

Chapter 1 Welcome

This user guide provides the hardware and software information of the LENOVO® Portable Computer which you use.

The computer is a complicated equipment. Read through the whole guide before your first begin to use it. Especially if you are a new user of computers or you're new to portable computing. Don't worry if you are still confused about some part of the guide. Keep this guide as a reference when you are using your computer, or call our agent for help.

Pay attention to the caution and safty messages in this guide and the safety messages in the preface.

In the guide, some useful icons are applied to catch your attention. There are:



Hint: Helpful pointers and tricks to get more from your notebook



Note: To help you note and avoid possible damage to your notebook's hardware or software, or loss of your work



Caution: Point out possible damage to property, personal injury or death

Pay your attention to the caution and safety messages in this guide and the safety messages in the preface.



Note: 1. Do not plug in and/or remove any computer component while using the computer (except USB, PCMCIA and/or CD-ROM devices which support PnP-Plug and play Technology).

2. The computer has adopted many new hardware components. The user must install the drivers by following the guide's instruction to get the best computer performance.

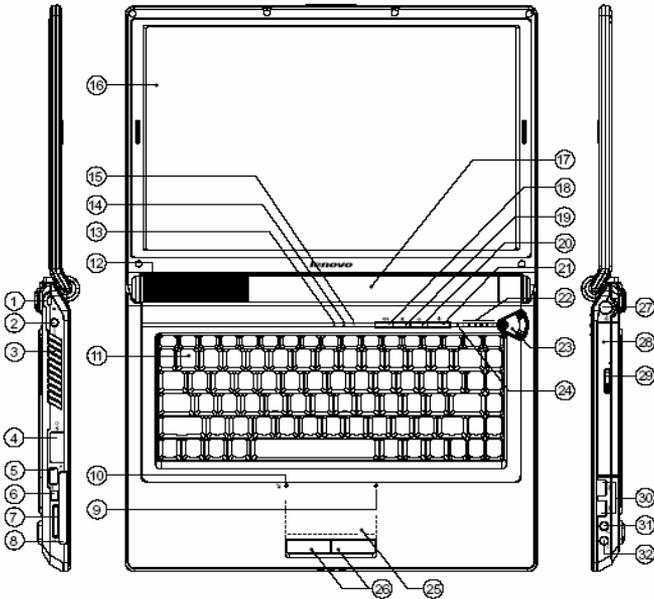
Thank you for your purchase of the LENOVO 3000 Y400 series notebook computer. This powerful and flexible notebook computer is designed to provide long-term, reliable, and high computing performance.

This chapter specifies the various components of your computer. Be familiar with each component before you start operating this notebook.

1.1 Quick tour for your computer

This section guides you through the locations for controls and ports on your computer:

- **Front view with the Display open, right side view, left side view**



1	Security keyhole	17	Battery
2	Power Jack	18	Wireless&Bluetooth Enable / Disable Button
3	Fan Louvers	19	Mute Button
4	LAN Port 、 Modem Jack	20	Novo Button
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11	Keyboard	27	S-VideoPort 
12	Subwoofer	28	Optical Media Drive
13	NUM Lock 	29	ODD disk Reject Button
14	Caps Lock 	30	USB Ports x2 
15	HDD/ODD LED Indicator 	31	Microphone-in Jack 
16	Display	32	Headphone-out Jack 

1.1.1 Security keyhole

Your computer comes with a security keyhole. You can purchase a security cable and lock to fit this keyhole. The security cable’s instruction tells you how to use it.

 **Hint:** Before you buy the security cable, make sure it fits your computer’s security lock slot.

1.1.2 Power jack

Use this connector to attach the AC adapter to your notebook to provide power and charge the battery.

 **Caution:** Use only the AC adaptor that comes with the

computer. Using the wrong adaptor might damage your computer.



Caution: The AC adaptor can automatically adjust to any voltage from 100 to 240 volts, as well as a frequency of either 50 or 60 hertz, thus enabling you to use the computer in almost any region. The Power Jack and power cord jack might vary in different countries and/or regions. Make sure that the AC adaptor is correctly connected to the power source. A wrong connection can damage your computer and result in a fire accident.

1.1.3 Fan louvers

The internal Fan Louvers enable air to circulate in the computer and cool the Central Processor.



Hint: Your notebook switches on the fan when the Central Processor becomes hot. The operation of the fan might cause some noises, which is a normal situation.



Caution: To avoid compromising ventilation, do not place any obstacle in front of the fan.

1.1.4 LAN port, Modem jack

1.1.4.1 LAN port

The RJ-45 network jack allows you to connect your computer to a local area network (LAN).

 **Note:** Be careful not to plug the telephone line into the slightly larger network connector. The telephone line uses higher voltage than the LAN cable; it might damage your computer.

1.1.4.2 Modem jack

The Modem jack allows you to connect your notebook to a telephone line with a standard RJ-11 connector.

 **Note:** Never connect the Modem jack to a digital line. The high current of a digital line might damage the Modem.

1.1.5 USB ports x1

Use Universal Serial Bus (USB) connectors to connect USB interface-compatible devices, such as a printer or digital camera. The USB ports comply with USB2.0 standards, which enable data transfer speeds 40 times faster than the USB 1.1 standards. (The ports also support USB 1.1.)



Hint: The USB device supports PnP (Plug and Play) technology. That means you can install and remove the USB device when your computer is on.



Caution: Do not install or remove the USB device while the computer is starting or shutting down.

1.1.6 IEEE 1394 port

Use the IEEE1394 connector to connect devices that are compatible with the IEEE1394 interface, such as digital video cameras and external hard disk drives.

1.1.7 SD/MS/MMC card port

The slot lets you easily transfer data from other digital device, such as DV, digital camera; DV and PDA that use flash memory. You can install an SD Card, a MultiMedia Card or a Memory Stick in the 3-in-1 Digital Media Reader.

1.1.8 PC card port

Your computer has the Type II PC Card slot. You can insert a PC Card in the slot. See “Using PC Card” for details.

1.1.9 Hidden Touchpad status LED indicator

This LED Indicator hints you that the Touchpad is in use or not. When it is in use, the LED is on.

1.1.10 Hidden Touchpad Enable/Disable LED indicator

This LED Indicator indicates the Hidden Touchpad function status. When the LED is on, it indicates the Touchpad and Touchpad button function have been enabled. When the LED is off, it indicates the Touchpad and Touchpad button function have been disabled.

1.1.11 Keyboard

Standard 86-key keyboard (Embedded numeric keypad and

function keys. They can be combined with [Fn] key to achieve some shortcut functional applications). See “Using Keyboard” for details.

1.1.12 Subwoofer

This computer is equipped with a 2.0-Watts subwoofer. This can provide you an exciting audio experience, making you feel like being surrounded in a home theatre.

1.1.13 NUM Lock

If the Num Lock LED is lit, the numeric keypad is on. To enable or disable the keypad, press and hold the Fn key, then press the NumLk key.

1.1.14 Caps Lock

If the LED is lit, the uppercase letter function is enabled. You can enter all alphabetic characters (A-Z) in uppercase without pressing the Shift key. To enable or disable Caps Lock mode, press the CapsLk key.

1.1.15 HDD/ODD LED indicator

Use a hard disk drive or an optional drive to read or write data. When this indicator is blinking, do not put the computer into standby mode, and do not remove the device from the bay or turn off the computer.

1.1.16 Display

The computer uses a 14.1" wide thin-film transistor (TFT) full-color display that supports up to 1280 horizontal x 800 vertical pixels and

32-bit color.

1.1.17 Battery

With a charged battery installed, you can use your notebook without connecting it to an electrical outlet. For more details, see "Using Battery".



Note: Do not press the computer too hard while you are trying to release the battery pack. It might damage your computer.

1.1.18 Wireless & Bluetooth Enable/Disable button

Pressing Wireless & Bluetooth button can enable/disable both of the wireless and Bluetooth function.



Hint: Wireless LAN and Bluetooth are options to marketing requirements. It will extend the operating time of battery if the wireless or Bluetooth function is disabled.



Caution: Do not use the wireless communication function in the hospital or nearby any electronic medical equipment! The radio waves of the wireless card might cause the electronic medical equipment out of function and result in serious accident.



