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Notebook Computer User Guide

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This manual guides you in setting up and using your new notebook computer. Information in this manual has been carefully checked for accuracy and is subject to change without notice.

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FCC Information to User

Safety and Care Instructions

No matter what your level of experience with computers, please make sure you read the safety and care instructions. This information can help protect you and your computer from possible harm.

Radio and television interference

Warning: Use the specified shielded power cord and shielded signal cables with this computer, so as not to interfere with radio and television reception. If you use other cables, it may cause interference with radio and television reception.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does not cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encourage to try to correct the interference by one or more of the following measures:

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

You may find helpful the following booklet, prepared by the Federal Communications Commission: Interference Handbook (stock number 004-000-

00345-4). This booklet is available from the U.S. Government Printing Office, Washington, DC20402

Warning: The user must not modify or change this computer without approval. Modification could void authority to this equipment.

FCC RF Radiation Exposure Statement:

This Transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20 centimeters between the radiator and your body.

15.247 (b)(4), the EUT meets the requirement that it be operated in a manner that ensures the public is not exposed to radio frequency energy levels in excess of the Commission's guidelines (1.1307, 1.1310, 2.1091 and 2.1093)

Canadian Department of Communications Compliance Statement

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

Shielded Cables Notice

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

Peripheral Devices Notice

Only peripherals (input/output devices, terminals, printers, etc) certified to comply with Class B limits may be attached to this equipment. Operation with

non-certified peripherals is likely to result in interference to radio and TV reception.

CD-ROM Notice

The CD-ROM and Combo drive are Class One Laser Product.

Caution

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

Use Conditions

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

About Your Notebook Computer

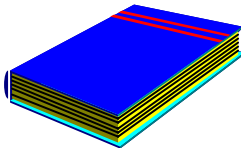


Congratulation for having purchased your new Professional Multimedia Notebook. This notebook incorporates the strongest features, which integrate the latest technologies available in the notebook industry.

Your new notebook computer not only drives today's multimedia applications but also be ready for tomorrow's exciting new software.

This Professional Multimedia Notebook is a freedom, flexibility, and functionality notebook that users are demanding for a long time.

About Your User Guide



Welcome to your Professional Multimedia Notebook User Guide. This manual covers everything you need to know in learning how to use your computer. This manual also assumes that you know the basic concepts of Windows and the PC. You will start doing a lot of great and fun things with your computer.

This manual is divided into seven chapters.

- Chapter 1 gives introduction on your computer features.
- Chapter 2 provides step-by-step instructions to help you begin using your notebook as quickly as possible.
- Chapter 3 describes how to operate the standard features of your computer.
- Chapter 4 illustrates how to integrate video and sound chips into impressive presentation.
- Chapter 5 illustrates how to connect external device to your computer.
- Chapter 6 explains how to use the System BIOS Setup program.
- Chapter 7 explains how to use the internal module options of your computer.
- Chapter 8 offers instructions on how to care and maintain your notebook.

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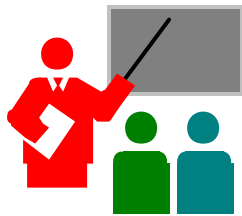
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Notebook User Guide

1 Introduction



Your Notebook PC is a fully Windows compatible portable personal computer. With the latest features in mobile computing and multimedia technology, this notebook makes a natural traveling companion. With leap of technology and compact, your Notebook PC runs on a whole wide range of general business, personal productivity, entertainment, and professional applications. It is ideal for use in the office, at home, and on the road.

Your Notebook PC makes an ideal choice for use in the office, the schoolroom, at home, on the road and all other occasions.

1.1 Feature Highlight

Before we go to identify each part of your Notebook PC, we will first introduce you to other notable features of your computer.

Processing Unit

- Your notebook runs on Intel Pentium 4/Intel Mobile Pentium 4 microprocessor. The Intel Pentium 4/Intel Mobile Pentium 4 are integrated with 512 KB L2 Cache. Check with your dealer on the CPU type and speed.
- Fully compatible with an entire library of PC software based on operating systems such as Windows XP.

Wireless LAN

Built-in Mini PCI Wireless LAN module (BTO)

Memory

This notebook provides two memory slots for installing DDR SDRAM 144-pin SODIMM modules up to 2048MB using 128MB, 256MB, 512MB or 1024MB DDR SDRAM modules.

PCMCIA

Provides one PCMCIA slot that allows you to insert one Type II card.

IEEE 1394

Provides one IEEE 1394 port for fast data transmission by external hard disk or digital video (DV)

USB 2.0

Provides four USB 2.0 ports for fastest I/O data transmission

AGP Local Bus Architecture

Provides blazing graphics controller with nVidia chipset. AGP video local bus and 3D Graphic Engine with maximum 64/128MB video memory

PCI Local Bus Architecture

- 32-bit PCI Enhanced IDE optimizes the data transfer between the CPU and hard disk drives. Support ultra DMA100 PIO Mode up to PIO Mode 4, bus mastering for LBA Scheme.
- 32-bit PCMCIA CardBus PCI technology that is also backward compatible with 16-bit PC cards.

Audio System

Full-duplex 16-bit stereo audio system output. Sound Blaster and Sound Blaster Pro compatible.

Flash BIOS

Flash BIOS allows you to easily upgrade the System BIOS using the Phoenix Flash utility program.

Power and System Management

- Integrated SMM (System Management Mode) on system chipset that shuts down components not in use to reduce power consumption. To execute power management, you can set up the parameter in Power Options properties by pointing your mouse to Control Panel of Windows.
- Suspend hot-key allows you to suspend the system operation instantly and resume at the press of the power button.

- System Password for User and Supervisor included on the BIOS SETUP Program to protect unauthorized use of your computer.

1.2 Unpacking the Computer

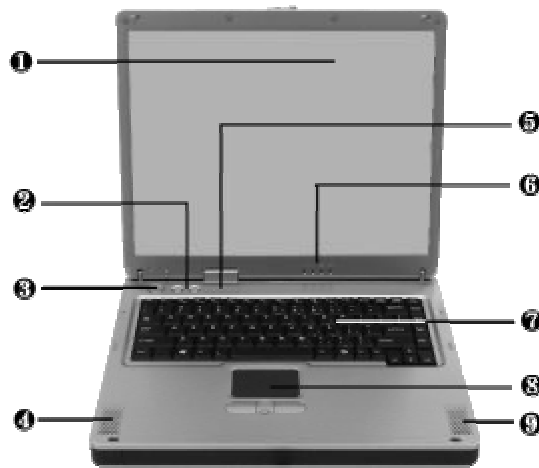
Your computer comes securely packaged in a sturdy cardboard shipping carton. Upon receiving your computer, open the carton and carefully remove the contents. In addition to this User Guide, the shipping carton should also contain the following items:

- The Notebook Computer
- An AC Adapter and AC Power Cord
- Li-Ion Battery Pack
- Utility Diskettes/CD
- Hardcopy User Guide/E-book
- Quick Setup Manual

Carefully inspect each component to make sure that nothing is missing and/or damaged. If any of these items is missing or damaged, notify your dealer immediately. Be sure to save the shipping materials and the carton in case you need to ship the computer or if you plan to store the computer away sometime in the future.

1.3 The Inside of the Notebook

The notebook computer is compact with features on every side. First, look at the inside of the system. The following sections describe inside features.



