

FIC PMN70D User Guide



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Notebook Computer User Guide

Original Issue: 2009/5

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

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FCC Information to User

Safety and Care Instructions

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

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.

Important Safety Instructions

This section gives you detailed information about how to maintain a safe working environment while using the Notebook (Laptop). You can maintain its condition and performance by following these guidelines. Please read it carefully to ensure maximum safety.

1. Please read these safety instructions carefully.
2. Please keep this manual for later reference.
3. Please keep this equipment from humidity.
4. Do not use this product near water, for example, near a bathtub, wash bowl kitchen sink or laundry tub, in a wet basement or near a swimming pool.
5. Avoid using a telephone (other than a cordless type) during an electrical storm. There may be a remote risk of electric shock from lightning.
6. Do not use the telephone to report a gas leak in a vicinity of the leak.
7. Lay this equipment on a reliable surface when install. A drop or fall could cause injury.
8. All cautions and warnings on the equipment should be noted.

9. Do not operate the Notebook (Laptop) with the cover removed. For safety reason, the equipment should only be opened by qualified service personnel.
10. Always disconnect all telephone lines & all power cords from the wall outlet before servicing or disassembling this product. To reduce the risk of personal injury from electrical shock or hot surfaces, disconnect the power cord from the wall outlet, and allow the internal system components to cool before touching.
11. Refer your system for servicing to qualified service personal under the following conditions:
 - When the power cord or plug is damaged or frayed.
 - If liquid has been spilled into the product.
 - If the product has been exposed to rain or water.
 - If the product does not operate normally when the operating instructions are followed. Adjust only those controls that are covered by the operating instructions, since improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the product to normal condition.
 - If the product has been dropped or the cabinet has been damaged.
 - If the product displays a distinct change in performance, it indicates a need for service.
 - If the equipment has obvious sign of breakage.
12. The unit can be operated at maximum ambient temperature of 35°C.
13. Li-Ion battery is vulnerable, do not charge it with other power adapter, or it may cause fire or explosion
14. This product should be operated from the type of power indicated on the marking label. If you are not sure of the type of power available, consult your dealer or local power company.
15. Use only a power adapter approved for use with this Notebook (Laptop).
16. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.

-
17. If the Notebook (Laptop) is not in use for a long time, disconnect it from mains to avoid possible damage by transient over-voltage.
 18. The risk of ignition caused by small metallic objects, such as paper clips or staples, moving around inside TRANSPORTABLE EQUIPMENT during transportation shall be reduced objects entering the equipment, please do not remove dummy card from the product.

For Safety Regulation:

- Risk of explosion if battery is replaced by an incorrect type.
- For electrical safety concerns, only use telephone cables rated 26AWG or higher.
- The Optical drive is a Class 1 Laser Product.
- Li-Ion battery is vulnerable, do not charge it with other power adapter, or it may cause fire or explosion.
- 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).

Installation Restrictions

1. If an extension cord is used with this product, make sure that the total ampere rating of the equipment plugged into the extension cord does not exceed the extension cord ampere rating. Also, make sure that the total rating of all products plugged into the wall outlet does not exceed the fuse rating.
2. Never push objects of any kind into this product through cabinet slots as they may touch dangerous voltage points or short out parts that could result in a fire or electronic shock. Never spill liquid of any kind on the product.
3. For electrical safety concerns, only use telephone cables rated 26AWG or higher.

4. Unplug this product from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a dry cloth for cleaning. Ensure that no liquid enters the system.

Laser Compliance Statement

The CD-ROM/DVD-ROM/CD-RW/DVD-RW drive in this computer is a laser product. The CD-ROM/DVD-ROM/CD-RW/DVD-RW drive's classification label (shown below) is location on the drive.

CLASS 1 LASER PRODUCT

Caution: Use to any controls or adjustments or procedures other than those specified herein may result in hazardous radiate exposure. To prevent exposure to laser emanations (Harmful to Human eyes), do not attempt to disassemble this unit.

Battery (Lithium)

Note:

1. The following caution statement is located in the service and operating manual or on the label adjacent to the battery.
2. Risk of explosion if battery is replaced by an incorrect type.
3. Do not dispose of batteries in a fire.

English

CAUTION: DANGER OF EXPLOSION IF BATTERY IS INCORRECTLY REPLACED. REPLACE ONLY WITH SAME OR EQUIVALENT TYPE RECOMMENDED BY THE MANUFACTURER. DISCARD USED BATTERIES ACCORDING TO THE MANUFACTURER'S INSTRUCTIONS.

French

IL Y A DANGER D'EXPLOSION S'IL Y A REMPLACEMENT

INCORRECT DE LA BATTERIE. REMPLACER UNIQUEMENT AVEC UNE BATTERIE DU MÊME TYPE OU D'UN TYPE RECOMMANDÉ PAR LE CONSTRUCTEUR. METTRE AU RÉBUT LES BATTERIES USAGÉES CONFORMÉMENT AUX INSTRUCTIONS DU FABRICANT.

German

VORSICHT ! Explosionsgefahr bei unsachgemäßen Austausch der Batterie. Ersatz nur durch denselben oder einem vom Hersteller empfohlenem ähnlichen Typ. Entsorgung gebrauchter Batterien nach Angaben des Herstellers.

Swedish

Explosionsfara vid felaktigt batteribyte. Använd samma batterityp eller en ekvivalent typ som rekommenderas av apparattillverkaren. Kassera använt batteri enligt fabrikantens instruktion.

Danish

Lithiumbatteri- Eksplosionsfare ved fejlagtig håndtering. Udskiftning må kun ske med batteri af samme fabrikat og type. Lever det brugte batteri tilbage til leverandoren.

Norwegian

Eksplosjonsfare ved feilaktig skifte av batteri. Benytt samme batteritype eller en tilsvarende type anbefalt av apparatfabrikanten. Brukte batterier kasseres i henhold til fabrikantens instruksjoner.

Finnish

Paristo voi räjähtää, jos se on virheellisesti asennettu. Vaihda paristo ainostaan laitevalmistajan suosittelemaan tyyppiin. Hävitä käyteet paristo valmistajan ohjeiden mukaisesti.

Power Cord Set Requirements

- 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).
- The power cord set (appliance coupler, flexible cord, and wall plug) you received with the Notebook (Laptop) meets the requirements for use in the country where you purchased the equipment.
- Power cord sets for use in other countries must meet the requirements of the country where you use the computer. For more information on power cord set requirement, contact your local authorized dealer, reseller, or service provider.
- Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.

Power Lines

Do not locate the antenna near overhead light or power circuits, or where it could fall into such power or circuits.

Warning: When installing or realigning an outside antenna system, extreme care should be taken to keep from touch such power lines or circuits. Contact with them could be fatal.

Television antenna connectors protection (for system TV tuner card) (Option)

External television antenna grounding

If an outside antenna or cable system is to be connected to your notebook, make sure that the antenna or cable system is electrically grounded to provide some protection against voltage surges and static charges.

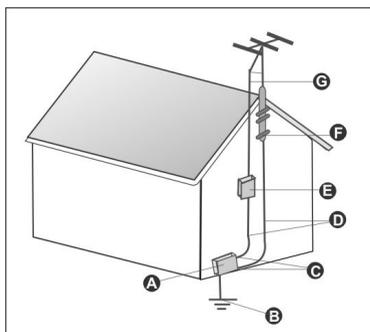
Article 810 of the National Electrical Code. ANSI/NFPA 70, provide information with regard to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding conductors, location of antenna discharge unit, connection to grounding electrodes, and requirements for the grounding electrode.

Lightning protection

For added protection of any product during a lightning storm or when it is left unattended or unused for long periods of time, unplug the product from the wall outlet and disconnect the antenna or cable system.



Må Kun tilkoples kabel-TV nett via galvanisk isolator.



	Grounding Component
A	Electric Service Equipment
B	Power Service Grounding Electrode System (NEC Art 250, Part H)
C	Ground Clamps
D	Grounding Conductors (NEC Section 810-21)
E	Antenna Discharge Unit (NEC Section 810-20)
F	Ground Clamp
G	Antenna lead-in wire

Antenna grounding

CATV Cable Safety

Make sure that your CATV system installer has connected the Coaxial cable shield to the grounding system of the building, as close to the point of cable entry as practical.

TV Antenna

The TV antenna supplied with any TV Tuner module is intended for Indoor use only. Please do not use your TV Tuner module outdoors.

Battery Pack



"Do not incinerate, (or) disassemble; may explode or release toxic materials. Do not short circuit; may cause burns. "

Power Adapter



For indoor use only.



For use with information technology equipment.



Risk of electric shock do not open.

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)

5.105 Federal Communications Commission (FCC) Requirements, Part 15

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 cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

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

5.21 Regulatory information/Disclaimers

Installation and use of this Wireless LAN device must be in strict accordance with the instructions included in the user documentation provided with the

product. Any changes or modifications (including the antennas) made to this device that are not expressly approved by the manufacturer may void the user's authority to operate the equipment. The manufacturer is not responsible for any radio or television interference caused by unauthorized modification of this device, or the substitution of the connecting cables and equipment other than manufacturer specified. It is the responsibility of the user to correct any interference caused by such unauthorized modification, substitution or attachment. Manufacturer and its authorized resellers or distributors will assume no liability for any damage or violation of government regulations arising from failing to comply with these guidelines.

