User's Guide

Model : LP 60

User's guide **6**

Important Safety Instructions **8**

Selecting a place to work 8

Using the battery pack 9

Replacing the backup (standby) battery 10

Connecting to an AC power source 11

Using the computer 12

Using the computer 13

Upgrading the computer 15

Carrying and storing the computer 16

Preventing data loss (handling hard disk drives) 17

A correct pose of your body and using head set 18

For Australian Users **19**

Laser compliance statement **20**

Overview **21**

Package contents 21

Components of Notebook PC 23

Front view 23

Opening and Closing LCD display of notebook PC 24

Rear view 25

Left view 26

Right view 26

Status indicators 27

Basics **29**

Using the battery pack 29

Using the AC adapter 33
1. Connecting the AC adapter to an AC outlet (100~240V) 33
2. Connecting the AC adapter to the notebook PC. 33
3. Opening and positioning the LCD display. 34
Power On 35

Registration Window 35
Turning on the computer 35
Turning off the computer 39

Using Windows XP 41
Overview 41
Help and Support 42
Windows XP desktop 43
Start menu 44
Changing the look of the Start menu 44
Changing the pinned items in the Start menu 44
Showing the recently used items on the Start menu 44
Control Panel 45

Setting up Local Area Network (LAN) connections 46

Changing the Themes and Desktop background 48
Using the Windows Classic Theme 48
Using a different theme 48
Changing the desktop background 49
Setting the Screen Saver 49
Taskbar 50
Desktop cleanup 50
Using the Power Options 51
Power Options Properties 51
Power Options Properties 53
Advanced tab 54
Power Meter 54
System Hibernation 55

Attaching external devices 56
Attaching a USB device 56
Attaching a television using an S-Video port 56
Attaching an external monitor 58
Attaching an IEEE 1394 device 59

Using Wireless LAN 59
Connecting and using the wireless network 60

Using IP Operator 61

Using Battery Miser 63

Input/Output 65

Using the keyboard 65
About the keyboard 65
Modifier and special function keys 68

Hot keys 69

Using the touch pad 71
Moving the pointer on the screen 72
Making the selection (Click) 72
Double-click (Run) 73
Drag and drop 73
Using the scroll up/down function 76

System Setup 77

Starting the system setup 77
Keys used in the system setup 77

Setting a password 78
Change Supervisor Password 79
Change User Password 80

Boot Password Required 82

Changing or removing the password 83

Setting Load Optimal Defaults 85

System Recovery 86
Using Full Recovery 86

Driver re-installation 90

Storage/Memory 91

Using the optical disk drive 91
Inserting a CD 91
Removing a CD 92

Playing an audio CD 93
Using Windows Media Player 93

Using Power DVD 94

Using SD Memory Card 96
Inserting SD Memory Card 96
Removing the SD Memory Card 96

Using Memory Stick (SONY) 97
Inserting Memory Stick 97
Removing the SD Memory Card 97

Using PC Card 98
Inserting PC Card 98
Removing PC Card 98

Expanding memory 99
About memory 99
Before installing memory 99
Purchasing memory 100
Installing memory 100

Features 103

Model 103
Processor 103
Memory 103

BIOS ROM 103
Storage devices.....103
External I/O Interfaces.....104
Display 104
Sound.....104
LAN 104
Modem 104

Power specification..... 105

AC Adapter (Free Voltage) 105
Battery pack (Li-Ion) 105
Charging time 105
Battery Life 105
Back-up battery 105

Operating environment..... 106

Operating.....106
Non-operating.....106

User's guide

Thank you for using the LG products.
LG has manufactured and tested this product to provide you with a reliable computing environment.
Please read this manual carefully before using the computer.

The following signs call attention to features and operations that may be dangerous to the user. Follow the instruction closely to reduce the risk of physical harm or damage to the equipment.

Danger: Not following the instruction will result in immediate death or serious injury.

Warning: Not following the instruction could result in death or serious injury.

Caution: Not following the instruction could result in minor or moderate injury and/or damage to the product.

