covered. The openings should never be blocked by placing 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, or in a built-in installation unless proper ventilation is provided.
7. This product should be operated from the type of power indicated on the marking label. If you are not sure of the type of power available, consult your dealer or local power company.
8. Do not allow anything to rest on the power cord. Do not locate this product where persons will walk on the cord.

# Notices

9. If an extension cord is used with this product, make sure that the total ampere rating of the equipment plugged into the extension cord does not exceed the extension cord ampere rating. Also, make sure that the total rating of all products plugged into the wall outlet does not exceed the fuse rating.
10. Never push objects of any kind into this product through cabinet slots as they may touch dangerous voltage points or short out parts that could result in a fire or electric shock. Never spill liquid of any kind on the product.
11. Do not attempt to service this product yourself, as opening or removing covers may expose you to dangerous voltage points or other risks. Refer all servicing to qualified service personnel.
12. Unplug this product from the wall outlet and refer servicing to qualified service personnel under the following conditions:
  - a. When the power cord or plug is damaged or frayed
  - b. If liquid has been spilled into the product
  - c. If the product has been exposed to rain or water
  - d. If the product does not operate normally when the operating instructions are followed. Adjust only those controls that are covered by the operating instructions since improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the product to normal condition.
  - e. If the product has been dropped or the cabinet has been damaged
  - f. If the product exhibits a distinct change in performance, indicating a need for service.

13. Replace battery with the same type as the product's battery we recommend. Use of another battery may present a risk of fire or explosion. Refer battery replacement to a qualified serviceman.
14. Warning! Battery may explode if not handled properly. Do not disassemble or dispose of in fire. Keep away from children and dispose of used battery promptly.
15. Use only the proper type of power supply cord set (provided in your accessories box) for this unit. It should be a detachable type: UL listed/CSA certified, type SPT-2, rated 7A 125V minimum, VDE approved or its equivalent. Maximum length is 15 feet (4.6 meters).

## Laser Compliance Statement

The CD-ROM drive in this computer is a laser product. The CD-ROM drive's classification label (shown below) is located on the drive.

CLASS 1 LASER  
PRODUCT

**CAUTION:**  
INVISIBLE LASER RADIATION WHEN OPEN.  
AVOID EXPOSURE TO BEAM

APPAREIL A LASER  
DE CLASSE 1  
PRODUIT LASER

**ATTENTION:**  
RADIATION DU FAISCEAU LASER INVISIBLE  
EN CAS D'OUVERTURE. EVITER TOUTE  
EXPOSITION AUX RAYONS.

LUOKAN 1  
LASERLAITE LASER  
KLASSE 1

**VORSICHT:**  
UNSICHTBARE LASERSTRAHLUNG, WENN  
ABDECKUNG GEÖFFNET NICHT DEM  
STRAHLL AUSSETZEN

PRODUCTO LÁSER  
DE LA CLASE I

**ADVERTENCIA:**  
RADIACIÓN LÁSER INVISIBLE AL SER  
ABIERTO. EVITE EXPONERSE A LOS RAYOS.

# Notices

## Lithium Battery Statement

### **CAUTION**

Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type recommended by the manufacturer.

Discard used batteries according to the manufacturer's instructions.

### **ADVARSEL!**

Lithiumbatteri - Eksplosionsfare ved fejlagtig håndtering. Udskiftning må kun ske med batteri af samme fabrikat og type. Léver det brugte batteri tilbage til leverandøren.

### **ADVARSEL**

Eksplosjonsfare ved feilaktig skifte av batteri. Benytt samme batteritype eller en tilsvarende type anbefalt av apparatfabrikanten.

Brukte batterier kasseres i henhold til fabrikantens instruksjoner.

### **VARNING**

Explosionsfara vid felaktigt batteribyte. Använd samma batterityp eller en ekvivalent typ som rekommenderas av apparattillverkaren. Kassera använt batteri enligt fabrikantens instruktion.

### **VAROITUS**

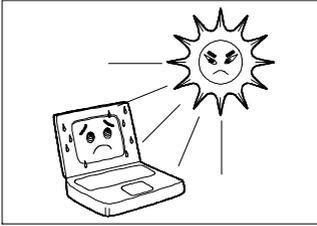
Päristo voi räjähtää, jos se on virheellisesti asennettu. Vaihda paristo ainoastaan laitevalmistajan suosittelemaan tyyppiin. Hävitä käytetty paristo valmistajan ohjeiden mukaisesti.

### **VORSICHT!**

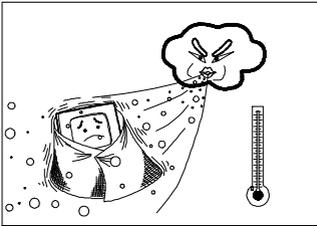
Explosionsgefahr bei unsachgemäßen Austausch der Batterie Ersatz nur durch denselben oder einem vom Hersteller empfohlenem ähnlichen Typ. Entsorgung gebrauchter Batterien nach Angaben des Herstellers.

## Taking Care of Your Computer

Your computer will serve you well if you take care of it.

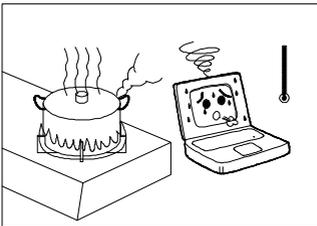


- ❑ Do not expose the notebook to direct sunlight. Do not place near sources of heat, such as a radiator.

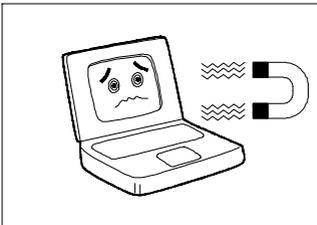


- ❑ Do not expose to temperatures below 0°C (32°F)

or

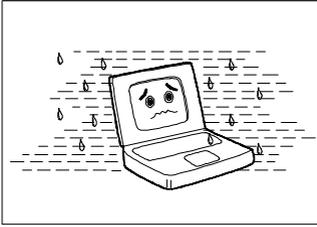


- ❑ above 50°C (122°F).

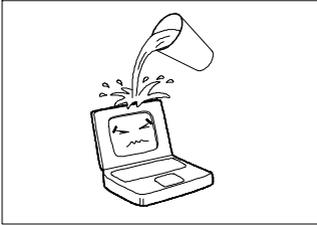


- ❑ Do not subject the notebook to magnetic fields.

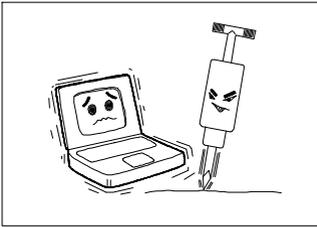
# Notices



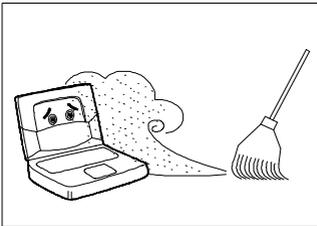
- ❑ Do not expose the notebook to rain or moisture.



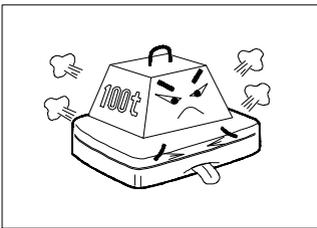
- ❑ Do not spill water or any liquid on the notebook.



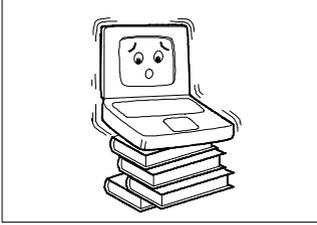
- ❑ Do not subject the computer to heavy shock and vibration.



- ❑ Do not expose the notebook to dust and dirt.



- ❑ Never place objects on top of the notebook to avoid damaging the notebook.



- ❑ Never place the notebook on uneven surfaces.

## Taking Care of Your AC Adapter and Battery Pack

Here are some ways of taking care of your AC adapter.

- ❑ Do not connect the adapter to any other device.
- ❑ Do not step on the power cord or place heavy objects on top of it. Carefully route the power cord and any cables away from personal traffic.
- ❑ When unplugging the power cord, do not pull on the cord itself but pull on the plug.
- ❑ The total ampere ratings of the equipment plugged in should not exceed the ampere rating of the cord if you are using an extension cord. Also, the total current rating of all equipment plugged into a single wall outlet should not exceed the fuse rating.

Here are some ways of taking care of your battery pack.

- ❑ Use only batteries of the same kind as replacements. Turn the power off before removing or replacing batteries.
- ❑ Do not tamper with batteries. Keep them away from children.
- ❑ Dispose of used batteries according to local regulations. Recycle if at all possible.

# Notices

## Cleaning and Servicing

When cleaning the notebook, follow these steps:

- 1.** Power off the notebook and remove the battery pack.
- 2.** Disconnect the AC adapter.
- 3.** Use a soft cloth moistened with water. Do not use liquid or aerosol cleaners.

Contact your dealer or see your service technician if any of the following occurs:

- Notebook has been dropped or the body has been damaged.
- Liquid has been spilled into the product.
- The notebook does not operate normally.

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This manual describes features of the Extensa™ 390 Series notebook computers. The Extensa series computers incorporate such features as CardBus, 16-bit stereo audio, Fast Infrared and internal pointing device.

This manual should answer most of the questions you have about the day-to-day operation of your Extensa notebook computer.

Use the *Just for Starters...* instructions that came with your computer to get your computer running for the first time.

You should also take advantage of the online help files that are available with almost all of the programs shipped with your computer.

We hope you enjoy your Extensa computer. With proper care, your computer will provide you with years of productive service.

## Connecting the Notebook

Connecting the computer is as easy as 1-2-3.

1. Insert the battery pack into the battery compartment and slide the battery compartment cover in place. The battery pack has a pull loop at the end for easy removal.



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**Note:** When using a battery pack for the first time, fully recharge the battery, then disconnect the adapter to use up the battery before recharging again. You only need to do this once with a new battery.

---

2. Connect one end of the AC adapter to the DC-in port on the notebook's rear panel and the other end to a properly grounded power outlet.
3. Slide the display cover latch to the left to open the display. Then press the power switch  to turn on the power. The POST (Power On Self-Test) routine executes and Windows begins loading.



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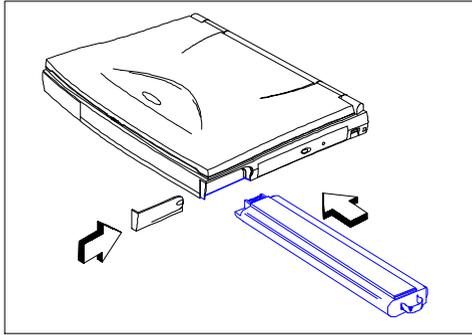
**Note:** To turn off power, press the power switch for more than four seconds. If you are using Windows 95, we recommend you use the Shutdown command to turn off the computer.

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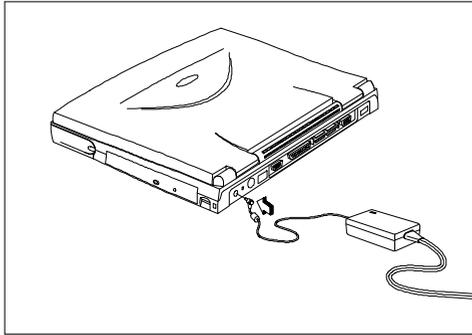
If you turn off the computer and want to turn it on again, wait at least 2 seconds before powering up.

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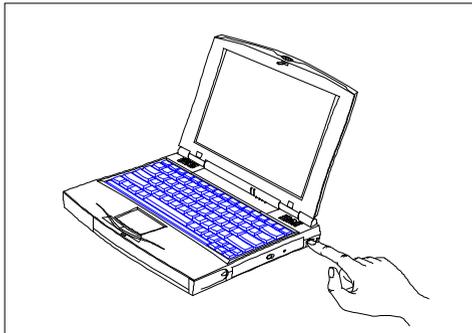
1



2



3



## Getting Help Online

This user's guide provides clear and concise information about the notebook, so read it thoroughly. To provide you with help when traveling, the notebook has a comprehensive online help.

## Accessing Online Help

Follow these steps to access the online documentation:

1. Press the Windows logo button or Click on the Start button.
2. Select Programs.
3. Click on Extensa Online.

The online help is easy to navigate with hypertext and hypergraphics. Clear illustrations help describe notebook operation as well.

## Getting Online

If you are connected to the Internet and have World Wide Web access, visit our home page (<http://www.acer.com/>) and get the latest information about our products.

# Getting Familiar with your Computer

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This computer combines high-performance, versatility, power management features and multimedia capabilities with unique style and ergonomic design. Work with unmatched productivity and reliability with your new power computing partner.

This chapter gives an in-depth “tour” of the computer’s many features.

## 1.1 Features

This computer was designed with the user in mind. Here are just a few of its many features:

### Performance

- ❑ Intel Pentium® processor with MMX™ technology
- ❑ 64-bit main memory and external (L2) cache memory
- ❑ Large LCD display and PCI local bus video with graphics acceleration
- ❑ Internal CD-ROM drive and external 3.5-inch floppy drive, or internal 3.5-inch floppy drive
- ❑ High-capacity, Enhanced-IDE hard disk
- ❑ Lithium-Ion or Nickel Metal-Hydride battery pack
- ❑ Power management system with standby and hibernation power saving modes

### Multimedia

- ❑ 16-bit high-fidelity stereo audio with 3-D sound
- ❑ Built-in dual speakers
- ❑ Ultra-slim, high-speed CD-ROM drive

# Getting Familiar with your Computer

## Connectivity

- ❑ High-speed fax/data modem port<sup>1</sup> (on some models)
- ❑ Fast infrared wireless communication
- ❑ USB (Universal Serial Bus) port

## Human-centric Design and Ergonomics

- ❑ Lightweight and slim
- ❑ Sleek, smooth and stylish design
- ❑ Full-sized keyboard
- ❑ Wide and curved palm rest
- ❑ Ergonomically-centered touchpad pointing device

## Expansion

- ❑ CardBus PC card (formerly PCMCIA) slots (two type II/I or one type III) with ZV (Zoomed Video) port support
- ❑ Port replicator option for one-step connect/disconnect from peripherals
- ❑ User-upgradeable memory and hard disk

---

<sup>1</sup> This feature is available only in the U.S., Canada, Japan and Taiwan. For other regions, you can connect a PC Card modem. Consult your dealer for details.