Canadian Department of Communications Compliance Statement

**The Class B digital apparatus meets all requirements of the Canadian Interference Causing Equipment Regulation.
Cet appareil numérique de la class B respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.**

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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



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 89/336/EEC.

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

EN 300 328-2 V.1.7.1 (2006)

EN 301 489-1 V.1.6.1 / EN 301 489-17 V.1.2.1 (2002)

EN 50371: 2002

EN 55022: 2006

EN 55024: 2001

EN 60950-1: 2001

EN 61000-3-2: 2006

EN 61000-3-3: 1995 + A1: 2001+ A2: 2005

802.11b and 802.11g 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."

About Your Notebook Computer

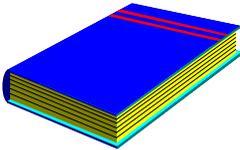


Congratulation for having purchased your new Professional Multimedia Notebook. This notebook incorporates the strongest features, which integrate the latest technologies available in the notebook industry.

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.
- Appendix A System Specification.

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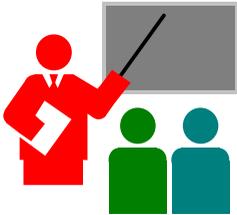
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1 Introduction



Your Notebook PC is a fully Windows compatible portable personal computer. 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 and at home.

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® Penryn Core 2 Duo or Quad processor that is integrated with 6MB or 12MB L2 Cache, respectively. 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 Vista.

IS *If the machine is equipped with Intel Core 2 Duo CPU, the corresponding adapter can be 90W or 120W. If you wish to replace your CPU to Intel Quad Core, the corresponding adapter should be 120W. In order to keep the optimum status, please contact your local dealer for technical support.*

Memory

This notebook provides two memory slots for installing DDR3 SDRAM 200-pin SODIMM modules up to 4GB using 1024MB or 2048MB DDR3 SDRAM modules.

Wide Screen LCD Display

Provides extraordinary 17" WXGA 1440 x 900 wide screen LCD display. It is the best choice for you to watch DVD movie.

Wireless LAN

IEEE 802.11b/g/n, Mini Card with PCI-E or USB interface

Graphic System

Provides blazing graphics controller with embedded in Intel Cantiga GM45 or integrated Nvidia N10P-GE1 graphic engine.

Optical Disk Drive

Provides SATA Combo CD/DVD.

USB 2.0

Provides three USB2.0 ports and one USB/ESATA port for fastest I/O data transmission.

Express Card

Provides one ExpressCard slot for faster new-generation PC card solution.

Audio System

Compliant with Intel HD Audio (Azalia). Sound Blaster compatible. Support 32-bit, multi-channel audio system output.

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.

- Closing the Notebook computer (lowering the cover) 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. The shipping carton should contain the following items:

- The Notebook Computer
- An AC Adapter and AC Power Cord
- Li-Ion Battery Pack
- CD with Driver Utility and User Guide
- Quick Setup Guide

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.



- | | |
|---------------------------------|-------------------------------|
| 1.6. Integrated Microphone | 2. WebCam |
| 3. Color Widescreen LCD Display | 4.8. Built-in Stereo Speaker. |
| 5. Power On/Resume Button | 7. Easy Buttons |
| 9. Keyboard | 10. Touchpad Pointing Device |

- Integrated Microphone
Integrated mono microphone for instant voice recording and simultaneous voice conversation.

- **WebCam**

The webcam can be used as a communication device that transmits instant image through network for conference.
- **Color Widescreen LCD Display**

The notebook computer comes with a color LCD that you can adjust for a comfortable viewing position. The LCD is 17" TFT color LCD with 1280x800 (Wide XGA+) resolution panels. The features of the Color LCD Display are summarized as follows:

 - ➔ TFT color LCD with Widescreen 17" 1280x800 (Wide XGA+) resolution panels.
 - ➔ Capable of displaying 16M colors (32-bit true color).
 - ➔ LCD display control hot-keys allow you to adjust the brightness of the LCD.
 - ➔ Simultaneous display capability for LCD and external desktop computer monitor.
- **Built-in Stereo Speakers**

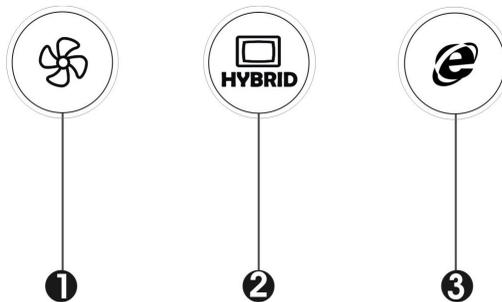
Integrated left and right mini stereo speakers for sound and audio output for your multimedia presentations or listening pleasure.
- **Power On/Resume Button**

Switches the computer power on and off, or resumes whenever it is in Suspend mode.
- **Easy Buttons**

There are three easy buttons used for CPU throttling, UMA/discrete mode switching and Internet accessing. Description of the easy buttons appears in the latter part of this section.
- **Keyboard**

- Standard QWERTY-key layout and full-sized 104 keys keyboard with Windows system hot-keys, embedded numeric keypad, 11 hot keys, inverted "I" 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.
- 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 touchpad to control the position of the cursor. Use the selection buttons below the touchpad to select menu items.

THE FUNCTION OF EASY BUTTONS



1. CPU Throttling

2. Hybrid Button

3. Internet Button

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

- **Hybrid Button**
Press this button to activate the VGA function in UMA mode or discrete mode.
- **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 Internet Explorer directly.

1.4 The Front Side of the Notebook



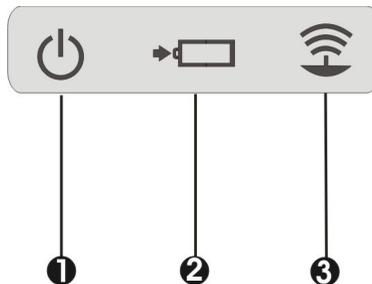
- | | |
|------------------------------------|---------------------|
| 1. Headphone Jack (with SPDIF out) | 2. Microphone Jack |
| 3. Line-in Jack | 4. 4-in-1 card slot |
| 5. Cover Switch | 6. LED Indicators |

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

- **Line-in Jack**
Connect audio sources, such as external CD, players to this jack for recording on your computer or playback through the Line-Out device.
- **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.
- **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.
- **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.

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. Wireless LAN Access

- **Power Indicator**
Lets you know that power to the system is turned on.
 - ➔ Lights blue when the system is powered on.
 - ➔ Lights blue blinking when the system is in Standby mode.
 - ➔ Lights off when the battery power is exhausted.
- **Battery Charging LED**
Lights to indicate battery in charging status.
 - ➔ Lights blue blinking to indicate that the battery is in charging.
 - ➔ Lights Amber blinking when the battery charging is in error.
 - ➔ Lights blue to indicate the battery is fully charged or no battery installed.
 - ➔ Lights Amber blinking when the system pop-up the battery warning message.
- **Wireless LAN Access**
When LED in blue light indicates that the wireless LAN module is activated. When LED lights off, it indicates that the function is disabled.

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.

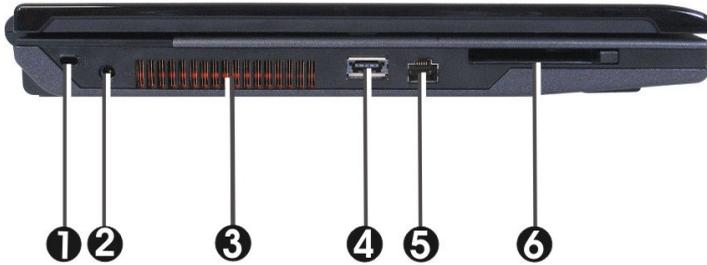


1. VGA Port 2. HDMI Port 3. USB 2.0 Port

- **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.
- **HDMI Port**
Lets you connect to the HDMI peripheral device for digital audio/video transmitting.
- **USB 2.0 Port**
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.

1.6 The Left Side of the Notebook

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



- | | |
|---------------------------|-----------------------|
| 1. Locking Device Keyhole | 2. DC Power Port |
| 3. Air-Outlet Vent | 4. ESATA/USB 2.0 Port |
| 5. LAN Port | 6. ExpressCard Slot |

- **Locking Device Keyhole**
Lets you attach a Kensington security system or a compatible lock to physically secure your notebook computer.
- **DC Power Port**
Lets you connect the AC power adapter in supplying continuous power to your notebook and recharging the battery.
- **Air-Outlet Vent**
Emits the heat out of your computer and keeps it within operating temperature.
- **ESATA/USB 2.0 Port**
The Universal Serial Bus (USB) port allows you to connect ESATA or USB 2.0-compliant devices (for example, printers, scanners and so on) to your notebook computer.
- **LAN Port**
An internal 10/100/1000Mb/s Ethernet LAN module connects your computer to other computers/networks through a local area network (LAN).