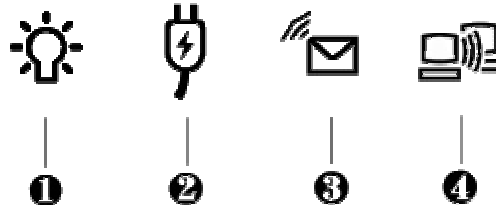
- | | |
|---------------------------------------|--------------------------------|
| 1. Color LCD Display | 2. CPU Speed Adjustment Button |
| 3. Power On/Resume Button | 4. Built-in Stereo Speakers |
| 5. Status LED Indicator | |
| 6. Power/Wireless LAN/Mail Status LED | |
| 7. Keyboard | 8. Touchpad Pointing Device |

- **Color LCD Display**
The notebook computer comes with a color LCD that you can adjust for a comfortable viewing position. The LCD can be 14.1" or 15.0" TFT color LCD with 1024x768 XGA (Extended Graphics Array) resolution panels or 15" TFT color LCD with 1400x1050 SXGA+ resolution. The features of the Color LCD Display are summarized as follows:

- ⊖ TFT color LVDS with 14.1" 1024x768 XGA or 15" 1400x1050 SXGA+ resolution panels.
- ⊖ Capable of displaying 16M colors (32-bit true color) on either size panels.
- ⊖ LCD display control hot-keys allows you to adjust the brightness of the LCD.
- ⊖ Simultaneous display capability for LCD and external desktop computer monitor.
- ⊖ LCD display can be 14.1" or 15" TFT.
- CPU Speed Adjustment Button
Increased or decreased the CPU speed incrementally for the balance between performance and power-saving.
- Power On/Resume Button
Switches the computer power on and off, or resumes whenever it is in Suspend mode.
- Built-in Stereo Speakers
Integrated left and right mini stereo speakers for sound and audio output for your multimedia presentations or listening pleasure.
- Status LED Indicator
Keeps you informed of your notebook computer' s current operating status. Description of the status icons appears in the latter part of this section.
- Power/Wireless/Mail Status LED
Keeps you informed of your notebook computer' s current power status, Wireless LAN and mail status. Descriptions of the status icons appear in the latter part of this section.
- Keyboard

- ⊖ Standard QWERTY-key layout and full-sized 87/90 keys keyboard with Windows system hot-keys, embedded numeric keypad, 10 hot keys, inverted "T" cursor arrow keys, and separate page screen control keys.
- ⊖ Wide extra space below the keyboard panel for your wrist or palm to sit-on comfortably during typing.
- Touch pad Pointing Device
Microsoft and IBM PS/2 mouse compatible with three select buttons as one Scroll button and two Touchpad click buttons. These three buttons array below the Glide pad. The middle one is located with the Scroll button that lets you execute the scroll page function. The two click buttons located at each side support tapping selection and dragging functions. These buttons work like a standard computer mouse. Simply move your fingertip over the Glide Pad to control the position of the cursor. Use the selection buttons below the Glide Pad to select menu items.

POWER/WIRELESS LAN/MAIL STATUS ICONS



- 1. Power Indicator
- 2. Battery Charging LED
- 3. Mail LED
- 4. Wireless LAN Access

- Power Indicator
Lets you know that power to the system is turned on. This LED is positioned so that you can see the power state whether the LCD panel is opened or closed.

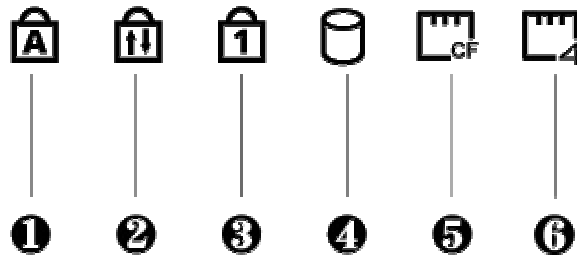
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- ⊖ Lights green when the system is powered on using the AC adapter or battery.
- ⊖ Lights green blinking when in Suspend to RAM. (or Suspend to Disk)
- ⊖ Lights orange when the battery power is low.
- **Battery Charging LED**
Lights to indicate battery in charging status.
 - ⊖ Lights blue to indicate that the battery is in charging.
 - ⊖ Lights off to indicate the battery is fully charged or no battery installed.
- **Mail LED**
Lights blinking blue to indicate that a new mail is arrived.
- **Wireless LAN access**
Lights in blue indicate that the wireless LAN module is installed. When lights blinking blue indicate that the system is accessing or retrieving data by wireless device.

The notebook computer uses status lights marked with icons to communicate system status. See the following figure and list for each icon' s meaning.

STATUS LED ICONS

The Status LED Panel keeps you informed of the notebook' s current operating status. Each LED is marked with an icon to designate the system status.



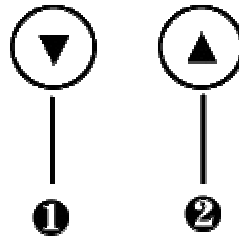
- | | |
|--------------|------------------------|
| 1. Caps Lock | 2. Scroll Lock |
| 3. Num Lock | 4. Drive Access |
| 5. CF Access | 6. 4 in 1 flash Access |

Status LED Icons

- **Caps Lock**
When LED in blue light indicates that the Caps Lock key on the keyboard is activated. When activated, all alphabet keys typed in will be in uppercase or capital letters.
- **Scroll Lock**
When LED in blue indicates that the Scroll Lock key on the keyboard is activated. The Scroll Lock key has different functions depending on the software you are using.
- **Num Lock**
When LED in blue light indicates that the Num Lock key on the keyboard is activated. When activated, the embedded numeric keypad will be enabled.
- **Drive Access**
When LED in blue light indicates that the system is accessing either the Hard Disk or CD/CD-RW/DVD/Combo drive.

- **CF Access**
When LED in blue light indicates that CF (Compact Flash) card is inserted into this slot and recognized by this NB.
- **4 in 1 flash Access**
When LED in blue light indicates that one of the flash card (SD, MMC, Memory Stick, or Smart Media card) is inserted into this slot and recognized by this NB.

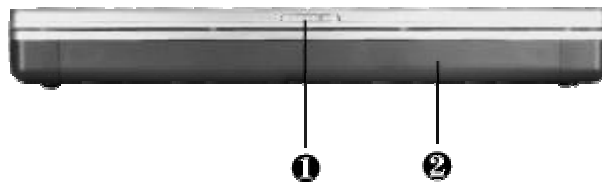
THE FUNCTION OF CPU SPEED ADJUSTMENT BUTTONS



1. CPU speed down button 2. CPU speed up button

- **CPU speed down button**
Press this button to decrease the CPU performance speed to save power for extending battery life and operation time.
- **CPU speed Up button**
Press this button to increase the CPU performance speed for highly performance demanding program

1.4 The Front Side of the Notebook



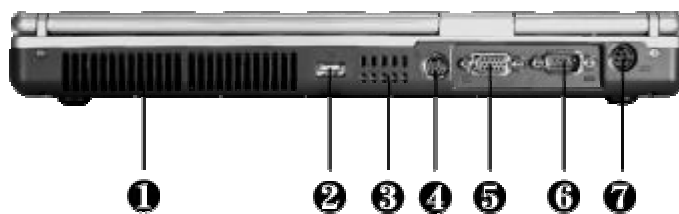
1. Cover Switch

2. Battery

- **Cover Switch**
The cover (LCD panel) is locked when it is closed. Slide the button right aside to release the latch for opening the cover of the computer.
- **Battery**
The battery provides the power for the N/B when there is no AC power available. Please refer to chapter 2.1 for how to attach and detach the battery.

1.5 The Rear Side of the Notebook

The system ports at the back of your notebook computer can connect various devices (like a printer or external monitor). Each port is described as followings.