## 1.2 Display

The large graphics display offers excellent viewing, display quality and desktop performance graphics. The computer supports two different display configurations — DSTN or TFT.

### **Video Performance**

PCI local bus video with graphics accelerator and 2MB EDO video RAM boost video performance.

### **Simultaneous Display**

The computer's large display and multimedia capabilities are great for giving presentations. If you prefer, you can also connect an external monitor when giving presentations. This computer supports simultaneous LCD and CRT display. Simultaneous display allows you to control the presentation from your computer and at the same time face your audience. You can even connect an LCD projection panel for large-audience presentations.

### **Power Management**

The power management system incorporates an "automatic LCD dim" feature that automatically decides the best settings for your display and at the same time conserve power. See section 2.2 for more information on power management.

# Getting Familiar with your Computer

## Opening and Closing the Display

To open the display, slide the display lid latch to the left and lift up the lid. Then tilt it to a comfortable viewing position. The computer employs a microswitch that turns off the display (and enters standby mode) to conserve power when you close the display cover, and turns it back on when you open the display cover.



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**Note:** If an external monitor is connected, the computer turns off the display (but does not enter standby mode) when you close the display cover.

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To close the display cover, fold it down gently until the display cover latch clicks into place.



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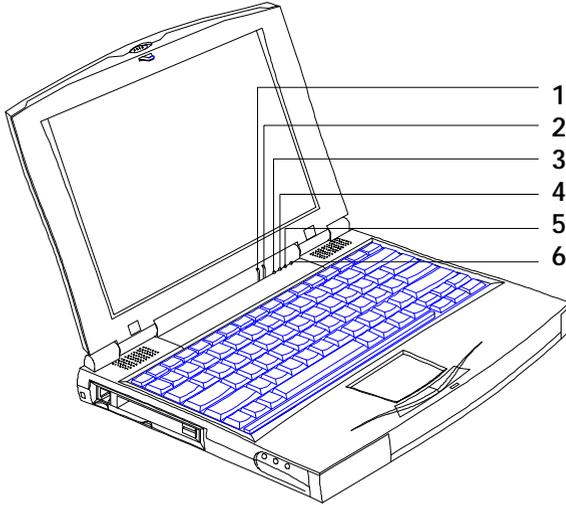
**Warning:** To avoid damaging the display, do not slam it when closing. Do not place any object on top of the computer when the display is closed.

---

# Getting Familiar with your Computer

## 1.3 Indicators

The computer has six easy-to-read indicator lights (LEDs) near the display cover.



Two of these LEDs, Power and Standby, are visible even when you close the display cover so you can see the status of the computer while the cover is closed.

# Getting Familiar with your Computer

#	Icon	Function	Description
1		Power	Lights when the computer is on.
2		Standby	Lights when the computer enters Standby mode.
3		Media Activity	Lights when the floppy drive, hard disk or CD-ROM drive is active.
4		Battery Charge	Lights when the battery is being charged.
5		Caps Lock	Lights when Caps Lock is activated.
6		Num Lock	Lights when Num Lock is activated.

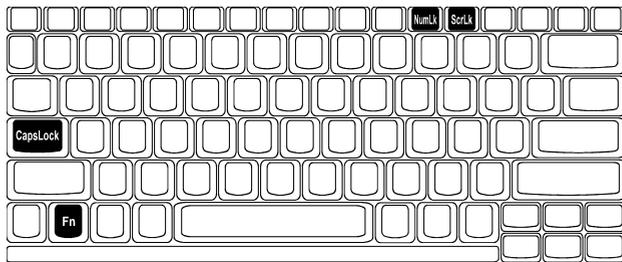
# Getting Familiar with your Computer

## 1.4 Keyboard

The keyboard has full-sized keys that includes an embedded keypad, separate cursor keys, two Windows 95 keys and twelve function keys.

### 1.4.1 Special Keys

#### Lock Keys



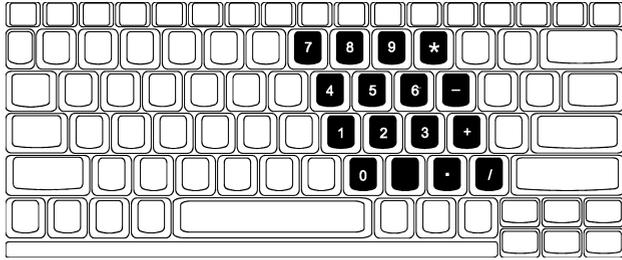
The keyboard has three lock keys which you can toggle on and off.

Lock Key	Description
Caps Lock	When Caps Lock is on, all alphabetic characters typed are in uppercase.
Fn-NumLk	When Num Lock is on, the embedded keypad is in numeric mode. The keys function as a calculator (complete with arithmetic operators +, -, *, and /). Use this mode when you need to do a lot of numeric data entry. A better solution would be to connect an external keypad.
Fn-ScrLk	When Scroll Lock is on, the screen moves one line up or down when you press ↑ or ↓ respectively. Scroll lock does not work with

# Getting Familiar with your Computer

some applications.

## Embedded Keypad



The embedded keypad functions like a desktop numeric keypad. It is indicated by small characters located on the upper right corner of the keycaps. To simplify the keyboard legend, cursor-control key symbols are not printed on the keys.

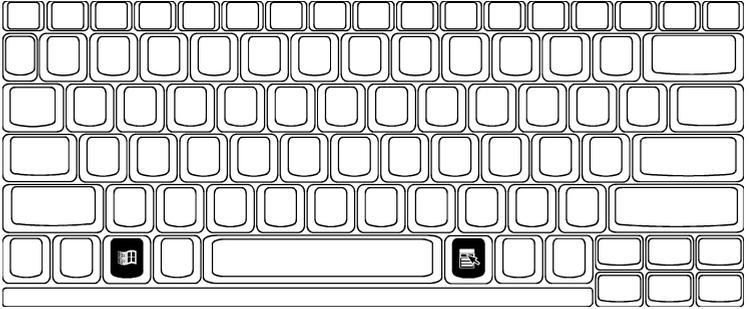
Desired Access	Num Lock On	Num Lock Off
Number keys on embedded keypad	Type numbers in a normal manner.	
Cursor-control keys on embedded keypad	Hold <b>Shift</b> while using cursor-control keys.	Hold <b>Fn</b> while using cursor-control keys.
Main keyboard keys	Hold <b>Fn</b> while typing letters on embedded keypad.	Type the letters in a normal manner.



**Note:** If an external keyboard or keypad is connected to the computer, the numlock feature automatically shifts from the internal keyboard to the external keyboard or keypad.

# Getting Familiar with your Computer

## Windows 95 Keys

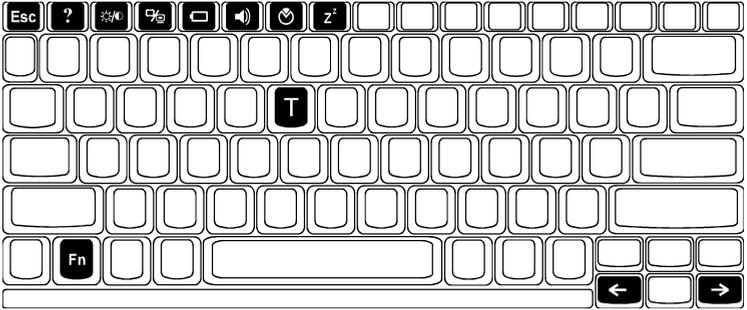


The keyboard has two keys that perform Windows 95-specific functions.

Key	Description
Windows logo key	Start button. Combinations with this key performs special functions. Below are a few examples: <ul style="list-style-type: none"><li><input type="checkbox"/> <i>Windows + Tab</i> Activate next Taskbar button</li><li><input type="checkbox"/> <i>Windows + E</i> Explore My Computer</li><li><input type="checkbox"/> <i>Windows + F</i> Find Document</li><li><input type="checkbox"/> <i>Windows + M</i> Minimize All</li><li><input type="checkbox"/> <i>Shift + Windows + M</i> Undo Minimize All</li><li><input type="checkbox"/> <i>Windows + R</i> Display Run dialog box</li></ul>
Application key	Opens the application's context menu (same as right-click).

# Getting Familiar with your Computer

## Hot Keys



The computer employs hot keys or key combinations to access most of the computer's controls like screen contrast and brightness, volume output and the BIOS setup utility.

Hot Key	Icon	Function	Description
Fn-Esc	<b>Esc</b>	Hotkey Escape	Exits the hotkey control.
Fn-F1	?	Hotkey Help	Displays the hotkey list and help.
Fn-F2		Brightness Control  Contrast Control 	Toggles between brightness control and contrast control.  Press the scale hotkeys ( <b>Fn</b> -→, <b>Fn</b> -←) to increase and decrease the brightness or contrast level.  Computers with TFT displays do not show the contrast control icon.

# Getting Familiar with your Computer

Hot Key	Icon	Function	Description
F <sub>n</sub> -F3		Display Toggle	Switches display between the following: <ul style="list-style-type: none"> <li>• LCD</li> <li>• CRT</li> <li>• Both LCD and CRT</li> <li>• TV (if the computer is attached to the optional port replicator)</li> </ul>
F <sub>n</sub> -F4		Battery Gauge 	Displays the battery gauge.
F <sub>n</sub> -F5		Volume Control 	Press the scale hotkeys ( <b>F<sub>n</sub>-→</b> , <b>F<sub>n</sub>-←</b> ) to increase and decrease the output level.
F <sub>n</sub> -F6		Setup	Gains access to BIOS setup utility's power management settings and system information reference screens. See section 5.3.5.
F <sub>n</sub> -F7	<b>Z<sup>Z</sup></b>	Sleep	Enters hibernation mode if the hibernation function (Sleep Manager) is installed, valid and enabled; otherwise, the computer enters standby mode. See section 2.2.1 to know more about standby and hibernation modes.
F <sub>n</sub> -→	→	Scale Increase	Increases the setting of the current icon.
F <sub>n</sub> -←	←	Scale Decrease	Decreases the setting of the current icon.

# Getting Familiar with your Computer

Hot Key	Icon	Function	Description
Fn-T		Toggle Touchpad	Turns the internal touchpad on and off.



---

**Note:** If you want to use an external PS/2 mouse, first enable the touchpad, connect the external PS/2 mouse, then disable the touchpad if necessary.

---

## Activating and Using Hot Keys

When activating hot keys, press and hold the first key **Fn** before pressing the other keys in the hot key combination.

Some hot keys pop-up an onscreen icon as shown in the previous table. For hot keys with pop-up icons, press the scale hot keys (**Fn**-> and **Fn**-<) to increase and decrease the setting of the icon.

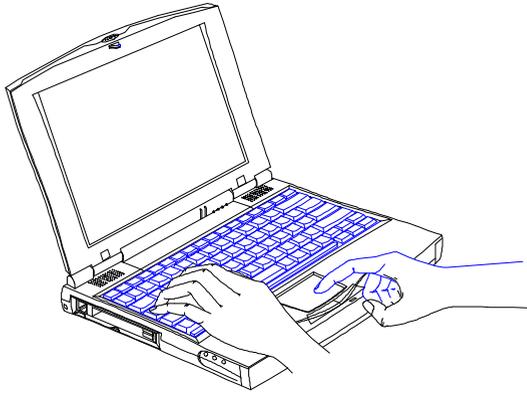
## Exiting Pop-up Icons and Screens

Press hot key escape (**Fn-Esc**) to exit a pop-up icon resulting from a hot key. Press **Esc** to exit a screen resulting from a hot key.

# Getting Familiar with your Computer

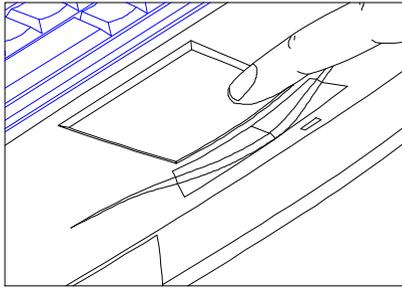
## 1.4.2 Keyboard Ergonomics

Located below the keyboard, the wide and curved palm rest gives you a place to rest your hands while you type.



## 1.5 Touchpad

The built-in touchpad is a PS/2-compatible pointing device that senses movement on its surface. This means the cursor responds as you move your finger on the surface of the touchpad. The central location on the palm rest provides ample comfort and support.



---

**Note:** When using an external mouse, you can press **Fn-T** to disable the internal touchpad.

If you want to use an external PS/2 mouse, first enable the touchpad, connect the external PS/2 mouse, then disable the touchpad if necessary.

---

### Touchpad Basics

The following items teach you how to use the touchpad:

- Move your finger across the touchpad to move the cursor.

# Getting Familiar with your Computer

- ❑ Press the left and right buttons located on the edge of the touchpad to do selection and execution functions. These two buttons are similar to the left and right buttons on a mouse. Tapping on the touchpad produces similar results.

Function	Left Button	Right Button	Tap
Execution	Click twice quickly		Tap twice (at the same speed as double-clicking the mouse button)
Selection	Click once		Tap once
Drag	Click and hold to drag the cursor		Tap twice (at the same speed as double-clicking the mouse button) and hold finger to the touchpad on the second tap to drag the cursor
Access Context Menu		Click once	



---

**Note:** Keep your fingers dry and clean when using the touchpad. Also keep the touchpad dry and clean.

The touchpad is sensitive to finger movements. Hence, the lighter the touch, the better the response. Tapping too hard will not increase the touchpad's responsiveness.

---

## 1.6 Storage

High-capacity storage comes in the form of a 2.5-inch Enhanced-IDE hard disk. The computer also has either an internal 3.5-inch, 1.44MB floppy drive or an internal high-speed CD-ROM drive.

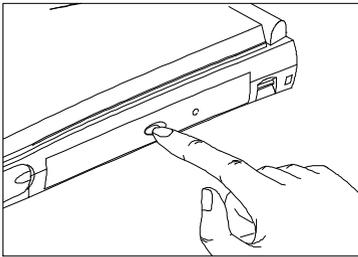
### 1.6.1 Hard Disk

The hard disk module can be upgraded when you need more storage space. See section 3.11.2.

### 1.6.2 Internal Drive

The computer comes with a floppy drive or CD-ROM drive. The CD-ROM drive gives you portable multimedia access. An external floppy drive is included for models with built-in CD-ROM drives.

