FIC
CT2
User Guide

Trademarks

Product names used herein are for identification purposes only and may be the trademarks of their respective companies.

Microsoft, Windows XP, and Windows Sound System are trademarks of Microsoft Corporation.

Intel ®, Intel ® Celeron ® M Processor are registered trademark of Intel Corporation.

Sound Blaster, Sound Blaster Pro are trademarks of Creative Technology.

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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 Exposure

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.

Optical Disk Drive Notice

The optical disk drive is Class 1 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.

European Notice

For the following equipment: Notebook PC

$C\epsilon$ $\textcircled{!}$

Is herewith confirmed to comply with the requirements set out in the

Council Directive on the Approximation of the Laws of the Member

States relating to Electromagnetic Compatibility (89/336/EEC), Low voltage

Directive (73/23/EEC) and the Amendment Directive

(93/68/EEC), the procedures given in European Council Directive
99/5/EC and 89/3360EEC.

The equipment was passed. The test was performed according to the
following European standards:

EN 300 328-2 V.1.2.1 (2001-12)

EN 301 489-1 V.1.3.1 (2001-09) / EN 301 489-17 V.1.1.1 (2000-09)

EN 50371: 2002

EN 55022: 2001

EN 55024: 2001

EN 60950: 2000

EN 61000-3-2: 2000

EN 61000-3-3: 1995 + A1: 2001

802.11b Restrictions:

- European standards dictate maximum radiated transmit power of 100mW
EIRP

and frequency range 2.400-2.4835GHz;

- In France, the equipment must be restricted to the 2.4465-2.4835GHz

frequency range and must be restricted to indoor use."

**For DVD Players with both 525p and 625p progressive scan
outputs:**

'CONSUMERS SHOULD NOTE THAT NOT ALL HIGH DEFINITION
TELEVISION SETS ARE FULLY COMPATIBLE WITH THIS

PRODUCT AND MAY CAUSE ARTIFACTS TO BE DISPLAYED IN THE PICTURE. IN CASE OF 525 OR 625 PROGRESSIVE SCAN PICTURE PROBLEMS, IT IS RECOMMENDED THAT THE USER SWITCH THE CONNECTION TO THE 'STANDARD DEFINITION' OUTPUT. IF THERE ARE QUESTIONS REGARDING OUR TV SET COMPATIBILITY WITH THIS MODEL 525p AND 625p DVD PLAYER, PLEASE CONTACT OUR CUSTOMER SERVICE CENTER.'

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 multimedia applications but also be ready for tomorrow exciting new software.

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

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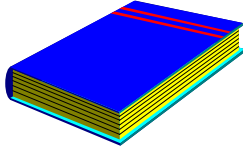
Welcome to your Professional Multimedia Notebook User Guide. This manual covers everything you need to know in learning how to use your computer. This manual also assumes that you know the basic concepts of Windows and the PC. You will start doing a lot of great and fun things with your computer.

This manual is divided into eight 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.

Table of Contents

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® Celeron® M Dothan microprocessor that is integrated with 1MB 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.

Memory

This notebook provides two memory slots for installing DDR SDRAM 200-pin SODIMM modules up to 1GB using 256MB, 512MB DDR SDRAM modules.

Wide Screen LCD Display

Provides extraordinary 14.0"(15:9) wide screen LCD display. It is the best choice for you to watch DVD movie.

Infrared Remote Control (BTO)

A infrared remote control is included with this notebook, and it is stored in the PCMCIA slot. You can use this infrared remote control to control DVDs, CDs, and MP3 without touching the computer.

Wireless LAN

Built-in Mini PCI Wireless LAN module, IEEE 802.11b/g

DVD Multi

DVD Multi is a standard that certifies DVD drives between three DVD formats. A DVD Multi drive can read and write DVD-R, DVD-RW, and DVD-RAM.

PCMCIA

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

IEEE 1394 (BTO)

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

USB 2.0

Provides three USB2.0 ports for fastest I/O data transmission.

Graphic System

Provides blazing graphics controller embedded in VIA PN800 chipset

PCI Local Bus Architecture

- 32-bit PCI Enhanced IDE optimizes the data transfer between the CPU and hard disk drives. Support ultra DMA ATA-100 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 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.
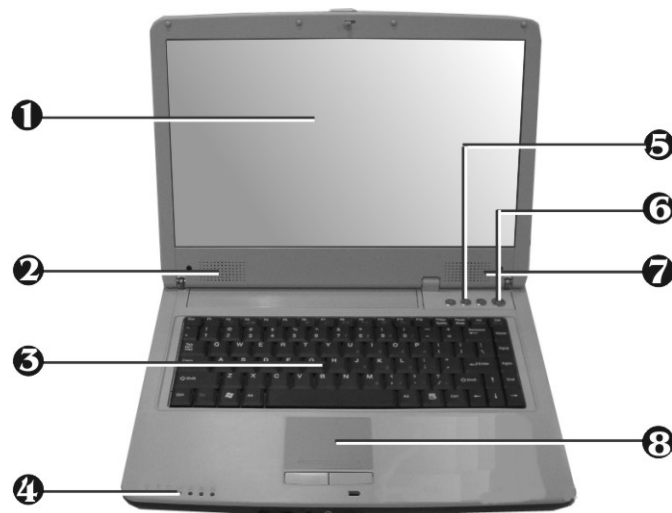
1. Color LCD Display	2. Built-in Stereo Speaker
3. Keyboard	4. LED Indicators
5. Easy Buttons	6. Power On/Resume Button
7. Built-in Stereo Speaker	8. Touchpad Pointing Device

- Color LCD Display
  The notebook computer comes with a color LCD that you can adjust for a comfortable viewing position. The LCD is 14" TFT color LVDS with 1280x768 WXGA (Wide XGA) resolution panels. The features of the Color LCD Display are summarized as follows:

 TFT color LVDS with 14" 1280x768 WXGA (Wide XGA) 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.

- Built-in Stereo Speakers
  Integrated left and right mini stereo speakers for sound and audio output for your multimedia presentations or listening pleasure.

- Keyboard

   Standard QWERTY-key layout and full-sized 87 keys keyboard with Windows system hot-keys, embedded numeric keypad, 8 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.

- LED Indicators
  Keeps you informed of your notebook computer's current power status and operating status. Description of the status icons appears in the latter part of this section.

- Easy Buttons
  There are three easy buttons used for accessing CPU Throttlingt, Accessing E-mail and Internet functions instantly and easily. Description of the easy buttons appears in the latter part of this section.

- Power On/Resume Button
  Switches the computer power on and off, or resumes whenever it is in Suspend mode.

- Touchpad Pointing Device
  Microsoft mouse compatible with two Touchpad click buttons. The two select 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 On/Resume Button
  Switches the computer power on and off, or resumes whenever it is in Suspend mode.

NOTEBOOK STATUS ICONS

The Status LED Panel keeps you informed of the notebook's current power and operating status. Each LED is marked with an icon to designate the system status.
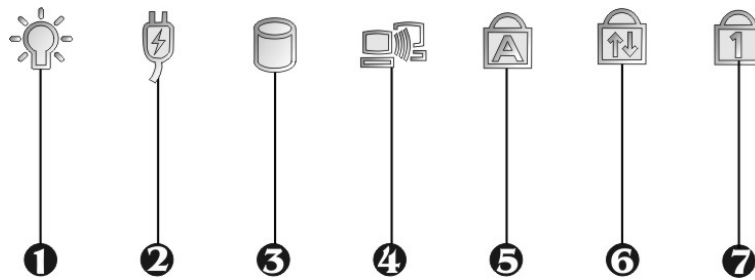
1. Power Indicator   2. Battery Charging LED
3. Drive Access   4. Wireless LAN Access

5. Caps Lock   6. Scroll Lock
7. Num Lock

- 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.

  - ☐   Lights green when the system is powered on.

  - ☐   Lights green blinking when the system is in Standby mode.

  - ☐   Lights orange when the battery power is low.

- Battery Charging LED
  Lights to indicate battery in charging status.

  - ☐   Lights orange to indicate that the battery is in charging.

  - ☐   Lights orange blinking when the batter charging is in error.

  - ☐   Lights green to indicate the battery is fully charged or no battery installed.

- Drive Access
  When LED in green light indicates that the system is accessing the Hard Disk.

- Wireless LAN access
  When LED in green light indicates that the wireless LAN module is activated. When LED lights off, it indicates that the function is disabled.

- Caps Lock
  When LED in green 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 green 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 green light indicates that the Num Lock key on the keyboard is activated. When activated, the embedded numeric keypad will be enabled.

THE FUNCTION OF EASY BUTTONS
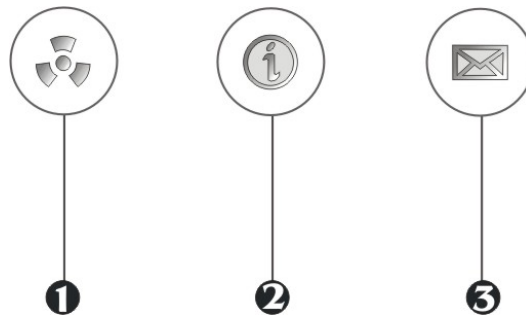
1. CPU Throttling   2. Internet Button   3. E-Mail Button

- CPU Throttling

  Press this button to decrease the CPU performance speed in order to save power for extending battery life and operation time.

- Internet Button

  This technology is designed specifically for providing a very convenient way in connecting Internet only by pressing Internet button as shown in the graphics. Just Press this button to open the Internat Explorer directly.

- E-mail Button
  This is the most convenient way to access the outlook 2000/2003... utility just by pressing this button. You can simplify several procedures in entering into Outlook 2000/2003... environment.

