FCC ID: L4PKl100X13

EUT: NOTEBOOK PERSONAL COMPUTER

EXHIB

KAPOK COMPUTER CO.,

USER'S MANUAL

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#### **EEDERAL COMMUNICATIONS COMMISSION**

### NOLE

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

- -Reorient o relocate the receiving antenna.
- -Increase the separation between the equipment and receiver. -Connect the equipment into an outlet on a circuit different from that to which the receiver is
- connected.

  Consult the dealer or an experienced radio/TV technician for help.

Shielded interface cables(except speaker, microphone, power adaptor data cable) must be used in order to comply with emission limits.

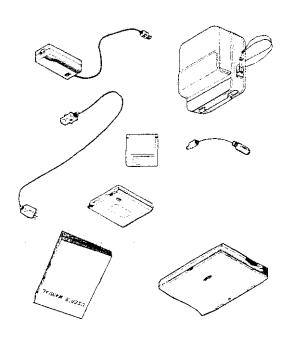
Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

# Chapter 1: Getting Started

This chapter provides a short introduction and tutorial that will familiarize you with the Notebook system and get you up and running quickly. This Chapter will discuss:

□ Unpacking
 □ Operating Environment
 □ Powering the System by AC Power Adapter
 □ Powering the System by Battery Pack
 □ Charging the Battery Pack
 □ Opening the LCD Cover
 □ Identifying all Devices and Ports

📃 Identifying all LED Indicators



I-I angia

O Notebook Computer.
O Carrying Bag.
O Power Cord.
O PS/2 Transfer Cable.
O Battery Pack.
O Battery Pack.
O Utilities Diskettes.
O Utilities Diskettes.

Carefully unpack the Notebook Computer and the included accessories (Figure 1-1). If there is any discrepancy or problem, contact your dealer immediately. Be sure to save the packing materials in the event that the notebook needs to be shipped at some point in the future.

# **Operating Environment**

As with any other precision electronic equipment, proper care and operation of your Notebook will provide long and reliable service. Be sure the computer system is not:

- O Exposed to excessive heat or direct sunlight.
- O Subjected to shock or vibration.
- O Exposed to strong magnetic fields.
- Left in a place where foreign matter or moisture may enter the system.

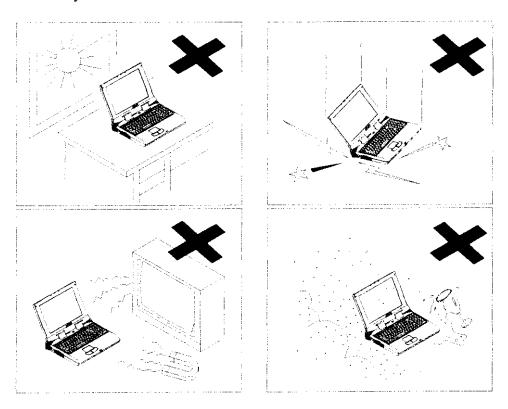


Figure 1-2

# Quick Start-up

## Powering the System

### **AC Power Adapter**

Use only the power adapter that comes with your Notebook Computer. System operation with an incorrect power adapter will cause damage to the Notebook and its components.

- 1. Plug the power adapter to the DC-in socket on the left panel of the Notebook.
- 2. Connect the power cord to the power adapter.
- 3. Plug the AC power cord into a properly grounded outlet (Figure 1-3).
- 4. Refer to Chapter 1, System Status LED Indicators for more information on system power status.

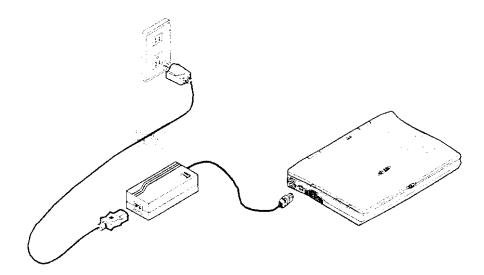


Figure 1-3

### **Battery Pack**

Power for continuous portable operation of the Notebook is provided by a battery pack. When using the battery no external power source is required. However, the actual operating time will be determined by the application used and the configuration set.

#### **Inserting**

- 1. Turn the Notebook over.
- 2. Position the battery pack and firmly fit it into the Notebook (Figure 1-4).
- 3. The two latches will click into place when it is seated.

#### Removing

- Turn the Notebook over.
- 2. Press the two latches in the direction indicated to release the battery pack. (Figure 1-5)
- 3. Carefully lift the battery pack from the Notebook.

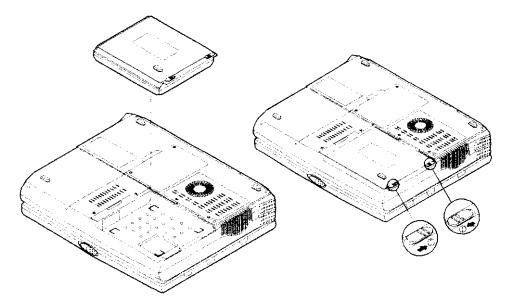


Figure 1-4

Figure 1-5

### Recharging by AC Power

The system's battery pack will recharge whenever the system is plugged into the AC power supply, regardless of whether the system is being operated or not. Please refer to Chapter 1, System Status LED Indicators for more information concerning battery charge status.

#### Off-Line Charge

The Notebook system is powered off. Connect the AC adapter to the unit. Its DC output will be used solely to charge the battery. It will take hours to bring a completely discharged battery to its full charge state.