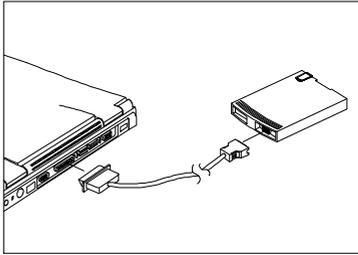
#### Ejecting the CD-ROM Tray



To eject the CD-ROM drive tray when the computer is turned on, press the CD-ROM eject button ▲.

# Getting Familiar with your Computer

## Connecting an External Floppy Drive



Connect the larger end of the floppy drive cable to the parallel port and the other end to the connector on the external floppy drive.



---

**Note:** The external floppy drive is hot-pluggable. You do not need to turn off the computer to connect and use the floppy drive.

---

# Getting Familiar with your Computer

## 1.7 Ports

Ports allow you to connect peripheral devices to your computer as you would with a desktop PC. The ports are found on the rear panel; PC card slots and audio ports are found on the left panel of the computer.

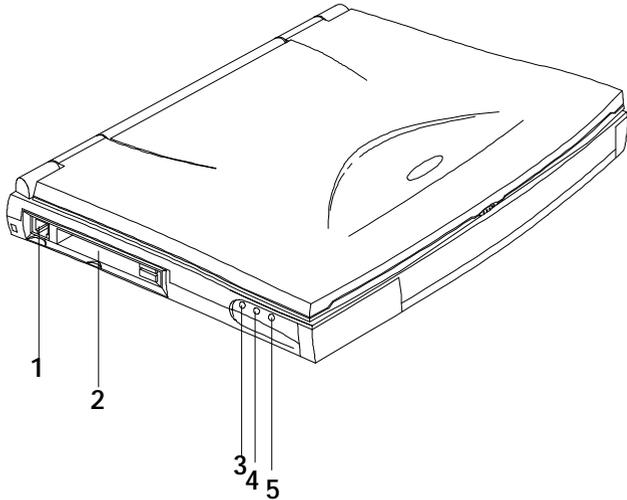


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**Note:** See Chapter 3 on how to connect external devices to the computer.

---

### 1.7.1 Left Ports



#	Icon	Port	Connects to...
1		Modem Jack	Phone line
2		PC Card Slots	PC Cards

# Getting Familiar with your Computer

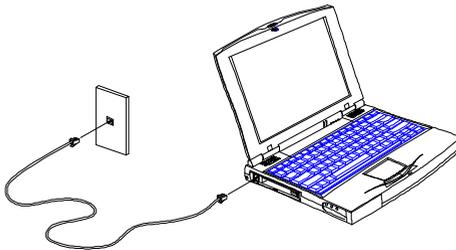
#	Icon	Port	Connects to...
3		Line-out Port	Line-out device (e.g., speakers, headphones)
4		Line-in Port	Line-in device (e.g., audio CD player, stereo walkman)
5		Microphone-in Port	External 3.5mm minijack condenser microphone

## Fax/Data Modem Port (on some models)

The computer has an optional built-in fax/data modem.<sup>1</sup>



**Warning: This modem port is not compatible with digital phone lines. Plugging this modem into a digital phone line will damage the modem.**



To use the fax/data modem port, connect a phone cable from the modem port to a telephone jack.

Start your communications software program. See your communications manual for instructions.

<sup>1</sup> This feature is available only in the U.S., Canada, Japan and Taiwan. For other regions, you can connect a PC Card modem. Consult your dealer for details.

# Getting Familiar with your Computer

## PC Card Slots

There are two type II/I or one type III CardBus PC Card slots found on the left panel of the computer. These slots accept credit-card-sized cards that enhances the usability and expandability of the computer.

PC Cards (formerly PCMCIA) are add-on cards for portable computers, giving you expansion possibilities long afforded by desktop PCs. Popular type II cards include flash memory, SRAM, fax/data modem, LAN and SCSI cards. Common type III cards are 1.8-inch ATA drives and cellular modems. CardBus improve on the 16-bit PC card technology by expanding the bandwidth to 32 bits.

ZV (Zoomed Video) port support allows your computer to support hardware MPEG in the form of a ZV PC card.



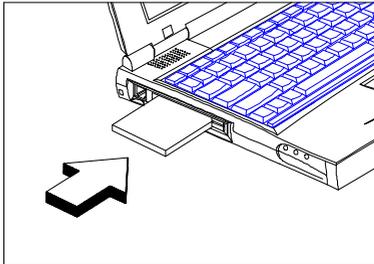
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**Note:** Refer to your card's user's manual for details on how to install and use the card and its functions.

---

# Getting Familiar with your Computer

## Inserting a Card



Insert the card into the desired slot and make the proper connections (e.g., network cable), if necessary. See your card manual for details.

For type III cards, insert card into the lower slot.



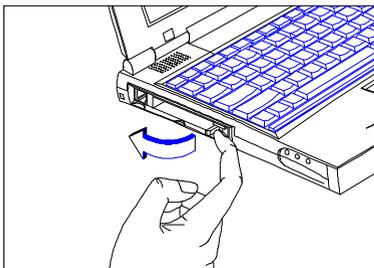
---

**Important:** If the computer detects a PC I/O card (e.g., modem card, ZV card) installed in the PC card slots, the computer will not enter standby/hibernation mode but “sleeps” to maintain your communication connection.

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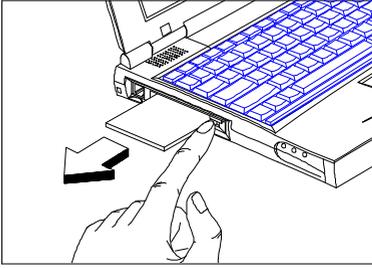
## Ejecting a Card

Exit the application using the card, then follow these steps:



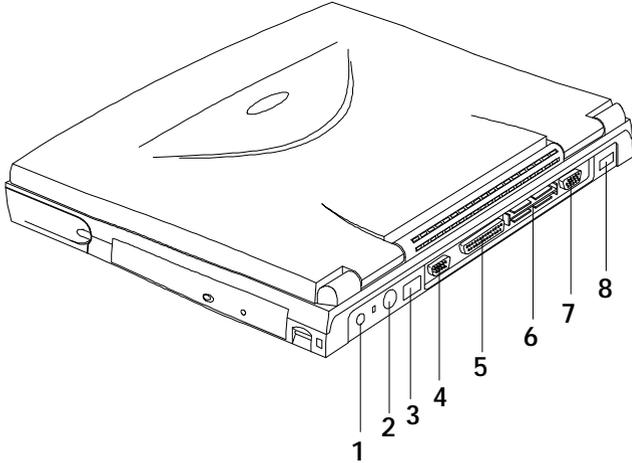
If the PC Card eject button (where the card is inserted) is tucked into its recessed area, pull it out.

# Getting Familiar with your Computer



Then press the slot eject button to eject the card.

## 1.7.2 Rear Ports



#	Icon	Port	Connects to...
1		DC-in Port	AC adapter and power outlet
2		PS/2 Port	PS/2-compatible device (e.g., PS/2 keyboard, keypad, mouse)

# Getting Familiar with your Computer

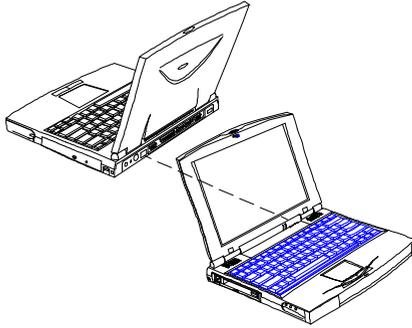
#	Icon	Port	Connects to...
3		FIR Port	Infrared devices (e.g., infrared printer, IR-aware computers)
4		Serial Port (UART16550-compatible)	Serial device (e.g., serial mouse)
5		Parallel Port (ECP-compliant)	External floppy drive, parallel device (e.g., parallel printer)
6		Port Replicator Port	Port replicator
7		External CRT Port	Monitor (up to 1024x768, 256-colors )
8		USB Port	USB device

## Fast Infrared Port

The computer's fast infrared (FIR) port allows you to do wireless data transfer with other IR-aware computers and peripherals such as infrared printers.

The infrared port can transfer data at speeds of up to four megabits per second (Mbps) at a distance of up to one meter.

# Getting Familiar with your Computer

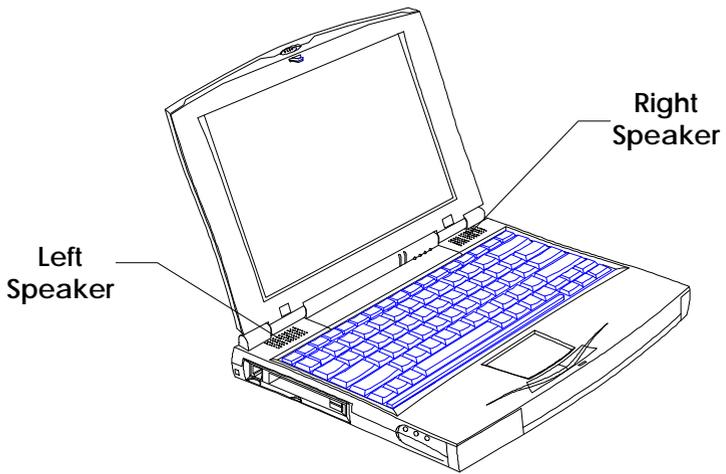


To use FIR, position two IR-aware devices such that their IR ports are no more than one meter apart and offset no more than 15 degrees.

When the two computers are in position, simply begin the data transfer as you normally would. See your file transfer software for details.

## 1.8 Audio

Standard computer configuration includes 16-bit high-fidelity stereo audio with further enhancements that include 3D sound for true audio immersion. Dual speakers found on both sides of the display hinge direct sound towards you which allows for excellent sound output.



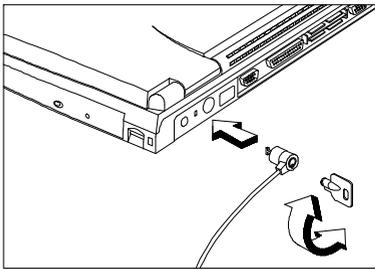
Besides the built-in speakers, there are audio ports on the left panel of the computer. See section 3.6 for more information on connecting external audio devices.

## 1.9 Securing your Computer

Security features include hardware and software locks — a security notch and a two-level password scheme.

### 1.9.1 Security Notch

A security notch  located on the rear panel of the computer lets you connect a Kensington-compatible key-based computer security lock.



Wrap a computer security lock cable around an immovable object such as a table or locked drawer handle. Insert the lock into the notch and turn the key to secure the lock.

### 1.9.2 Passwords

A two-level password scheme protects your computer from unauthorized access. When set, no one can access the computer without entering the correct password.

# Getting Familiar with your Computer

There are two types of passwords you can set:

- ❑ *Setup Password* prevents unauthorized access to the Setup Utility. Once set, you must key-in this password the next time you want to enter the Setup Utility. Section 5.3 discusses this utility in detail.
- ❑ *Power On Password* secures your computer against unauthorized use. Once set, you have to type it whenever you boot the computer.



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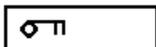
**Important: Do not forget your password!** If you forget your password, you need to contact your dealer.

---

## Setting a Password

Follow these steps:

1. During POST (while the startup logo is being displayed), press **F2** to enter the Setup Utility.
2. Press the ↑ or ↓ key to select System Security, then press **Enter**.
3. Highlight a password parameter and. press the → or ← key. The password prompt appears:



4. Type a password. The password may consist of up to seven characters (A-Z, a-z, 0-9).

# Getting Familiar with your Computer

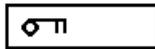
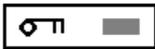


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**Important:** Be very careful when typing your password because the characters do not appear on the screen.

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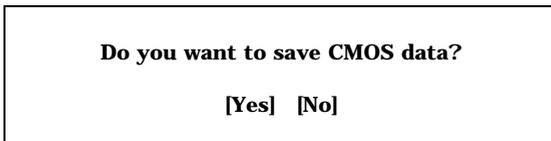
5. Press **Enter**. A prompt asks you to retype the password to verify your first entry.



6. Retype the password then press **Enter**.

After setting the password, the computer automatically sets the chosen password parameter to Enabled.

7. Press **Esc** to exit the System Security screen and return to the main menu.
8. Press **Esc** to exit the BIOS Utility. A dialog box appears asking if you want to save the CMOS data.



9. Select **Yes** to save the changes and reboot the computer.

# Getting Familiar with your Computer

## Changing or Removing a Password

Should you want to change or remove a password, do the following:

1. During POST (while the startup logo is being displayed), press **F2** to enter the Setup Utility.
2. Select System Security and press **Enter**.
3. Highlight the desired password parameter to change or remove.
4. Press **→** or **←** to display the password prompt and key-in a new password, or

Press **→** or **←** and select **None** to remove the existing password.

5. Press **Esc** to exit the System Security screen and return to the main menu.
6. Press **Esc** to exit the Setup Utility. A dialog box appears asking if you want to save the CMOS data.

Do you want to save CMOS data?

[Yes] [No]

7. Select **Yes** to save the changes.

# Operating on Battery Power

---

The computer operates on AC or battery power. This chapter contains the information you need to know to operate the computer on battery power. It also includes information on how your computer manages and saves power.

# Operating on Battery Power

## 2.1 Battery Pack

The computer uses a battery pack that gives you long use between charges.

### 2.1.1 Battery Pack Characteristics

The battery pack has the following characteristics:

- ❑ *Employs Current Battery Technology Standards* The computer uses either a Lithium-Ion or Nickel Metal-Hydride (NiMH) battery pack. These battery types do not have the memory effect problem of Nickel Cadmium (NiCd). NiMH and especially Li-Ion batteries consistently provide the longest battery life, best-suited for road warriors.
- ❑ *Battery-low Warning* When the battery charge level becomes low, the computer gives off warning beeps and the status indicator flashes at regular intervals. This tells the user that the battery power is critically low. You can correct this situation by recharging the battery pack.

Whenever possible, use the AC adapter. The battery will come in handy when you travel or during a power failure. It is advisable to have an extra fully-charged battery pack available as backup.

# Operating on Battery Power



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**Note:** When using a battery pack for the first time, fully recharge the battery, then disconnect the adapter to use up the battery before recharging again. You only need to do this once with a new battery or with a battery that's been stored without being used for a long time.

