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# Table of Contents

<b>CHAPTER 1 : GETTING STARTED .....</b>	<b>1-1</b>
UNPACKING THE NOTEBOOK .....	1-2
FEATURES OF THE NOTEBOOK .....	1-3
Opening the LCD Cover .....	1-3
Power button .....	1-4
System Status LED Indicators .....	1-5
Top-Front View .....	1-6
LCD Panel .....	1-6
Stereo Speakers .....	1-7
Trackpad and Buttons .....	1-7
Microphone .....	1-7
Rear View .....	1-8
AC-in Socket .....	1-8
Dual USB Ports .....	1-8
RCA Jack .....	1-8
External Monitor (CRT) Port .....	1-9
Expansion Port .....	1-9
Parallel Port .....	1-9
Right-side View .....	1-10
Removable 3.5" Floppy Disk Drive .....	1-10
Infrared .....	1-11
Removable 5.25" CD-ROM Drive .....	1-11
Phone Jack (option) .....	1-11
Speaker-out Jack .....	1-11
Line-in Jack .....	1-11
Microphone-in Jack .....	1-12

Right-side Stand .....	1-12
Left-side View .....	1-13
Left-side Stand.....	1-13
Ventilation .....	1-13
Removable 2.5” Hard Disk Drive Module .....	1-14
PC Card Sockets.....	1-14
Battery Pack .....	1-14
Bottom View .....	1-15
CD-ROM latch .....	1-15
Hard Disk Drive latch.....	1-15
CPU Cover .....	1-16
Battery Pack latch.....	1-16
Floppy Disk Drive latch .....	1-16
OPERATING ENVIRONMENT .....	1-17
POWERING THE SYSTEM.....	1-18
AC Power Adapter .....	1-18
Battery Pack .....	1-19
Removing .....	1-19
Inserting.....	1-19
Recharging by AC Power .....	1-20
Proper Handling of the Battery Pack .....	1-20
<b>CHAPTER 2 : OPERATION .....</b>	<b>2-1</b>
UPGRADING THE PROCESSOR .....	2-2
CPU Core Frequency Settings.....	2-3
Replacing the Processor .....	2-4
Reinstalling the Processor .....	2-4
Reinstalling the Heat Sink.....	2-5

SETTING THE DIP SWITCH.....	2-6
Updating the Flash ROM BIOS .....	2-6
Accessing the 8-Pole DIP Switch (SW1) .....	2-6
EXPANDING MEMORY .....	2-7
Accessing the Memory Sockets.....	2-8
Installing the Memory Module.....	2-9
Removing the Memory Module .....	2-10
USING THE HARD DISK DRIVE .....	2-11
Removing the Hard Disk Drive Module.....	2-11
Replacing the Hard Disk Drive .....	2-12
Inserting the Hard Disk Drive Module.....	2-12
USING FLOPPY DISK DRIVE.....	2-13
Inserting/Removing the Diskette.....	2-13
Replacing the Floppy Disk Drive.....	2-14
Write-Protecting Diskettes .....	2-15
<i>Do's and Don'ts</i> .....	2-15
USING THE CD-ROM.....	2-16
Removing the CD-ROM Module .....	2-17
Loading the Compact Discs .....	2-18
Handling of the Compact Discs.....	2-19
USING THE PC CARD SOCKETS .....	2-20
Inserting the PC Cards.....	2-20
Removing the PC Cards .....	2-21
USING THE HOT KEYS .....	2-22
USING THE NUMERIC KEYPAD.....	2-24
USING THE POWER MANAGEMENT.....	2-25
Advanced Power Management (APM 1.2).....	2-25

Hard Disk Standby .....	2-26
Global Standby .....	2-26
Suspend and Resume .....	2-26
Powered On Suspend (POS).....	2-27
Suspend To Disk (STD).....	2-28
<b>ATTACHING THE PERIPHERAL DEVICES .....</b>	<b>2-29</b>
Attaching a Phone Line (option) .....	2-29
Attaching a PS/2 Keyboard or Mouse .....	2-30
Attaching a Serial Mouse .....	2-31
Attaching a Parallel Printer .....	2-32
Attaching an External Monitor (CRT).....	2-33
Attaching a Proprietary Port Replicator .....	2-34
Attaching a Video Input Device .....	2-35
Attaching a TV Set .....	2-36
Attaching a USB-compatible Device .....	2-37

**CHAPTER 3 : BIOS UTILITIES .....3-1**

POWER ON SELF TEST (POST).....	3-2
POST Message: Normal Operation .....	3-2
POST Message: Error Detected.....	3-3
<b>SYSTEM CONFIGURATION UTILITY .....</b>	<b>3-4</b>
Information in the System Configuration Utility .....	3-4
Initiating the System Configuration Utility .....	3-5
Working with the Menu Bar (Main Menu).....	3-7
Working with the Pull-down Menu (Submenu).....	3-8
Features of the System Configuration Utility .....	3-9
Standard CMOS Setup.....	3-9
Advanced CMOS Setup.....	3-10

Power Management Setup.....	3-12
PCI / Plug and Play Setup.....	3-13
Peripheral Setup .....	3-14
Change Supervisor Password .....	3-15
Auto Configuration with Optimal Settings.....	3-16
Save Settings and Exit.....	3-17
Exit without Saving.....	3-18

**CHAPTER 4 : TROUBLESHOOTING ..... 4-1**

BATTERY .....	4-2
POWER .....	4-3
HARD DISK DRIVE .....	4-5
FLOPPY DISK DRIVE.....	4-5
HARDWARE INSTALLATION.....	4-6
LCD PANEL.....	4-6
MEMORY MODULE.....	4-7
PC CARD.....	4-8
BOOT PASSWORD .....	4-9
AUDIO.....	4-9
CD .....	4-10
PRINTER.....	4-11
ATI DVD PLAY (OPTIONAL).....	4-12

**CHAPTER 5 : INSTALLING DRIVERS..... 5-1**

PREPARATION .....	5-2
INSTALLING WINDOWS 95 (FOR REFERENCE) .....	5-2
INSTALLING WINDOWS 98 (FOR REFERENCE).....	5-4
INSTALLING DRIVERS IN WINDOWS 95.....	5-5

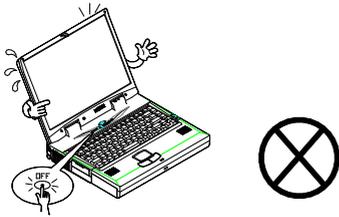
Step 1: Run USB supplement .....	5-5
Step 2: Installing ALi 16B2 Chip .....	5-5
Step 3: Installing ALi Power Management.....	5-5
Step 5: Installing VGA Driver .....	5-6
Step 6: Installing PCMCIA Driver .....	5-6
Step 7: AMD Updated Files .....	5-7
Step 8: Using Infrared Wireless Communication .....	5-7
INSTALLING DRIVERS IN WINDOWS 98.....	5-9
Step 1: Installing AGP Driver.....	5-9
Step 2: Installing Audio Driver.....	5-9
Step 3: Installing VGA Driver .....	5-10
Step 4: Installing PCMCIA Driver .....	5-10
INSTALLING DRIVERS IN WINDOWS NT 4.0.....	5-11
Step 2: Installing VGA Driver .....	5-12
APPENDIX A: SPECIFICATIONS.....	I
APPENDIX B: I/O PORT PIN ASSIGNMENTS.....	V

# Safety Notice

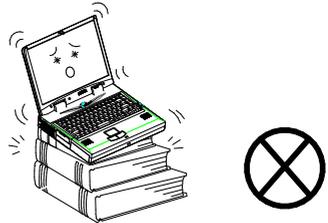
The computer is a delicate device that requires careful handling. Negligence or mistaken use may cause serious damage. Before you learn to operate or use this computer, you need to understand the instruction regarding safety handling.

The following mentions the incorrect handling that is seriously inhibited. To keep the computer from being damaged, please keep these precautions in your mind.

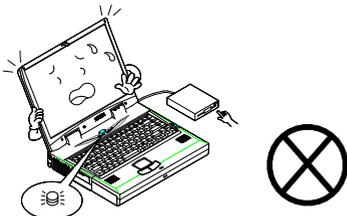
***Do not turn off the power in operation.***



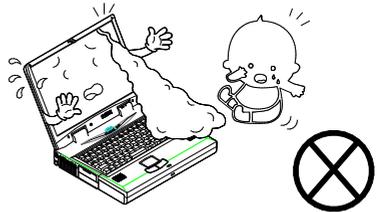
***Do not place the computer on unstable surface.***



***Do not turn off the peripheral device when the light is on.***



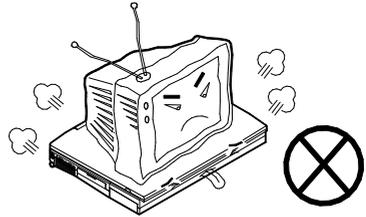
***Do not touch the poisonous liquid when the LCD is broken.***



**Do not disassemble the computer yourself.**



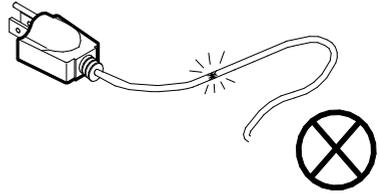
**Do not place anything heavy on the computer.**



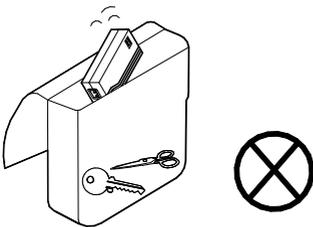
**Do not touch power cord by wet hand.**



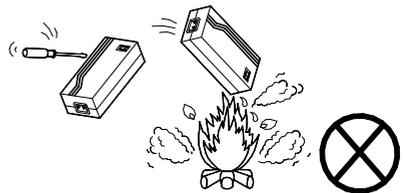
**Do not use broken power cord.**



**Keep the computer away from any metal appliance.**

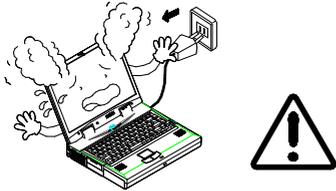


**Do not throw the computer or accessories into fire.**

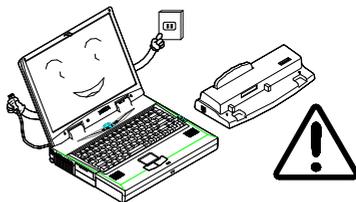


The following mentions the actions that are important for your computer. To keep your computer in the most excellent condition, please follow the instruction as much as possible.

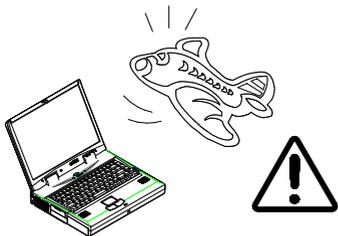
*If there is unusual odor, heat or smoke, unplug the power cord immediately.*



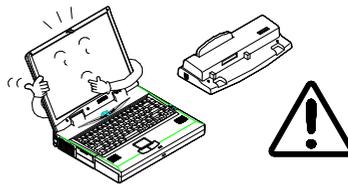
*Unplug the power cord in attaching peripheral device.*



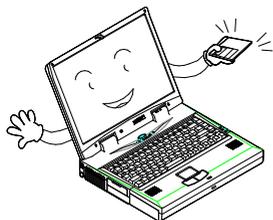
*Follow the use instruction in taking airplane.*



*Use the same brand of peripheral device.*



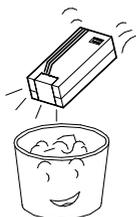
**Maintain your computer regularly.**



**Do not place heavy thing on the power cord.**



**Affix tap to the contact plate while putting the battery into keeping box.**



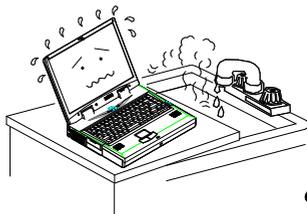
**Take a rest after a long time of work.**



**The data is easy to lose in low power status.**



**Please keep the computer away from humid environment.**



# Conventions

This manual uses the following conventions to describe, identify, and highlight terms and operating procedures.

## Text Conventions

Text in boldface contains messages that are important for safe operation. Please read.

Characters in boldface represent specific items or keys, e.g. **CardBus**, **Fn** key.

File names are presented in bold capitals, e.g. **A:\>0VMAKFIL —Pn**.

## Abbreviations

For the purpose of clarity, abbreviations are enclosed in parentheses following their definition; for example, Enhanced Parallel Port (EPP) mode.

## Icons

Icons identify ports and jacks of the notebook computer. The system status indicators are also identified with their relative icons.

## Keys

Keys appear in boldface. A plus sign (+) between two keys indicates that they should be pressed simultaneously.

## Messages

**Note:** A note is an advice that helps you make best use of your notebook computer. Please read.

# Ergonomics

Developing good work habits are important if you need to work in front of the computer for long periods of time. Improper work habits can result in discomfort or serious injury from repetitive strain to your hands, wrists or other joints. The following are some tips to reduce the strain:

- Adjust the chair and desk to make your elbow height near the height of keyboard. Keep your forearms, wrists, and hands in a relaxed position.
- Your knees should be slightly higher than your hips. Place your feet flat on the floor or on a footrest if necessary.
- Use a chair with a back and adjust it to support your lower back comfortably.
- Sit straight so that your knees, hips and elbows form approximately 90° angles when you are working.



# Lighting

Proper lighting and comfortable display viewing angle can reduce the eye strain and muscle fatigue in your neck and shoulders.

- Position the display to avoid glare or reflections from overhead lighting or outside light sources.
- Keep the display screen clean and set the brightness and contrast to levels that allow you to see the screen clearly.
- Position the display directly in front of you at a comfortable viewing distance.
- Adjust the display-viewing angle to find the best position.

In addition, continuous concentration on computing work can result in discomfort and injury. Remember to:

- Alter your posture frequently.
- Stretch and exercise your body several times a day.
- Take periodic breaks when you work at the computer for long periods of time. Frequent and short breaks are of greater benefit than fewer and longer breaks.



---

# ***Chapter 1 : Getting Started***

This chapter provides you with the introduction to the Notebook Computer. It will familiarize you to the computer's features, components, operating environment and the power sources.



**Unpacking the Notebook**



**Features of the Notebook**



**Operating environment**



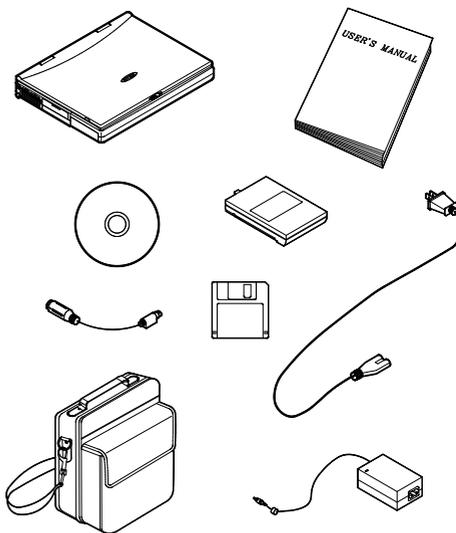
**Powering the system**

---

## **Unpacking the Notebook**

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 in the future. The shipping carton should contain the following items:

- μ Notebook computer
- μ CD for Drivers
- μ PS/2 Transfer Cable
- μ Carrying Bag
- μ User's Manual
- μ Battery Pack
- μ Utilities Diskette
- μ Power Cord
- μ Power Adapter



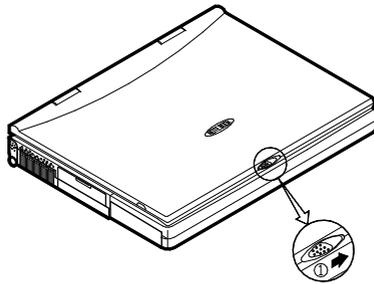
**Figure 1-1**

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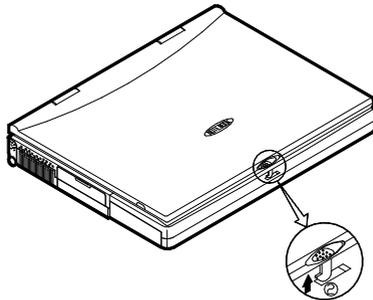
# **Features of the Notebook**

## **Opening the LCD Cover**

1. Push the latch towards the right to open the top cover. (Figure 1-2)
2. Lift the top cover to reveal the LCD (Liquid Crystal Display) panel and the keyboard.
3. Adjust the LCD panel to a comfortable viewing angle.
4. Press the power button to turn the system on or off (Figure 1-4).