#### Trickle Charge

The Notebook system is powered on. Again, make sure the AC adapter is connected to the unit. Its DC output will both power the system and charge the battery. It may take more hours than off-line charge to charge the battery.

## Proper Handling of the Battery Pack

- Do not attempt to disassemble the battery under any circumstances.
- The battery may explode if exposed to fire or high temperatures.
- Avoid short circuiting the battery by preventing contact between the metal terminals (+, -).

# **Opening the LCD Cover**

- 1. To release the top cover slide the latch to the right (Figure 1-6).
- 2. Lift the top cover to reveal the LCD panel and keyboard (Figure 1-7).
- 3. Adjust the LCD panel to a comfortable viewing angle.
- 4. Press the power button to turn the system on or off (refer to Chapter 1, Top-Front View for the information of the power button).

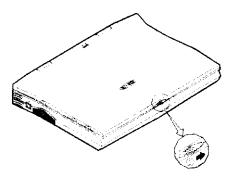


Figure 1-6

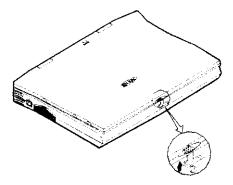


Figure 1-7

# LED Indicators on the LCD Cover

Icon	Color	Description
	Green	Battery power is used with system turned on.
	Red	AC power is used with system turned on.
	Green	Battery is fully charged.
	Red	Battery is being charged.
	Blinking Red	Battery power is critically low.

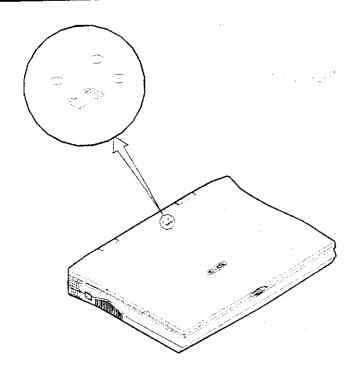


Figure 1-8

## Top-Front View

### LCD Panel

The Notebook provides you with a large LCD panel. Depending upon the model you have purchased, it can either be a 13.3" XGA (1024x768 pixels) compatible, using TFT technology, or a 12.1" SVGA (800x600 pixels) compatible, using DSTN or TFT technology. The LCD panel is driven by a PCl local bus video controller with 2MB video memory.

### Stereo Speakers

Two built-in speakers provide clear stereo sound.

### Trackpad and Buttons

The pointing device features a sensitive glide pad for precise movements. It functions like a two-button mouse does. The right trackpad button is equivalent to the right mouse button; the left trackpad button is equivalent to the left mouse button.

### Keyboard

The Notebook utilizes a Windows 95 keyboard that is integrated with the numeric keypad. It is detachable for various language versions. You may refer to *Chapter 2: Operation* for more information.

### Microphone

This is the built-in microphone for recording sound into your applications.

## **System Status LED Indicators**

The LED indicators display the system's operation status.

Icon	Color	Description
	Green	Battery power is used with system turned on.
Red		AC power is used with system turned on.
	Green	Battery is fully charged.
	Red	Battery is being charged.
	Blinking Red	Battery power is critically low.
0	Green	The hard disk is being accessed.
Ð	Green	The system has entered the Power On Suspend (POS) mode.

### **Power Button**

Icon	Description
1	Use this button to turn the system on or off.

Note: After turning off the system, wait for a few seconds to power it on again when you need to.

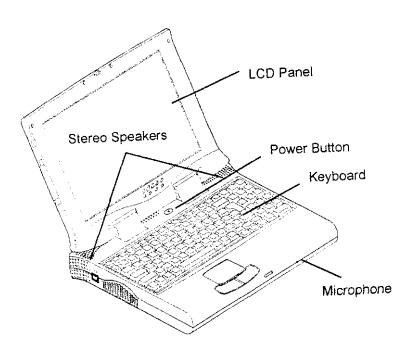


Figure 1-10

## Rear View

Microphone-in Jack

Use this jack to connect a microphone to the system for audio input.

Headphone Jack

Headphone can be attached to the system through this jack for audio output, so can external speakers that have built-in output power amplifier.

**Security Connector** 

The Security Connector is used to protect your Notebook from being stolen. Wrap the steel cable around your desk. Next, insert the locking device into this security connector.

PS/2 Type Port

A PS/2 type mouse and keyboard may be connected to the system using this port.

Serial Port

This port is UART 16C550 compatible. It features a 9-pin connector for the addition of an external mouse for example.

Parallel Port

This parallel port supports EPP (Enhanced Parallel Port) and ECP (Extended Capabilities Port) modes.

External Monitor (CRT) Port

This port is used for transmission of the display to an external monitor. Simultaneous display with the LCD panel is available.

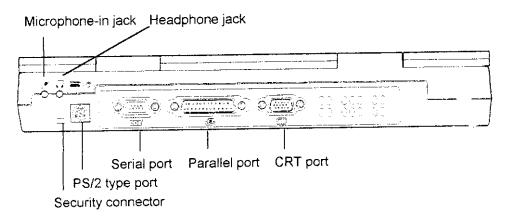


Figure 1-11

# Right-side View

## 3.5" Floppy Diskette Drive

The Notebook comes standard with a 1.44MB floppy drive installed. Press the button on its top-right side to eject the diskette.

## 5.25" CD-ROM Drive

The 5.25" IDE CD-ROM module is designed to be changeable installing or removing the two screws that fasten the CD-ROM drive. The eject button is located in the middle of the front cover of the CD-ROM drive. Pressing it will release the CD tray. Refer to Chapter 2: Operation, for more information.