Microsoft, MS, WinPE, and Windows are trademarks of the Microsoft Corporation in the United States and/or other countries.

"Memory Stick" and are the trademarks of the Sony Corporation.

is the trademark of LG.

Copyright 2003 LG Electronics, Inc., DigitalMate Co., Ltd.
Information in this manual may include technical inaccuracies or typographical errors. Images in this manual are for illustrative purposes only and may be different from the actual products. LG reserves the rights to make improvements and/or changes to the product without notice.

Reproducing any of the information contained in this publication without written permission is prohibited.
Your computer complies with the radio frequency and safety standards for all of the countries and regions in which it has been approved for wireless use.

Important Safety Instructions

These safety instructions will ensure many years of safe enjoyment from the product. Set up your computer on a flat, stable surface. (LG is not responsible for the problems and damages caused by incorrect use of the computer in an unsafe environment.)

Selecting a place to work

Warning

Do not operate your computer near water; for example, in a bathroom or near a

The computer may not function properly, and there is the risk of electric shock.
Operate your computer at room temperture, range of (50 ~ 95) degrees F (10 ~ 35) degrees C and 20 to 80% of relative humidity.
Safely dispose of the packing materials, such as desiccant and plastic bags.
Children may swallow desiccant or suffocate from plastic bags.

Caution

Keep your computing environment clean and free of dust.
There is the risk of disfunction to the computer.

Keep your computer away from electromagnetic fields.
Exposing to the electromagnetic field may result in loss of data in the hard disk drive and/or damage to the Liquid Crystal Display(LCD).

Do not block the fan louvers and leave enough space around the computer for ventilation. The computer may overheat and result in fire or injuries.

Using the battery pack

Warning

Use only the battery paack that is recommended by LG.
Using a battery pack of a different type may result in explosion.

Keep metallic objects, such as keys and clips, away from the battery pack.
Objects that conduct electricity can short-circuit the battery pack and result in fire and/or injuries.

Keep the battery pack away from heat.
There is the risk of explosion or fire.

Do not short-circuit battery terminals.
There is the risk of explosion.

Do not subject the battery pack to temperatures above (140 degrees F) (60 degrees C). There is the risk of explosion or fire.

Keep the battery pack out of reach of children.
There is the risk of injury and damage to the battery pack.

Do not put the battery pack in the water.
There is the risk of fire or damage to the batter pack.

Be cautious when handling the keen part of the battery pack hook.
It may be harmful.

Lock the Notebook locker at the bottom surface.
There is the risk of damage to the battery.

Replacing the backup (standby) battery

Warning

If the back up battery is not properly replaced, there is the risk of explosion.

The lithium batterry contains lithium and can explode if it is not properly used, handled, or disposed of.

Replace only with a battery of the type recommended by LG.

Connecting to an AC power source

Warning

Do not use loosend or damaged power plugs.
There is the risk of electric shock or fire.

Use properly grounded outlet.
Connecting the computer to an outlet without proper grounding may result in electric shock and damages to your computer.

Do not touch or grab the power plug with wet hands.
There is the risk of electric shock.

Hold the plug body when removing the power cord from an outlet.
There is the risk of fire and damages to the computer.

Use your computer at the proper voltage/current level indicated.
Using an inappropriate power might cause severe damage to your computer

If you hear a noise from the power cord or outlet, unplug the power cord immediately, and contact a Technical Support for help.
There is the risk of fire or electric shock.

Make sure the power plug fits snugly into the electrical outlet.
Loose fit may result in fire.

Do not bend the power cord or place a heavy object on top of it. Keep the power cord out of reach of children.
Damaged power cord may result in electric shock or fire.
Keep the power cord and plug clean and free of dust.
There is the risk of fire.

If you find liquid absorbed into your computer, remove power cord, battery, and any other cables from your computer, and contact a Technical Service for help.
There is the risk of electric shock, fire, or damage to the computer.

Before cleaning the computer, remove power cord, battery, and any other cables from your computer.
There is the risk of electric shock or damage to the computer.

Using the computer

Warning

To clean your computer, use mild detergent or computer cleaning products. Make

Using the computer without completely drying it may result in electric shock or fire.