- ExpressCard Slot

A newly developed PC Card interface, its connector has 26 pins and has a potential transfer rate of up to 500 MB/sec (or 250 MB/sec in each direction).

1.7 The Right Side of the Notebook

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



1. Optical Disk Drive

2. USB 2.0 Ports

Right Side Features

- Optical Disk Drive

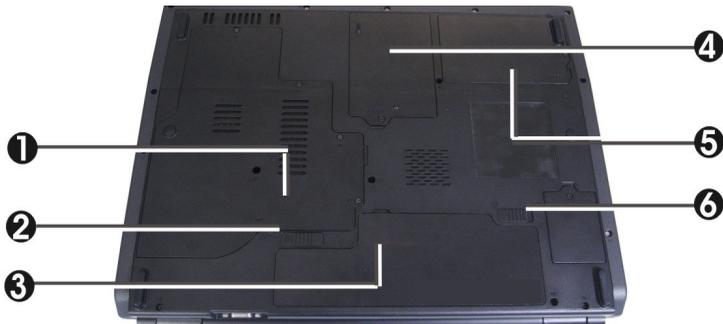
Allows you to load and start programs from a compact disc (CD) or a digital video disc (DVD) and play conventional audio CDs. It also can make CD/DVD by using CD-R/RW or DVD-R/RW.

- 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.

1.8 The Underside of the Notebook

The bottom of the notebook computer offers the following features.



1. Memory Compartment
3. Battery Pack
5. Hard Disk Compartment

2. Battery Release Latch
4. Hard Disk Compartment
6. Battery Lock Latch

Bottom of the System

- **Memory Compartment**
There are two SO-DIMM memory slots. One memory slot is empty for upgrade usage.
- **Battery Release Latch**
To release the battery, first locate the Battery Lock Latch at the left side with unlock status, then push the Battery Release Latch to the right end to remove the battery pack.
- **Battery Pack**
Equipped with a choice of Lithium-Ion (Li-Ion) battery pack.

- **Hard Disk Compartment**
Open this cover of this compartment to replace with other Hard Disk Drive.
- **Battery Lock Latch**
Push the latch to the lock side to lock and secure the battery, or push the latch to the unlock side for unpacking the battery pack.

 *When you set up HDD to AHCI mode on a computer that has multiple hard disks, you may expect the disk assignment numbers to match the corresponding SATA channel numbers, but, however, when Vista SPI is installed, HDD 1 may be assigned to the hard disk on SATA1, and HDD2 may be assigned to the hard disk on SATA0. Therefore, you may lose important data when you set up Windows Vista on the wrong drive, or even try to format the incorrect drive partition.*

You can see the assigned disk numbers by using any of the following methods:

- *Run the Disk Management console.
To do this, click Start, type diskmgmt.msc in the Start Search box, and then click diskmgmt.msc in the Programs list.*
- *Use the Diskpart.exe command-line utility to run the list disk command.*
- *During Windows Vista setup, the assigned disk numbers are listed when you are prompted to select a drive and a partition for the installation.*

For more information, please refer to Microsoft's website:
<http://support.microsoft.com/kb/937251/en-us>

1.9 Notebook Accessories

AC Adapter

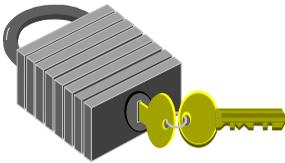
The AC Adapter supplies external power to your notebook computer and charges the internal battery pack simultaneously. The AC adapter has an auto-switching design that can connect to any 100VAC ~ 240VAC power outlets. You just change the power cord if you are going to use your notebook in other countries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

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

Battery Pack

Aside from the AC adapter, your computer can also be powered through the internal battery pack. The battery pack uses rechargeable Lithium-Ion (Li-Ion) battery cells that provide long computing hours when fully charged and power management enabled. You should always leave the battery inside your computer even when using the AC adapter as it also acts as a back-up power supply in case power from the AC adapter is cut off. It is also very important to have the battery pack always charged to prevent battery cell degradation.

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.

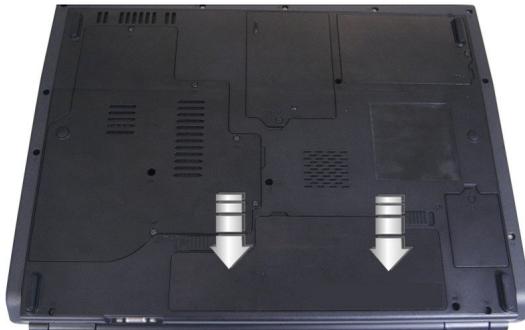
If you do not discharge the battery completely, it fails to accept a full recharge.

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

⚠ Risk of explosion if battery is replaced by an incorrect type. Dispose of used batteries according to the instructions.

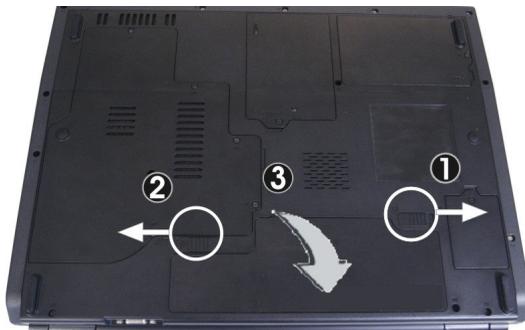
Installing the Battery Pack

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 right side to unlock the battery lock latch (1), and slide the battery release latch to the end of left side to release the battery latch (2), then take out the battery pack with your finger (3).



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 ExpressCard slot, the hard disk drives, and optical disk 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."

 ***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 left side of the computer.

NOTE *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.*

- NOTE**
- *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 VISTA FROM OPTICAL DISK DRIVE

To install Windows Vista directly from your optical disk drive, please go to **Boot** menu of **BIOS** setup menu. Use arrow key to select "DVD/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 Vista installation

CD into optical disk drive with following the instructions on the screen to finish the installation.

DRIVER INSTALLATION NOTE:

-  *Before install driver & utility, please turn off "Turn User Account Control on or off" item of User Accounts in Control Panel.*

-  *Please install chipset driver first.*

-  *Please install Hybrid VGA driver when you enable hybrid function in BIOS setup; please install Nvidia VGA driver when you disable hybrid function and set Nvidia in BIOS setup; please install Intel VGA driver when you disable hybrid function and set IGD in BIOS setup.*

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 Vista32

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\Vista x86\Chipset\Setup.exe"**.
3. Click **"OK"** to execute the setup program. The **Setup** box appears.
4. Click **"Next"** continuously to install this driver when screen displays this command.
5. Click **"Yes"** to accept the License Agreement.
6. Click **"Next"** to continue the following step.

7. Click **"Next"** to complete it.
8. Tick the option **"Yes, I want to restart this computer now."**, and press **"Finish"** to restart your system.

INSTALLING THE HYBRID VGA DEVICE DRIVER

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

Installing Hybrid VGA device driver for Windows Vista32

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\Vista x86\VGA\Hybrid\setup.exe".
3. Click **"OK"** to execute the setup program. The **Setup** box appears.
4. Click **"Next"** to install this driver when screen displays this command.
5. Click **"Yes"** to accept the License Agreement.
6. Tick the option **"Yes, I want to restart this computer now."**, and press **"Finish"** to restart your system.

INSTALLING THE NVIDIA VGA DRIVER

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

Installing NVIDIA VGA device driver for Windows Vista32

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\Vista x86\VGA\Nvidia\setup.exe".

3. Click **"OK"** to execute the setup program. The **Setup** box appears.
4. Click **"Next"** to install this driver when screen displays this command.
5. Click **"Yes"** to continue the installation.
6. Tick the option **"Yes, I want to restart my computer now."**, and press **"Finish"** to restart your system.

INSTALLING THE INTEL VGA DRIVER

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

Installing Intel VGA device driver for Windows Vista 32

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\Vista x86\VGA\Intel\Setup.exe".
3. Click **"OK"** to execute the setup program. The **Setup** box appears.
4. Click **"Next"** to install this driver when screen displays this command.
5. Click **"Yes"** to continue the driver installation.
6. Click **"Next"** twice to continue the driver installation.
7. Tick the option **"Yes, I want to restart my computer now."**, and press **"Finish"** to restart your system

INSTALLING THE IMSM DRIVER

Please follow the procedures below for installing the IMSM driver:

Installing IMSM driver for Windows Vista 32

1. Click the **Start** button, then point to **Run**. The **Run** dialog box appears.

2. Click **Browse** button and navigate to the directory as **"E:\Drivers\Vista x86\IMSM\setup.exe"**
3. Click **"OK"** to execute the setup program. The **Setup** box appears.
4. Click **"Next"** twice to implement the setup program to install this driver.
5. Click **"Yes"** to continue the driver installation.
6. Click **"Next"** twice to continue the driver installation.
7. Tick the option **"Yes, I want to restart my computer now."**, and press **"Finish"** to restart your system.

