
Chapter 1 Welcome

This user's guide provides the hardware and software information of the LENOVO® Notebook Computer which you will use.

The computer is a precision electronic equipment. Read through the whole guide before your first use. Especially if you are a new user of computers or you're new to notebook computers. 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 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.

1.1 Quick tour of your notebook computer

Thank you for your purchase of the LENOVO3000 Y300 series notebook computer. This powerful, flexible and lightweight notebook computer is designed to provide long-term reliable and

high computing performance. It is a good friend of you whenever you are in work or entertainment time.

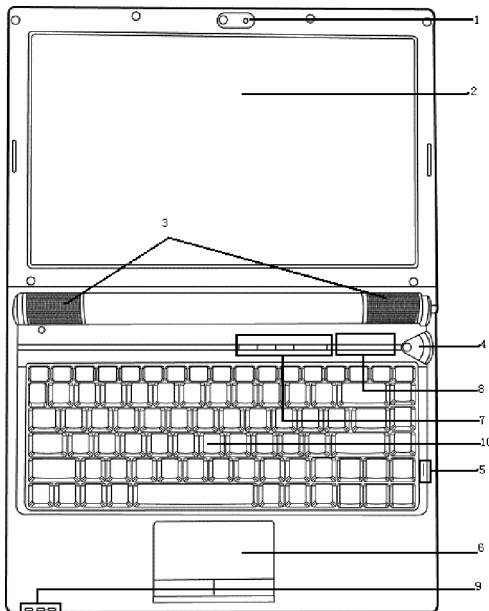


LENOVO® 3000 Y300 series has two select models as follows:

- I Intel® 945GM Express Chipset with integrated graphics card
- I Intel® 945PM Express Chipset with NVIDIA® Geforce® Go 7300 discrete graphics card.

1.2 Finding where everything is located

1.2.1 Front view with the display open



1	Camera
2	TFT color LCD
3	Build-in Stereo speaker
4	Shuttle
5	Build-in Microphone
6	Touchpad
7	Launch Key
8	Status indicator 1
9	Status indicator 2
10	Keyboard

1. Integrated camera

1.3-Mega Multi-function and high quality CMOS camera has been integrated for picture taking and video communication, etc. To use the integrated camera, double-click the Scanners and Camera wizard on the desktop and follow the instructions on the screen.

2. TFT Color LCD

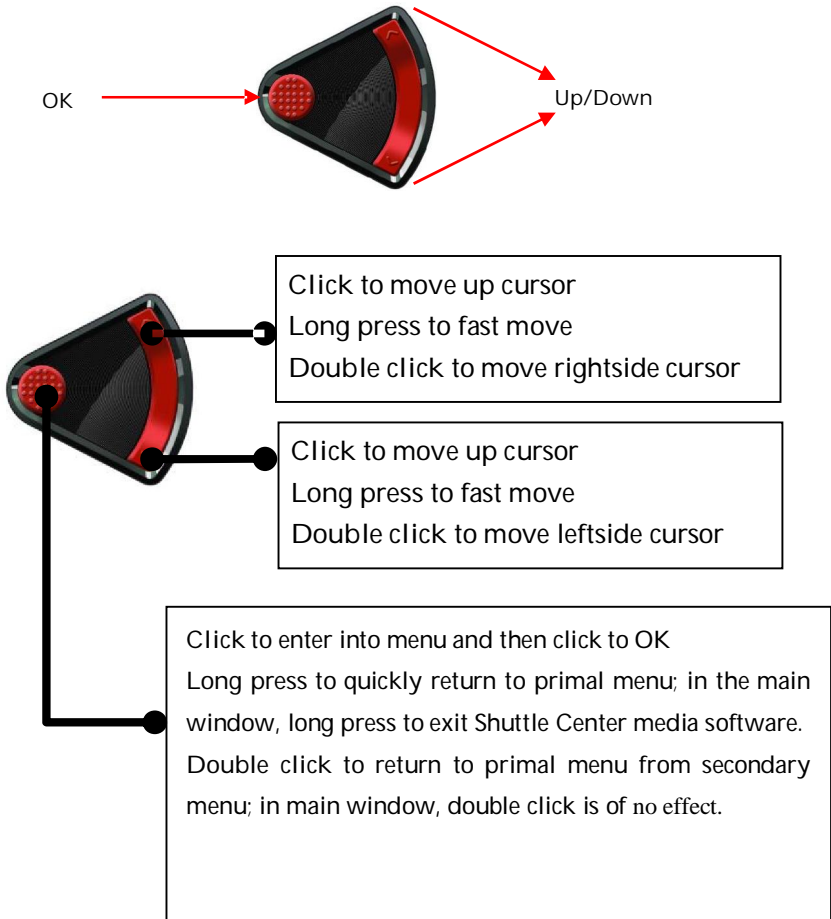
The computer adopts 13W" Thin-Film Transistor (TFT) full-color display which supports the highest as 1280 horizontal x 768 vertical pixels, 32-bit color.

3. Stereo speakers

Left and right speakers deliver stereo audio output.

4. Shuttle

This Shuttle control is associated with Shuttle Center software. To use the Shuttle Center, first install the Shuttle Center driver, and then refer to Shuttle Center Help.



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


5. Build-in microphone

The built-in microphone enables user for audio input.

6. Touchpad


Move your fingertip across the Touchpad to move the pointer. There are two buttons which perform like mouse buttons. After the driver install, Touchpad can be set to perform more functions. For more details, refer to "Using Touchpad".

7. Launch key

· Power button : Press this button to turn on or off the computer. Under Operating System, use this button to enter/quit standby or hibernation status.



Hint: If the system cannot shut down normally, press the power button for 4~5 seconds to shut it down.


NOVO key : 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 User Guide> in Lenovo Drivers CD for details.



Caution: Make sure you have already backed up the data in 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 OS (such as WinXP or other more advanced OS)

Camera key : Press Camera key to run the EasyCapture application. Within the EasyCapture application, press Camera key to take a photo.

Wireless launch key : Enable or disable the wireless LAN.