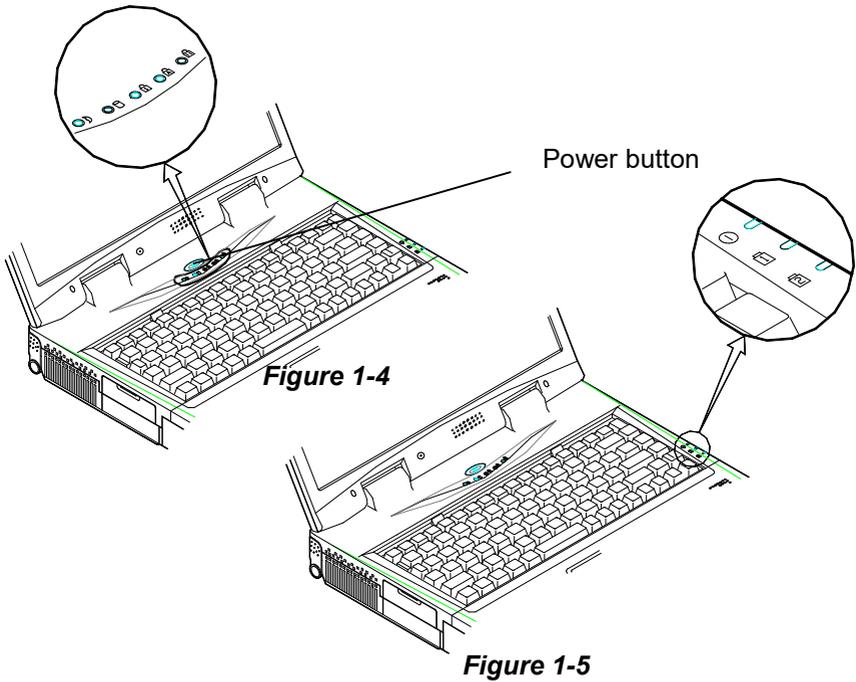
**Figure 1-2**



**Figure 1-3**

---

## System Status Indicators



### Power button

Use this button to turn the system on or off (Figure 1-4). After proper configuration under SCU (System Configuration Utilities), this button can be used as suspend/resume hot button (refer to Chapter 3: BIOS Utilities, Power Menu for more information).

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

---

## System Status LED Indicators

The LED indicators show the system's operation status (see Figure 1-4 & 1-5).

Icon	Color	Description
	Green	Battery power is used with the system turning on.
	Red	AC power is used with the system turning on.
	Blinking Red	Battery power is critically low.
	Green	1 <sup>st</sup> Battery is fully charged.
	Red	1 <sup>st</sup> Battery is being charged.
	Green	2 <sup>nd</sup> Battery is fully charged.
	Red	2 <sup>nd</sup> Battery is being charged.
	Green	The embedded numeric keypad feature is activated
	Green	The Caps Lock feature is activated.
	Green	The Scroll Lock feature is activated.
	Green	The system has entered the configured suspend mode.
	Green	The hard disk is being accessed.



---

## ⊂ **Stereo Speakers**

Two built-in speakers provide clear stereo sound.

## ⊆ **Trackpad and Buttons**

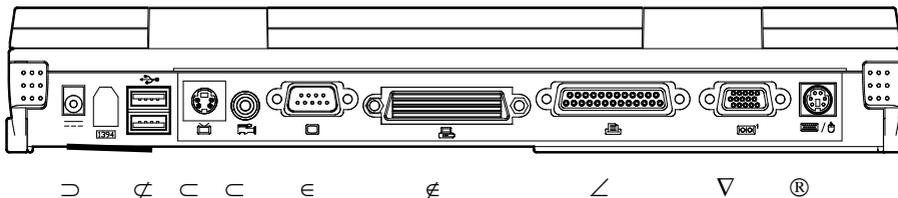
The pointing device features a sensitive glide pad for precise movements. It is compatible with the IBM PS/2 mouse. The buttons of the trackpad function as those of a standard mouse.

## ∈ **Microphone**

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

---

## Rear View



**Figure 1-7**

### **AC-in Socket**

Plug the AC adapter into this socket for power supply. Pull the plug (not the cord) directly back to disconnect.

### **Dual USB Ports**

The dual Universal Serial Bus (USB) ports simplify the expansion capability for peripheral devices. You can optionally connect the USB devices such as a mouse, keyboard or monitor to the notebook.

### **S-video Jack**

Use this jack to transmit video signal to a TV set. You may need to select the video standard (NTSC/PAL) for video display (please refer to Chapter 3, Components Menu for more information).

### **RCA Jack**

This jack accepts analog composite signals from external video devices, e.g. CCD Camera, Camcorder.

---

## € External Monitor (CRT) Port

The External Monitor uses a 15-pin connector for connecting an external CRT monitor. Simultaneous display in LCD screen and external CRT monitor is available.

## € Expansion Port

The Expansion port uses a 176-pin Docking connector for connecting a Port Replicator.

## ∠ Parallel Port

The Parallel Port uses a 25-pin female connector for connecting a parallel printer or other parallel devices. This parallel port supports EPP (Enhanced Parallel Port) V1.7/V1.9 and ECP (Extended Capabilities Port) modes.

## ∇ Serial Port <sup>1</sup>

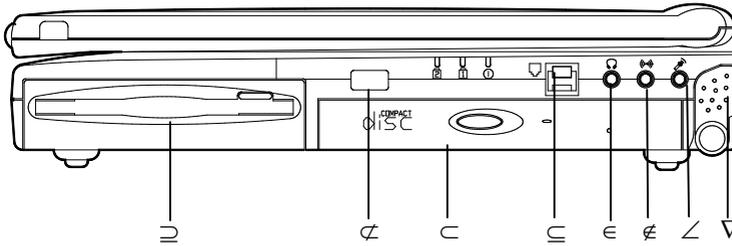
The RS-232C serial port uses a 9-pin male connector for connecting an external serial mouse, serial printer or fax/modem.

## ® PS/2 Type Ports

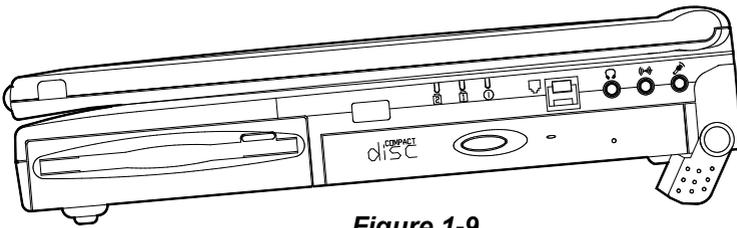
The PS/2 Type Port uses 6-pin connector for connecting an external PS/2 type mouse or keyboard.

---

## Right-side View



**Figure 1-8**



**Figure 1-9**

### ☐ Removable 3.5" Floppy Disk Drive

The Notebook comes standard with a removable 3.5" 1.44MB floppy drive installed in a bay. The floppy disk drive module can be replaced with optional drive units, such as a 12.7mm high 2.5" hard disk drive, a 12.7mm high LS-120 120MB floppy drive or a secondary battery pack. (Please refers to Chapter 2: Operation for more information on using floppy disk drive.)

---

## ♀ Infrared

The notebook is equipped with an infrared feature that allows the communication with an infrared-compatible device. The Infrared port supports IrDA (HPSIR) 1.1 mode, Amplitude Shifted Keyed IR (ASKIR) mode, and Fast IR (FIR) mode.

## ⊃ Removable 5.25" CD-ROM Drive

The notebook comes standard with a 24-speed 5.25" CD-ROM drive. The removable CD-ROM drive module can be replaced with the optional drive units, such as a 12.7mm high DVD-ROM drive, or a third Hard Disk drive. (Please refers to the Chapter 2: Operation for more information on using the CD-ROM.)

## ⊃ Phone Jack (option)

The phone jack is used to support the built-in modem. You can attach a phone line to the jack and insert a modem card (optional) into the modem socket on the mainboard.

## ∈ Speaker-out Jack

Headphone or speakers can be attached to the system through this jack.

## € Line-in Jack

External audio source can be fed into the Notebook through this jack.

---

## ∠ **Microphone-in Jack**

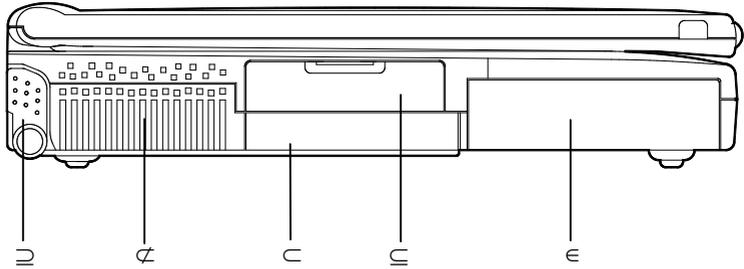
Connect an external microphone to the system.

## ▽ **Right-side Stand**

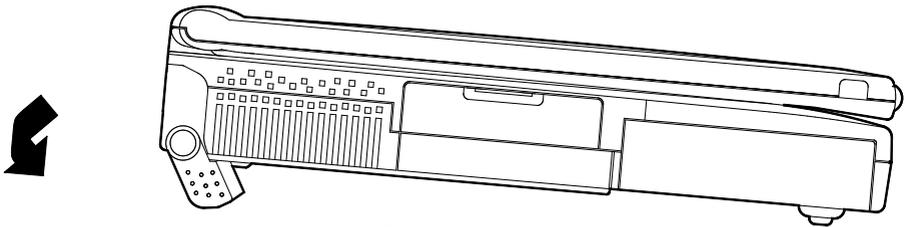
Move this stand (together with the left one) to adjust the typing angle. If a AMD-CPU is installed on the system, erecting the stands on both sides will be necessary for heat dissipation during operation and thus avoid the machine stopping running. (Figure 1-9)

---

## Left-side View



**Figure 1-10**



**Figure 1-11**

### ☐ Left-side Stand

Move this stand (together with the right one) to adjust the typing angle. If a high speed CPU is installed on the system, erecting the stands on both sides will be necessary for heat dissipation during operation (Figure 1-11).

### ☒ Ventilation

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

---

## ⊆ **Removable 2.5” Hard Disk Drive Module**

The notebook comes standard with a removable 2.5-inch IDE Hard Disk Drive with a height of 12.7mm installed in a bay. (Please refers to Chapter 2: Operation for more information on using Hard Disk Drive.)

## ⊆ **PC Card Sockets**

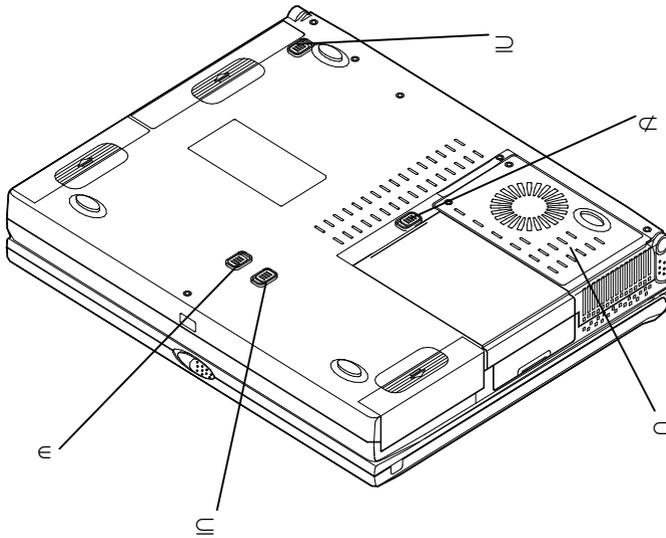
The notebook provides two Type II or one Type III PC card socket. Both sockets will expand the system capabilities when a PC card is inserted. (Please refers to Chapter 2: Operation for more information on Using PC Card socket.)

## ∈ **Battery Pack**

The notebook comes with a rechargeable battery pack that lets you operate the computer without an external power source.

---

## Bottom View



**Figure 1-12**

### **≡ CD-ROM latch**

Push this latch to release the CD-ROM module from its bay. (Please refers to Chapter 2: Operation for more information on inserting or removing the CD-ROM.)

### **∠ Hard Disk Drive latch**

Push this latch to release the Hard Disk Drive module from its bay. (Please refers to Chapter 2: Operation for more information on Inserting or removing the Hard Disk Drive.)

---

## ⊂ **CPU Cover**

Detaching the screws to remove the cover. The CPU is under the heat sink and the cover. You may upgrade the CPU for higher performance.

## ⊆ **Battery Pack latch**

Push this latch to release the Battery Pack from its bay. (Please refers to Chapter 1: Getting Started for more information on Inserting or removing the Battery Pack.)

## ∈ **Floppy Disk Drive latch**

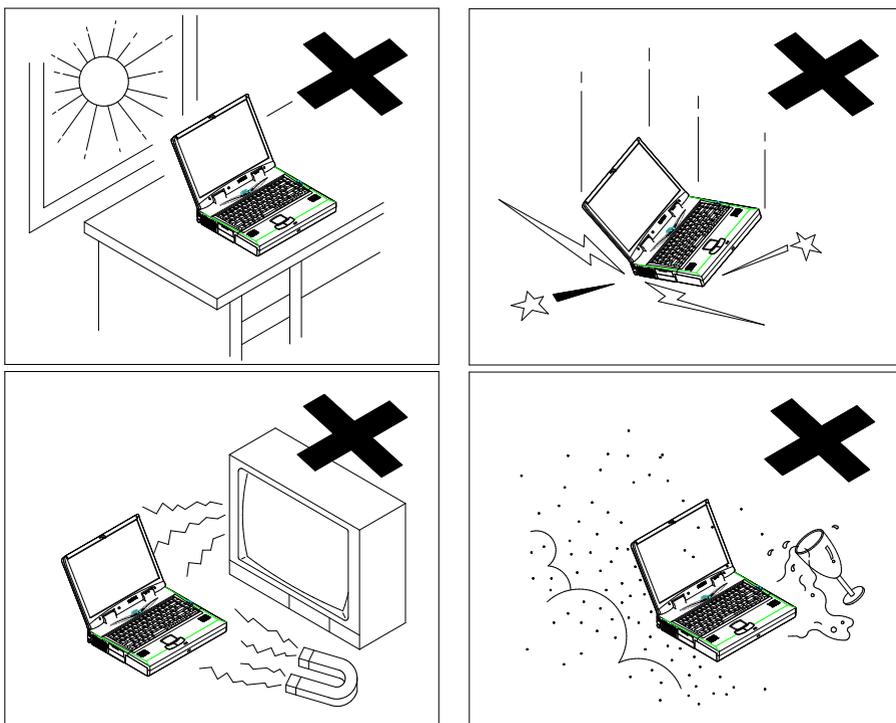
Push this latch to release the Floppy Disk Drive module from its bay. (Please refers to the Chapter 2: Operation for more information on inserting or removing the Floppy Disk Drive.)

---

## **Operating Environment**

Proper care and operation of your notebook computer will prolong the use period. Make sure the computer is not:

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



**Figure 1-13**

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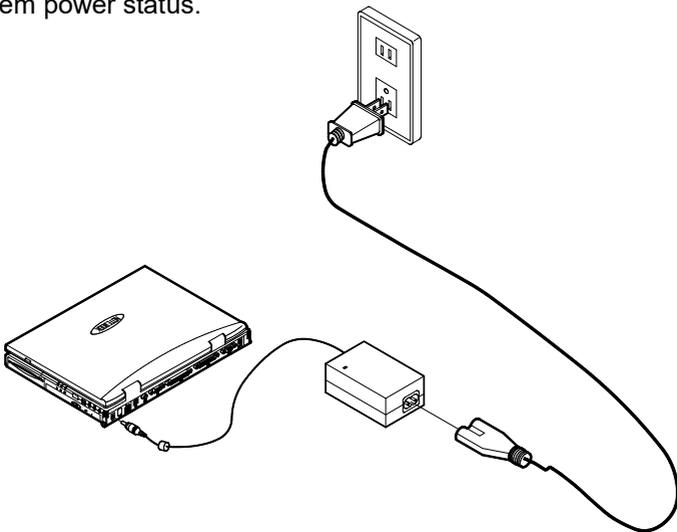
# **Powering the System**

You can use the AC power adapter or battery pack to power the computer system.

## **AC Power Adapter**

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

1. Plug the power adapter to the AC-in socket on the rear panel of the Notebook.
2. Connect the power cord to the power adapter.
3. Plug the AC power cord into a properly grounded outlet.
4. Refer to Chapter 1, System Status Indication for more information on system power status.