INSTALLING THE AUDIO DEVICE DRIVER

Your notebook computer uses the Realtek Audio controller:

Installing Audio device driver for Windows Vista32

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\Vista x86\Audio\Setup.exe"** where the audio driver is located.
3. Click **"OK"** to execute the setup program. The **Setup** box appears.
4. Click **"Next"** to continue the following steps.
5. Tick the option **"Yes, I want to restart my computer now."**, and press **"Finish"** to restart your system.

INSTALLING ALPS - TOUCHPAD DEVICE DRIVER

Installing ALPS - TouchPad driver for Windows Vista32

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\Vista x86\TouchPad\Setup.exe**".
3. Click "**OK**" to execute the setup program. The **Setup** box appears.
4. Click "**Next**" to execute the setup program. The **Welcome** box appears
5. Select "**I accept this agreement**" and click "**Next**" to continue the installation.
6. Click "**Finish**" and then press "**Restart Now**" to restart your system.

INSTALLING THE LAN DEVICE DRIVER

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

Installing LAN driver for Windows Vista32

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\Vista x86\LAN\setup.exe**".
3. Click "**OK**" to execute the setup program. The **Setup** box appears.
4. Click "**Next**" to continue the following steps.
5. Click "**Install**" to begin the installation.
6. Click "**Finish**" to complete it.

INSTALLING CARD READER DEVICE DRIVER

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

Installing Card Reader driver for Windows Vista32

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\Vista x86\Card Reader\setup.exe**".
3. Click "**OK**" to execute the setup program. The **Setup** box appears.
4. Click "**Finish**" to complete it.

INSTALLING THE WIRELESS LAN DRIVER

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

Installing Wireless LAN driver for Windows Vista32

1. Click the **Start** button, then point to **Run**. The **Run** dialog box appears.
2. Click **Browse** button and specify the directory as "**E:\Drivers\Vista x86\WLAN\setup.exe**".
3. Click "**OK**" to execute the setup program. The **Setup** box appears.
4. Click "**Next**" to install this driver when screen displays this command.
5. Click "**Finish**" to finish the driver installation.

INSTALLING THE BLUETOOTH DRIVER & UTILITY

Following is the procedure for installing the Bluetooth driver & Utility:

Installing Bluetooth device driver & utility for Windows Vista 32

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\Vista x86\Bluetooth\Setup.exe**".
3. Click "**OK**" to execute the setup program. The **Setup** box appears.
4. Click "**Next**" continuously to install this driver when screen displays this command.

5. Tick the option "**I accept the terms in the license agreement**", and press "**Next**" to continue.
6. Click "**Install**" to continue the installation.
7. Press "**Finish**", then press "**Yes**" to restart your system.

INSTALLING THE CAMERA UTILITY

Please follow the procedures below for installing the Camera utility:

Installing Camera utility for Windows Vista32

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\Vista x86\Camera\Utility\Setup.exe**".
3. Click "**OK**" to execute the setup program. The **Setup** box appears.
4. Choose setup language, then click "**Next**" to execute setup program.
5. Click "**Finish**" to complete it.

INSTALLING HOTKEY UTILITY

Please follow the procedures below for installing the Hotkey utility:

Installing Hotkey Utility for Windows Vista32

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\Vista x86\Hotkey\Setup.exe**".
3. Click "**OK**" to execute the setup program. The **Setup** box appears.
4. Click "**Next**" to continue the following steps.

5. Click **"Install"** to implement setup program to install the utility.
6. Tick the option **"Yes, restart the computer now"**, and press **"Finish"** to restart your system.

INSTALLING POWERMANAGER UTILITY

Please follow the procedures below for installing the Power Manager utility:

Installing Power Manager Utility for Windows Vista32

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\Vista x86\Power Manager\setup.exe"
3. Click **"OK"** to execute the setup program. The **Setup** box appears.
4. Click **"Next"** to continue the following steps.
5. Click **"Install"** to implement setup program to install the utility.
6. Tick the option **"Launch Power Manager"**, and click **"Finish"** to complete it.

INSTALLING LAUNCH PAD UTILITY

Please follow the procedures below for installing the Launch Pad utility:

Installing Launch Pad Utility for Windows Vista32

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\Vista x86\Launch Pad\setup.exe"
 3. Click **"OK"** to execute the setup program. The **Setup** box appears.
 4. Click **"Next"** to continue the following steps.
-

5. Click "**Install**" to implement setup program to install the utility.
6. Tick the option "**Yes, restart the computer now**", and press "**Finish**" to restart your system.

INSTALLING THE REGKEY

Please follow the procedures below for installing the Regkey.

Installing Regkey for Windows Vista32

1. Click the **Start** button, then point to **Run**. The **Run** dialog box appears.
2. Click **Browse** button and specify the directory as "**E:\Drivers\Vista x86\Regkey\Regkey.exe**"
3. Tick the option "**Yes, restart the computer now**", and press "**Finish**" to restart your system.
4. Click "**OK**" to complete it.

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 LCD 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 LCD panel for a long period of time when computer is on and power saving features are disabled.

3 Using Your Notebook



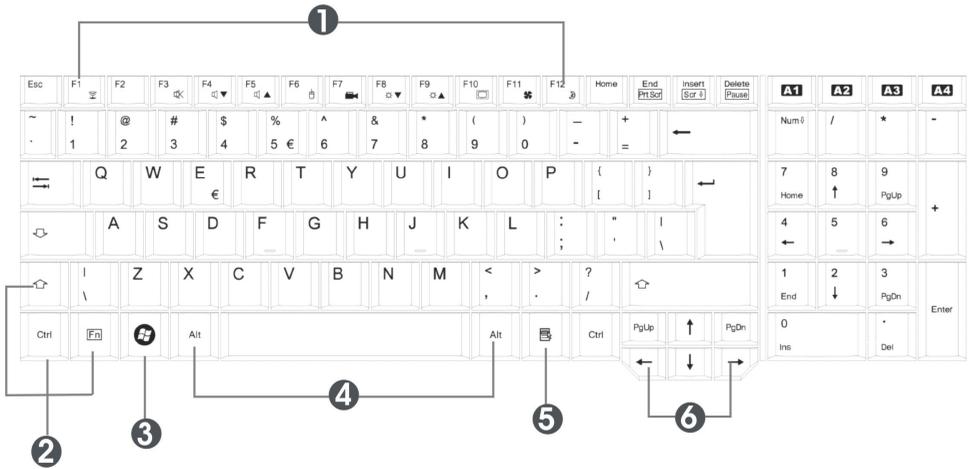
This chapter describes how to operate the standard built-in features of the notebook that you normally would use in your day-to-day computer work. If you are new to computers and to your operating system, you also need to read the manual for the operating system on how to work with your computer. It 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 104 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 > 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 > key. Press this key to cancel or escape from a command or function.
	< Ins > key. Known as the Insert key. Press this key to toggle the keyboard data entry from insert to type over mode.
	< Fn > + < PrtScr > key. Known as the Print Screen key. Press this key to map the whole screen to share memory for your specific usage.
	< 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.
	< Fn > + < Pause > key. Press this key to temporarily halt execution of a command. Pressing any other key to resume execution of a command.
	< Backspace > key. Press this key to delete the character to the left of the cursor.
	< Shift > key. Press this key in combination with alphabet letters to produce uppercase letters in typing. Use this key in combination with those two-character keys (found on the second row of the keyboard) to produce the upper marked keys. Also used in most application program in combination with other keys to execute a certain command.
	< Tab > key. Press this key to move the cursor to the next tab stop on the right. This key works much the same as in ordinary typewriter.

Keypad	Function Description
	< Ctrl > key. Known as the Control key. Used in most application program in combination with other keys to execute a certain command.
	< Alt > key. Known as the Alternate key. Used in most application program in combination with other keys to execute a certain command.
	< Num Lock > key. Activates the embedded 15-key numeric keypad. The keys are color coded blue.
	< Caps Lock > key. Used in most application program to always activate uppercase alphabet characters.
	< 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 > key. Moves the cursor to the beginning of a screen or line.
	< PgUp > key. Moves the cursor up one screen at a time
	< PgDn > key. Moves the cursor down one screen at a time
	< 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
	To activate or close the Wireless LAN function.
	To shut down or resume the built-in system speaker volume.
	Decreases the audio volume of the notebook incrementally.
	Increases the audio volume of the notebook incrementally.
	To activate or close the touchpad function.
	To activate or close the Web Camera function.
	Decreases the brightness of LCD display incrementally.

Keypad	Function Description
	Increases the brightness of LCD display incrementally.
	Switches display between LCD, CRT, or LCD and CRT simultaneously.
	To activate or close the CPU throttling function.
	Switches the system into Suspend mode.