1.4 The Front Side of the Notebook

1. 4-in-1 Card slot.   2. Microphone Jack
3. Headphone Jack   4. Cover Switch
5. IR Port

- 4 in 1 card slot
  The card slot supports SD, MMC, MS (Memory Stick) and MS_Pro flash memory card format. You can use either of the 4 types flash memory cards for extra storage media. Please pay attention to correct direction when you insert the flash memory card. For more detail of flash card, you can refer to Chapter 3.9

- Microphone Jack
  Allows you to connect an external microphone for monophonic sound recording directly into your notebook computer.

- Headphone Jack (with SPDIF out)
  Lets you plug in a stereo headphone, powered speakers, or earphone set
  with 1/8 inch phono plug for personal listening. (The SPDIF transmits
  digitized audio signal by optical fiber. The external audio amplifier can get
  the best audio quality without loss.)

- 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.

- IR Port
  Wireless data/files transferring between your notebook computer and an
  IR-equipped device or notebook computer. You can also control DVDs,
  CDs, MP3 without touching the computer and print to an IR-equipped
  printer without using cables.

1.5   The Rear Side of the Notebook

The system ports at the back of your notebook computer can connect various devices. Each port is described as followings.

1. TV Port (S-video)   2. VGA Port
3. Kensington Lock Hole

- TV Port
  Lets you connect to the S-Video TV connector for presentation or VCD, DVD watching.

- VGA 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.

- Locking Device Keyhole
  Lets you attach a Kensington security system or a compatible lock to physically secure your notebook computer.

1.6 The Left Side of the Notebook

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

1. Modem Port   2. LAN Port
3. Air Outlet Vent   4. IEEE 1394
5. PCMCIA slot

Left Side Features

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

- LAN Port
  An internal 10Base-T/100Base-TX LAN module connects your computer to other computers/networks through a local area network (LAN).

- Air-Outlet Vent
  Emits the heat out of your computer and keeps it within operating temperature.

- 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.

- PCMCIA Slot

  An Infrared Remote Control is stored in this slot while shipping. Besides, this slot functions as a normal PCMCIA slot.

  □   Lets you connect various PC cards such as memory card

  □   Supports both 3V, 5V 32-bit CardBus and 16-bit PC cards.

1.7   The Right Side of the Notebook

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

1. USB 2.0 Ports   2. Optical Disk Drive   3.DC Power Port

Right Side Features

- USB 2.0 Ports
  The Universal Serial Bus (USB) port allows you to connect USB 2.0-compliant devices (for example, printers, scanners and so on) to your notebook computer.

- Optical Disk Drive
  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/DVD by using CD-R/RW. or DVD-R/RW.

- DC Power Port
  Lets you connect the AC power adapter in supplying continuous power to your notebook and recharging the battery.

1.8   The Underside of the Notebook

The bottom of the notebook computer offers the following features.
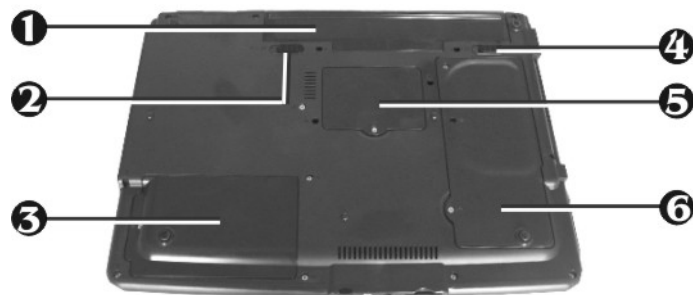
1. Battery Bay	2. Battery Release Latch
3. Hard Disk Compartment	4. Battery Lock Latch
5. Memory Compartment	6. Wireless LAN Compartment

Bottom of the System

- Battery Bay
  Equipped with a choice of Lithium-Ion (Li-Ion) battery pack.

- Battery Release Latch
  Push the latch to the left end to remove the battery pack.

- Hard Disk Compartment
  Open this cover of this compartment to replace with other Hard Disk
  Drive. Please refer to Chapter 7 for how to replace it.

- Battery Lock Latch
  Push the latch to the lock side to secure the battery. This action only
  available when the battery release latch has located to the right side.

- Memory Compartment
  Remove the screw to find two SO-DIMM memory slots. One memory
  slot is empty for upgrade usage.

- Wireless LAN Compartment
  This compartment is for installing Wireless LAN module to enable the
  Wireless LAN function. We strongly suggest that Wireless LAN module
  should be installed only by certified dealer.

1.9   Infrared Remote Control

A infrared remote control is included with this notebook, and it is stored in the
PCMCIA slot. While the multimedia features give users a range of options for
entertainment, you can use this infrared remote control to control DVDs, CDs,
MP3 without touching the computer.

The infrared remote control that fits just perfectly in you hand is for power, volume up/down, six music/video media buttons (play, fwd, rwd, stop, etc), 4-way thumb joystick, and other keyboard functions. You will no longer to move your body to control the software by touching ing the notebook, just lay on your couch and enjoy the convenience that the IR remote control brings to you.
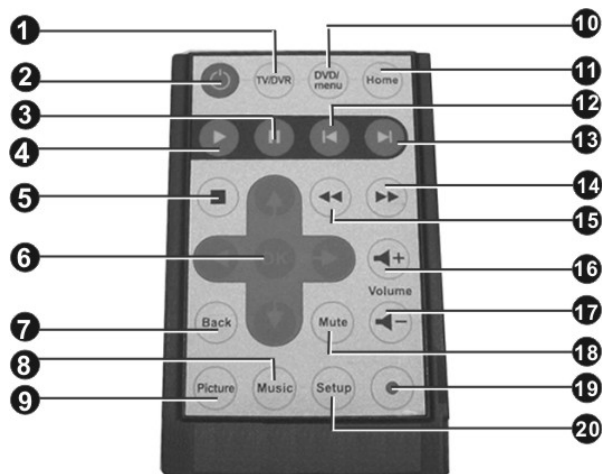
1.	**TV/DVR**	Start TV/DVR
2.	**Power**	Shut down your computer
3.	**Pause**	Pause
4.	**Play**	Play
5.	**Stop**	Stop
6.	**4-way Thumb Joystick**	Position your cursor
7.	**Back**	Back to previous page
8.	**Picture**	Begin to show pictures
9.	**Music**	Begin to play music
10.	**DVD/menu**	Start DVD
11.	**Home**	Return to the home page

12.	**Prev**	Back to previous chapter
13.	**Next**	Go to next chapter
14.	**Fwd**	Fast Forward
15.	**Rew**	Fast Backward
16.	**Volume up**	Increase the volume
17.	**Volume down**	Decrease the volume
18.	**Mute**	Mute the sound
19.	**Record**	Begin to record
20.	**Setup**	Open setup window

  This Infrared Remote Control is for Windows Medis Player only, so the three buttons "TV/DVR", "DVD/menu", "Home" is not valid.
  The full functions of the Infrared Remote Control will be supported if the Software of InterVideo Thearer Home (optional) has been installed.

1.10 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.

1.11 Notebook Options

DVD/CD-RW 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.

DVD dual (Dual Rewritable DVD combo) Device Pack

This device pack combines following two standard packs. Using the suitable media, you can make any format of CD or DVD as you want.

DVD-RW combo:

This device pack can write data to CD-R or CD-RW and DVD-R or DVD-RW media and also can read DVD/CD title. This media is commonly used on DVD video player.

DVD+RW combo:

This device pack can write data to CD-R or CD-RW and DVD+R or DVD+RW media for you to backup the data and also can read DVD/CD title. This media is commonly used on newer DVD video player.

DVD Multi

DVD Multi is a standard that certifies DVD drives for media compatibility between three DVD formats. A DVD Multi drive can read and write DVD-R, DVD-RW, and DVD-RAM, all of which are supported by the DVD Forum.

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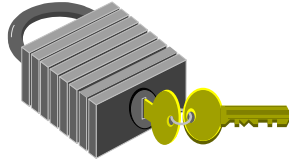
Your Notebook is designed and pre-configured for easy setup and use. This chapter describes the installation steps you should follow to get the notebook up and running as quickly as possible. Contact your dealer if they have pre-installed all the needed drivers to fully operate your computer or if there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

2.1 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 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 menu that is described on chapter 6.6

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. With the extended nose directed toward the compartment, insert and push the battery pack.
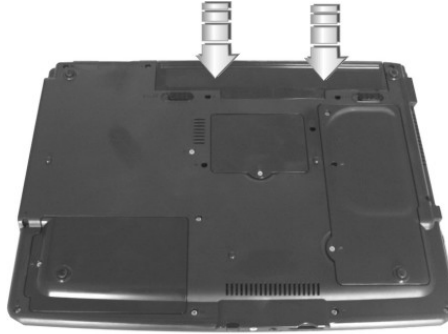
Removing the Battery Pack

To remove the battery pack, slide the lock latch to the end of left side to unlock the battery pack (1), and push Battery release latch to left (2). At the same time, remove the battery pack (3), and then take out the battery pack with your fingers.
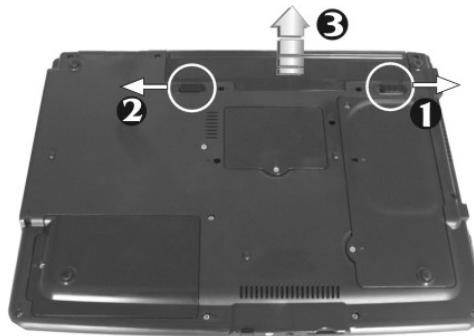
Replacing the Battery Pack

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 disk drives, and 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 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.

2.2   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 right side 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).*

2.3   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.

2.4   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.

2.5   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 OPTICAL DISK DRIVE

To install Windows XP directly from your optical disk drive, 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 optical disk 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**. Then Click **OK** to return to the **Device Manager** box.

4. Change the setting of **Secondary IDE Channel** with following the previous steps that was set to **Primary IDE Channel**.