1. Air-Outlet Vent

2. USB Port

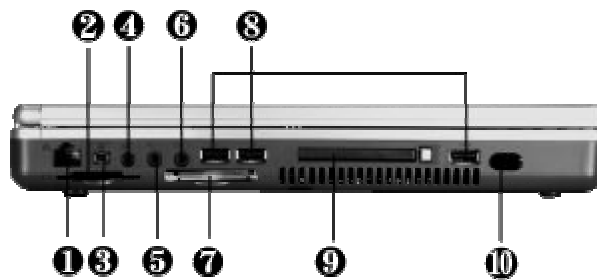
3. Air Inhalant

4. TV Port 5. Monitor Port 6. COM Port
7. DC Power Port

- **Air-Outlet Vent**
Emits the heat out of your computer and keeps it within operating temperature.
- **USB Port**
The Universal Serial Bus (USB) port allows you to connect up to 127 USB-equipped peripheral devices (for example, printers, scanners and so on) to your notebook computer.
- **Air Inhalant**
Inhale the air into your computer to keep it within operating temperature.
- **TV Port**
Lets you connect to a S-Video TV connector for presentation or VCD, DVD watching.
- **Monitor Port**
Lets you attach an external monitor or projector for wider display. You can run the LCD display and the external monitor simultaneously or switch it to monitor only using the display hot-key.
- **COM Port**
Lets you connect a 9-pin external serial device such as a PDA, GPS or other serial devices.
- **DC Power Port**
Lets you connect the AC power adapter in supplying continuous power to your notebook and recharging the battery.

1.6 The Left Side of the Notebook

The left side of your notebook computer provides the features shown in the following figure.



- | | |
|--------------------|------------------------|
| 1. LAN port | 2. 4 in 1 card slot |
| 3. IEEE 1394 | 4. Stereo line in jack |
| 5. Microphone jack | 6. Headphone jack |
| 7. CF card slot | 8. USB port |
| 9. PC Card slot | 10. IR port |

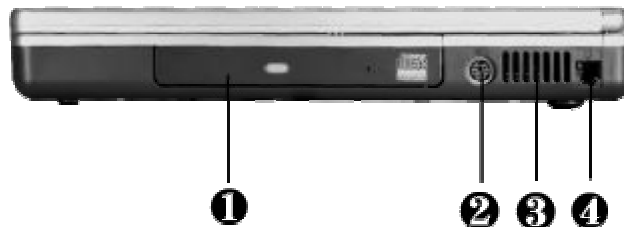
Left Side Features

- **LAN Port**
An internal 10Base-T/100Base-TX LAN module connects your computer to other computers/networks through a local area network (LAN).
- **4 in 1 card slot**
The card slot supports MMC, SD, Smart Media and Memory Stick flash memory card format. You can use either of the 4 types flash memory card for extra storage media. Please pay attention to put the copper connector at the bottom side when you insert the flash memory card.
- **IEEE 1394**
IEEE 1394 port is a high speed I/O port that can transfer high levels of data in real-time, such as external hard disk, Digital Video Camera.

- **Stereo Line-In Jack**
Lets you connect an external audio device such as CD player, a tape deck, or a synthesizer as an input source. Use a cable to connect to the Line-Out port on the other audio system to record or play on this N/B.
- **Microphone Jack**
Allows you to connect an external microphone for monophonic sound recording directly into your notebook computer.
- **Headphone Jack**
Lets you plug in a stereo headphone, powered speakers, or earphone set with 1/8 inch phono plug for personal listening.
- **CF card Slot**
This card slot provides you in using CF (Compact Flash) card as extra storage media. There is one correct side only can be accepted for this card slot. If you cannot insert the card into the slot, please turn the card upside down and insert it again.
- **USB Port**
The Universal Serial Bus (USB) port allows you to connect up to 127 USB-equipped peripheral devices (for example, printers, scanners and so on) to your notebook computer.
- **PC Card Slot**
 - ⊖ Lets you connect various PC cards such as memory card
 - ⊖ Supports both 3V, 5V 32-bit CardBus and 16-bit PC cards.
- **IR Port**
Wireless data/files transferring between your notebook computer and an IR-equipped device or notebook computer. You can also print to an IR-equipped printer without using cables.

1.7 The Right Side of the Notebook

The right side of the notebook computer offers the features shown in the following figure.



1. CD-ROM, DVD-ROM, CD-RW/DVD Combo
2. PS/2 Port
3. Air Inhalant
4. Modem Port

Right Side Features

- **CD-ROM, DVD-ROM, CD-RW/DVD Combo**
Allows you to load and start programs from a compact disc (CD) or a digital video disc (DVD) and play conventional audio CDs. It also can make CD by using CD-R or CD-RW.
- **PS/2 Port**
Lets you connect an external PS/2-style mouse, PS/2-style keyboard, or PS/2-style numeric keypad to the system. With an optional Y-cable adapter, you also can connect any combination on two of these
- **Air Inhalant**
Inhale the air into your computer to keep it within operating temperature.

- **Modem Port**
A 56K internal fax/data modem is installed. It keeps you connected to the outside world through networks.

1.8 The Underside of the Notebook

The bottom of the notebook computer offers the following features.



- | | |
|--|-----------------------|
| 1. Air Inhalant | 2. Battery Lock Latch |
| 3. Battery Release Latch | 4. Memory Compartment |
| 5. Wireless LAN/Modem Module Compartment | |
| 6. Battery Bay | |

Bottom of the System

- **Air Inhalant**
Inhale the air into your computer to keep it within operating temperature.
- **Battery Lock Latch**
Push the latch to the bottom to lock the battery bay. This action only available when the battery release latch has located to the right side.
- **Battery Release Latch**
Push the latch to the left end to remove the battery pack.

- **Memory Compartment**
Remove the screw to find two DIMM slots. One slot is empty for upgrade usage.
- **Wireless LAN/Modem Module Compartment**
This compartment is for installing Wireless LAN/Modem combo module to enable the Wireless LAN/Modem function. It is BTO option and can be installed only by certified dealer.
- **Battery Bay**
Equipped with a choice of Lithium-Ion (Li-Ion) battery pack.

1.9 Notebook Accessories

AC Adapter

The AC Adapter supplies external power to your notebook computer and charges the internal battery pack simultaneously. The AC adapter has an auto-switching design that can connect to any 100VAC ~ 240VAC power outlets. You just change the power cord if you are going to use your notebook in other countries with different connector outlets.

When you connect the AC adapter, it charges the battery whether or not the notebook computer is powered on.

Battery Pack

Aside from the AC adapter, your computer can also be powered through the internal battery pack. The battery pack uses rechargeable Lithium-Ion (Li-Ion) battery cells that provide long computing hours when fully charged and power management enabled. You should always leave the battery inside your computer

even when using the AC adapter as it also acts as a back-up power supply in case power from the AC adapter is cut off. It is also very important to have the battery pack always charged to prevent battery cell degradation.

1.10 Notebook Options

DVD-ROM Device Pack

This device pack option is used for reading DVD or playing DVD titles. DVD-ROM drives are also backward compatible with CD-ROM, so you can also use any audio CDs, video CDs, photo CDs, and CD-R.

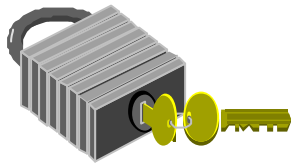
CD-RW Device Pack

This device pack can write data to CD-R or CD-RW CD for you to backup the data.

CD-RW/DVD Combo Device Pack

This device pack can write data to CD-R or CD-RW CD for you to backup the data and also can read DVD/CD title.

2 Getting Started



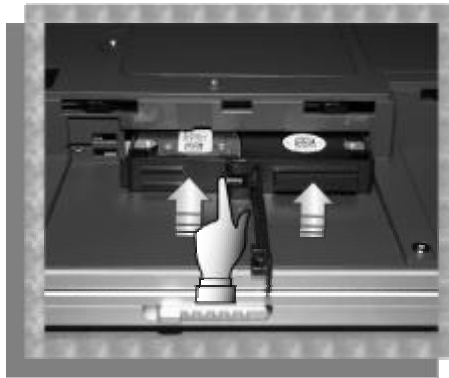
Your Notebook is designed and pre-configured for easy setup and use. This chapter describes the installation steps you should follow to get the notebook up and running as quickly as possible. Contact your dealer if they have pre-installed all the needed drivers to fully operate your computer or if there is an update on the driver installation of the notebook.

