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Warranty service will be furnished on an exchange basis. The manufacturer may repair or replace your product with a new or reconditioned one. Any replaced components or parts become the property of the manufacturer.

No warranty is expressed or implied for products damaged by accident, abuse, misuse, acts of god, or unauthorized modification. No warranties apply after the one-year warranty period.

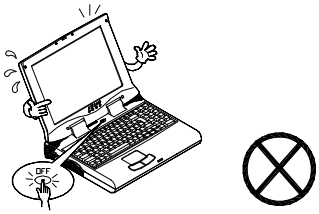
To obtain warranty service described herein, deliver the product along with proof of purchase date, to any of the manufacturer's authorized distributors during the warranty period. The owner agrees to insure the product and assume the risk of damage or loss in transit, to pay in advance all shipping charges, and to use the original shipping container (or the equivalent).

The manufacturer is not liable to any purchaser or end-user for any damages including, but not limited to, lost revenue, lost wages, lost savings, or any other incidental or consequential damages arising from the purchase, use, or inability to use this product.

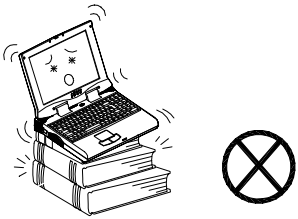
Safety Notice

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

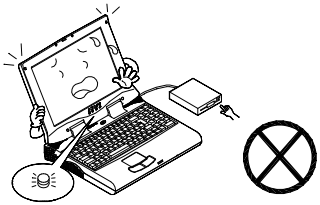
Do not turn off power in operation.



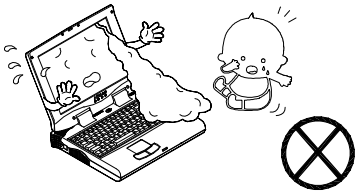
Do not place the computer on unstable surface.



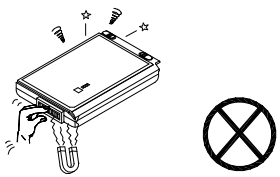
Do not turn off the peripheral device when the light is on.



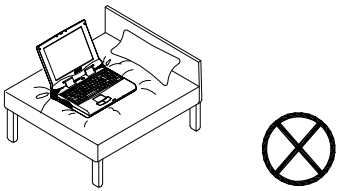
Do not touch the poisonous liquid when the LCD panel is broken.



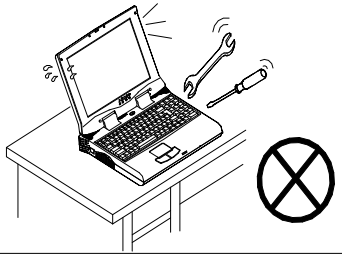
Do not touch the battery's contact plate with hands or metal objects.



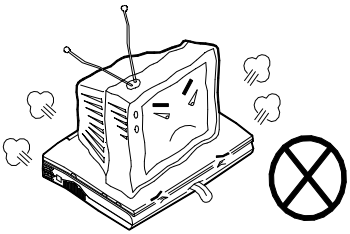
Do not put the computer on surfaces that can block the ventilation.



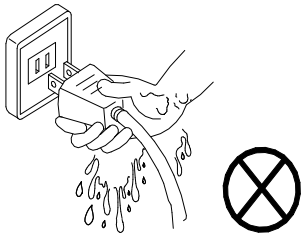
Do not disassemble the computer yourself.



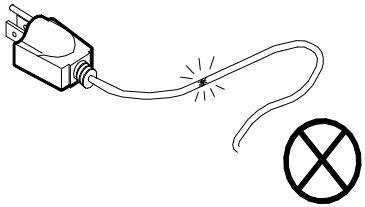
Do not place anything heavy on the computer.



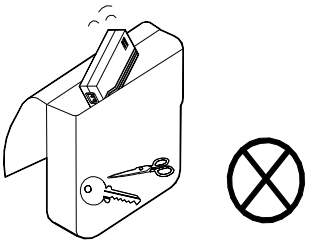
Do not touch power cord by wet hand.



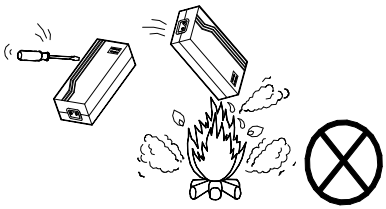
Do not use broken power cord.



Keep the computer away from any metal appliance.

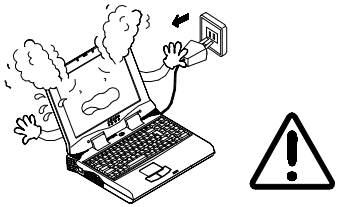


Do not throw the computer or accessories into fire.

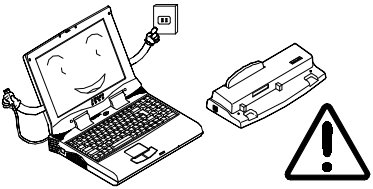


The following mentions the actions that are important for your computer. To keep your computer in the most excellent condition, please follow the instruction as much as possible.

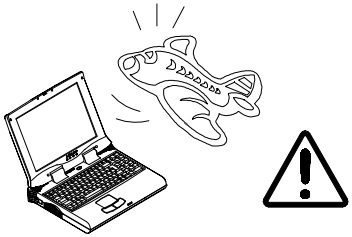
If there is unusual odor, heat or smoke, plug out the power cord.



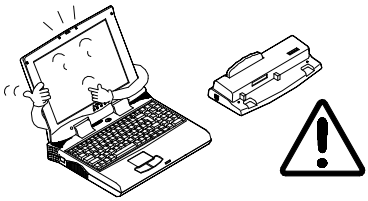
Plug out the power cord in attaching peripheral devices.



Follow the use instruction in taking airplane.

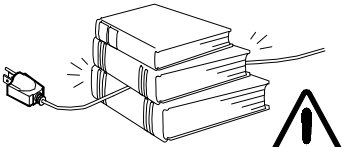


Use the same brand of peripheral devices.

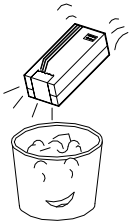


Maintain your computer regularly.

Do not place heavy thing on the power cord.



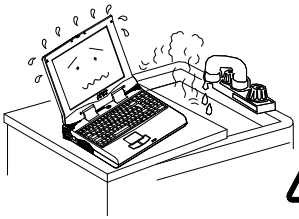
Affix tape to the contact plate while putting the battery into keeping box.



Take a rest after a long term of work.

The data is easy to lose in low power status.

Please keep the computer away from humid environment.



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 height of the chair and/or desk so that the keyboard is at or slightly below the level of your elbow. 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 eye strain and muscle fatigue in your neck and shoulders.

- Position the display to avoid glare or reflections from overhead lighting or outside sources of light.
- 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.

Table of Contents

Chapter 1 : Getting Started

This chapter provides you with the short instruction of notebook computer system that will help you to get the basic understanding about the computer.

- Unpacking
- Operating Environment
- Powering the System
  - AC Power Adapter
  - Battery Pack
- Opening the LCD Cover
- Top-Front View
- Rear View
- Right-side View
- Left-side View

: *Unpacking*

Carefully unpack the notebook computer and the included accessories (Figure 1-1). Check the items one by one. If there is something wrong, contact your dealer immediately.

- Notebook Computer.
- Carrying Bag.
- Power Adapter.
- Power Cord.
- User Manual.
- PS/2 Transfer Cable.
- Battery Pack.
- Utilities Diskette(s).

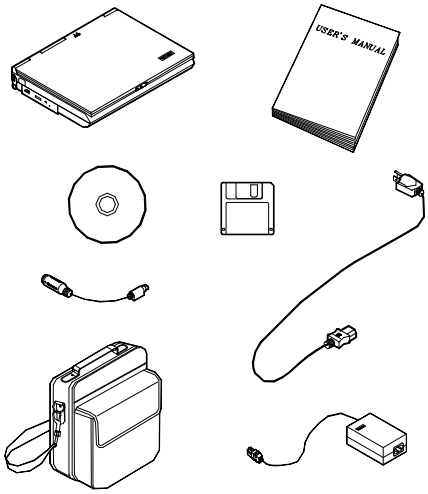


Figure 1-1

: *Operating Environment*

As with any other precision electronic equipment, proper care and operation of your computer will prolong the use period. Make sure the computer is not:

- Exposed to excessively heat or direct sunlight.
- Shocked or vibrated.
- Exposed to strong magnetic fields.
- Left in a place where foreign matter or moisture may affect the system.

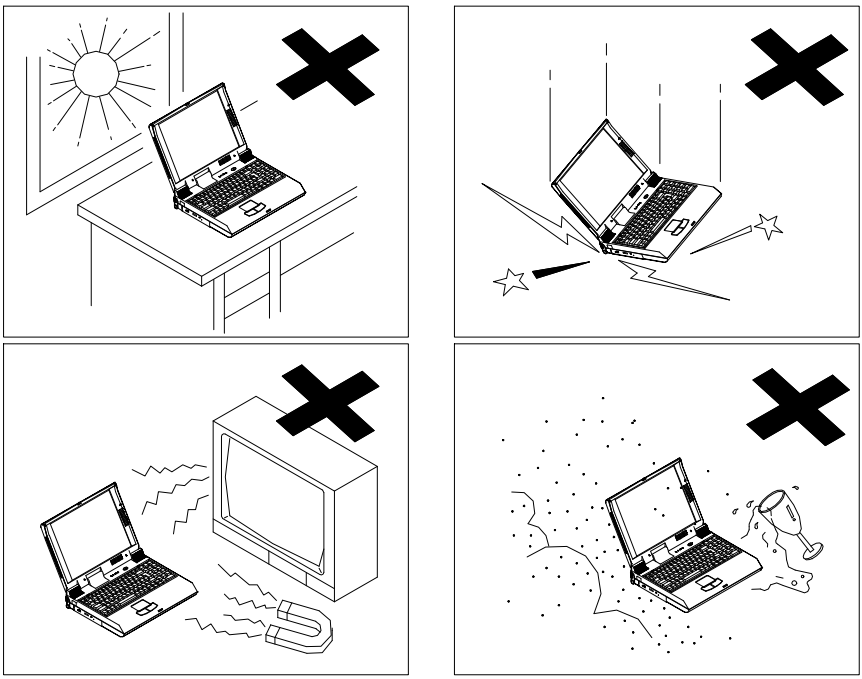


Figure 1-2

: *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 computer. An incorrect type of power adapter will cause damage to the computer and its components.

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

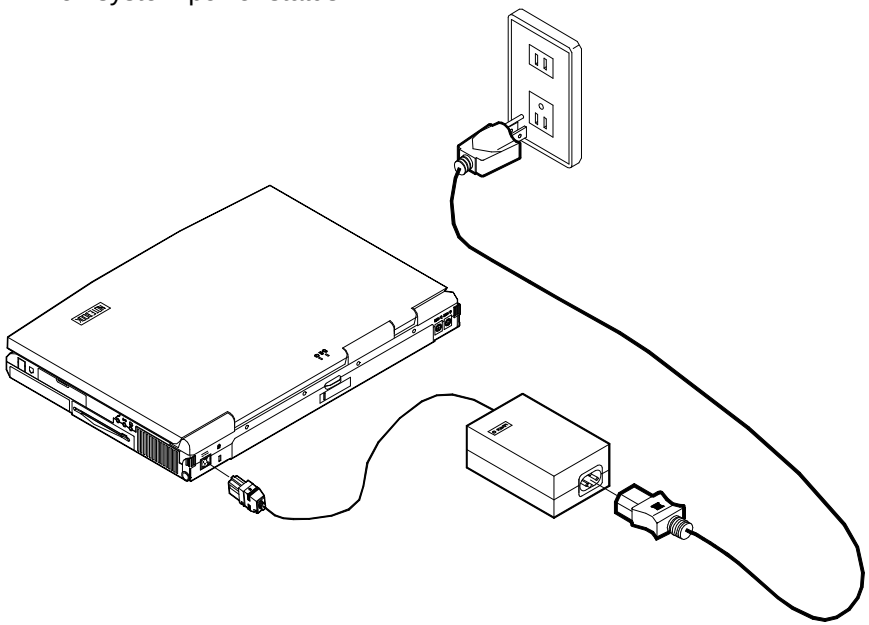


Figure 1-3

Battery Pack

The battery pack provides power for continuous portable operation of the computer. When using the battery no external power source is required. The actual operation time is related to the application and the configuration you're using.

Inserting

1. Turn the computer over.
2. Fit the battery pack firmly at a slight angle into the computer.
3. Install the four screws to fasten the battery pack (Figure 1-4).

Removing

1. Turn the computer over.
2. Remove the four screws that fasten the battery pack.
3. Carefully lift the battery pack from the computer.

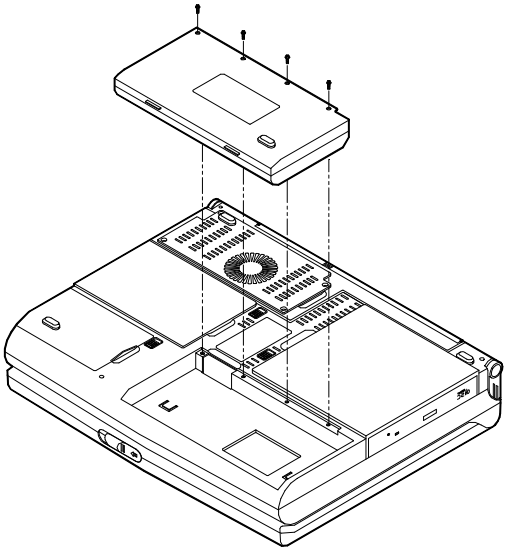


Figure 1-4

Recharging by AC Power

The battery pack can be recharged when the computer is connected with the AC power supply, no matter the system is in operation or not.