3.3 Using the Touchpad Pointing Device

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

The touchpad 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 touchpad 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 touchpad device and is normally used under Windows-based operating system. However, if you want to utilize the added

features of the touchpad, 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. Touchpad

Touchpad Features

Here how to use the touchpad 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 touchpad surface and always keep the touchpad surface and pointing finger dry from sweat built-up. Also do not expose touchpad 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 Wide screen 15.4" 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
Widescreen 17" 1280x800 WXGA+ LCD	800x600	16 million colors
	1024x768	16 million colors
	1280x768	16 million colors
	1280x800	16 million colors
CRT Only	800x600	16 million colors
	1024x768	16 million colors
	1152 x 768	16 million colors
	1280x1024	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> + <F10> 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.

IS *Hibernation is enabled by default. To verify that Hibernation is enabled, Click Start, point to Settings, and then click Control Panel. Choose Power Options icon, then click on the Hibernate tab. If the check 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 consumed 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, 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 ExpressCard

WHAT IS EXPRESSCARD ?

The ExpressCard is a newly developed PC Card interface, its connector has just 26 pins and the interface has a potential transfer rate of up to 500 MB/sec (or 250 MB/sec in each direction) using a single-lane PCI Express link. Its form factor is up to 40 percent smaller than a PC Card, which allows ExpressCard modules to be included in smaller host systems. Designed for both desktop and mobile use, ExpressCard use either USB 2.0 or a single lane PCI Express technology.

The ExpressCard standard was developed by PCMCIA member companies including technology leaders, system manufacturers, card manufacturers, from all other parts of the PC Card industry.

Dimensions of ExpressCard

Current CardBus PC cards are 54 millimeters wide. ExpressCard can be divided into two categories, based on width. Most designs will use the ExpressCard 34 design, which sets the width at 34 millimeters. For some applications, the wider ExpressCard 54 standard will be used to produce cards that can handle the higher thermal requirements of those applications.

All ExpressCard modules are 5mm thick but the standard also allows for card developers to build longer 'extended' modules.

INSERTING AND REMOVING A EXPRESSCARD

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

Inserting ExpressCard

To insert an ExpressCard into the ExpressCard slot:

1. Locate the ExpressCard slot cover on the left side of the computer.
2. Insert the side of ExpressCard with the 26-pin socket into the ExpressCard 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 ExpressCard will be automatically detected, and once the needed driver is installed, it will generate a beep sound to indicate that the card is detected.



Removing ExpressCard

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

1. Double click the **ExpressCard** 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 ExpressCard card.
3. Then you can remove the inserted ExpressCard. To release the ExpressCard, just push the ExpressCard again to the end. Then the ExpressCard will automatically bounce off the ExpressCard slot.
4. When the ExpressCard has moved out a space out of the slot, hold the edges of the card and slowly slide it out.



NOTE *The power consumption of ExpressCard/54 is about 2.1W, while the consumption of ExpressCard/34 is about 1.3W. To save energy, press the button to disconnect the card when it is not in use.*

3.9 Using Flash Memory Cards

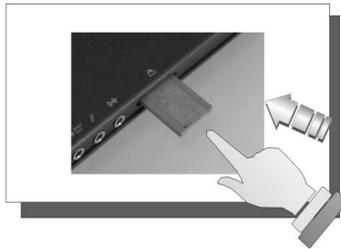
FLASH MEMORY CARD

Flash Memory is a memory storage media. It is used by most digital camera. Flash memory card is built with different form factor and brand name. The 5 in 1 card slot in this Everex DevBook supports following cards as SD, MS (Memory Stick), MMC, xD, and MS_Pro.

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

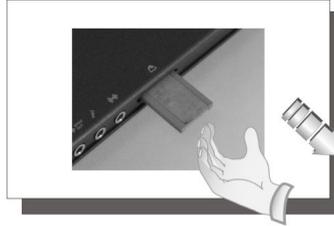
INSERTING FLASH MEMORY CARD

To insert a flash memory card into the slot, please pay more attention whenever insert the flash memory card into the slot with the correct side. You should position the copper connector at the bottom side. All of these cards should be located at the center of the slots in inserting. Only one correct side can be accepted for the 5 in 1 card slot. 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 insert it again. To prevent the damage made both on card and the slot, never forced an entry into the slot with incorrect side.



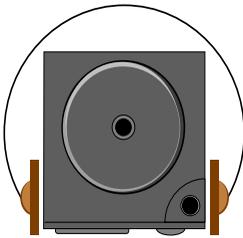
REMOVING FLASH MEMORY CARD

To remove the flash memory card, you can pull out the card directly, there is no release button for flash memory slot.



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4 Fun with Windows Vista Experience



This notebook integrated in a highly compact platform is designed for digital entertainment. With Windows Vista, it offers a breakthrough user experience and is designed to help you feel confident in your ability to view, find, and organize information and to control your computing experience. It simplifies our digital life in taking charge of media, share movies, TV, photos, and music with your friends and family.

4.1 What is Windows Vista?

Windows Vista is an operating system that enables you to enjoy the best in entertainment on your notebook.

The visual sophistication of Windows Vista helps streamline your computing experience by refining common window elements so you can better focus on the content on the screen rather than on how to access it.

With Windows Vista, you can store, share and enjoy all of your photos, all of your music, all of your home video and even recorded TV. It's all contained in one control system. That is as easy to use with a great new user-friendly interface.

4.2 Get Ready for Windows Vista

Windows Vista is designed to help make you more productive as you work with your PC throughout the day with new features.

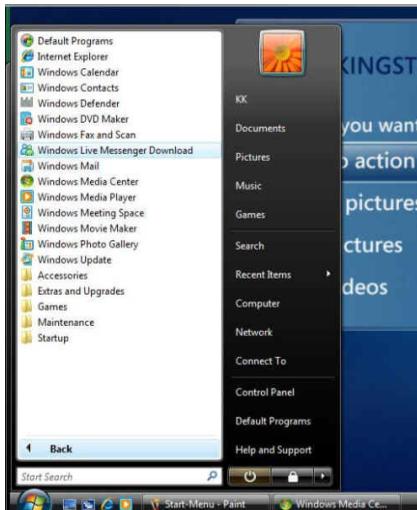
Starting the Windows Vista

When you start using Windows Vista, you will recognize familiar elements such as the Start menu, which is now faster, more streamlined, and more helpful than in previous versions of Windows. More than that, the new start menu makes it very easy for you to navigate across all of the installed applications on your PC. Eliminating the slow performing, cascading "All Programs" view, the new start menu can help you get something started more quickly than ever.



About the entertainment

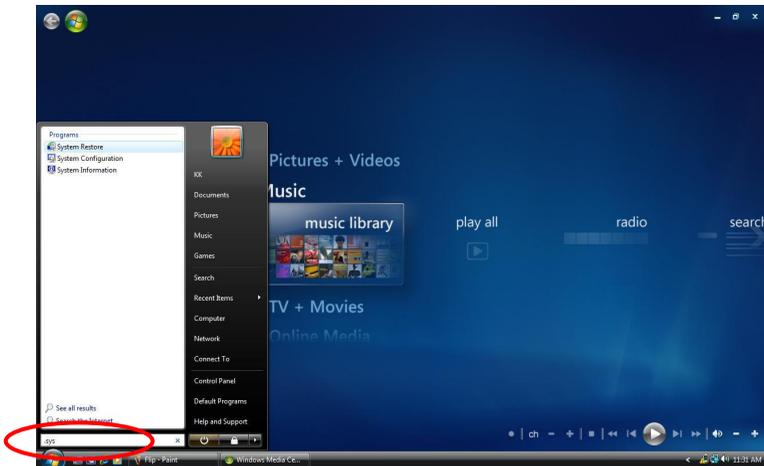
To recall all default multimedia applications, click on “All Programs” located on the left corner on the desktop, the “All Programs” will be changed to “Back” as shown in the following figure.



It now becomes more easy to execute various application with just click on it.

Instant Search

The Start menu features integrated desktop search through a new feature called Instant Search which can help you find and launch almost anything on your PC. Just type in a word, a name, or a phrase, and Instant Search can find the right file for you.



Use Instant Search to quickly find the information you need.

4.3 Enjoy Your Multimedia Application

INTERNET EXPLORER

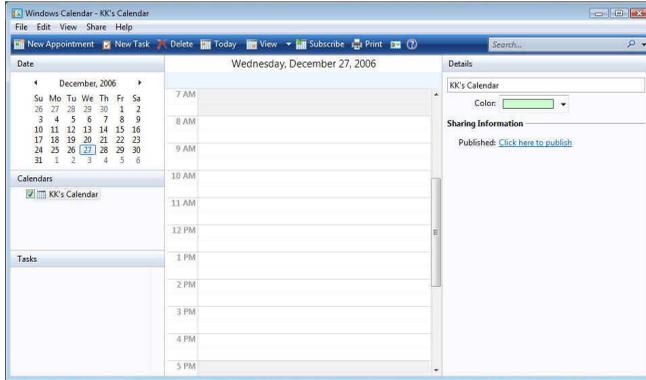
Windows Vista enhances the Internet Explorer experience in finding and displaying information, and Web sites on the Internet.



The upcoming release of Internet Explorer 7 not only adds important new security and privacy features, but makes everyday tasks easier through features such as tabbed browsing, inline search, and shrink-to-fit printing

WINDOWS CALENDAR

Windows Calendar helps you in management appointments and tasks by creating personal calendar, publishing them, and subscribe to other users calendars.