If the computer is to be stored for more than two weeks, we suggest that you remove the battery pack. Battery power (from a fully charged battery pack) depletes in roughly ten hours with the computer in standby mode. When power is off, battery power depletes in one month.

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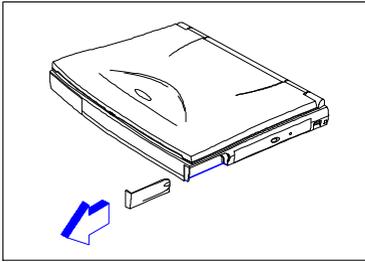
**Warning: Do not expose battery packs to temperatures below 0°C (32°F) or above 60°C (140°F). This may adversely affect the battery pack.**

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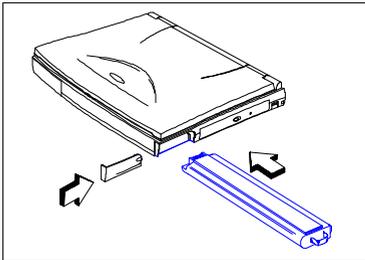
## 2.1.2 Installing and Removing the Battery Pack

Before removing the battery pack, make sure that you have an AC adapter connected to the computer; otherwise turn off the computer. The following figures illustrate how to remove the battery pack.

# Operating on Battery Power



Press the battery compartment cover release button  and slide out the cover.



Insert the battery pack into the battery compartment (connector side-up).

To remove the battery pack, remove the battery compartment cover; then pull out the battery pack using the pull loop at the end.

## 2.1.3 Charging the Battery

To charge the battery, place the battery pack inside the battery compartment and plug the AC adapter into the computer and an electrical outlet.

# Operating on Battery Power

## Charging Modes

The adapter has three charging modes:

- ❑ Rapid mode

The computer uses rapid charging when power is turned off and a powered AC adapter is connected to it. In rapid mode, a fully depleted battery gets fully charged in approximately two hours.

- ❑ Charge-in-use mode

When the computer is in use with the AC adapter plugged in, the computer also charges the battery pack if installed. This mode will take longer to fully charge a battery than rapid mode. In charge-in-use mode, a fully depleted battery gets fully charged in approximately six to eight hours.

- ❑ Trickle mode

When the battery is fully charged, the adapter changes to trickle mode to maintain the battery charge level. This prevents the battery from draining while the computer is in use.



---

**Note:** We suggest that you charge the battery pack before retiring for the day, letting it charge overnight before traveling. This ensures a fully charged battery for use the next day.

---

# Operating on Battery Power

## 2.1.4 Checking the Battery Level

The computer features battery-low warning signals that are both audible and visible. When the battery pack is low, the computer emits warning beeps and the battery indicator flashes at regular intervals. Also, you can check the battery charge level using the onscreen battery gauge.

### Using the Onscreen Battery Gauge



To access the onscreen battery gauge, press **Fn-F4**. The battery level icon displays onscreen.

The onscreen battery gauge indicates the present battery level.

## 2.1.5 Optimizing Battery Life

This section helps you get the most out of battery operation. Optimizing battery life prolongs the charge/recharge cycle and improves recharge efficiency. Follow these suggestions to optimize and maximize battery power:

- Purchase an extra battery pack.
- Use the Sleep Manager utility to reserve hard disk space for the hibernation function. See section 5.1.

# Operating on Battery Power

- ❑ Use the AC adapter whenever possible so that the battery is reserved for on-the-go computing.
- ❑ Keep the battery pack in the computer powered by the AC adapter. The constant trickle charge maintains the battery level to eliminate the battery self-discharge effect. The charge-in-use function also charges the battery pack.
- ❑ Disable the parallel and serial ports if no devices are connected to these ports. You can do this through the Setup Utility. See section 5.3.3.
- ❑ Eject the PC card from the card slot when not in use, since the PC card draws extra power.
- ❑ Store the battery pack in a cool, dry place. The recommended storage temperature for battery packs ranges from 10 to 30 degrees C. The higher the storage temperature, the faster the battery pack self-discharges.
- ❑ The batteries can be recharged about 500 times when used as directed. Excess recharging decreases battery life.
- ❑ Take care of your battery pack and AC adapter. See the notices section found in the front part of the user's guide.

# Operating on Battery Power

## 2.1.6 Battery-low Warning

You never have to worry about battery power as long as you are using the AC adapter. However, when you operate the computer on battery power, pay extra attention to the warning beeps and the indicator light on the display panel. The indicator flashes when the battery power is low.

The following signals indicate a battery-low condition:

- ❑ The buzzer generates four short beeps every minute, if you enabled the Battery-low Warning Beep parameter in Setup
- ❑ The status indicator flashes at regular intervals until battery power is depleted

When you receive a battery-low warning, you have around three minutes to save your work. If you do not connect the AC adapter within this period, the computer enters hibernation mode if the Sleep Upon Battery-low parameter in Setup is enabled and the following conditions exist:

- ❑ The hibernation file created by Sleep Manager is present and valid. See section 5.1.
- ❑ There is enough battery power left to save system information onto the hard disk.

Otherwise, the computer enters standby mode.

# Operating on Battery Power



---

**Warning: Connect the AC adapter to the computer as soon as possible. Data is lost when computer power is cut off during standby mode.**

---

The following table shows the recommended course of action to take when you encounter a battery-low condition.

# Operating on Battery Power

Situation	Recommended Action
AC adapter and power outlet available	<ol style="list-style-type: none"><li>1. Connect the AC adapter to the computer.</li><li>2. Save all necessary files.</li><li>3. Resume work.</li></ol> <p>Power off the computer if you wish to recharge the battery rapidly.</p>
An extra fully-charged battery pack available	<ol style="list-style-type: none"><li>1. Save all necessary files.</li><li>2. Exit the application.</li><li>3. Power off the computer.</li><li>4. Replace the battery pack.</li><li>5. Power on the computer and resume work.</li></ol> <p>or</p> <ol style="list-style-type: none"><li>1. Save all necessary files.</li><li>2. Enter hibernation mode.</li><li>3. Install the extra battery pack.</li><li>4. Resume from hibernation mode.</li></ol>
AC adapter or power outlet not available	<ol style="list-style-type: none"><li>1. Save all necessary files.</li><li>2. Exit the application.</li><li>3. Power off the computer.</li></ol> <p>or</p> <ol style="list-style-type: none"><li>1. Save all necessary files.</li><li>2. Enter hibernation mode.</li></ol>

## 2.2 Power Management

This computer has a built-in power management unit that monitors system activity. System activity refers to any activity involving one or more of the following devices: keyboard, mouse, floppy drive, hard disk, peripherals connected to the serial and parallel ports, and video memory. If no activity is detected for a period of time (called an inactivity time-out), the computer stops some or all of these devices in order to conserve energy.

This computer employs an innovative power management technique called Heuristic Power Management or HPM. HPM allows the computer to provide maximum power conservation and maximum performance at the same time.

Power management methods used by most computers are timer-based. You set inactivity time-out values for the display, hard disk, and other devices. The computer then “sleeps” when these time-outs elapse. The problem with this is that no two users are alike. Each of us has his or her own habits when using the computer, which makes timer-based power management ineffective.

With HPM, your computer manages its power according to the way you use your computer. This means the computer delivers maximum power when you need it, and saves power when you don't need the maximum—all without your intervention. There are no timers to set, because the HPM system figures out everything for you.

# Operating on Battery Power



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**Note:** We recommend you enable heuristic power management to prolong your battery life.

---

## 2.2.1 Power Management Modes

### Display Standby Mode

Screen activity is determined by the keyboard, the built-in touchpad, and an external PS/2 pointing device. If these devices are idle for the period determined by the computer's HPM unit, the display shuts off until you press a key or move the touchpad or external mouse.

### Automatic Dim Feature

The computer has a unique “automatic dim” power saving feature. When the computer is using AC power and you disconnect the AC adapter from the computer, it automatically dims the LCD backlight to save power. If you reconnect AC power to the computer, it automatically adjusts the LCD backlight to a brighter level.

### Hard Disk Standby Mode

The hard disk enters standby mode when there are no disk read/write operations within the period of time determined by the computer's HPM unit. In this state, the power supplied to the hard disk is reduced to a minimum. The hard disk returns to normal once the computer accesses it.

# Operating on Battery Power

## Hibernation Mode

In hibernation mode, all power shuts off (the computer does not consume any power). The computer saves all system information onto the hard disk before it enters hibernation mode. Once you turn on the power, the computer restores this information and resumes where you left off upon leaving hibernation mode.

There are three necessary conditions for the computer to enter hibernation mode:

- ❑ The hibernation file created by Sleep Manager must be present and valid. See section 5.1.
- ❑ Heuristic Power Management Mode must be set to [ENABLED].
- ❑ System Sleep State must be set to [HIBERNATION].

In this situation, there are four ways to enter hibernation mode:

- ❑ Pressing the sleep hot key **Fn-F7 (z<sup>2</sup>)**
- ❑ If the waiting time determined by the computer's HPM unit elapses without any system activity, the computer goes into hibernation mode.
- ❑ If a battery low condition takes place, the computer enters hibernation mode in about three minutes. The Sleep Upon Battery-low parameter in Setup must be set to [ENABLED].

# Operating on Battery Power

- ❑ Invoked by the operating system power saving modes



---

**Note:** If the computer beeps but does not enter hibernation mode after pressing the sleep hot key, it means the operating system will not allow the computer to enter the power saving mode.

---

To exit hibernation mode, press the power switch . The computer also resumes from hibernation mode if the resume timer is set and matched.



---

**Warning:** Do not change any devices (such as add memory or swap hard disks when the computer is in hibernation mode).

---



---

**Important:** If the computer detects a PC I/O card installed in the PC card slots, the computer “sleeps” to maintain your communications connection. It will not enter standby nor hibernation mode.

---

## Standby Mode

The computer consumes very low power in standby mode. Data remain intact in the system memory until battery is drained.

There are two necessary conditions for the computer to enter standby mode:

# Operating on Battery Power

- ❑ Heuristic Power Management Mode must be set to [ENABLED].
- ❑ System Sleep State must be set to [STANDBY].

There are five ways to enter standby mode:

- ❑ Pressing the sleep hot key **Fn-F7 (Z<sup>2</sup>)**
- ❑ If the waiting time determined by the computer's HPM unit elapses without any system activity, the computer goes into standby mode.
- ❑ Closing the display cover
- ❑ If the computer is about to enter hibernation mode with System Sleep State set to [HIBERNATION], but
  - ❑ the hibernation file is invalid or not present.
  - ❑ there is a I/O PC card present in the PC Card slot(s).
- ❑ Invoked by the operating system power saving modes



---

**Note:** If the computer beeps but does not enter standby mode after pressing the sleep hot key, it means the operating system will not allow the computer to enter the power saving mode.

---

The following signals indicate that the computer is in standby mode:

# Operating on Battery Power

- The buzzer beeps
- The standby indicator lights



---

**Warning: Unstored data is lost when you turn off the computer power in standby mode or when the battery is drained.**

---

To leave standby mode and return to normal mode:

- Press any key
- Move the active pointing device (internal or external, PS/2 or serial)
- Resume Timer is set and matched
- Open the display cover
- If an incoming PC card modem event occurs and the Modem Ring Resume On Indicator is enabled, the computer returns to normal mode.



---

**Important:** If the computer detects a PC I/O card installed in the PC card slots, the computer “sleeps” to maintain your communications connection. It will not enter standby nor hibernation mode.

---

## 2.2.2 Advanced Power Management

This computer supports the APM standard designed to further reduce power consumption. APM is a power-management approach defined jointly by Microsoft and Intel. An increasing number of software supports APM to take advantage of power saving features and allows greater system availability without degrading performance.

For more information about APM under Windows 95, refer to your Windows 95 user's manual.



---

**Notes:**

If you enable heuristic power management in Setup without APM installed and enabled, the system time and date do not display the correct settings after the computer returns to normal operation from standby or hibernation mode. To update the time and date, reboot the computer. APM should be enabled to avoid this problem.

Advanced Power Management greatly prolongs battery life. Use APM whenever possible.

---

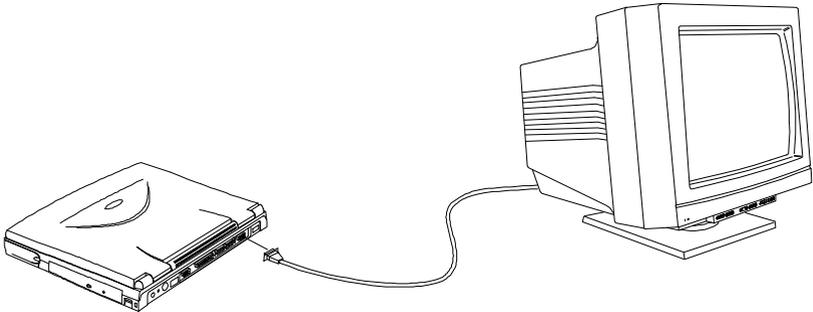
Your computer offers excellent expansion capabilities with its built-in ports and connectors. This chapter describes how to connect peripherals and hardware options that help you use your computer with ease. When connecting peripherals, read the manual included with the peripheral for operating instructions.

This chapter also includes sections on how to upgrade key components. Key component upgradeability helps keep your computer in step with the latest technology.

# Options

## 3.1 External Monitor

To show graphical effects on a larger display, connect an external monitor to the CRT port . Read the monitor manual for additional instructions.



---

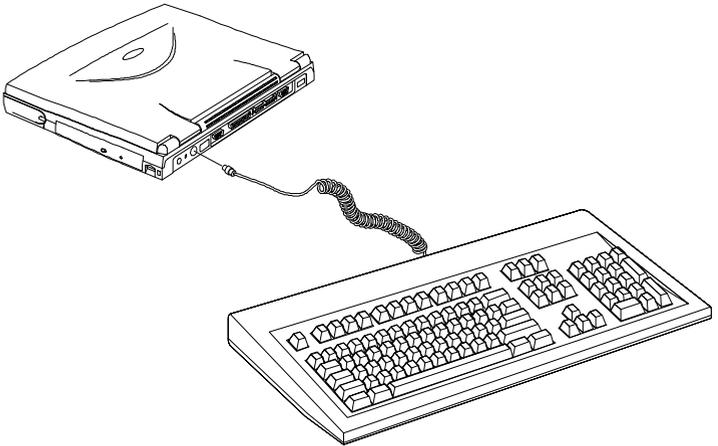
**Note:** If an external monitor is not connected, closing the display cover puts the computer into standby mode.