During a lightning storm, remove the power cord, telephone line, and LAN cable from the computer.
There is the risk of electric shock or fire.

Do not spill water, chemicals, or liquid of any kind on the computer.
Liquid of any kind absorbed into your computer may result in electric shock or fire.

Do not try to connect modem directly to a multi-line telephone.
There is the risk of electric shock or fire.

If you drop your computer, remove the power cord and battery pack, and then contact a Technical support for help.
There is the risk of electric shock or fire.

Do not use or place your computer near heat, sparks, or other sources of ignition. There is the risk of fire.
If you smell smoke from the computer or adaptor, turn off the computer, remove the power cord, and then contact a Technical support for help.
There is the risk of fire.

The fluorescent lamp in the LCD contains Mercury..
Avoid direct contact when LCD monitor is broken. If it spills into eyes or the other parts of your body, wash it out several times with clean water and get medical help or contact a Poison Control Center immediately.

Using the computer

Caution

Do not place an object, such as a pen or clip, on the keyboard.
Do not leave any object on the keyboard when you close the LCD cover, your LCD screen may be damaged.
Do not touch or scratch the LCD with sharp objects.
Your LCD may be damaged.

Make sure to turn off the computer before you close the LCD cover.
The computer may overheat, or be damaged.

Do not give excessive pressure on the LCD. LCD is fragile, made of glass.

Follow the instructions in the User's guide.
There is the risk of damage to the computer.

Do not place objects into the PC Card slot.

There is the risk of electric shock or fire.

Upon completion of any service or repairs, ask service technician to perform safety checks.
Ignoring safety checks may result in electric shock or fire.

Use the Wireless LAN at least 5m away from a microwave oven or plasma lamp.
When using the Wireless LAN near a plasma lamp, use the channel 11, 12, or 13.
The connection may be unavailable or slow.

Keep the computer away from heat.
The computer may deform and there is a risk of fire.

When using external device, make sure you have the right device, compatable to your computer.
There is a risk of damage to your computer.

Do not insert a damaged CD-ROM or floppy disk.
Your computer may be damaged.

Upgrading the computer

Warning

Before disassembling the computer for upgraing purposes, turn off the power and

There is the risk of electric shock or fire. If you need to disassemble your computer, contact a Technical Support for help.

Keep screws and other small parts out of reach of children.
Children may choke on a screw or other small part. If a child swallows a small part, get medical help.

Caution

Do not attempt to disassemble or modify your computer without consulting with a Technical Support. If necessary, Use only the parts that are approved by LG.
There is the risk of electric shock.

Consult with a Technical Support before connecting or using the computer with any non-LG product.
There is a risk of damage to the computer.

Carrying and storing the computer

Caution

Before moving the computer, turn the power off and remove all the cables.
You may fall over the loosend cables.

When traveling on an airplane, follow the instructions by a flight attendant.
Using the computer on an airplane may result in an accident.

Do not carry your computer, leaving LCD screen open.

Do not use your computer in direct sunlight in a closed area, such as inside a car.
Prolonged exposure to high temperatures may deform the computer and also result in fire.

Preventing data loss (handling hard disk drives)

Caution

Be cautious when handling the hard disk drive.
The hard disk drive is very delicate to any physical impact. Always make backup files for your data. LG is not responsible for the data lose caused by users.

The data on your hard disk itself may be damaged in the following situations:
1. Exposure to a physical shock during the disassembling or installing process.
2. The computer is reset (rebooted), for example by power outage, while the hard disk drive is operating.
3. A computer virus is detected on your computer.
4. Your computer has accidentally been turned off during operation.
5. A physical damage on your computer while the computer is operating.

To prevent data loss due to hard disk drive damages, always backup your data.
LG is not responsible for the loss of data.

A correct pose of your body and using head set

Warning

Adjust an angle for LCD screen to avoid reflections from enviromental light.

The top portion of the LCD screen should be on or below your eye level.

Keep your head and neck in an upright position.

Keep your forearms, wrists, and hands in a horizontal position.