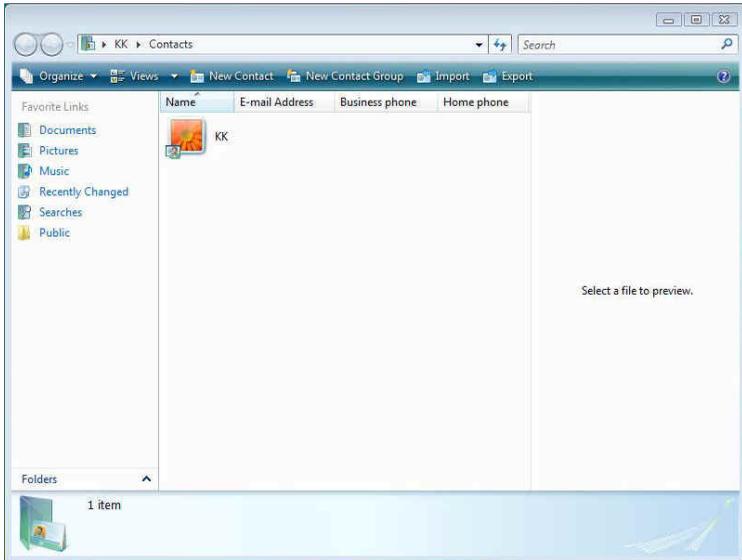


Windows Calendar is a flexible, easy-to-use calendar built directly into the Windows Vista operating system. It lets you plan and manage all of your activities and coordinate your schedule with others. It also lets you create a personal task list and receive automatic notifications and reminders about specific tasks and upcoming appointments.

Windows Calendar has a broad range of features to help you manage your personal schedule

WINDOWS CONTACTS

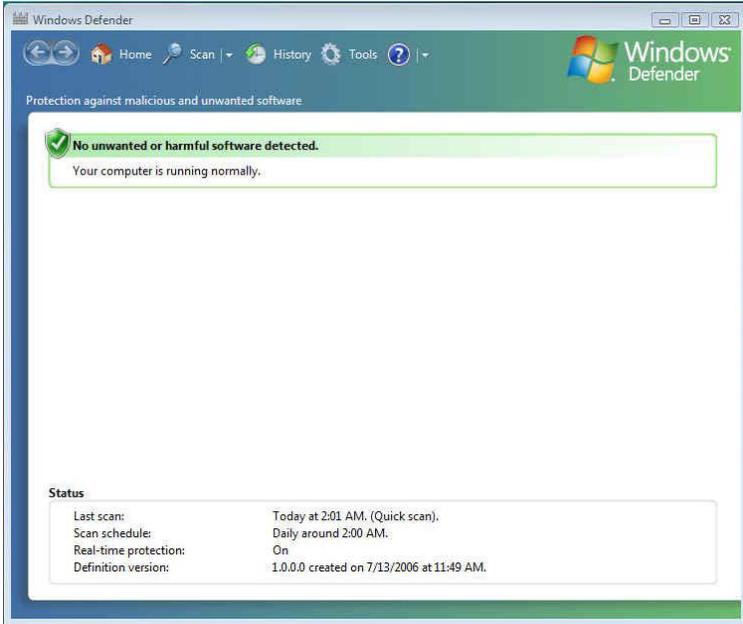
Windows Contacts can store e-mail addresses and other information about people and organizations.



Microsoft Windows Vista provides a new mechanism and user interface for storing and retrieving information about people (contacts) who are important to the users of Microsoft Outlook and Windows Mail (formerly Outlook Express).

WINDOWS DEFENDER

Windows Defender is able to protect the computer from spyware and other potentially unwanted software.



Windows Defender helps protect computers against pop-ups, slow performance, and security threats caused by spyware and other unwanted software. Applications can check and change its status.

WINDOWS DVD MAKER

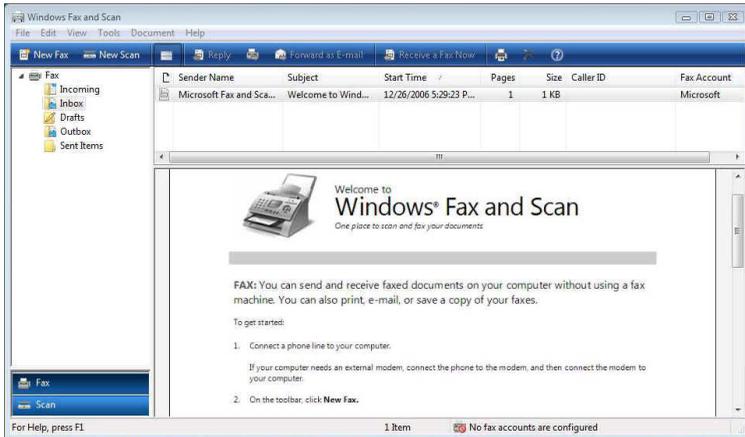
Windows DVD maker helps you burn pictures and video to DVD..



Windows DVD maker lets you create a DVD quickly, complete with professional-looking menus, a scene selection page so viewers can easily find what they are looking for, and even slide shows using your favorite songs as a soundtrack.

WINDOWS FAX AND SCAN

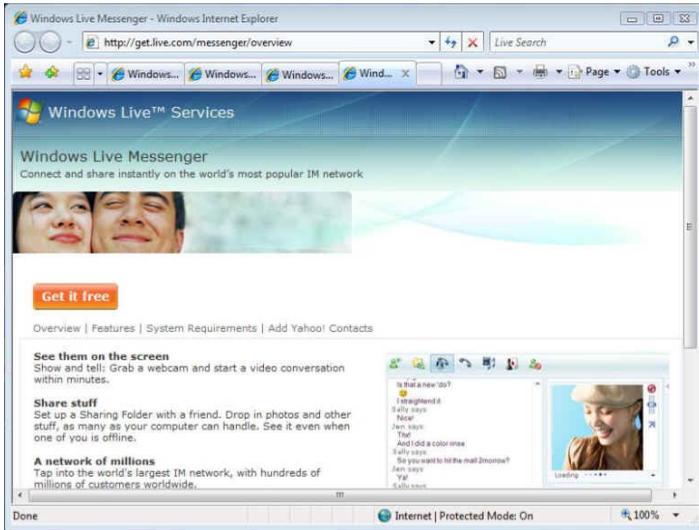
Windows Fax and Scan help you send and receive faxes or scan pictures and documents.



Faxing and scanning functions come together in Windows Vista through Windows Fax and Scan. Sending and receiving faxes through your PC is now as simple as performing the same tasks on a fax machine, especially for digital document

WINDOWS LIVE MESSENGER DOWNLOAD

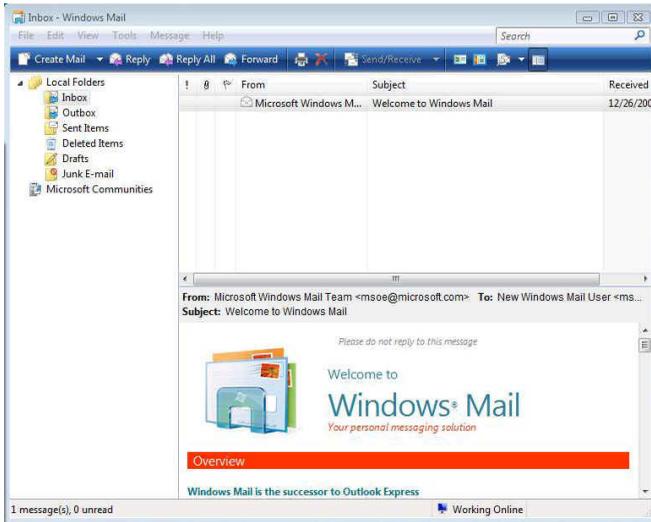
Windows Live Messenger Download can connect and share message instantly on the world's favorite IM service..



Windows Live Messenger is the next-generation MSN Messenger. It has everything you already love about Messenger, and much more.

WINDOWS MAIL

Windows Mail can send and receive e-mail and newsgroup messages.



Windows Mail is designed to help you prevent emerged some annoyances and risks that have grown over the years, that enables your e-mail experience is as productive and fun as possible. Windows Mail includes features that help you reduce the risks, while enjoying the many benefits, of e-mail

WINDOWS MEDIA CENTER

Windows Media Center lets you opens your home entertainment option for digital and on-demand media, including TV, Movies, music and pictures.

It is enable to make you enjoy all your favorite digital entertainment—including live and recorded TV, movies, music, and pictures—in one place with the easy-to-use Windows Media Center menu system and remote control. Windows Media Center in Windows Vista includes enhancements for expanded support of digital and high-definition cable TV, an improved menu system, and the ability to create a consumer-electronics-quality living-room experience, as well as new options for multi-room access to your entertainment through Media Center Extenders.

WINDOWS MEDIA PLAYER

Windows Media Player can play digital media including music, video, CDs and DVDs.