- Connect the computer with the AC power supply to begin recharging the system's battery pack. You do not need to turn off the system's power.
- Hours may be needed to recharge the battery pack.
- Please refer to Chapter 1, System Status LED Indicators for more information on battery charge status.

Proper Handling of the Battery Pack

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

: *Opening the LCD Cover*

1. Move the latch to the right to release the top cover. (Figure 1-5).
2. Lift the top cover to reveal the LCD panel and keyboard (Figure 1-6).
3. Adjust the LCD panel to a comfortable viewing angle.
4. Press the power button to turn the system on or off (refer to Chapter 1, Top-Front View for more information of the power button).

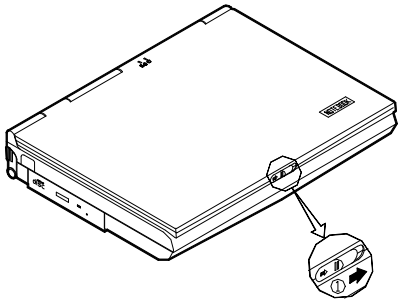


Figure 1-5

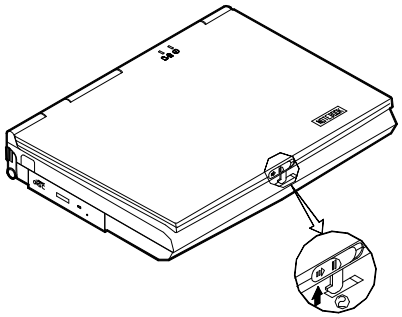


Figure 1-6

LED Indicators on the LCD Cover

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

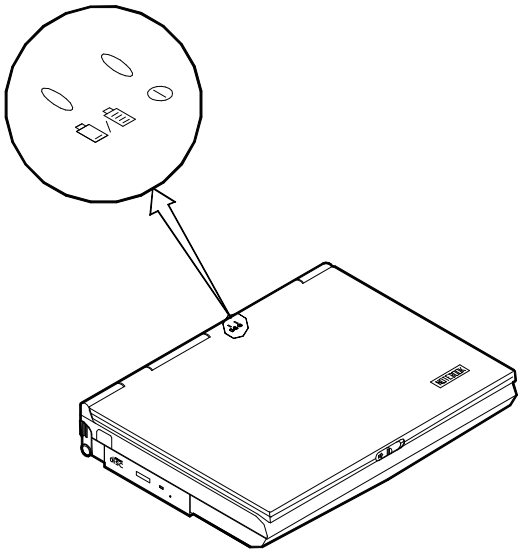


Figure 1-7

: *Top-Front View*

LCD Panel

The computer provides you with a large LCD panel. Depending on the model you have purchased, it can either be a 15.1" or 15.0" TFT flat panel The LCD panel is driven by a AGP bus video controller with 8 MB video memory.

Stereo Speakers

Two built-in speakers provide clear stereo sound.

Trackpad and Buttons

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

Keyboard

The computer features a 102-key Windows 95 keyboard that is integrated with the numeric keypad. It is detachable for various language versions. You may refer to Chapter 2: Operation for more information.

Microphone

This is the built-in microphone.

System Status LED Indicators

The LED indicators display the system's operation status.

Icon	Color	Description
	Green	Battery power is used with system turned on.
	Red	AC power is used with system turned on.
	Green	Battery is fully charged.
	Red	Battery is being charged.
	Blinking Red	Battery power is critically low.
	Green	The system has entered the configured suspend mode (either POS or STR mode).
	Green	The hard disk is being accessed.

Power Button

	Use this button to turn the system on or off.
	After proper configuration under SCU, 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.*

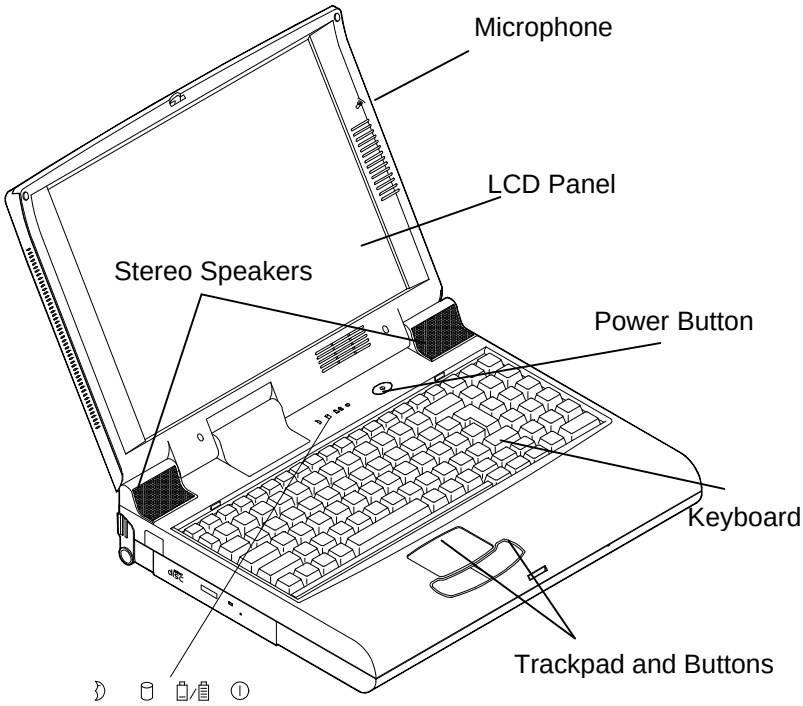

Microphone
LCD Panel
Stereo Speakers
Power Button
Keyboard
Trackpad and Buttons
Status LED Indicators

Figure 1-8

: *Rear View*

AC-in Socket

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

Security Connector

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

Parallel Port

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

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. camera, CD.

Expansion Port

This port is used to connect the proprietary Port Replicator.

Dual USB Ports

The dual Universal Serial Bus (USB) ports simplify the expansion capability for peripheral devices.

Serial Port

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

External Monitor (CRT) Port

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

Dual PS/2 Type Ports

A PS/2 type mouse and keyboard can be connected to the system using these ports. However, you cannot connect the same type of PS/2 devices to both ports simultaneously.

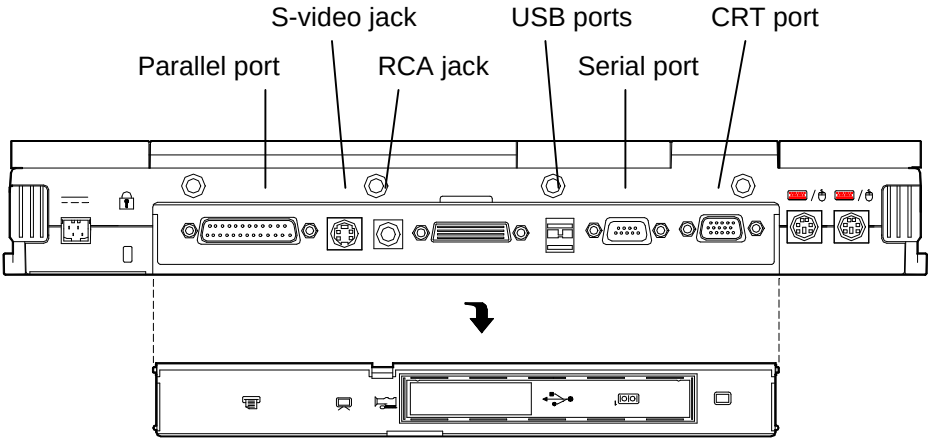


Figure 1-9

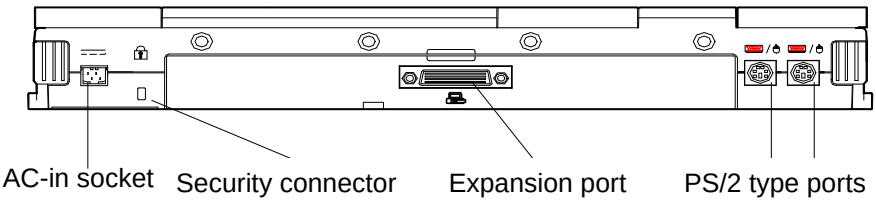


Figure 1-10

: *Right-Side View*

PC Card Sockets

One Type III or two Type II PC cards can be used. Both sockets will expand the system capabilities when a PC card is inserted. To eject the PC card, press the appropriate eject button (Figure 2-15).

2.5" Hard Disk Drive

The 2.5" hard disk drive is removable. It accepts any 2.5" IDE hard disk drive with a height of 12.7mm or less. Refer to Chapter 2: "Operation" for more information.

3.5" Floppy Disk Drive

The computer comes standard with a 1.44MB floppy drive installed. Press the button on its top-right side to eject the diskette. The floppy disk module can be replaced with additional drive units, such as a secondary 2.5"/3.0" hard disk drive or Zip drive (Refer to Chapter 2: Operation for more information).

Speaker-out Jack

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

Line-in Jack

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

Microphone-in Jack

Use this jack to connect a microphone to the system.

Ventilation

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

Right-side Stand

Move this stand (together with the left one) to adjust the typing angle. If a high speed CPU is installed, erecting the stands on both sides will be necessary for heat dissipation during operation (Figure 1-12).

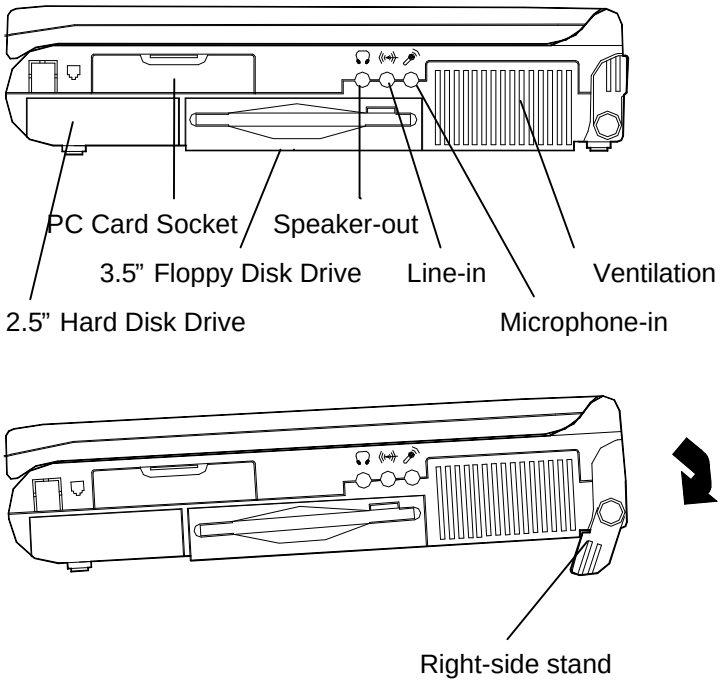


Figure 1-12

: *Left-Side View*

5.25” CD-ROM Drive

The 5.25” IDE CD-ROM module is designed to be removable. The eject button is located in the middle of the front cover of the CD-ROM drive. Pressing it will release the CD tray.

Infrared

The system adopts infrared technology as the interface for simple, fast and convenient data exchange from the computer to an infrared-compatible device. It implements IrDA (HPSIR), Amplitude Shifted Keyed IR (ASKIR), and Fast IR (FIR). No object should be blocking the line of sight between the computer and the infrared-equipped device. For further information, please refer to the manual of the wireless device you wish to connect on how to use the point-and-shoot operation.

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 1-14).

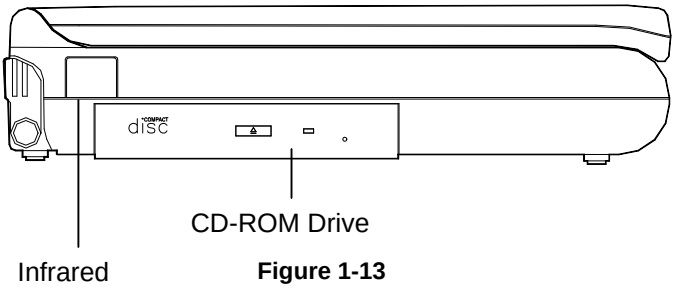


Figure 1-13

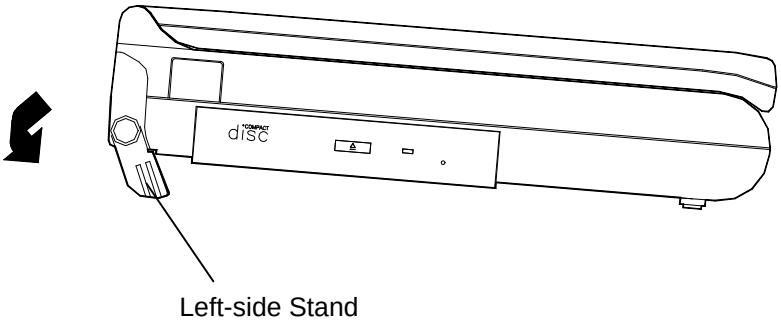


Figure 1-14

Chapter 2 : Operation

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

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

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

- Upgrading Processor Module
- Setting DIP Switch
- Expanding Memory
- 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

: *Upgrading Processor Module*

Replacing Processor Module

1. Remove all power sources (AC power and battery).
2. Turn the computer over.
3. Remove the CPU cover.
4. Remove the screws that fasten the heat sink mounted on the Processor Module.
5. Carefully detach the Processor Module from the mainboard (Figure 2-1).