Adjust your chair to keep your arms and hands in a comfortable position.

Sitting on a chair in a wrong position for a long period of time may cause discomfort to your body.

Take short breaks while working with your computer. No more than 2 hours of computing per day is recommended.

Stretch often to reduce muscular discomfort.

Check the volume level, when using head set.

Check if the volume level is too high before using head set.

Do not use the head set for a prolonged period of time.

For Australian Users

Warning

For safety reasons, only connect equipment with a telecommunications compliance label. This includes customer equipment previously labelled or certified.

Laser compliance statement

An optical disk drive (device), such as a DVD-ROM, DVD/CD-RW COMBO, DVD±RW drive which can be installed in this unit is a laser product. The driver's classification label is on the surface of the drive as shown below.

CLASS 1 LASER PRODUCT
LASER KLASSE 1
LUOKAN 1 LASERLAITE
APPAREIL A LASER DE CLASSE 1
KLASS 1 LASER APPARAT

The drive is certified by the manufacturer to comply with the requirements of the Department of Health and Human Services 21 Code of Federal Regulations (DHHS 21 CFR) Subchapter J for Class I laser products at the date of manufacture.

In other countries, the drive is certified to conform to the requirements of IEC825 and EN60825 for Class 1 laser products.

DANGER

Do not open the optical disk drive unit: no user adjustments or serviceable parts are inside. Use of controls, adjustments, or the performance of procedures other than those specified might result in hazardous radiation exposure.

Package contents

The following items are included in this package. Match the items below with the items in your package. Some items may look different from the pictures.

LP 60

User's guide

Battery pack

power cord / AC adapter (120W)

Software installation CD

Modem cable

Note:
Battery is consumable, so its capacity and lifetime will gradually decrease.