Windows Media Player gives you an easier way to enjoy and manage your digital music, video, and pictures on your PC. See things the way you want to see them, by CD cover art or in lists. Connect to networked media devices around your home or seamlessly sync up with your portable digital media player to enjoy all your entertainment wherever you are. Sporting an improved look and feel, Windows Media Player delivers a high-quality audio and visual experience both on the computer and around your home

WINDOWS MEETING SPACE

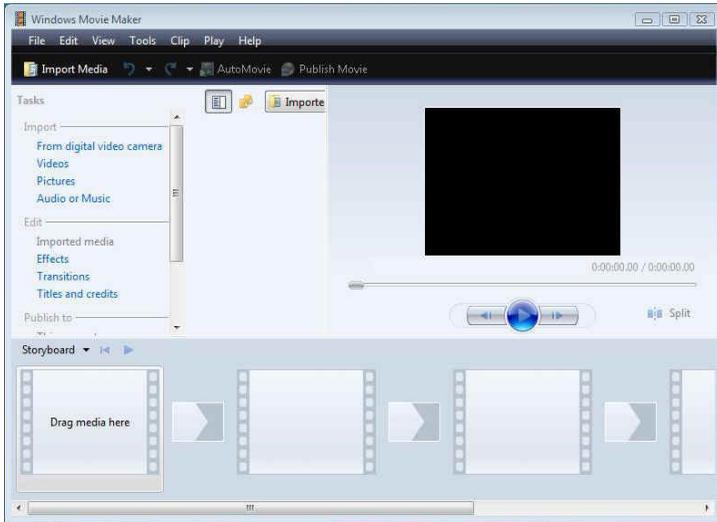
Windows Meeting Space lets you share files, a program, or your laptop anytime and anywhere.



Windows Meeting Space gives you the ability to share documents, programs, or your desktop with other people. Some advantages are: you can share your desktop or any program with other meeting participants; you and other meeting participants can distribute and co-edit documents; you can pass notes to other participants; you can connect to a network projector to give a presentation.

WINDOWS MOVIE MAKER

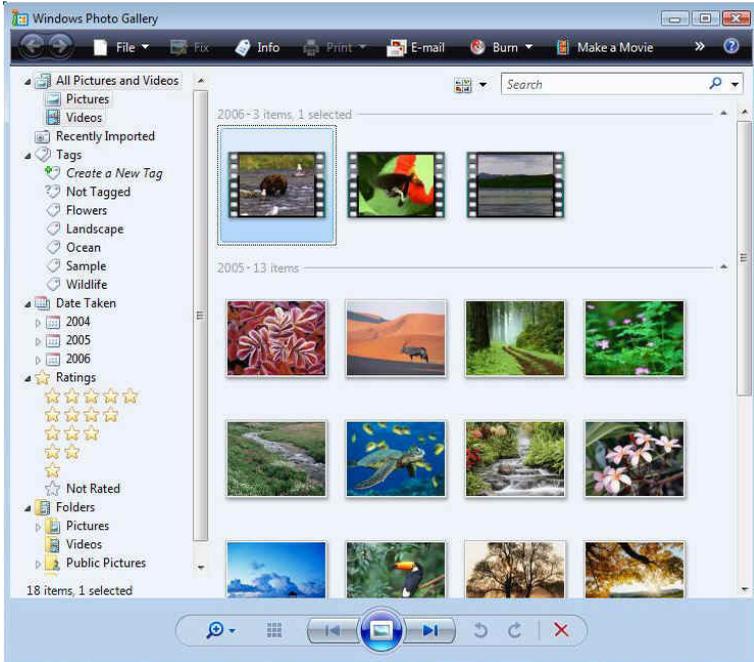
Windows Movie Maker helps you make your own movie using videos, digital pictures and movies.



With Windows Movie Maker, you can quickly and easily import, edit, and organize all of your digital home videos. New tools, such as new effects and transitions, and improved graphics performance help you manage and edit your home videos. You can include photos along with video when you create a movie, and even add narration and soundtracks. Once your movies are just the way you want them, you can easily burn them to DVD or share them with others through the Internet

WINDOWS PHOTO GALLERY

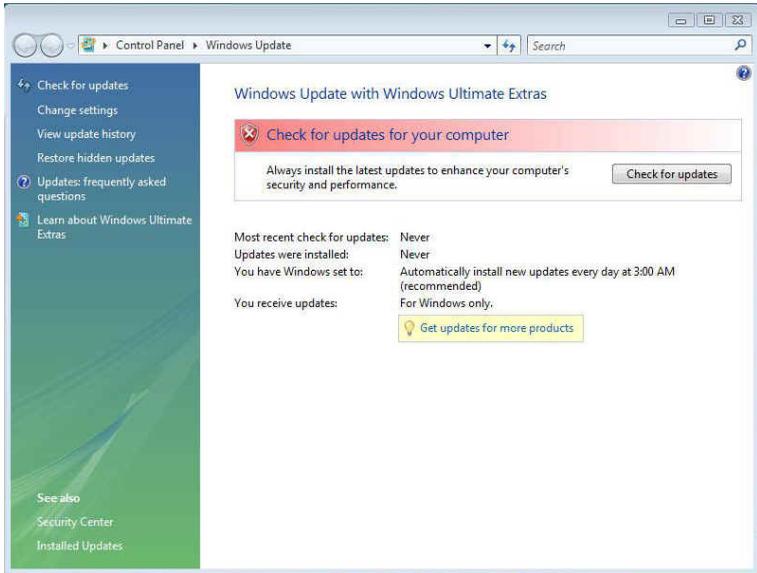
Windows Photo Gallery lets you view , edit, organize, and share your photos and videos.



Windows Photo Gallery in Windows Vista gives you the tools you need to easily organize, find, and view your photos and videos. You can edit, print, and share your photos from within Windows Photo Gallery, as well as transfer photos from your camera to your computer with a simple import process

WINDOWS UPDATE

Windows Update delivers software updates and drivers, and provide automatic updating options.



Windows Update keeps your computer up to date and more secure by automatically providing software updates to Microsoft Windows Vista. Updates can include upgrades to Windows Vista features, updates that improve reliability and performance, and updates that provide new security protections against malware and other potentially unwanted software.

Windows Update makes updating easy and minimizes disruption to your work. It's easy to start updating—when you set up Windows Vista, you can set options that enable Windows Update to automatically download and install updates for you—so you can "set it and forget it"

WINDOWS SIDEBAR AND GADGETS

As you use your computer to access more information, perform more tasks, and interact with more software applications, you increasingly face information overload. You open a web browser just to check the weather, open an application to view your calendar, and open a calculator program to simply add

numbers. You need simple, specialized, and lightweight mini-applications that put information and tasks at your fingertips—no matter what you're doing.

Windows Sidebar boosts your personal productivity by providing instant access to gadgets—a wide variety of engaging, easy-to-use, and customizable mini-applications that offer information at a glance and provide easy access to frequently used tools



GAMING

If you are a parent, you now have a rich set of controls to ensure your children are only playing games that you consider appropriate. You can allow or restrict your children's access to games according to game title, rating, category, or content. Windows Vista supports six international rating standards and makes it easy for parents to manage and monitor their children's gaming experience



WINDOWS FLIP AND WINDOWS FLIP 3D

Windows Vista provides two entirely new features to manage windows: Windows Flip and Windows Flip 3D. Flip allows you to flip through open windows (by using Alt+Tab), providing a live thumbnail of each window, rather than just a generic icon and file name. Live thumbnails make it easier to quickly identify the window you want, particularly when multiple windows of the same kind are open. With Flip 3D, you can use the scroll wheel on your mouse to flip through open windows in a stack, and quickly locate and select the one you want to work with.



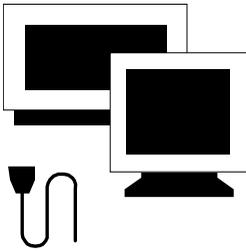
Use Flip to view and navigate more easily through open windows.

You can visit and browse each domain to experience the information and assistance that Windows Vista offers.

For more information, please refer to Microsoft's website:

<http://www.microsoft.com/windowsvista/features/default.mspx>

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 (Universal Serial Bus) is a hardware interface that enables you to connect multiple devices (such as printers, mice, keyboards, storage devices, joysticks, digital cameras, and video conference cameras, etc.) to your notebook computer, and up to 127 devices can be attached. Besides, USB's hot swap capability allows everything to be plugged in and unplugged without turning the system off.

Microsoft, HP, Compaq, Intel, Agere, NEC and Philip are seven core members of USB-IF to have worked on USB 2.0 standardization. USB 2.0 offers data transfer rate up to 480Mbps (megabits per second) compared to USB 1.1 devices, which transfer at speeds of 12Mbps. So, you could know that USB 2.0 can transfer data between the computer and its peripherals 40 times faster than USB 1.1. However, USB 2.0 is fully backward compatible, you will be able to use a USB 1.1 device in a USB 2.0 compliant system.