---

## 3.2 External Keyboard

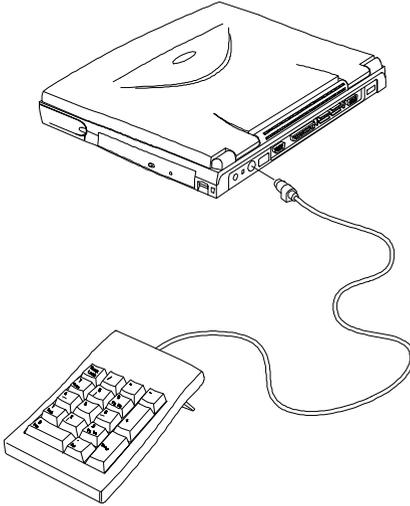
This computer has a keyboard with full-sized keys and an embedded keypad. If you feel more comfortable using a desktop keyboard, you can install a PS/2-compatible external keyboard.

To connect an external keyboard, plug the external keyboard into the PS/2 connector  .



## 3.3 External Keypad

You can also use a 17-key numeric keypad for number-sensitive data entry applications. To connect the keypad, plug in the keypad connector to the PS/2 port



## 3.4 External Pointing Device

This computer accepts either a PS/2-compatible or serial mouse or similar pointing device.

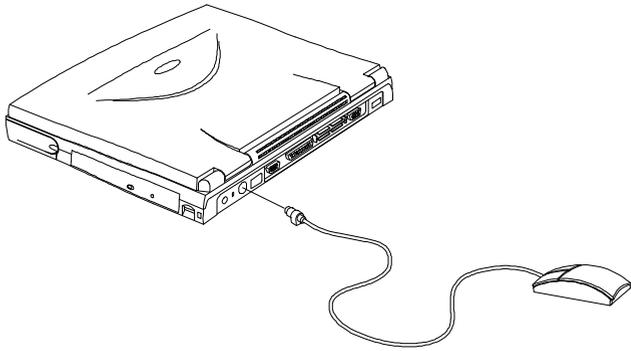


---

**Note:** When using an external mouse, you may choose to disable the internal touchpad by pressing **Fn-T**.

---

The built-in touchpad works alternately with an external PS/2 mouse which is hot-pluggable. To use a PS/2-compatible mouse, simply plug it into the PS/2 port  .



External PS/2 Mouse



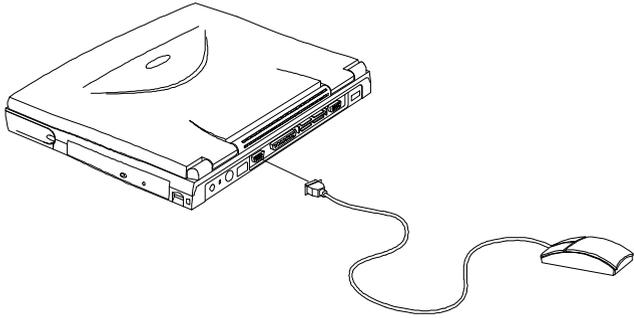
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**Note:** Enable the touchpad before connecting the PS/2 mouse.

---

# Options

If you use a serial mouse, plug it into the serial port . To enable the serial mouse, use the Add New Hardware tool in the Windows 95 Control Panel.



**External Serial Mouse**

## 3.5 Printer

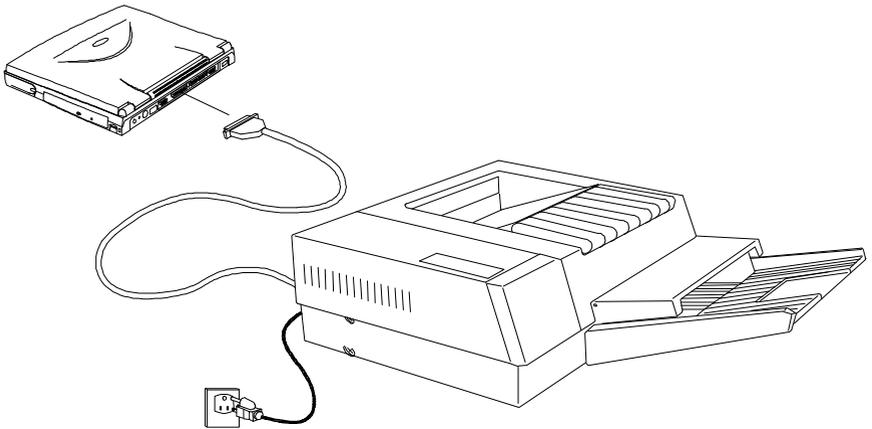
This computer supports both serial and parallel printers. For a serial printer, plug the printer cable into a serial port . For a parallel printer, plug the printer cable into the parallel port . See your printer manual for operating instructions.



---

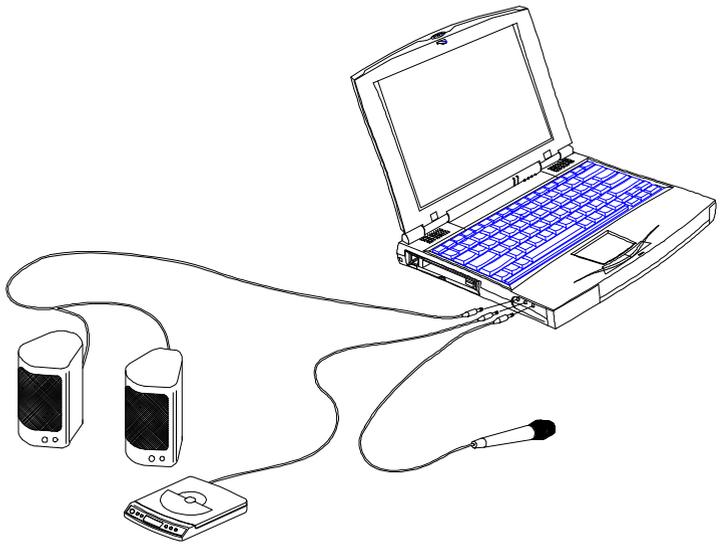
**Note:** If the printer does not function, enter Setup and verify that the parallel port is enabled. Refer to section 5.3.3 for assistance.

---



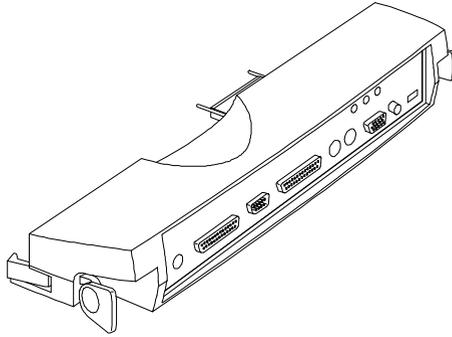
## 3.6 Audio Devices

Audio devices are easy to connect with the audio ports accessible from the left side of the computer. You can plug in amplified speakers or headphones, a line-in device and external microphone to the line-out , line-in  and microphone-in  ports respectively.



## 3.7 Port Replicator

For one-step connection and disconnection from your peripherals, use the optional full-featured port replicator. This port replicator includes all the ports on your computer and adds a few more.



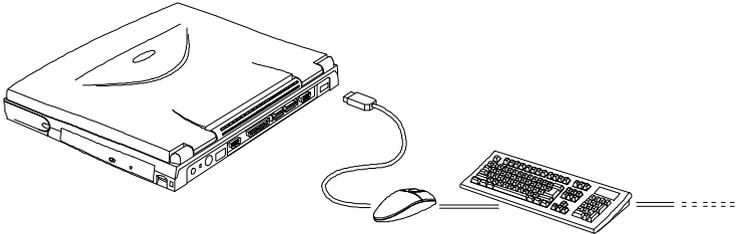
## 3.8 PC Cards

The computer has two CardBus PC card slots that accommodate two type I/II or one type III PC card(s). Please consult your dealer for PC card options available that you can purchase for your computer.

## 3.9 USB Devices

The computer has a USB (Universal Serial Bus) port that allows you to connect peripherals without occupying too many resources. Common USB devices include the mouse and keyboard.

Most USB devices also include a built-in USB port which allows you to daisy-chain other USB devices.



## 3.10 Miscellaneous Options

### 3.10.1 Additional Power Packs

You can order spare batteries and AC adapter.

#### **Battery Pack**

It is good practice to have a spare battery around, especially when you travel. The NiMH and Li-Ion batteries, coupled with power management features, supply you with more power on-the-go.

#### **AC Adapter**

The compact AC adapter charges your battery pack and supplies power to your computer. You can order a spare AC adapter so you do not need to carry it from the office to your home or destination.

### 3.10.2 Cables

#### **Floppy Drive Cable**

The floppy drive cable connects your floppy drive to the computer. This cable is supplied along with the floppy drive. Simply plug in the 25-pin (larger end) of the floppy drive cable to the parallel port on the rear of the computer, and the other end to the external floppy drive.

## PS/2 Y-Bridge Cable

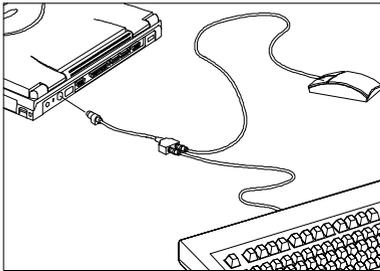
The PS/2 Y-bridge cable allows you to connect two PS/2 devices, mouse and keyboard, to your computer simultaneously.



---

**Note:** The keyboard must be connected to the connector marked keyboard and the mouse must be connected to the connector marked mouse.

---



Connect the single connector end of the Y-bridge cable to the computer's PS/2 port and the double connector ends to the two PS/2 devices.

## File Transfer Cable

Besides using the infrared port, you can also transfer files between computers using a file transfer cable. Connect the file transfer cable between the parallel ports of the two computers and use your file transfer utility to perform the transfer.

## 3.11 Key Component Upgrades

The computer delivers superior power and performance. However, some users and the applications they use may demand more. This computer allows you to upgrade key components when you need increased performance.



---

**Note:** Contact your authorized dealer if you decide to perform a key component upgrade.

---

### 3.11.1 Memory Upgrade

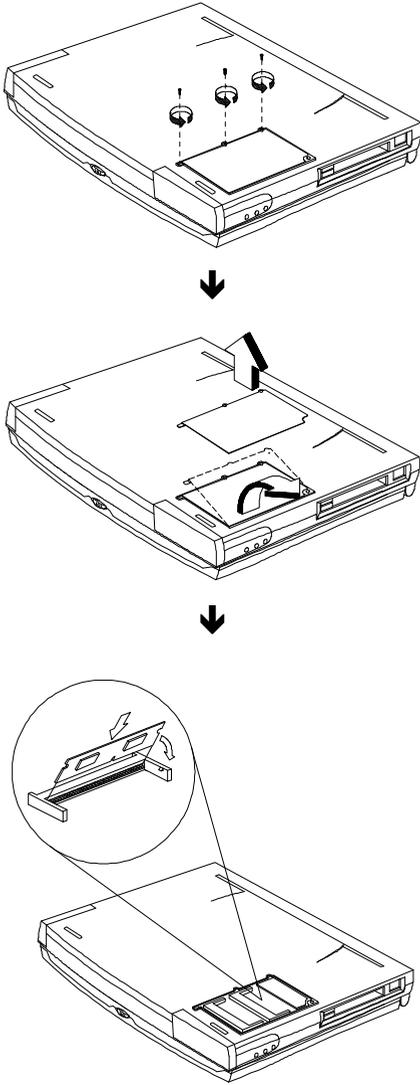
Memory is upgradeable from 16 to 128 MB, employing 8-/16-/32-/64-MB 64-bit soDIMMs (Small Outline Dual Inline Memory Modules).

#### Installing Memory

Follow these steps to install memory:

- 1. Turn off the computer and remove the battery pack.** Then turn the computer over to access its base.
- 2.** Remove three screws from the memory door; then lift up and remove the memory door.
- 3.** Insert the memory module diagonally into the slot, then gently press down until it clicks into place.

4. Replace the memory door and secure it with the screws.



The computer automatically detects and reconfigures the total memory size.

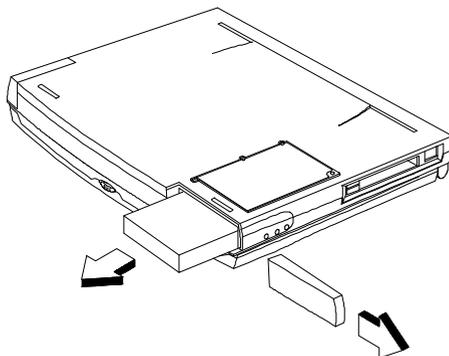
## 3.11.2 Hard Disk Upgrade

You can upgrade your hard disk with a higher capacity drive when you need more storage space. The computer uses a 12.5mm, 2.5-inch Enhanced-IDE hard disk.

### Installing a Replacement Hard Disk

Follow these steps to install a hard disk:

- 1. Turn off the computer and remove the battery pack.** Then turn the computer over to access its base.
- 2. Slide out the hard disk bay cover** .
- 3. Pull out the hard disk** using the pull loop attached to the end of the hard disk.



- 4. Insert a new hard disk** into the hard disk bay and replace the cover.

# Moving with your Computer

---

This chapter gives you tips and hints on things to consider when moving around or traveling with your computer. We have arranged these according to the following situations:

- ❑ *Moving around* — when you are just moving within short distances, for example, from your office desk to a meeting room.
- ❑ *Taking the Computer Home* — when you are moving from your office to your home or vice versa.
- ❑ *Traveling with the Computer* — when you are moving within a larger distance, for instance, from your office building to a client's office building or traveling locally.
- ❑ *Traveling Internationally with the Computer* — when you are moving from country to country.

## 4.1 Disconnecting from the Desktop

Follow these steps to disconnect your computer from external accessories.

1. Save your work in progress.
2. Shut down the operating system.
3. Turn off the computer.
4. Disconnect the cord from the AC adapter.
5. Disconnect the keyboard, pointing device, printer, external monitor, and other external devices.

If your external devices are connected to the optional port replicator, disconnect the notebook from the port replicator. You do not need to disconnect the external devices from the port replicator.