**Figure 1-14**

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## Battery Pack

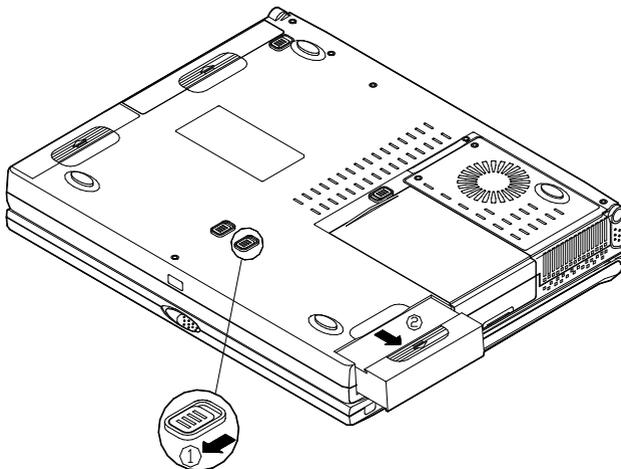
Power for continuous portable operation of the Notebook is provided by a battery pack. When the battery pack is fully charged, you can operate the computer for approximately two hours. However, the actual operating time will be determined by the application used and the configuration set.

### Removing

1. Turn the Notebook over.
2. Locate the Battery Pack latch. (Figure 1-15)
3. Pushes the latch in the direction as indicated and draw the battery pack out the bay.

### Inserting

1. Turn the Notebook over.
2. Insert the battery pack into the bay.
3. Make sure the battery slides into the bay properly and mates with its connector firmly.



**Figure 1-15**

---

## **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.

1. You may connect the AC power adapter to the Notebook Computer at any time to begin recharging the system's battery pack. You do not need to turn off the system's power.
2. It will take several hours to recharge the battery to its full charge status.
3. Please refer to Chapter 1, System Status Indicators for more information on battery charge status.

## **Proper Handling of the Battery Pack**

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

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## 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 the components.***

-  **Upgrading Processor**
-  **Setting DIP Switch**
-  **Using Hard Disk Drive**
-  **Using Floppy Disk Drive**
-  **Using CD-ROM**
-  **Using PC Card Sockets**
-  **Using Hot Keys**
-  **Using Numeric Keypad**
-  **Using Power Management**
-  **Attaching Peripheral Devices**

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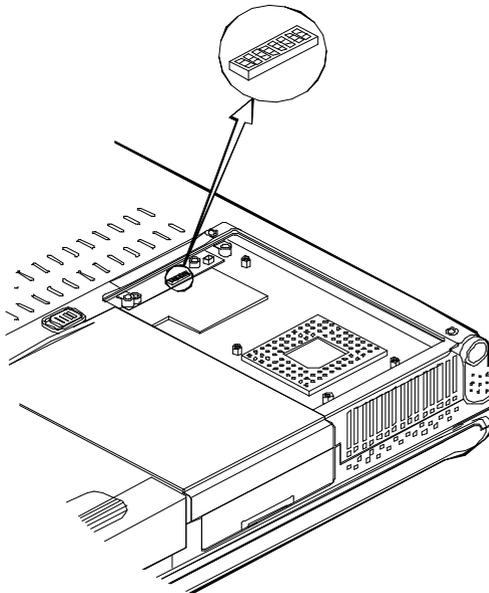
## **Upgrading the Processor**

The notebook supports AMD MMX-Enhanced processor at K6-233/266/300MHz, K6-2-266/300/333MHz, and K6-ST-350MHz Core frequencies. The AMD processor provides good performance for applications running on advanced operating systems such as Window 95/98, Window NT, and UNIX. In addition, It features a Dynamic Execution microarchitecture and also executes **MMX** technology instructions for enhanced media and communication.

# CPU Core Frequency Settings

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

<b>CPU TYPE</b>	<b>CPU BUS SPEED</b>			<b>Freq.</b>	<b>CORE BUS RATIO</b>		
	<b>S2-1</b>	<b>S2-2</b>	<b>S2-3</b>		<b>S2-5</b>	<b>S2-6</b>	<b>S2-7</b>
<b>AMD</b>				<b>Mhz</b>			
<b>K6-2/266</b>	OFF	ON	ON	66	ON	OFF	ON
<b>K6-2/300</b>	OFF	OFF	OFF	100	OFF	ON	OFF
<b>K6-2/333</b>	ON	OFF	OFF	95	OFF	OFF	OFF
<b>K6-2/350</b>	OFF	OFF	OFF	100	OFF	OFF	OFF
<b>K6-2/366</b>	OFF	ON	ON	66	OFF	OFF	ON
<b>K6-2/380</b>	ON	OFF	OFF	95	ON	OFF	ON
<b>K6-2/400</b>	OFF	OFF	OFF	100	ON	OFF	ON
<b>K6-2/450</b>	OFF	OFF	OFF	100	ON	ON	ON
<b>K6-3/400</b>	OFF	OFF	OFF	100	ON	OFF	ON
<b>K6-3/450</b>	OFF	OFF	OFF	100	ON	ON	ON



**Figure 2-1**

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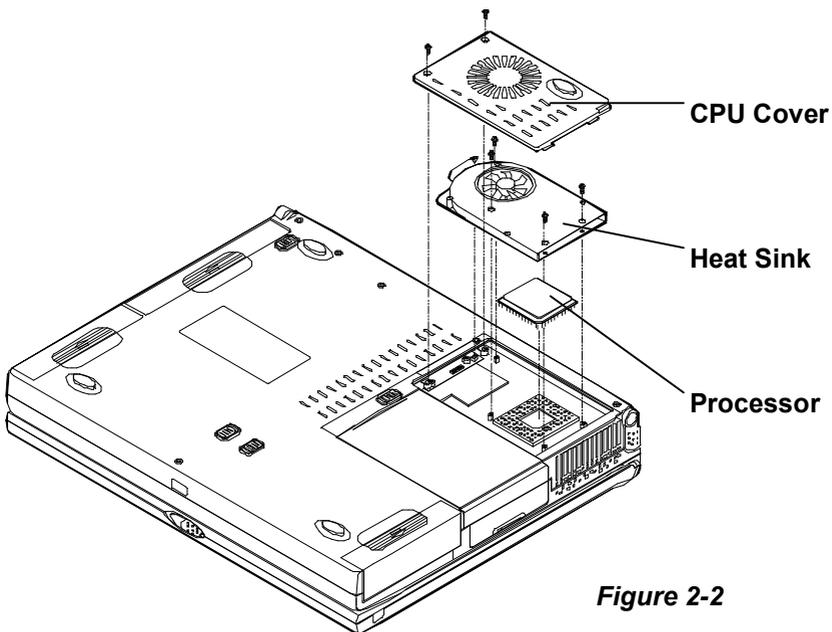
## Replacing the Processor

1. Remove all the 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 Processor.
5. Carefully detach the Processor from the mainboard.

### **Note:**

***Wait for the CPU to cool down before replace it.***

***Contact your dealer for the proprietary tool to replace the CPU.***



**Figure 2-2**

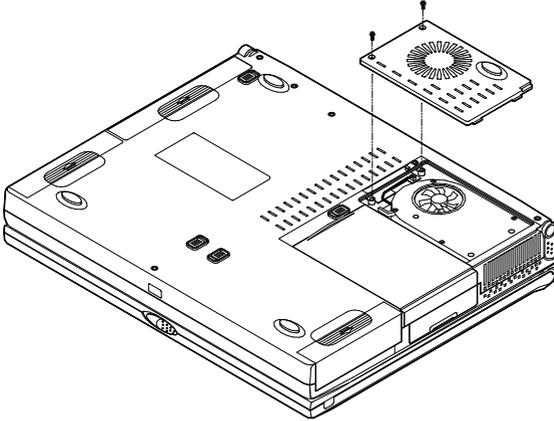
## Reinstalling the Processor

To insert or extract your processor, please contact your service dealer for correct operation.

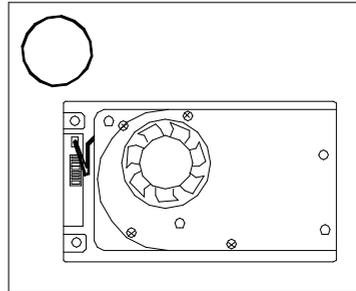
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## Reinstalling the Heat Sink

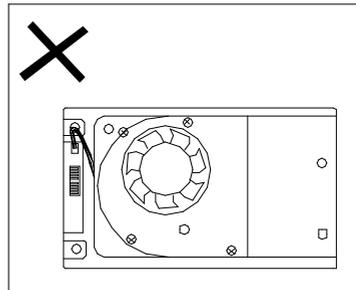
Make sure that the heat sink cable is properly placed (Figure 2-3/2-4).



**Figure 2-3**



**Figure 2-4**



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## Setting the DIP Switch

### Updating the Flash ROM BIOS

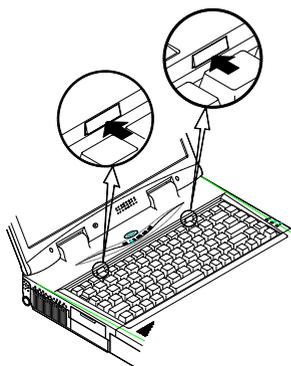
In order to keep up with the latest system BIOS, your notebook may be upgraded. Consult your dealer for further information. The DIPSwitch needs to be set in the **On** position when updating the existing system BIOS. The DIPSwitch should be reset to the **Off** position after BIOS updating is complete.

DIP Switch (SW1)								Purpose
S1-1	S1-2	S1-3	S1-4	S1-5	S1-6	S1-7	S1-8	Flash ROM BIOS
OFF	OFF	X	X	X	X	X	X	Existing BIOS
ON	ON	X	X	X	X	X	X	Update BIOS

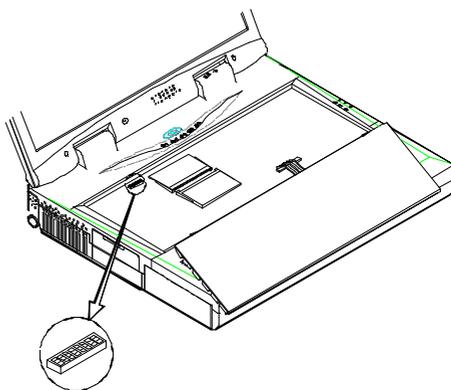
### Accessing the 8-Pole DIP Switch (SW1)

Access the 8-Pole DIPSwitch to set the BIOS.

1. Turn the system power off.
2. Press the two keyboard latches and carefully lift the keyboard assembly out to expose the mainboard. Adjust the DIPSwitch SW1 to set the configuration.



**Figure 2-5**



**Figure 2-6**

## **Expanding Memory**

The system has two memory sockets for different RAM modules to expand the memory up to 256MB. These RAM modules are of a 144-pin SODIMM (Small Outline Dual In-line Memory Module) type. The Notebook supports EDO, and SDRAM operation. The total memory size is automatically detected by the POST routines. With the following different RAM combinations (for reference), the total memory size can be:

<b>Bank 0 (64-bit)</b>	<b>Bank 1 (64-bit)</b>	<b>Power</b>	<b>Minimum Speed</b>	<b>Total Size</b>
16MB	0MB	3.3V	EDO: 60ns  SDRAM:75 MHz	16MB
0MB	16MB			16MB
16MB	8MB			24MB
8MB	16MB			24MB
16MB	16MB			32MB
32MB	0MB			32MB
0MB	32MB			32MB
32MB	8MB			40MB
8MB	32MB			40MB
32MB	16MB			48MB
16MB	32MB			48MB
64MB	0MB			64MB
0MB	64MB			64MB
64MB	8MB			72MB
8MB	64MB			72MB
64MB	32MB			96MB
32MB	64MB			96MB
64MB	64MB			128MB
0MB	128MB			128MB
128MB	32MB			160MB
32MB	128MB			160MB
128MB	64MB			192MB
64MB	128MB			192MB
128MB	128MB			256MB

**Note:** You can not use the EDO RAM and SDRAM together.

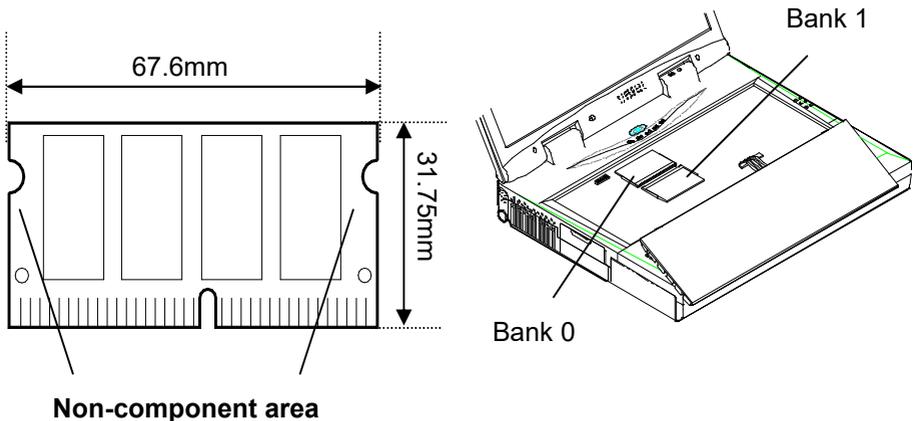
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## Accessing the Memory Sockets

1. Turn the system power off.
2. Press the two keyboard latches to elevate the keyboard from its normal position.
3. Carefully lift the keyboard assembly out to expose the mainboard. Locate the memory sockets (Figure 2-8).

### Note:

- *The memory socket Bank 1 is a reverse type, make sure you install the memory module with the reverse side to fit its connector.*
- *Please ensure that each edge of the memory module (SDRAM) has no component mounted on (see Figure 2-7). It is recommended to use the RAM module that complies with Intel unbuffered SO-DIMM (67.6mmX31.75mm). Please consult your dealer for detailed information.*



(The edges of the memory module are the non-component areas.)

Figure 2-7

Figure 2-8

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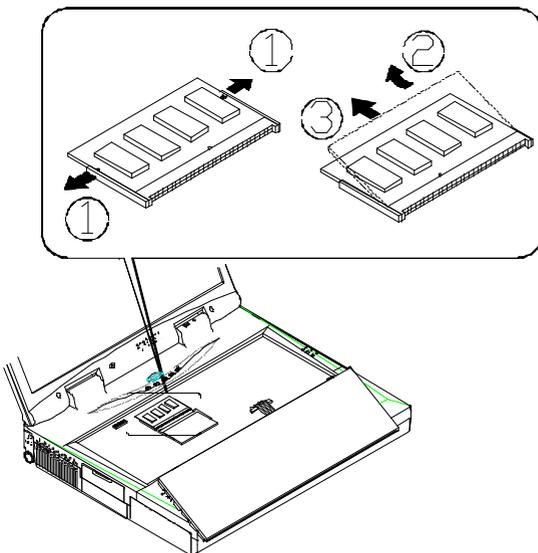
## Installing the Memory Module

Follow the steps below to install the memory module:

1. Turn the system power off.
2. Press the two keyboard latches to elevate the keyboard from its normal position.
3. Carefully lift the keyboard assembly out to expose the mainboard. Locate the memory sockets (Figure 2-8).
4. **Position the memory module at a slight angle (45° )** and fit its connectors into the socket firmly (Step 1 of Figure 2-9).
5. **Press two edges of the memory module (Step 2 of Figure 2-8) to make it locked into place.**
6. Reinstall the keyboard assembly.

### Note:

*It is recommended to install the memory module in the order of Bank 0, Bank 1 (see Figure 2-10). Please refer to the table of DRAM combinations or consult your dealer for a proper installation.*

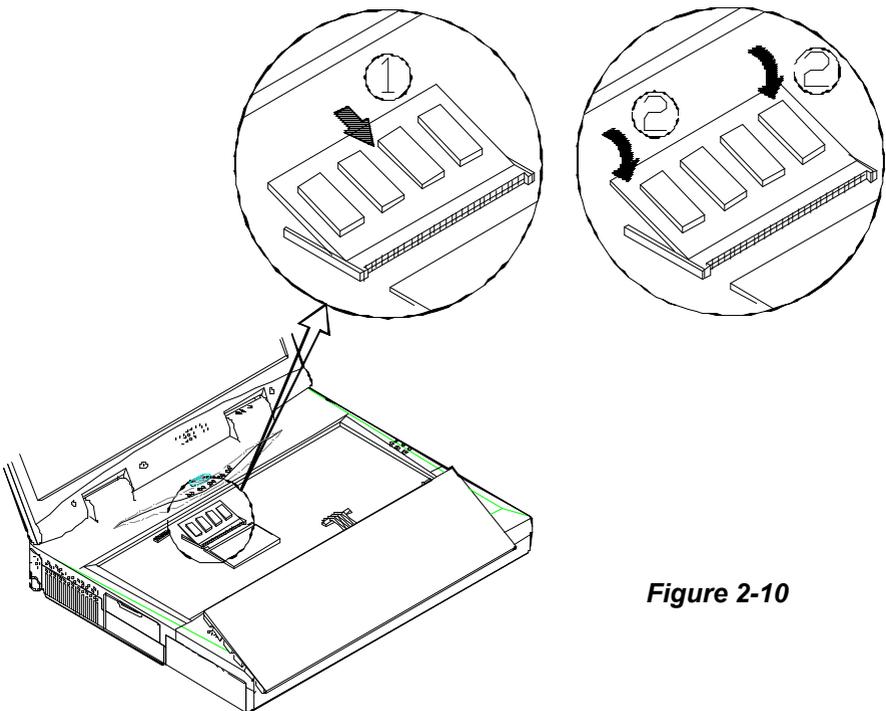


**Figure 2-9**

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## Removing the Memory Module

1. Turn the system power off.
2. Press the two keyboard latches to elevate the keyboard from its normal position.
3. Carefully lift the keyboard assembly out to expose the mainboard. Locate the memory sockets (Figure 2-8).
4. Gently pull the two latches on both ends of the module outward (Step 1 of Figure 2-10). The module will pop up (Step 2 & 3 of Figure 2-10).
5. Remove the memory module.
6. Reinstall the keyboard assembly.