### **PC Card Sockets**

One Type III or two Type II PC cards may be used. Both sockets will expand the system capabilities when a PC card is inserted. To eject the PC card, press the appropriate eject button (Figure 2-17).

## Right-side Stands

When a high speed CPU is installed, the erecting stands on both sides will help heat dissipation during operation.

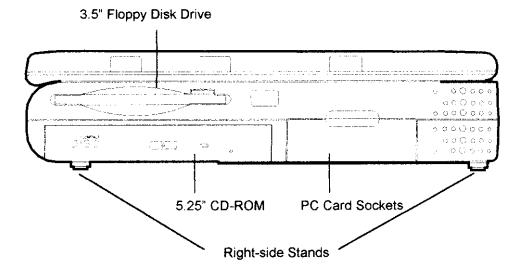


Figure 1-12

# Left-side View

## \_\_ DC-in Socket

Plug the AC adapter into this socket for power supply. To disconnect, pull the plug (not the cord) directly back.

### Ventilation

The Notebook provides ventilation to dissipate the system's operating heat. Do not block or obstruct it during operation.

## Left-side Stands

When a high speed CPU is installed, the erecting stands on both sides will help heat dissipation during operation.

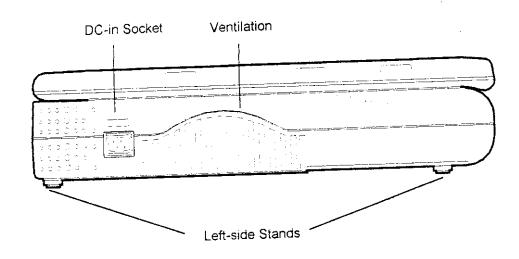


Figure 1-13

## **Bottom View**

#### 2.5" Hard Disk Drive

The 2.5" hard disk drive accepts any 2.5" IDE hard disk drive with a height of 12.7mm or less. Accessing the corresponding screws will allow you to install or to remove this hard disk drive. Refer to *Chapter 2: Operation*, for more information.

### **CPU Cover**

Detaching the screws to remove the cover will reveal the microprocessor. You may upgrade the CPU for higher system performance.

### **Battery Pack**

This compartment houses a rechargeable battery pack of either Ni-MH or Li-Ion. To recall detailed information turn back to the section *Battery Pack*.

### **CD-ROM Cover**

The CD-ROM cover functions for easy installation and easy removal of the CD-ROM, in case you need maintenance service during warranty period.

1-18

Figure 1-14

# Chapter 2: Operation

The Notebook has many advanced features to help you with your computing work. This chapter describes each of the Notebook's hardware features and shows you how to use them.

Before you begin working with any internal components of the Notebook, remove the battery and disconnect the AC power adapter.

Make sure that you wear an anti-static wrist strap to ground yourself before working with any internal components of the Notebook. Static electricity may damage components beyond repair.

- Setting DIP Switches
- Expanding Memory
- Using Hard Disk Drive
- Using Floppy Disk Drive
- Using CD-ROM
- Using PC Card Sockets
- Using Hot Keys
- Using Numeric Keypad
- Getting Familiar with LCD Panel
- ☐ Using Power Management
- Attaching Peripheral Devices

Upgrading CPU

The system is capable of hosting a wide range of Intel CPU. Upgrading your CPU will increase your computing speed. The higher the CPU speed installed, the better the system performance. Different CPUs may have different power voltages. If you want to upgrade the CPU, remember to adjust the corresponding settings.

## Replacing CPU

- 1. Remove all power sources (AC power and battery).
- 2. Turn the Notebook over.
- 3. Remove the CPU cover.
- 4. Remove the screws that fasten the heat sink mounted on the CPU (Figure 2-1).

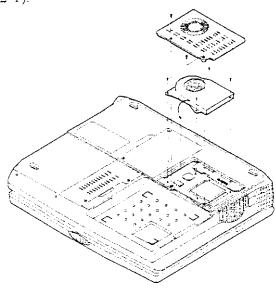


Figure 2-1

#### Note:

- Contact your dealer for the proprietary tool to replace the CPU.
- Wait for the CPU to cool down before replacing it.

# Setting DIP Switch

You need to set the following DIP Switches for correct system configuration:

- 10-pole DIP Switch for CPU core frequency (MHz) and flash ROM BIOS.
- 8-pole DIP Switch for CPU core voltage.
- 2-pole DIP Switch for CPU I/O voltage.

## Accessing the 10-Pole DIP Switch

- 1. Turn the system power off.
- 2. Press the two keyboard latches so that the keyboard can be elevated from its normal position (Figure 2-2).
- 3. Carefully lift the keyboard assembly out so that the mainboard is exposed. Employ the 10-pole DIP Switch to set the configuration (Figure 2-3).

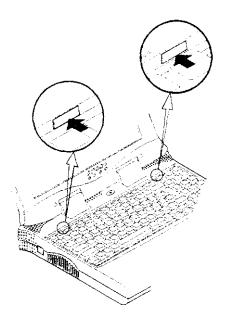


Figure 2-2

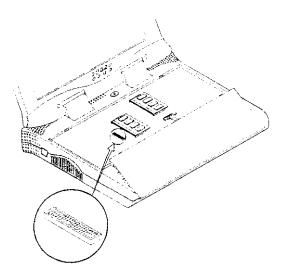


Figure 2-3

### **CPU Core Frequency Settings**

The correct configuration for CPU core frequency is listed as follows:

Pentium Processor at 3.3V I/O Voltage										
CPU Frequency	1	2	3	4	5	6	7	8	9	10

· · · —		· · · · · · · · · · · · · · · · · · ·		L						4 - 1 - E
233 MHz	X	X	X	Off						

<sup>\*</sup> X = Not Applied.