2.1 Installing the Hard Disk

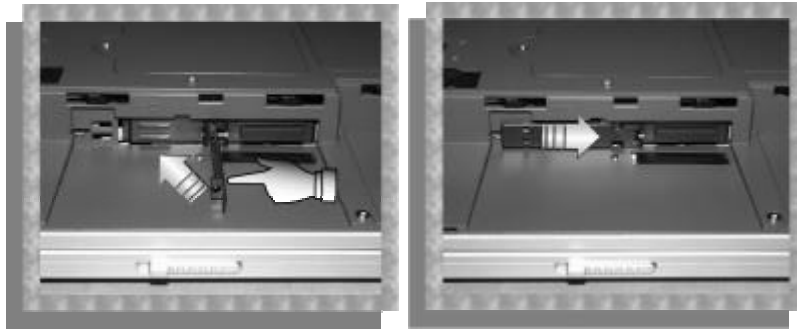
For safety and delivery purpose, the HDD might be separately packed from the notebook. If it had installed by the dealer, please skip this section and refer the next section continuously. If the HDD is packed individually, you should install it with following procedures before using the notebook.

To install the HDD:

1. Remove the HDD's protecting package.
2. Insert the HDD with its connector toward the socket inside the battery bay.
3. Push the HDD firmly and slowly.



4. Place the locking bar and push it right side to lock the HDD firmly.



2.2 Using the Battery Pack

The notebook is designed to operate with one of the following power sources:

- With AC power using the AC adapter connected to an electrical outlet.
- With a Lithium-Ion (Li-Ion) battery pack.

You should use the AC adapter whenever it is possible, relying on the battery pack only when AC power is unavailable.

Before you use your notebook computer, install and recharge the battery pack first. The rechargeable Li-Ion battery pack allows you to operate the notebook without an external power source. When you connect the AC power adapter, the battery immediately starts to recharge. Normal battery charging time is 2~2.5 hours for Lithium-Ion (Li-Ion) battery pack when your computer is turned off.

For maximum battery performance, fully discharge the battery first before recharging it when you start to use it first time. To do so, unplug the AC adapter, turn off power management features (through Setup and Windows), and turn on the system. Once the battery is fully discharged, plug in the AC adapter and recharge the battery. You can also do it by using the **Battery Refresh** function in BIOS setup manual that is described on chapter 6.6

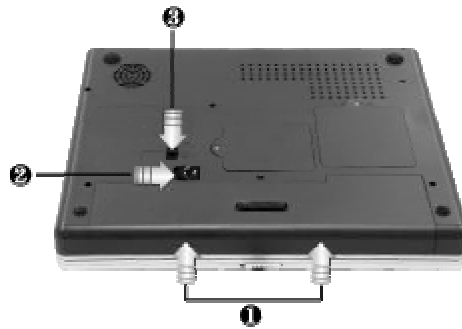
Notebook User Guide

If you do not discharge the battery completely, it fails to accept a full recharge.

⚠ ***Li-Ion battery is vulnerable, do not charge it with other power adapter, or it may cause fire or explosion.***

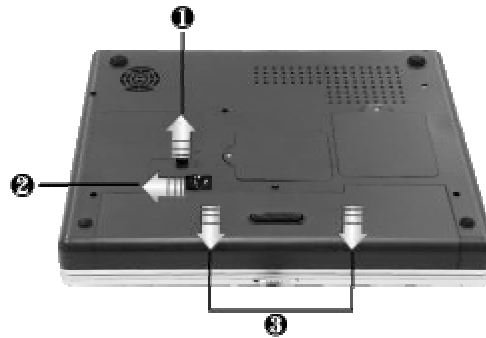
Installing the Battery Pack

This notebook provides the most convenient way to install the battery pack into your computer. To install the battery, first orient the extended nose directed toward the compartment, then following the sequence as shown in the figure below.



Removing the Battery Pack

To remove the battery pack, slide the related latch and then take out the battery pack with your finger as the sequence shown in the figure below.



Replacing the Battery Pack

When your notebook estimates that the battery only has enough charge to continue for a few minutes, it will alert you with a battery low warning beep. If you are consuming a lot of power by using the audio system, the PCMCIA slots, the hard drives, and CD/DVD/CD-RW/Combo drive, your notebook might run out of charge much sooner than you expect. You should always respond to the battery low indication by connecting to AC power or turning off your notebook, or suspending your notebook to disk. If you do not do so, the notebook will automatically suspend to disk and turn off. The contents of the memory will store in the hard disk drive. You will be unable to restart the notebook until you have connected to the AC adapter or installed a charged battery. To replace the battery pack, refer to the previous sections on "Installing the Battery Pack" and "Removing the Battery Pack."

- ⌘ ***For Window Me/2000/XP, the suspend mode (Hibernate or Standby) can be chosen at Power Options of Windows's Control Panel)***
- ⌘ ***Be sure to save your data before replacing the battery pack or connecting the AC adapter. Failure to do so can result in data loss.***

EXTENDING BATTERY LIFE

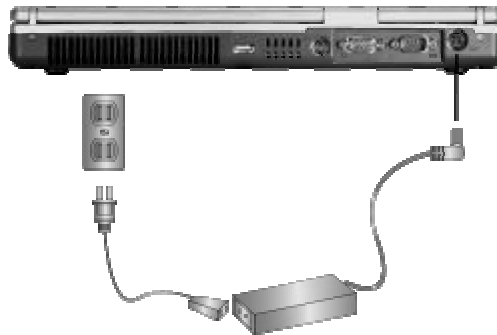
It is important to be aware of the simple things for extending the life of the system main battery while you are on the road. You should find a working place where the external lighting is not too bright and turn down the screen brightness. Also, you can choose the available mode on the Power Management item of the Control Panel in Windows.

2.3 Connecting the AC Power Source

The AC adapter provides external power source to your computer and charges the internal battery pack at the same time. The AC adapter also has an auto-switching design that can connect to any 100VAC ~ 240VAC power outlets.

To connect the power adapter:

1. Plug the AC power cord into the power socket of the AC power adapter.
2. Plug the other end of the AC power cord to a live AC wall outlet.



3. Plug the connector of the AC adapter to the DC-IN port found at the back of the computer.

⚠ Whenever possible, it is advisable to always have the AC adapter connected to the notebook and the battery pack installed. This ensures continuous power supply and prevents any data loss incurring from sudden power breakdown.

- *For the power supply of this equipment, an approved power cord has to be used.*
- *Make sure the socket and any extension cord(s) you use can support the total current load of all the connected devices.*
- *Before cleaning the computer, make sure it is disconnected from any external power supplies (i.e. AC adapter).*

2.4 Starting Your Computer

The Power/Resume button is found on the top of the base unit. Press the Power/Resume button to start your computer and check that if the Power LED turns on.



After a few seconds, the computer's display will turn on and your computer will begin to execute the Power On Self Test or POST to check if all system components are running properly. Any error found during the test will be displayed on the screen and may generate short beep sound as well.

After the test, the screen will also display a message "**press <F2> to enter SETUP**". You don't need to run this program at the moment as your dealer already made the necessary settings for your computer optimal operation. Refer to Chapter 6 on running the SETUP program later.

After the test has completed, your computer will start to search and boot up the operating system from your hard drive. The notebook computer normally comes with a Windows operating system pre-installed in your hard drive. Consult the Windows manual on how to use the program. If not, contact your dealer for assistance.

2.5 Adjusting the Display Controls

The LCD brightness adjustment is controlled by **<Fn> + <F8>** and **<Fn> + <F9>** keys respectively. You need to press these hot-key controls after powering on your notebook to suit your viewing pleasure.

The Brightness hot-key control adjusts the brightness on the LCD. The brightness hot-key control will not set the LCD completely dark or bright; it provides sufficient lighting to the LCD to match the external lighting of the surrounding. The brighter the room, the more you need to increase the brightness of the LCD.