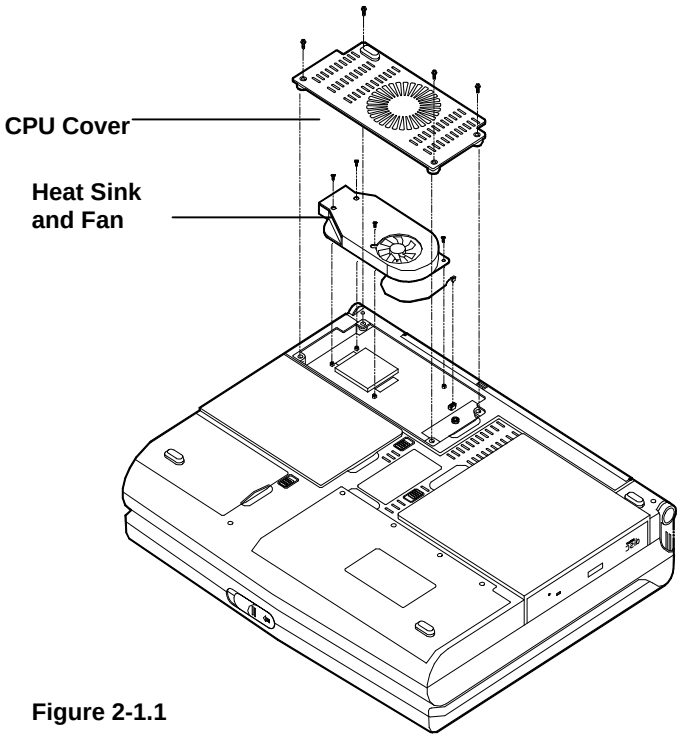


Figure 2-1.1

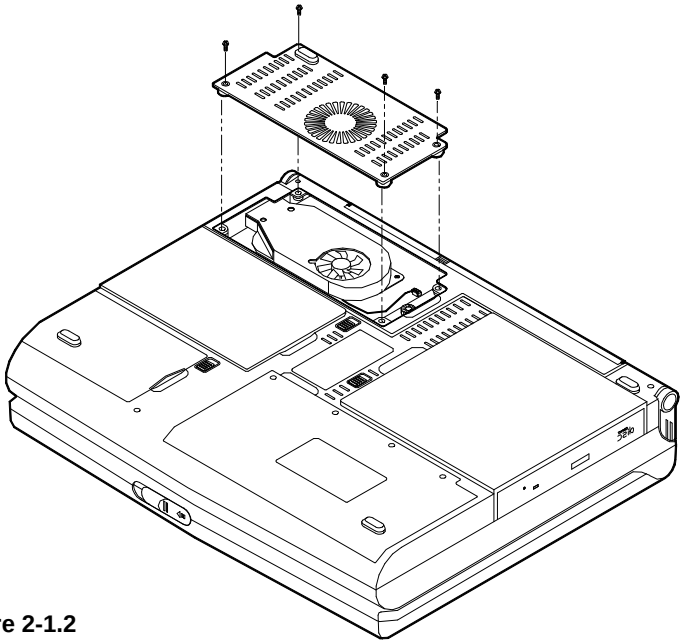


Figure 2-1.2

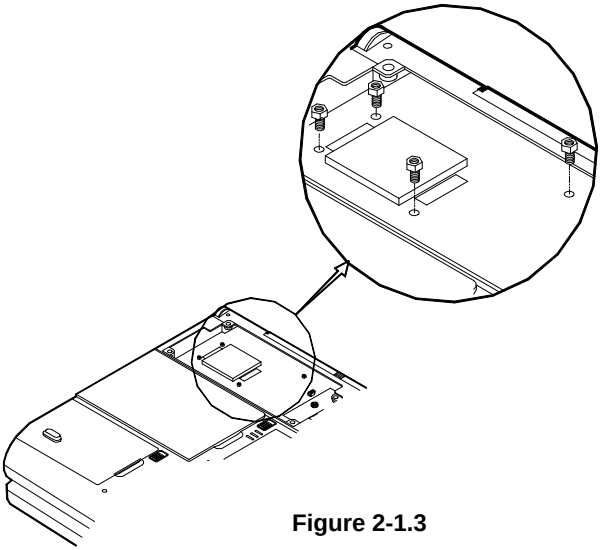


Figure 2-1.3

Reinstalling Heat Sink

Reinstall the CPU in the reverse order of removal. Make sure that the heat sink cable is properly installed. (Figure 2-2)

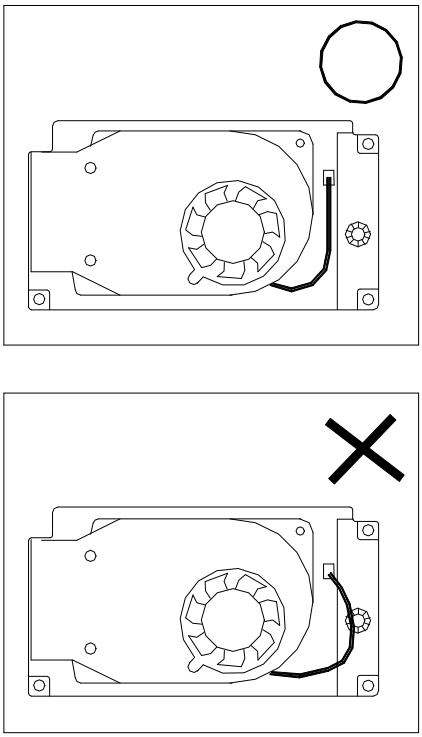


Figure 2-2

: *Setting DIP Switch*

Remove the keyboard to reveal the system's mainboard. Locate the DIP Switch (SW1) to set the correct configuration for the following purpose:

Flash ROM BIOS Settings

To upgrade your computer, you need to keep up with the latest system BIOS. Consult your dealer for further information. The DIP Switch needs to be set in the **On** position when updating the existing system BIOS. The DIP Switches should be reset to the **Off** position after BIOS updating is complete.

DIP Switch (SW1)		Purpose
S1-1	**S1-2**	**Flash ROM BIOS**
Off	Off	Disable
On	On	Enable

Accessing DIP Switch (SW1)

1. Turn the system power off.
2. Press the two keyboard latches to elevate the keyboard from its normal position (Figure 2-3).
3. Carefully lift the keyboard assembly out to expose the mainboard. Locate the DIP Switch SW1 to set the configuration (Figure 2-4).

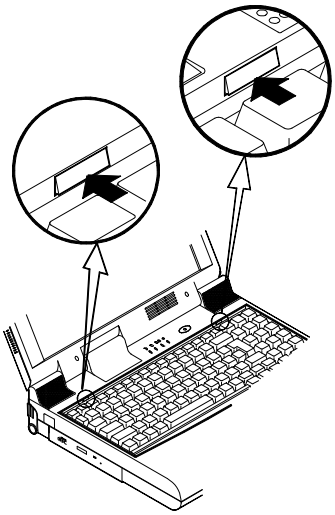


Figure 2-3

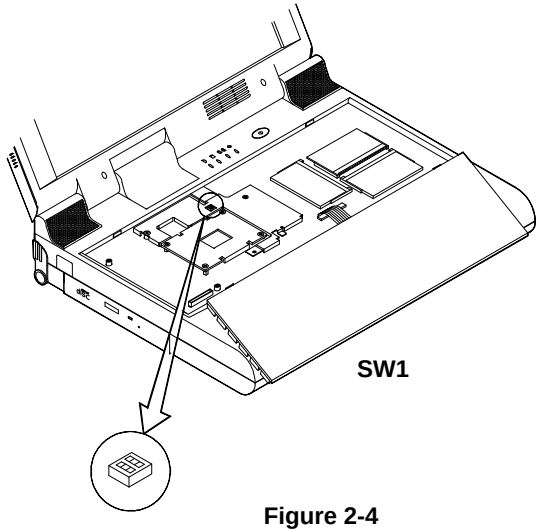


Figure 2-4

: *Expanding Memory*

The system has three memory sockets for different RAM modules to expand the memory up to 384MB. The RAM modules should be 144-pin SODIMM (Small Outline Dual In-line Memory Module) type. The computer supports EDO, and SDRAM operation. The total memory size is automatically detected by the POST routines. To expend the memory, you have the following choice with different DRAM combinations:

Bank 0	Bank 1	Bank 2	Total Size
32	0	0	32
32	32	0	64
32	32	32	96
64	0	0	64
64	32	0	96
64	32	32	128
64	64	0	128
64	64	32	160
64	64	64	192
128	0	0	128
128	32	0	160
128	32	32	192
128	64	0	192
128	64	32	224
128	64	64	256
128	128	0	256
128	128	32	288
128	128	64	320
128	128	128	384

Accessing the Memory Sockets

1. Turn the system power off.
2. Press the two keyboard latches to elevate the keyboard from its normal position (Figure 2-3).
3. Carefully lift the keyboard assembly out to expose the mainboard. Locate the memory sockets (Figure 2-5).

Note:

- **The memory socket Bank 0 is a reverse type, make sure you install the memory module with reverse side to fit it connector.**
- **Please ensure that each edge of the memory module (SDRAM) has no component mounted on (see Figure 2-5.1). 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.**

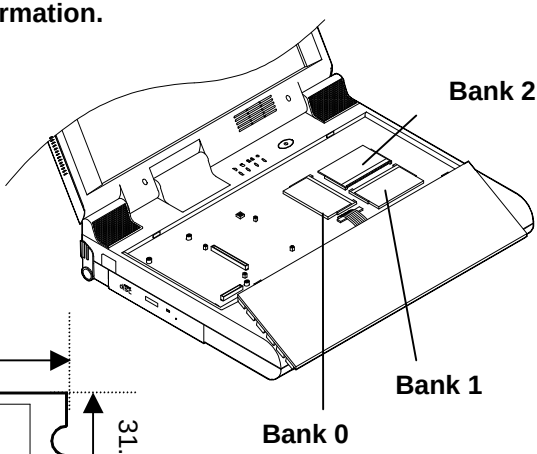
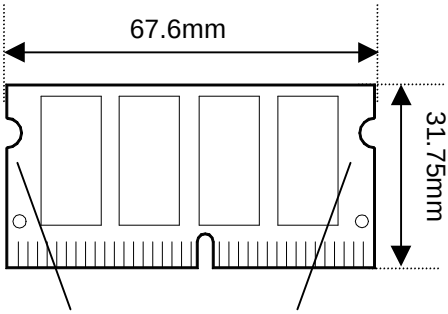


Figure 2-5



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

Figure 2-5.1

Installing 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 (Figure 2-3).
3. Carefully lift the keyboard assembly out to expose the mainboard. Locate the memory sockets (Figure 2-5).
4. **Insert the memory module at a slight angle (45°)** and fit its connectors into the socket firmly.
5. **Press two edges of the memory module (as the arrows indicated) to make it locked into place** (Figure 2-6).
6. Reinstall the keyboard assembly.

Note:
Make sure you install the memory module in the order of Bank 0, Bank 1, Bank 2 (see Figure 2-6). Please refer to the table of DRAM combinations or consult your dealer for a proper installation.

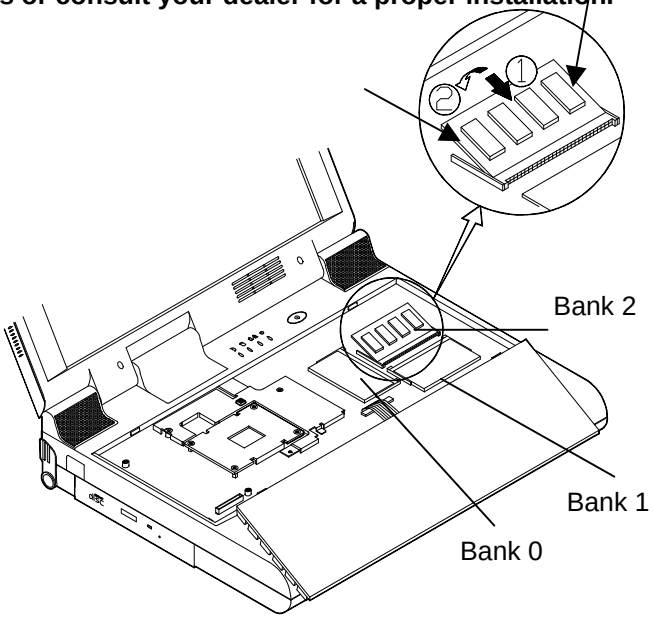


Figure 2-6

Removing Memory Module

1. Turn the system power off.
2. Press the two keyboard latches to elevate the keyboard from its normal position (Figure 2-3).
3. Carefully lift the keyboard assembly out to expose the mainboard. Locate the memory sockets (Figure 2-5).
4. Gently pull the two latches outward on both ends of the module. The module will pop up (Figure 2-7).
5. Remove the memory module.
6. Reinstall the keyboard assembly.