6. Disconnect the Kensington lock if you are using one to secure the computer.

## 4.2 Moving Around

### 4.2.1 Preparing the Computer

Before moving the computer, close and latch the display cover to place it in standby mode. You can now safely take the computer anywhere you go within the building.

To bring the computer out of standby mode, open the display.

### 4.2.2 What To Bring to Short Meetings

A fully charged battery runs the computer for 2-3 hours under most circumstances. If your meeting is shorter than that, you probably do not need to bring anything with you other than the computer.

### 4.2.3 What To Bring to Long Meetings

If your meeting will last longer than 3 hours or if your battery is not fully charged, you may want to bring the AC adapter with you to plug in your computer in the meeting room.

If the meeting room does not have an electrical outlet, reduce the drain on the battery by putting the computer in standby mode. Close the display cover whenever you are not actively using the computer.

# Moving with your Computer

## 4.3 Taking the Computer Home

### 4.3.1 Preparing the Computer

After disconnecting the computer from your desktop, follow these steps to prepare the computer for the trip home.

1. Remove all media from the drives. Failure to remove the media can damage the drive head.
2. Pack the computer in a protective case that can prevent the computer from sliding around and cushion it if it should fall.



---

**Caution: Avoid packing items next to the top cover of the computer. Pressure against the top cover can damage the screen**

---

### 4.3.2 What To Bring with You

Unless you already have some items at home, bring the following items with you.

- AC adapter and power cord
- The printed user's manual

### 4.3.3 Special Considerations

Follow these guidelines to protect your computer while traveling to and from work.

# Moving with your Computer

- ❑ Minimize the effect of temperature changes by keeping the computer with you.
- ❑ If you need to stop for an extended period of time and cannot bring the computer with you, leave the computer in the trunk of the car to avoid exposing the computer to excessive heat.
- ❑ Changes in temperature and humidity can cause condensation. Allow the computer to return to room temperature, and inspect the screen for condensation before turning on the computer. If the temperature change is greater than 18°F (10°C), allow the computer to come to room temperature slowly. If possible, leave the computer for 30 minutes in an environment with a temperature between outside and room temperature.

## 4.3.4 Setting Up a Home Office

If you frequently work on your computer at home, it may be worthwhile purchasing a second AC adapter for use at home. With a second AC adapter, you can avoid transporting the extra weight to and from home.

If you use your computer at home for significant periods of time, you might also want to add an external keyboard, monitor, or mouse.

# Moving with your Computer

## 4.4 Traveling with the Computer

### 4.4.1 Preparing the Computer

Prepare the computer as if you were taking it home. Be sure the battery in the computer is charged. Airport security often requires you to turn on your computer when bringing it into the gate area.

### 4.4.2 What To Bring with You

Bring the following items with you.

- AC adapter
- External floppy drive and cable (for CD-ROM models)
- Spare, fully-charged battery packs
- Additional printer driver files if you plan to use another printer

### 4.4.3 Special Considerations

In addition to the guidelines for taking the computer home, follow these guidelines to protect your computer while traveling.

- Always take the computer as carry-on luggage.

# Moving with your Computer

- ❑ Have the computer inspected by hand. Do not put the computer through a security X-ray machine or a metal detector.
- ❑ Avoid exposing floppy disks to hand-held metal detectors.

# Moving with your Computer

## 4.5 Traveling Internationally with the Computer

### 4.5.1 Preparing the Computer

Prepare the computer as you would normally prepare it for traveling.

### 4.5.2 What To Bring with You

Bring the following items with you.

- AC adapter
- Power cords that are appropriate to the country to which you are traveling
- External floppy drive and cable (for CD-ROM models)
- Spare, fully-charged battery packs
- Additional printer driver files if you plan to use another printer
- Proof of purchase, in case you need to show it to Customs officials
- ITW passport

## 4.5.3 Special Considerations

Follow the same special considerations as when traveling with the computer. In addition, these tips are useful when traveling internationally.

- ❑ When traveling in another country, check that the local AC voltage and the AC adapter power cord specifications are compatible. If not, purchase a power cord that is compatible with the local AC voltage. Do not use converter kits sold for appliances to power the computer.
- ❑ If you are using a PC Card modem, check if the PC card modem and connector used with your computer is compatible with the telecom system of the country you are traveling in.

The computer comes preloaded with the following software:

- ❑ Windows 95 (or Windows NT) operating system
- ❑ System utilities, drivers and application software

This chapter discusses the important system utilities bundled with your computer.



---

**Note:** To access most of the software applications, click on the Start button and select the application folder. Then click on the application icon to run the selected application.

To learn about the software and utility, make use of the online help provided by the software.

---

## 5.1 Sleep Manager

Most notebook computers feature built-in power-saving functions. This computer has two power management modes, standby and hibernation.

While standby puts your computer into a light sleep state, hibernation shuts off all power after saving the current state of your computer. The next time you press the power switch, the computer resumes from where you left off.

Sleep Manager allows your computer to perform this function.



---

**Note:** To understand how your computer saves and manages power, see section 2.2.

---

Sleep Manager is a utility that works with your computer's BIOS and Windows APM (Advanced Power Management) to manage the hibernation operation. This includes:

- ❑ creating the hibernation file which contains the current state of the computer
- ❑ checking if the hibernation file is valid
- ❑ saving and loading the contents of the hibernation file when entering to and resuming from hibernation

The hibernation file resides in a contiguous area on your hard disk.

Sleep Manager can automatically create, recover, and reallocate space for the hibernation file. If the system memory size was changed or the hibernation file on the hard disk was corrupted, Sleep Manager reallocates the hard disk space for you automatically.

## 5.1.1 Accessing the Sleep Manager

There are two ways to bring up the Sleep Manager.

### On the Taskbar

The computer automatically loads Sleep Manager every time you start Windows 95. Sleep Manager resides in the background and the Sleep Manager status icon appears on the taskbar.



Double-click on the Sleep Manager status icon (🌿) if enabled to bring up the main Sleep Manager program.

The Sleep Manager icon may or may not appear on the taskbar. A checkbox in the Sleep Manager main screen determines whether to enable or disable the icon on the taskbar.

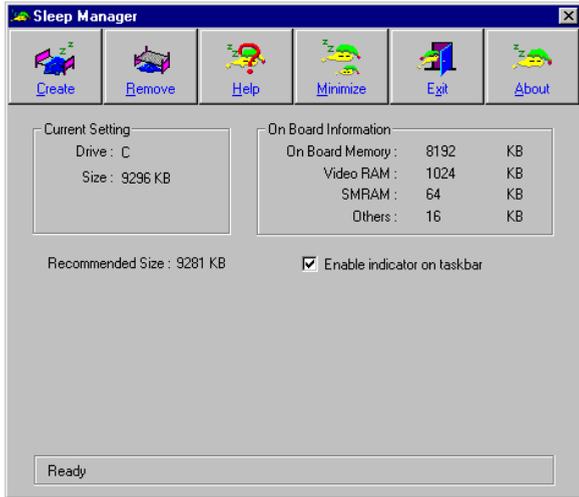
This icon shows the current status of the hibernation feature. The icon changes to tell you if the feature is valid or not. Resting your cursor on the icon also shows the status.

# System Utilities

## Start menu

1. Click on the Start button.
2. Select Programs.
3. Select Sleep Manager.
4. Select the Sleep Manager program.

The Sleep Manager displays below:



Item	Description
Buttons	Click to access the Sleep Manager functions
Current Setting	Displays the drive and size of the current reserved space created by Sleep Manager.

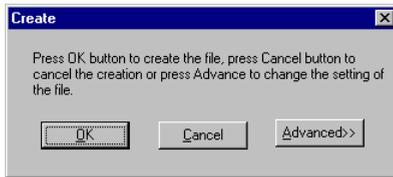
# System Utilities

Item	Description
On Board Information	<p data-bbox="439 262 1009 453">Displays the different areas of system memory and their respective sizes. These system resources need to be stored before the computer can enter hibernation mode, so that the computer can resume successfully.</p> <p data-bbox="439 465 923 491">These resources are the contents of:</p> <ul data-bbox="439 505 979 664" style="list-style-type: none"><li data-bbox="439 505 979 565">• Onboard memory (DRAM or dynamic memory)</li><li data-bbox="439 569 979 595">• Video RAM (VRAM or video memory)</li><li data-bbox="439 598 979 624">• SMRAM (static memory)</li><li data-bbox="439 628 979 654">• Others</li></ul> <p data-bbox="439 678 1001 739">The total size of these resources shows as the recommended size in the dialog box.</p>
Recommended Size	<p data-bbox="439 756 990 913">Displays the minimum size of the contiguous space you need for the hibernation feature. The actual size may be a little bit more due to file system alignment.</p>
Enable Indicator on the Taskbar	<p data-bbox="439 930 1001 991">When this checkbox is checked, the Sleep Manager status appears on the taskbar.</p> <p data-bbox="439 1003 1001 1130">Double-click on the Sleep Manager status icon on the taskbar to bring up the main program, or simply rest your cursor on the icon to display the current status.</p>

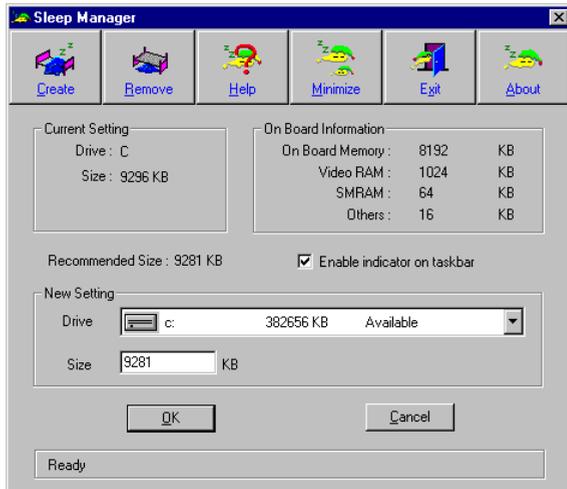
## 5.1.2 Sleep Manager Functions

### Create

Sleep Manager automatically finds a contiguous area on your hard disk and creates the hibernation file in this space. You can also perform this function by clicking on the Create button. When you click on the **Create** button, a dialog box pops up:



Select **OK** to automatically create the hibernation file. Sleep Manager displays the recommend size based on onboard system information. You can also choose **Advance>>>** to manually set the space settings and size. The advanced screen shows below.



Sleep Manager automatically checks the system configuration and displays the recommended size. The drive where the space will be created is defined by the system and will be the first available logical drive which has the requested contiguous free disk space on it. The recommended size is the minimum size needed to save the current system status.

If the program cannot find the required space on the hard disk during the space creation process, it shows a message box to inform the user.

## Not Enough Space for Allocation

This is an error message that may appear when Sleep Manager is creating the hibernation file. There are several different reasons that may cause this error.

# System Utilities

One reason is that the size of the free disk space on your hard disk is less than the required size. For example, if the onboard memory is 16MB and the video memory is 2MB, the total free disk space required will be around 18~19MB. If the total free disk space is less than this, the user has to free up space on his hard disk.

Another possible reason is that the hard disk has enough free space, but this free space exists as small fragments. The free disk space that Sleep Manager requires needs to be contiguous. To solve this problem, use tools such as Disk Defragmenter (Windows 95) to compact these free disk spaces. Then run Sleep Manager again to create the file.

One other factor that causes the error is when disk compression utilities are used. Sleep Manager can work with most compression software. However, Sleep Manager can only create the space on a host drive. A host drive stores original file information and cannot be compressed. The free space on the host drive is usually very small, so the compression software needs to be run again to enlarge the size of the host (uncompressed) drive for Sleep Manager.

## Remove

If you want to use or take back the reserved space, click on the Remove button. This will disable the hibernation feature. Instead, the computer will only be able to enter standby mode.

## Minimize

Minimize Sleep Manager by selecting the Minimize button. If the Enable indicator on taskbar box is checked, Sleep Manager will switch to the background by locating itself on the taskbar. You can pop-up Sleep Manager again by double-clicking on this icon.

## Exit

Exit Sleep Manager by selecting the Exit button. Sleep Manager will quit and disable the capability of auto-adjusting the reserved space size. Exiting Sleep Manager is NOT recommended.



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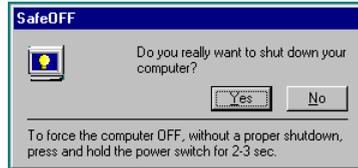
**Important:** Do not deactivate (remove or exit) or uninstall Sleep Manager. Do not remove or delete the hibernation file. Hibernation will not work without Sleep Manager and the hibernation file.

---

# System Utilities

## 5.2 SafeOff

SafeOFF provides protection from accidental power off. If you accidentally press the power switch, a dialog box pops up for confirmation.



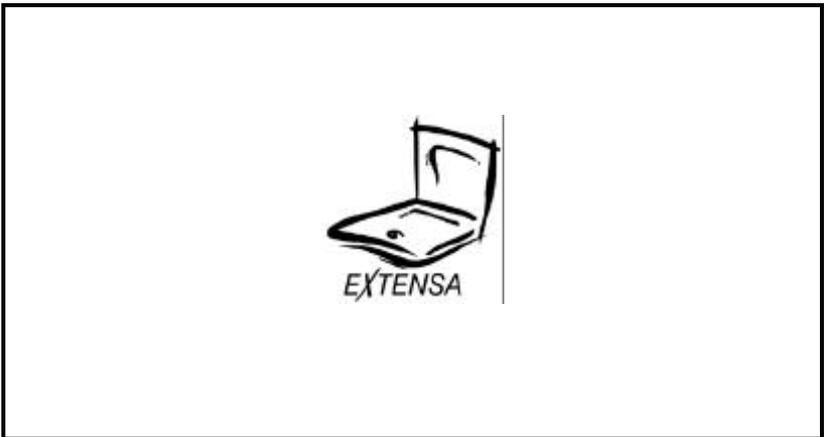
- ❑ If you select **No**, the dialog closes and the system does not power off.
- ❑ If you select **Yes**, SafeOFF will request Windows 95 to shutdown the computer. Opened files can be saved and closed safely.
- ❑ If none of the alternatives is chosen, SafeOFF waits for 30 seconds and shuts down the computer.

## 5.3 Setup Utility

The Setup Utility is a hardware configuration program built into your computer's BIOS (Basic Input/Output System).