8. Status indicator 1




The system status indicators show the status of the computer as follows:

1. Caps Lock indicator	Blue: You can enter all alphabetic characters (A-Z) in uppercase without pressing the Shift key.
2. HDD / ODD indicator	Blinking blue/ Orange: A hard disk drive or an optical drive is being used to read or write data.

3. Numeric-lock indicator	Blue: The numeric keypad on the keyboard is enabled.
4. Voice indicator	Blue: Volume up/down

9. Status indicator 2

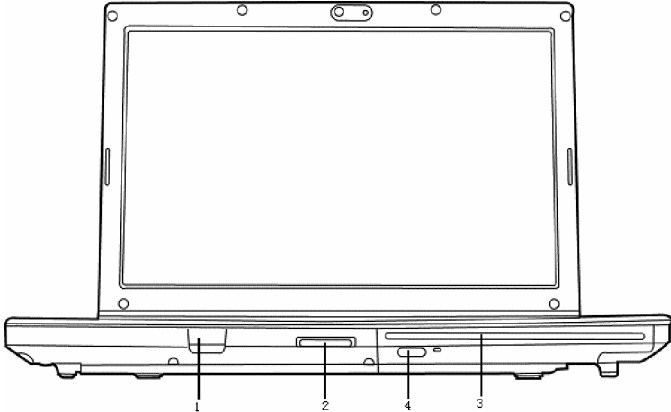
The system status indicators show the status of the computer as follows:

1. Power button 	Blue: The computer is on. Blinking blue: The computer is in STR (Suspend to Ram).
2. Battery indicator 	Blue: The battery is fully charged Orange: The battery is being charged. Blinking orange: The battery is low.
3. Wireless LAN /Bluetooth indicator 	Blue: The wireless LAN feature is on. Blinking Orange: The bluetooth is on. Blue+Blinking Orange: Bluetooth and Wireless are both enabled.

10. Keyboard

Standard 86-key keyboard (Embedded numeric keypad and function keys. They can combine with [Fn] key to achieve some shortcut functions). For more details, refer to "Using keyboard".

1.2.2 Front view



1	Infrared port
2	multiple digital media card slot (4 in 1)
3	Slot in optical driver
4	Optical driver button

1. Infrared port

Use this port to send and receive infrared (IR) signals to and from other IR-compatible devices. This port supports a transfer rate of up to 4 Mbps per second.

2. Multiple digital media card slot (4 in 1)

The slot lets you easily transfer data from other digital device. It supports Memory Stick, Memory Stick Pro, SD (Secure Digital) and MMC .

3. Optical driver

Optical media drive provides the way to transfer data between your computer and CD/DVD. Depending on your computer's feature, you can play CD, VCD and DVD on your computer. If your computer has a CD-RW/DVD-ROM (as known as COMBO), or a Super-Multi, you can burn the digital data to CD or DVD. For more details, refer to "Using optical driver".



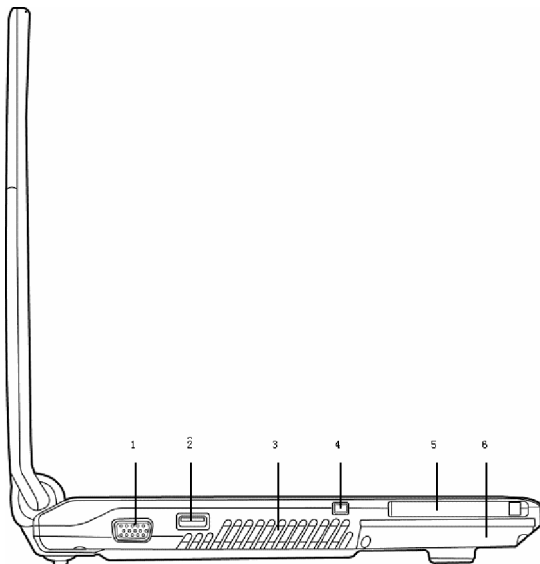
Note: Optical media drive might vary with computer model.

When optical media drive is operating, the CD/DVD is circumvolving at very high speed in the drive. Sometimes it makes a little bit noise, but it is not a malfunction.

4. Optical driver button

Push this button to eject the optical disk from the driver.

1.2.3 Left view



1	VGA port
2	USB ports
3	Air Vent
4	IEEE1394 port
5	PC card slot
6	HDD Compartment

1. VGA port

This port lets you connect an external monitor or a projector to your computer.

2. USB (Universal Serial Bus) ports

You can connect USB devices to your computer, such as mouse, full-size keyboard and memory key, etc. 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, which means you can install and remove the USB device when your computer is on.

3. Air vent

The internal fan and louvers enable air to circulate in the computer and cool the central processor. Be careful not to block the vent.



Note : When the computer's temperature is high, the computer will run the cooling fan automatically. The cooling fan makes a little bit noise when it operates. But that is not a malfunction.

4. IEEE 1394 port

You can connect an external device that supports IEEE 1394 to this port for high-speed data transfer. Most digital cameras support this technology.

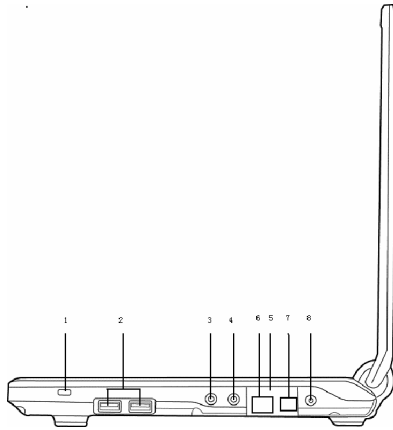
5. PC card slot

The slot supports Type II PC card.

6. HDD compartment

The HDD compartment contains the hard disk.

1.2.4 Right view



1	Security keyhole
2	USB ports
3	Microphone jack
4	Earphone jack
5	Connector cover
6	RJ45 LAN connector
7	RJ11 Modem connector
8	Power jack

1. Security keyhole

You can buy a security cable that can attach to the keyhole. Use it to anchor your computer to your desk or other large object to deny theft. The security cable's instructions tell you how to use it.