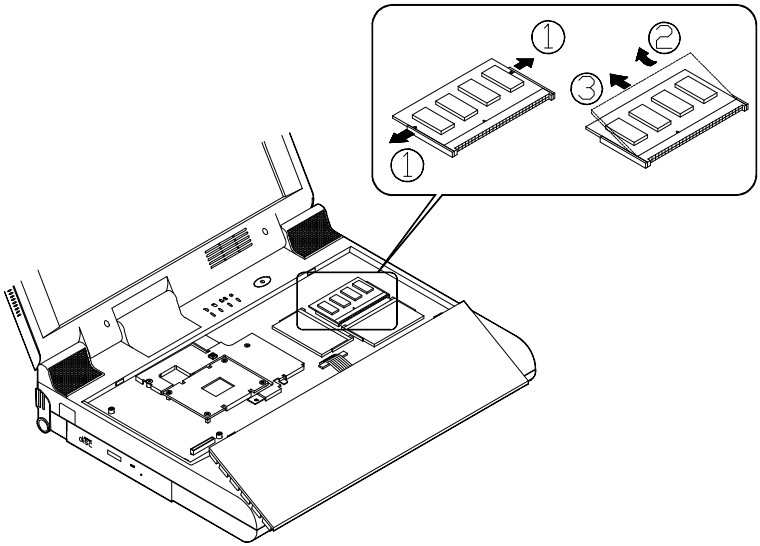


Figure 2-7

: Using Hard Disk Drive

The hard disk drive is mounted in a removable case and can be taken out to accommodate other 2.5" IDE hard disk drives with a height of 12.7mm. The system supports drives with 2.0 GB capacities through the Logical Block Addressing (LBA) mode. It also supports Programmed I/O (PIO) mode 4, Bus Master IDE and provides a high performance data transfer rate at speeds up to 33 MBytes/second (ATA-33).

Removing

1. Turn the system power off.
2. Turn the computer over.
3. Locate the Hard Disk Drive latch.
4. Press the latch in the direction indicated and take the hard disk drive out of the computer (Figure 2-8).

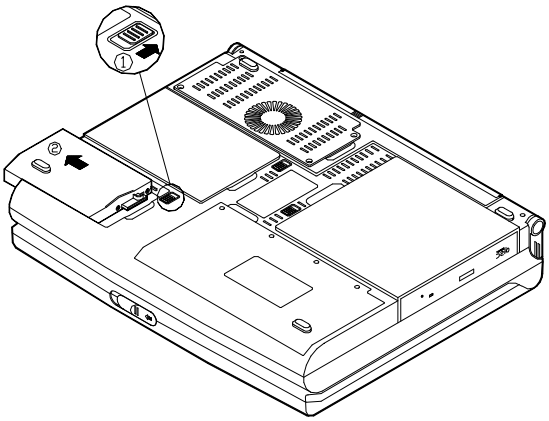


Figure 2-8

Note:
When inserting the hard disk drive, Insert it firmly into the computer. Make sure you feel the drive click into the position when it is seated properly.

Replacing Hard Disk Drive

The hard disk drive is contained in a case. To take the hard disk drive out of the case and replace with another one, you need to remove the two screws on each side of the case (Figure 2-9). The location of the two screws may be varied depending on different types of hard disk model. Gently disconnect the cable from the hard disk drive when taking it out of the case. Be careful not to bend any pins or crimp the cable.

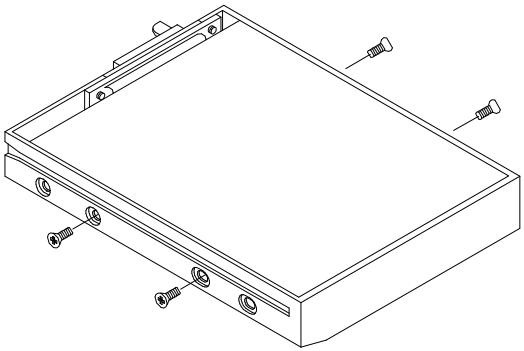


Figure 2-9

: *Using Floppy Disk Drive*

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

You may replace the floppy disk module with the following options: a 2.5" secondary hard disk drive (of 12.7mm or 17mm high), a 3.0" secondary hard disk drive (of 12.5mm high), a 100MB Zip drive (of 15mm high), or a LS-120 device (of 12.7mm high). Contact your dealer for details about these options.

Inserting/Removing Diskettes

When using the floppy drive, always insert your floppy diskette label-side up (Figure 2-10). To remove your diskette, press the eject button on the top-right corner of the floppy drive.

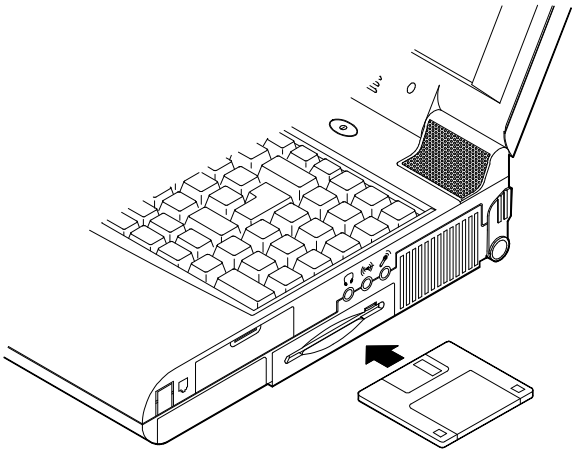


Figure 2-10

Replacing Floppy Disk Drive

1. Turn the system power off.
2. Turn the computer over.
3. Locate the Floppy Disk Drive latch.
4. Press the latch in the direction indicated and take the floppy disk drive out of the computer (Figure 2-11).
5. Insert the replacement drive (2.5"/3.0" secondary HDD or 100MB Zip drive) firmly into the computer.

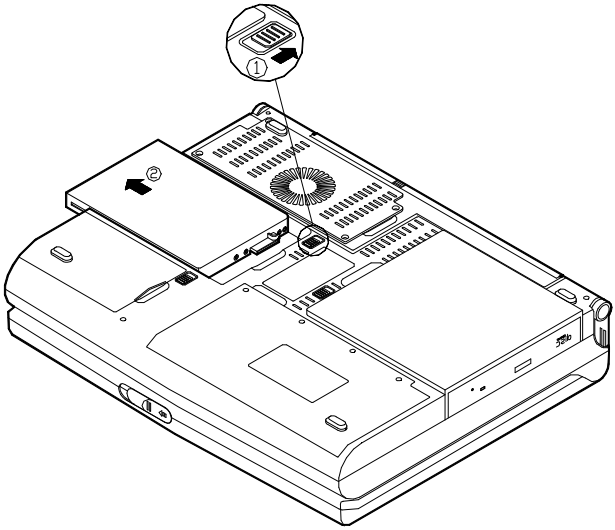


Figure 2-11

: *Using CD-ROM*

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

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

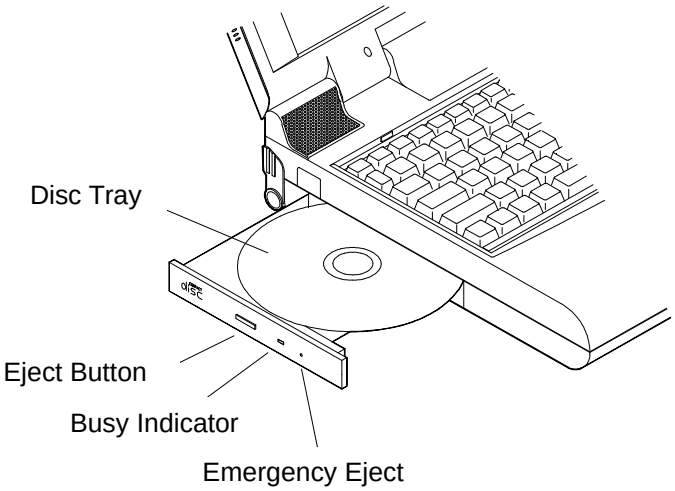


Figure 2-12

Removing CD-ROM Module

1. Turn the system power off.
2. Turn the computer over.
3. Locate the CD-ROM latch.
4. Press the latch in the direction indicated and take the CD-ROM module out of the computer (Figure 2-13).

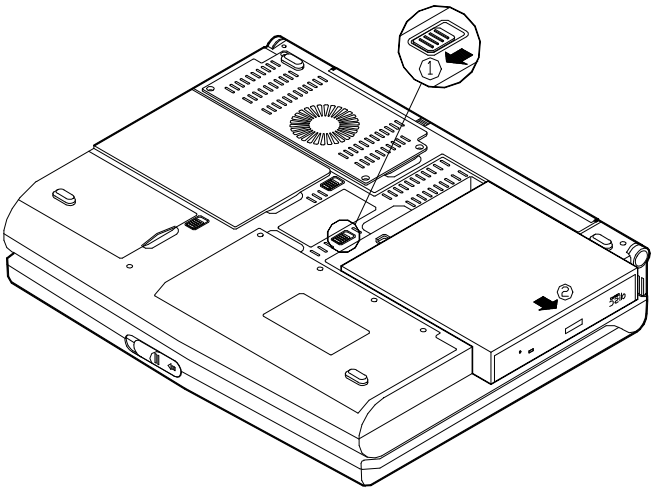


Figure 2-13

Loading Compact Discs

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

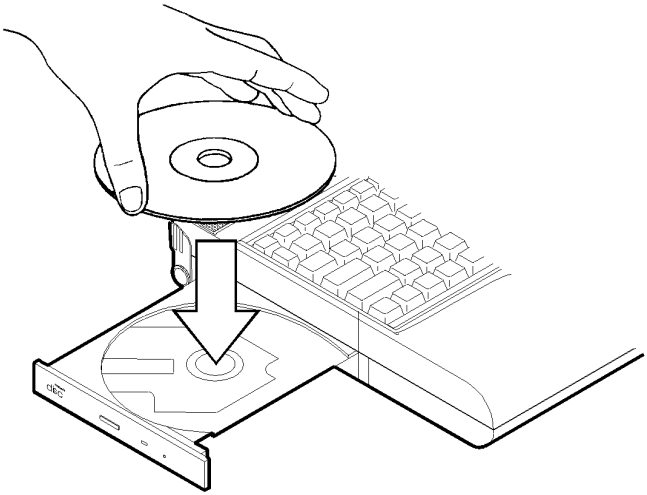


Figure 2-14

Handling of Compact Discs

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

- Hold the CD by the edges; do not touch the surface of the disc.
- Use clean, soft, and dry cloth to remove dust or fingerprints.
- Do not use pen to write on the surface.
- Do not attach any paper or other materials to the surface of the disk.
- Do not store or place the CD in the high-temperature areas.
- Do not use benzene, thinners, or other cleaners to clean the CD.
- Do not bend the compact disc.
- Do not drop or subject the CDs to shock.

: *Using PC Card Sockets*

The computer provides system expansion capabilities with two PC card sockets (previously referred to as PCMCIA). PC cards to be inserted can be LAN, fax/modem, communication devices, or expanded memory. Both sockets support 5V/3.3V 16-bit PC cards and 3.3V 32-bit PC cards (referred to as **CardBus**).

The PC card sockets on the right-side panel support one Type III card (equivalent to two Type II cards). The lower socket (socket A) is capable of **ZV (Zoomed Video)** (Figure 2-15).

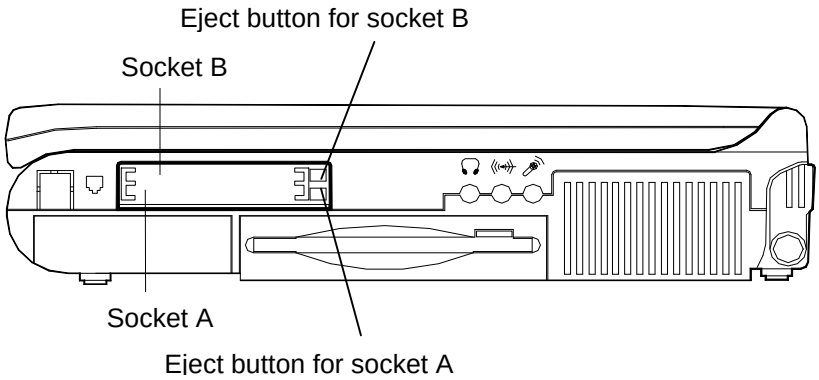


Figure 2-15

Note: *There are three types of PC cards. Type 1 measures 3.3 mm thick; Type II 5.0 mm; and Type III 10.5 mm.*

Inserting PC Cards

1. Open the access door (Figure 2-16).
2. Align the PC card with the slot and push it in firmly until it locks into the place (Figure 2-17).

.

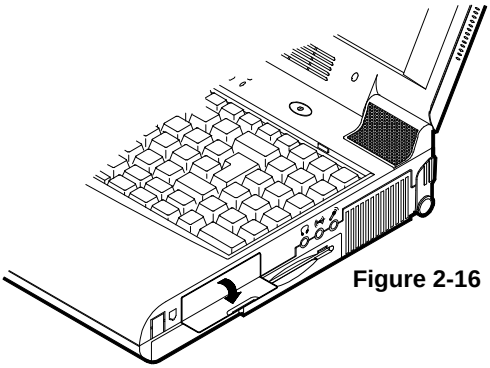


Figure 2-16

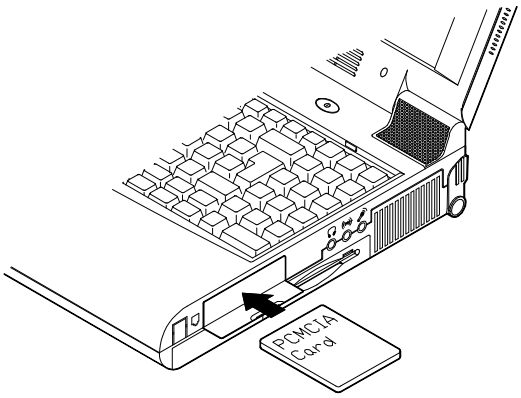


Figure 2-17

Removing PC Cards

To remove a PC card, press the appropriate eject button to eject the card from its slot. (Figure 2-15).