2.6 Installing the Notebook Device Drivers

If you already have an operating system installed into your notebook computer, it is best to install the needed device drivers for using the built-in devices of your computer. Before installing the drivers, check with your dealer first if they have

already installed all the drivers along with the operating system. If not, follow the procedures below:

INSTALLING WINDOWS XP FROM CD/DVD/CD-RW/COMBO DRIVE

To install Windows XP directly from your CD-ROM or DVD-ROM, please go to **Boot** menu of **BIOS** setup menu. Use arrow key to select "CD-ROM Drive", then use "+" or "-" to move it to the top. Go to **Exit** menu and select "**Exit Saving Changes**". Accordingly, insert the Windows XP installation CD into CD-ROM drive with following the instructions on the screen to finish the installation.

ENABLE DMA CHANNEL FOR BEST PERFORMANCE

This Notebook supports DMA function for fastest data bus transmission. The Windows system does not enable this function after you had installed the Windows system. You must enable this function manually to make this notebook running smoothly, especially in music listening and DVD, VCD playback.

Enable DMA for Windows XP

1. Please click the following buttons with the procedure **Start --> Setting--> Control Panel --> System --> Hardware --> Device Manager**.
2. Select and click **IDE ATA/ATAPI Controller**, you will find **Primary IDE Channel** and **Secondary IDE channel**. Please click **Primary IDE Channel** first.
3. Click **Advanced setting** Tab. Please change the selection of **Transfer Mode** to **DMA if available** on both **Device 0** and **Device 1**.

4. Return to previous level, please change the setting of **Secondary IDE Channel** as above.
5. Restart your notebook to let the setting take effect.

INSTALLING THE AGP DRIVER

For the best and fast performance of video AGP, please install the driver of the AGP. Follow the procedures indicated below to install the AGP driver.

Installing AGP driver for Windows XP

1. Click the **Start** button, then point to **Run**. The Run dialog box appears.
2. Click the **Browse** button and specify the directory as.
"E:\Drivers\WinXP\AGP\Setup.exe".
3. Implement the setup program to install this driver. The Welcome dialog box appears.
4. Click **Next** to process the further step continuously when screen displays this command.
5. Press **Finish** to restart your system.

INSTALLING THE VGA DEVICE DRIVER

Following is the procedure for installing the Video Accelerator 3D Adapter VGA driver to your computer:

Installing VGA device driver for Windows XP

1. Click the **Start** button, then point to **Run**. The Run dialog box appears.
2. Click the **Browse** button and specify the directory as.
"E:\Drivers\WinXP\VGA\Setup.exe".

3. Implement the setup program to install this driver. The Welcome dialog box appears.
4. Click **Next** to process the further step continuously when screen displays this command.
5. Press **Finish** to restart your system.

INSTALLING THE LAN DEVICE DRIVER

Please follow the procedures below for installing the LAN driver:

Installing LAN driver for Windows XP

1. Click the **Start** button, then point to **Run** to appear the Run dialog box.
2. Click the **Browse** button to specify the directory as
"E:\Drivers\WinXP\LAN\Setup.exe"
3. Execute the setup program and then the **Welcome** dialog box appears.
4. Click **Next** button to start installing.
5. Click **Finish** to restart your system.

INSTALLING THE AUDIO DEVICE DRIVER

Your notebook computer uses the Realtek Audio controller.

Installing Audio device driver for Windows XP

1. Click the **Start** button, then point to **Run**. The Run dialog box appears.
2. Click the **Browse** button and specify the directory as
"E:\Drivers\WinXP\Audio\Setup.exe"
where the audio driver is located
3. Implement the setup program to install this driver. The Welcome dialog box

appears.

4. Click **Next** to process the further step continuously when screen displays this command.
5. Press **Finish** to restart your system.

INSTALLING EZBUTTON DRIVER

Following is the procedure for installing the Internet and e-mail buttonkeys.

Installing EzButton driver for Windows XP

1. Boot Windows from your hard disk and insert the disc containing the EzSystem driver for Windows.
2. Click the **Start** button and then click **Run**. In the Run dialog box, click **Browse** button and navigate to the directory as "**E:\Drivers\WinXP\EzButton\EzButton.exe**" where the EzButton driver is located.
3. The system may prompt you the message to restart the computer to finish the installation.

INSTALLING EASY MAIL LIGHT DRIVER

Installing Easy Mail Light for Outlook 98/2000/2002 driver on Windows XP

1. Boot Windows from your hard disk and insert the disc containing the Ez Mail Light driver.
2. Click the **Start** button, then click **Run**. In the Run dialog box, click **Browse** button and navigate to the directory as "**E:\Drivers\WinXP\EzMail\EzMail.exe**".

3. Run the execution file for installing the EZ Mail Light driver, and then click **Finish** after completes the installing procedure.

INSTALLING SYNAPTICS - TOUCH PAD DRIVER

Installing Synaptics - Touch Pad driver for Windows XP

1. Click the **Start** button, then point to **Run** to appear the Run dialog box.
2. Click the **Browse** button to specify the directory as "**E:\Drivers\WinXP\Touch Pad\Setup.exe**".
3. Execute the setup program and then select the **Welcome** dialog box appears.
4. Select the language version that you want to install and then click "**OK**" to continue.
5. Click **Next** button several times.
6. Click **Finish** to restart your system.

INSTALLING THE FIR (FAST IR) DEVICE DRIVER

Your notebook computer uses the Fast IR controller.

Installing Audio device driver for Windows XP

1. Click the **Start** button, then point to **Run**. The Run dialog box appears.
2. Click the **Browse** button and specify the directory as "**E:\Drivers\WinXP\FIR\Setup.exe**".
3. Implement the setup program to install this driver. The Welcome dialog box appears.
4. Click **Next** to process the further step continuously when screen displays

this command.

5. Press **Finish** to restart your system.

INSTALLING THE IDE DEVICE DRIVER

Your notebook computer uses the advanced IDE controller. Installing the driver will enhance the stability and performance.

Installing IDE device driver for Windows XP

1. Click the **Start** button, then point to **Run**. The Run dialog box appears.
2. Click the **Browse** button and specify the directory as.
"E:\Drivers\WinXP\IDE\Setup.exe".
3. Implement the setup program to install this driver. The Welcome dialog box appears.
4. Click **Next** to process the further step continuously when screen displays this command.
5. Press **Finish** to restart your system.

INSTALLING THE CARD READER DEVICE DRIVER

Your notebook computer uses the advanced card reader controller. Installing the driver will enhance the stability and performance

Installing IDE device driver for Windows XP

1. Click the **Start** button, then point to **Run**. The Run dialog box appears.
2. Click the **Browse** button and specify the directory as.
"E:\Drivers\WinXP\Card Reader\Setup.exe".

3. Implement the setup program to install this driver. The Welcome dialog box appears.
4. Click **Next** to process the further step continuously when screen displays this command.
5. Press **Finish** to restart your system.

2.7 Turning off Your Computer

If you are not going to use the computer for a while, it is best to turn off the power of the computer for longer use. Before turning off the power, you need to close first all application programs and shutdown the operating system.

After turning off the computer, make it a habit to leave the LVDS panel open for a while whenever used for an extended period of time. This allows the inside parts of the computer to cool off. Closing the panel will force the heat up against the LCD screen, which may degrade the LCD when done regularly. More importantly, never close the LVDS panel for a long period of time when computer is on and power saving features are disabled.

3 Using Your Notebook



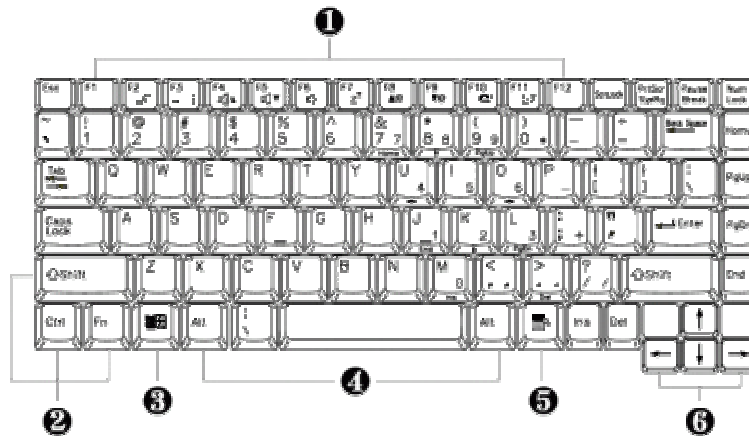
This chapter describes how to operate the standard built-in features of the notebook that you normally would use in your day-to-day computer work. If you are new to computers and to your operating system, you also need to read the manual for the operating system on how to work with your computer. It is very important to familiarize yourself well with the operating system. The succeeding chapters not only guide you to go beyond the basics, but also try other exciting features.