5. Restart your notebook to let the setting take effect.

DRIVER INSTALLATION NOTE:

⬚ *Please be notified that when you install the driver utility, it should be install the CHIPSET Driver first.* *
Please install ENE KBC driver previously before install Alps touch pad driver.

INSTALLING THE CHIPSET DRIVER

Your notebook computer uses the advanced chipset. Installing the driver to enhance the stability and performance.

Installing Chipset 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\Chipset\Setup.exe".**

3. Implement the setup program to install this driver. The Welcome dialog box appears.

4. Click **Next** continuously to install this driver when screen displays this command.

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

INSTALLING ENE- KBC DRIVER

Installing ENE-KBC 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\KBC\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 install this driver when screen displays this command.

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

INSTALLING THE AUDIO DEVICE DRIVER

Your notebook computer uses the 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 THE MODEM DEVICE DRIVER

Please follow the procedures below for installing the Data Fax Modem driver:

Installing Modem driver for Windows XP

1. Click the **Start** button and then click **Run**. The Run dialog box appears.

2. Click **Browse** button and navigate to the directory as
    "E:\Drivers\WinXP\Modem\setup.exe"
    where the modem driver is located.

3. Click >> to install this driver when screen displays this command.

4. Press ✔ to finish the installation.

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\winsetup.exe"

3. Click **OK** to finish the installation.

INSTALLING ALPS - TOUCH PAD driver

Installing ALPS - Touch Pad 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\Touch Pad\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

Please follow the procedures below for installing the Card Reader driver:

Installing the Card Reader 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. Click **Next** to process the further step continuously when screen displays this command.

4. Press **Finish** to finish the installation.

INSTALLING THE WIRELESS LAN DEVICE DRIVER

Please follow the procedures below for installing the Wireless LAN driver:

Installing the Wireless LAN 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\Wireless LAN\ 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. Click **Yes** to process the further step continuously when screen displays

   License Agreement.

6. Click **Next** to process the further step continuously when screen displays this command.

7. Press **Finish** to finish the installation.

INSTALLING THE BLUETOOTH UTILITY

Please follow the procedures below for installing the Bluetooth Utility

Installing the Bluetooth utility 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\Bluetooth Utility\Setup.exe ".

3. Click **OK** to process the further step continuously when screen displays Choose Setup Language.

4. Implement the setup program to install this driver. The Welcome dialog box appears.

5. Click **Next** to process the further step continuously when screen displays this command.

6. Select **I accept the terms in the license agreement** then press **Next.**

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

8. Click **Install** to process the further step continuously when screen displays Ready to Install the Program.

9. Press **Finish** then **Yes** to restart your system.

2.6   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 87 keys keyboard that provides all the functionality of a full-sized 101 or 102-key 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.
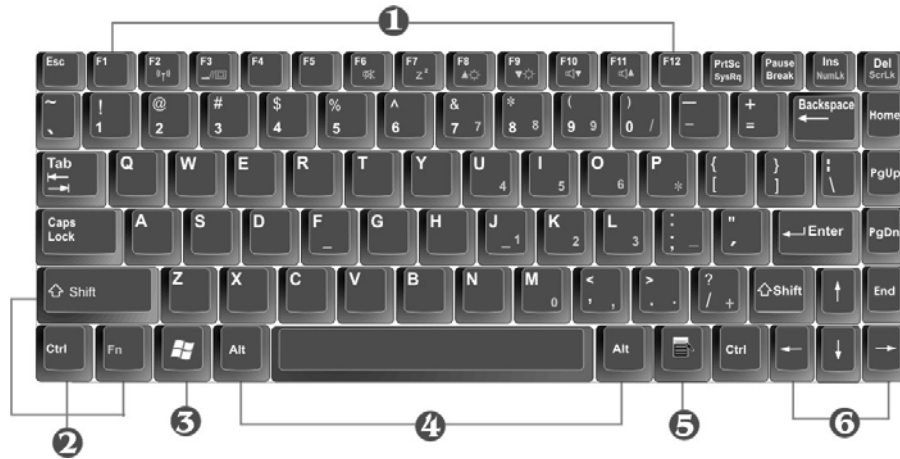
1. Function Keys   2. Control Keys
3. Windows Start Menu Key   4. Control Keys
5. Windows Shortcut Key   6. Cursor Control Keys

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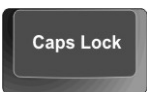
  Cursor control keys let you position the cursor on the screen where you want. In the screen, the cursor is a blinking underline, block, or vertical bar depending on the application. The cursor indicates where the next text typed is inserted.

- **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
◄─┘Enter	**<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.
Esc	**<Esc>** key. Press this key to cancel or escape from a command or function.
Ins NumLk	**<Ins>** key. Known as the Insert key. Press this key to toggle the keyboard data entry from insert to type over mode.
PrtSc SysRq	**<PrtScr>** key. Known as the Print Screen key. Press this key to map the whole screen to share memory for your specific usage.
Del ScrLk	**<Del>** 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.
Pause Break	**<Pause>** key. Press this key to temporarily halt execution of a command. Pressing any other key to resume execution of a command.
Backspace ◄──	**<Backspace>** key. Press this key to delete the character to the left of the cursor.
⇧ Shift	**<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 ├── ──┤	**<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.

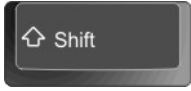| Keypad	Function Description
Ctrl	<**Ctrl**> key. Known as the Control key. Used in most application program in combination with other keys to execute a certain command.
Alt	<**Alt**> key. Known as the Alternate key. Used in most application program in combination with other keys to execute a certain command.
Fn + Ins NumLk	<**Fn**> + <**Num Lock**> key. Activates the embedded 15-key numeric keypad. The keys are color coded blue.
Caps Lock	<**Caps Lock**> key. Used in most application program to always activate uppercase alphabet characters.
Fn + Del ScrLk	<**Fn**> + <**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	<**Home**> key. Moves the cursor to the beginning of a screen or line.
PgUp	<**PgUp**> key. Moves the cursor up one screen at a time
PgDn	<**PgDn**> key. Moves the cursor down one screen at a time
End	<**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
Fn + **F2**	Enable or Disables the built-in wireless LAN.
Fn + **F3**	Switches display between LCD, CRT, or LCD and CRT simultaneously.
Fn + **F6**	To shut down or resume the built-in system speaker volume.
Fn + **F7**	Press this key to activate the system into the suspend mode.
Fn + **F8**	Increases the brightness of LCD display incrementally.
Fn + **F9**	Decreases the brightness of LCD display incrementally.
Fn + **F10**	Decreases the audio volume of the notebook incrementally.
Fn + **F11**	Increases the audio volume of the notebook incrementally.

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. Right Selection Button

3. 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. When you press both the Left and Right click button at the same time, the auto Scroll function will be activated.

☐ *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 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 5 "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 14" 1280x768 WXGA (Wide XGA) or 14.1" 1280x800 (Wide XGA) resolution 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
14" 1280x768 WXGA LCD	800x600 1024x768 1280x768	16 million colors 16 million colors
CRT Only	800x600 1024x768 1152 x 768 1280x1024	16 million colors 16 million colors 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 5 "Installing the Notebook Device Drivers" of Chapter 2 in this manual. Consult your dealer for the latest Windows 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 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 Options** function in **Control Panel** of Windows.

The definitions of Standby Mode, Hibernation Mode, and Shutdown are depicted as follows:

Standby Mode

Standby Mode is mainly for power saving. When the Standby Mode is activated, your display and hard drive are shut down and all open applications

and documents are stored in RAM (Random Access Memory). This allows your notebook to wake up quickly, but a low level of power is required to maintain this suspended state. How quickly your system powers down into Standby mode is up to you by setting proper times in Power Options of Control Panel in Window. While the notebook is in Standby mode, the LED of power indicator flashes. To resume your working again, you can press the power button to return your work to the screen where you left off.

Hibernation Mode

In Hibernation mode, all system devices are powered down and the contents of RAM are stored on your hard drive. Hibernate mode uses less power than Standby mode, but takes a bit longer time to resume. When your notebook goes into hibernation, Windows saves your entire desktop state before powering down your computer. You don't need to save and close each document before you put your notebook into hibernation. When you press power button again, system will bring your notebook out of hibernation. You'll find your applications and documents open on your desktop exactly as you left them.

> *Hibernation is enabled by default. To verify that Hibernation is enabledd, Click **Start**, point to **Settings**, and then click **Control Panel**. Choose **Power Options** icon, then click on the **Hibernate** tab. IF the chock box of Enable Hibernate is selected, the Hibernation mode is enabled.*

Shutdown

All power has been turned off from the notebook. This means that no power including external AC power source and battery power source will be consume by the notebook.

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 (up to 60 GB), 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 Optical Drive

Your system ships with an optical disk 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 combo 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 combo drive, simply push the CD tray inside. The combo drive LED will activate when the disc is detected. Wait until the LED has turned off and then start to read the disc.

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 other optical storage media.

⧠ The Combo drive 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 GPRS card is an example. 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 combo 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.

⧠ *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 slot allows 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 SD, MMC, MS (Memory Stick), and MS_Pro card.

The 4 in 1 card slot is used by the following cards as SD, MS (Memory Stick), MMC, and MS_Pro.

☐ *For a single moment, only one card can be inserted into the 4 in 1 card or CF 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 flash memory card into the slot with the correct side.

For MMC and SD card, you should position the copper connector at the bottom side. For Memory Stick card, you should position the copper connector at the topside. All of these cards should be located at the center of the slots in inserting.