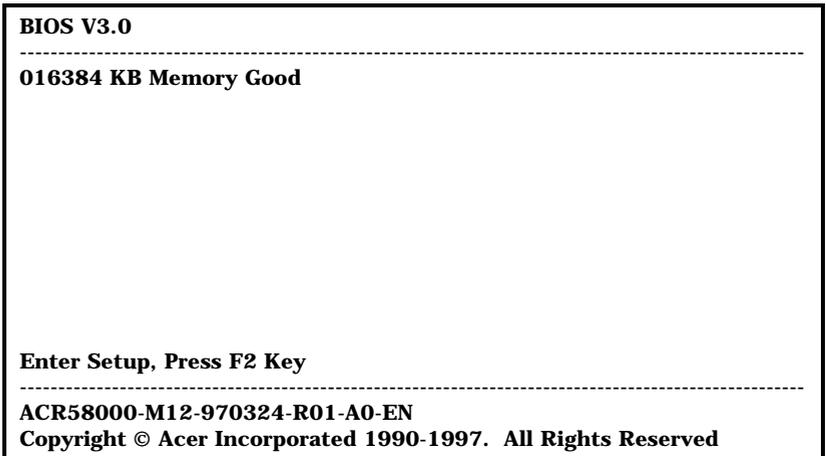
Your computer is already properly configured and optimized, and you do not need to run this utility. However, if you encounter configuration problems, you may need to run Setup. Please also refer to Chapter 7, Troubleshooting when a problem arises.

To activate the Setup Utility, press **F2** after you hear a beep while the Extensa logo is being displayed.

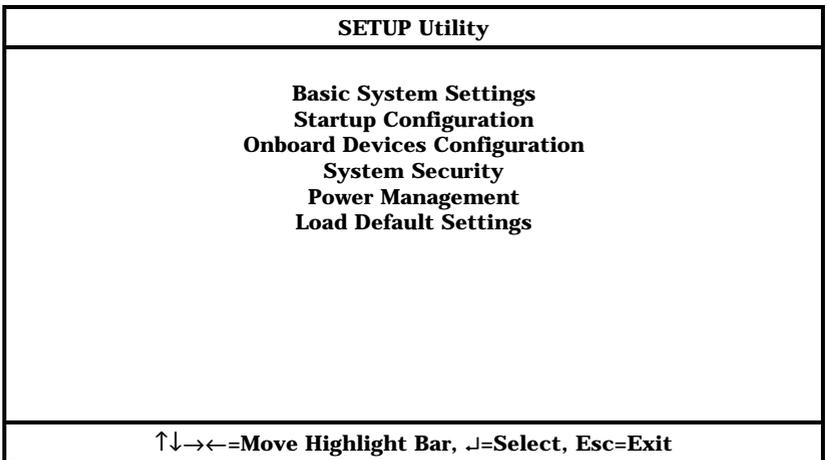


When Silent Boot (described later in this chapter) is disabled, a message displays telling you when you can press F2 to run the Setup Utility.

# System Utilities



Pressing **F2** brings up the main screen of the Setup Utility.



Press the cursor keys (↑↓→←) to move the highlight bar, then press **Enter** to make a menu selection.

## 5.3.1 Basic System Settings

The Basic System Settings screen contains parameter items involving basic computer settings.

Basic System Settings					
Date .....	[Fri Feb 14, 1997]				
Time .....	[10:00:00]				
Floppy Disk A .....	[1.44 MB 3.5-inch]				
Floppy Disk B .....	[ None ]				
		Cylinders	Heads	Sectors	Size(MB)
Hard Disk .....	[Auto]	2100	16	63	1033
↑↓=Move Highlight Bar, →←=Change Setting, Esc=Exit					

Press ↑ and ↓ to move the highlight bar; press → and ← to change the setting of the highlighted parameter. To exit this screen and return to the main screen, press **Esc**.

The following table describes the parameters in this screen. Settings in **boldface** are the default and suggested parameter settings.

# System Utilities

Parameter	Description	Setting or Format
Date	Sets the computer's system date	Day of the Week- Month-Day-Year
Time	Sets the computer's system time	Hour:Min:Sec
Floppy Disk A	Selects the floppy disk drive type.	<b>1.44 MB 3.5-inch</b> None
Floppy Disk B	Selects the floppy disk drive type.  In most cases, you only have need for one floppy disk drive (A), so this is normally set to <i>None</i> .	<b>None</b> 1.44 MB 3.5-inch
Hard Disk	Selects the hard disk drive type.  When set to <i>User</i> , you need to specify the Cylinder, Head and Sector information. For hassle-free and correct drive detection, this should be set to <i>Auto</i> .	<b>Auto</b> User None

## 5.3.2 Startup Configuration

The Startup Configuration screen contains parameter items that are set-up when the computer starts up.

Startup Configuration	
Boot Display .....	[Auto]
Memory Test .....	[Enabled]
Silent Boot .....	[Enabled]
System Boot Drive .....	[Drive A Then C]
Boot from CD-ROM .....	[Enabled]
Operating System .....	[Windows 95/DOS]
USB Function Support .....	[Disabled]

↑↓=Move Highlight Bar, →←=Change Setting, Esc=Exit

Press ↑ and ↓ to move the highlight bar; press → and ← to change the setting of the highlighted parameter. To exit this screen and return to the main screen, press **Esc**.

The following table describes the parameters in this screen. Settings in **boldface** are the default and suggested parameter settings.

# System Utilities

Parameter	Description	Setting
Boot Display	<p>Sets the display device (computer LCD and/or external monitor) to use when the computer starts (boots) up.</p> <p>When set to <i>Auto</i>, the computer outputs to the external monitor if one is connected; otherwise, the computer outputs to the LCD.</p>	<b>Auto</b> Both
Memory Test	Runs or skips the memory test.	<b>Enabled</b> Disabled
Silent Boot	Hides or displays the POST (Power On Self Test) screen messages.	<b>Enabled</b> Disabled
System Boot Drive	<p>Sets the startup (boot) sequence of the drives in your computer.</p> <p>For example, when set to <i>Drive A Then C</i>, the computer searches for a system (bootable) diskette in drive A first before proceeding with drive C.</p>	<b>Drive A Then C</b> Drive C Then A Drive C Drive A
Boot from CD-ROM	<p>Tells the computer to search for a bootable disc in the CD-ROM drive and boot from that disc.</p> <p>If the computer cannot find a bootable disc, it proceeds according to the System Boot Drive parameter setting.</p>	<b>Enabled</b> Disabled

# System Utilities

Parameter	Description	Setting
Operating System	Selects the operating system you are using.	<b>Windows 95/DOS</b> Windows NT
USB Function Support	Selects support for USB (Universal Serial Bus). Enable this parameter if you are connecting USB device(s) to the computer.	<b>Disabled</b> Enabled

# System Utilities

## 5.3.3 Onboard Devices Configuration

The Onboard Devices Configuration screen contains parameter items that are related to port devices on your computer.

Onboard Devices Configuration	
<b>Serial Port</b> .....	<b>[Enabled]</b>
<b>Base Address</b> .....	<b>[3F8h]</b>
<b>IRQ</b> .....	<b>[4]</b>
<b>IrDA FIR</b> .....	<b>[Enabled]</b>
<b>Base Address</b> .....	<b>[2F8h]</b>
<b>IRQ</b> .....	<b>[3]</b>
<b>DMA</b> .....	<b>[3]</b>
<b>Internal Modem</b> .....	<b>[Enabled]</b>
<b>Base Address</b> .....	<b>[3E8h]</b>
<b>IRQ</b> .....	<b>[11]</b>
<b>Parallel Port</b> .....	<b>[Enabled]</b>
<b>Base Address</b> .....	<b>[378h]</b>
<b>IRQ</b> .....	<b>[7]</b>
<b>Operation Mode</b> .....	<b>[Bi-directional]</b>
ECP DMA Channel .....	<b>[-]</b>

↑↓=Move **Highlight Bar**, →←=Change **Setting**, Esc=Exit

Press ↑ and ↓ to move the highlight bar; press → and ← to change the setting of the highlighted parameter. To exit this screen and return to the main screen, press **Esc**.

The following table describes the parameters in this screen. Settings in **boldface** are the default and suggested parameter settings.

# System Utilities

Parameter	Description	Setting
Serial Port	Enables or disables the serial port	<b>Enabled</b> Disabled
Base Address	Sets the I/O base address of the serial port	<b>3F8h</b> 2F8h 3E8h 2E8h
IRQ	Sets the IRQ (interrupt request) channel of the serial port	<b>4</b> 11
IrDA FIR	Enables or disables the infrared port	<b>Enabled</b> Disabled
Base Address	Sets the I/O base address of the infrared port	<b>2F8h</b> 3E8h 2E8h 3F8h
IRQ	Sets the IRQ channel of the infrared port	<b>3</b> 10
DMA	Sets the DMA (direct memory access) channel of the infrared port	<b>3</b> 1
Internal Modem	Enables or disables the internal modem	<b>Enabled</b> Disabled
Base Address	Sets the I/O base address of the internal modem	<b>3E8h</b> 3F8h 2F8h 2E8h
IRQ	Sets the IRQ channel of the internal modem	<b>11</b> 5 3 4 10
Parallel Port	Enables or disables the parallel port	<b>Enabled</b> Disabled

# System Utilities

Parameter	Description	Setting
Base Address	Sets the I/O base address of the parallel port	<b>378h</b> 278h 3BCh
IRQ	Sets the interrupt request (IRQ) channel of the parallel port	<b>7</b> 5
Operation Mode	Selects the operation mode of the parallel port. ECP (Extended Capabilities Port) supports a 16-byte FIFO (first in, first out) which can be accessed by host DMA cycles and PIO cycles, boosting I/O bandwidth to meet the demands of high-performance peripherals.	<b>Bi-directional</b> ECP Standard
ECP DMA Channel	Sets the DMA channel of the parallel port when the parallel operation mode is set to ECP.	<b>1</b> 3

## 5.3.4 System Security

The System Security screen contains parameter items that help safeguard and protect your computer from unauthorized use.

System Security	
<b>Disk Drive Control</b>	
<b>Diskette Drive</b> .....	<b>[Normal]</b>
<b>Hard Disk Drive</b> .....	<b>[Normal]</b>
<b>Setup Password</b> .....	<b>[ None ]</b>
<b>Power On Password</b> .....	<b>[ None ]</b>

↑↓=Move **Highlight Bar**, →←=**Change Setting**, Esc=**Exit**

Press ↑ and ↓ to move the highlight bar; press → and ← to change the setting of the highlighted parameter. To exit this screen and return to the main screen, press **Esc**.

The following table describes the parameters in this screen. Settings in **boldface** are the default and suggested parameter settings.

# System Utilities

Parameter	Description	Setting
Diskette Drive (Control)	Sets the control level of the diskette drive.	<b>Normal</b> Disabled Write Protect All Sectors Write Protect Boot Sector
Hard Disk Drive (Control)	Sets the control level of the diskette drive.	<b>Normal</b> Disabled Write Protect All Sectors Write Protect Boot Sector
Setup Password <sup>1</sup>	Sets (and enables) the setup password.  When set, this password protects this Setup Utility from unauthorized entry. Before the computer allows access to the Setup Utility, you need to enter the setup password.	<b>None</b> Enabled
Power On Password <sup>1</sup>	Sets (and enables) the power on password.  When set, this password protects the computer from unauthorized entry. At startup, you need to enter the power on password to continue computer operation.	<b>None</b> Enabled

---

<sup>1</sup> To set passwords, see section 1.9.2.

## 5.3.5 Power Management Settings

The Power Management Settings screen contains parameter items related to power-saving and power management.

Power Management Settings	
<b>Heuristic Power Management Mode</b> ----	<b>[Enabled]</b>
<b>Display Always On</b> .....	<b>[Disabled]</b>
<b>System Sleep State</b> .....	<b>[Hibernation]</b>
<b>System Resume Timer Mode</b> .....	<b>[Disabled]</b>
System Resume Date .....	[--/--/----]
System Resume Time .....	[--/--/--]
<b>Modem Ring Resume On Indicator</b> ----	<b>[Enabled]</b>
<b>Battery-low Warning Beep</b> .....	<b>[Enabled]</b>
<b>Sleep Upon Battery-low</b> .....	<b>[Enabled]</b>
↑↓=Move Highlight Bar, →←=Change Setting, Esc=Exit	

Press ↑ and ↓ to move the highlight bar; press → and ← to change the setting of the highlighted parameter. To exit this screen and return to the main screen, press **Esc**.

The following table describes the parameters in this screen. Settings in **boldface** are the default and suggested parameter settings.

# System Utilities

Parameter	Description	Setting or Format
Heuristic Power Management Mode	Enables or disables heuristic power management mode.  For more information on power management modes, see section 2.2.1.	<b>Enabled</b> Disabled
Display Always On	When enabled the computer does not enter display standby mode.	<b>Disabled</b> Enabled
System Sleep State	Setting this item determines which power management mode (Hibernation or Standby) the computer enters into when you press the Sleep hotkey ( <b>Fn-F7</b> ).  For more information on power management modes, see section 2.2.1.	<b>Hibernation</b> Standby
System Resume Timer Mode	When enabled and the system resume date and time are valid, the computer resumes (wakes up) at the set time and date.	<b>Disabled</b> Enabled
System Resume Date	Sets the date the computer resumes (wakes up) from if the system resume timer is enabled.	month/day/ year

# System Utilities

Parameter	Description	Setting or Format
System Resume Time	Sets the time the computer resumes (wakes up) from if the system resume timer is enabled.	hour/minute /second
Modem Ring Resume On Indicator	When enabled, and an incoming modem ring is detected, the computer wakes up from standby mode. When the computer is off or in hibernation mode, the computer will not resume on a modem ring.	<b>Enabled</b> Disabled
Battery-low Warning Beep	Enables or disables warning beeps during a battery-low condition.	<b>Enabled</b> Disabled
Sleep Upon Battery-low	Enables or disables the sleep function (hibernation or standby) during a battery-low condition.  When the computer is running very low on battery power, the computer will disregard the system sleep state setting and enter hibernation mode if Sleep Manager is installed and the hibernation file is valid (see section 5.1).	<b>Enabled</b> Disabled

# System Utilities

Pressing **Fn-F6** during normal computer operation (after POST) also brings up the power management screen. An additional page, shown below, is added to this function which appears only via **Fn-F6**.