Caution: Do not use the wireless communication function on the plane! The radio waves of the wireless card might cause the electronic equipments out of function and result in serious accident.



Caution: Avoid interfering with other electronic equipment when you enable the wireless communication function! The

radio waves of the wireless card might cause other electronic equipment out of function and result in serious accident.

1.1.19 Mute button

The Mute button enables you to quickly mute the sound from your computer.

1.1.20 Novo button

By default, the Novo Key is the Onekey Recovery key. It is used to activate the “Onekey Recovery” application. When the computer is powered off, press the Novo Key to enter into the system recovery application. You can recover, backup or uninstall the system through the application. See < OneKey Recovery 4.6 User Guide > in Lenovo Drivers CD for details.



Caution: Make sure you have already backed up the data on the hard drive. The system recovery will reformat the hard drive and restore it to factory settings.

If your operation system has installed the “EnergyCut” software, you can quickly lunch the EnergyCut program under the working operating system (such as WinXP or other more advanced opertating system)

1.1.21 Power switch

Use the power switch to turn on the computer. To turn off your computer, use the Start -> Shutdown option. The power switch can also be programmed to shut down the computer or put it into standby or hibernation.



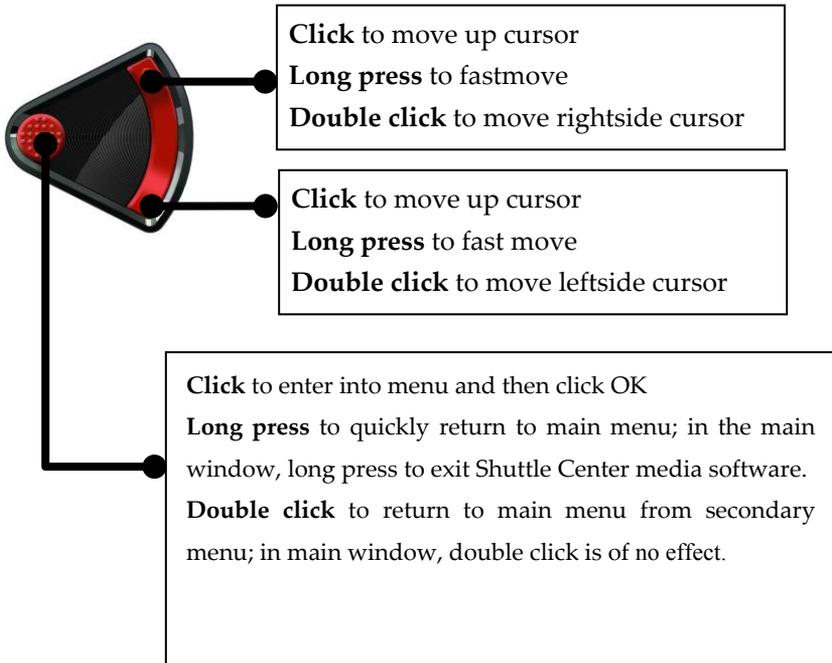
Hint: If your computer stops responding, and you can't turn it off, then press and hold the Power Switch for more than 4 seconds. If the system still can't be powered off, then remove the AC adapter and the battery.

1.1.22 Audio volume status LED indicator

The six Volume status LED indicators indicate the audio volume adjust status. Use the Shuttle or [Fn] + [→][←] to adjust the audio volume.

1.1.23 Shuttle





Interaction under Windows operating system:

- a. If Lenovo Shuttle Center is installed on your Notebook
 - Press OK to run Lenovo Shuttle Center application
 - Press Up and Down button to control
- b. If Lenovo Shuttle Center is not installed on your Notebook
 - Press Up and Down button to control the volume
 - Press OK to run Windows Media Player

1.1.24 Built-in microphone

The built-in microphone captures sound and voice when it is used with an application program capable of handling audio.

1.1.25 Hidden Touchpad

The Touchpad works like a mouse: Move your fingertip across the Touchpad to move the pointer. See “Using the Touchpad” for details.

1.1.26 Touchpad button

The Touchpad buttons provide functions similar to those of mouse buttons. See “Using the Touchpad” for details.

1.1.27 S-Video port

Support external display device through S-video, like the TV set or other devices which has the S-video port.

1.1.28 Optical media drive

The optical media drive provides a way to transfer data between your computer and CD/DVD media. Depending on the features provided with your computer, you can play CD, VCD and DVD media on your computer. If your computer has a CD-RW or DVD±RW Device, you can burn the digital data to CD or DVD media.



Hint: Optical media drives might vary with your computer model. When the optical media drive is operating, the CD/DVD spins at a very high speed in the drive. Sometime it makes some noise, but it is not necessarily a malfunction.

See “Using optical media drive” for details.

1.1.29 ODD disk Reject button

Use ODD disk Reject button to eject the ODD disk or ODD tray. See “Using Optical Media Drive” for details.

1.1.30 USB ports x2

Use these ports to connect up to two USB devices, such as a mouse, a full-size external keyboard, or a printer. The USB ports comply with USB2.0 standards, which enable data transfer speeds 40 times faster than the USB 1.1 standards. (The ports also support USB 1.1.)



Hint: The USB device supports PnP (Plug and Play) technology. That means you can install and remove the USB device when your computer is on.



Caution: Do not install or remove the USB device while the computer is starting or shutting down.

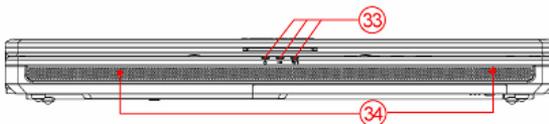
1.1.31 Microphone-in jack

Enables a microphone connection for audio input.

1.1.32 Headphone-out jack

Enables a headphone or external connection for audio output. When you connect the headphone or other devices, internal speakers are automatically disabled.

- Front view with the display closed



33	System and Power Status Indicators
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34	Build-in Stereo Speakers
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1.1.33 System and power status indicators

Your computer has system and power status indicators: Power-on status, Standby status; Battery status, and Wireless/Bluetooth status.

1.1.33.1 Power-on status

The Power LED shows the following stauses:

- Blue: The computer is on and ready to use.
- Fading in/out blue: The computer is in Standby mode;

The indicator is off when the computer is powered off or in Hibernation mode.

1.1.33.2 Battery status

The computer is operating on battery power. The battery LED status is:

- Blinking amber: The battery is low power.

The computer is operating on external power. The battery status includes:

- Blue: The battery has more than 95% charge.
Amber: The battery is being charged;

1.1.33.3 Wireless/Bluetooth status

The Wireless/Bluetooth LED shows the wireless and bluethoth statuses,

- Amber: Bluetooth is enabled
- Blue: Wireless is enabled
- Amber+Blue: Bluetooth and Wireless both are enabled

Wireless status:

- Blue blinks once every 5 seconds: The wireless feature is on, but not connected to network.
- Blue on: The wireless feature is on, and already connected to network, the radio link is ready for use
- Flashing blue: Data is being transmitted.

Bluetooth status:

- Amber on: The Bluetooth feature is on, and the radio link is ready for use.
- Flashing amber: Data is being transmitted.

1.1.34 Build-in stereo speakers

Use the two 1.5 Watts stereo speakers to output clear stereo sound.

- **Back view**



35	Monitor Connector 
36	Fan Louvers

1.1.35 Monitor connector

Use this port to connect an external monitor or a projector with your computer to display information. See “Connecting to External Display Device” for details.

1.1.36 Fan louvers

The internal Fan Louvers enable air to circulate in the computer and

cool the Graphics Processor.

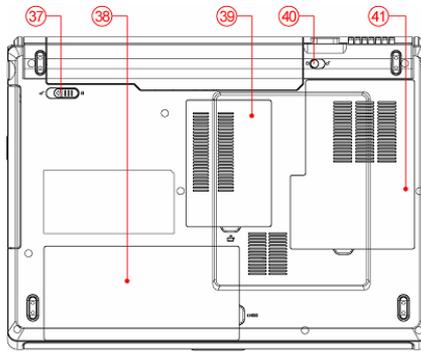


Hint: Your notebook switches on the fan when the Graphics Processor becomes hot. The operation of the fan might cause some noises, which is a normal situation.