3.1 Starting Your Operating System

The operating system is a must ingredient in using your computer. Without an operating system, it is like playing chess without the chessboard. It is the platform for all your software application programs to run on. The most popular operating system today is Microsoft Windows. You should have installed one operating system by your dealer unless you are an expert computer user and would need a more powerful operating system. If you have an operating system already installed in your computer, then you would be up and running after you power on your computer and boot up the system. Check your operating system manual on how to run it.

3.2 Understanding the Keyboard Functions

Your notebook computer is equipped with an 84/88 keys keyboard that provides all the functionality of a full-sized 101 or 102-key IBM keyboard. Aside from the standard typewriter-layout keyboard of your computer, there are a number of extra features and function controls on the built-in keyboard including Windows system hot keys.



- | | |
|---------------------------|------------------------|
| 1. Function Keys | 2. Control Keys |
| 3. Windows Start Menu Key | 4. Control Keys |
| 5. Windows Shortcut Key | 6. Cursor Control Keys |

Keyboard

Key features and operations are described below:

- Function Keys**
 Function keys are application-driven, like **F1** through **F12** can be found on the keyboard. These keys work together with the **Fn** key to activate special functions. Some keys (printed in blue on keypad) are preprogrammed with dual functions.
- Control keys** — **Ctrl**, **Alt**, **Fn**, and **Shift** are controls used in conjunction with other keys to change their functions. To use control keys, press and hold the control key while pressing another key. For example, "Press **Ctrl-C**" means to hold down the **Ctrl** key and type the letter **C**. Key combinations work especially to the application you are running.

- **Windows keys**

Use the following two keys to facilitate your work:

- Start Menu key
Displays the Start menu.
- Shortcut/Application key
Provides quick access to shortcut menus. This key acts like a right mouse button.



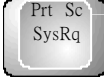
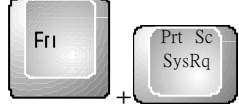

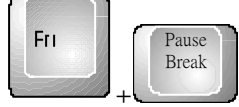


- **Cursor Control keys**









Cursor control keys let you position the cursor on the screen where you want. In the screen, the cursor is a blinking underline, block, or vertical bar depending on the application. The cursor indicates where the next text typed is inserted.

- **Typewriter keys**


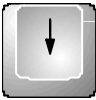


Typewriter keys (also called *alphanumeric* keys) are used to enter text and characters. Keys with blue print on them behave differently when combined with control keys.

BASIC KEYBOARD FUNCTIONS




Keypad	Function Description
	<p><Enter> key. Execute a command. Within many text editing application programs, the <Enter> key inserts a hard carriage return, just like what ordinary typewriter does.</p>
	<p><Esc> key. Press this key to cancel or escape from a command or function.</p>
	<p><PrtSc> key. Known as the Print Screen key. Press this key to map the whole screen to share memory for your specific usage.</p>
	<p><SysRq> key. Used for multitasking operating system.</p>
	<p><Pause> key. Press this key to temporarily halt execution of a command. Pressing any other key to resume execution of a command.</p>
	<p><Break> key. Press this key to temporarily halt execution of a command. Pressing any other key to resume execution of a command.</p>
	<p><Ins> key. Known as the Insert key. Press this key to toggle the keyboard data entry from insert to type over mode.</p>
	<p> key. Known as the Delete key. Press this key to delete the character to the right of the cursor, or delete marked texts or items.</p>


Keypad	Function Description
	<Backspace> key. Press this key to delete the character to the left of the cursor.
	<Shift> key. Press this key in combination with alphabet letters to produce uppercase letters in typing. Use this key in combination with those two-character keys (found on the second row of the keyboard) to produce the upper marked keys. Also used in most application program in combination with other keys to execute a certain command.
	<Tab> key. Press this key to move the cursor to the next tab stop on the right. This key works much the same as in ordinary typewriter.
	<Ctrl> key. Known as the Control key. Used in most application program in combination with other keys to execute a certain command.
	<Alt> key. Known as the Alternate key. Used in most application program in combination with other keys to execute a certain command.
	<Num Lock> key. Activates the embedded 15-key numeric keypad. The keys are color coded blue.
	<Caps Lock> key. Used in most application program to always activate uppercase alphabet characters.
	<Scroll Lock> key. Used in most application program to scroll the screen without having to move the cursor.

CURSOR CONTROL KEYS



Keypad	Function Description
	Up arrow key. Moves the cursor up one line at a time.
	Down arrow key. Moves the cursor down one line at a time.
	Left arrow key. Moves the cursor to the left one space at a time.
	Right arrow key. Moves the cursor to the right one space at a time.

SCREEN CONTROL KEYS

Keypad	Function Description
	<Home> key. Moves the cursor to the beginning of a screen or line.
	<PgUp> key. Moves the cursor up one screen at a time
	<PgDn> key. Moves the cursor down one screen at a time

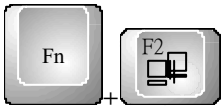
Keypad	Function Description
	<End> key. Moves the cursor to the end of a screen or line.

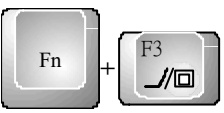
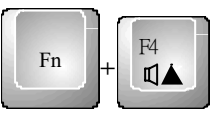
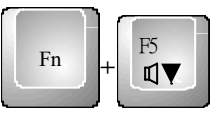
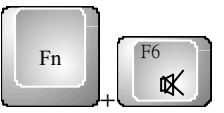
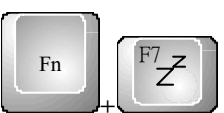

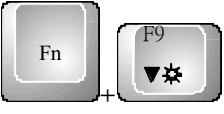
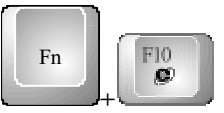
WINDOWS HOT KEYS

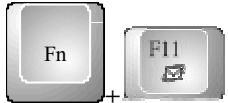
Keypad	Function Description
	<Start> key. Pulls up the Windows Start menu.
	<Right Click> key. Performs a mouse right-click function for Windows system.

SPECIAL FUNCTION KEYS

The notebook has special system function keys that activate key serving dual functions. When pressed in conjunction with the <Fn> key, these keys set specific system parameters and are sometimes referred to as "hot keys".

Keypad	Function Description
	Enable or Disables the built-in wireless LAN.

Keypad	Function Description
	Switches display between LCD, CRT, or LCD and CRT simultaneously.
	Increases the audio volume of the notebook incrementally.
	Decreases the audio volume of the notebook incrementally.
	Enable or Disables the built-in system speaker.
	Activate or deactivate the sleep mode.
	Increases the brightness of LCD display incrementally.
	Decreases the brightness of LCD display incrementally.
	Activate the Internet connection.

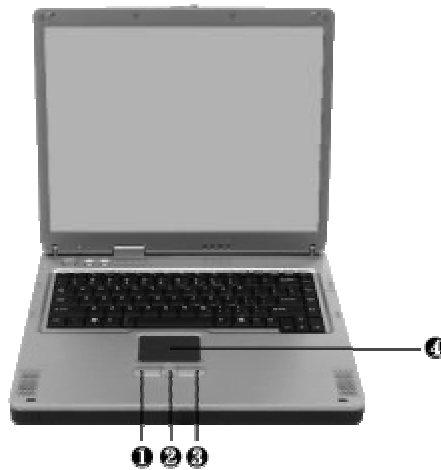
Keypad	Function Description
 The image shows two laptop keys side-by-side. The left key is labeled 'Fn' and the right key is labeled 'F11' with a small envelope icon below the text. A small '+' sign is positioned between the two keys.	Activate the Mail connection.