Hint: Before you buy the security cable, make sure it fits your computer's security keyhole.

2. USB (Universal Serial Bus) ports

You can connect USB devices to your computer, such as mouse, full-size keyboard, and memory key, etc. 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, which means you can install and remove the USB device when your computer is on.

3. Microphone jack

Enable connection of a microphone for audio input.

4. Earphone jack

Enable connection of a headphone or external speaker for audio output. When you connect the headphone or other device, internal speakers are automatically disabled.

5. Connector cover

Protect RJ11 and RJ45 connector. When it is covered you cannot see the RJ11 and RJ45 connector.

6. RJ45 LAN connector

The LAN jack supports RJ-45 standard. You can use a cable to connect your computer to a LAN (Local Area Network).



Note: Be careful not to put the telephone line into the LAN jack. The telephone line uses higher voltage than the LAN cable. It can damage your computer.

7. RJ11 Modem connector

In areas where an internal Modem is installed as standard device, there is a Modem jack that lets you use a modular cable to connect the Modem directly to a telephone line.



Caution: Be careful not to connect the digital circuitry cable to the Modem jack. Its electric current might damage the Modem.

8. Power jack

The AC adaptor connects to this jack. The AC adaptor can power your computer and/or charge the battery when connected to the AC power.

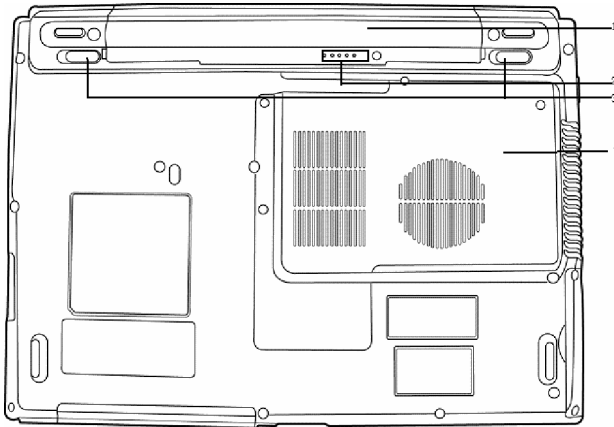


Caution: Use only the model of AC adaptor that comes with

the computer. Wrong adaptor can damage your computer.

⚠ Caution: The AC adaptor can adapt to any voltage from 100 to 240 volts and to a frequency of either 50 or 60 hertz, enabling you to use the computer in almost any region. The power connector jack and power cord jack might vary in different countries. Make sure that the AC adaptor is correctly connected to the AC power. Wrong connection might damage your computer and result in fire accident.

1.2.5 Bottom view




1	Battery pack
2	Battery Status indicator lights
3	Battery Pack Lock/Release Latch
4	FAN/CPU/Wireless LAN Card/Memory Cover

1. Battery Pack

When the battery is fully recharged, it can supply the power to your computer and let you enjoy your mobile computing. To recharge the battery, simply connect the AC adaptor to the AC power and the computer.

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

Installing battery pack

Slide the Battery Pack Lock to the Unlock position , and insert the battery pack horizontally into the mainframe until you hear the little “click” sound. Slide the Battery Pack Lock to the Lock position and the Battery Release Latch will restore again.

Releasing battery pack

Shut down the computer, close the display panel and turn over the computer. Slide the battery pack lock to the Unlock position. Slide the battery release latch to free the battery pack for removal and pull the battery pack horizontally out of the mainframe.

2. Battery status indicator lights

The status indicator lights correspond to the capability of your battery.

3. Battery pack lock and release Latch

Slide it to free the battery pack for removal.



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

4. FAN/CPU/wireless LAN card/memory cover

This cover protects the CPU, memory and its thermal modules; wireless LAN card is also installed here.



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.



Note: Do not insert the different model of memory module. It can reduce the computer performance, and even damage the motherboard.

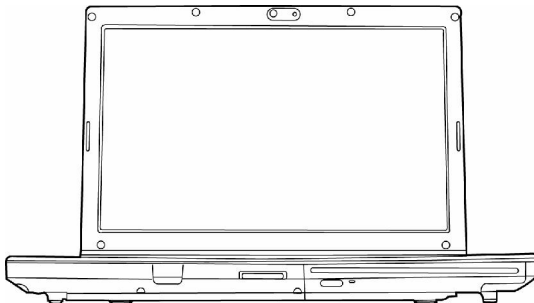



Caution: This cover is designed for memory expansion convenience. But do not install additional memory

module by yourself. If you need to install additional memory module, bring your computer to one of our agents. The professional technician who has been qualified by Lenovo will help you. Because of compatibility, Lenovo does not guarantee all memory modules are compatible with the computer.

1.3 Turn on/off the power

1.3.1 Open/close the LCD display panel



Hold and lift up the display panel slowly with your both hands to the best view angle for you. Press the Power Button  to turn on the computer. Then the Power Indicator glows blue.

When you are closing the display panel, hold the middle-top side and lay down the panel slowly with your both hand until the LCD display panel engages with the main frame.

1.3.2 Turn on the computer

Because the battery is uncharged, when you turn on the computer for first time, you have to connect the AC adaptor to your computer.




Note: Use the power cord and AC adaptor that come with the computer. If one of them is damaged, do not use them but contact our customer service for help.



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

1.3.3 Turn off the computer


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

Click *Start* à *Turn Off Computer* à *Turn Off*.

The computer completes the turnoff process and shut down the power.



Hint: If there is an error during the turnoff process, the system

cannot shut down automatically. In this case, press the power button “

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

1.4 Using battery pack

1.4.1 Activate the battery

The battery that comes with the computer is a lithium-ion battery. The battery might contain a little power when you use for the first time. Operate the computer on the battery power until the battery is fully discharged. Then follow 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 step 2 for another two times. The charging time must be longer in the second and third time to ensure the battery reaches the maximal capacity.



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. Only use and charge the battery that comes with the computers.
 3. Operate the computer on the battery power until the battery is fully discharged.
 4. 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 maximal capacity.

After the above-mentioned steps, you can use the battery normally.