Pentium Processor at 2.5V I/O Voltage										
CPU Frequency	1	2	3	4	5	6	7	8	9	10
	,				, 	· 		<del></del>	τ	
233 MHz	X	X	X	Off	Off	Off	Off	On	Off	On

<sup>\*</sup> X = Not Applied.

### Flash ROM BIOS Settings

In order to keep up with the latest system BIOS, your Notebook may be upgraded. Consult your dealer for further information. The DIP Switch needed to be set in the **On** position when updating the existing system BIOS. The DIP Switches should be reset to the **Off** position after BIOS updating is complete.

Flash ROM BIOS	1	2	3	4	5	6	7	8	9	10
Existing BIOS	Off	Off	X	X	Χ	X	X	X	X	X
Updating BIOS	On	On	Χ	X	X	X	X	X	X	X

<sup>\*</sup> X = Not Applied.

# Accessing the 8-Pole DIP Switch

Access the 8-pole DIP Switch to set the CPU core voltage.

- 1. Turn the system power off.
- 2. Turn the Notebook over.
- 3. Remove the CPU cover. Use the 8-pole DIP Switch to set the configuration (Figure 2-4).

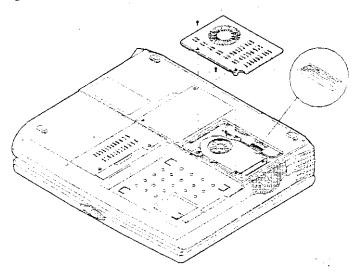


Figure 2-4

## Accessing the 2-Pole DIP Switch

Access the 2-pole DIP Switch to set the CPU I/O voltage.

- 1. Turn the system power off.
- 2. Turn the Notebook over.
- 3. Remove the CPU cover. Use the 2-pole DIP Switch to set the configuration (Figure 2-5).

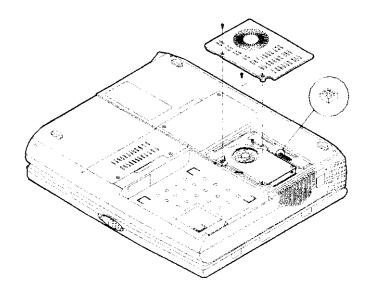


Figure 2-5

## **CPU I/O Voltage Settings**

The correct configuration for CPU I/O voltage is listed as follows:

CPU I/O Voltage	1	2
2.5 V	On	Off
3.3 V	On	On

# **Expanding Memory**

The system has two memory sockets for different RAM modules to expand the memory up to 128MB. These RAM modules are of a 144-pin SODIMM (Small Outline Dual In-line Memory Module) type. The Notebook supports Fast Page Mode, EDO (Extended Data Out), and SDRAM operation. With the following memory configurations the total memory size will be automatically detected by the POST routines:

Bank 1 (64-bit)	Bank 1 Bank 2 (64-bit) (64-bit)		Minimum Speed	Total Size
(1Mx16)x4	None			8MB
(1Mx16)x4	(1Mx16)x4			16MB
(1Mx16)x8	None	1		16MB
(1Mx16)x8	(1Mx16)x4	-		24MB
(4Mx16)x4	None	1	FPG: 60ns	32MB
(1Mx16)x8	(1Mx16)x8	-	red, oons	32MB
$\frac{(1Mx16)x8}{(4Mx16)x4}$	(4Mx16)x4	3.3V	EDO: 60ns	64MB
(4Mx16)x4 (4Mx16)x8	None	-		64MB
(8Mx8)x8	None	_	SDRAM:75MHz	64MB
(4Mx16)x8	(1Mx16)x4	-		72MB
	(1Mx16)x8	1		80MB
(4Mx16)x8	(4Mx16)x4	+		96MB
(4Mx16)x8	(4Mx16)x4 (4Mx16)x8	-		128MB
(4Mx16)x8	····	-		128MB
(8Mx8)x8	(8Mx8)x8	<u> </u>		1201112

## **Accessing the Memory Sockets**

- 1. Turn the system power off.
- 2. Press the two keyboard latches so that the keyboard can be elevated from its normal position (Figure 2-2).
- 3. Carefully lift the keyboard assembly out so that the mainboard is exposed. Locate the memory sockets (Figure 2-6).

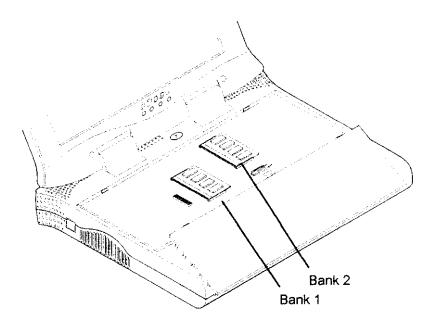


Figure 2-6

## **Installing Memory Module**

Follow the steps below to install the memory module:

Turn the system power off. 1.

- Press the two keyboard latches so that the keyboard can be elevated from its normal position (Figure 2-2).
- Carefully lift the keyboard assembly out so that the mainboard is exposed. Locate the memory sockets (Figure 2-6).
- Position the memory module at a slight angle and fit its connectors into the socket firmly. Push the module down and ensure it locks into place (Figure 2-7).
- Reinstall the keyboard assembly.