Slot	Card type	Copper connector
4 in 1	SD (Secure Digital)	Bottom side
	MMC (MultiMedia Card)	Bottom
	MS (Memory Stick)	Top side
	MS_Pro	Top side

Only one correct side can be accepted for the 4 in 1 card slots. If you cannot insert the card into the 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.
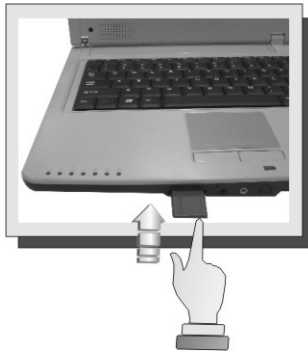
Removing Flash Memory Card

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.
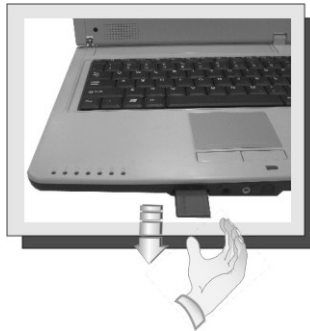
4   Fun with Multimedia
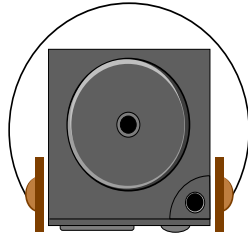
This chapter lets you make full use of all the multimedia features of your computer in having fun and excitement during work or leisure. You will learn how to mix and match the built-in sound system, use Combo drive in creating an exciting full multimedia presentation.

4.1   Notebook Multimedia Features

Your notebook computer is rich in multimedia features that make your computing fun, comfortable, exciting and easy. Your computer is well able to perform all multimedia tasks through the following:

- Intel® Celeron ® M Processor Dothan

- Up to 1GB DDR SDRAM

- DVD/CD-RW Combo or DVD Dual/Multi (Optional)

- Integrated VIA PN800 graphics engine.

- 16-bit Audio Sound System with built-in speaker and microphone.

4.2   Audio Sound System Features

Your computer has a built-in 16-bit stereo sound controller that allows you to record, store, and playback voice, music and other sound effects with built-in mixer controls. An integrated full-duplex microphone and twin mini-speakers are also built-in into your computer to allow you to record and playback sound anytime and anywhere.

On the front side of your computer, you will find the audio ports that include the following:

- External 1/8-inch microphone jack that connects external microphone for recording purpose.

- Earphone or headphone jack for personal listening.

- SPDIF out port for digitized audio signal transmission.

- Sound volume adjust by K/B hot-key

4.3   Setting Up the Audio Driver Properties

Before you can start using the audio capabilities of your computer, you need first to setup properly the audio driver after installing Windows. If you bought your computer with Windows pre-installed, it is most likely that your dealer have configured the sound driver for you. If not, you must refer to Chapter 2 on how to setup the sound drivers for Windows.

4.4   Windows Multimedia Programs

Windows provides several multimedia programs that you can run with the built-in features of your computer. Pointing the **Start** button, **Programs**, **Accessories**, then **Entertainment**, you will find the Multimedia programs group. (The section below use Window XP as examples)

Notebook User Guide
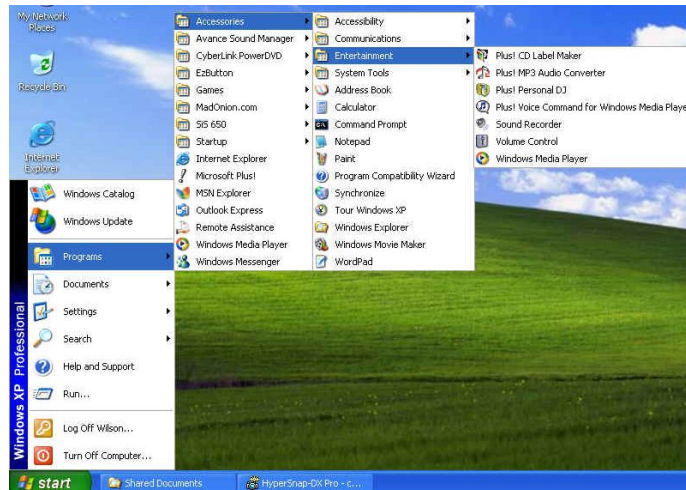
Figure 4-1 Entertainment Programs Group

The standard multimedia components are as follows:

- Windows Media Player - for playing sound, video and animation files

- Sound Recorder - for recording sounds and playback

- Volume Control - for adjusting the volume of mixer

For more information on how to operate these multimedia components, run the program and click on the Help menu.

4.5 Recording Sounds

Your computer allows you to record voice and other sounds in several ways and stores them as files on your hard disk. These voice or sound files can then

be played back through the internal speaker or earphone jack using an external speaker, headphone, or earphone set. You can also use the files as voice annotations on many applications for more real presentation. This section will describe briefly how you can record sounds under Windows operating system.

To record sounds, you need to run the Sound Recorder program from the Multimedia program groups. The control buttons of the Sound Recorder are simple to understand which comprise of the Fast Rewind, Fast Forward, Play, Stop, and Record buttons. Click the Help menu on how to operate the Sound Recorder.

Figure 4-2   Sound Recorder

The Sound Recorder also allows you to record sound from different input audio source like the following:

• From the external microphone

• From the Combo drive

Since you could record sound from different input sources, you must first set the proper audio input recording device under the Recording Control panel. To do this:

1. Double-click on the Volume Control on the taskbar or click Start button, then point to Programs, Accessories, Entertainment and then click on Volume Control.

2. Click **Properties** in the Options main menu.

3. Click the round button for Recording and tick off each component that list in the "Shows the following Volume Controls" box.
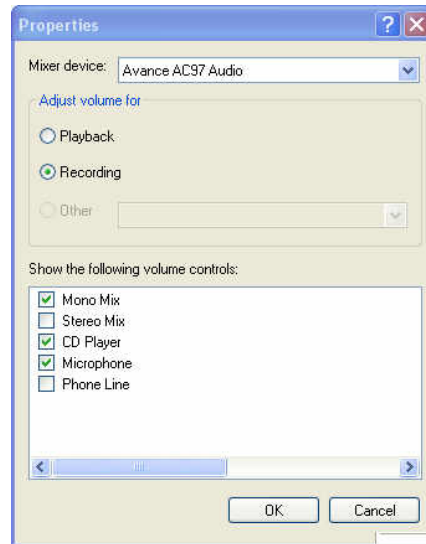
Figure 4-3 Audio Properties

4. Click OK and the Recording Control dialog box will appear. Here, you will select the input device for the recording source. If you want to record from the Combo drive with audio music, you must click on CD Player.
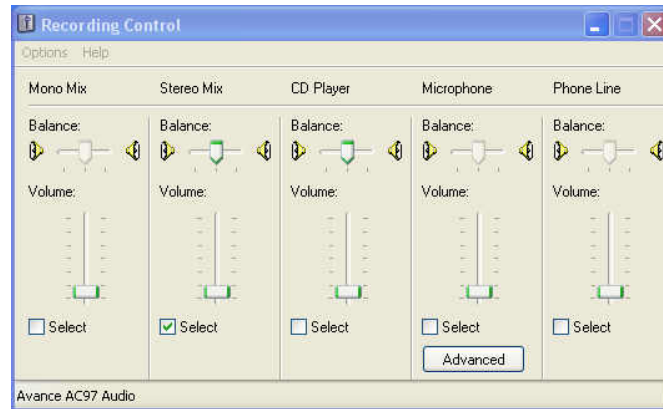
Figure 4-4 Recording Volume Control

USING AN EXTERNAL MICROPHONE

Your computer allows you to connect an external microphone for high quality recording. The external microphone jack is found on the left side of your computer. Use only microphone with 1/8-inch mini-jack connector. Follow the same procedure for recording voice.

USING THE BUILT-IN COMBO DRIVE

You would normally use the Combo drive for recording audio music from the Audio CD. Follow these steps:

1. Activate CD Player volume on the Recording Control as discussed earlier.

2. Run the Sound Recorder program.

3. Insert the audio CD into the Combo drive. Unless you have disabled the CD auto-insertion notification for supporting Suspend mode, the CD Player should automatically run after you have inserted an audio compact disc and will start playing the audio CD.
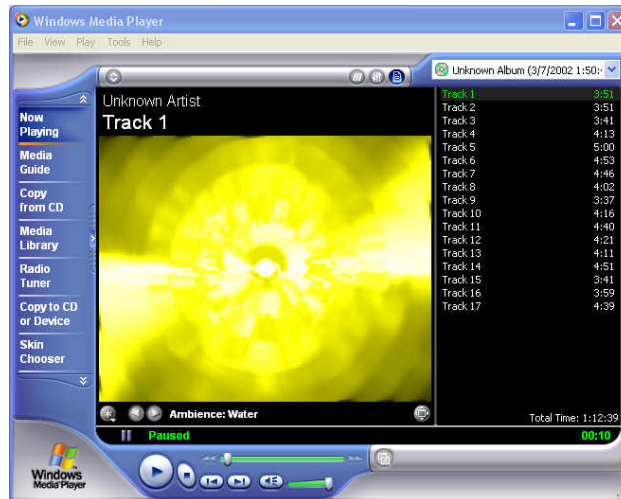
Figure 4-5 Play Audio CD by Windows Media Player

4. Select the starting point where you want to start recording.

5. Switch to the Sound Recorder and press the Record button.

6. Switch immediately to the Windows Media Player and press the **Play** button. You can adjust the volume control so you can also hear the music while in recording.

4.6 Playing Audio and Sound

Your computer has built-in twin speakers to playback audio and sound. You can also adjust the volume manually by adjusting the volume control hotkeys found on the right bottom side of the keyboard.

For more quality sound output, you can choose to connect an external amplified speaker or earphone from headphone jack. Always minimize the volume first before placing the phone set to your ear.