1.4.2 Using battery

When your computer does not connect to an external AC power, the battery will automatically supply the power for your computer. The operating time of the 945PM model, which uses a dedicated video card, is a little shorter than the 945GM model which uses integrated video card.

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

You can plug the adaptor into DC IN jack to charge the battery. The state of battery charging will display through the battery indicator at 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 due to self-discharge. This is the inherent feature of lithium-ion battery. In this case, use the external AC power or recharge the battery. If you still cannot turn on the computer (the battery indicator also no 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 will not use the computer in a long time, remove the battery pack and store it separately.



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

1.4.3 Battery initialization

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

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

1. Make sure the computer is turned off. Then connect the computer to an external AC power to charge the battery.

2. Turn on the computer when the battery is fully-charged. Press [F2] to enter the BIOS setup program.
3. Unplug the AC adaptor. Let the computer operate on the battery power until it automatically turns off at the end of battery power.
4. 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 effect and extend the battery life.



Hint: Because the lithium-ion battery has certain operating life, use the external AC power as possible as you can to decrease the using times of battery pack and extend the battery operating life.

1.4.4 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:

Double-click the battery icon at the right-bottom of Windows taskbar (By 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 the remaining battery power.

Hold the mouse on the battery icon at the right-bottom of Windows taskbar (By 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 notifies the user of the situation through sound (The related BIOS and system should be made). A red "X" mark appears on the battery icon at the right-bottom of Windows taskbar and a prompt window pops up to suggest you to connect to the AC power to avoid data loss.



Hint: If the battery icon does not appear at the right-bottom of Windows taskbar, adjust the Windows setting to display it by following the following steps:

Click *Start* à *Control Panel* à *Performance and Maintenance* à *Power Option* à *Advanced*, select "*Always show icon on the taskbar*". Click *OK*.



Note : The broken lithium-ion battery pollutes the environment and can be dangerous to human. Do not dispose the battery as normal trash. Dispose the battery as required by local directives or regulations. Contact local manage institutions for disposal details.

1.5 Using the LCD display

This computer's display is 13.1", TFT WXGA LCD, which supports 1280×768, 32bit.

Use [Fn]+[↑] and [Fn]+[↓] to adjust LCD brightness.

LCD can switch the mode 15:9 and 4:3 with the function key [Fn]+[F11], that is ,you can switch 1280*768 and 1024*768.



Note: 1. LCD is made of glass and easy to break. So 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 or close it gently.

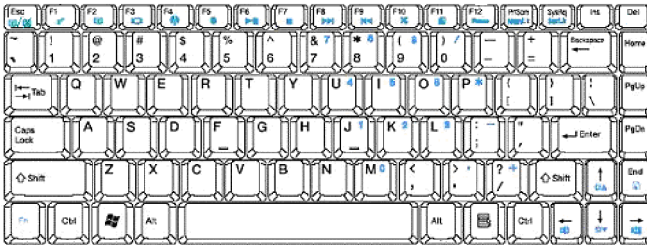
2. Do not hold only left or right side when open or close the display panel.

3. Do not open or close the display roughly. This might damage the LCD display.

4. Do not put object on the LCD back cover, press or hit it.

1.6 Using keyboard

The computer has an 86-key Windows Keyboard or multi-language keyboard.



1.6.1 Using numeric keypad

The numeric keypad is the keys of blue numbers and symbols at the right side of the keyboard. Press [Fn] + [PrtScr/NumLk] to enable the numeric keypad function. When the function is active, the Num Lock indicator grows blue. You can quickly input serried numbers

and characters under the mode. Press [Fn] + [Print Screen/Num Lock] again to disable this function.

1.6.2 Keyboard shortcut

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

Shortcut	Function
[Fn] + [ESC]	Camera on/off
[Fn] + [END]	Touchpad on/off
[Fn] + [F1]	Let the computer into Standby Mode.
[Fn] + [F2]	Turn on/off LCD backlight
[Fn] + [F3]	Change display mode (between LCD and external display)
[Fn] + [F4]	Wireless LAN on/off
[Fn] + [F5]	Bluetooth on/off
[Fn] + [F6]	Play/pause
[Fn] + [F7]	Stop
[Fn] + [F8]	Next
[Fn] + [F9]	Previous
[Fn] + [F10]	Enable/disable Mute function
[Fn] + [F11]	4:3 and 15:9 switch

[Fn] + [PrtScrn]	Enable/disable numeric keypad function
[Fn] + [SysRq]	Enable/disable Scroll Lock function
[Fn] + [à][β]	Volume up/down
[Fn] + [↑][↓]	Increase/decrease LCD brightness

You also can use Windows Key “

Shortcut	Function
 + E	Open Windows Explore
 + R	Open Rundialog box
 + F	Open Search Results dialog box
 + Ctrl + F	Open Search Results - Computers dialog box (when computer connects to network)
 +Pause/Break	Open System properties dialog box

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

1.7 Using Touchpad

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 two buttons next to the Touchpad performs the same functions as mouse buttons.

Touchpad Utilities:

1. Click

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

2. Drag and Drop


Move the on-screen pointer on material 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 Touch pad 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 à Control Panel à Printers and Other Hardware à Mouse*, and get more help and examples.

4. Touchpad indicator

Note that the T/P (Touchpad) effective area is in "" and the indicator on the left top of the Touchpad. The indicator lights up blue/orange when Touchpad is enabled/disabled.



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

1.8 Using optical driver

Drivers are classified into following two types:

1. Tray-in driver


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


- ① Press the drive eject button on the drive door and wait a while for the drawer to come out. Pull out it 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

Insert the disc slowly in optical driver by keeping horizontal the disc.



 Note: The slot in ODD doesn't support 8cm disk. Do not use 8cm disk whenever.

 Note: Do not move the computer when the optical drive is working. The optical drive indicator at the upside of the keyboard shows the optical drive working status. There is another optical drive indicator beside the drive eject button. It also shows the optical drive working status.