Caution: To protect your notebook from damage or fire, avoid inserting objects into the air vents and blocking air flow.

- **Bottom view**



37	Battery Release Latch
38	Hard Disk/Wireless CardCover
39	Memory Module Cover
40	Battery Lock/Unlock Latch
41	CPU FAN Cover

1.1.37 Battery Release latch

Slide the latch across to release the battery pack for removal.



Hint: To release the battery pack you should first unlock the battery Lock/Unlock latch.

1.1.38 Hard disk/wireless card cover

This cover protects the hard disk and Wireless Card.



Caution: Do not remove or change the hard disk or wireless Card by yourself. If you need to remove or change the hard disk or wireless card, bring your computer to one of our service centres. The professional technician who has been qualified by Lenovo will help you. Because of compatibility, Lenovo does not guarantee all hard disks and wireless cards are compatible with your computer.

1.1.39 Memory module cover

This cover protects the memory modules.



Hint: Do not insert a different model of memory module. It might drop the computer performance, and even damage the motherboard.



Caution: This cover is designed for memory expansion convenience, but do not install additional memory modules by yourself. If you need to install additional memory modules, bring your computer to one of our service centres. The professional technician who has been qualified by Lenovo will help you. Because of memory compatibility, Lenovo does not guarantee all memory modules are compatible with your computer.

1.1.40 Battery Lock/Unlock latch

The battery Lock/Unlock latch secures the battery pack. Slide to the Unlock position to install or release the battery pack. After installing the battery pack, slide it to the Lock position to prevent battery pack

from unexpected releasing.

To load and release the battery pack, follow the following steps:

· **Installing battery pack**

1. Slide the battery Lock/Unlock latch to the Unlock position 
2. Insert the battery pack horizontally into the main frame until you hear a “click” sound.
3. Slide the Battery Lock/Unlock Latch to the Lock position to restore the Battery Release Latch.

· **Releasing battery pack**

1. Shut down the computer
2. Close the display panel and turn over the computer.
3. Slide the Battery Lock/Unlock Latch to the Unlock position to remove the battery pack by pulling the battery pack horizontally out of the main frame.

1.1.41 CPU fan cover

This cover protects CPU and thermal module.



Caution: Do not change the CPU by yourself. If you need to change the CPU, bring it to one of our agents, the professional technician who has been qualified by Lenovo will help you.

1.2 Turn on/off the power

1.2.1 Open/close the LCD display panel



Hold and lift up the display panel slowly with both hands to the best view angle for you. Press the Power Switch  to turn on the computer, then the Power Indicator glows yellow.

To close the display panel, hold the middle-top side and close the panel slowly with your both hand until the LCD display panel engages with the main frame

1.2.2 Starting up for the first time

Because the battery is not charged, when you turn on your computer for first time, you have to connect the AC adaptor to the computer.



Note: If there's no external power source connected and the battery is low, probably you cannot power on the system. In this case, you need to plug an AC adaptor for power supply.



Caution: Wrong AC adaptor might damage your computer. Instructions to connect the AC adaptor and turn on the computer:

1. Place the computer on a flat and clean surface;
2. Connect the power cord to the computer;

3. Connect the AC adaptor's DC output plug to the computer's DC IN socket;
4. Plug the power cord into a live power source which supports the voltage from 100 to 240volts and the frequency of either 50 or 60 hertz.
5. Open the display panel to the right angle and press the Power Switch to turn on the computer.

1.2.3 Turn off the computer

Save and close all the open files and exit all the running applications.

Click **Start -> Turn Off Computer-> Turn Off**.

The computer will complete the turning off process and shut down the power.



Hint: If there is an error during the turning off process, and the system cannot shut down automatically, press the Power Switch “” for 4~5 seconds to turn off the computer.



Note: If you are using the Windows operating system, then use the operating system to turn off the computer to avoid data loss.

1.3 Using battery pack

1.3.1 Activating the battery

The battery that comes with the computer is a lithium-ion battery.

The battery might contain a little power when you use it for the first time. Operate the computer on the battery power until the battery is fully discharged. Then complete the following steps to activate the battery.

Step 1. Uninterruptedly charge the battery for a long time.

Step 2. Operate the computer on the battery power until the battery is fully discharged.

Step 3. Do the Step 1 and 2 for another two times. The charging time must be longer in the second and third time to ensure the battery reaches the maximum capacity. After the aforesaid steps, you can use the battery normally.



Hint: Charge more than 6 hours when the computer is off; charge more than 8 hours when the computer is on.



Note: 1. Do not unplug the power connection during the charging.

2. Use and charge only the battery that comes with the computer.

1.3.2 Using battery

When your computer is not connected to an external power source, it will automatically supply power for your computer. The fully-charged battery operates for about 3~5 hours (based on the maximum of the Battery Mark test result).

The actual operating time varies with different factors, such as LCD brightness, system power management property, application, computer peripheral usage, and battery accumulative using time.

You can plug the adaptor into a DC IN Jack to charge the battery. The state of the battery charging will display through the battery

indicator located in front of the computer.



Hint: No matter whether the battery is installed in the computer or not, it always performs self-discharge. (About 1% a day)

If the battery has not been used for a long time, it might have no power because of self-discharge. This is the inherent feature of lithium-ion battery. You should use the external power source or recharge the battery.

If you still cannot turn on the computer (the battery indicator also doesn't flash), it means the battery is in self-protection state. Charge the battery for 2~4 hours to activate the battery. Turn on the computer again when the battery indicator flashes.



Hint: If you do not plan on using the computer for a long time, remove the battery pack and store it separately.



Note: Charge and discharge the battery at least once every three months to avoid the battery malfunctions by over-discharge.

1.3.3 Battery initialization

After using the battery for a long time, the battery's operating time is much shorter than the first use. The reason is that the lithium-ion battery memory is affected. Complete the battery initialization process to erase the affected part of the battery memory.

The battery initialization is the process of fully-charging the battery, fully-discharging the battery and fully-charging it again. Complete the following steps to perform the battery initialization process:

- Make sure the computer has been turned off; connect the computer to an external power source to charge the battery.
- Turn on the computer when the battery is fully-charged. Press

[F2] to enter the BIOS setup program.

- Unplug the AC adaptor; let the computer operate on the battery power until it automatically turns off.
- Plug the AC adaptor to fully charge the battery.
- Repeat the above steps for 2 or 3 times to erase part of the battery memory that was affected and extend the battery life.

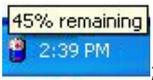


Hint: Because the lithium-ion battery has a finite lifecycle, use the external power source as much as possible to extend the battery life.

1.3.4 Checking the battery status

When you are using the battery power, you can get the battery status and the remaining power of the battery through the following ways:

1. Double-click the battery icon  at the right-bottom of Windows taskbar (By the default, the battery icon only shows when the computer is using battery power.) to pop up the battery status window. It shows the battery status and its remaining power.
2. Hold the mouse on the battery icon  at the right-bottom of Windows taskbar (By the default, the battery icon only shows when the computer is using battery power.) to display the remaining battery power automatically.



When the battery power is low, the system will notify the user of

the situation through sound (related BIOS and system settings should be made). A red “×” mark will appear on the battery icon located at the bottom right-side of the Windows taskbar. And a prompt window suggests that you to connect to a power source to avoid data loss.



Hint: If the battery icon does not appear at the bottom right-side of the Windows taskbar, adjust the Windows settings to display it by completing the following steps: Click Start -> Control Panel -> Performance and Maintenance -> Power Option -> Advanced, select “Always show icon on the taskbar”. Click OK.



Note: The broken lithium-ion battery will pollute the environment and can be dangerous to humans. Do not dispose the battery as normal trash. Dispose the battery as required by local ordinances or regulations. Contact your local institutions for disposal details.

1.4 Using the LCD display

This computer's display is 14.1" TFT WXGA LCD, which supports 1280*800, 32 bit.