**Figure 2-10**

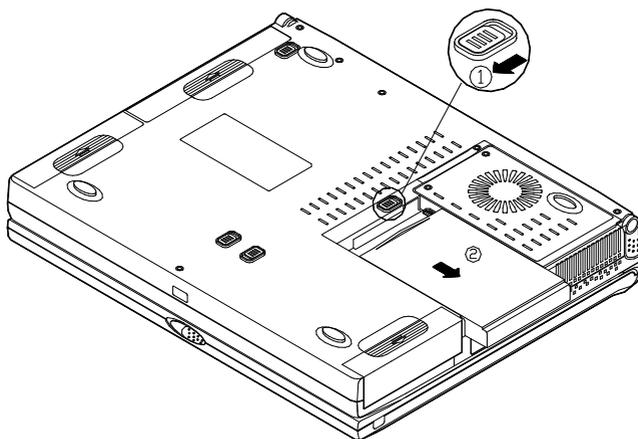
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## **Using the Hard Disk Drive**

The notebook is equipped with a 2.5" IDE hard disk drive mounted in a removable case. Therefore, the hard disk drive can also be easily removed and replaced with another hard disk drive with a height of 17mm. The hard disk drive supports Programmed I/O (PIO) mode 4, Master mode and Ultra ATA (Ultra DMA-33) mode which can provide a high performance data transfer rate at speeds up to 33 MB/second.

### **Removing the Hard Disk Drive Module**

1. Turn off the power.
2. Turn the Notebook over.
3. Locate the Hard Disk drive latch (Figure 2-11).
4. Push the latch in the direction as indicated and pull the hard disk drive module out of the bay.



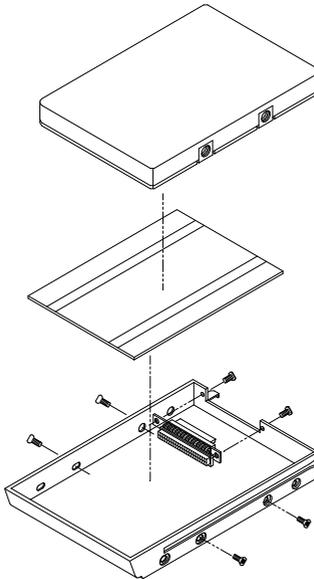
**Figure 2-11**

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## Replacing the Hard Disk Drive

1. Remove the two screws on each side of the case. (Figure 2-12)
2. Gently disconnect the cable from the hard disk drive.
3. Connect the replacement hard disk drive with the cable.
4. Insert the replacement hard disk drive into the case.
5. Fasten the screws of each side.

**Note:** *The hard disk drive with different height must use the different case to house itself. Contact your dealer for details about these replacements.*



**Figure 2-12**

## Inserting the Hard Disk Drive Module

1. Insert the hard disk drive module into the bay
2. Make sure it slides into the bay properly and mates with the connector firmly.

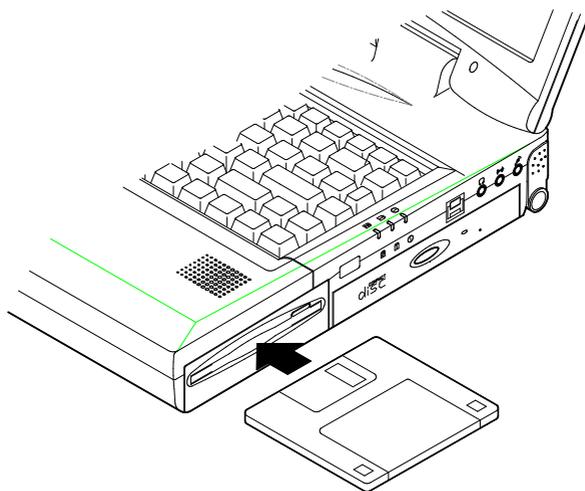
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## **Using Floppy Disk Drive**

The Notebook is equipped with a removable 1.44MB, 3.5" floppy disk drive module. It is usually designated as drive A by default and may be used as a boot device if properly set in SCU (please refer to Chapter 3, BIOS Utilities). You may replace the floppy disk drive module with the following options: a 2.5" secondary IDE hard disk drive (of 12.7mm high), a 120MB LS-120 floppy disk drive (of 12.7mm high), or a secondary battery pack. Contact your dealer for detailed information about these options.

### **Inserting/Removing the Diskette**

Always insert your floppy diskette with label-side up when using the floppy drive. Press the eject button on the top-right corner of the floppy drive to remove your diskette.

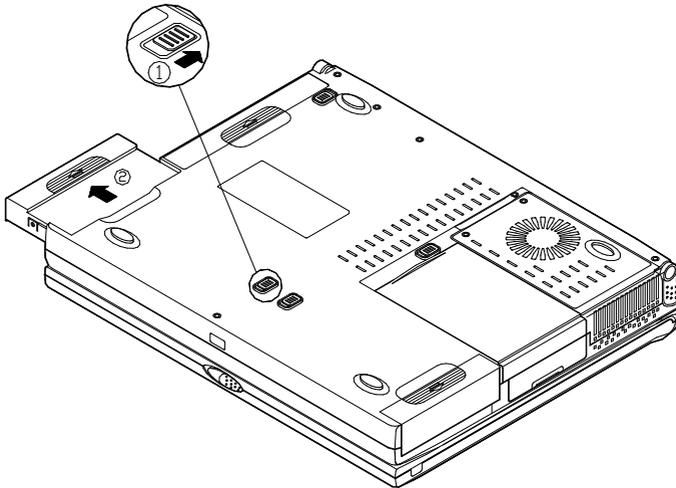


**Figure 2-13**

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## Replacing the Floppy Disk Drive

1. Turn off the power.
2. Turn the Notebook over.
3. Locate the Floppy Disk Drive latch (Figure 2-14).
4. Push the latch in the direction as indicated and pull the floppy disk drive module out of its bay.
5. Insert the replacement module into the bay.
6. Make sure it slides into the bay properly and mates firmly with the connector.



**Figure 2-14**

---

## **Write-Protecting Diskettes**

Diskettes can be write-protected to prevent files from being accidentally erased or destroyed by system. 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 diskette). Putting the write protect tab back "down" will enable you to write data on the disk again.

### ***Do's and Don'ts***

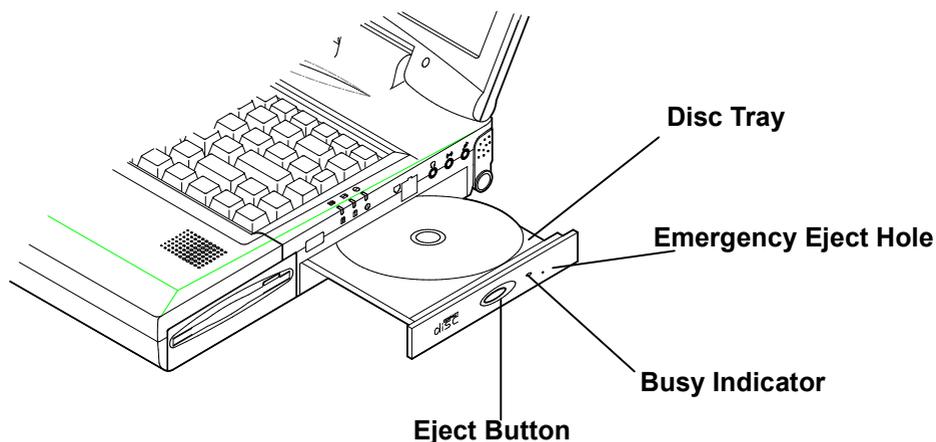
- μ Always make backup copies of your software and data diskettes.
- μ Keep the diskettes away from the magnetic fields.
- μ Do not remove the diskettes from the drive while the diskette "in-use" light is on.
- μ Do not open or remove the protective shutter that covers the diskette's media.
- μ Do not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

---

## **Using the CD-ROM**

The Notebook is equipped with a removable CD-ROM drive module. It is usually designated as drive D by default and may be used as a boot device if properly set in SCU (please refer to Chapter 3, BIOS Utilities). You may replace the CD-ROM drive module with the following options, DVD-ROM drive (of 12.7mm), or the third battery pack.

To insert a CD, press the **Eject Button** and place the CD on the **Disc Tray** with label-side up. The **Busy Indicator** will light up while the data is being accessed or while playing an audio CD. When the power of the system is unexpectedly interrupted, insert an instrument such as a straightened paper clip into the **Emergency Eject Hole** to manually eject the tray.



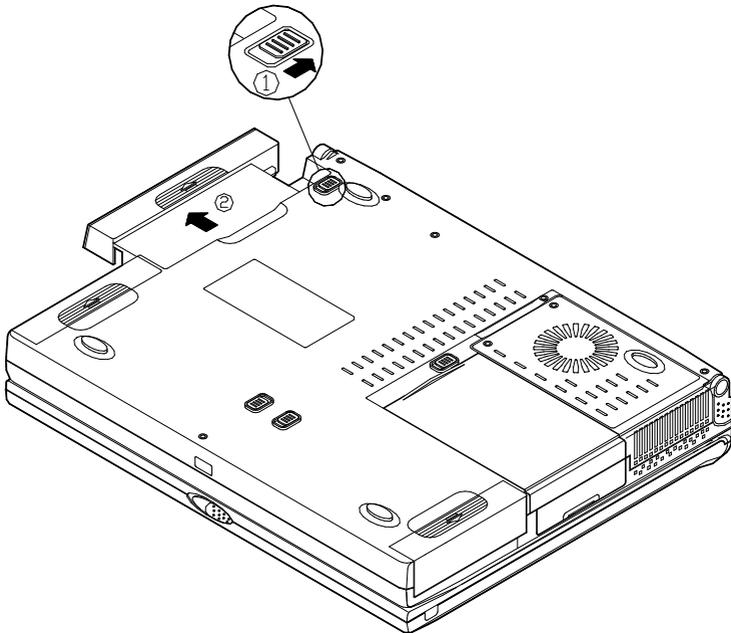
**Figure 2-15**

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## Removing the CD-ROM Module

1. Turn off the power.
2. Turn the Notebook over.
3. Locate the CD-ROM latch (Figure 2-16).
4. Push the latch in the direction as indicated and pull the CD-ROM module out of the bay.

**Note:** Do not disassemble the CD-ROM module by yourself. Only certified technicians should perform repairs to the CD-ROM module.

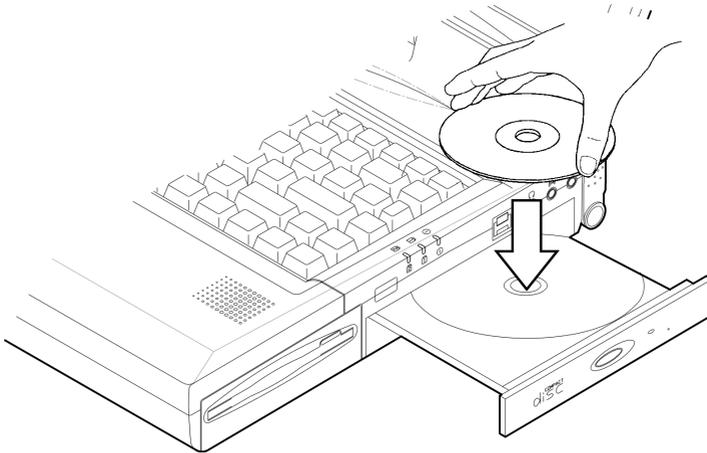


**Figure 2-16**

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## Loading the Compact Discs

1. Turn on the power.
2. Press the CD-ROM eject button; the disc tray will pop out partially.
3. Gently pull the disc tray out.
4. Carefully load the CD on the disc tray with label-side up. Make sure the CD is seated properly.
5. Push the tray into the computer to close it.



**Figure 2-17**

---

## Handling of the Compact Discs

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

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

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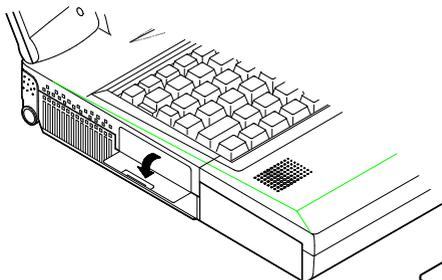
## **Using the PC Card Sockets**

The PC cards can expand the capabilities of the notebook computer. Your Notebook is equipped with two PC card sockets that accommodate one Type III card or two Type II cards. These sockets support both PCMCIA standard release 2.0 cards and 32-bits Cardbus (PC card 95) cards, and so on. PC cards can be LAN, fax/modem, communication devices, or expanded memory ones. These PC card sockets can accept either 3.3V or 5V PC cards.

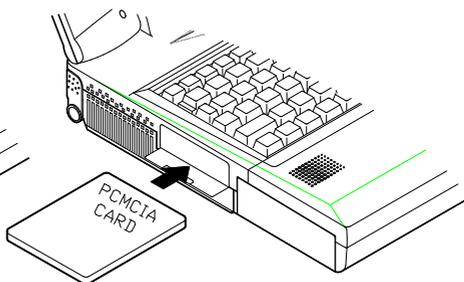
The lower socket named socket A is capable of ZV (Zoomed Video), which allows a direct connection between a PC card and video devices that enables high quality video playback (Figure 2-20).

### **Inserting the PC Cards**

1. Open the access door of the PC card sockets (Figure 2-18).
2. Align the PC card with the appropriate socket and push it in firmly until it locks into place.