Chapter 2 More understanding

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

2.1 Setup and maintain the computer

2.1.1 EnergyCut

The notebook computer has a series of automatic adjustable power-saving facilities called EnergyCut. EnergyCut tries to change some system components from high power consumption to lower level, thus ensuring the computer runs with higher performance and lower EnergyCut. This computer has built-in EnergyCut. It can force the computer to operate in standby, hibernation mode under pre-defined conditions. Using the EnergyCut properly can extend the battery operating time.

This computer supports ACPI (Advanced Configuration and Power Interface) EnergyCut standard. ACPI also needs the Operating System which supports ACPI (such as: Microsoft Windows ME, Microsoft Windows 2000, Microsoft Windows XP) to take effect.

In Microsoft Windows XP and Microsoft Windows 2000, ACPI will overlay the BIOS EnergyCut settings and take over the computer EnergyCut.

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

Under pure DOS system, the BIOS directly controls the EnergyCut.

2.1.2 The EnergyCut under Windows XP ACPI mode

Under the ACPI mode of the Microsoft Windows XP operating system, the system EnergyCut will be controlled by the operating system. Go to *Control Panel à Performance and Maintenance à Power Options* to modify all the EnergyCut t settings.

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 has been idle for a certain time. The path is *Control Panel à Performance and Maintenance à Power Options*.

2.1.4 Standby mode

Standby mode suspends the system to RAM (STR). In this mode, the computer turns off the monitor and hard disk to reduce the power consumption while it has been idle for a certain time. Press the power button to restore the previous working environment.



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

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

1. Click *Start à Turn Off Computer à Standby*.
2. Click *Start à Control Panel à Performance and Maintenance à Power Options à Advanced*, and then set up how you want the computer to enter the standby mode, "close the lid of notebook

computer", "press the power button", or "press the sleep button".

2.1.5 Hibernation mode

Hibernation mode suspends the system hard disk (STD). It is a very useful facility. It saves all the data of 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 system, you only need to enable this facility through *Start à Control Panel à Performance and Maintenance à Power Options à Hibernation*.

Under hibernation mode, the system data will be saved to hard disk and the computer shut down to save the power consumption. After the computer enter hibernation mode, press the power button to wake up the computer and restore the previous state. If you enable hibernation facility when the computer battery is extremely low, the computer will enter the hibernation mode automatically by default. You can set up the way of entering hibernation mode for your computer: *"close the lid of notebook computer", "press the power button", or "press the sleep button".*

To enable hibernation facility, Click *Start à Control Panel à Performance and Maintenance à Power Options à Hibernation*, choose *Enable Hibernation*, and click *Apply*.



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

To quit the hibernation mode, press the power button. Pressing the keyboard key and Touchpad cannot 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 run out, while you have no related protection settings, you data will lose. 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 notice you though sound. You should save all the data to the hard disk immediately and connect the AC adaptor to the computer.

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



Hint: We strongly recommend you to complete the setting as follows:

Click *Start* à *Control Panel* à *Performance and Maintenance* à *Power Options* à *Hibernation*, choose *Enable Hibernation*, and click *Apply* to enable hibernation facility.

Click *Start* à *Control Panel* à *Performance and Maintenance* à *Power Options* à *Alarms*, choose "Activate low battery alarm when power level reaches -- 10%" and "Activate critical battery alarm when power level reaches -- 3%", and then click *Apply*.

Click *Start* à *Control Panel* à *Performance and Maintenance* à *Power*

Options à 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, and 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 on the left side of the computer. You can control the main volume with software. Other volumes are controlled by software.

You can adjust the speaker volume as desired when listening to music or watching movies. Click Start à All Programs à Accessories à Entertainment à 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: Because there are several noise 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 perform voice recognition tasks, we recommend you use external microphones, because the inner noise has a severe effect on 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 drivers must be installed.

Before changing any of the original display settings, note the original settings for future reference. Click *Start* à *Control Panel*; Pick a category, à *Appearance and Themes* à Pick a task, *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 settings will automatically adjust to the closest possible setting.

2.4 Connecting IEEE1394 device

IEEE 1394 is a new data transmission standard supported by Windows systems. It 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. Then plug the display cable into the external display connector on the left of the computer. 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 external displays by pressing *Fn + F3*. There are three display modes: LCD only, external display only, LCD and external display simultaneously.

2.6 Using PC card

Installing PC cards

PC cards can enhance the notebooks' 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 on its right side. When you need to remove the PC cards, press the eject button besides the slot and pull the PC cards out.

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



Note: Some PC cards do not support PnP (Plug and Play) facility; refer to the user's guide before using them.

Removing PC cards

Warning: Before removing a PC Card, stop it 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 any).

Follow this procedure to remove the PC card:

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

2.7 Using card reader

This computer has a 4 in 1 Memory Card Reader. It can read and write the popular Memory Stick, Memory Stick Pro, SD (Secure Digital) and MMC cards.

Chapter 3 System configuration

3.1 Install drivers

We provide a driver CD with all drivers that you need in the box. You can install drivers from the CD. Follow the following steps to install drivers on your computer. We assume that the CD-Rom is "E:" Disk.



Note: Adhere to the following sequence. Otherwise It can

compromise the system's stability and audio or video effect, even cause you to reinstall the operating system.

3.1.1 Install chipset driver

- Insert the driver CD.
- Select *Start* → *Run* → Browse to open "E:\WinXP\Chipset\Setup.exe". In the installation screen, follow the instruction to start the files copying process. At the end of installation, select "*Yes, I want to restart my computer now*" and click *Finish* to restart your computer.
- The system will restart to complete the installation.

3.1.2 Install graphic card driver

- Insert the driver CD
- Select *Start* → *Run* → Browse to open the correct path
For integrated graphics: "E:\WinXP\VGA\Intel\Setup.exe."
For discrete graphics: "E:\WinXP\VGA\Nvidia\Setup.exe."
In the installation screen, follow the instruction to start files copying process. At the end of installation, select "*Yes, I want to restart my computer now*" and click *Finish* to restart your computer.
- The system will restart to complete the installation.
- You can setup your own display resolution and color properties through *Control Panel* → *Appearance and Themes* → *Display* → *Display Properties* → *Settings*.