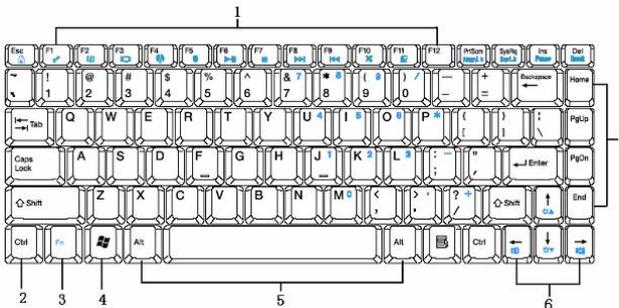
LCD brightness can be adjusted by [Fn]+[↑] and [Fn]+[↓].

LCD can switch the display modes from 1280*800 to 1024*768 with the function key [Fn]+[F11].

- ⚠ Note:**
1. LCD display are made of glass and are easy to break. Use both hands to hold the left and right side, or one hand to hold the up-middle side of the display panel and the other hand to open and close it gently.
 2. Do not hold only the left or right side to opening and closing the display panel.
 3. Do not open and close the display roughly. Otherwise, it can damage the LCD display.
 4. Do not put objects on the LCD back cover or press or hit it.

1.5 Using keyboard

The computer has an 86-key Windows Keyboard.



1	Function keys	5	[Alt] key
2	[Ctrl] key	6	Direction control

			key
3	[FN] key	7	Windows shortcut key
4	Windows start key		

1.5.1 Using numeric keypad

The numeric keypad is the keys of blue numbers and symbols at the right side of the keyboard. Press **[Fn] + [PrtScm/NumLk]** to enable the numeric keypad function. When the function is active, the NumLock indicator glows blue. You can quickly input a series of numbers and characters under this mode. Press **[Fn] + [PrtScm/NumLk]** again to disable this function.

1.5.2 Keyboard shortcuts

You can use the shortcut keys to access some functions quickly:

Shortcut	Function
[Fn] + [ESC]	Enable/disable touchpad function
[Fn] + [F1]	Put the computer into Standby Mode
[Fn] + [F2]	Turn off the LCD back light
[Fn] + [F3]	Change display mode (between LCD and external display)
[Fn] + [F4]	Enable/disable wireless function
[Fn] + [F5]	Enable/disable Bluetooth function
[Fn] + [F6]	Play/pause Media Player
[Fn] + [F7]	Stop Media Player
[Fn] + [F8]	Go to Next
[Fn] + [F9]	Go to Previous
[Fn] + [F10]	Enable/disable mute function

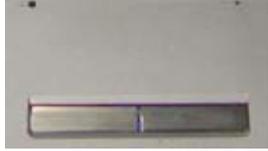
[Fn] + [F11]	Change display mode (between Widescreen and Regular Display)
[Fn] + [PrtScm/NumLk]	Enable/disable numeric keypad function
[Fn] + [SysRq/ScrLk]	Enable/disable screen scroll function
[Fn] + [Ins/Pause]	Pause
[Fn] + [Del/Break]	Break
[Fn] + [→][←]	Turn up/down the sound
[Fn] + [↑][↓]	Increase/Decrease LCD brightness

You also can use Windows Key “

Shortcut	Function
 + E	Open Windows Explorer
 + R	Open Run dialog box
 + F	Open Search Results dialog box
 + Ctrl + F	Open Search Results -> Computers dialog box (when computer connects to network)
 +Fn+Ins/Pause	Open System properties dialog box

If you want to change the keyboard setting, Click **Start -> Control Panel -> Printers and Other Hardware -> Keyboard**, and change the default setting.

1.6 Using the Touchpad



The touchpad is a touch sensitive device. It can perform all the functions of a normal mouse. Touch and move your finger on the pad to direct the on-screen pointer. The functions of the left and right click buttons correspond to those of the left and right mouse buttons on a conventional mouse.

Touchpad utilities:

1. Click:

Tap the Touchpad once to perform the same function as clicking the left mouse button. Tap twice to perform the same function as double clicking the left mouse button.

2. Drag and Drop:

Move the on-screen pointer on the object that you want to move. Tap the Touchpad twice but leave your finger on the pad after the second tap. Now you are in Drag and Drop mode (as press and hold the left mouse button). Move your finger away from the Touchpad to stop drag and drop.

3. Scroll button:

It helps you to view Websites and documents more conveniently.

You can change the Touchpad setting through **Start -> Control Panel -> Printers and Other Hardware -> Mouse**, and get more help and examples.

4. Touchpad indicator

Note that the Touchpad effective area is in “L J”. The LED on the

left side of the Touchpad indicates the Touchpad's function status: the LED On indicates that the Touchpad function is ok while the LED Off indicates that the Touchpad function is off. The LED on the right side of the Touchpad indicates the Touchpad use status: the LED On indicates that the Touchpad is in use while the LED Off indicate that the Touchpad is in idle status.



Note: Always keep the Touchpad and your fingers dry. Avoid spilling any liquid on the Touchpad. Do not expose the Touchpad to a magnetic and radiant environment for a long time.

1.7 Using optical media driver

There are two kinds of ODD drivers: Tray-in driver and Slot-in driver.

1. Tray-in driver

To load the disc into optical media drive, complete the following steps:

- 1 Press the drive eject button on the drive door and wait a while for drawer to come out. Pull it out gently until it is fully opened.
- 2 Lay the CD/DVD into the drawer, label side up.
- 3 Press at the center of CD/DVD gently until you feel it click into place and CD/DVD can rotate well.
- 4 Push the drawer and close it gently.

2. Slot-in driver

Directly insert the CD/DVD disk into the ODD drive by keeping the disc horizontal.



Note: When you open or close the optical drive, do not press the drive drawer. Close the optical drive when you do not use it.



Note: Do not move the computer while the optical drive is working. The optical drive indicator located beside the drive eject button will show the optical drive in working status.



Caution: The Slot-in ODD drive does not support 8 cm CD/DVD disk. When the ODD drive is Slot-in kind, don't use 8 cm CD/DVD disk.

Chapter 2 Learning more about your computer

After you are familiar with the basic hardware and software operation, the following content will help you understand more about your notebook computer.

2.1 Setup and maintain the computer

2.1.1 Power management

The notebook computer has a series of automatic adjustable power-saving facilities called power management. Power management will try to change some system components from high power consumption to lower level and ensure the computer operates at higher performance and lower power consumption. This computer has build-in power management. It can force the computer into standby and hibernation mode under pre-defined conditions. Using the power management properly can extend the battery's operating time.

This computer supports the ACPI (Advanced Configuration and Power Interface) power management standard. The operating

system (such as Microsoft Windows ME, Microsoft Windows 2000, Microsoft Windows XP) also needs to support ACPI. In Microsoft Windows XP and Microsoft Windows 2000, ACPI will overwrite the BIOS power management settings and take over the computer's power management functions.

Refer to the Microsoft Windows guide for the details or use online support.

Under a pure DOS system, the BIOS directly controls the power management functions.

2.1.2 The power management under Windows XP ACPI mode

Under the ACPI mode of the Microsoft Windows XP operating system, the system power management will be controlled by the operating system, so all the power management settings can be modified through **Control Panel -> Performance and Maintenance -> Power Options**.

2.1.3 Turn off the monitor or hard disk

You can modify the power schemes to turn off the monitor or hard disk after the system is idle for a certain time, go to **Control Panel -> Performance and Maintenance -> Power Options**.

2.1.4 Standby mode

Standby mode suspends the system to RAM (STR). Under this mode, the computer turns off the monitor and hard disk to reduce

the power consumption after it is idle for a certain time. Press the Power Switch will restore the previous work environment.



Note: If the AC adaptor and battery pack are both unplugged from the computer while it is in standby mode, all the data that is not saved to the hard disk will be lost.

In Windows XP, you can enter standby mode by either of following ways:

1. **Click Start -> Turn Off Computer -> Stand By.**
2. **Click Start -> Control Panel -> Performance and Maintenance -> Power Options -> Advanced**, then set up how you want the computer to enter standby mode, **“close the lid of portable computer”**, **“press the Power Switch”**, or **“press the computer sleep button”**.

2.1.5 Hibernation mode

Hibernation mode suspends the system hard disk (STD). This useful facility saves all the data in memory and video memory to the hard disk. The next time you turn on the computer, the pervious state will restore. If you are using Microsoft Windows XP or Windows 2000 operating systems, you only need to enable this facility through **Start -> Control Panel -> Performance and Maintenance -> Power Options -> Hibernation**.