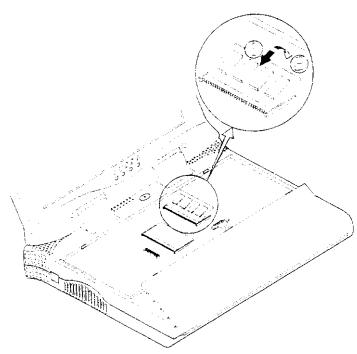


Figure 2-7

### **Removing Memory Module**

- 1. Turn the system power off.
- 2. Press the two keyboard latches so that the keyboard can be elevated from its normal position (Figure 2-2).
- 3. Carefully lift the keyboard assembly out to expose the mainboard. Locate the memory sockets (Figure 2-6).
- 4. Gently pull the two latches on both ends of the module outward. The module will pop up (Figure 2-8).
- 5. Remove the memory module.
- 6. Reinstall the keyboard assembly.

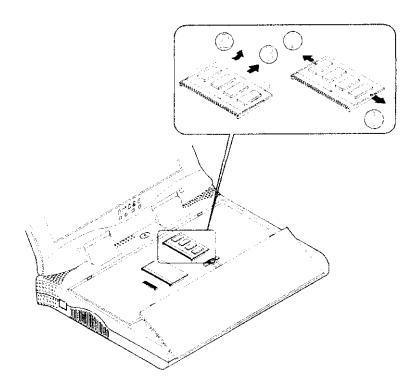


Figure 2-8

Using Hard Disk Drive

The hard disk drive is mounted in a removable case and may therefore be taken out to accommodate other 2.5" IDE hard disk drives with a height of 12.7mm. The system supports drives with capacities greater than 528MB through the Logical Block Addressing (LBA) mode. It also supports Programmed I/O (PIO) mode 4 and provides a high performance data transfer rate at speeds up to 33 MBytes/second (ATA-33).

### Removing

- Turn the system power off.
- Turn the Notebook over.
- Remove the HDD cover (Figure 2-9). 3.
- Disconnect the cable (Figure 2-9).
- Detach the HDD case from the Notebook (Figure 2-9).

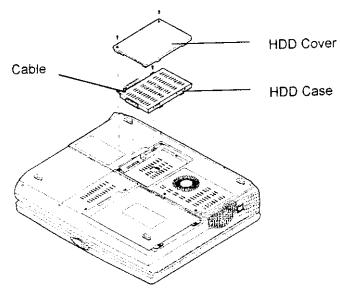


Figure 2-9

### Inserting

Reinstall the Hard Disk Drive in the reverse order of removal.

### **Replacing Hard Disk Drive**

The hard disk drive is contained within a case. Two screws on each side of the case need to be removed so that the hard disk drive can be taken out of the case to replace with another one (Figure 2-10). The location of the two screws may be varied depending on different hard disk models. Gently disconnect the cable from the hard disk drive when taking it out of the case. Be careful not to bend any pins or crimp the cable.

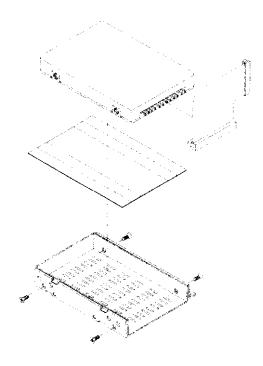


Figure 2-10

# Using Floppy Disk Drive

The Notebook comes standard with a 1.44MB, 3.5" floppy disk drive. It is labeled drive A: and may be used as a boot device if properly set.

Inserting/Removing Diskettes

When using the floppy drive, always insert your floppy diskette label-side up (Figure 2-11). To remove your diskette, press the eject button on the top-right corner of the floppy drive.

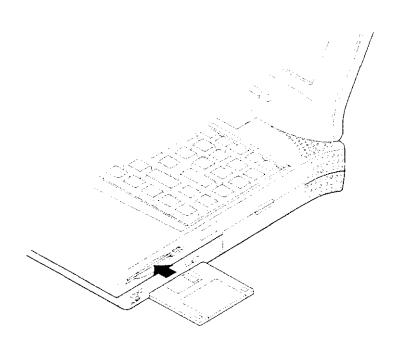


Figure 2-11

#### **Write-Protecting Diskettes**

Diskettes can be write-protected to prevent files from being accidentally erased or destroyed. To write-protect a 3.5" floppy diskette, move the built-in write-protect tab to the write-protect position, ("up" so that you can see through the "hole" in the upper, right-hand corner of the diskeet). Putting the write protect tab back "down" will enable you to write data on the disk again.

#### Do's and Don'ts

- Always make backup copies of your software and data diskettes.
- Keep diskettes away from magnetic fields.
- Do not remove diskettes from the drive while the diskette "in-use" light in on.
- Do not open or remove the protective shutter which covers the diskette's media.
- Do not allow dust or moisture to collect on diskettes.
- Do not bend or throw diskettes.
- Do not clean diskettes with liquids or solvents.

# Using CD-ROM

The Notebook comes standard with a removable 5.25" CD-ROM module. It is labeled drive D: and may be used as a boot device if properly set.

Do not disassemble the CD-ROM module. Only certified technicians should perform repairs to the CD-ROM module.

To insert a CD, press the **Eject Button** and place the CD on the **Disc Tray** label-side facing up. Push the CD tray in and you are ready to start. The **Busy Indicator** will light up while data is being accessed or while an audio CD is playing. When power to the system is unexpectedly interrupted, insert an instrument such as a straightened paper clip into the **Emergency Eject Hole** to manually eject the tray (Figure 2-12).