: *Using Hot Keys*

Located on the bottom-left edge of the keyboard layout is a colored **Fn** key. The **Fn** key function allows you to change operational features instantly. When you use the following functions, press and hold the **Fn** key; then press the appropriate function key (Figure 2-18).

Hot Keys	System Features
Fn + F3	Expand LCD display.
Fn + F6	Toggle CRT/LCD/LCD+CRT.
Fn + F9	Decrease LCD brightness.
Fn + F10	Increase LCD brightness.
Fn + F11	Decrease audio volume.
Fn + F12	Increase audio volume.
Fn + Esc	Put the system in a suspend state for power management.

Windows 95 Special Keys

The keyboard provides two keys that have special functions in Windows 95:

This key has the same functions as the secondary mouse does.

This key activates the Windows 95 Start menu.

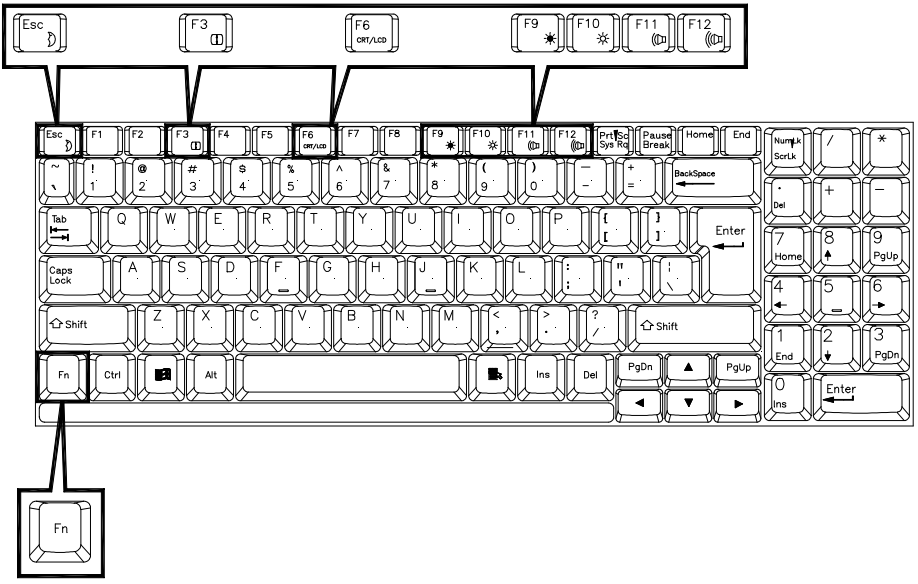


Figure 2-18

: *Using Numeric Keypad*

The computer features a 102-key keyboard with an integrated numeric keypad for easy numeric data input (Figure 2-19).

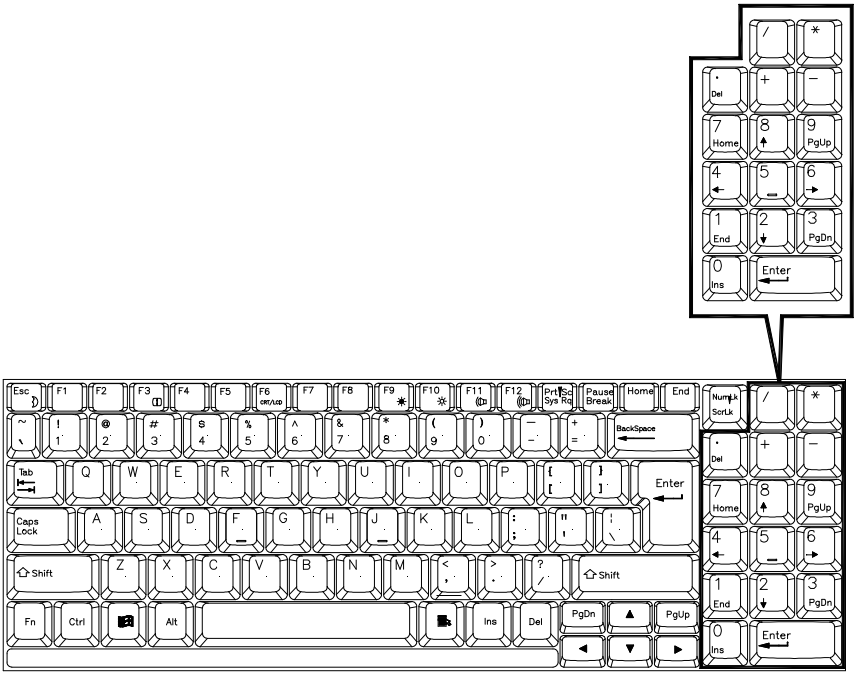


Figure 2-19

: *Using Power Management*

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

Advanced Power Management (APM 1.2)

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

Global Standby

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

Hard Disk Standby

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

Suspend and Resume

When at extremely low power, you can enter suspend mode to save power. In suspend mode, all tasks are stopped and stored in memory to save power. The system features two levels of suspend mode: Powered-On-Suspend (POS) mode and Suspend-To-Disk (STD) mode.

Another useful feature is resume mode. This feature allows you to turn the computer's power off without exiting your software application. When you turn the power on again, you can resume work where you left off, because the screen display is restored as you left it. This saves time and battery power.

Caution: *Do not enter suspend mode when you are*

1. Accessing any of the disk drives, such as HDD, FDD or CD-ROM drives.
2. Using the audio features or playing back video.
3. Playing a DOS game.

Powered On Suspend (POS)

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

Resume from POS Mode

The system can resume from Powered-On-Suspend mode by:

- Alarm resume (month/day/hour/minute)
- Modem ring
- Pressing any keyboard key.
- Pressing the power button (if configured as Suspend/Resume function under SCU)
- Opening the display lid (only if the suspend mode is initiated by closing the display lid)

Suspend To Disk (STD)

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

1. Use your operation system's FDISK program to delete all partitions of the hard disk if any already exist on the target drive.

2. Boot the system and run the 0VMAKFIL.EXE Utility to create the Suspend to Disk partition on the hard disk. The size of Suspend to Disk partition will be the installed DRAM (n) plus 8MB integrated video RAM.

   :\>0VMAKFIL -Pn

   For example, if the system DRAM is 32MB, 0VMAKFIL will create a partiton size of approximately 40MB.

   :\>0VMAKFIL -P40

Resume from STD Mode

The system will resume from Suspend-To-Disk mode by:

- Power back on
- Alarm resume (month/day/hour/minute)
- Opening the display lid (only if the suspend mode is initiated by closing the display lid)

: *Attaching Peripheral Devices*

To extend the computer' s functions, you can attach the following peripheral devices to the computer through the ports or jacks on the rear panel of computer.

Attaching a Security Lock

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

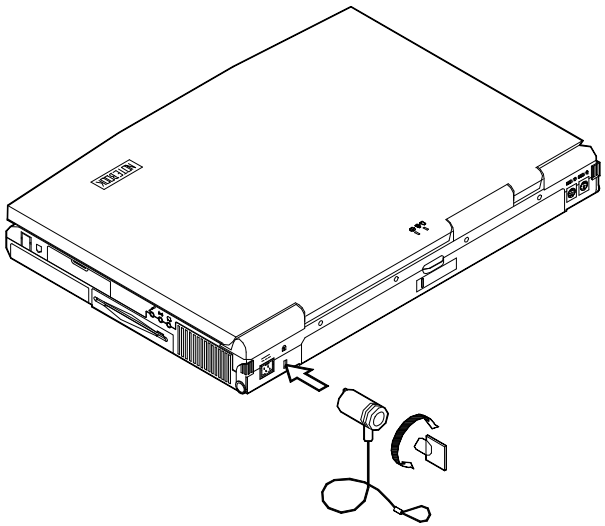


Figure 2-20

Attaching a Parallel Printer

You may connect any standard Centronics parallel printer to your computer through the parallel port.

1. Turn the system power off.
2. Connect the cable to the parallel port on the rear of the computer.
3. Tighten the screws that fasten the cable to the parallel port (Figure 2-21).
4. Insert the other end of the cable to the printer's connector. Fasten the cable's connector.

5. Turn on the printer and computer.

In addition, you also 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.

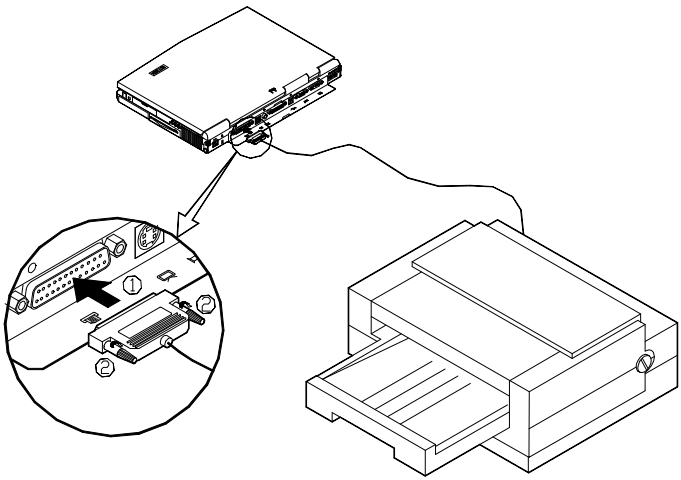


Figure 2-21

Attaching a TV Set

The S-Video jack on the rear panel of the computer is used for transmitting video signals to a TV set. You may need to 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 can enter the SCU to select the appropriate parameters in DOS or enter Control Panel to configure the driver's settings in Windows.

Attach the TV set as shown below (Figure 2-22).

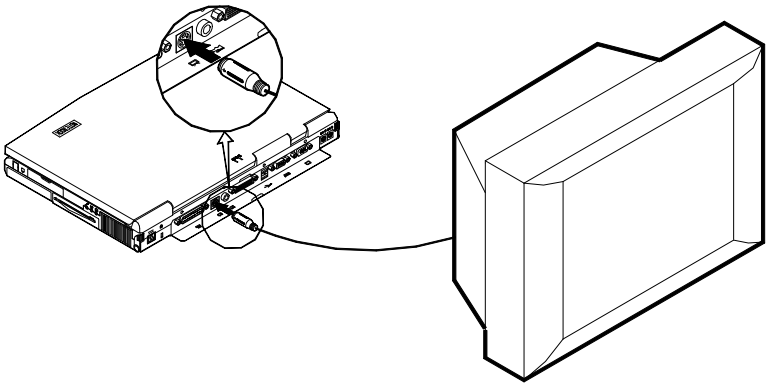


Figure 2-22

Attaching a Video Input Device

The RCA jack on the rear panel of the computer allows analog composite signal input from external video devices. Attach the device as shown below (Figure 2-23).

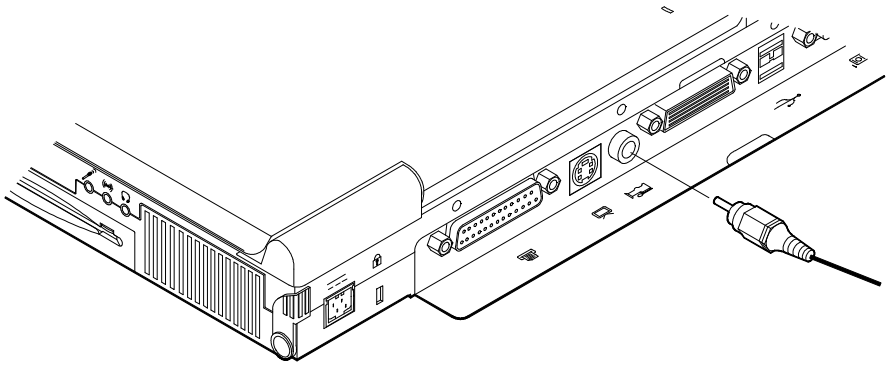


Figure 2-23

Attaching a USB-compatible Device

The computer provides dual USB ports for connection of a USB-compatible keyboard, mouse, or other devices. Attach the device as shown below (Figure 2-24).

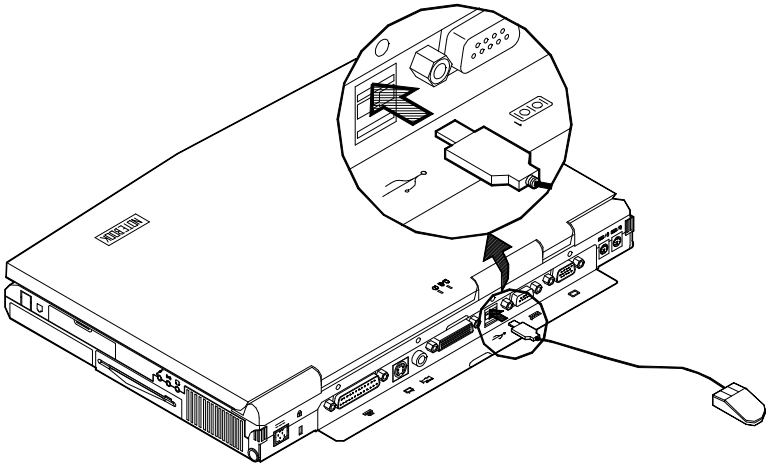


Figure 2-24

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.