**Figure 2-18**

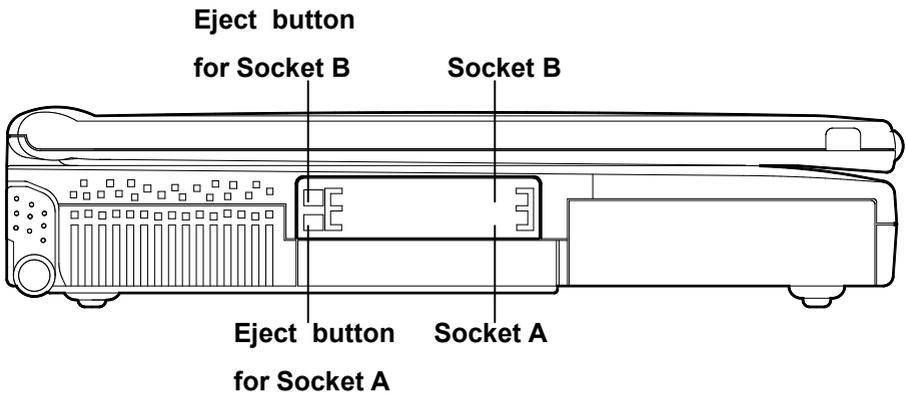


**Figure 2-19**

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## Removing the PC Cards

Two eject buttons are located next to each socket. Press the appropriate eject button to remove the PC card from its socket. (Please refer to Figure 2-20)



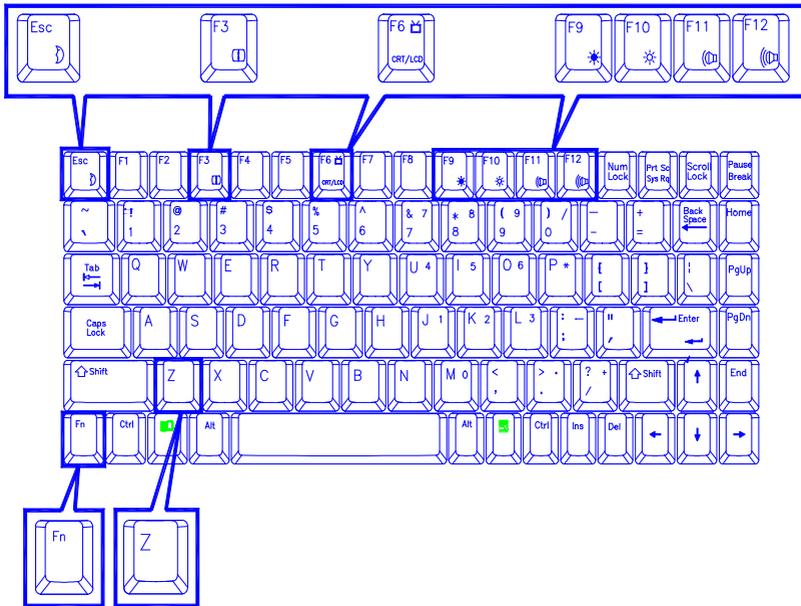
*Figure 2-20*

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## **Using the Hot Keys**

Located on the bottom-left corner of the keyboard layout is a colored **Fn** key (Figure 2-21). It is a special feature designed only on the Notebook for an easy access to system features. Simultaneously press **Fn** key and one of the following keys to execute the specific functions:

<b><i>Hot Key</i></b>	<b><i>System Features</i></b>
<b>Fn+F3</b>	Expand the display of LCD
<b>Fn+F6</b>	Toggle CRT/LCD/LCD+CRT/TV/CRT+TV
<b>Fn+F9</b>	Decrease the brightness of LCD
<b>Fn+F10</b>	Increase the brightness of LCD
<b>Fn+F11</b>	Decrease the audio volume
<b>Fn+F12</b>	Increase the audio volume
<b>Fn+Z</b>	Toggle audio mute on/off
<b>Fn+Esc</b>	Suspend/resume



**Figure 2-21**

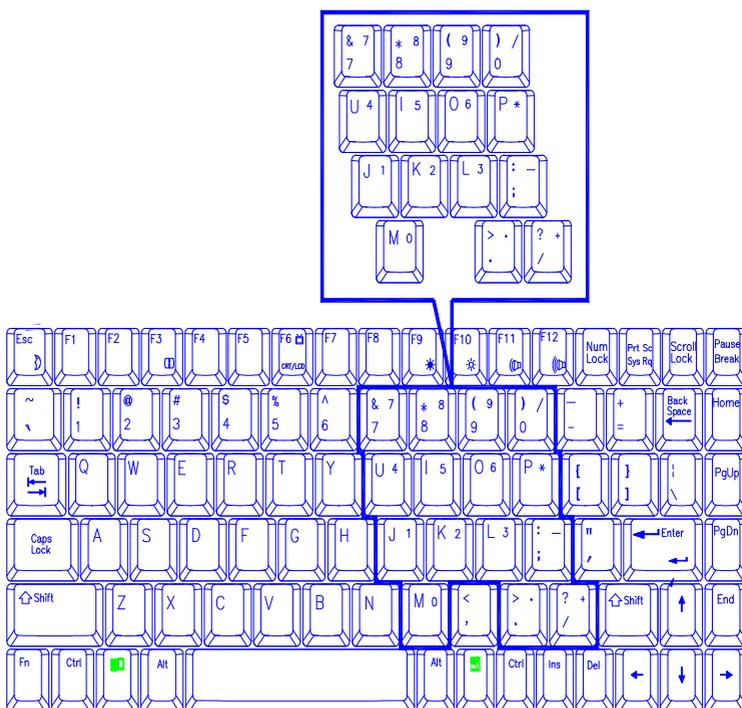
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## Using the Numeric Keypad

The Notebook features an 88-key keyboard with an embedded numeric keypad for numeric data input (Figure 2-22). The colored keys in the middle section of the keyboard will function as a Numeric Keypad. The numeric keypad is engaged when the NumLock LED indicator shines green light.

Follow these steps to access the Numeric Keypad:

- μ Press the **NumLock** Key to activate the Numeric Keypad.
- μ Press the **Fn** key and any colored key together to activate the Numeric Keypad.



**Figure 2-22**

---

## **Using the Power Management**

The Notebook provides you with some built-in power management features to reduce the power consumption without affecting the performance of the system in most application.

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

The Notebook provides built-in Advanced Power Management (APM 1.2) supporting to reduce power consumption. **Some operating systems do not support APM, such as Windows NT, and therefore, cannot take advantage of the system's capabilities in this OS environment.**

---

## Hard Disk Standby

The system will turn off the Notebook's hard disk drive after a specified period of inactivity. The Hard disk drive will be turned back on once the system attempts to read data from it or write data to it. You can adjust the Standby timeout period in the power menu of BIOS utilities

## Global Standby

In Global Standby mode, the CPU clock will be stopped and most of the 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

Under the circumstance of extremely low power, the system will stop all tasks stored them in memory to save the power. This is called Suspend mode. The Suspend Mode features three levels: Powered-On-Suspend (POS) mode, Suspend-To-RAM (STR) mode and Suspend-To-Disk (STD) mode.

**Note:** *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 the wake-up event occurs. This is called Resume.

---

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

In these two suspend modes, Powered-On-Suspend (POS) saves the less amount of power than STD (Suspend to Disk) mode. However, it takes the least time to return to full operation.

### **Resume from POS Mode**

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

- μ Alarm resume (month/day/hour/minute): The system will resume at the specified time.
- μ Modem ring: The system will resume when a modem ring is detected. (COM port only)
- μ Any keyboard key pressed
- μ Depressing the power button (if configured as Suspend/Resume function under SCU)

---

## Suspend To Disk (STD)

Suspend to Disk is a 0-volt suspend mode for system power management. STD mode saves more amount of power than POS mode but takes longer 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 drive A: and run the 0VMAKFIL.EXE Utility to create the Suspend to Disk partition on the hard disk. The size of the Suspend to Disk will accommodate **the installed DRAM (n) plus 4MB integrated video RAM.**

**A:\>0VMAKFIL —Pn**

For example, if the system DRAM is 32MB, 0VMAKFIL will create a partition size of approximately 36MB.

**A:\>0VMAKFIL —P32**

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

**C:\>0VMAKFIL —PW**

3. Use your FDISK program operating system to Re-partition the hard disk.

## Resume from the STD Mode

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

- μ Power back on
- μ Alarm resume (month/day/hour/minute): The system will resume at the specified time.

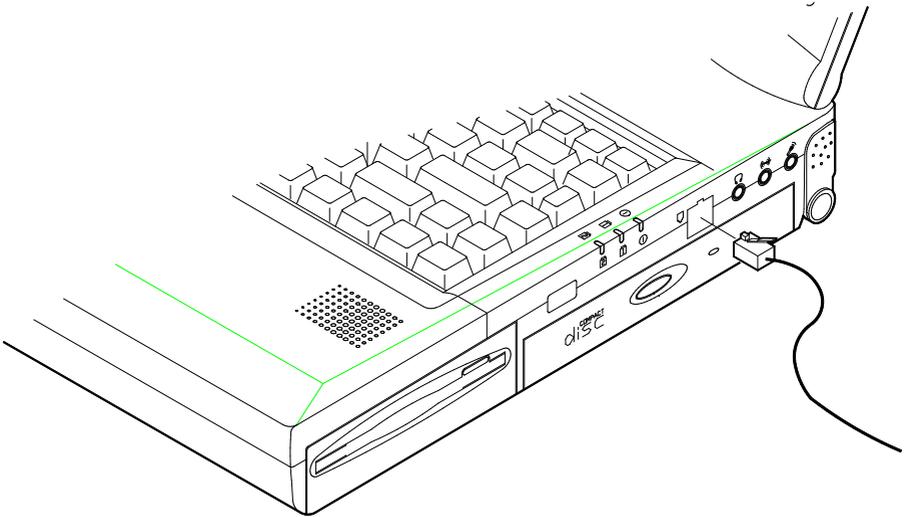
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## **Attaching the Peripheral Devices**

You can add a variety of external devices to your computer to expand your computing capabilities.

### **Attaching a Phone Line (option)**

The notebook is equipped with a phone jack for connecting a phone line. To enable the function of a built-in modem, the users have to insert a modem card (Optional) into the socket on the mainboard and attach a phone cord to the jack.

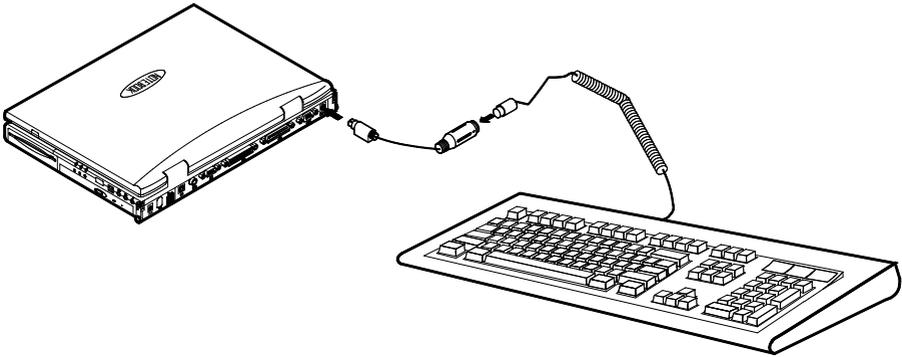


**Figure 2-23**

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## Attaching a PS/2 Keyboard or Mouse

The Notebook can be operated with an external PS/2 keyboard or mouse. Make sure the mouse or keyboard has a cable with 6-pin connector for the PS/2 port. If not, use the transfer cable that comes with your notebook.



**Figure 2-24**

---

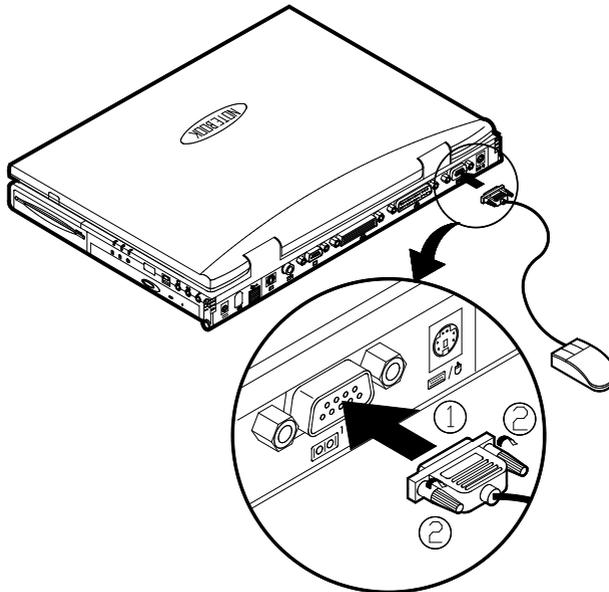
## Attaching a Serial Mouse

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

To connect a serial mouse, follow these steps:

1. Turn the system power off.
2. Connect the cable to the serial port on the rear panel of the Notebook Computer.
3. Tighten the screws to fasten the cable to the serial port.
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 2-25**

---

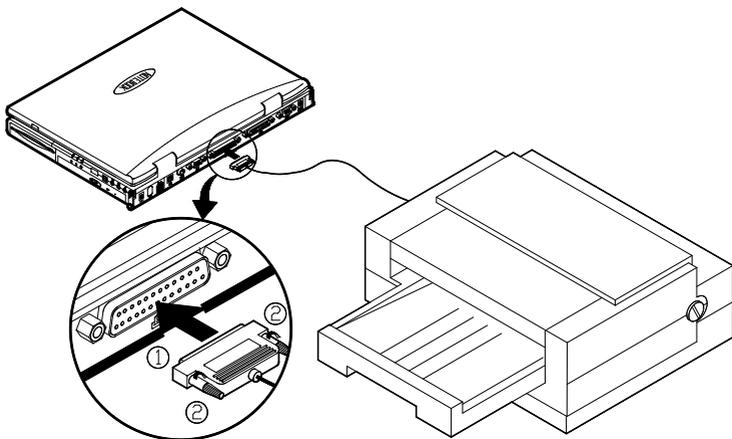
## Attaching a Parallel Printer

You may connect any standard Centronics-compatible parallel printer to your Notebook through the parallel port.

To connect a printer, follow these steps:

1. Turn the system power off.
2. Connect the cable to the parallel port on the rear of the Notebook Computer.
3. Tighten the screws to fasten the cable to the parallel port (Figure 2-26).
4. Insert the other end of the cable to the printer's connector. Fasten the cable's connector.
5. Turn on the printer and Notebook Computer.

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 2-26**

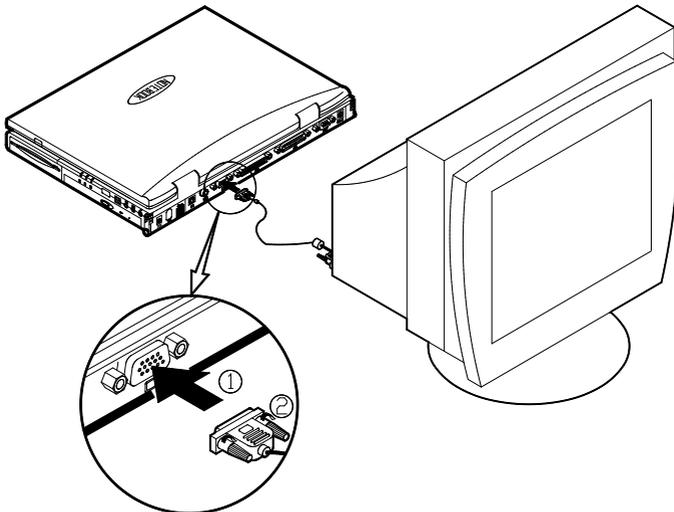
---

## Attaching an External Monitor (CRT)

The computer is capable of displaying not only on the internal LCD, but also on an external XGA display monitor. Simultaneous display on LCD and External monitor is available. You may enter the System Configuration Utility (SCU) to select the appropriate parameters or use the **Fn + F6** keys (refer to *Chapter 2, Using Hot Keys*) to change the display setting.

To connect an External Monitor, follow these steps:

1. Turn the system power off.
2. Connect the cable to the CRT port on the rear panel of the Notebook Computer.
3. Tighten the screws to fasten the cable to the CRT port.
4. Insert the other end of the cable to the external monitor.
5. Turn on the Notebook Computer.

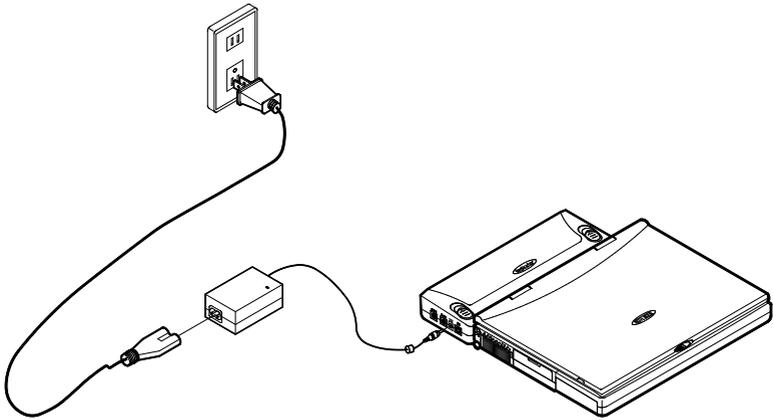


**Figure 2-27**

---

## Attaching a Proprietary Port Replicator

The proprietary Port Replicator provides interfaces for those found on the Notebook system. It can free you from fumbling with multiple cables every time you leave the office. Please contact your dealer for detailed information.