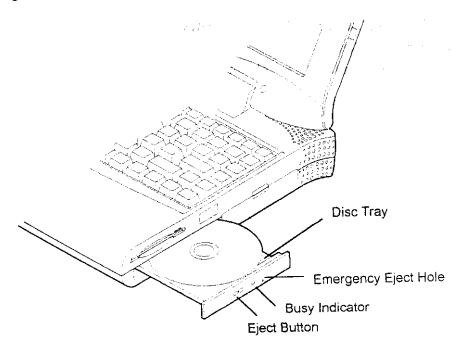


Figure 2-12

#### **Removing CD-ROM Module**

- 1. Turn the system power off.
- 2. Turn the Notebook over.
- 3. Remove the CD-ROM cover (Step 1 in Figure 2-13).
- 4. Remove the screw to release the CD-ROM module. (Step 2 in Figure 2-13).
- 5. Slide the CD-ROM module slightly out to disconnect the cable (Step 3 and Step 4 in Figure 2-13).
- 6. Pull gently and firmly the CD-ROM module away from the compartment (Step 5 in Figure 2-13).

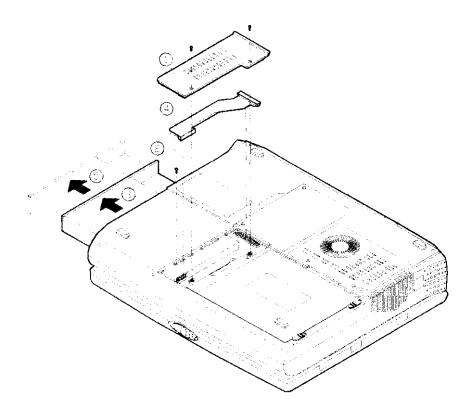


Figure 2-13

## **Loading Compact Discs**

- Turn on the power. 1.
- Press the CD-ROM eject button; the disc tray will pop out partially. 2.
- Pull the disc tray out. 3.
- Carefully load the CD on the disc tray with label-side facing up. Press it gently to ensure it fits into place (Figure 2-14).
- Push the tray into the computer to close it. 5.

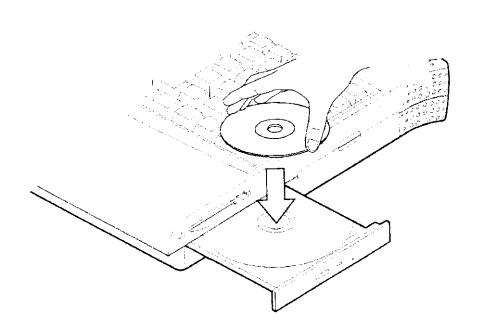


Figure 2-14

### **Handling of Compact Discs**

Proper handling of your CDs will prevent them from being damaged and ensure the accessibility of data stored on them.

- Hold the CD by the edges; do not touch the surface of the disc.
- Use clean, soft, dry cloth to remove dust or fingerprints.
- Do not write on the surface using pen.
- Do not attach any paper or other materials to the surface of the disk.
- Do not store or place the CD in areas where it will be exposed to high temperatures.
- Do not use benzine, thinners, or other cleaners to clean the CD.
- Do not bend the Compact Disc.
- Do not drop or subject the CDs to shock.

# Using PC Card Sockets

The Notebook provides system expansion capabilities with two PC card sockets (previously referred to as PCMCIA). PC cards to be inserted can be LAN, fax/modem, communication devices, or expanded memory. Both sockets support 3.3V 32-bit PC cards, referred to as CardBus. The CardBus sockets are backward compatible with 5V 16-bit PC cards. There are three types of PC cards. Type I measures 3.3mm thick; Type II 5.0mm, and Type III 10.5mm.

The PC card sockets accommodate one Type III card or two Type II cards and the lower socket named Socket A is capable of ZV (Zoomed Video), which allows a direct connection between a PC card and video devices that enables high quality video playback.

### **Inserting PC Cards**

Open the access door (Figure 2-15).

Align the PC card with the slot and push it in firmly until it locks into place (Figure 2-16).

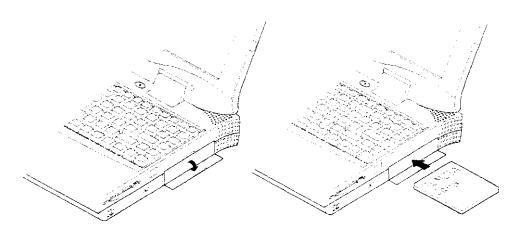
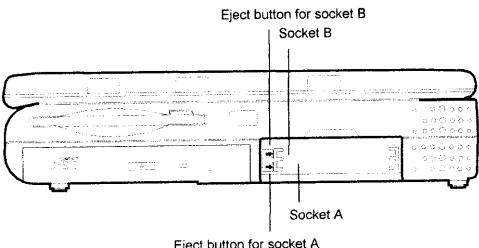


Figure 2-15

Figure 2-16

**Removing PC Cards** 

To remove a PC card, press the appropriate eject button and the card will be ejected from its slot (please refer to Figure 2-17).