USING THE WINDOWS MEDIA PLAYER

The easiest way to playback multimedia media files is to run the Windows Media Player. Follow these steps:

1. Click on **Start**, point to **Programs**, **Accessories**, and then **Entertainment**.

2. Click on **Windows Media Player** to start program.

3. Click on the File menu and select the file you want to play.

4. When the file is recognized and open, click on the **Play** button to start playback.

4.7   Playing Video and MPEG Files

Your computer is capable of running video motion files as well as MPEG (Motion Picture Expert Group) files on CD, DVD, or CD-RW. By using software MPEG program, you can watch real full-motion picture on your computer. You can also run the Windows Media Player under the Entertainment programs group as well to show all media device programs.
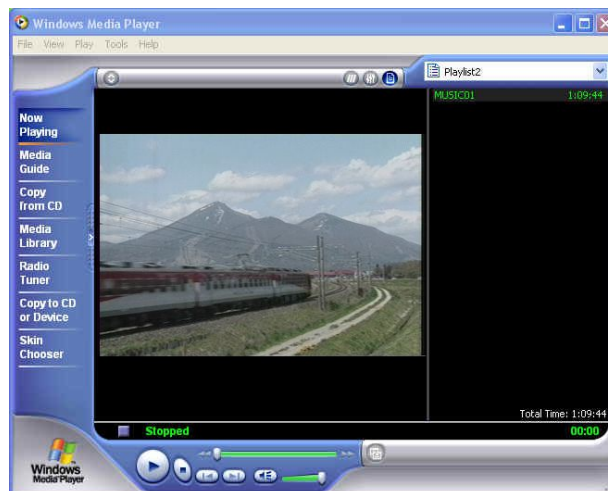
Figure 4-6 Windows Media Player

4.8   Using DVD

DVD is the breakthrough in superb full-motion picture playback. One disc can contain at least 4.7GB of information, capable of holding one full-length movie with soundtracks, subtitles, and different languages. Much more, the DVD-ROM drive of your computer is backward compatible with CD-ROM drive so it allows you to use any CD as well. It also works the same as the CD-ROM.

To playback DVD titles, you would need a software MPEG-2 program and the DVD-ROM drive at least. Your Notebook computer has installed Windows XP for operation system and its Windows Media Player supports DVD's playback..

You can use Windows Media Player to watch DVDs on your Notebook computer. Like a conventional DVD player, by using the Player, you can skip to specific **titles** and **chapters**, play sequences in slow motion, gain access to special features, and switch audio and caption languages. In addition to these conventional DVD player tasks, you can also retrieve information about each disc from the Internet.
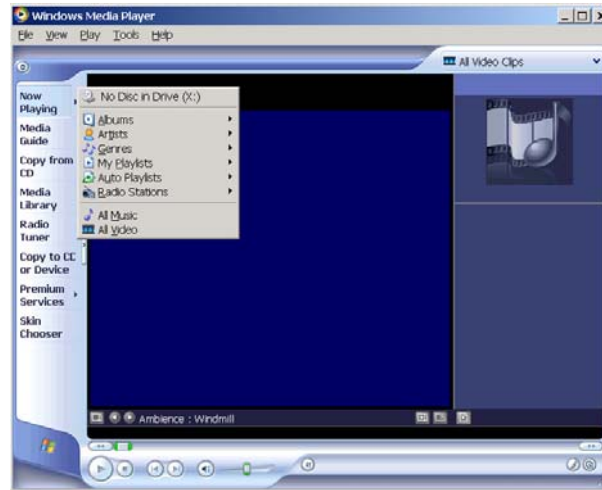
Figure 4-7 To play a DVD

On the Play menu, point to DVD, VCD or CD Audio, and then click the drive that contains the DVD. In the Playlist pane, click a DVD title, or chapter name, if appropriate.

To eject a disc, on the Play menu, click Eject. If you have discs in multiple drives, point to Eject, and then click the name of the disc that you want to eject. To play a selected title in a DVD repeatedly, on the Play menu, click Repeat. A check mark appears next to the command to indicate it is turned on.

☐ For best DVD playback, please enable the DMA function of this notebook, for how to enable the DMA channel on both DVD/CD-ROM drive and Hard Disk, please refer to driver installation on section 5 of chapter 2. Moreover, you can enable Hardware Accelerator if the software MPEG-2 player you are using has supported this function.

4.9   Using rewritable Optical Disk Drive

DVD/CD-RW Combo or DVD+RW combo drive is a device that can write digital data to CD-R and CD-RW or DVD+R and DVD+RW media. With this device, you can backup your own data to CD-R or CD-RW disc for mass data storage and safely retaining. The CD-R disc can be written several times until the CD-R is full; the CD-RW disc, furthermore, can write and erase data repeatedly. Please refer to the related user manual about the CD-RW software.

☐ Please pay attention to the copyright of the software or data you want to backup. Backup or distribute the software or data might be illegal according the restriction of the law.

5   Connecting to Peripherals
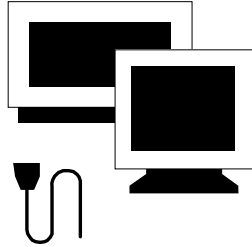
This chapter describes how you attach peripheral devices to your notebook. You can attach a printer or mouse; connect an external monitor and keyboard, or any other peripheral device. You will learn how to use these peripheral devices with the step-by-step instructions depicted in this chapter.

5.1 Using the USB Port

USB or Universal Serial Port is a peripheral bus standard developed by Compaq, DEC, IBM, Intel, Microsoft, NEC and Northern Telecom. Personal computers equipped with USB will allow computer peripherals to automatically configure as soon as they are physically attached - without the need to reboot or run setup. USB will also allow multiple devices to run simultaneously on a computer, with peripherals such as floppy drive, mouse, digital cameras, scanners, printers, CD-RW drives, modems, keyboards, games devices and acting as additional plug-in sites, or hubs.

Depending on your operational requirements, you may need to disable other ports in order to release system resource for the USB port.

5.2 Using an External Monitor Port

Your computer has a 15-pin Monitor port for supporting any external CRT or LCD color monitor. You need a display signal cable (usually provided with the monitor). One end of the cable must have a 15-pin connector for the system.

To connect an external monitor:

1. Turn off your computer and make sure the monitor power switch is turned off.

    The notebook computer must be powered off or suspended while the monitor is being connected. Although you can connect the external Monitor without power off the computer and the external monitor, however, it is harmful to both devices and it shortens the life of these devices.

2. Connect the connector cable of the monitor to the VGA port at the back of your computer. Secure the cable connection with the screws provided.

3. Connect the monitor power cable and plug it into a properly grounded wall outlet.

4. Turn on the power of the monitor.

5. Turn on your computer. Both the LCD panel and the monitor screen will show the display. Your computer is set at default to run at simultaneous display mode.

6. If you only want to show the display on the external monitor or projector and shut off the LCD display, you can use the **<Fn> + <F3>** hot-key to switch display type between LCD and external monitor. Keep pressing the hot-key until you get the display to external monitor only.

> ☐ *Refer to Chapter 3 regarding the possible External CRT resolutions and how to change the display properties.*

5.3 Using the IEEE 1394 Port

IEEE 1394 is a new I/O standard that is supported by Win98 (second edition) or later Windows versions. With supporting high-speed transmission and delivering data at a guaranteed rate, you can record digital video clips and download them directly via a super-speed IEEE 1394 port at the left of the notebook. IEEE 1394 becomes an ideal for devices that need to transfer high levels of data in real-time.

With built-in IEEE 1394 port, this computer enables the peripheral devices in transmitting digital video data or data backup. To install the IEEE 1394 port driver, please refer to Win98 (second edition) or later Windows version. The Windows system will automatically recognize it in installing a suitable driver for it. For other version of Windows, please visit Microsoft's web site for more information about it.

Moreover, you should install the driver of peripheral device to connect with the IEEE 1394 port, for details please refer to the manual that comes with your peripheral device.

> ☐ *Please make sure that the external IEEE 1394 HDD box you purchase on local electronic store should provide external power adapter. There are different types of IEEE1394 HDD box and hard disk from different manufactures, the power consumption has varied range. If the power of the external IEEE 1394 HDD is supplied from the USB of this notebook, it may not run properly.*

5.4   Using the TV Port

Also found at the rear side of your computer is one TV port (s-video).

To display your computer screen on the TV, please connect the TV port of this notebook to the Video Input of the TV set. You can press **<Fn> + <F3>** key continually to switch between TFT, external monitor, TFT + external monitor and TV only. Keep pressing the hot-key until you get the display to external TV only.

Or you can setup the detail by operate the computer as follows.

1.   Turn off your computer and plug one end of the s-video jack cable to the end to the input video jack of your television set.

2.   Turn on your computer and your television set.

3.   Click the **Start** button, then point to **Settings**, and click **Control Panel.**

4. Double-click on the **Display** icon and point to **Setting** tab.

5. Double-click **Advanced** button and point to **Intel(R) Extreme Graphics** tab and then click **Graphics Properites...**

6. In the **Device** tab, select the **Telvision** icon and change the related detail setting if you want. Click **OK** finally. Windows now automatically detect the TV port and enable this function.

5.5 Using the External Audio System

At the rear side of your computer, you will find the built-in audio ports. You can connect Microphone jacks, earphone or powered speaker.

To connect to a audio jack:

1. Locate the audio port (Microphone, Headphone) that you want to use to the target device.

2. Plug the jack into the port on the front sides of the system.

If you use external speakers and experience the sound distortion or feedback, please lower the volume. Some factors is caused by too close locating the microphone and speakers from each other, moving away the external audio option from the unit may also help.

5.6   Using the LAN Port

This notebook comes with an internal 10Base-T/100Base-TX LAN module that connects your computer to other computers/networks through a local area network (LAN) and supports data transfer rates at 10Mbps and can be up to 100Mbps. The 10Base-T standard also called Twisted Pair Ethernet is connected with RJ-45 connectors. The 100Base-TX is based on the older Ethernet standard. Because it is 10 times faster than Ethernet, it is often referred to as Fast Ethernet.