3.1.3 Install sound card driver

- Insert the driver CD.

- Select *Start* à *Run* à Browse to open “E:\WinXP\Audio\Setup.exe”. In the installation screen, follow the instruction to start the files copying process. Then System Settings Change will ask “*Do you want to restart your computer now?*” Click *Yes* to restart your computer.

3.1.4 Install Modem driver

- Insert the driver CD.
- Select *Start* à *Run* à Browse to open “E:\WinXP\Modem\Setup.exe”. In the installation screen, follow the instruction to start the files copying process and complete the installation. Then System Settings Change will ask “*Do you want to restart your computer now?*” Click *Yes* to restart your computer.
- Installation is finished when you see *SUCCESS* in “device driver installation wizard” interface.

3.1.5 Install EnergyCut

- Insert the driver CD.
- Run “E:\WinXP\EnergyCut\Setup.exe”. In the installation screen, follow the instruction to start the files copying process and complete the installation.
- Restart the system after the installation.

3.1.6 Install LAN card driver

- Insert the driver CD.
- Run “E:\WinXP\Lan\SetupYukonWin.exe”. In the installation screen, follow the instruction to start the files copying process and

complete the installation.

- Restart the system after the installation.

3.1.7 Install Wireless LAN card (optional) driver

- Insert the driver CD.
- Run "E:\WinXP\Wireless\DPInst.exe". In the installation screen, follow the instruction to start the files copying process and complete the installation.
- Restart the system after the installation.

3.1.8 Install Touchpad driver

- Insert the driver CD.
- Run "E:\WinXP\touchpad\Setup.exe". In the installation screen, follow the instruction to start the files copying process. At the end of installation, select "*Yes, I want to restart my computer now*" and click *Finish* to restart your computer.
- The system will restart to complete the installation.

3.1.9 Install card reader drive

- Insert the driver CD.
- Run "E:\WinXP\CardReader\Setup.exe". In the installation screen, follow the instruction to start the files copying process (select all the facilities during installation). At the end of installing, click *Finish* to complete the installation.

3.1.10 Install Quick button

- Insert the driver CD.

- Run "E:\WinXP\Quick Button\Setup.exe". In the installation screen, follow the instruction to start the files copying process and complete the installation. At the end of installing, click Yes to reboot the system.
- The system will restart to complete the installation.

3.1.11 Install Camera Drive

- Insert the driver CD.
- Select *Start* à *Run* à *Browse* to open "E:\WinXP\Camera\Setup.exe". In the installation screen, follow the instruction to start the files copying 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.

3.1.12 Install Bluetooth driver

- Insert the driver CD.
Enable Bluetooth device by pressing [Fn]+[F5] before installing the driver.
- Run "E:\WinXP\Bluetooth\Setup.exe". In the installation screen, follow the instruction to start files copying process and complete the installation.
- Follow the instruction to restart the system after the installation.


3.2 BIOS setup

BIOS is the abbreviation of Basis Input/Output System. It is the communication layer between hardware and software and is known

as Firmware. It is used to translate software instructions to the instructions that the hardware can understand.

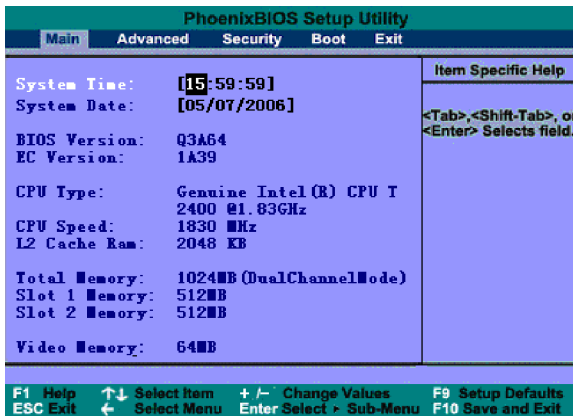
To enter the BIOS setup utility, press F2 before the operating system is booted.

BIOS Setup Utility is a menu-driven application in English. It is used to change the system configuration based on user's need.

 Note: BIOS has a decisive effect on the system's stability, reliability and security. Do not change any BIOS setting until you get a comprehensive knowledge about BIOS. BIOS information is subject to change for different BIOS version and computer configuration.

3.2.1 Main screen

The main screen is the first to appear to users in the BIOS Setup Utility. It contains Main, Advanced, Security, Boot and Exit menus.

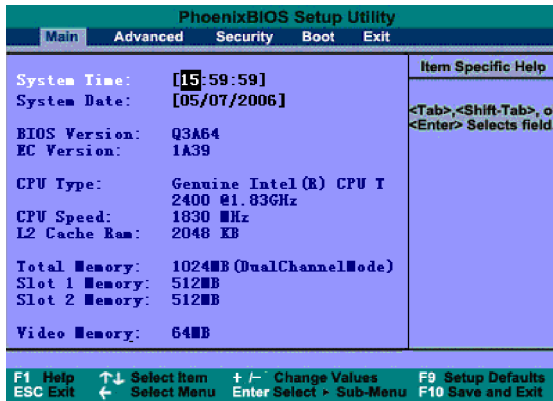


This screen provides access to the utility's various functions.

The following table lists keys that can be used in the BIOS menus.

Key	Function
F1	Help
Esc	Exit the current menu, enter the Exit menu.
↑ ↓ → ←	Scroll through the items on a menu, or scroll through menus
+/-	Change Values
Enter	Press to enter menus and submenus
F9	Setup Defaults setting
F10	Save current setting and Exit

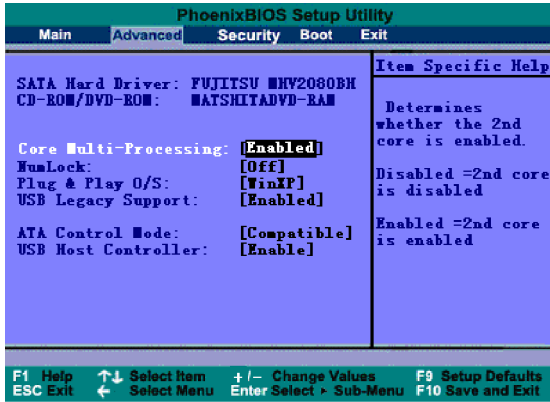
3.2.2 Main menu



Time and Date

You can set your System Time and System Date through the Number key.