Eject button for socket A

Figure 2-17

Using Hot Keys

Located on the bottom-left edge of the keyboard layout is a colored **Fn** key. It is a special feature found only on the Notebook that provides for key combinations with other keys for easy access to system features. Hold down the **Fn** key while pressing other key as below:

Hot Keys	System Features	Remark
+ =	Expand LCD display	
+	Control display top/center position	
+	Toggle LCD/CRT/LCD+CRT	
+	Decrease LCD contrast	
+	Increase LCD contrast	
+ -	Decrease LCD brightness	
+	Increase LCD brightness	
+	Decrease audio volume	
+ 1	Increase audio volume	
+	Toggle audio mute on/off	
+ 150	Put the system in a suspend state for power management	

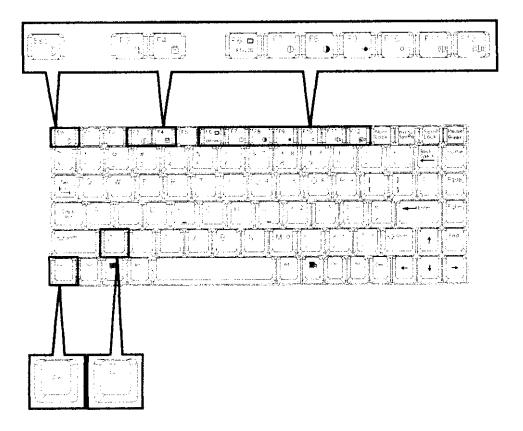


Figure 2-18

# Using Numeric Keypad

The colored keys in the middle section of the keyboard will function as a Numeric Keypad (Figure 2-19). The numeric keypad overlay can be used for numeric data input. Follow these steps to access the Numeric Keypad:

- Press the NumLock key to lock the Numeric Keypad.
- Press the Fn key along with the colored keys to operate the Numeric Keypad.

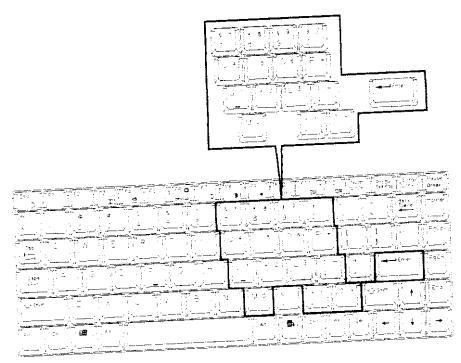


Figure 2-19

# Windows 95 Special Keys

## **Application Key**



The Application key has the same function as the secondary mouse button.

## Windows Key



The Window key activates the Start menu.

# Getting Familiar with LCD Panel

The Notebook Computer features the LCD panel display with the following:

- PCI local bus controller.
- 2MB video RAM (SGRAM type).
- Capability to support 1024x768 (XGA) resolution TFT display.
- Ability to transmit video signals to a VGA monitor (CRT).
- Capable of simultaneous display on LCD and CRT.
- Video Port Manager (VPM) for video input from ZV-capable PC card.

## Using Power Management

The Notebook system provides you with various modes to manage its power consumption while maintaining system performance. Please refer to Chapter 3: BIOS Utilities, System Configuration Utility, Power Menu for more information.

## **Advanced Power Management (APM 1.2)**

The Notebook provides built-in Advanced Power Management (APM 1.2) support to reduce power consumption. APM function varies depending on the operating system you are using. Some operating systems do not support APM, such as Windows NT, and therefore, cannot take advantage of the system's capabilities in this area.

# Advanced Configuration and Power Interface (ACPI)

The ACPI interface gives the operating system (OS) direct control over the power management and Plug and Play functions of a computer. The operating system can perform the functions covered by the ACPI specification, such as system power management, device power management, and thermal management.

Hard Disk Standby

The system will turn off the Notebook's hard disk drive motor if it has not been accessed after a specified period of time. The motor will be turned back on once the system attempts to read or write data to it.

Global Standby

In Global Standby mode, the CPU clock will be stopped and most controllable peripheral devices will be powered off. If the idle timer expires before any system activity is detected, the system will change from Standby mode into Suspend mode.

#### Suspend and Resume

When at extremely low power the system will halt operations yet retain all its programming. This is called **Suspend** Mode. The Suspend Mode features two levels: Powered-On-Suspend (POS) mode, and Suspend-To-Disk (STD) mode.

Be sure not to initiate the Suspend Mode when any of the disk drives is accessed such as HDD, FDD and CD-ROM drive.

The system operation can be returned to exactly where it was suspended when wake-up event occur. This is called **Resume**.

#### **Powered On Suspend (POS)**

Of the two suspend modes, Powered-On-Suspend saves the less amount of power. However, it takes the shorter time to return to full operation.

#### **Resume from POS Mode**

The system may be resumed from Powered-On-Suspend mode by:

- Alarm resume (month/day/hour/minute)
- Modem ring
- Any keyboard key pressed

Suspend To Disk (STD)

Suspend to Disk is a 0-volt suspend mode for system power management. STD mode saves the maximum power but takes the longest time to return to full operation.

- 1. Use your operating system's FDISK program to delete all partitions of the hard disk if any already exist on the target drive.
- 2. Boot the system from the A: drive and run the 0VMAKFIL.EXE
  Utility to create the Suspend to Disk partition on the hard disk of a
  size that will accommodate the installed DRAM (n) plus 2MB
  integrated video RAM.

#### A:\>0VMAKFIL/Pn

For example, if the system DRAM is 32MB, 0VMAKFIL will create a partiton size of approximately 34MB.

#### A:\>0VMAKFIL /P32

**Note:** Rewrite the sector signatures if you need to partition the hard disk again.

#### C:\>0VMAKFIL/PW

3. Re-partition the hard disk using your operating system's FDISK program.

#### Resume from STD Mode

The system may be resumed from Suspend-To-Disk mode by:

- Power back on
- Alarm resume (month/day/hour/minute)

# Attaching Peripheral Devices

The herein mentioned shows you how to attach peripheral devices to the ports or jacks on the rear panel of the Notebook Computer.