Under hibernation mode, the system data saves to the hard disk and the computer shuts down to reduce the power consumption. After the computer enters hibernation mode, you can press the Power

Switch to “wake up” the computer and restore the previous state. If you enable the hibernation facility, when the computer battery is extremely low, the computer will enter hibernation mode automatically by default setting.

The following are ways you can set your computer to enter hibernation mode: “**close the lid of portable computer**”, “**press the Power Switch**” or “**press the computer sleep button**”.

To enable the hibernation facility, **Click Start -> Control Panel -> Performance and Maintenance -> Power Options -> Hibernate**, choose “**Enable Hibernation**” and click “**Apply**”.



Hint: If the PC card does not work properly after the system restores from hibernation mode, remove and re-install the card and restart the computer.

To quit hibernation mode, press the Power Switch. Press the keyboard key and touchpad can not quit the hibernation mode.

2.1.6 Set up low power protection:



Note: If you do not save your data in time before the battery runs out, and you have no related protection setting for this issue, your data will be lost. So we suggest you to read the following instructions about setting up low power protection.

When the battery power is very low, the computer will notify you by sound. You should save all the data to the hard disk immediately and connect the AC adaptor to the computer.

If you can not connect the adaptor to the computer, turn off the computer or let the computer enter hibernation mode.



Hint: Completing the following setting is strongly recommended:

- Click **Start** -> **Control Panel** -> **Performance and Maintenance** -> **Power Options** -> **Hibernation**, choose “**Enable Hibernation**”, and click “**Apply**” to enable hibernation facility.
- Click **Start** -> **Control Panel** -> **Performance and Maintenance** -> **Power Options** -> **Alarms**, choose “**Activate low battery alarm when power level reaches -- 10%**”.
- Click **Start** -> **Control Panel** -> **Performance and Maintenance** -> **Power Options** -> **Alarms**, Click “**Alarm Action**” in “**Critical battery alarm**”, in the pop-up window, choose “**when the alarm goes off, the computer will Hibernate**”, click “**OK**” in the pop-up window, click “**Apply**” in the **Power Options Properties** window.

2.2 Using multimedia audio system

The computer is equipped with a multimedia audio system including built-in stereo speakers. Audio output jacks and external microphone jacks are at the left side of the computer.

You can adjust the main volume with software. You can adjust the speaker volume as desired while you are listening to music or watching movies. Click **Start** -> **All Programs** -> **Accessories** -> **Entertainment** -> **Volume Control**. In the Volume Control window, click and drag the bar in the Volume Control column, and slide it up or down to increase or decrease the volume.



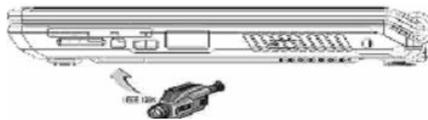
Note: Since there are several sound sources, such as the fan, hard disk and speakers in the computer, the speakers will scream when the volume is too high. This is caused by the internal speakers' positive feedbacks and can be eliminated by decreasing the volume. When you are performing voice recognition tasks, we recommend you to use external microphone, because the inner sound of the computer has certain effect to the internal microphones.

2.3 Setting display resolution

To view a program at a specific resolution, both the video controller and display must support the program, and the necessary video drivers must be installed.

Before you change any of the original display settings, record the original settings for future reference. Click **Start -> Control Panel -> Appearance and Themes -> Change the screen resolution**. Use the slider to choose different settings for Color quality and Screen resolution. If you choose a resolution or color palette that is higher than what the display supports, the resolution will automatically adjust to the closest possible setting.

2.4 Connecting IEEE1394 device



IEEE 1394 can transmit data and digital videos stably and rapidly. Through the IEEE 1394 port, the computer can connect external hard disks, digital cameras and video cameras.

2.5 Connecting to external display device

Plug the power cord of the display to an AC outlet, connect the display cable to Monitor Connector at the back of the computer and turn on the display. The computer will begin to search for the external display and display the current screen. You can switch between LCD and the external display by pressing [Fn + F3]. There are three display modes: LCD only, external display only, LCD and external display simultaneously.

2.6 Using PC cards

PC cards can enhance the computer's performance without any cost of mobility. The mostly used PC cards include memory cards, Modem, hard disks and LAN cards. PCMCIA defines the industry standard for PC cards.

This computer provides a PCMCIA slot for Type II PC cards at its right side.

When you need to remove PC cards, press the eject button besides the slot and pull the PC cards out.

Your computer can recognize most popular PC Cards and automatically load the appropriate device drivers. If the configuration program tells you to load the manufacturer's drivers, use the floppy disk or CD that came with the PC Card.

Removing PC card:

Follow the procedure to remove the PC card:

1. Press the release latch to let it protrude out.
2. Press the latch again to eject the card.
3. Remove the card.

-  **Caution:** Before removing a PC Card, stop it from running from the configuration utility on the taskbar. Failure to do so could result in data loss. Never try to remove a PC Card by pulling on its cable, if one is attached.
-  **Note:** Some PC cards do not support PnP (Plug and Play) facility; refer to the user guide before using them.

2.7 Using card reader

This computer has a 3 in 1 Memory Card Reader. It can read and write the popular Memory Stick, Secure Digital (SD) and MMC card. So you can easily transfer the data between your computer and digital camera, PDA and MP3 player.

Chapter 3 System configuration

3.1 Installing drivers

We provide a driver CD with all drivers that you need in the box. You can install drivers from the CD. Complete the following steps to install drivers on your computer. We assume that the CD-ROM is designated as the "E:" disk.



Note: Adhere to the following sequences, otherwise it might compromise the system's stability and audio or video and even cause you to reinstall the operating system.

3.1.1 Installing Chipset driver

- Insert the driver CD.
- Open "E:\WinXP\Chipset\Setup.exe". In the appeared installation screen, follow the instruction to start the files copy process.
- At the end of installing, restart the computer to complete the installation.

3.1.2 Installing Graphic Card driver

- Insert the driver CD.
- Base on the different Graphics Card to install:
For Discrete Graphics Card machine:
Open "E:\WinXP\VGA\Intel\Setup.exe".
For Integrated Graphics Card machine:
Open "E:\WinXP\VGA\Nvidia\Setup.exe".
- In the appeared installation screen, follow the instruction to start

files copy process.

- At the end of installing, restart the computer to complete the installation.

3.1.3 Installing Sound Card driver

- Insert the driver CD.
- Open "E:\WinXP\Audio\UAA\UAA_Setup.exe". In the appeared installation screen, follow the instruction to start files copy process. At the end of installing, select "Yes".
- After installed the UAA driver, Open "E:\WinXP\Audio\Setup.exe". In the appeared installation screen, follow the instruction to start files copy process. At the end of installing, select "Yes, I want to restart my computer now" and click "Finish" to restart your computer.
- The system will restart to complete the installation.

3.1.4 Installing Bluetooth driver

- Insert the driver CD.

Enable the Bluetooth device before you install the driver. (by pressing [Fn]+[F5] or pressing quick button / )

- Open "E:\WinXP\Bluetooth\setup.exe". In the appeared installation screen, follow the instruction to start files copy process and complete the installation.

- Follow the instruction to restart the system after the installation.

3.1.5 Installing Modem driver

- Insert the driver CD.
- Open "E:\WinXP\Modem\Setup.exe". In the appeared installation screen, follow the instruction to start files copy process and complete the installation.

3.1.6 Installing EnergyCut driver

- Insert the driver CD.
- Open "E:\WinXP\EnergyCut\Setup.exe". In the appeared installation screen, follow the instruction to start files copy process and complete the installation.
- Follow the instruction to restart the system after the installation.

3.1.7 Installing LAN Card driver

- Insert the driver CD.
- Open "E:\WinXP\LAN\Setup.exe". In the appeared installation screen, follow the instruction to start files copy process and complete the installation.
- Follow the instruction to restart the system after the installation.

3.1.8 Installing Wireless LAN Card driver (optional)

Intel 3945 A+B+G Wireless LAN Card driver

- Insert the driver CD.
- Open "E:\WinXP\Wireless Lan\Intel\DPInst.exe". In the appeared installation screen, follow the instruction to start files copy process and complete the installation.