3.3 Using the Glide Pad Pointing Device

Your computer comes with a built-in Glide Pad pointing device that is found on the center of the palm-rest surface.

The Glide Pad offers a number of options that let you customize how it functions. To access these options, locate the **Control Panel** and double click on the **Mouse** icon. The options let you control the size and color of the cursor, cursor speed, the accepted double-click speed, and selection button orientation.

The Glide Pad works a mouse pointing device replacement that is used under Windows-based operating system. You can use the standard Microsoft driver that is compatible with the Glide Pad device and is normally used under Windows-based operating system. However, if you want to utilize the added features of the Glide Pad, you may want to try installing its own device driver that comes with added utilities for enhancing the function of the device.



- | | |
|---------------------------|------------------|
| 1. Left Selection Button | 2. Scroll Button |
| 3. Right Selection Button | 4. Glide Pad |

Glide Pad Features

Here how to use the Glide Pad pointing device:

1. The rectangular surface acts like a miniature duplicate of your display screen. To move the mouse cursor, place the finger lightly on the sensor pad and move in the desired direction. If you reach the end of the pad, lift your finger and place it back down on the other side of the pad.
2. To select an item, click on the item by pressing the left button control or by simply tapping on the surface once. A light, quick tap always works best. To execute an item, click the left button twice or do a quick double tap on the surface.

3. To simulate holding the mouse button down (dragging an icon or selection), use the tap-and-drag gesture. This feels much like a double-click, except that the finger remains on the pad after the second tap: Tap, lift, tap, hold and move. The simulated button remains held as long as the finger remains on the pad.
4. To scroll up or down the screen, just slide up or down the scroll button to move the screen up or down.

⚠ *Avoid spilling any liquid on the Glide pad surface and always keep the Glide pad surface and pointing finger dry from sweat built-up. Also do not expose Glide pad to any magnetic source object.*

3.4 Configuring Your Screen Display

The VGA display function of your notebook is based on a high performance AGP local bus controller and is fully IBM VGA compatible. This controller offers a large set of extended functions and higher resolutions especially useful when you are connecting an external high-resolution and high-frequency CRT or LCD.

Please Refer to Section 6 "Installing the Notebook Device Drivers" of Chapter 2 in this manual for the procedures on how to install the VGA device driver under Windows. After installing the VGA driver, you would then configure the display resolution or screen size to match your LCD display panel. This notebook computer model provides 1024x768 as well as 1400x1050 LCD panels. You would also probably want to set the amount of color output to display sharper images and photos.

POSSIBLE DISPLAY CONFIGURATIONS

The table below shows you the possible display resolution you can set when using either the LCD display or the external monitor (CRT):

Display	Possible Resolution	Maximum Colors
1024x768 XGA LCD	640x480	16 million colors
	800x600	16 million colors
	1024x768	16 million colors
1400x1050 SXGA+ LCD	640x480	16 million colors
	800x600	16 million colors
	1024x768	16 million colors
	1400x1050	16 million colors
CRT Only	640x480	16 million colors
	800x600	16 million colors
	1024x768	16 million colors
	1152x768	16 million colors
	1280x1024	16 million colors
	1400x1050	16 million colors

∞ **65,536 or 64K colors is also equivalent to 16-bit high color while 16 million or 16M colors is equivalent to 32-bit true color.**

∞ **You can use the <Fn> + <F3> hot-key to switch the display between LCD only, CRT only, or both LCD and CRT display.**

CHANGING THE DISPLAY PROPERTIES UNDER WINDOWS

To change the display properties of your screen under Windows system, just right-click on the desktop area and select Properties or go to the Control Panel and click on the Display icon. The Display Properties dialog box will appear on your screen. Click on the Settings tab to set your desired configuration. Make sure to follow the configuration table above.

⌚ *If you cannot configure the display properties, change the display driver first as mentioned on Section 6 "Installing the Notebook Device Drivers" of Chapter 2 in this manual. Consult your dealer for the latest Windows AGP VGA driver.*

3.5 Knowing the Power Saving Features

One of the great features in your notebook computer aside from its superior performance is the ability to save energy power. Your computer is designed to incorporate intelligent and advanced power management functions that turn off power of most components when system is idle or not in use. This does not affect the performance of your system as it monitors the activity of your computer and resumes power and operating speed when activity is detected. This feature not only gives you longer battery hours but cooler systems and components as well. For more information on how to control the power management features of your computer, refer to Power Management function in Control Panel of Windows.

The definitions of power management mode are depicted as follows:

Full-On Mode

No device in the system is executed in power management, the system can respond to all applications at maximum performance.

Suspend to RAM mode

All devices are powered off except the other supporting components and system memory where your working files are stored. You can activate this either pressing

the power button or setting the Suspend timer on the Power Management function of the Control Panel in Windows. To resume full-on state, press the power button.

Suspend to Disk mode

When this mode is activated, the context of the entire system is saved to disk and all components and devices are powered off, while all clocks are also stopped (except Real Time Clock or RTC). You can activate this by setting the Hibernate (Windows Me/2000/XP) mode on the Power Management function of the Control Panel in Windows. To resume full-on state, you can press the power button.

Mechanical off Mode

All power, except the RTC (real time clock), has been turned off from the system. This includes external AC power source and battery power source.

3.6 Working with the Built-in HDD

Your notebook computer is equipped with a built-in large capacity 2.5 inch IDE hard disk drive where you store or install your computer operating system and all application software programs. You need to format the hard disk before using. The internal hard disk is normally assigned as Drive C after formatting. Sometimes divided into two partitions, adding a Drive D. Since your computer supports different hard disk capacities (to 40 GB or above), you also need to setup the disk type first on your computer's BIOS SETUP program before formatting the disk drive. Your computer supports Auto-detect hard disk type, so you do not need to set it manually. Your dealer should already have done all

of this for you. You can refer to **Chapter 6** on how to run the BIOS SETUP program.

You can increase the system's storage capacity by replacing the standard hard disk drive with a drive of greater storage capacity.

- ⌘ *If you wish to replace your hard disk, contact your local dealer for more information about this dealer-installable device.*
- ⌘ *Always turn off your computer first before removing the hard disk drive. Failure to do so will damage the computer and the hard disk. Avoid jarring or moving the computer while the hard disk is still being accessed.*

3.7 How to Access the CD/DVD/CD-RW/Combo Drive

Your system ships with either a CD-ROM, CD-RW, DVD-ROM or CD-RW/DVD combo drive installed on the right side of your computer. You would normally use the drive for installing operating system and software application programs.

To insert and remove a disc on the drive:

1. Make sure the computer is turned on. Press the eject button found on the door cover of the CD-ROM drive. The CD tray mechanism will pop-out slightly and slowly pull out the whole length of the tray.
2. Place the disc on top of the CD tray with the label side facing up. Gently press the compact disc onto the center spindle to secure the disc.



3. To remove the disc, press on the center spindle and pull up the disc from the side until the disc snaps out of the spindle lock.

∞ ***If the eject function is disabled by software or a power failure occurs, the Emergency Eject Hole allows you to manually remove a CD from the reader.***

4. To close the CD-ROM drive, simply push the CD tray inside. The CD-ROM LED will activate when the disc is detected. Wait until the LED has turned off and then start to read the disc.

The above procedures also apply to CD-RW, DVD-ROM or CD-RW/DVD drive.

How to care the CD

When you handle CDs, pay attention to the following guidelines:

- Always pick up the CD by its edges.
- Avoid scratching or soiling either side of the CD.
- Do not write with the hard ball-point pen or apply labels on either side of the CD.
- Keep the CD away from direct sunlight or high temperatures.