The built-in LAN module provides a standard RJ-45 connector.

To connect the twisted-pair cable to your LAN port:

1. Locate the twisted-pair cable in the accessories box in notebook shipping carton. Each end of the cable has a RJ-45 connector.

2. Connect one end of the cable into the network wall outlet or HUB.

3. Connect the other end of the cable into the computer RJ-45 LAN port.

5.7 Using the Wireless LAN

Wireless LAN is the major breakthrough in computer communication technology. It lets user connect to the LAN environment without using any wire to traditional RJ-45 jack. User can enjoy the wireless connection within the range of Access Point (AP) of LAN.

Access Point (AP) is the wireless transmission and receiving device, it generally connects to the server of a LAN environment or act as a LAN hub with wireless connection. Access point can be set in an office environment, airport, major railway station, etc. that depends on the construction of each country. In most case, you probably can use it at office, please consult with the network department of your company for more details.

This computer integrates built-in 802.11b/g wireless LAN module. IEEE 802.11b standard supports 11 Mbps wireless connection speed. However, IEEE 802.11g supports 54Mbps wireless connection speed, and is backward compatible with the slower 802.11b. You can connect to the wireless LAN Access Point without insert extra wireless LAN card into the PCMCIA slot.

Wireless LAN module is similar to LAN module. You need to install software driver before using it. Please refer to chapter 2.5 on how to install the driver.

5.8 Using the Modem Port

This notebook comes equipped with a 56K internal fax/data modem that allows you to communicate with others via fax, email, or to connect to an online service or bulletin board.

The built-in fax/data modem provides on standard phone connector.

To connect the analog phone cable to your modem:

1. Locate the analog phone cable in the accessories box in notebook shipping carton. Each end of the cable has a RJ-11 connector.

2. Connect one end of the cable into a standard wall outlet.

3. Connect the other end of the cable into the computer modem port.

❑ *The speed of data transmission is dependent on the quality of telephone lines. Digitally terminated lines improve the speed of data transmission. Contact your service provider for more information.*

❑ *The analog phone cable is an industry standard cable. Longer cables are available at your local electronics store.*

6   Customizing Your Notebook
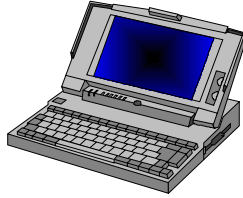
Your computer uses the Phoenix BIOS Setup program that allows you to set several system configuration in changing the way your computer performs. This includes you r system time and date, disk drive configuration and password setup. This information is then stored in the CMOS RAM and will remain permanent unless you change it again. This chapter discusses on how you will activate the BIOS Setup program and change the system configuration to suit your desired operation. You must be careful to set the configuration properly in order for your computer to run smoothly. If you are not sure of any settings, contact your dealer.

6.1 Running the BIOS Setup Program

Your computer is likely to have been properly setup and configured by your dealer prior to delivery. However, you may find it necessary to use the computer's BIOS (Basic Input-Output System) Setup program to change system configuration information, such as the current date and time, or your hard disk drive type. The Setup program can be accessed when you power on the system and pressing the **<F2>** function key.

The settings that you specify within the Setup program are recorded in a special area memory called the **CMOS RAM**. This memory is backed up by a battery so that is will not be erased when you turn off or reset the system. Whenever you turn on the computer, the system will read the settings stored in the CMOS RAM and compare them to the equipment check conducted during the Power On Self Test (POST). If an error occurs, an error message will be displayed on the screen, and you will then be prompted to run the Setup Program.

As the POST (Power-On Self Test) executes during the boot up process, the screen will display the following message:

```
Press <F2> to Enter SETUP
```

Press the **<F2>** key to run the BIOS Setup program. The BIOS Setup program is organized into five menus which you can select using the <-- and --> keys. To move from one option to another, you use the up and down arrow keys while using the <F5> and <F6>, or <+>and <-> keys to change the settings. On the right hand side of the screen are some brief help descriptions of each item you want to change.

On the BIOS Setup program, you will find the following parts on the screen:

- Item Specific Help
  The right side of the screen. This area describes each parameter and its available settings.

- Menu Bar
  The top line of the screen. Each of the five selections displays its own screen.

- Parameters
  The left side of the screen. This area lists the parameters and their current settings.

- Key Status Bar
  The bottom part of the screen. These lines display the keys available to move the cursor, select a particular function and so forth.

To exit the BIOS Setup program, simply press the <Esc> key and select from the Exit menu whether you want to Save changes and exit; Discard Changes and exit.

6.2   Using the Main Menu Setup

```
        Phoenix BIOS Setup Utility

      Main        Advanced        Security        Boot      Exit

                                                    Item Specific Help

      System Time:           [17 :54 :32]          <Tab>, <Shift-Tab>,
      System Date:           [02/24/2005]          or <Enter> selects
                                                    field.
    ▶ IDE Channel 0 Master   [40008MB]
      IDE Channel 1 Master   Installed CD/ DVD

      System Memory:         640 KB
      Extended Memory:       194560 KB
      CPU Type:              Celeron ® M Processor
      CPU Speed:             1300 MHz
      BIOS Version:          0.3A-0033-0812

  F1  Help     ↑↓  Select Item    -/+    Change Values    F9   Setup Defaults
  Esc Exit     ←-->  Select Menu   Enter  Select ▶ Sub-Menu  F10  Save and Exit
```

- System Time
  Allows you to change the system time using the hour:minute:second
  format of the computer.
  Enter the current time for reach field and use the <Tab>,
  <Shift>+<Tab>, or <Enter> key to move from one field or back to
  another.
  You can also change the system time from your operating system.

- System Date
  Allows you to set the system date using the month/date/year format.
  Enter the current time for reach field and use the <Tab>,
  <Shift>+<Tab>, or <Enter> key to move from one field or back to
  another.
  You can also change the system time from your operating system.

- IDE Channel 0 Master
  This field display various parameters for the hard disk drive. If type [Auto]
  is selected, the system automatically sets these parameters. If type [User] is
  selected, Cylinders, Heads and Sectors and other value can be edited.

- IDE Channel 1 Master
  This field is for information only as the BIOS automatically detects the
  optical drive.

- System Memory
  This field reports the amount of base (or conventional) memory found by
  the BIOS during Power-On Self-Test (POST).

- Extended Memory
  This field reports the amount of extended memory found by the BIOS
  during Power-On Self-Test (POST).

- CPU Type
  This field reports the CPU type information detected by the BIOS during
  Power-On Self-Test (POST).

- CPU Speed
  This field reports the CPU speed information detected by the BIOS
  during Power-On Self-Test (POST).

- BIOS Version
  This field is for information only as the BIOS displays the BIOS version
  during the Power-On Self-Test (POST).

6.2.1 INTERNAL HDD SUB-MENU

Phoenix BIOS Setup Utility				
Main	**Advanced**	**Security**	**Boot**	**Exit**

Primary Master: [40008MB]		Item Specific Help
Type:	[Auto]	User = you enter parameters of hard-disk drive installed at this Connection.
LBA Format		
Total Sector:	78140160	
Maximum Capacity:	40008MB	Auto = autotypes Hard-disk drive installed here.
Multi-Sector Transfers:	[16 Sectors]	1-39 = you select pre-determined type of hard-disk drive installed here.
LBA Mode Control:	[Enabled]	
32 Bit I/O:	[Disabled]	
Transfer Mode:	[FPIO 4 / DMA 2]	
Ultra DMA Mode:	[Mode 5]	
Smart Monitoring:	Enable	CD-ROM = a CD- ROM drive is installed here. ATAPI Removable= removable disk drive is installed here.

F1 Help	↑↓ Select Item	-/+	Change Values	F9	Setup Defaults
Esc Exit	←--> Select Menu	Enter Select ▶Sub-Menu		F10	Save and Exit

Use the Type field to select the drive type installed. You can select different drive types as **CD-DVD**, **User**, **Auto** or **None** by pressing <**Space**> bar. Set this option to Auto so your computer will automatically detect the drive type during power on. Set this option to None when your computer is not installed any devices. Press <**Esc**> to return to the Main Menu.

6.3 Using the Advanced CMOS Setup

Phoenix BIOS Setup Utility				
Main	**Advanced**	**Security**	**Boot**	**Exit**

		Item Specific Help
Quiet Boot	[Disabled]	
Summary Screen	[Disabled]	Select boot screen
		using options:
Frame Buffer Size:	[64Mb]	[Disabled]
Aperture Size:	[256M]	- Logo screen
Legacy USB Support	[Enabled]	
LAN Boot Control:	[Disabled]	[Enabled]
		- POST screen

F1	**Help**	**↑↓**	**Select Item**	**-/+**	**Change Values**	**F9**	**Setup Defaults**
Esc	**Exit**	**←-->**	**Select Menu**	**Enter**	**Select ▶ Sub-Menu**	**F10**	**Save and Exit**

- Quiet Boot
  Lets you specify the boot screen to Logo screen or POST screen by choosing Disabled or Enabled, respectively.

- Summary Screen
  Displays system configuration on boot.

- Frame Buffer Size:
  Lets you specify the speed of AGP rate for video devices. Please set it to default value.

- Aperture Size:
  Lets you specify the memory size of the Graphics Engine. Please set it to default value.

- Legacy USB Support
  Enable or disable the USB Bus support when in connection with USB device.

- LAN Boot Control:
  Lets you specify Enabled or Disabled for booting the notebook from Network.