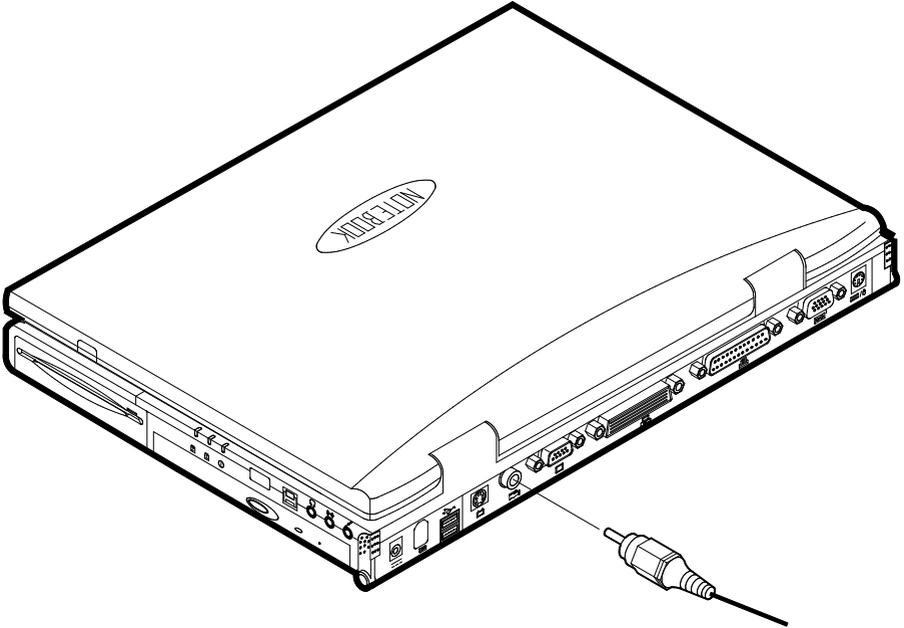


**Figure 2-28**

---

## Attaching a Video Input Device

The RCA jack on the rear panel of the Notebook allows analog composite signal input from external video devices. You can connect a CCD to the RCA jack.



**Figure 2-29**

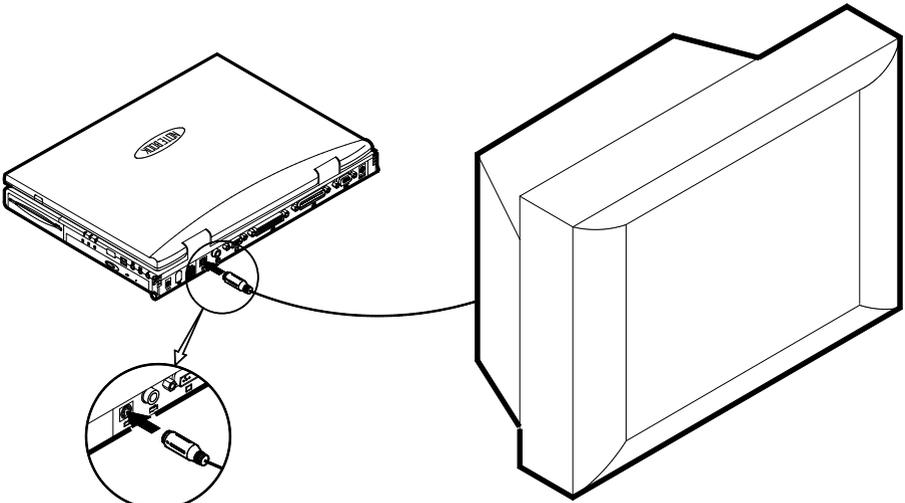
---

## Attaching a TV Set

The S-video jack on the rear panel of the Notebook is used for transmitting video signals to a TV set. You may select the video standard for video display. Enter the System Configuration Utility (SCU), Components Menu to specify the appropriate TV mode. Simultaneous display on external monitor (CRT) and TV is available. You may enter the SCU to select the appropriate parameters or use the **Fn + F6** keys (refer to *Chapter 2, Using Hot Keys*) to change the setting.

See figure 2-32 for information on attaching a TV set.

**Note:** *Different countries use different TV broadcast standards. A TV set must comply with the appropriate standard to properly receive the broadcast signals. You should refer to your TV user guide to make sure which TV standard you are using.*

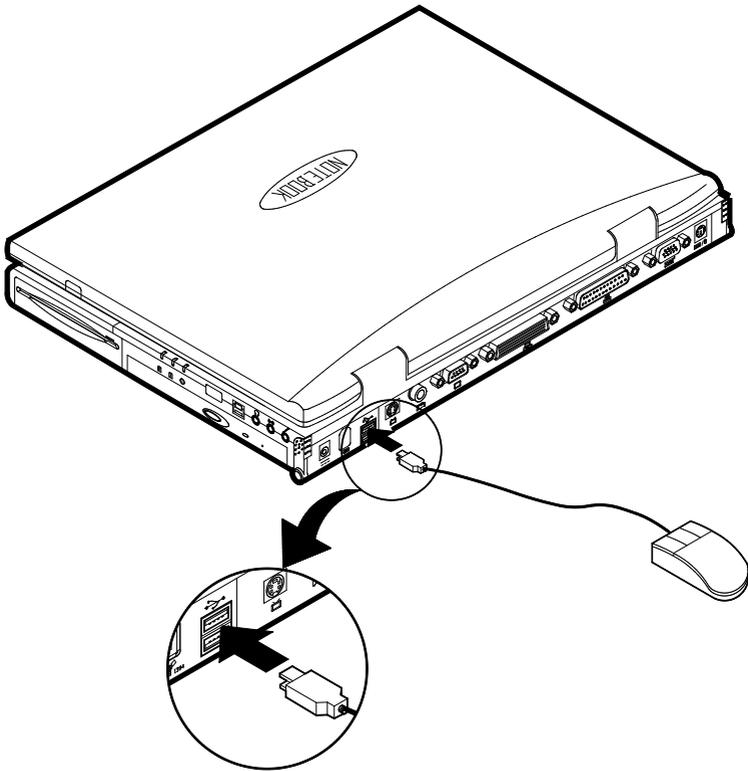


**Figure 2-30**

---

## Attaching a USB-compatible Device

The Notebook provides a USB port for connecting an USB-compatible keyboard, mouse or other devices. See Figure 2-31 for information on connecting a serial mouse.



**Figure 2-31**



---

## ***Chapter 3 : BIOS Utilities***

This chapter provides information regarding the Power On Self Test (POST) and shows you how to use the System Configuration Utility (SCU) to configure the system parameters. The settings made in BIOS SCU will affect the performance of the notebook.



**Power On Self Test (POST)**



**System Configuration Utility (SCU)**

---

## **Power On Self Test (POST)**

The system BIOS (Basic Input/Output System) performs a series of Power On Self Test (POST) on system memory and key computer components when the computer is turned on every time. If an error exists, the POST routine may halt execution (depending on the seriousness of the problem). The POST also initializes BIOS configuration then boots the operating system.

### **POST Message: Normal Operation**

You will see the following message if no error exists after the POST is performed

**Note:** *You may press the Spacebar key to skip the memory test.*

```
AMIBIOS MOBILE '98PCI/PNP
Build-033, 04/12/1999 ALT-5 BIOS-Ver 1.00,
AMD-K6 (tm) -III/400MHz
Checking NVRAM.....
65536KB OK
WAIT.....
Auto-Detecting Pri Master...IDE Hard Disk
Auto-Detecting Pri Slave.....Not Detected
Auto-Detecting Sec Master...ATAPI CDROM
Auto-Detecting Sec Master....Not Detected
E0.03A TOSHIBA MK 3205MAR
Ultra DMA Mode-3
S.M.A.R.T. Capable but Disabled
Sec Master: 1.5A CD-224E
```

---

## POST Message: Error Detected

If an error is detected, a WARNING message will be displayed. You should either press **F1** key to continue, or press the **del** keys simultaneously to enter the System Configuration Utility.

AMIBIOS MOBILE '98PCI/PNP

Build-033, 04/12/1999 ALT-5 BIOS-Ver 1.00,

AMD-K6 (tm) -III/400MHz

Checking NVRAM.....

65536KB OK

Error

Press F1 to Resume

---

## **System Configuration Utility**

The System Configuration Utility (SCU) is a ROM-based configuration utility that displays the system's configuration status and provides users with a tool to set their system parameters. The settings are stored in battery-backed CMOS RAM which saves the information even when the power is turned off, and retains it when the system is turned back on.

### **Information in the System Configuration Utility**

The following shows the main menu and its submenu that may be changed within the System Configuration Utility.

<b>Menu Bar Items</b>	<b>Items</b>
Standard CMOS Setup	Date and Time, Floppy Drive A, and Pri Master.
Advanced CMOS Setup	Quick Boot, 1 <sup>st</sup> Boot Device, 2 <sup>nd</sup> Boot Device, 3 <sup>rd</sup> Boot Device, Initial Display Mode, BootUp Num-Lock, Password Check, Boot To OS/2, Internal Cache, Video In, TV Out Selection and IntelliMouse Support.
Power Management Setup	Power Switch Type, Battery Low Function and Power Savings Type.
PCI/Plug and Play Setup	Plug and Play Award O'S, PCI VGA Palette Snoop and PCI IDE BusMaster.
Peripheral Setup	COMB Port and OnBoard Parallel Port.
Change Supervisor Password	Enter Password.
Auto Configuration with Optimal Settings	Yes, No.
Save Settings and Exit	Yes, No.
Exit Without Saving	Yes, No.

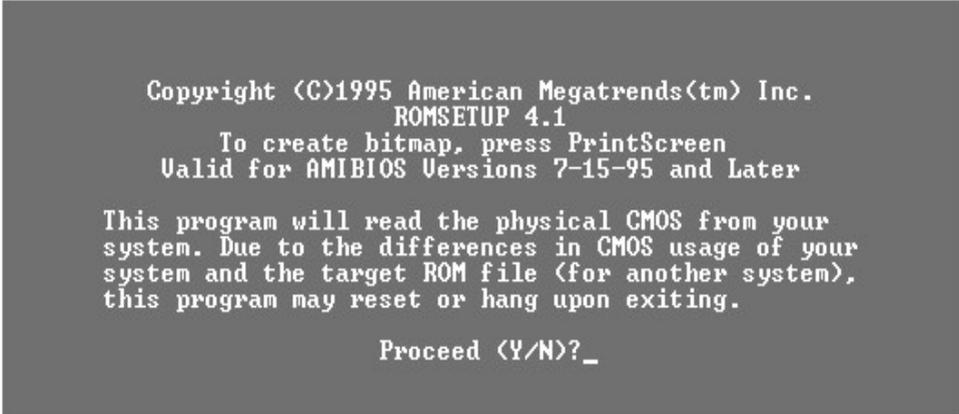
---

## Initiating the System Configuration Utility

The System Configuration Utility (SCU) will be accessed when pressing the **Del** keys simultaneously.

**<Del> to enter System Configuration Utility**

The above message only lasts seconds. If you miss it, the computer will initiate the boot process. You must reboot the system and try again within the time limit if you want to enter the System Configuration Utility.



```
Copyright (C)1995 American Megatrends(tm) Inc.  
ROMSETUP 4.1  
To create bitmap, press PrintScreen  
Valid for AMIBIOS Versions 7-15-95 and Later
```

```
This program will read the physical CMOS from your  
system. Due to the differences in CMOS usage of your  
system and the target ROM file (for another system),  
this program may reset or hang upon exiting.
```

```
Proceed (Y/N)?_
```

**Figure3-1 Enter into System Configuration Utility (SCU)**

---

AMIBIOS HIFLEX SETUP UTILITY - VERSION 1.18  
(C)1998 American Megatrends, Inc. All Rights Reserved

Standard CMOS Setup  
Advanced CMOS Setup  
Advanced Chipset Setup  
Power Management Setup  
PCI / Plug and Play Setup  
Peripheral Setup  
Auto-Detect Hard Disks

Change Supervisor Password

Auto Configuration with Optimal Settings

Save Settings and Exit  
Exit Without Saving

Standard CMOS setup for changing time, date, hard disk type, etc.  
ESC:Exit ↑:Sel F2/F3:Color F10:Save & Exit

**Figure3-2 System Configuration Utility (SCU)**

---

## Working with the Menu Bar (Main Menu)

After entering the SCU, you may use the following keys to work with the menu bar (main menu).

Action	Keys Used	Description
Activate menus	Alt	Activate the System Configuration Utility.
Select menu bar item	Left arrow (←)	Move to a menu bar item on the left.
	Right arrow (→)	Move to a menu bar item on the right.
	The highlighted letter key	Move to the corresponding menu bar item.
Accept menu item	Mouse left button Spacebar Enter	Enter the selected menu bar item to configure settings.
Cancel current action	Mouse right button Esc	Undo the current command.

---

## Working with the Pull-down Menu (Submenu)

When the desired menu bar (main menu) item is highlighted, press the **Enter** key to enter the pull-down menu (submenu) for values setting. You may use the following keys to work with the pull-down menu.

Action	Keys Used	Description
Select pull-down menu item	Down arrow (↓)	Move to the next pull-down menu item.
	Up arrow (↑)	Move to the previous pull-down menu item.
	The highlighted letter key	Move to the corresponding pull-down menu item.
Select a control	Tab	Move between the options.
Change values	Down/Up arrows (↓)(↑)	Modify the settings.
Accept entries	Spacebar	Enable/disable the specified function. When a check mark (√) appears, the function is on.
	Enter	Choose <OK> from a list of options.
Reject entries	Esc	Undo the current setting.
	Enter	Choose <Cancel> from a list of options.
Activate accelerators	Alt	Initiate all the highlighted letters corresponding to their respective options.
Quit	Esc	Press the Esc key to close the pull-down menu.

# Features of the System Configuration Utility

## Standard CMOS Setup

Item	Setting/Option	Function	
Date and Time	Day/Month/Year Hour/Minute/Second	Set the current date and time.	
Floppy Drive A	Not Installed or LS-120 1.44 MB 3 1/2	Configure diskette drives A.	
Pri Master	On	1-46	Predefined types
		USER	Enter Parameters manually
		AUTO	Set parameters automatically on each boot
		CDROM	Use for ATAPI CDROM drives
		ARMD	Use for LS120, MO, Iomega Zip drives
	ENTER	For auto-detect	
	Off	32-bit	32-bit transfer (it will be enabled only if supported by controller)

```

          AMIBIOS SETUP - STANDARD CMOS SETUP
    (C)1998 American Megatrends, Inc. All Rights Reserved

Date (mm/dd/yyyy): Wed Apr 21,1999      Base Memory: 0 KB
Time (hh/mm/ss)  : 10:33:07             Ext'd Memory: 0 MB

Floppy Drive A:  Not Installed

                                LBA  Blk  PIO  32Bit
                                Mode Mode Mode Mode
Pri Master : Not Installed
Pri Slave  : Not Installed
Sec Master : Not Installed
Sec Slave  : Not Installed

Available Options:                ESC:Exit  ↑:Sel
Not Installed                    PgUp/PgDn:Modify
360 KB 5¼                        F2/F3:Color
1.2 MB 5¼
720 KB 3½
1.44 MB 3½
  
```

**Figure3-3 Standard CMOS Setup**

## Advanced CMOS Setup

Item	Setting/Option	Function
Quick Book	Disabled	Initialize and quickly boot the system in a few seconds by skipping certain diagnostic tests.
	Enabled	
1 <sup>st</sup> Boot Device 2 <sup>nd</sup> Boot Device 3 <sup>rd</sup> Boot Device	Disabled	Select one of these drives as the selected choice for the BIOS for booting the system.
	1 <sup>st</sup> IDE-HDD	
	2 <sup>nd</sup> IDE-HDD	
	3 <sup>rd</sup> IDE-HDD	
	Floppy	
	LS-120 ATAPI CDROM	
Initial Display Mode	BIOS	Enter into the standard booting or simplified booting.
	Silent	
BootUp Num-Lock	Off	Specify whether Num Lock is on or off at system boot time.
	On	
Password Check	Setup	Set password for booting computer or modifying SCU.
	BIOS	
Boot To OS/2	No	Go to OS/2 system.
	Yes	
Internal Cache	Disabled	Enable/Disable internal cache memory.
	Enabled	
External Cache	Disabled	Enable/Disable external cache memory.
	Enabled	
Video In	Disabled	Enable/Disable video input function.
	Enabled	
TV Out Selection	NTSC	Specify the TV mode as NTSC, PAL.
	PAL	
IntelliMouse Support	Disabled	Support PS/2 mouse with the wheel button.
	Enabled	

---

AMIBIOS SETUP - ADVANCED CMOS SETUP  
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Quick Boot	Disabled
1st Boot Device	Disabled
2nd Boot Device	Disabled
3rd Boot Device	Disabled
4th Boot Device	Disabled
Initial Display Mode	BIOS
BootUp Num-Lock	Off
Password Check	Setup
Boot To OS/2	No
Internal Cache	Disabled
External Cache	Disabled
Video IN	Disabled
TV Out Selection	NTSC
IntelliMouse Support	Disable

Available Options:  
Disabled  
Enabled

ESC:Exit ↑↓:Sel  
PgUp/PgDn:Modify  
F2/F3:Color

**Figure 3-4 Standard CMOS Setup**

## Power Management Setup

Item	Setting/Option	Function
Power Switch Type	On/Off	Set up the type when press the button.
	Suspend	
Battery Low Function	Disabled	Set up the situation in low battery power.
	Suspend	
Power Savings Type	Disabled	Set up the power saving features.
	Minimum	
	Medium	
	Customized	