## Attaching a Security Lock

To protect your Notebook from being stolen, the computer is equipped with a security connector. To install the security lock, wrap the cable around a desk or other immovable object, then insert the locking device into the connector (Figure 2-20).

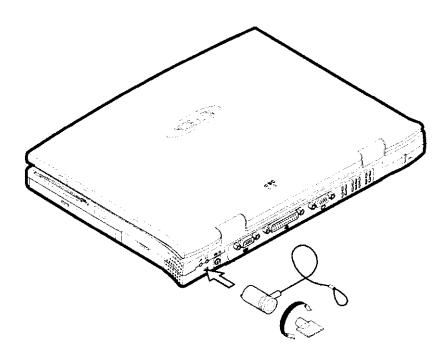


Figure 2-20

Attaching a PS/2 Keyboard or Mouse

The Notebook can be operated with a PS/2 keyboard or mouse attached by means of the PS/2 transfer cable. Attach the external keyboard or mouse as shown below (Figure 2-21).

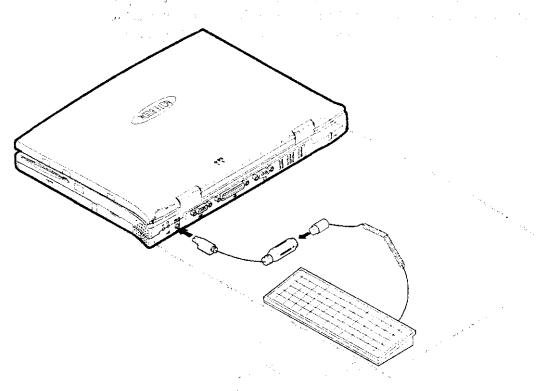


Figure 2-21

**Attaching a Serial Mouse** 

The serial port features a 9-pin connector. You can connect any serial device such as a mouse to this port.

Turn the system power off.

2. Connect the cable to the serial port on the rear of the Notebook Computer (Step 1 in Figure 2-22).

3. Tighten the screws that fasten the cable to the serial port (Step 2 in Figure 2-22).

4. Turn on the Notebook Computer.

In addition, you may need to install the manufacturer-supplied driver for the serial mouse. Refer to the device's user's guide for more information.

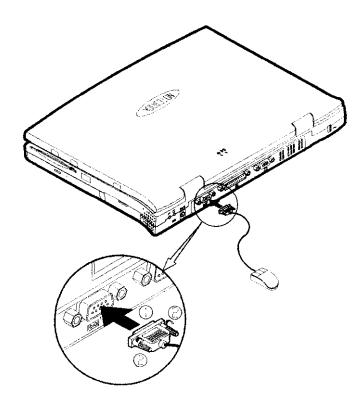


Figure 2-22

# Attaching a Parallel Printer

You may connect any standard Centronics parallel printer to your Notebook using the parallel port.

Turn the system power off. 1.

Connect the cable to the parallel port on the rear of the Notebook Computer (Step 1 in Figure 2-23).

Tighten the screws that fasten the cable to the parallel port (Step 2 in

Figure 2-23).

4. Insert the other end of the cable to the printer's connector. Fasten the cable's connector.

Turn on the printer and Notebook Computer. 5.

In addition, you will need to install the manufacturer-supplied driver for the printer. Refer to the device's user's guide for more information. If the connected printer supports EPP (Enhanced Parallel Port) or ECP (Extended Capabilities Port) mode, please enter System Configuration Utility (SCU) to configure the required setting.

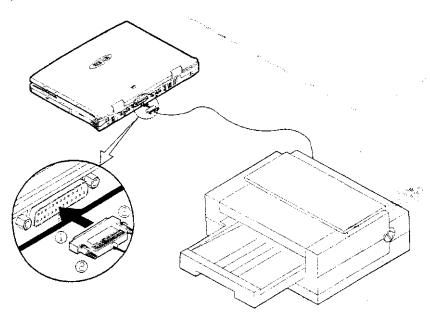


Figure 2-23

### Attaching an External Monitor (CRT)

The computer is capable of displaying information not only on the LCD, but also on SVGA compatible displays attached to the computer. Information can be displayed on both the LCD and the external monitor simultaneously. Enter the System Configuration Utility (SCU) to select the appropriate parameters or use the  $\mathbf{Fn} + \mathbf{F6}$  keys (refer to Chapter 2, Using Hot Keys).

- 1. Turn the system power off.
- 2. Connect the cable to the CRT port on the rear of the Notebook Computer (Step 1 in Figure 2-24).
- 3. Tighten the screws that fasten the cable to the CRT port (Step 2 in Figure 2-24).
- 4. Insert the other end of the cable to the external monitor.
- 5. Turn on the Notebook Computer.

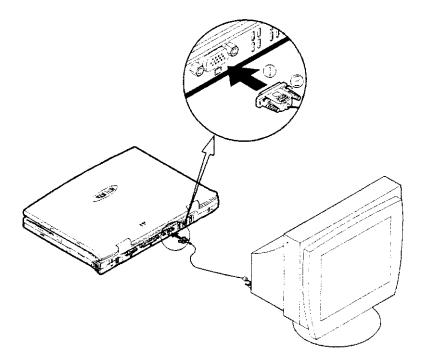


Figure 2-24