6.4   Security Menu Setup

Phoenix BIOS Setup Utility				
Main	Advanced	**Security**	**Boot**	**Exit**

		Item Specific Help
Supervisor Password Is:	Clear	
User Password Is:	Clear	Supervisor Password controls access to the setup utility.
Set Supervisor Password	[Enter]	
Set User Password	[Enter]	
Fixed disk boot sector	[Normal]	
Password on boot	[Disabled]	

F1	**Help**	**↑ ↓**	**Select Item**	**-/+**	**Change Values**	**F9**	**Setup Defaults**
Esc	**Exit**	**←-->**	**Select Menu**	**Enter**	**Select ▶ Sub-Menu**	**F10**	**Save and Exit**

- Supervisor Password Is
  Set/Clear selections show that the notebook is under controlled by Supervisor Password or not.

- User Password Is
  Set/Clear selections show that the notebook is under controlled by User Password or not.

- Set Supervisor Password
  Supervisor password gives you the authority in accessing the setup utility. You also need to enter this password in system booting and resuming from suspend mode. When you press <**Enter**> in this field, the Set Supervisor Password dialog box appears. Enter a new password with up to 8 alpha-numeric characters, and then re-enter it for confirmation.

- Set User Password
  This field is only available when Supervisor Password has set. Enter the user password when boot the system or resume from suspend mode. But if the Write Protect is set in the Fixed disk boot sector field, you should enter a supervisor password to access the fixed disk when boot the system or resume from suspend mode.

- Fixed Disk Boot Sector
  If you set this field to Write Protect, the write protect boot sector on hard disk will protect against viruses. In this situation, only the supervisor can access the Boot Sector of fixed disk.

- Password on Boot
  If you set this field to Enabled, your computer will always ask for the password every time you boot your computer.

6.5   Using the Boot Setup

This item allows you to set the search drive sequence where the system will try to boot up first.

Phoenix BIOS Setup Utility				
Main	**Advanced**	**Security**	**Boot**	**Exit**

Boot Device Priority	Item Specific Help
1: CD-ROM/DVD-ROM	
2: Hard Drive	Keys used to view or
3: USB Floppy Drive	Configure devices:
4: USB Storage Disk	Up or Down arrows
5: Boot from LAN	Select a device.
	<+> and <-> moves
	the device up or down.

F1 Help	**↑↓ Select Item**	**-/+**	**Change Values**	**F9 Setup Defaults**
Esc Exit	**←--> Select Menu**	**Enter Select ▶ Sub-Menu**		**F10 Save and Exit**

This page allows you to set the search drive sequence where the system will try to boot up first.

To select the boot device, you can use the up or down arrow key, then press **<+>** to move up the device in the list or press **<->** to move down the device in the list. To exit from this menu, press **<Esc>**.

6.6   How to Exit the Setup Program

There are two choices to escape from the Setup program.

Phoenix BIOS Setup Utility				
Main	**Advanced**	**Security**	**Boot**	**Exit**

	Item Specific Help
Exit Saving Changes	Exit System Setup
Exit Discarding Changes	and save your
Load Setup Defaults	changes to CMOS.
Discard Changes	
Save Changes	
Battery Refresh	

F1	Help	↑ ↓	Select Item	F5/F6	Change Values	F9	Setup Defaults
Esc	Exit	←-->	Select Menu	Enter	Execute Command	F10	Save and Exit

- Exit Saving Changes
  Saves all changes to CMOS while running the BIOS setup program and exit from the system setup program.

- Exit Discarding Changes
  Allows you to discard all changes made while running the BIOS setup program and exit from the system setup program.

- Load Setup Defaults
  Lets you load the default values for all setup items.

- Discard Changes
  Reverts to previously selected settings.

- Save Changes
  Saves Setup data to CMOS.

- Battery Refresh
  Conditions the battery so that the battery can be fully charged.

6.7   How to Upgrade the BIOS

Your computer uses EPROM Flash BIOS chip that allows you to easily
upgrade the BIOS program. When you update the BIOS, any customized
settings you made are lost.

To upgrade the BIOS:

1. Insert the BIOS Update diskette into the diskette drive.

2. Power on the system with the diskette in the diskette drive.

3. On the DOS prompt, type the following command.

    ```
    A:\>Phlash XXXXXX.ROM (BIOS filename)  or
    A:\>XXXXXX.BAT (Batch file for BIOS file)
    ```

4. Press <Enter> to run this BIOS utility. After the system has been
    successfully run this program, a message similar to the following appears:

    ```
    Flash memory has been successfully programmed,
    press any key to restart the system. If the
    system does not restart, turn it off, then turn
    on again.
    ```

5. Press any key to restart this system.

Contact your dealer for the latest BIOS update file.

7   Using Options
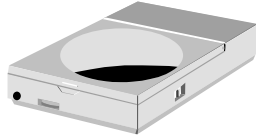
This chapter describes the advanced features and expandable architecture in your notebook. You can upgrade your system for specific requirements.

System Upgrade

This section provides some steps in doing system upgrade for your notebook computer. The upgrade procedures include the following:

MEMORY UPGRADE

Your notebook computer offers 200-pin SODIMM (Small Outline Dual Inline Memory Module) at least 256MB DDR-SDRAM. The memory compartment is located inside your computer. The table below lists the possible combinations of different memory module and memory size.

> *Please contact dealer for changing or adding DDR-SDRAM module. It is not available for users to change it by themselves.*

Based Memory	Installing Memory	Total
256 MB	0 MB	**256 MB**
256 MB	256 MB	**512 MB**
256 MB	512 MB	**768 MB**
512 MB	0 MB	**512 MB**
512 MB	256 MB	**768 MB**
512 MB	512 MB	**1024 MB**

INSTALLING MEMORY MODULE

Your computer comes with standard 256 MB, 512MB of synchronous DDR SDRAM. You can increase system memory to a maximum of 1048 MB in the system, by installing two small outline double inline memory modules (SO-DIMMs) with installed base memory in the system.

The 256MB, 512MB memory modules are available:

To install the memory module:

1. Make sure the system is powered off, the battery also is removed and that no peripheral devices are attached.

2. Turn the computer upside-down and locate the screw that secures the DIMM door at the underside of the notebook.
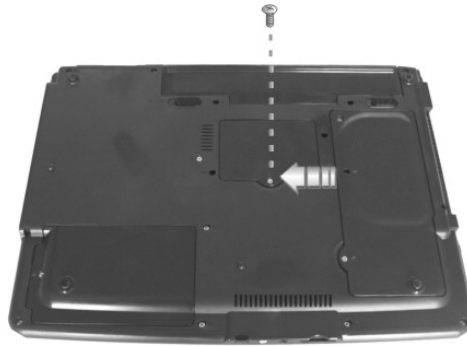
3. Remove the screw and open the DIMM cover by your finger.

4. Locate the memory module into the empty memory module sockets. (Your system comes with one memory module already installed in the socket.)

🗍 *Avoid touching the exposed components inside the system. Doing so may damage the system.*

5. Insert the connector of the memory module into the socket. Make sure the notch of the memory module fits the nose of the socket.
    *   Hold the memory module at a 30-degree angle and push its connector into the memory socket of the notebook.

- Press down on the edge of the memory module until the locking tabs on both sides is locked.

6. Put the DIMM door back and secure the screw on the DIMM door.

7. Turn the system over.

To remove a memory module, push the locking tabs aside from the memory module until the module pops up. Then, remove the memory module.

UPGRADE HARD DISK

Your notebook computer offers one 2.5" format, 9.5mm height hard disk. If the volume does not fit your need or it is crashed, you can upgrade it by replacing with new hard disk. Please do the following steps to change it.

1. Remove the screws and open the cover by lifting its upper side cover.
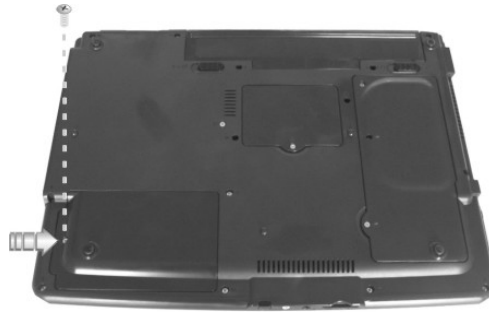
2. Take out the hard disk from the compartment by finger carefully

3. Remove the connector from the hard disk gently.

4. Remove the crane screws located at each side of the hard disk.

5. Rotate and tighten the crane screws to the new hard disk.

6. Attach the connector to the new hard disk precisely.

7. Place the hard disk back to the compartment.

8. Cover the lid, then rotate and tighten the screws.

9. Set the boot device as DVD/CD-RW Combo drive and Primary Master as Auto on BIOS setup menu. Please refer to Chapter 6 about the setting of BIOS setup menu. Then, boot the system by using WinXP CD-ROM and the system will detect the hard disk automatically and prompt you how to format the new disk.

⬜ *Please tighten the screws located at each side of the hard disk before operating the hard disk. Any vibration may cause damage for the running hard disk.*

⬜ *Please contact dealer or certified technician for changing the hard disk drive. The damage of changing HDD resulting from users may not be under warranty*

WIRELESS MODULE INSTALLATION

This computer uses mini-PCI wireless LAN module at the bottom of this notebook for wireless connection.

⬜ *Please contact dealer for adding or changing this module. Any damage that caused by inappropriately adding or changing this module will not be under warranty*

8   Caring for Your Notebook

Your Notebook PC is a fully IBM compatible portable personal computer with the latest features in mobile computing and multimedia technology. Lightweight and compact, your Notebook PC runs on a whole wide range of general business, personal productivity, and professional applications, it is ideal for use in the office, at home, and on the road.

Your Notebook PC also allows you for several levels of customization and expansion that are previously available only on desktop PCs.

8.1 Important Safety Instructions

Portable computers take the most beating from end users. This section gives you detailed information about how to maintain a safe working environment while using the notebook computer. You can maintain its condition and performance by following these guidelines. Please read it carefully to ensure maximum safety.