AMIBIOS SETUP - POWER MANAGEMENT SETUP (C)1998 American Megatrends, Inc. All Rights Reserved			
Power Switch Type	On/Off	Select 'On/Off' for power on/off system. Select 'Suspend' for suspend system.	
Power Savings Type	Disabled		
CPU Auto Doze Mode	<N/A>		
Standby Time Out	<N/A>		
Suspend Mode	<N/A>		
Suspend Time Out	<N/A>		
DRAM to Disk Auto Time Out	<N/A>		
Display Time Out	<N/A>		
Hard Disk Time Out	<N/A>		
Onboard Audio	<N/A>		
Onboard Peripheral(s)	<N/A>		
Resume Alarm	<N/A>		
Resume Alarm Time	<N/A>		
			ESC:Exit ↑↓:Sel PgUp/PgDn:Modify F2/F3:Color

**Figure3-5 Power Management Setup**

## PCI / Plug and Play Setup

Item	Setting/Option	Function
Plug and Play Aware O/S	No	
	Yes	
PCI VGA Palette Snoop	Disabled	
	Enabled	
PCI IDE BusMaster	Disabled	
	Enabled	

AMIBIOS SETUP - PCI / PLUG AND PLAY SETUP (C)1998 American Megatrends, Inc. All Rights Reserved		
Plug and Play Aware O/S	No	Available Options: No Yes
PCI VGA Palette Snoop	Disabled	
PCI IDE BusMaster	Disabled	
		ESC:Exit   ↑↓:Sel PgUp/PgDn:Modify F2/F3:Color

**Figure3-6 PCI / Plug and Play Setup**

## Peripheral Setup

Item	Setting/Option	Function
OnBoard Serial PORT	Disabled	Select the position of the serial port.
	3F8h	
	2F8h	
	3E8h	
	2E8h	
OnBoard Parallel Port	Normal	Select the position of the parallel port.
	Bi-Dir	
	EPP	
	ECP	

AMIBIOS SETUP - PERIPHERAL SETUP (C)1998 American Megatrends, Inc. All Rights Reserved		
<b>COMB PORT</b>	<b>Disabled</b>	<b>Available Options:</b>
Serial Port2 Mode	N/A	Disabled
Fast IR DMA	N/A	3F8h
OnBoard Parallel Port	Normal	2F8h
Parallel Port DMA	N/A	3E8h
		2E8h
		ESC:Exit ↑↓:Sel
		PgUp/PgDn:Modify
		F2/F3:Color

**Figure3-7 Peripheral Setup**

---

## Change Supervisor Password

Item	Setting/Option	Function
Enter new supervisor password?	Key in password	Set password for modifying SCU. Users are authorized to change the SCU setting after entering correct password.



**Figure3-8 Change Supervisor Password**

---

## Auto Configuration with Optimal Settings

Item	Setting/Option	Function
Load high performance settings?	Yes	Load the BIOS default setting or the best performance.
	No	

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Standard CMOS Setup  
Advanced CMOS Setup  
Advanced Chipset Setup  
Power Management Setup  
PCI / Plug and Play Setup

Load high performance settings (Y/N) ? N

Auto Configuration with Optimal Settings  
Auto Configuration with Fail Safe Settings  
Save Settings and Exit  
Exit Without Saving

Load configuration settings giving highest performance  
ESC:Exit ↑:Sel F2/F3:Color F10:Save & Exit

**Figure3-9 Auto Configuration with Optimal Settings**

---

## Save Settings and Exit

Item	Setting/Option	Function
Save current settings and exit?	Yes	Save the current settings and reboot the system.
	No	

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Standard CMOS Setup  
Advanced CMOS Setup  
Advanced Chipset Setup  
Power Management Setup  
PCI / Plug and Play Setup

Save current settings and exit (Y/N) ? Y

Auto Configuration with Optimal Settings  
Auto Configuration with Fail Safe Settings  
Save Settings and Exit  
Exit Without Saving

Write the current settings to CMOS and exit  
ESC:Exit ↑:Sel F2/F3:Color F10:Save & Exit

**Figure 3-10 Save Settings and Exit**

---

## Exit without Saving

Item	Setting/Option	Function
Quit without saving?	Yes	Exit without saving any current changes.
	No	



**Figure3-11 Exit without Saving**

---

## ***Chapter 4 : Troubleshooting***

Sometimes your computer has some problems. Before you consult the computer vendor, you can try to solve problems yourself. This chapter provides you with a list of some commonly experienced problems and their possible solutions.



**Battery**



**Power**



**Hard Disk Drive**



**Floppy Disk Drive**



**Hardware Installation**



**LCD Panel**



**Memory Module**



**PC Card**



**Boot Password**



**Audio**



**CD**



**Printer**

---

## **Battery**

**Problem:**        *The battery pack can not be charged.*

**Solution 1 :** The battery pack is exposed to excessively hot and cold environment. Let it restore to normal condition before you use it.

**Solution 2 :** The power might be used up.

**Problem:**        *The battery pack can not be charged and the charge indicator turns off.*

**Solution 1 :** The battery has been fully charged.

**Solution 2 :** The battery pack is exposed to excessively hot or cold environment. Let it restore to normal condition before you use it.

**Solution 3 :** The battery pack is used up.

**Problem:**        *The beep sound is heard and the low-battery indicator turns on.*

**Solution :** The computer is in low-battery status. Please connect your computer with AC adapter, or press Fn + Esc key combination to enter suspend mode.

**Problem:**        *The beep sound isn't heard whereas the low-battery indicator turns on, or the gauge indicates power is less than 10%.*

**Solution :** The computer is in low battery status. Please adjust the volume control and connect the computer with AC adapter.

**Problem:**        *The actual battery operation time is shorter than expected.*

---

**Solution 1 :** The battery is exposed to excessively high or low temperature.

The ideal temperature for battery operation is between 50°F and 95°F (10°C and 35°C) whereas keeping is between 32°F and 113°F (0°C and 45°C).

**Solution 2 :** The battery has released some power. Please recharge it.

**Solution 3 :** The power management has been turned off.

**Solution 4 :** Some peripheral device or PC card is consuming power. Turn off the unused device to save power.

**Solution 5 :** The battery has been given a partial charge. When charging, always fully charge after fully discharge.

## **Power**

**Problem: *The computer can not boot when the battery pack is not inserted.***

**Solution 1 :** The power cord is not correctly connected with AC adapter. Make sure the power cord is firmly plugged into grounded outlet and computer.

**Solution 2 :** The grounded outlet is not in normal operation. Check the outlet's function or use other outlet.

**Problem: *The system has automatically entered suspend mode.***

**Solution 1 :** The system's temperature is too high. Let it cool before you use it.

**Solution 2 :** The system has entered suspend mode after a specified period of time. Please press any key or touch the trackpad to wake up

---

the computer.

---

## **Hard Disk Drive**

**Problem:** *The message “Nonsystem disk” appears.*

**Solution :** The computer is trying to boot from the floppy including no software. Please take the floppy out and restart the computer.

**Problem:** *It needs a longer time to read the hard disk drive after restarting the computer.*

**Solution 1 :** The data saved on hard disk drive may be lost. Please operate the “disk defragmenter” to check the lost unit.

**Solution 2 :** As in low battery status, the computer is waking up from the suspend mode.

## **Floppy Disk Drive**

**Problem:** *The floppy disk drive can not write data to disk.*

**Solution 1 :** The floppy is not formatted.

**Solution 2 :** The floppy is write-protected. Please cancel the protection.

**Solution 3 :** The data is written to incorrect disk drive.

**Solution 4 :** The space left on disk is not enough. Please use a new disk or delete the unneeded data.

**Problem:** *The disk drive can not read the disk.*

**Solution 1 :** The disk is not formatted.

**Solution 2 :** The disk is damaged.

**Solution 3 :** An incorrect disk type is used.

---

## **Hardware Installation**

**Problem:**        *The computer can not recognize the device as part of the system.*

**Solution 1 :** The power switch of new device is not turned on. Please turn on the power switch, then restart the computer.

**Solution 2 :** You do not rearrange the computer after the device is installed.

**Solution 3 :** The power cord or the connector between device and computer is plugged out. Please make sure the device is firmly connected with the computer.

**Solution 4 :** You do not follow the system configuration as the computer suggested. Please follow the suggestion.

## **LCD Panel**

**Problem:**        *The font is too dark.*

**Solution :** The brightness or contrast is not correctly set. Please press Fn+F7 or Fn+F8 key combination (only limited to DSTN panel) to adjust the contrast control, and use Fn+F9 or Fn+F10 to adjust the brightness control.

---

**Problem:**        *The screen is blank.*

**Solution 1 :** The panel blank application might be set.

**Solution 2 :** The system operates the screen saver after a specified period of time. Please press any key or touch the trackpad.

**Solution 3 :** The brightness or contrast needs to be adjusted. Please press Fn+F7 or Fn+F8 key combination (only limited to DSTN panel) to adjust the contrast control, and use Fn+F9 or Fn+F10 to adjust the brightness control.

**Solution 4 :** The system has entered suspend mode. Please press any key or touch the trackpad to wake up the computer.

**Problem:**        *The LCD panel displays incorrect font or blinks when the computer is connected with an external monitor.*

**Solution :** The resolution you use for the monitor exceeds that the LCD panel can support whereas you have switched to the LCD panel. Please restart the computer.

## **Memory Module**

**Problem:** *The computer can not boot.*

**Solution :** The incorrect type of memory module is installed.

**Problem:**        *The memory capacity is not enough.*

**Solution :** The memory is not correctly configured for the application.

---

**Problem:**        *The detected memory capacity is not correct.*

**Solution :** Some memory module is not correctly installed or not compatible with your computer.

**Problem:**        *The message “out of memory” is displayed.*

**Solution :** The memory configuration is not correctly set or the memory is not enough to run the application.

**Problem:**        *The message “insufficient memory” is displayed.*

**Solution :** The application can not be operated as the memory is used up.

## **PC Card**

**Problem:**        *The PC card can not be configured.*

**Solution :** The PC card is not supported.

**Problem:**        *The system can not recognize the PC card.*

**Solution 1 :** The PC card is not completely inserted into the socket or inserted in reverse.

**Solution 2 :** The PC card driver is not installed.

**Solution 3 :** The PC card or card driver is not compatible with the computer.

**Problem:**        *The beep sound is not heard while the PC card is inserted into.*

**Solution :** The beep sound control is closed.

---

## **Boot Password**

**Problem:**        *You forget the boot password.*

**Solution :** While forgetting the password, you must unpack the computer and delete the memory. Please ask the vendor for help.

## **Audio**

**Problem:**        *The audio speaker can not be heard.*

**Solution :** The volume might be set too low. Please check your volume control.

**Problem:**        *The volume is too high (or too low).*

**Solution :** The volume is not correctly set. Please check your volume control.

**Problem:**        *The headphone can not be heard.*

**Solution 1 :** The volume is not correctly set. Please check the volume control.

**Solution 2 :** The volume source is not chosen.

**Solution 3 :** The headphone is plugged into the wrong jack.

---

## **CD**

**Problem:**        *The compact disk can not be exited.*

**Solution :** The compact disk is not correctly placed in the tray.

**Problem:**        *The compact disk can not be read.*

**Solution 1 :** The compact disk is not correctly placed in the tray.

**Solution 2 :** The compact disk is dirty. Please clean it with a CD-ROM cleaner kit.

**Problem:**        *The musical compact disk can be read while the data disk can not.*

**Solution :** The compact disk hardware for reading data needs to be checked.

**Problem:**        *All compact disks can not be read.*

**Solution 1 :** The Windows system can not recognize the CD-ROM drive or the CD-ROM drive is not compatible with other devices.

**Solution 2 :** The compact disk is dirty. Please clean it with a CD-ROM cleaner kit.

**Solution 3 :** The compact disk hardware for reading data needs to be checked.

---

# **Printer**

**Problem:**        *The printer can not be set up.*

**Solution :** The printer power cord is not plugged into or the connector is not correctly connected.

**Problem:**        *The printer can not work.*

**Solution 1 :** The printer is not powered on. Please turn on the printer.

**Solution 2 :** The printer is not in “connected” status. Please set the printer in “connected” status.

**Solution 3 :** The printer paper is used up. Please add the paper.

**Solution 4 :** The printer driver is not installed or correctly chosen. Please check the system.

**Solution 5 :** The printer for network is not connected with the network.

**Problem:**        *The printer prints incorrect data.*

**Solution 1 :** The printer driver is not installed or correctly chosen.

**Solution 2 :** The printer power cord is not plugged into or the connector is not correctly connected.

---

## **ATI DVD Play (Optional)**

***Problem:*** *When the DVD station is playing, pressing any (Fn) Hot keys quickly at the same time, the DVD station will stop running in the normal Windows system.*

***Solution :*** Please avoid pressing the Hot key quickly and continuously. For example, when use the Fn key, stopping seconds each time before pressing again. Or go to Windows 95/98, click the icon of volume at the right-bottom corner the voice volume.





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## ***Chapter 5 : Installing Drivers***

This chapter provides users the step-by-step instructions of installing device drivers and utilities. This chapter is designed for notebook beginners as well as advanced users. Please follow the steps and suggestions below to start a new notebook computer work.

Use the CD for drivers in the Package; prepare a DOS startup disk and DOS files before installing drivers for the first.

For more details and operating help, please contact your service dealer.



**Installing Windows 95**



**Installing Windows 98**



**Drivers for Windows 95**



**Drivers for Windows 98**



**Drivers for Windows NT4.0**

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## **Preparation**

### *Preparation for a new notebook:*

1. Use a DOS startup disk to start the Notebook Computer.
2. Run FDISK utility from DOS to create a bootable partition.  
After A: prompt, type fdisk. (A: fdisk) Choose "1" to create hard disk as drive C:  
  
(See DOS manual for the operation detail.)
3. Format hard disk. Follow the command "Format C:/S" to create a bootable hard disk and a bootable floppy disk. (A: format C) (C:/S copies system files to the formatted disk)
4. Copy the file [MSCDEX.EXE] from DOS disk to drive C:
5. Insert the disk of the CD-ROM driver. Type "Install" after A prompt (A: install) See the driver manual for detail.
6. Restart the system

## **Installing Windows 95 (For Reference)**

1. Start DOS.
2. Insert the Windows 95 CD-ROM.
3. Go to the "setup" directory
4. After the directory prompt, type "setup", then press [Enter].

- 
5. After the Windows 95 setup program performs a routine check on your system, press [enter] to continue.
  6. When the “Welcome to Windows 95 Setup” screen appears, click “Continue”.
  7. Click “Yes” on the “License Agreement” screen.
  8. Click “Next” to select “Collecting Information about your computer”.
  9. Click “Next” to select the default of “C:\WINDOWS”, or enter a different directory.
  10. On the screen of “Setup Options”, select “Portable”, then click “Next”.
  11. On the screen of “Certificate of Authenticity”, enter the Product Identification Number, then click “Next”.
  12. On the screen of “User Information”, enter your name and company, then click “Next”.
  13. Analyzing your computer, click “Next”.
  14. Select “Install the most common components (recommended)”, then click “Next”.
  15. On the screen of “Startup Disk”, insert a blank diskette into drive A to create a startup diskette.
  16. The Setup Wizard is now copying files. After the copying is finished, remove the disk, then click “OK”.
  17. Click “Next” to start copying Windows 95 files to your computer.
  18. Click “Finish” to restart Windows 95.
  19. On the screen of “Set Up a Printer”, click “Cancel”.
- Note:** *Do not install a printer at this time. You will not be able to access the Windows 95 Installation CD until you reboot.*
20. Click “OK” to restart the computer.

---

## **Installing Windows 98 (For reference)**

1. Start DOS.
2. Insert the Windows 98 CD-ROM.
3. Go to the “setup” directory, type “setup”, then press [Enter].
4. Follow the instructions on the screen and choose the recommended option.
5. The Windows 98 setup program will check the hard disk drive automatically.
6. When the setup initializes, click “Continue”.
7. Choose “License Agreement” to agree the Contract.
8. Click “Next” to type the product ID number.
9. Click “Next”. The program will automatically check the system.
10. Choose the directory for your computer. Select the path of “C:\Windows”, or type another path.
11. For reinstallation, choose “Yes” (recommended) to keep the files.
12. Select your location.
13. To create a Win98 Startup disk, insert a floppy disk into drive A. To create the startup disk later, choose “Cancel”.
14. Press “Next”. The program will copy files to your computer’s hard disk.
15. At the same time, the screen will show the Win98 concerned information and the setup items one by one.
16. After the automotive setup stops, restart the computer.