- Follow the instruction to restart the system after the installation.

Broadcom PCI-E Wireless LAN Card driver

- Insert the driver CD.
- Open “E:\WinXP\Wireless Lan\Broadcom\setup.exe”. In the appeared installation screen, follow the instruction to start files copy process and complete the installation.
- Follow the instruction to restart the system after the installation.

3.1.9 Installing Touchpad driver

- Insert the driver CD.
- For Discrete Graphics card machine:
Open “E:\WinXP\TouchPad\Discrete graphics card machine\Setup.exe”.
For Integrated Graphics card machine:
Open “E:\WinXP\TouchPad\Integrated graphics card machine\Setup.exe”
- In the appeared installation screen, follow the instruction to start files copy process. At the end of installing, select “Yes, I want to restart my computer now” and click “Finish” to restart your computer.
- The system will restart to complete the installation.

3.1.10 Installing Card Reader driver

- Insert the driver CD.
- Open “E:\WinXP\Card Reader\setup.exe”. In the appeared installation screen, follow the instruction to start files copy process. At the end of installing, select “Restart windows now”

and click “Finish” to restart your computer.

- The system will restart to complete the installation.

3.1.11 Installing Easy Button driver

- Insert the driver CD.
- For Discrete Graphic card machine:
Open “E:\WinXP\EasyButton\Discrete Graphics card machine\Setup.exe”.
For Integrated graphic card machine:
Open “E:\WinXP\EasyButton\Integrated Graphics card machine\Setup.exe”.
- In the appeared installation screen, follow the instruction to start files copy process.
- At the end of installing, restart the computer to complete the installation.

3.2 BIOS setup

The BIOS (Basic Input and Output System) Setup program is a menu driven utility. It enables you to change the system configuration and tailor the operation of your Notebook to meet your individual work needs. To enter the BIOS setup utility, press F2 before the operating system is booted. BIOS Setup Utility is a menu-driven application in English. Through it, users can change the system configuration based on his/her need.



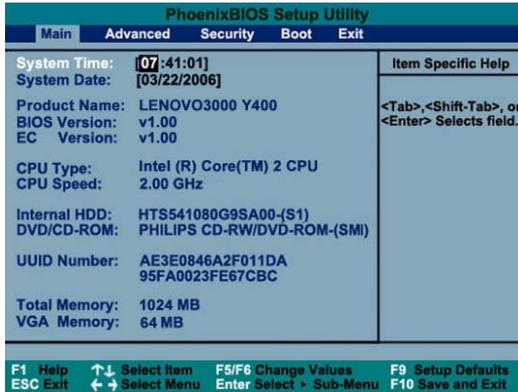
Note: The BIOS has decisive effect on the system’s stability, reliability and security. Do not change any BIOS setting until you get a comprehensive knowledge about BIOS.



Hint: The BIOS setting figures in this book are just for examples, the actual settings might be different.

3.2.1 Accessing the BIOS Setup program

To access the BIOS Setup program, press F2 as soon as the computer starts up and you see the information “Press [F2] for SETUP, Press [F10] for boot device selection menu”.



Note: The information BIOS shows might be different based on the different hardware configuration

The Menu bar

The top of the Setup screen has a menu bar with the following selections:

Main	Use this menu to change the basic system configuration.
Advanced	Use this menu to enable and change the advanced features available on your system.
Security	Use this menu to set User and Supervisor passwords.
Boot	Use this menu to specify the order in which the Notebook is to check for a device to boot the system.
Exit	Use this menu to specify how to exit the Setup

	program.
--	----------

To move among menu bar items, use the [←] and [→] arrow keys until the desired item is highlighted. Then press [↑] and [↓] to set the settings.

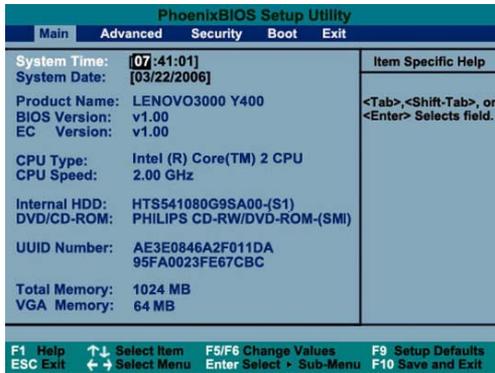


Hint: At the bottom of the Setup screen, there is an item specific help bar. For each item that you select on the menu, the bar tells its specific function as well as the hot keys related specifically to that item and/or submenu.

If you accidentally make unwanted changes to the current configuration, go to the Exit menu and select Discard Changes.

3.2.2 The Main menu

Press [←] and [→] to select the Main menu, the Main menu is as follows :



It displays the following information regarding your current system:

System Time	Reports the system’s current time
System Date	Reports the system’s current date

BIOS Version	Reports the current version of the BIOS
EC Version	Reports the current version of the EC
CPU Type	Reports the CPU type being used
CPU Speed	Reports the CPU Speed being used
Internal HDD	Displays the model name of the hard disk of the default boot drive.
DVD/CD-ROM	Displays the model name of the default optical disc drive.
Total Memory	Lists the Base and Extended memory sizes.

Use the down key to select the Main Menu.

3.2.2.1 System time

Set your system to the specified time (usually the current time). The format is hour, minute and second, using the 24-hour clock. You can insert the appropriate information with [Tab] and [Enter] key.

3.2.2.2 System date

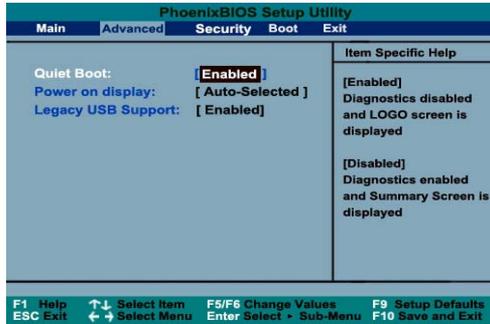
Set your system to the specified date (usually the current date). The format is month, day and year. You can insert the appropriate information with [Tab] and [Enter] key.

3.2.2.3 Other information

In the Main subsystem, the user can only set the system time and date, the other information such as BIOS/EC version、CPU/HDD/ODD type will be different based on the different Hardware Configuration.

3.2.3 The Advanced menu

Press [←] and [→] to select the Advanced menu, the Advanced menu is as follows:



3.2.3.1 Quiet Boot

This option allows you to display a screen logo immediately upon booting up while the system checks itself. This appears before the actual operating system is loaded. If the setting is [Enabled], then the system will show a screen logo when boots up; If the setting is [Disabled], then won't show a screen logo when boots up. The default setting is [Enabled].

3.2.3.2 Power on Display

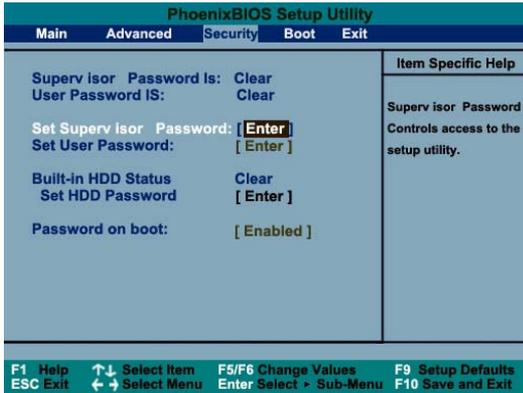
This option allows you to set the Power on Display mode:
 If set to [Auto-Selected], then if any external display is connected, the power on display will be in CRT mode only. Otherwise it will be in LCD mode only.
 If set to [Simultaneous], then will display both of the integrated LCD screen and CRT screen mode.
 The default setting is [Auto-Selected] mode.

3.2.3.3 Legacy USB Support

Enables or disables legacy USB device support.
 The default setting is [Enabled]

3.2.4 Security menu

Press [←] and [→] to select the Security menu, the Security menu is as follows:



3.2.4.1 Set Supervisor Password

Press [Enter] key , the setting menu displays:



Then you can key in the password.

If you want to change the password, press [Enter] key and key in the current password, then key in the new password.