1. Turn the system power off.
2. Connect the cable to the serial port on the rear of the computer.
3. Tighten the screws that fasten the cable to the serial port (Figure 2-25).
4. Turn on the 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.

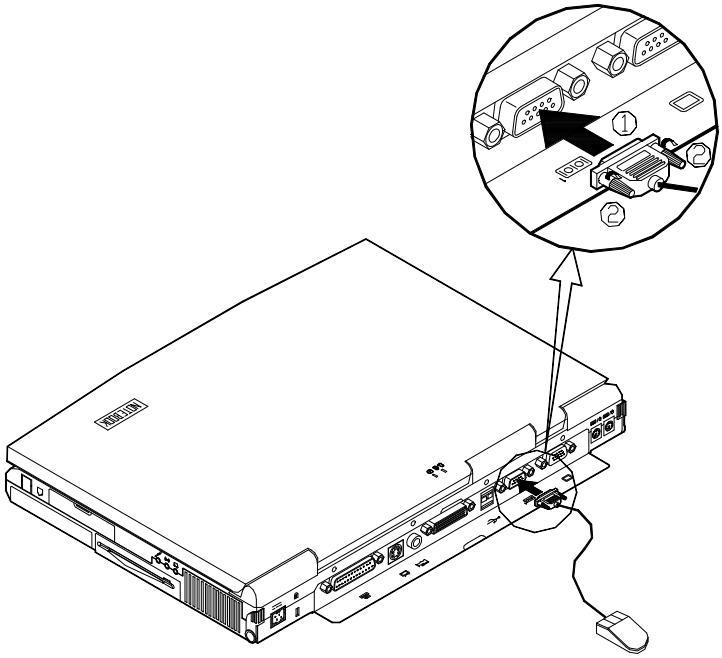


Figure 2-25

Attaching an External Monitor (CRT)

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

1. Turn the system power off.
2. Connect the cable to the CRT port on the rear of the computer.
3. Tighten the screws that fasten the cable to the CRT port (Figure 2-26).
4. Insert the other end of the cable to the external monitor.
5. Turn on the computer.

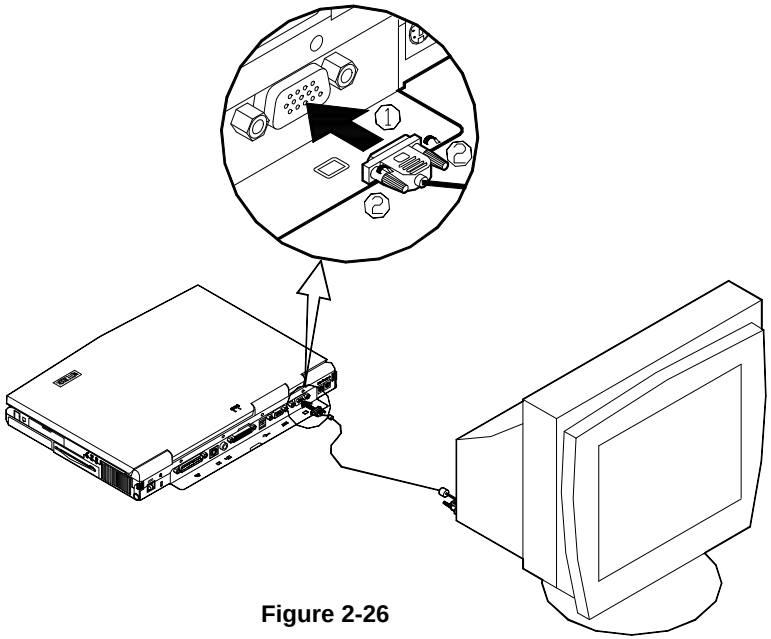


Figure 2-26

Attaching a PS/2 Keyboard or Mouse

The computer can be operated with a PS/2 keyboard or mouse attached by means of the PS/2 transfer cable. Attach the external keyboard or mouse as shown below (Figure 2-27).

Both PS/2 type ports on the rear panel of the computer can be used for the connection of a PS/2 keyboard and mouse.

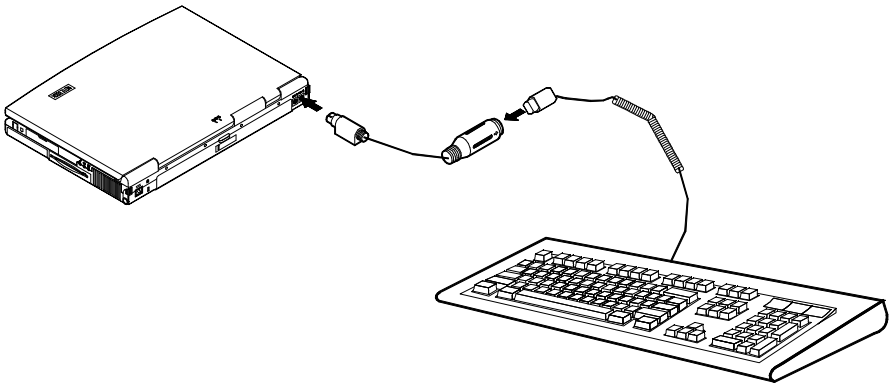


Figure 2-27

Chapter 3 : BIOS Utilities

This chapter provides you with the information of Power On Self Test (POST) and shows you how to configure the system parameters using the System Configuration Utility (SCU).

- Power on Self Test (POST)
  - POST Message: Normal Operation
  - POST Message: Error Detected
- System Configuration Utility (SCU)
  - Information in the SCU
  - Initiating the SCU
  - Working with the Menu Bar of the SCU
  - Working with the Pull-Down Menu of the SCU
  - Features of the SCU
    - Startup Menu
    - Memory Menu
    - Disks Menu
    - Components Menu
    - Power Menu
    - Exit Menu

: *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 every time the computer is turned on. If an error exists, the POST routine may halt execution (depending on the problem). If no error exists, the POST will 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.

```
SystemSoft MobilePRO BIOS Version 1.01 (2482-00)
Copyright 1983-1996 SystemSoft Corp. All Rights Reserved


300 MHz Celeron with Intel CPU
External Cache: 128KB installed
8 MB Video RAM
SystemSoft Plug-n-Play BIOS Ver.1.17.01

Base Memory          000640 Kb
Extended Memory      064512 Kb
Total Memory         065536 Kb


Auto Detecting IDE Devices[Done]

<CTRL-ALT-S> to enter System Configuration Utility
```

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

POST Message: Error Detected

If an error is detected, you will see the following WARNING message. You may press **F1** key to continue, or press the **Ctrl**-**Alt**-**S** keys simultaneously to enter the System Configuration Utility.

SystemSoft MobilePRO BIOS Version 1.01 (2482-00)
Copyright 1983-1996 SystemSoft Corp. All Rights Reserved

300 MHz Celeron with Intel CPU
External Cache: 128KB installed
8 MB Video RAM
SystemSoft Plug-n-Play BIOS Ver.1.17.01

Base Memory	000640 Kb
Extended Memory	064512 Kb
Total Memory	065536 Kb

WARNING – HARD DISK CONTROLLER 1 FAILURE
Auto Detecting IDE Devices[Done]

<CTRL-ALT-S> to enter System Configuration Utility
Press F1 to Continue

: *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 non-volatile battery-backed CMOS RAM which saves the information even when the power is turned off, and retains it when the system is turned on again

Information in the System Configuration Utility

The following shows the system settings that may be changed within the System Configuration Utility.

Menu Bar Items	Pull-down Menu Items
Startup	Date and Time, Fast Boot, Boot Device, Display, Enable Battery Low Beep, Enable LCD Expand Mode, Enable Power On Beep, Boot Password, SCU Password.
Memory	Cache Systems.
Disks	Enable LS120/ZIP 100 Drive, Diskette Drives, IDE Settings.
Components	COM Ports, MODEM Port, LPT Port, PS/2 Mouse Port, Keyboard Numlock, Keyboard Repeat, TV Mode, Video in Mode, ZV Port Enabled
Power	Enable Power Saving, Low Power Saving, Medium Power Saving, High Power Saving, Customize, Suspend Controls, Resume Timer, Enable MODEM Ring Resume, Enable Battery Low Suspend, Advance CPU Controls.
Exit	Save and Exit, Exit (No Save), Default Settings, Restore Settings, Version Info.

.

Initiating the System Configuration Utility

The System Configuration Utility (SCU) can be accessed when pressing the **Ctrl**, **Alt**, and **S** keys simultaneously.

<CTRL-ALT-S> 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.

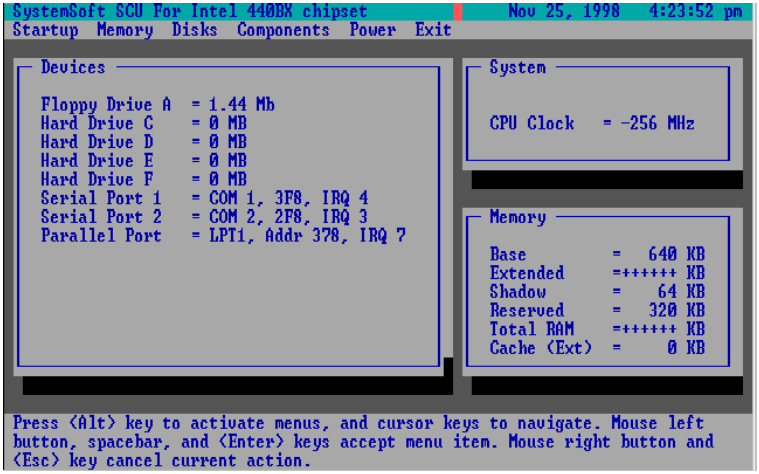


Figure 3-1
System Configuration Utility (SCU)

Working with the Menu Bar

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

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

Working with the Pull-down Menu

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

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

Features of the System Configuration Utility

Startup Menu

Item	Setting/Option	Function
Date and Time	Day/Month/Year Hour/Minute/Second	Set the current date and time.
Fast Boot	Enable	Initialize and quickly boot the system in a few seconds by skipping certain diagnostic tests.
	Disable	Disable the above.
Boot Device	Diskette A	Specify where the system boots from.
	Hard Disk C	
	CD-ROM Drive	
Display	LCD	Activate the system's LCD panel.
	CRT	Activate an external monitor.
	LCD + CRT	Activate both the LCD and the CRT.
	TV	Activate an external TV.
	CRT + TV	Activate both the CRT and the TV.
Enable Battery Low Beep	Enable	The system emits a series of warning beeps sound when the battery power becomes low.
	Disable	Disable the above.
Enable LCD Expand Mode	Enable	Stretch the display to fill the entire viewing area of the LCD panel.
	Disable	Disable the above.

Item	Setting/Option	Function
Enable Power On Beep	Enable	Enable or Disable Power On Beep.
	Disable	
Enable PNP OS Support	Enable	Enable or Disable PNP OS Support
	Disable	
Boot Password	Enter old Power-On Password	Set password for booting computer. Users are authorized to start the system after entering correct password.
	Enter new Power-On Password	
	Verify new Power-On Password	
	Enable Password to Power-On	
SCU Password	Enter old Setup Password	Set password for modifying SCU. Users are authorized to change the SCU setting after entering correct password.
	Enter new Setup Password	
	Verify new Setup Password	
	Enable Setup Password	

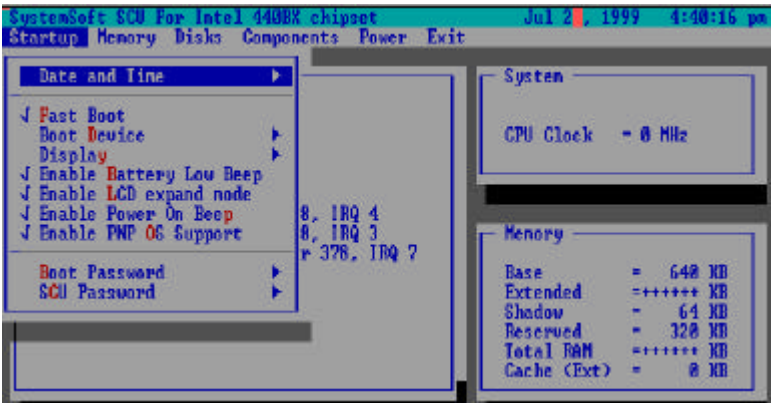


Figure 3-2
Startup Menu

Memory Menu

Item	Setting/Option		Function
Cache Systems	L1 Cache	Disabled	Disable the processor's internal cache.
		Write Back	Enable the Processor's internal write-back cache.
	L2 Cache	Disabled	Disable the L2 cache controller.
		Write Back	Enable the LS write-back cache.
	BIOS Shadow	Cached	The process of *shadowing* copies instructions from system BIOS into RAM to improve system performance.
		Not Cached	Disable the above.
	Video Shadow	Cached	The process of *shadowing* copies instructions from video BIOS into RAM to improve system performance.
		Not Cached	Disable the above.