---

# **Installing Drivers in Windows 95**

*Note: Under Windows 95, when AMD K6-2-3 processors are above 350MHz, change the Dip-Switch to 300 or 333Mhz before installing driver. After finished installing driver, change the Dip-Switch to the original settings.*

## **Step 1: Run USB supplement**

- μ Open “**Usbsupp**”. Follow the instruction dialogue on the screen.
- μ Click “**Yes**” to **install Microsoft USB supplement to your system**.
- μ Click “**Yes**” and “**Ok**” to restart the system.

## **Step 2: Installing ALi 16B2 Chip**

- μ Run the chip “**Ali16b2**” from the path of CD-ROM Drive.
- μ Follow the instruction. Click “**Next**”, “**Yes**” and “**Ok**”.

## **Step 3: Installing ALi Power Management**

- μ Run the chip Ali-agp\“**7101-010**” from the path of CD-ROM Drive.
- μ Follow the instruction. Click “**Next**”, “**Yes**” and “**Ok**”.

## **Step 4: Installing Audio Driver**

- μ From the disk for driver, find the audio driver for Windows 95.
- μ Open the file “**Audio\_W9x**” \ “**457**”.

- 
- μ Run “**Setup**”
  - μ Double click “**Next**” to update the driver.
  - μ Choose “**Yes**” for choosing PCI Multimedia Audio Device.
  - μ Click “**Finish**”
  - μ Click “**Next**” to search for the device.
  - μ Click “**Next**”.
  - μ Specify a location as CDROM Drive:\WINDOWS\Options\lcabs.
  - μ Double click “**Next**” and press “**Finish**”
  - μ Insert Windows 95 CD-ROM and click “**OK**”.
  - μ Specify the location of Win95 program and click “**OK**”.

## Step 5: Installing VGA Driver

- μ From the driver disk, find out the file and open, “**Ati\_vga**”.
- μ Click “**vga\_win9x**”, “**523c47j**” and choose “**Disk1**”.
- μ Click “**Setup**”, “**Finish**” and “**OK**” to install the first disk.
- μ Next copy the file from the Disk2 so you have to change the directory from Disk1 to Disk2 (\vga\_win9x\523c47j\disk2) and click “**OK**”.
- μ Restart the computer and click yes.
- μ Thus, the installation has finished.
- μ After restarting, check the VGA resolution.
- μ Click “**My computer**”[]“**Control Panel**”[]“**Display**”[]“**Settings**”.  
Change the resolution from 640 to 1024 by 768 pixels.(recommended)

## Step 6: Installing PCMCIA Driver

- μ Copy the file from driver disk, Pcmcia.w95\Pcmcia.inf to the hardisk drive c:\WINDOWS\inf/. Click “**Yes**” to update.
- μ Copy the file **Cbss.vxd**, **Pccard.vxd** and **Pci.vxd** to the directory,

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**windows\system\**. Click **“Yes”** to update.

- μ Under Windows95, open **“My Computer”** **»** **“Control Panel”** **»** **“System Properties”** **»** **“Device Manager”**
- μ Click **PCMCIA Socket**. Click **“Remove”** and **“Ok”** and delete the two sub-directories **“Generic CardBus Bridge”**. Click **“Ok”** and **restart** the computer.
- μ After restarting, the system will automatically detect **“New Hardware Found”**. Double click **“Next”/No** and click **“Finish”**.
- μ Replace the Windows 95 CD-ROM; specify the location of windows program and restart.

## Step 7: AMD Updated Files

- μ Run the chip **“Amdk6upd”** from the path of CD-ROM Drive.
- μ Follow the instruction. Click **“Yes”** and **“Ok”** to update the file and restart the system.
- μ Change the Windows 95 CD-ROM and specify the location of windows. Click **“Ok”**. Choose **“Yes”** to keep the files.

## Step 8: Using Infrared Wireless Communication

- μ Under Windows95, open **“My Computer”** **»** **“Control Panel”** **»** **“System Properties”** **»** **“Device Manager”**.
- μ Choose **“Ports”** **»** **“COM Port (COM2)”**. Click **“Remove”**, **“Ok”** and **“Refresh”**.
- μ Specify the location from the driver CD:\SMC1.2. Click **“Ok”**, **“Finish”** and **“Close”**. Restart the system.
- μ Go to **“My Computer”** **»** **“Control Panel”** **»** **“System Properties”** **»** **“Device Manager”** **»** **“Ports”**.

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μ To update the driver, choose **“Driver”** ▯ **“Update Driver”** ▯ **“Next”**.

---

# **Installing Drivers in Windows 98**

## **Step 1: Installing AGP Driver**

- μ Find the AGP driver from the disk.
- μ Click the icon, "**Aliagp15**" and run "**Setup**".
- μ Click "**Next**".
- μ Press "**Yes**" to restart the computer.
- μ Click "**Ok**" to finish installation.

*Note 1: Have to install AGP driver firstly before any other driver installed.*

*Note 2: Install the driver in the driver order of AGP, Audio, VGA and PCMCIA.(recommended)*

## **Step 2: Installing Audio Driver**

- μ From the disk for driver, find the audio driver for Windows 98.
- μ Open the file "**Audio\_W9x**"\ "**457**".
- μ Run "**Setup**"
- μ Double click "**Next**" to upgrade the driver.
- μ Choose "**Yes**" for choosing PCI Multimedia Audio Device.
- μ Click "**Finish**"
- μ Click "**Next**" to search for the device.
- μ Click "**Next**".
- μ Specify a location as CDROM Drive:\ **WINDOWS**\ **Options**\ **cab**s.
- μ Double click "**Next**" and press "**Finish**"
- μ Insert Windows 98 disk to the CDROM drive and click "**Ok**".
- μ Copy the files from the CDROM Drive \ Win98 and click "**Ok**".
- μ Replace the Windows98 disk with the driver disk.

---

## Step 3: Installing VGA Driver

- μ From the driver disk, find out the file and open, "**Ati\_vga**".
- μ Click "**vga\_win9x**", "**523c47j**" and choose "**Disk1**".
- μ Click "**Setup**", "**Finish**" and "**Ok**" to install the first disk.
- μ Next copy the file from the Disk2 so you have to change the directory from Disk1 to Disk2 (\vga\_win9x\523c47j\disk2) and click "**Ok**".
- μ Restart the computer and click yes.
- μ Thus, the installation has finished.
- μ After restarting, check the VGA resolution.
- μ Click "**My computer**"[]"**Control Panel**"[]"**Display**"[]"**Settings**". Change the resolution from 640 to 1024 by 768 pixels.(recommended)

## Step 4: Installing PCMCIA Driver

- μ Copy the PCMCIA file to the hardisk drive **c:WINDOWS/inf/**. Click "**Yes**" to update "**Pcmcia.w98**" and restart.
- μ Under Windows98, open "**My Computer**"[]"**Control Panel**" []"**System Properties**"[]"**Device Manager**"
- μ Click **PCMCIA Socket**. Click "**Remove**" and "**Ok**" and delete the two sub-directories "**Generic CardBus Controller**". Click "**Ok**" and **restart** the computer.
- μ After restarting, the system will automatically detect "**New Hardware Found**". Double click "**Next/No**" and click "**Finish**".
- μ Replace the Windows 98 CD-ROM drive; specify the location of windows program and restart.

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# **Installing Drivers in Windows NT 4.0**

**Note:** After installing Windows NT4.0, please install Service Pack3 to enhance the function. Download the latest Service Pack3 version from the Microsoft web site.

## **Step 1: Installing Audio Driver**

- μ Open “**My Computer**”[]“**Control Panel**” []“**Multimedia**”[]“**Devices**”.
- μ Choose “**Multimedia Devices**” [] “**Unlisted or updated Driver**” [] “**Add**”. Click “**Ok**” and “**Browse**”; specify the directory from driver disk: \Audio.no\40225”. Click “**Ok**” to finish installing “ESS Audio Drive M2/M2E 4.02.25”.
- μ Restart the system.

---

## Step 2: Installing VGA Driver

- μ Click **“My computer”** **“Control Panel”** **“Display”** **“Settings”**.
- μ Choose **“Display Type”** **“Change”** **“Have Disk”** **“Browse”**
- μ Specify the location as: **\\Ati-vga\vga\_nt\534-b12\Disk1**. Browse the location again but change the directory Disk1 to Disk2 as: **\\Ati-vga\vga\_nt\534-b12\Disk2**.
  1. From the driver disk, find out the file and open, **“Ati\_vga”**.
  2. Click **“vga\_nt”**, **“534-b12”** and choose **“Disk1”** **“Nt40”** **“atirage”**.
  3. **Open** the file; click **“Ok”** and choose **“ATI 3D RAGELT PRO AGP 2X”**.
  4. Click **“Ok”**, **“Yes”**, **Ok**, **“Close”** and **“Yes”**. Restart the system, pressing **“Ok”**.
- μ After restarting, change the display resolution.
- μ Go to **“My computer”** **“Control Panel”** **“Display”** **“Settings”**. Change the display resolution into **1024 by 768 pixel**. Click **“Test”** and see whether the bitmap is properly. If yes, click **“Yes”**, **“Apply”**, **“Ok”**. Thus, the test has finished.

*Note: The VGA driver will be failed to install when Service Pack3 is not installed.*





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# **Appendix A: Specifications**

The following are the features and specifications of the notebook computer:



## **Processor**

- AMD MMX-Enhanced Processor:K6-233/266/300MHz; K6-2-266/300/333MHz and K6-ST-350MHz



## **Memory**

- Supports 3.3V EDO/SDRAM SODIMM
- Expandable memory up to 256MB
- Two sockets for 8/16/32/64/128MB 144-pin SODIMM RAM modules.



## **System BIOS**

- 256KB Flash ROM
- SystemSoft BIOS with smart battery
- Plug and Play 1.0a



## **Display**

- 13.3"/14.1" TFT XGA LCD panel
- 4MB display memory SGRAM type (100MHz)
- Tri-view™ for triple display, TV, CRT & LCD.
- AGP 2X
- Complete 64-bit hardware 2D/3D Accelerator Graphics Engine

- 
- Motion Compensation
  - High quality TV-out with Macro Vision® V7.01 anti-copy technology.
  - Support TFT panel resolution up to 1024X768X16M.
  - Support CRT resolution up to 1280X1024X16M
  - Support TV resolution 1024X768.
  - Support ZV port.
  - Support external Video Input.



### **Storage**

- 3.5" Floppy disk drive
- 2.5" hard disk drive (12.7 or 17mm high)
- DVD-ROM/CD-ROM (24X speed)
- Support Master mode IDE, PIO mode 4 and ATA-33 (Ultra DMA33)



### **Audio**

- Sound-Blaster Pro™ version 3.01 compatible
- AC 97 compliant
- 3D stereo enhancement sound system
- IIS interface for external ZV port
- Built-in microphone
- 2 built-in speakers
- Downloadable Wavetable
- High-quality FM music synthesizer 16-bit stereo sound system



## **PC Card Sockets**

- Support CardBus (PC Card95)
- Support Zoom Video Port (Socket A)
- Two Type II PC cards or one Type III PC card



## **Input/Output**

- Built-in trackpad (PS/2)
- Dual USB ports
- One Fast Infrared( FIR)
- One S-video jack for TV output
- One 176-pin expansion port for Port Replicator
- One RCA jack for video input
- One External monitor (CRT) port
- One Serial port
- One Parallel port(LPT1), support ECP/EPP 1.7 and 1.9
- One PS/2 type ports
- One Speaker-out jack
- One Line-in jack
- One Microphone jack
- One RJ-11 jack for PCI PnP Modem Accessory or RJ-45 for ISDN Accessory (Option)
- DC-in jack



### **Infrared Wireless Communication**

- IrDA 1.1
- FIR
- ASKIR



### **Power Management**

- Support APM v1.2
- Soft Off
- Support suspend to disk
- Battery low suspend
- Resume from alarm time
- Resume from modem ring (COM Port only)



### **Power**

- AC input: 100~240V, 47~63Hz
- Support dual pack, removable Lithium-Ion Battery (48.6 watt ) or Ni-MH Battery (45.6 watt)



### **Size**

- 316mm(w)x256mm(d)x47mm(h)



### **Keyboard**

- A4-Size Win95 keyboard included numeric keypad.

## Appendix B: I/O Port Pin Assignments

### Parallel Port

Pin	Description	Pin	Description
1	PSTB#	2	PD0
3	PD1	4	PD2
5	PD3	6	PD4
7	PD5	8	PD6
9	PD7	10	PACK#
11	PBUSY	12	PPE
13	PSLCT	14	PATFD#
15	PPERR#	16	PINIT#
17	PSLIN#	18	Ground
19	Ground	20	Ground
21	Ground	22	Ground
23	Ground	24	Ground
25	Ground		

### RS-232C Serial Port

Pin	Description
1	DCDA (DATA Carrier Detect)
2	RXDA (Received Data)
3	TXDA (Transmitted Data)
4	DTRA (Data Terminal Ready)
5	GND (Signal Ground)
6	DSRA (Data Set Ready)
7	RTSA (Request To Send)
8	CTSA (Clear To Send)
9	RIA (Ring Indicator)

**External Monitor Port**

<b>Pin</b>	<b>Description</b>
1	BRED
2	BGREEN
3	BBLUE
4	N.C
5	GND
6	GND
7	GND
8	GND
9	N.C
10	GND
11	N.C
12	DDCDA
13	DHSYNC
14	DVSYNC
15	DDCLK

**PS/2 Type Port**

<b>Pin</b>	<b>Description</b>
1	EKDA
2	EMCLK
3	GND
4	VCC
5	EKCLK
6	EMDA

**S-Video Jack**

<b>Pin</b>	<b>Description</b>
1	GND
2	COMP
3	XLUMA
4	XCRMA

**USB Port**

**Port A:**

<b>Pin</b>	<b>Description</b>
1	USB VCCA
2	USBP0-
3	USBP0+
4	GND

**Port B:**

<b>Pin</b>	<b>Description</b>
1	USB VCCB
2	USBP1-
3	USBP1+
4	GND

**PC Card Sockets**

**Socket A:**

<b>Pin</b>	<b>Description</b>	<b>Pin</b>	<b>Description</b>
1	GND	35	GND
2	A CD3	36	A CD1#
3	A CD4	37	A CD11
4	A CD5	38	A CD12
5	A CD6	39	A CD13
6	A CD7	40	A CD14
7	A CE1#	41	A CD15
8	A CA10	42	A CE2#
9	A OE#	43	A VS1
10	A CA11	44	A IORD#
11	A CA9	45	A IOWR#
12	A CA8	46	A CA17
13	A CA13	47	A CA18
14	A CA14	48	A CA19
15	A WE#	49	A CA20
16	A RDYBY#	50	A CA21
17	A VCC C	51	A VCC C
18	A VPP	52	A VPP
19	A CA16	53	A CA22
20	A CA15	54	A CA23
21	A CA12	55	A CA24
22	A CA7	56	A CA25
23	A CA6	57	A VS2
24	A CA5	58	A RESET
25	A CA4	59	A WAIT#
26	A CA3	60	A INPACK
27	A CA2	61	A REG#
28	A CA1	62	A BVD2#
29	A CA0	63	A BVD1#
30	A CD0	64	A CD8
31	A CD1	65	A CD9
32	A CD2	66	A CD10
33	A WP#	67	A CD2#
34	GND	68	GND

**Socket B:**

<b>Pin</b>	<b>Description</b>	<b>Pin</b>	<b>Description</b>
1	GND	35	GND
2	B CD3	36	B CD1#
3	B CD4	37	B CD11
4	B CD5	38	B CD12
5	B CD6	39	B CD13
6	B CD7	40	B CD14
7	B CE1#	41	B CD15
8	B CA10	42	B CE2#
9	B OE#	43	B VS1
10	B CA11	44	B IORD#
11	B CA9	45	B IOWR#
12	B CA8	46	B CA17
13	B CA13	47	B CA18
14	B CA14	48	B CA19
15	B WE#	49	B CA20
16	B RDYBY#	50	B CA21
17	B VCC C	51	B VCC C
18	B VPP	52	B VPP
19	B CA16	53	B CA22
20	B CA15	54	B CA23
21	B CA12	55	B CA24
22	B CA7	56	B CA25
23	B CA6	57	B VS2
24	B CA5	58	B RESET
25	B CA4	59	B WAIT#
26	B CA3	60	B INPACK
27	B CA2	61	B REG#
28	B CA1	62	B BVD2#
29	B CA0	63	B BVD1#
30	B CD0	64	B CD8
31	B CD1	65	B CD9
32	B CD2	66	B CD10
33	B WP#	67	B CD2#
34	GND	68	GND