3.2.3 Advanced menu



1. Core Multi-Processing: Determine whether the second core is enabled if your Processor is duo core.

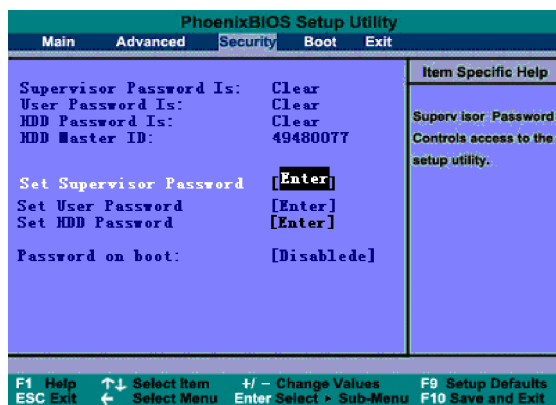
2. Num Lock: Select Power-on state for Num Lock. By default, the setting is Off.

3. Plug&Play O/S: Select the operating system installed on your system.

4. USB Legacy Support: This item allows you enable support for USB devices.

5. USB Host Controller: Allow you enable or disable USB Host Controller.

3.2.4 Security menu



The Set Supervisor/User /HDD Password items set passwords for different levels of access to the notebook. The notebook is shipped with the password disabled.

1. Supervisor Password: This field allows you to set the Supervisor password. A password is required to access the BIOS setup menus if the password has been set.

To set the Supervisor password, highlight this field and press the <Enter> key. The following dialog box appears:



Type the password and press the <Enter> key. You can type up to eight alphanumeric characters. Symbols and other keys are ignored. To confirm the password, type the password again and press the <Enter> key. The Supervisor Password is now set up. This password

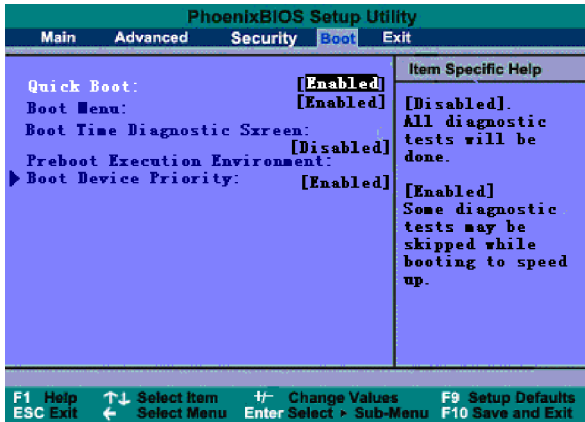
allows full access to the BIOS Setup menu.

To clear a password, highlight the Set Supervisor Password field and press the <Enter> key. Enter the current password. Leave the Enter New Password field blank and press <Enter> twice. The password is now cleared up.

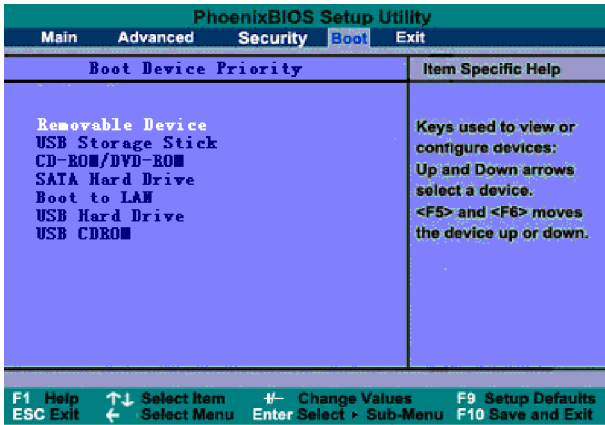
Check the Boot System box to prompt the user to provide the supervisor password after booting the system.

2, HDD Password: This field allows you to set a HDD password. To set the HDD Password, follow the instructions for setting the Supervisor Password. The system prompts the user to enter the password before access to the hard disk drive if the password has been set.

3.2.5 Boot menu

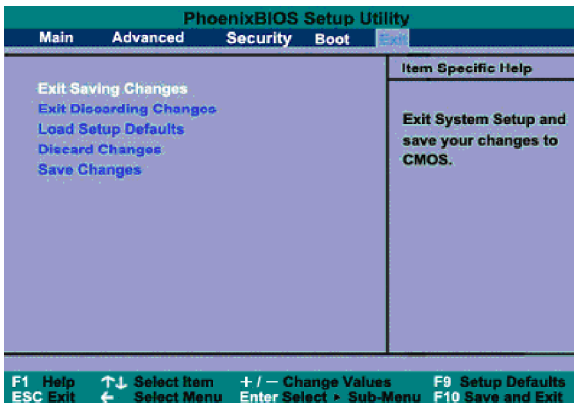


1. Quick Boot: Enable Quiet Boot to turn off the memory check sound during the POST.
2. Boot Menu: Choose if you want to show the Boot Menu.
3. Boot Time Diagnostic Screen: Choose the logo screen or the diagnostic screen during boot.
4. Preboot Execution Environment: Choose it if Boot from network server.
5. Boot Device Priority: The BIOS loads the operating system from the disk drives in the sequence selected. When you highlight this item and press “Enter”, you can see the following menu.



Press the Up and Down arrow keys to select which component is used for the boot device, then use F5 and F6 to confirm the boot order of the device .

3.2.6 Exit menu



Choose from one of the following items to execute the operation.

Exit Saving Changes: Exit the BIOS setup screen and save all the changes which you have made.

Exit Discarding Changes: Exit the BIOS setup screen and discard all the changes which you have made.

Load Setup Default: Restore the BIOS setting to factory default setting.

Discard Changes: Discard all the changes which you have made.

Save Changes: Save all the changes which you have made.