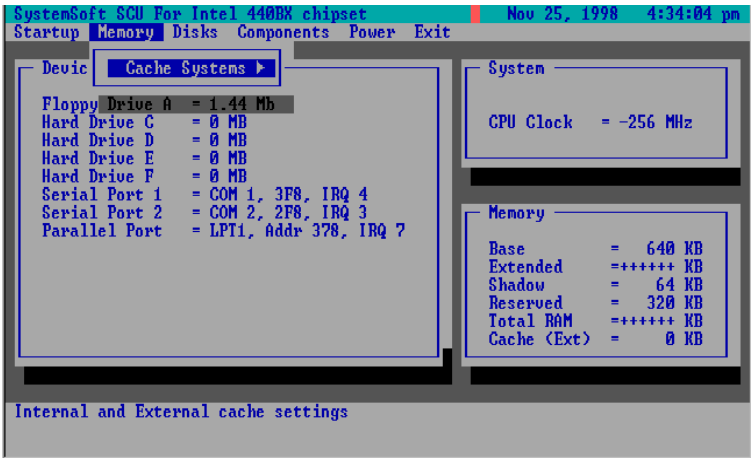


Figure 3-3
Memory Menu

Disks Menu

Item	Setting/Option		Function
Diskette Drives	Drive A	None	Specify the drive types for the diskette drive A.
		1.44 Mb	
		2.88 Mb	
IDE Settings	Primary HDD	Drive Enabled	Enable enhanced IDE settings.
		Multiple Sector Mode	
		PIO Mode	
	CD-ROM / DVD-ROM / 3th HDD	Drive Enabled	
		PIO Mode	
	LS120 /ZIP/ 2nd HDD	Drive Enabled	
		PIO Mode	
	IDE UDMA-33 Function: Enable (default)		
	IDE 32Bit I/O: Enable (default)		
Enable LS120/ ZIP Drive	Enable		Enable the LS120 or ZIP drive.
	Disable		Disable the LS 120 or ZIP drive.

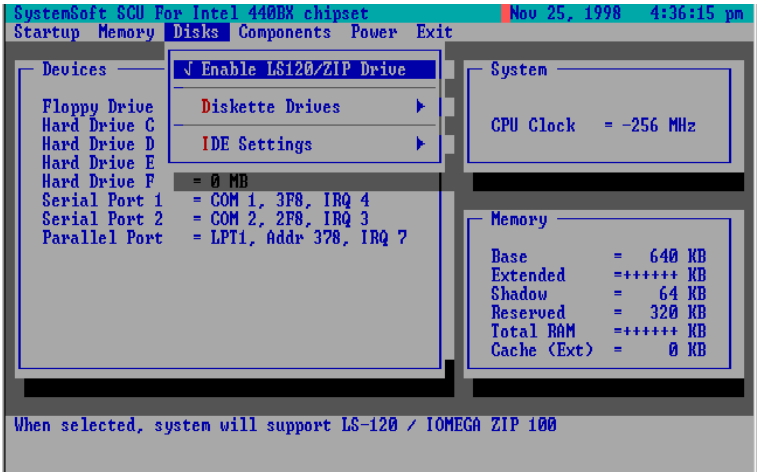


Figure 3-4
Disks Menu

Components Menu

Item	Setting/Option		Function
COM Ports	COM A I/O Settings	None	Specify the COM A configuration. Support the settings for the DOS system and NON-PNP OS.
		COM1, 3F8, IRQ4	
		COM2, 2F8, IRQ3	
		COM3, 3E8, IRQ10	
		COM4, 2E8, IRQ11	
	COM B I/O Settings	None	Specify the COM B configuration. Support the settings for the DOS system and NON-PNP OS.
		COM1, 3F8, IRQ4	
		COM2, 2F8, IRQ3	
		COM3, 3E8, IRQ10	
		COM4, 2E8, IRQ11	
	Mode Setting for COM B	Normal (16550)	Define the COM B hardware.
		IrDA (HPSIR)	
		ASK IR	
		FAST IR	
	DMA Setting for Fast IR	DMA 0	Specify the Fast IR DMA configuration.
		DMA 1	
		DMA 3	
LPT Port	Port Address	None	Specify the LPT port and IRQ configuration.
		LPT1, Addr 378, IRQ7	
		LPT2, Addr 278, IRQ5	
		LPT3, Addr 3BC, IRQ7	
	Port Definition	Standard AT (Centronics)	
		Bidirectional (PS-2)	
		Enhanced Parallel (EPP)	
		Extended Capabilities (ECP)	
	DMA Setting For ECP Mode	DMA 1	Specify the ECP DMA configuration.
		DMA 3	
	EPP Type	EPP 1.7	Specify the EPP type.
		EPP 1.9	

Item	Setting/Option		Function
PS/2 Mouse Port	Enable		Enable the system's trackpad or an external PS/2 mouse.
	Disable		Disable the trackpad or PS/2 mouse if an external mouse is connected to COM A port.
Keyboard Numlock	Enable		Specify whether Num Lock is on or off at system boot time.
	Disable		
Keyboard Repeat	Key Repeat Rate	2 cps	Define the rate (characters per second) at which the keyboard repeats while a key is depressed.
		6 cps	
		10 cps	
		15 cps	
		20 cps	
		30 cps	
	Key Delay	1/4 sec	Specify the amount of time (second) that will pass after a key is depressed before the key starts to repeat.
		1/2 sec	
		3/4 sec	
		1 sec	
TV Mode	NTSC		Specify the TV mode selection
	PAL		
Video in Mode	Disabled		Disable or enable the video in mode.
	Enabled		
ZV Port Enabled	Enable		Enable or disable the ZV port.
	Disable		

Item	Setting/Option	Function
Modem Port	None	Specify the Modem Port settings.
	Port 3E8, IRQ 11	
	Port 2E8, IRQ 11	
	Port 3F8, IRQ 11	
	Port 3E8, IRQ 9	
	Port 2E8, IRQ 9	
	Port 3F8, IRQ 9	
	Port 2F8, IRQ 9	
	Port 2F8, IRQ 11	

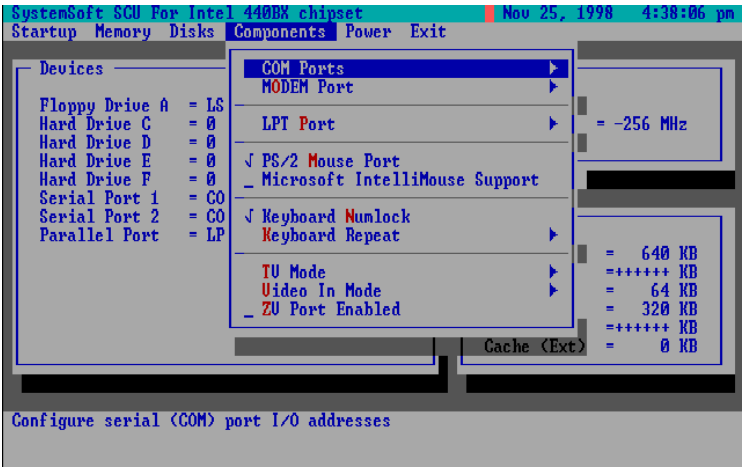


Figure 3-5
Components Menu

Power Menu

Item	Setting/Option		Function
Enable Power Saving	Enable		Enable/Disable all power saving features.
	Disable		
Low Power Saving	Enable		Enable/Disable the power saving to its lowest which results in max. performance but shortest battery life.
	Disable		
Medium Power Saving	Enable		Enable/Disable the power saving to its medium which results in both moderate performance and battery life.
	Disable		
High Power Saving	Enable		Enable/Disable the power saving to its highest which results in min. performance but longest battery life.
	Disable		
Customize	Disk Standby	5 sec	The hard disk will be put on standby if it is not accessed within the specified period. Hard disk power will be restored when the disk drive is accessed again.
		10 sec	
		15 sec	
		20 sec	
		30 sec	
		Always on	
	Global Timeout	1 min	The system power will be reduced if the system has been idle over the specified period. System power will be restored when any system activity is detected.
		2 min	
		4 min	
		6 min	
		8 min	
		12 min	
		16 min	
		Always on	

Item	Setting/Option		Function
Suspend Controls	Power Button Function	Power On/Off	The power button is switched to turn the system on or off.
		Suspend/ Resume	The power button acts as a suspend/resume button for switching the system between a working state and the suspend mode.
			Pressing the power button for more than four seconds will generate a power button over-ride event to switch the system from a working state to the Soft-Off state.
	Lid Switch Function	Suspend/ Resume	Enter suspend mode or resuem by closing or opening the display lid.
		LCD Panel Off/On	Turn the panel power on or off by opening or closing the display lid.
	Suspend Type	Suspend to Disk	Specify the suspend mode for power management.
		Powered on Suspend	
	Suspend Timeout	1 min	If the system has been idle for the specified period, the system will enter user-defined suspend.
		5 min	
		10 min	
		20 min	
		30 min	
		Never	
Resume Timer	Alarm	Enable	Resume the system from the configured suspend mode when resume alarm timer expires.
		Disable	
	Resume Month/Day/Hour/Minute		The system will resume at the specified time (month, day, hour and minute).

Item	Setting/Option		Function
Enable MODEM Ring Resume	Enable		Resume the system from STR or POS mode when a modem ring is detected (which modem should be connected to the serial port).
	Disable		Disable the above.
Enable Battery Low Suspend	Enable		Automatically suspend the system to disk upon a low battery condition.
	Disable		Disable the above.
Advance CPU Controls	Clock Control Mechanism	Full Mode	Specify the type of Processor Clock Control.
		Doze Mode	

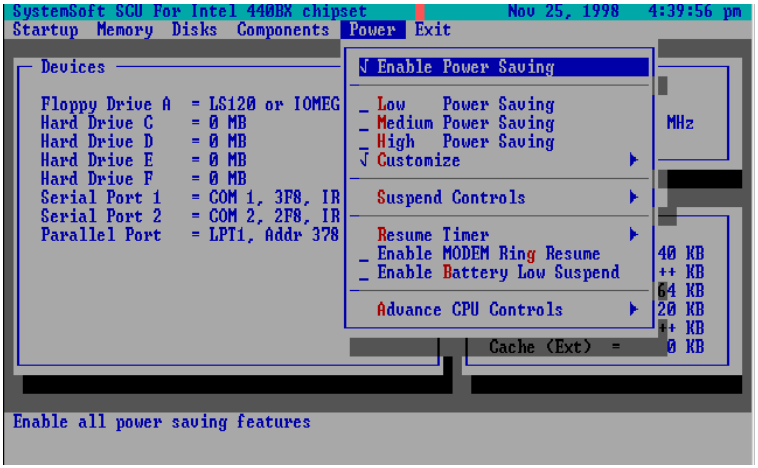


Figure 3-6
Power Menu

Exit Menu

Item	Function
Save and Exit	Save the current settings and reboot the system.
Exit (No Save)	Exit without saving any current changes.
Default Settings	Restore the default settings (the original ones found in ROM).
Restore Settings	Restore the current setup settings to the original custom ones.
Version Info	Show current BIOS version information.

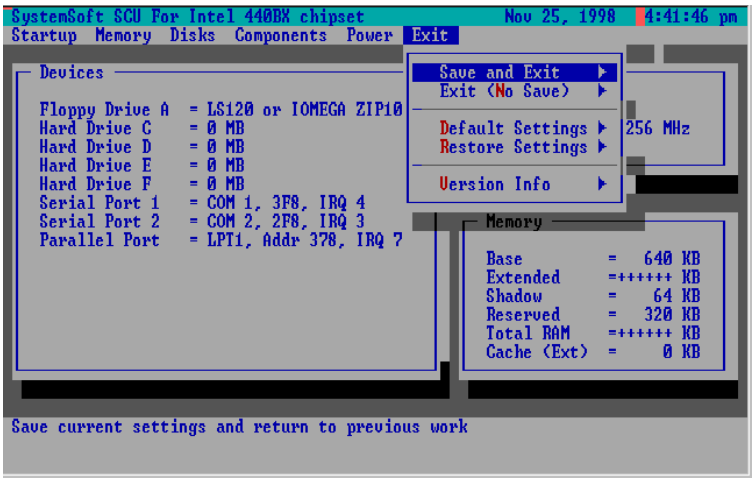


Figure 3-7
Exit Menu

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

Solution 3: The power 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.***

Solution1: 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 configurated 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 inserted into the socket or reversely inserted.
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.***
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 power 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 (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 to control the voice volume, press 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 to control the voice volume.

Chapter 5 : Installing Drivers

The chapter helps you starting to operate the Notebook Computer with the procedures of how to install software, device drivers and utilities step by step. This chapter is designed for notebook beginners as well as advanced users. Please follow the steps and suggestions below to start a new notebook computing work.

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

By following the steps and procedures in the chapter, users can start to work with your Notebook Computer at once.

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

- Preparation
- Installing Windows 95
- Installing Windows 98 SE
- Drivers for Windows 95
- Drivers for Windows 98 SE
- Drivers for Windows NT4.0

: *Preparation*

Preparation for a new notebook:

1. Use a DOS startup disk to start the Notebook Computer.
2. Run the FDISK utility from DOS to create a bootable partition. (See the DOS manual for operational details.)
3. Format the hard disk. Use the command “Format C:/S” to create a bootable hard disk and a system boot file. (C:/S copies system files to the formatted disk.)
4. Run the program CDINST.COM from the "CD-ROM Driver Installation Diskette". This will install a CD-ROM driver device automatically.
5. Restart the system

: *Installing Windows*

Windows 95 (For Reference)

1. Start DOS.
2. Insert the Windows 95 CD-ROM.
3. Search the Win95 directory including the "setup" file.
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 setup initializes, 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" for Notebook Computers, 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.
20. Click "OK" to restart the Notebook Computer.

Windows 98 SE (For Reference)

1. Start DOS.
2. Insert the Windows 98 CD-ROM.
3. 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 to 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 if you prefer.
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 relevant Win98 information and the items being installed.
16. After the setup stops, restart the computer.