3.2.4.2 Set User Password

The user password can only be set after setting the supervisor password, the setting of user password is same as the setting of supervisor password.

 **Note:** If you want to clear the password, you must key in the old password into the [Enter old Password] option, then press [Enter] key to clear.

 **Note:** Be careful to remember the password, or you might unable to enter the system or lose data.

3.2.4.3 Set HDD Password

This option is used to set the HDD password, press [Enter] key, then key in the password:



 **Note:** If you want to clear the password, you must key in the old password into the [Enter old Password] option, then press [Enter] key to clear.

 **Note:** Be careful to remember the password, or you might unable to enter the system or lose data.

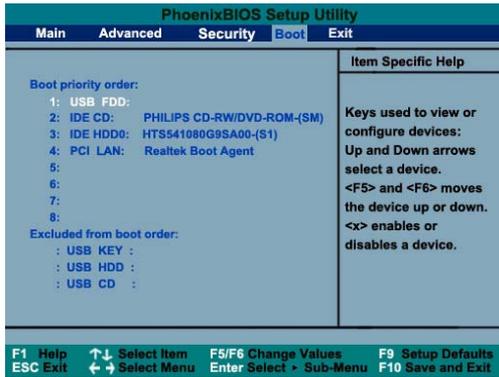
3.2.4.4 Password on Boot

This option allows you to specify whether a password is required upon booting the machine, Press [Enter] key to select [Enabled] to require a password, or [Disabled] when you don't require one.

 **Note:** To change or clear a password, enter the submenu again. You will need to enter the Supervisor password, after which you can create a new one or set the password verification options.

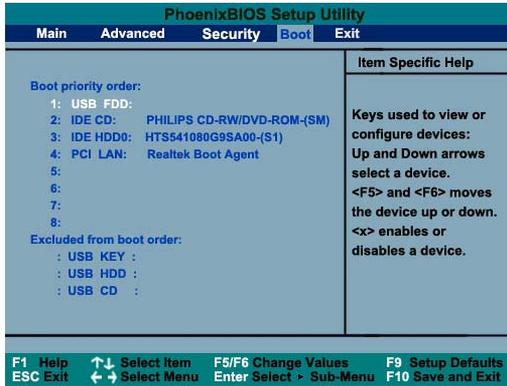
3.2.5 The Boot menu

The Boot menu allows you to specify the order in which the Notebook checks for a device to boot the system. Bootable devices include floppy disk drives, hard disk drives, Network Boot and optical disc drives. To make changes, select Boot from the menu bar.



3.2.5.1 Boot priority order menu

This option allows you to alter the boot priority. The system uses this priority to search for the boot device on system power up according to the numerical order.



Use [Fn] and [F6] to alter the priority.

3.2.5.2 Excluded from boot order menu

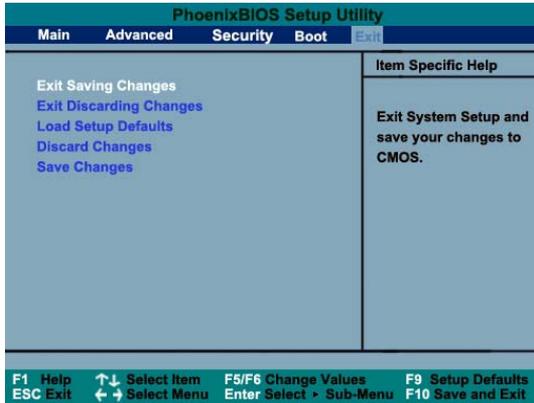
This menu displays the USB devices system used to boot up, such as USB HDD, USB CD etc. You can press [Fn] and [F6] to add them to the “**Boot priority order**”

3.2.6 The Exit menu

Once you have made all of your selections from the various menus in the Setup program, you should save your changes and exit Setup.

3.2.6.1 Exit Saving Changes

Once you have finished making your selections, choose this option from the Exit Menu to ensure the values you selected are saved to Non-Volatile RAM.



Once your selections have been saved, the Setup program asks you to confirm your choices, and then reboot the computer. The system will reboot if you select OK or stay in Setup if you select Cancel.



Hint: If you attempt to exit the Setup program without saving your changes, the program will prompt you with a message asking if you want to save your changes before exiting.

3.2.6.2 Exit Discarding Changes

This option can be used if you do not want to save the changes you have made to the Setup program. The default setting is No. If you have made changes to the fields other than system date, system time and password, the system will ask for confirmation when choosing Exit Discarding Changes, The system reboots using the original Setup values.

3.2.6.3 Load Setup Defaults

This option allows you to load the default values for each of the parameters on the Setup Menus. When this option is selected, a

confirmation message appears.

The system will remain in Setup after either selection.

3.2.6.4 Discard Changes

This option restores the Setup program's values to the ones it had when you entered the program during the boot sequence.

3.2.6.5 Save Changes

This option will save the values that you selected to the Non-Volatile RAM.

3.3 Hardware configuration and component standard



Note: The configuration is subject to prior sale, the following information is only for your reference.

CPU

- Intel Merom/Yonah/Yonah Celeron CPU
- μ FCPGA encapsulation

Chipset

- North Bridge: Intel 945GM/Intel 945PM/Intel 940GML
- South Bridge: Intel ICH7-M

System RAM

- Support DDRII 533/667MHz RAM
- Upgradeable to 4GB Memory by two sets of 2GB SODIMM



Note: 940GML North Bridge only supports Upgradeable to

2GB Memory by two sets of 1GB SODIMM.

Hard Disk Drive (HDD)

- 2.5 inch (9.5 mm) SATA hard disk for portable computer use.

Optical Disk Drive (ODD)

- 12.7mm Tray-in/Slot-in DVD-Combo (DVD/CDRW)
- 12.7mm Tray-in/Slot-in DVD-Super-multi

Audio

- ADI High-definition Audio CODEC
- Built-in 2 speakers(1.5 watt each) and 1 subwoofer(2 watt)

Display

- Color 14.1" 16:10 WXGA TFT-LCD Glare Type, 1280*800
- Intel 945GM/940GML model with Integrated Graphics card
- Intel 945PM model with Nvidia Geforce Go7300 discrete Graphics card:

A: When the system memory is 256M, then the VGA RAM can be up to 128M through TurboCache™ technology.

B: When the system memory equals or is beyond 512M, then the VGA RAM can be up to 256M through TurboCache™ technology.

C: NVIDIA® TurboCache™ technology can dynamically allocate system memory for graphics use, so the GPU has an entire 128MB or 256MB of graphics memory and can achieve the optimal system performance.

Keyboard

- 86-Key Windows Keyboard

Expansion

- One DC IN Jack
- One Headphone Jack
- One Microphone-in Jack
- One Monitor Connector
- One Modem Jack (RJ-11)
- One LAN Jack (RJ-45)
- One S-Video Out Port
- Three USB (2.0) Ports
- One IEEE 1394 (4pin) Port
- One TypeII PCMCIA Slot
- One 3 in 1 Card Reader (SD Card, MultiMedia Card, Memory Stick Card)

Communication device

- Built-in 10M/100M or 1Giga Ethernet Card
- Built-in 56Kbps Modem
- Built-in PCI-E Wireless Card (option)
- Built-in Bluetooth Card (option)

Weight and size

- Weight (including battery pack): 2.29 Kg
(Weight might vary with different configurations.)
- Size: 340mm x 253mm x 27 (front) /37(back)mm

Power

- Battery (Li-ion 4400mAh 6cell)
- Adapter

For Discrete Graphics Card Machines : (Input: 100~240V,

50~60Hz; Output: 19V, 4.74A)

For Integrated Graphics Card Machines : (Input: 100~240V,
50~60Hz; Output: 19V, 3.42A)

Chapter 4 Technical support and customer service

4.1 Kind reminder

 **Note:** Use your Lenovo portable computer in compliance with the instructions in this guide, for example, conditions and environment requirements. If you violate any requirement in any purpose, in this situation, Lenovo will not guarantee the computer's performance, stability, reliability and security and you have to carry all the related risks alone. Regularly backup your critical data which is in the notebook computer to ensure the data's safety and security.