- Clean fingerprints or dust from the CD by wiping it with a soft cloth.

The above points also apply to CD-RW, DVD-ROM or CD-RW/DVD drive.

∞ *The CD-ROM, DVD-ROM reader is a Class 1 Laser Product.*

3.8 Using PCMCIA Cards

WHAT IS PCMCIA?

PCMCIA or Personal Computer Memory Card International Association is a non-profit trade association that defines the industry standard for the PC Card technology. The goal of PCMCIA is to ensure that any PC Card can work in any mobile computer built with a PCMCIA slot.

A PC Card is a peripheral device that can add a wide variety of capabilities to your computer including memory, mass-storage, LAN, fax/modem, wireless communications, and multimedia. The PCMCIA standardized PC Card is roughly the dimension of a credit card, and has a standardized 68-pin connector at one end. The main benefits of the PC Card are its low-power consumption, small size and ruggedness.

To allow manufacturers to add functions and technologies in the PC Card form factor, PCMCIA has defined two PC Card types:

Type	Thickness	Sample Devices
Type II	5.0 mm	Fax/Modem & Network Cards
Type III	10.5 mm	Hard Disks (ATA Cards)

Type II Cards

Type II card has a thickness of 5.0 millimeters (mm). Type II cards are often storage or communications devices such as Flash Memory, LAN, and Small Computer System Interface (SCSI). Typical Type II cards include input/output (I/O) features such as modems and LANs. The features for Type II Cards include following characters:

- **Type II Extended Cards**
Many PC cards are Type II extended cards. The extended card has an additional physical component that protrudes beyond the traditional card size. The extension can be as large as 40 mm deep by 9.65 mm high. This extension provides room for additional electronics as well as a location for external connectors. The wireless LAN card and GPRS card are examples. The extended part is for additional electronics and antenna.
- **Communication Cards**
Both network PC cards and fax/modem cards can use with your notebook computer. However, if you use built-in LAN/Modem options of this computer, it is not necessary to use those cards. If you start the LAN/Modem application without inserting the fax/modem card or had the built-in LAN/Modem options installed, the application typically does not find the card.
- **Storage Cards**
When you insert a storage PC card, PC card Adapter for other memory card (i.e. Compact Flash card, Smart Media card...) or small hard drive card in the notebook computer, it appears as a unique drive depending on the type of card you are using.

The following table provides sample drive designations.

Sample Drive Designations

Drive letter	Location/Device
C:	Internal hard disk
D:	Internal hard disk, 2nd partition
E:	CD/DVD/RW/Combo drive
F:	Slot 0, high-speed memory card

Type III Cards

Type III cards are thicker (10.5 mm) than Type II cards and allow no extensions. This notebook does not support Type III Card.

WHAT IS CARDBUS?

CardBus is the high-performance 32-bit PCI bus master interface from PCMCIA. It runs up to 33MHz clock speed and operates at only 3.3V. Your notebook computer incorporates the CardBus inside the PC card slot. Aside from 3.3V CardBus PC cards, you can also insert 5V 16-bit PC cards that can also be detected and used by your computer.

INSERTING AND REMOVING A PCMCIA CARD

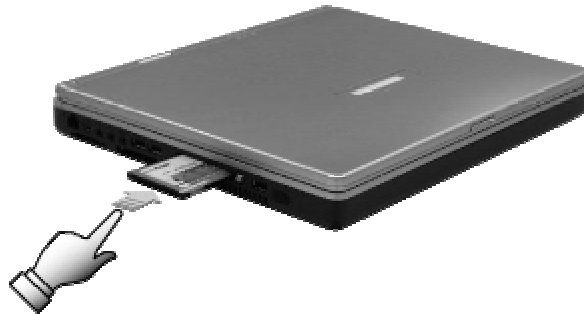
Your computer includes hot swapping capability, that allows you to exchange cards while the computer is turn on and start using it immediately.

Inserting PC Cards

To insert a PC card into the PCMCIA slot:

1. Locate the PC card slot cover on the left side of the computer.
2. Insert the side of PC card with the 68-pin socket into the PC slot. The face label of the card should also be facing up.

3. When the full length of the card is almost inside the slot, push firmly but slowly, to ensure full connection with the computer. The PC card will be detected and once the needed driver is installed, it will generate a beep sound to indicate that the card is detected.



Removing PC Cards

To remove a PC card from the PCMCIA slot, you should first disable the PCMCIA card setting in the system as described followings:

1. Double click the **PC card** icon on the right bottom side of the task bar.
2. Select the socket from the list that you want to remove, and click **Stop** button. The system then disables the function of PCMCIA card.
3. Then you can remove the inserted PC card, push the button found on the right side of the PC slot to release the eject button. Then push it again to release the PC card.
4. When the PC card has moved out a space out of the slot, hold the edges of the card and slowly slide it out.



MAKING PC CARDS WORK

Since PC cards come in different types and brands, making every card work on your computer may not that be easy. PC cards like network, SCSI or multifunction cards (MFC) need additional driver installation and configuration in making the card work. This additional driver may already be built-in under Windows that Windows will try to detect and prompts you if you want to install the driver. If the driver is not included under Windows, you will need to insert the driver CD provided by the PC card manufacturer into the CD-ROM drive and install to Windows system. You need to read the manual guide of the PC card on how to configure and operate the card.

æ Some PC cards require additional system resources. Before inserting a PC card you may have to disable either the USB port, or the 56K internal modem. Check the Windows device manager to ensure that there are no conflicts of resource amount those devices.

HOT SWAPPING PC CARDS

Just like floppy disk drive, your PCMCIA slots allow you to replace one PC card with another even while your computer is on. However, you need to remember the rule that if the PC card is in use, you must not remove it.

⌘ *PC cards draw power even when not in use. To save energy, press the button to disconnect the card when it is not in use.*

3.9 Using Flash Memory Cards

WHAT IS FLASH MEMORY CARD?

Flash Memory is a memory storage media. It is used by most digital camera, moreover, it can replace the traditional floppy disk. Flash memory card is built with different form factor and brand name. Their size is smaller than PCMCIA card. This computer supports most of the flash memory card, including MMC, SD, Smart Media, Memory Stick and CF card.

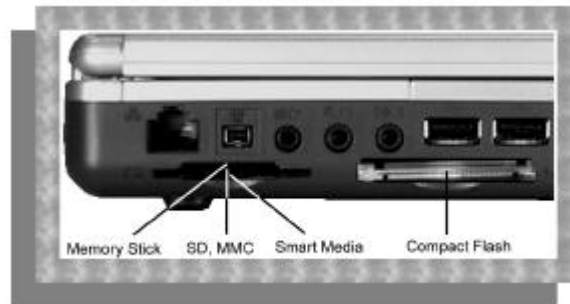
The CF slot is used by CF (Compact Flash) card. The 4 in 1 card slot is used by the following cards as MMC, SD, Smart Media and Memory Stick.

⌘ *For a single moment, only one card can be inserted into the 4 in 1 card slot*

Inserting Flash Memory Card

To insert a flash memory card into the slot is similar to PCMCIA card. You only need to pay more attention whenever insert the CF card or the flash memory card into the slot with the correct side.

When you insert the CF card, the connector should be positioned at front side toward the slot. For MMC, SD and Smart Media card, you should position the copper connector at the bottom side. For Memory Stick card, you should position the copper connector at the top side. All of these cards should be located at the center of the slots in inserting.



Only one correct side can be accepted for the CF and 4 in 1 card slots. If you cannot insert the card into the CF, 4 in 1 slot or you had inserted the card but it is not recognized by the computer, please remove the card and turn the card upside down and insert it again. To prevent the damage made both on card and the slot, never forced an entry into the slot with incorrect side.



Removing Flash Memory Card

It is similar to PCMCIA card for removing a flash memory card from the slot, you should first disable the card setting in the system as described in the PCMCIA chapter.

To remove the flash memory card, you should only pull out the card by finger, there is no release button for flash memory slot.