3.3 Hardware configuration and component standard

CPU

- | Intel CPU
- | μ FCPGA encapsulation

Chipset

- | North Bridge: Intel 945 GM/PM
- | South Bridge: Intel ICH7-M
- | VGA: nVIDIA (only for 945PM)

System RAM

- | Support DDRII533/667RAM
- | Up to 4G.

Hard Disk Drive (HDD)

- | 2.5-inch hard disk

Optical Driver Device (ODD)

- | 12.7mm DVD- Combo (DVD/CDRW)
- | 12.7mm Super-Multi
- | 12.7mm DVD-ROM

Audio

- | Azalia
- | 2 speakers built-in.

Display

- | Color 13.1' WXGA TFT-LCD.

Keyboard

- | 86 Key Windows Keyboard

Expansion

- | One Type II PCMCIA Slot
- | One Modem Jack (RJ-11)
- | One LAN Jack (RJ-45)
- | One DC IN Jack
- | One VGA Port
- | One Headphone Jack
- | One Microphone-in Jack
- | 3 USB (2.0) Ports
- | One IEEE 1394(4pin) Port
- | One infrared port
- | One 4 in 1 Card Reader (Memory Stick, Memory Stick Pro, MMC , Secure Digital)

Communication Device

- | Built-in 10M/100M Ethernet Card
- | Built-in 56Kbps Modem

Weight

- | Weight (with battery pack): 2.2Kg (the weight might vary due to
to
vendor components, manufacturing process and options)

Power

- I Battery (Li-ion)
- I Adaptor (3 Pin)

Chapter 4 Technical support and customer service

4.1 Kindly remind



Note: Use your Lenovo notebook computer in compliance with the requirements in this guide, for example, conditions and environment requirements. If you violate any requirement for any purpose, Lenovo will not guarantee the computer's performance, stability, reliability and security and you have to carry all the related risks alone.

Regularly back up your critical data on the notebook computer to ensure the data safety and security.

4.1.1 Take care of using the computer

Do not disassemble the computer. Contact your provider immediately when you encounter problems.

Do not place any heavy objects on the LCD cover.

The LCD is easy to scratch. Do not wipe the LCD with paper or touch it with fingers or pens.

We recommend you to select "Turn Off the Display Automatically" in EnergyCut to extend the LCD's life.

Cover the external ports with the attached cover when you do not use them to avoid defilement or static electricity.

Regularly backup you data to avoid data loss.

4.1.2 Environmental requirements

Keep the temperature around the computer in the range of 10-35°C when you use 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 so as 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 happens 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 power on.

Wipe the shell of the computer with a soft cloth.

Use a soft cloth that does not leave any crumbs to clean the LCD. Do not use soap or detergent.

Dusts or stain 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 at one time. Do not stop recharging or start discharging when the battery is still under recharging. This helps keeping your battery in an optimized status.

If you will leave 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-circuited.

Do not place the battery separately from the computer and do not leave it without recharging for over 6 months.

4.1.5 For outdoor use

Backup you 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 closed LCD and 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 for consign, 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).

When going abroad, get to know the power cord standard in the target country before you go.

4.1.6 Do not change the factory hardware without authorization

Do not change the computer's factory hardware, including removing original hardware or adding new hardware, without authorization 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 turn it on.

Do as follows:

- I See if the AC adapter and its power cord are well connected to the computer and power outlet.
- I Check the battery's power status (some battery has a power self-checking button). See if the battery interface is defiled or if the power cord plug is defiled.
- I Use the battery and AC power to power the computer respectively. Turn the computer on to see if the power indicator is on.
- I If you the above-mentioned methods do not work, contact Lenovo licensed service agencies.

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 or reinstall the operating system.

Enter the BIOS Setup Utility, restore its settings to 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. Try the CD or other storage media in other notebook computers.
- | Read the user's guide of the software you want to install, and see whether it is compatible with the operating system on your 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

one.

4.2.4 The printer can not be installed and printed.

- I See if the cable between the printer and computer is connected well.
- I See if the printer's power is turned on and if the printer is in a normal working status.
- I Read the user's guide of the printer and configure the printer and computer in compliance with the requirements in the guide.
- I See if the computer port connected with the printer is disabled in BIOS.
- I See if the computer's port configuration meets the requirements of the printer. You can check this in BIOS and in the operating system.
- I See if your printer can print normally when it is connected with other notebook computers.
- I See if a printer of other model can print normally when it is connected with your notebook computer. If the methods above 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.

- I See if the cable between the device and the computer is well connected.
- I See if the device is turned on and in a normal working status.
- I Read the user's 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 be compatible with it.
- | See if the device can work normally when it is connected with other notebook computers.
- | See if a device of other model can work normally when it is connected with your notebook computer. If the above-mentioned methods do not work, contact Lenovo licensed service agencies.

4.2.6 You can not dial-up with the computer.

- | See if the telephone cable 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 cable 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 cables devices might use different standards from normal cables. This might cause compatibility problem when you want to access internet by dial-up. If your computer can dial-up with normal telephone, it means 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 in these programs are not deleted by accident.
- | See if the hardware configuration of the computer meets the lowest operating requirement of these programs.
- | Read the user's guide of the software and make sure the software environment can be used for these programs' operation.
- | Read the user's 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 remove conflicts among software.
- | If the software can't operate normally, uninstall it. Restart the computer and install it once more.

4.2.8 Battery service time is too short

- | See if it's charged fully.
- | See if the battery hasn't been used for a long time since it's fully charged. Recharge it and try it again.
- | See if the battery interface is defiled.
- | It's the chemical feature of battery that its service time will shorted after charge and discharge time after time. It's a normal

phenomenon.

- I If there are still problems, contact Lenovo licensed service agencies.

4.2.9 LCD is black

See if your computer is in Hibernation mode.

See if you have made the following configuration for EnergyCut: shut down LCD screen after some time.

See if your computer has 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 Lennon'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".



Note: The contact information is subject to change. If there is any change, we'll not give any additional notification. Conform to the latest telephone numbers, web site address or addresses released by Lenovo Group.

Keep the guide well for future use!