4.1.1 Take care of using the computer

- Do not disassemble the computer. Contact your supplier immediately when you encounter a problem.
- Do not place any heavy objects on the LCD cover.
- The LCD is easy to make scratch. Do not wipe the LCD with paper or touch it with fingers or pens.
- We strongly recommend you to select Turn Off the Display Automatically in Power Management to extend the LCD's life.
- Cover the external ports with the attached cover when you do not use them to avoid dust and static electricity.
- Regularly backup your data to avoid data loss.

4.1.2 Environmental requirements

- Keep the temperature around the computer in the range of 10-35°C while you are using the computer.
- Do not use the computer in a humid, extremely hot or cold, vibrating, dusty environment or under direct sunshine.
- The slots and opening on the shell of the computer are used for ventilation. Do not jam or cover these slots and openings to prevent the computer from being over heated. Do not place the computer on bed, sofa or other similar places; otherwise these ventilation slots might be jammed.
- Keep the computer at least 13cm away from electric appliances which have strong magnetic radiations such as TV set, refrigerator, motor or large speakers.
- Do not move the computer from a cold environment to a warm place suddenly. When the temperature difference is over 10°C, condensation phenomenon will happen inside the computer and damage storage media.
- Do not place the computer on an unbalanced surface.

4.1.3 Cleaning your computer

- Do not clean your computer when it is powered on.
- Wipe the shell of the computer with a soft cloth.
- Use a soft cloth that does not leave any residue to clean the LCD. Do not use soap or detergent.
- Dusts or stains will compromise the touchpad's sensitivity.

Eliminate them with viscid tape.

4.1.4 About the battery

- Recharge the battery only after the power has run out and fully recharge it in one time. Do not stop recharging or start discharging when the battery is still under recharging. This helps to keep your battery in an optimized status.
- If you plan on leaving your computer unused for a long time (over 2 weeks), Plug out the battery.
- Place the battery in a place far away from conductive objects (e.g. water or metal) to prevent the battery from being short circuit.
- Do not place the battery separately from the computer and without recharging for over 6 months.

4.1.5 For outdoor using

- Backup the critical data before you take your computer outdoors.
- Ensure that the battery is full.
- Be sure to turn off the power and close the LCD well.
- Do not leave anything between the closed LCD and the keyboard.
- When you leave the computer in your car, Place it on the back seat to avoid being insulated.
- Carry the AC adapter and power cord with the computer.
- Do not place the computer in the trunk and consign it by rail, but carry it yourself.
- For airport safety check, we recommend you to choose the X-ray machine (the machine to check your personal luggage) to check

your computer and disks and avoid magnetic detectors (including the arch-like machine and handheld detectors in the hands of safety investigators).

- If you travel with your computer abroad, get to know the power cord standard in the destination country before you go.

4.1.6 Do not change the factory hardware specification without authorization

- Do not change the computer's factory hardware specification, including removing original hardware or adding new hardware, without authority from Lenovo licensed agencies.
- Lenovo has no warranty on the usability or reliability of any devices or software that are not provided by Lenovo or its affiliates.

4.2 Troubleshooting

4.2.1 The computer does nothing when you press the power button.

Do as follows:

- See if the AC adapter and its power cord are well connected to the computer and power outlet.
- Check the battery's power status (some batteries are equipped with a power self-checking button). See if the battery interface is damaged or if the power cord plug is damaged.
- Use the battery and AC power to power the computer respectively. Turn the computer on to see if the power indicator

is on.

- If the methods above mentioned do not work, contact a Lenovo licensed service agency.

4.2.2 You can turn on the computer but can not start the system.

- If you hear a series of beeps, it means that there are system errors. Contact Lenovo licensed service agencies.
- If the computer shows the screen of logo, but cannot boot the operating system or reports errors when the system is booted, see if there is a floppy disk in the floppy drive.
- If the computer shows the screen of logo, but cannot boot the operating system or reports errors when the system is booted, restore the operating system.
- Enter the BIOS Setup Utility, restore its settings to the default configuration and save it. Restart the computer.

4.2.3 The computer halts or reports error when you install software or applications from CD or other storage media.

- Check the surface of the CD or other storage media. Test the CD or other storage media in other portable computers.
- Read the user guide of the software you want to install, and see whether it is compatible with the operating system on you computer.

- See if your computer's hardware can meet the hardware requirements of the software.
- See if you have shut down other running applications, such as anti-virus software, real-time network monitoring applications, when you are installing the software.
- See if your computer is connected to Internet.
- See if the software you are installing is licensed and qualified.

4.2.4 The printer can not be installed and printed.

- See if the cable between the printer and computer is connected well.
- See if the printer's power is turned on and if the printer is in a normal working status.
- Read the user guide of the printer and configure the printer and computer in compliance with the requirements in the guide.
- See if the computer port connected with the printer is disabled in BIOS.
- See if the computer's port configuration meets the requirements of the printer. You can check this in BIOS and in the operating system. For example, some Ir-port printers' transmission speed is different with the computer's Ir transmission speed.
- See if your printer can print normally when it is connected with other portable computers.

- See if a printer of other model can print normally when it is connected with your portable computer. If the methods above mentioned do not work contact Lenovo licensed service agencies.

4.2.5 A peripheral device or an electronic device can not work when it is connected to the computer.

- See if the cable between the device and the computer is well connected.
- See if the device is turned on and in a normal working status.
- Read the user guide of the device and configure it and your computer in compliance with the requirements in the guide.
- See if the computer port connected with the electronic device is disabled in BIOS.
- See if the port configuration and electric standard meets the requirements of the device or is compatible with it.
- See if the device can work normally when it is connected with other portable computers.
- See if the device of other model can work normally when it is connected with you portable computer. If the methods above mentioned do not work, contact Lenovo licensed service agencies.

4.2.6 You can not dial-up with the computer.

- See if the telephone line is well connected to the Modem port on the computer.
- See if you have hung up your telephone and extensions.
- If you are using ISDN, see if the ISDN devices are working well.
- See if your telephone line is working well and can dial an outside number.
- If you are using an extension line in a hotel or other places, see if it supports dial-up Internet access service.

 **Note:** Some telephone line devices might use different standards from normal lines. This might cause compatibility problem when you want to access the Internet by dial-up. If your computer can dial-up with a normal telephone, it would mean that the computer works well.

4.2.7 The computer reports error or halts when running some programs.

- See if these programs are normally installed and some files associated with these programs have not been deleted by accident.
- See if the hardware configuration of the computer meets the lowest operating requirements of these programs.
- Read the user guide of the software and make sure the software environment can be used to operate these programs.
- Read the user guide of the software and make sure other peripheral devices called during the operation of these programs can operate normally.
- Shut down other operating software so as to eliminate conflicts among software.
- If the software can not operate normally, uninstall it. Restart the computer and install it again.

4.2.8 Battery service time is too short.

- See if it is charged fully.
- See if the battery has not been used for a long time since it's fully charged. Recharge it and try again.

- See if the battery interface is damaged.
- Protect the battery according to the previous chapters.
- Battery life will be shortened over time after charging and discharging. It's a normal phenomenon.
- If problems still exist, contact a Lenovo licensed service agency.

4.2.9 LCD is black

- See if your computer is in Hibernation mode.
- See if you have made the following configuration for Power Management: "shut down LCD screen after some time".
- See if your computer is connected to any external display device and you have switched to it.

4.3 Service support system

Except the maintenance and troubleshooting actions we recommend, we strongly recommend: Do not disassemble your computer; do not maintain, repair or restructure the computer by yourself or by agencies that are not licensed by Lenovo.

Contact Lenovo licensed service agencies for maintenance and repair services. You can get free or charging services on the basis of Lenovo's service policies.

You also can contact service support systems of Lenovo to get more service information.

4.3.1 Warranty service telephone numbers

The phone numbers provided later in this section are correct at time of printing and are subject to change without notice. For the latest warranty service contact telephone number in a country, contact

Lenovo, or your reseller in your country

- Singapore 800 6012 047
- Malaysia 1800 18 2388
- Thailand 1800 06 0087
- Indonesia 001 803 0601 2003
- India 1800 425 3324

A list of Service Providers and their telephone numbers is available at www.lenovo.com/support/phone.

For more details, refer to “Safety and warranty guide” comes with your computer.

Keep the guide well for future use!