- Before cleaning the notebook computer, make sure it is disconnected from any external power supplies (i.e. AC adapter, car adapter and so on).

- When cleaning, do not use liquid or sprayed detergent for cleaning. Instead, use moisture sheet or a cloth for cleaning.

- The socket-outlet shall be installed near the notebook computer and shall be easily accessible.

- Please keep the notebook computer from humidity.

- Lay the notebook computer on a reliable surface when installing. A drop or fall may cause injury.

- The openings on the enclosure are for air convection hence the notebook computer can be protected from overheating. DO NOT COVER THE OPENINGS.

- Be careful of using power supply. The notebook computer has specific power requirements.

- Use only a power adapter approved for use with this notebook computer.

- The power adapter may have a 2-prong plug. This is an important safety feature. A compatible outlet is required. If it is not available, find a qualified electrician to install one.

- While unplugging the power cord, disconnect it by the plug head, not by its wire.

- Make sure the socket and any extension cords you may use can support the total current load of all the connected devices.

- Though your AC adapter is suitable for universal international voltage, it still requires a stable and continual power supply. Make sure the voltage of the power source when connect the notebook computer to the power outlet. If your are unsure of your local power specifications, consult your dealer or local power company.

- Place the power cord in such a way that people can not step on it. Do not place anything over the power cord.

- All cautions and warnings on the notebook computer should be noted.

- If the notebook computer is not in use for a long time, disconnect it from mains to avoid possible damage by transient over-voltage.

- Never pour any liquid into openings as this may cause fire or electrical shock.

- Never open the body of notebook computer. For safety reason, the notebook computer should only be opened by qualified service personnel.

- If one of the following situations arises, have the notebook computer checked by service personnel:

  - The power cord or plug is damaged.

  - Liquid has penetrated into the notebook computer.

  - The notebook computer has been exposed to moisture.

  - The notebook computer has not worked well or you can not get it work according to user's manual.

        ☐   The notebook computer has dropped and damaged.

        ☐   The notebook computer has obvious sign of breakage.

- Do not leave this notebook computer in an environment unconditioned. Storage temperature above 60ºC (140ºF) may damage the notebook computer.

- An approved power cord has to be used for the notebook computer's power supply. For a rated current up to 6A and an equipment weight more than 3 kg, a power cord not lighter than H05VV-F, 2G, 0.75mm², has to be used.

- To avoid any damage happened to the internal device, you should first disconnect the AC adapter and remove the battery pack from the notebook when replacing any internal device.

The sound pressure level at the operator's position according to IEC 60704-1 is equal or less than 70dB(A).

8.2   Cleaning Your Computer

When it is necessary to clean the plastic case and keyboard, use a soft, lint-free cloth, slightly dampened with a mild detergent solution or use the contents of any commercially available computer cleaning kit.

Never use alcohol, petroleum-based solvents, or harsh detergents to clean the notebook. Also never spray any liquids directly on the computer case, keyboard, or screen. If the liquid-crystal display (LCD) screen has become smeared or dusty, clean the screen by first applying a mild glass cleaner to a soft, clean, lint-free cloth, and gently wipe the glass. Never apply liquids directly on the screen surface. Moreover, do not use paper towels to clean the display screen. Paper can scratch the display screen matte.

8.3 Maintaining the LCD Quality

When it comes to screen problems, heat plays a big part. After a good working session, the typical routine is to shut the machine and close the cover. But the display surface - no matter what type it is - and the components inside the computer radiates heat; when you close the cover, you trap the heat against the screen. Leave the computer's cover open for about ten minutes while the heat disperses. Make this a habit.

You should also enable the power management of your computer to turn off the LCD power and display when the system is in inactivity for some time. Adding screen savers is also acceptable.

Follow the safety guidelines mentioned earlier and how to clean your computer.

8.4 Maintaining Your Hard Disk

Losing your data has the same consequences as a system break down. Users must make it a habit of doing hard disk maintenance every week or so. Here is some maintenance you could do:

- Always back up your data files from your hard disk.

- Install the virus detecting program to monitor virus that could tamper your files.

- Use SCANDISK once in a while to correct any errors found in the directory and File Allocation Table. This will also free up space from any unused sectors.

- Never move or raise the computer while the hard disk is being accessed, most especially don't jar the hard disk as this may cause a hard disk crash.

- Use hard disk maintenance programs like **Disk Defragmenter** of Windows. These reorganize your hard disk by eliminating fragmentation and improving your hard disk access time.

- Install a system password in your computer so others won't be able to use the hard disk.

8.5   Battery Care Guidelines

The battery pack furnished with the computer requires reasonable care and handling to ensure efficient operation and maximum life. There is a risk of fire and chemical burn if the battery pack is handled improperly.

To ensure that the battery pack endures normal life cycle, always observe the following precautions when handling the battery pack:

- Handle batteries carefully. Do not try to disassemble, crush, puncture, open, drop, mutilate, short external contacts, disposed of in water or fire, or expose it to temperatures higher than 60 C.

- Recharge batteries only as described in this manual and only in ventilated areas. Never use an external charger other than the one supplied with your computer.

- Do not leave batteries in hot locations for more than a day or two.

- Do not leave your battery in your computer for longer than 1 month without plugging in the power adapter.

- Do not leave battery in storage for more than 2 months without recharging it to prevent over discharge. Over discharge will hurt the battery

- Dispose dead battery properly to protect the environment. The batteries contain hazardous chemicals and should not be thrown out with household or office trash.

- You should always discharge your battery before recharging it on either of these two conditions: first, this is the first time you start to use your battery; second, you had not charge the battery for more than 2 months. To discharge the battery, please execute the "Battery Refresh" function in the BIOS Setup Utility.

8.6 When You Travel

For safety and convenience when traveling, please follow these instructions:

- Back up all needed files on your hard disk before traveling.

- Recharge your battery overnight to ensure full battery power before you leave.

- Don't forget to bring along the AC adapter and extra battery pack.

- Try to bring backup software as well.

- Check the voltage rating and the outlet type of your destination. If the power cord of the adapter is different, then you need to purchase a suitable one. Consult your dealer.

- Carry your computer in its carrying case or in a briefcase. Never check-in the computer as a luggage.

- Remember to apply those power saving features and techniques to save battery power.

APPENDIX A
System Specification
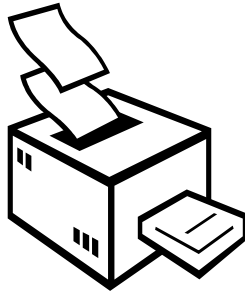
This appendix gives information on the technical and hardware specifications of your computer. Please note that the information mentioned here may not be exactly the same with your computer as specification is subject to change without notice or modifying this manual.

Designed with an advanced modular architecture, your Notebook PC also allows you for several levels of customization and expansion that are previously available only on desktop PCs.

PROCESSOR UNIT

- Intel® Celeron® M Processor Dothan

- Above 1.3 GHz CPU

- 1MB integrated L2 cache for the processor

SYSTEM MEMORY

- Two 200-pin memory slots

- User-upgradeable to maximum 1GB using 200-pin SODIMM 256MB, 512MB modules

- DDR -400 SDRAM modules

LCD DISPLAY

- 14" WXGA (15:9) Color TFT LCD

- Maximum 16M true colors on all LCD display

VGA SYSTEM

- Integrated VIA PN800 graphic engine

- Simultaneous LCD and external monitor (CRT) display

- Maximum 16 million colors on LCD display at 1280x768 resolution for 14" LCD

- Maximum 16 million colors on external monitor or projector at 1280x1024 resolution (Non-Interlaced)

STORAGE

- 2.5" Format 9.5mm High HDD Module; Bus Mastering, Ultra DMA ATA-100 Support for LBA Scheme

- Enhanced IDE bootable DVD-ROM drive module

- Optional DVD/CD-RW Combo drive

- Optional DVD Dual/Multi drive

- 4-in-1 (SD, MS, MMC, and MS_Pro) card reader

AUDIO SYSTEM

- Full-duplex 16-bit stereo speaker with wavetable support

- H/W Audio Sound Blaster 16 compatible

- Built-in dual speakers

- Audio input jacks for microphone (MIC)

- Audio output jack for external speaker or headphone (Line-Out)

- Digitized audio SPDIF port for high quality signal transmission.

- Sound volume adjust by K/B Hot-Keys

PCMCIA

- 32-bit CardBus PCI Local Bus PCMCIA controller

- Supports 1 x Type II PC card

- Supports 32-bit Cardbus Cards, and 16-bit PC Cards

GLIDE PAD

Integrated Glide Pad (Serial/USB mouse) pointing device with 2 click buttons

KEYBOARD

- Full-sized 87-keys keyboard with Windows systems hot-keys, inverted T-cursor keys, 8 hot keys, 12 function keys, and embedded numeric keypad

- Provides international language keyboard

FLASH BIOS

512K Flash ROM BIOS for easy BIOS upgrade

I/O PORTS

- 1 x 15-pin VGA port

- 1x TV-Out Port (S-Video)

- 3 x Universal Serial Bus (USB 2.0)

- 1 x IEEE 1394 port (BTO)

- 1 x IR (Infrared) port

- 1 x LAN port

- 1 x Modem port

WIRELESS DEVICES

- Build-in Mini PCI 802.11b/g Wireless LAN Solution (BTO)

- 1 x Infrared Remote Control (BTO)

- Bluetooth (BTO)

AC/DC POWER SUPPLY ADAPTER

Universal auto-switching (100V~240V) 65W adapter, 20 Volt

BATTERY

- Rechargeable 6 Cells Li-ion battery pack with Smart Battery function

- Approximately 4 Hours (by average JEITA) Battery Life

WEIGHT AND DIMENSION

- 335.5 (W) x 238.9 (D) x 24.9 (H) ~33.1 mm

- Approximately 2.3 kg