: *Drivers for Windows 95*

Step 1: Run USB supplement path update file

- After finishing Win95 ORS2.1 installation, go to Win95.

  Download the file <USB supplement path update file> from Microsoft Web Site to run the USB supplement path.

Step 2: Setup [TXPATCH]

- Under Win95, open the driver [TXPATCH] Intel 82371xb.inf TX chip from the path of CD-ROM Drive.
- Open [setup.exe.] and follows the instruction to complete the installation.
- Restart the system.

Step 3: VGA Driver Installation

- Under Win95, click [Start] at the bottom-left corner on the screen. Select [Run]. Open the path [D:\WIN9X\setup.exe]

Note: When ATI VGA driver has been existed in Win95 system, Click [Start]. Select [Run]. Open the path [atiuinst-clean]. Double-click [Ok] to finish installation.

Step 4: Audio Driver Installation

- Under Win95, click [Start]; select [Settings]; click [Control Panel] ¡ ÷ [Device Manager]¡ ÷Other Devices] and delete [Unknown Devices] by clicking [Remove] and [Ok].
- Restart the notebook; go to Win95. The program will automatically find out [Add New Hardware Wizard] (PCI Multimedia Audio Device). Click [Next] ¡ [Other Locations] and [Browse] to find the path from CD-ROM driver as [CD-ROM drive: \Audio\Win95]. Then click [Ok]. Press [Finish] to set up the first audio driver.

Step 5: Video-in Driver Installation

- Boot the system, switching to SCU system by press keys Ctrl+Alt+S before running Windows. Choose [Components] from the top of the screen. Choose [Enable] for [Video-In Mode]
- Under Windows, Select [Start], [Run] and open the path [D:\video-in \setup.exe] to complete the installation.

Step 6: ATI DVD Play Driver Installation (Optional)

- Note: Firstly make sure that it has already successfully installed the VGA drivers, Audio Driver and Direct X5 or DirectX6.
- Boot the system; press Ctrl+Alt+S to enter SCU system. Select [Power]. Enable [Low Power Saving], or Select [Advance CPU control] to set [Full Speed]. (If the clock of Intel Pentium II is above 366MHz/400MHz or if your DVD runs smoothly, you can skip the step).
- In the windows system, click [Start]; select [Setting], [Control Panel], and [System]. Open [Device Manager]; select [CDROM]. Click the item including the type of [DVD-ROM], and [Setting]; then enable [DMA] in Options.
- Insert the CD of Ati-DVD-Play application and the program will automatically run the installation until finished. Otherwise, click [Start] in the windows system. Select [Run]. Open the path [D:\Atiplay\setup.exe]. Run [setup.exe] to finish the installation.

: *Drivers for Windows 98 SE*

Step 1: Installing a VGA Driver

- Click "Start".
- Click "Run".
- Select the file "Setup.exe" from the CD-ROM. (The path is :\VGA\Win98.)
- Click "OK".

Step 2: Installing an Audio Driver

- Click "Start".
- Select "Settings".
- Click "Control Panel"/"System"/"Device Manager".
- Select "Other Devices".
- Remove "PCI Multimedia Audio Device".
- Click "OK", then restart the system.
- After entering into Win98 system, the program will automatically go to the "Add New Hardware Wizard" (PCI Multimedia Audio Device).
- Click "Next", and then select "search for the best driver for your device".
- Click "Next".
- Select "specify a location".
- Click "Browse" to locate the audio driver from the CD-ROM. (The path is :\Audio\Win98)
- Click "Next"/"Finish" to set up the audio driver.
- Click "Next", and then click "Finish" to set up the first audio driver.

: *Drivers for Windows NT4.0*

Note: *After installing Windows NT4.0, please install Service Pack to enhance Windows NT functions. Download the latest Service Pack 3 version from the Microsoft web site.*

Step 1: Installing a VGA Driver

- Click "Start".
- Select "Settings".
- Click "Control Panel".
- Select "Display".
- Click "Settings".
- Select "Display Type", and then select "Change".
- Click "Have Disk".
- Select "Browse" to specify the location.
- Open the path "D:\VGA\NT4.0".
- Click "OK" (All appropriate files are then copied to the hard disk.)
- Restart WinNT4.0.

Step 2: Installing an Audio Driver

- Click "Start".
- Select "Settings".
- Click "Control Panel"/"Multimedia".
- Select "Devices".
- Click "Add".
- Select "Unlisted or Updated Driver".
- Click "OK".
- Click "Browse" to locate the audio driver from the CD-ROM. (The path is :\Audio\NT4.0)
- Click "OK".
- Restart the system.

Appendix A: Specifications

This following are the features and specifications of the notebook computer.

Processor
- Intel Celeron-300A, Celeron-333, Celeron-366
  Socket 370, PPGA Package

Memory
- 3.3V power supply
- Supports EDO/Sync SDRAM DODIMM
- 8MB expandable up to 384MB
- *8/16/32/64/128MB 144-pin SODIMM RAM modules (optional)*

System BIOS
- 256KB Flash ROM
- Plug and Play 1.0a

Display
- 15.1”/15.0” TFT XGA LCD panel
- AGP 2X
- 64 bit Hardware 2D/3D Accelerator Graphics Engine
- Motion Compensation
- 8MB display memory SGRAM type (100MHz)
- Support external Video Input
- Support Video Playback
- Tri-view ™for triple displays: TV, CRT and LCD

Storage
- 3.5” FDD
- 12.7mm(h) LS-120MB floppy drive
- 15mm(h) IO Mega 100MB ZIP drive
- 2.5” hard disk drive (12.7 or 17mm high)
- *2.5” (12.7mm high) or 3.0” (12.5mm high) or 2.5” (17mm high) secondary hard disk drive*
- DVD-ROM/CD-ROM (24X speed)

Audio

- Sound-Blaster Pro ™version 3.01 compatible
- 3D stereo sound system
- Stereo full duplex support
- Downloadable Wavetable
- IIS interface for external ZV port or MPEG audio
- Built-in microphone
- Built-in 2 watts speakers x 2
- 16-bits 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
- S-video jack for TV output
- 120-pin expansion port
- RCA jack for video input
- External monitor (CRT) port
- Serial port
- Parallel port
- Dual PS/2 type ports
- Speaker-out jack
- Line-in jack
- Microphone-in jack
- RJ-11 jack on ISA Plug & Play Modem Accessory(Optional)
- DC-in jack

Communication

- Wireless Infrared transfer IrDA 1.1
- ASKIR
- FIR

Power Management

- APM v1.2
- Soft Off
- Device Power Management
- CPU over temperature protection
- Suspend and resume

Power

- AC input: 100~240V, 47~63Hz
- Lithium-Ion Battery/Lithium-Ion Smart Battery

Size & Weight

- 358mm(w)x280mm(d)x50mm(h)
- 4.2kg (with Lithium-Ion battery)

Appendix B: I/0 Port Pin Assignments

Parallel Port

Pin	Signal	Pin	Signal
1	Strobe#	2	Data 0
3	Data1	4	Data 2
5	Data 3	6	Data 4
7	Data 5	8	Data 6
9	Data 7	10	ACK#
11	Busy	12	Paper Empty
13	Select	14	Auto Linefeed#
15	Error#	16	Initialize#
17	Select In	18	Ground
19	Ground	20	Ground
21	Ground	22	Ground
23	Ground	24	Ground
25	Ground		

Serial Port

Pin	Signal
1	DCD (Data Carrier Detect)
2	RXD (Received Data)
3	TXD (Transmitted Data)
4	DTR (Data Terminal Ready)
5	GND (Signal Ground)
6	DSR (Data Set Ready)
7	RTS (Request To Send)
8	CTS (Clear To Send)
9	RI (Ring Indicator)

RCA Jack

Pin	Signal
1	Video-in
2	GND

Monitor Port

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

Dual PS/2 Type Ports

Pin	Signal
1	EKDA
2	NC
3	GND
4	VCC
5	EKCLK
6	NC

Pin	Signal
1	EMDA
2	NC
3	GND
4	VCC
5	EMCLK
6	NC

Dual USB Ports

Pin	Signal
1	USB VCCA
2	USBPO -
3	USBPO +
4	GND

Pin	Signal
1	USB VCCB
2	USBP1 -
3	USBP1 +
4	GND

S-Video Jack

Pin	Signal
1	GND
2	COMP
3	XLUMA
4	XCRMA

PC Card Sockets / Socket A:

Pin	Signal	Pin	Signal	Pin	Signal
1	GND	35	GND	69	GND
2	A-CD3	36	A-CA5	70	A-CA19
3	A-CD4	37	A-CA4	71	A-CA20
4	GND	38	GND	72	GND
5	A-CD5	39	A-CA3	73	A-CA21
6	A-CD6	40	A-CA2	74	A-VCC-C
7	GND	41	GND	75	GND
8	A-CD7	42	A-CA1	76	GND
9	A-CE1#	43	A-CA0	77	A-VPP
10	GND	44	GND	78	A-CA22
11	A-CA10	45	A-CD0	79	GND
12	A-OE#	46	A-CD1	80	A-CA23
13	GND	47	GND	81	A-CA24
14	A-CA11	48	A-CD2	82	GND
15	A-CA9	49	A-WP#	83	A-CA25
16	GND	50	GND	84	A-VS2
17	A-CA8	51	GND	85	GND
18	A-CA13	52	A-CD1#	86	A-RESET
19	GND	53	A-CD11	87	A-WAIT#
20	A-CA14	54	GND	88	GND
21	A-WE#	55	A-CD12	89	A-INPACK
22	GND	56	A-CD13	90	A-REG#
23	A-RDYBY#	57	GND	91	GND
24	A-VCC-C	58	A-CD14	92	A-BVD2#
25	GND	59	A-CD15	93	A-BVD1#
26	GND	60	GND	94	GND
27	A-VPP	61	A-CE2#	95	A-CD8
28	A-CA16	62	A-VS1	96	A-CD9
29	GND	63	GND	97	GND
30	A-CA15	64	A-IORD#	98	A-CD10
31	A-CA12	65	A-IOWR#	99	A-CD2#
32	GND	66	GND	100	GND
33	A-CA7	67	A-CA17		
34	A-CA6	68	A-CA18		

PC Card Sockets / Socket B:

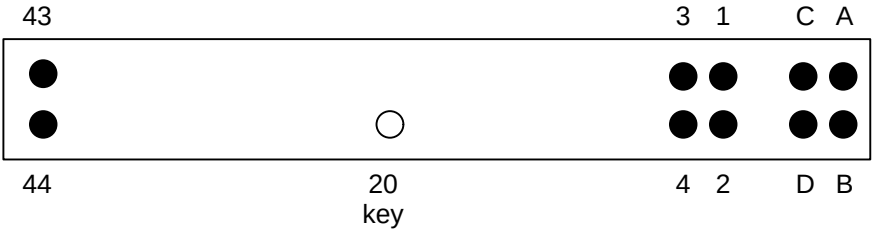
Pin	Signal	Pin	Signal	Pin	Signal
1	GND	35	GND	69	GND
2	B-CD3	36	B-CA5	70	B-CA19
3	B-CD4	37	B-CA4	71	B-CA20
4	GND	38	GND	72	GND
5	B-CD5	39	B-CA3	73	B-CA21
6	B-CD6	40	B-CA2	74	B-VCC-C
7	GND	41	GND	75	GND
8	B-CD7	42	B-CA1	76	GND
9	B-CE1#	43	B-CA0	77	B-VPP
10	GND	44	GND	78	B-CA22
11	B-CA10	45	B-CD0	79	GND
12	B-OE#	46	B-CD1	80	B-CA23
13	GND	47	GND	81	B-CA24
14	B-CA11	48	B-CD2	82	GND
15	B-CA9	49	B-WP#	83	B-CA25
16	GND	50	GND	84	B-VS2
17	B-CA8	51	GND	85	GND
18	B-CA13	52	B-CD1#	86	B-RESET
19	GND	53	B-CD11	87	B-WAIT#
20	B-CA14	54	GND	88	GND
21	B-WE#	55	B-CD12	89	B-INPACK
22	GND	56	B-CD13	90	B-REG#
23	B-RDYBY#	57	GND	91	GND
24	B-VCC-C	58	B-CD14	92	B-BVD2#
25	GND	59	B-CD15	93	B-BVD1#
26	GND	60	GND	94	GND
27	B-VPP	61	B-CE2#	95	B-CD8
28	B-CA16	62	B-VS1	96	B-CD9
29	GND	63	GND	97	GND
30	B-CA15	64	B-IORD#	98	B-CD10
31	B-CA12	65	B-IOWR#	99	B-CD2#
32	GND	66	GND	100	GND
33	B-CA7	67	B-CA17		
34	B-CA6	68	B-CA18		

Appendix C: 2nd HDD Jumper Setting

Please make sure you have already adjusted the jumper of the secondary Hard disk drive to be in a **Salve** mode before installing it. However, It is recommended to adjust the jumper in a **CSEL** (Cable Select) mode which may be suitable for both 2nd HDD and 3rd HDD. Contact your dealer for more detailed information.

The hard disk drive of different brands have different jumper settings, please adjust the jumper according to the table below:

JUMPER SETTING					
MODE	IBM/HITACH	TOSHIBA	FUJITSU	SEAGATE	MAXTOR
Master	All open	All open	All open	All open	All open
Slave	A-B	C-D	B-D	A-B	C-D
CSET	B-D	B-D	A-C	A-B, C-D	B-D



Pin Placement of HDD Connector