System Information Reference	
Serial Number	: 1111111117
System BIOS Version	: V3.0 R01-A0-EN
BIOS Release Date	: 2/14/97
VGA BIOS Version	: 0.2.5 R01-F0
Processor	: Pentium
Processor Speed	: 150 MHz
Total Memory	: 16 MB
Video Memory	: 2 MB
Floppy Drive A	: 1.44 MB
Floppy Drive B	: None
Hard Disk	: 1033 MB
CD ROM	: Installed
CD ROM Bootable	: Enabled
System Boot Drive	: Drive A Then C
Internal Cache	: 16KB, Enabled
External Cache	: 256KB, Enabled
Pointing Device	: Detected
Serial Port	: 3F8h, IRQ4
Irda FIR	: 2F8h, IRQ3, DMA3
Internal Modem	: 3E8h, IRQ11
Parallel Port	: 378h, IRQ7
Operation Mode	: Bi-directional

Esc=Exit

The System Information Reference screen gives a summary of your computer's BIOS information. These items are easy to understand and are self-explanatory.



**Note:** The Serial Number and BIOS Versions are important information about your computer. If you experience computer problems, this data helps our service personnel know more about your computer.

## 5.3.6 Load Default Settings

When you select the Load Default Settings item from the main screen, a dialog box appears asking you to confirm that you want to reset all settings to their factory defaults.

**Load Setup Default Settings**  
**Are you sure?**

[Yes]                      [No]

Choose **Yes** to confirm or **No** if otherwise.

This chapter instructs you on how to deal with common system problems. Read it before calling a technician if a problem occurs. Solutions to more serious problems require opening up the computer. Do not attempt to open the computer by yourself. Contact your dealer or an authorized service center for assistance.

# Troubleshooting

## 6.1 Q & A

Q & A lists possible situations that may arise during the use of your computer, and gives easy answers and solutions to these questions.

Questions	Answers
<p>I pressed the power switch opened the display but the computer does not start or boot-up.</p>	<p>Look at the Power indicator:</p> <p>If it is not lit, no power is being applied to the computer. Check the following:</p> <ul style="list-style-type: none"><li><input type="checkbox"/> If you are running on battery power, it may be low and unable to power the computer. Connect the AC adapter to recharge the battery pack.</li><li><input type="checkbox"/> Make sure the AC adapter is plugged in properly to the computer and to the power outlet.</li></ul> <p>If it is lit, check the following:</p> <ul style="list-style-type: none"><li><input type="checkbox"/> If the Standby indicator is lit, the computer is in standby mode. Press any key or tap on the touchpad to resume.</li><li><input type="checkbox"/> Is a non-bootable (non-system) diskette in the floppy drive? Remove or replace it with a system diskette and press <b>Ctrl-Alt-Del</b> to restart the system.</li></ul> <p>The operating system files may be damaged or missing. Insert the startup disk you created during Windows 95 setup into the floppy drive and press <b>Ctrl-Alt-Del</b> to restart the system. This will diagnose your system and make necessary fixes.</p>

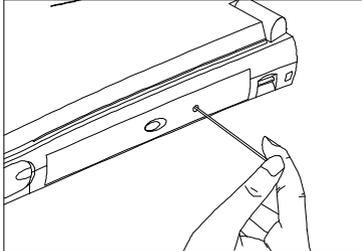
# Troubleshooting

Questions	Answers
Nothing appears on the screen.	<p>The computer's power management system automatically blanks the screen to save power. Press any key to turn the display back on.</p> <p>If pressing a key does not turn the display back on, two things might be the cause:</p> <ul style="list-style-type: none"><li data-bbox="490 508 985 734">❑ The contrast and/or brightness level might be too low. Press <b>Fn-F2</b> (☉/☾) to bring up the contrast/brightness pop-up icon. Then press the scale increase hot keys (<b>Fn</b>→) to increase the contrast/ brightness level.</li><li data-bbox="490 748 985 904">❑ The display device might be set to an external monitor. Press the display toggle hot key <b>Fn-F3</b> (☐/☑) to toggle the display back to the computer.</li></ul>
Image is not full-screen.	<p>Make sure the resolution is set to 800x600. Right-click on your Windows 95 desktop and select Properties to bring up the Display Properties dialog box. Then click on the Settings tab to make sure the resolution is set to 800x600.</p> <p>640x480 resolution is not full-screen on the computer or on an external monitor.</p>

# Troubleshooting

Questions	Answers
No audio from the computer.	<ul style="list-style-type: none"><li data-bbox="487 256 1004 418">❑ The volume may be muted. In Windows 95, look at the volume control icon on the taskbar. If it is crossed-out, click on the icon and de-select the Mute option.</li><li data-bbox="487 430 1004 557">❑ The volume level may be too low. Press <b>Fn-F5</b> to bring up the volume control pop-up icon. Press <b>Fn-→</b> to increase the volume.</li></ul> <p data-bbox="487 569 1004 725">If headphones, earphones or external speakers are connected to the line-out port on the computer's rear panel, the internal speakers automatically turn off.</p>
The keyboard does not respond.	<p data-bbox="487 743 1004 899">Try attaching an external keyboard to the PS/2 connector on the computer's rear. If it works, contact your dealer or an authorized service center as the internal keyboard cable may be loose.</p>
The serial mouse does not work.	<ul style="list-style-type: none"><li data-bbox="487 916 1004 1008">❑ Make sure that the serial cable is plugged securely into the serial port.</li><li data-bbox="487 1020 1004 1147">❑ Press <b>Fn-F6</b> (🔊) to enter Setup, then press <b>PgDn</b> to see the System Information Reference screen. Check if the serial port is enabled.</li></ul> <p data-bbox="487 1159 1004 1385">If the serial port is disabled, you need to reboot the machine and press <b>F2</b> during POST, then access System Security. Move the cursor to the serial port base address parameter and change the setting. See section 5.3.3 for details.</p>

# Troubleshooting

Questions	Answers
<p>The printer does not work.</p>	<ul style="list-style-type: none"><li>❑ Make sure that the printer is connected to a power outlet and it is turned on.</li><li>❑ Make sure the printer cable is connected securely to the computer's parallel port and the corresponding port on the printer.</li><li>❑ Press <b>Fn-F6</b> (🖨️) to enter Setup, then press <b>PgDn</b> to see the System Information Reference screen. Check if the parallel port is enabled.</li></ul> <p>If the parallel port is disabled, you need to reboot the machine and press <b>F2</b> during POST, then access System Security. Move the cursor to the parallel port base address parameter and change the setting. See section 5.3.3 for details.</p>
<p>I want to eject the CD-ROM tray without turning on the power.</p> <p>I cannot eject the CD-ROM drive tray.</p>	<p>There is a mechanical eject button on the CD-ROM drive. Simply insert the tip of a pen or paperclip and push to eject the CD-ROM tray.</p> 

# Troubleshooting

Questions	Answers
<p>I prefer using an external keyboard and mouse, but both have PS/2 connectors and there is only one PS/2 port on the computer.</p>	<p>To connect two PS/2-type devices to the computer, you need to use a PS/2 Y-bridge connector. See section 3.10.2 for details.</p>
<p>I want to set-up my location to use the internal modem</p>	<p>To properly use your communications software (e.g., HyperTerminal), you need to set-up your location:</p> <ol style="list-style-type: none"><li data-bbox="490 638 1001 730">1. Open the Windows 95 Control Panel and double-click on the Modems icon.</li><li data-bbox="490 743 1001 805">2. Click on Dialing Properties and begin setting up your location.</li></ol>

## 6.2 Error Messages

If you receive an error message, note the message and take the corrective action. The following table lists the error messages in alphabetical order together with the recommended course of action.

Error Message	Corrective Action
CMOS Battery Bad	Contact your dealer or an authorized service center.
CMOS Checksum Error	Contact your dealer or an authorized service center.
Disk Boot Failure	Insert a system disk in drive A, then press <b>Enter</b> .
Diskette Drive Controller Error or No Controller Present	Contact your dealer or an authorized service center.
Diskette Drive Error	Contact your dealer or an authorized service center.
Diskette Drive Type Mismatch	Press <b>F2</b> (during POST) to reconfigure the computer.
Equipment Configuration Error	Press <b>F2</b> (during POST) to reconfigure the computer.
Hard Disk 0 Error	Contact your dealer or an authorized service center.
Hard Disk 0 Extended Type Error	Contact your dealer or an authorized service center.
I/O Parity Error	Contact your dealer or an authorized service center.
Insert system diskette and press <Enter> key to reboot	Insert a system disk in drive A, then press <b>Enter</b> .
Keyboard Error or No Keyboard Connected	Contact your dealer or an authorized service center.

# Troubleshooting

Error Message	Corrective Action
Keyboard Interface Error	Contact your dealer or an authorized service center.
Memory Size Mismatch	Enter and then exit the System Configuration Setup in the Setup utility (pressing <b>F2</b> during POST).
Missing operating system	Correct the HDD type and reboot. See the specification label attached to hard disk drive.  We suggest you set the HDD type to [Auto] for hard disk drive auto-detection.
Non-system disk or disk error. Replace and strike any key when ready	Insert a system disk in drive A, then press <b>Enter</b> .
Pointing Device Error	Contact your dealer or an authorized service center.
Pointing Device Interface Error	Contact your dealer or an authorized service center.
Protected Mode Test Fail	Contact your dealer or an authorized service center.
RAM BIOS Bad	Contact your dealer or an authorized service center.
RAM Parity Error	Contact your dealer or an authorized service center.
Real-Time Clock Error	Press <b>F2</b> (during POST) to reconfigure the computer.
Video RAM BIOS Bad	Contact your dealer or an authorized service center.

# Troubleshooting

If you still encounter problems after going through the corrective measures, please contact your dealer or an authorized service center for assistance. Some problems may be solved using the BIOS Setup Utility discussed in section 5.3.

This appendix lists the general specifications of your computer.

## Microprocessor

- ❑ Intel Pentium® processor with MMX™ technology

## Memory

- ❑ 16MB main memory (64-bit dual memory banks) expandable to 128 MB
- ❑ 256KB 2<sup>nd</sup> level cache memory
- ❑ 256KB Flash ROM BIOS

## Data Storage

- ❑ One 2.5-inch, 12.7mm hard disk drive
- ❑ One 3.5-inch internal floppy disk drive (floppy drive model only)
- ❑ One 3.5-inch external floppy disk drive (CD-ROM model only)
- ❑ One 5.25-inch internal CD-ROM drive (CD-ROM model only)

# Specifications

## Display and Video

- ❑ 12.1-inch DualScan or TFT color LCD
- ❑ 800x600 SVGA resolution
- ❑ 2MB EDO video memory
- ❑ PCI local bus video with graphics accelerator
- ❑ Simultaneous LCD and CRT display

## Audio

- ❑ 16-bit stereo audio
- ❑ Dual speakers
- ❑ Sound Blaster Pro- and Windows Sound System-compatible
- ❑ Separate audio ports for line-in, line-out and microphone-in

## Keyboard & Pointing Device

- ❑ 84-/85-/88-key Windows 95 keyboard
- ❑ Ergonomically-centered touchpad pointing device

## I/O Ports

- ❑ Two type II/I or one type III CardBus socket(s)
- ❑ One RJ-11 phone jack<sup>1</sup> (on some models)
- ❑ One DC-in jack (AC adapter)
- ❑ One FIR wireless communications port (IrDA-compliant)
- ❑ One RS-232 serial port (UART16550-compatible)
- ❑ One parallel port/external floppy drive port (ECP-compliant)
- ❑ One external monitor port (I<sup>2</sup>C-compatible)
- ❑ One keyboard/mouse port (PS/2-compatible)
- ❑ One port replicator connector
- ❑ One audio line-out jack (speaker-/headphone-out jack)
- ❑ One audio line-in jack
- ❑ One microphone-in jack
- ❑ One USB port

---

<sup>1</sup> This feature is available only in the U.S., Canada, Japan and Taiwan. For other regions, you can connect a PC Card modem. Consult your dealer for details.

# Specifications

## Weight

- ❑ 2.95 kg (6.49 lb) for CD-ROM drive model
- ❑ 2.79 kg (6.13 lb) for floppy drive model

## Dimensions (round contour, main footprint)

- ❑ 304~310 x 237~245 x 45~46 mm  
(11.97~12.2 x 9.33~9.65 x 1.77~1.81 in)

## Temperature

- ❑ Operating: 10°C ~ 35°C
- ❑ Non-operating: -20°C ~ 60°C

## Humidity (non-condensing)

- ❑ Operating: 20% ~ 80% RH
- ❑ Non-operating: 20% ~ 80% RH

## Operating System

- ❑ Windows 95 or Windows NT(option)

## Battery Pack

- ❑ 43-WattHour Lithium-Ion or 38-WattHour Nickel Metal-Hydride battery pack
- ❑ Smart battery management technology
- ❑ 2~3-hour rapid charge for NiMH; 3~4-hour rapid charge for Li-Ion.

## AC Adapter

- 45-Watt
- Auto sensing 100~240Vac, 50~60Hz

## Options

- 8-/16-/32-/64-MB EDO or SDRAM memory upgrade module
- Higher-capacity hard disk drive
- PS/2 Y-cable
- Full-function compact port replicator
- Additional AC adapter and battery pack

# Where to Get Help

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This appendix describes how to get in contact with our authorized service centers when you need support on our products or when you need get more information about our products.

## B.1 International Traveler's Warranty

Your notebook is backed by an International Traveler's Warranty (ITW) that gives you security and peace of mind when traveling. Our worldwide network of service centers are there to give you a helping hand.

An ITW passport comes with your computer. This passport contains all you need to know about the ITW program. A list of available, authorized service centers are in this handy booklet. Read this passport thoroughly.



---

**Note:** Always have your ITW passport on hand, especially when you travel to receive the benefits from our support centers. Place your proof-of-purchase in the flap located inside the front cover of the ITW passport.

---

## B.2 Worldwide Support

If the country you are traveling in does not have an Acer-authorized ITW service site, you can still get in contact with our offices worldwide.

For technical assistance and support in the United States and Canada, you can call 1-800-816-2237. You can also contact the local dealer or distributor in the country you are traveling in for assistance.



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**Note:** If you are connected to the Internet and have World Wide Web access, visit our home page (<http://www.acer.com/>) and get an updated list of our worldwide offices, as well as information about our products.

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