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

 *The USB bus distributes 0.5 amps (500 milliamps) of power through each port. For the purpose of power saving, please disconnect your USB device while not in use.*

5.2 Using the HDMI Port

Also found at the rear of your computer is one HDMI port.

The High-Definition Multimedia Interface (HDMI) is an all-digital audio/video interface capable of transmitting uncompressed streams. HDMI provides an interface between any compatible digital audio/video source, such as a set-top box, a DVD player, a PC, a video game console, or an AV receiver and a compatible digital audio and/or video monitor, such as a digital television (DTV).

To display your computer screen or playback the audio sound on the digital television (DTV), please connect the HDMI port of this notebook to the Video/Audio Input of the TV set.

You can setup the detail by operating the computer as follows.

1. Turn off your computer and plug one end of the HDMI jack cable to the end to the input video/audio jack of your digital television set.
2. Turn on your computer and your digital 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. Click **Advanced** button and point to **Displays** tab. You can see the **TV** icon on the screen.
6. Please click the red button above the TV icon. Click **OK**, Windows now automatically detect the TV port and enable this function.

5.3 Using the 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 CRT monitor or projector and shut off the LCD display, you can use the <Fn> + <F10> 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.



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

5.4 Using the External Audio System

At the front 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 side 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.

5.5 Using the LAN Port

This notebook comes with an internal 10/100/1000Mb/s 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.



5.6 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 802.11 b/g/n wireless LAN module. IEEE 802.11b standard supports 11 Mbps wireless connection speed. However, IEEE 802.11g/IEEE 802.11n supports 54Mbps/300Mbps wireless connection speed respectively, and is backward compatible with the slower 802.11b.

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.

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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 your 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 it 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:	[08:20 :32]				<Tab>, <Shift-Tab>, or <Enter> selects field.
System Date:	[05/07/2009]				
SATA HARD DRIVE1	P0-WDC WD2500BEVT-22ZCT0				
SATA HARD DRIVE2	P1-WDC WD2500BEVT-22ZCT0				
CD/DVD-ROM	HL-DT-ST DVDROM GSA-T50N				
BIOS Version	0.4C-1646-0022				
BIOS Vendor	Phoenix				
BIOS Date	05/07/09				
CPU Type:	Intel (R) Core (TM) 2 Duo CPU P9500 @ 2.53GHz				
Amount of Memory	2048 MB				
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 each 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 each 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.
- **SATA Hard Drive1**

This field is for information as the BIOS automatically detects the type of the first hard disk drive.
- **SATA Hard Drive2**

This field is for information as the BIOS automatically detects the type of the second hard disk drive.
- **CD/DVD-ROM**

This field is for information as the BIOS automatically detects the type of optical drive.
- **BIOS Version/BIOS Vendor/BIOS Date**

These fields are for information only as the BIOS displays the BIOS version, BIOS Vendor and BIOS Issued Date during the Power-On Self-Test (POST).

- CPU Type
This field reports the CPU type and information detected by the BIOS during Power-On Self-Test (POST).
- Amount of Memory
This field reports the amount of memory detected by the BIOS during Power-On Self-Test (POST).

6.3 Using the Advanced CMOS Setup

Phoenix BIOS Setup Utility			
Main	Advanced	Security	Boot Exit
			Item Specific Help
Setup Warning Setting items on this menu to incorrect values may cause your system to malfunction.			Enables support for Legacy Universal Serial Bus
Legacy USB Support::		[Enabled]	
SATA Mode Selection:		[AHCI]	
LAN Boot:		[Disabled]	
RTC (Real Time Clock):		[Disabled]	
Hybrid Graphics Mode		[Enabled]	
VGA Display Adapter		[IGD]	
F1 Help	↑↓ Select Item	-/+ Change Values	F9 Setup Defaults
Esc Exit	←--> Select Menu	Enter Select ▶ Sub-Menu	F10 Save and Exit

- **Legacy USB Support**
Enable or disable the Legacy Universal Serial Bus support when in connection with USB device.
- **SATA Mode Selection**
Lets you choose IDE or AHCI for SATA controller operation.
- **LAN Boot**
Lets you enable or disable the LAN boot function.
- **RTC (Real Time Clock)**
Lets you enable or disable the RTC. If enable is chosen, the system can wake up by RTC from S4 state.
- **Hybrid Graphics Mode**
Lets you enable or disable the Hybrid Graphics Mode. If "Enable" is chosen, the system can switch between UMA and discrete mode.
- **VGA Display Adapter**
If you choose "Disabled" in Hybrid Graphics Mode, the VGA Display Adapter will appear for your selection for "IGD" for "Nvidia".

6.4 Security Menu Setup

Phoenix BIOS Setup Utility				
Main	Advanced	Security	Boot	Exit
			Item Specific Help	
Supervisor Password Is:		Clear	Supervisor Password controls access to the setup utility.	
User Password Is:		Clear		
Set Supervisor Password		[Enter]		
Set User Password		[Enter]		
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.
- **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
			Item Specific Help	
Boot: priority order: 1: PCI BEV: P4-HL-DT-ST DVDROM GSA-T50 2: USB FDC: 3: USB KEY: 4: USB HDD: 5: IDE CD: 6: IDE HDD: 7: SATA HDD: P0-WDC WD2500BEVT-22ZCT0 8: Excluded from boot order: : USB CDROM: : USB ZIP: : SATA HDD: P1-WDC WD2500BEVT-22ZCT0			Keys used to view or configure devices: Up and Down arrows select a device. <+> and <-> moves the device up or down. <x> exclude or include the device to boot.	
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 setup “Enabled” or “Disabled” for booting from LAN, or you can search drive sequence by using 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
Exit Saving Changes			Item Specific Help	
Exit Discarding Changes			Exit System Setup	
Load Setup Defaults			and save your	
Discard Changes			changes to CMOS.	
Save Changes				
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.

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. Put in the BIOS Update data into the USB device.
2. Power on the system with the USB device inserted in the USB port.
3. On the DOS prompt, type the following command.

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

4. Press any key to restart this system.

Contact your dealer for the latest BIOS update file.

7 Caring for Your Notebook



Your Notebook PC is a fully 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.

7.1 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.
- 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 you 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 60°C (140°F) 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.

7.2 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.

7.3 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.

7.4 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.

7.5 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 45° 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.

7.6 When You Travel

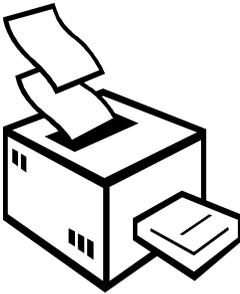
For safety and convenience when traveling, please follow these instructions:

- 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.

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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® Penryn® (including Core 2 duo and Quad core SKUs) series processor.
- 6MB/12MB integrated L2 cache

SYSTEM MEMORY

- Two 200-pin memory slots
- User-upgradeable to maximum 4GB using 200-pin SODIMM 1024MB or 2048MB modules
- DDRII – 800/1066 SDRAM modules

LCD DISPLAY

- 17" WXGA+ Color TFT LCD, 1440x900
- Maximum 16M true colors on all LCD display

VGA SYSTEM

- Provides Hybrid solution for embedded in Intel Cantiga GM45 or integrated Nvidia N10P-GE1 graphic engine.
- Simultaneous LCD and external monitor (CRT) display
- Maximum 16 million colors on LCD display at 1440x900 resolution for 17" LCD
- Maximum 16 million colors on external monitor or projector at 1280x1024 resolution (Non-Interlaced)

STORAGE

- 2.5" Format 9.5mm High SATA HDD Module; Bus Mastering, Ultra DMA ATA-150 Support for LBA Scheme
- SATA ODD, DVD DL, HD-DVD or BluRay
- 4-in-1 (SD, MS, MMC and MS_Pro) card reader

AUDIO SYSTEM

- Compliant with Intel HD Audio (Azalia).
- 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.

EXPRESSCARD

One 54mm, 26-pin ExpressCard slot

WEBCAM

One Webcam with USB2.0 CMOS 1.3M pixel

TOUCHPAD

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

KEYBOARD

- Full-sized 104-keys keyboard with Windows systems hot-keys, inverted T-cursor keys, 11 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 VGA port
- 1 x HDMI port
- 4 x Universal Serial Bus (USB 2.0) (USB x 3, ESATA x 1)
- 10/100/1000Mb/s LAN port

WIRELESS DEVICES

- IEEE 802.11b/g/n, Mini Card Wireless LAN Solution

AC/DC POWER SUPPLY ADAPTER

- For Core 2 Duo : Universal auto-switching (100V~240V) 90W adapter, 20 Volt
- For Quad Core : Universal auto-switching (100V~240V) 120W adapter, 20 Volt

BATTERY

- Rechargeable 6/8 Cells Li-ion battery pack with Smart Battery function

- Approximately 5 Hours (for Battery Mark, 8 Cell) Battery Life

WEIGHT AND DIMENSION

- For Core 2 Duo: 400(W) x 295(D) x 40.5(H) mm;
For Quad core: 400(W) x 295(D) x 43.5(H) mm
- Approximately 3.6 kg

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