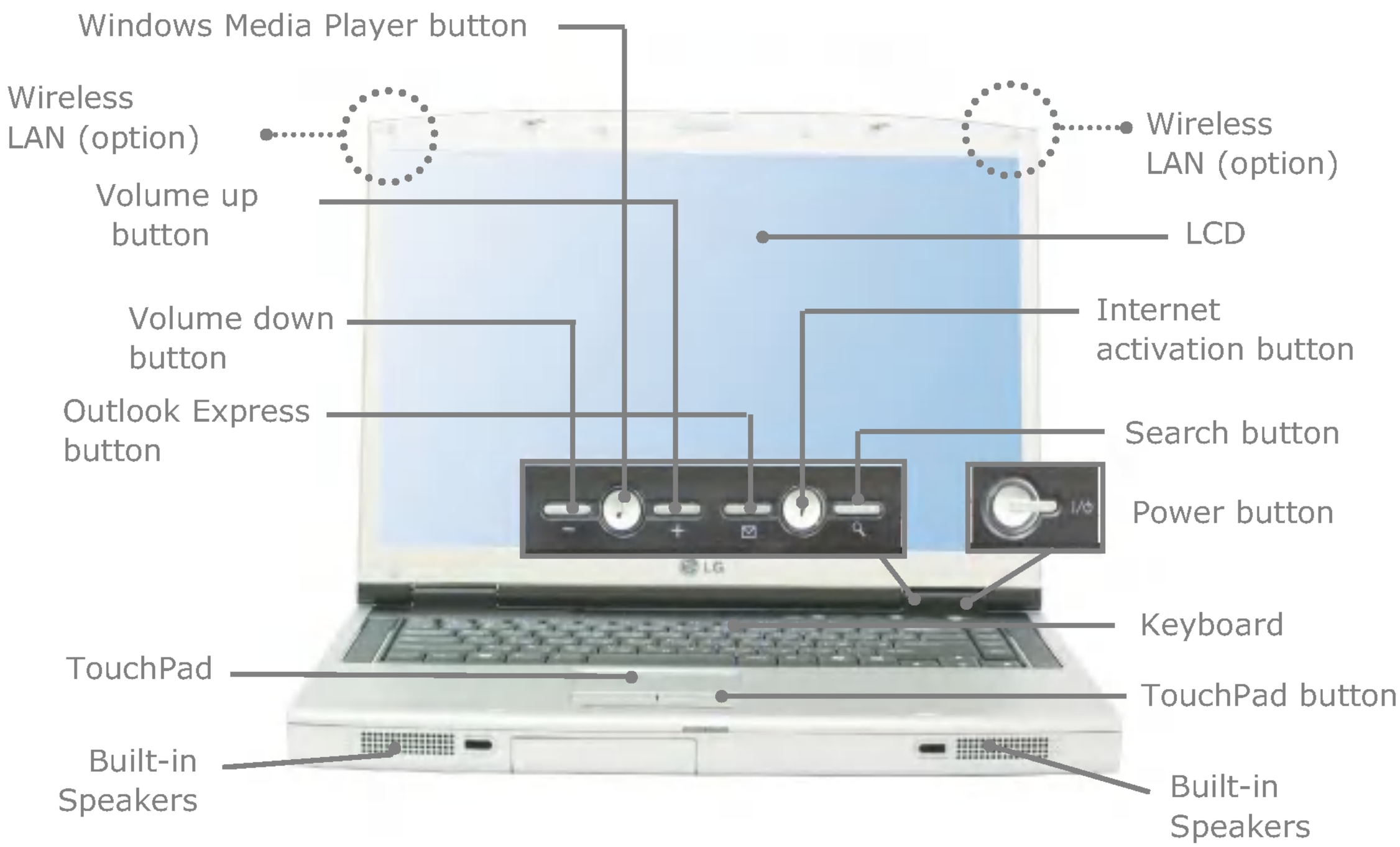
Caution

When cleaning your computer, use cleaning products manufactured specifically for computing equipment. Using abrasive chemicals, such as paint thinner, benzene, or alcohol, may damage your computer.

Components of Notebook PC

Learning the components and their functions helps you use the computer more efficiently.

Front view

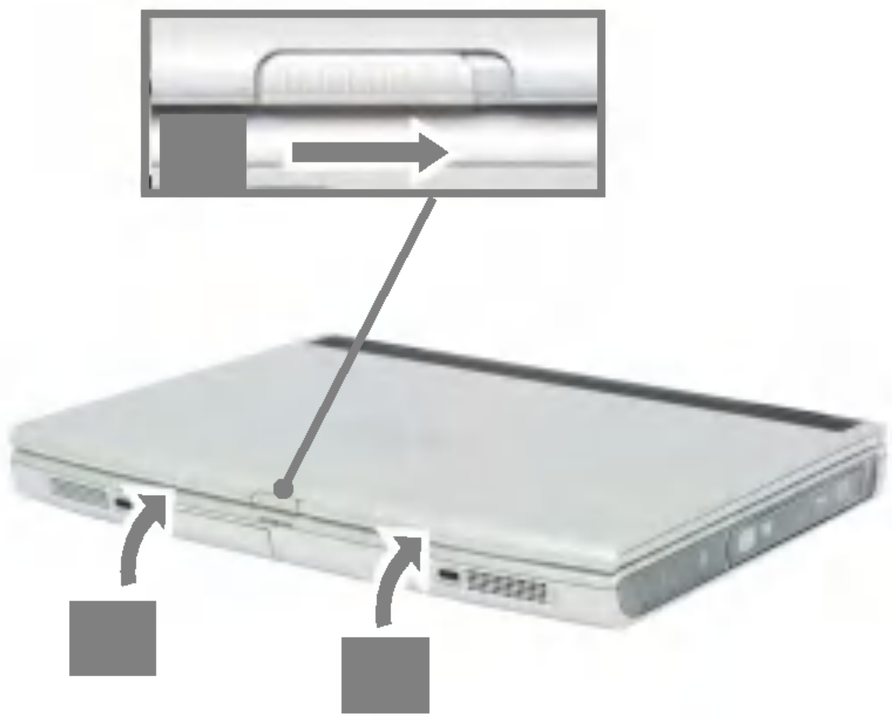


Note:
Pressing the Volume up and down buttons at the same time mutes the sound.

Opening and Closing LCD display of notebook PC

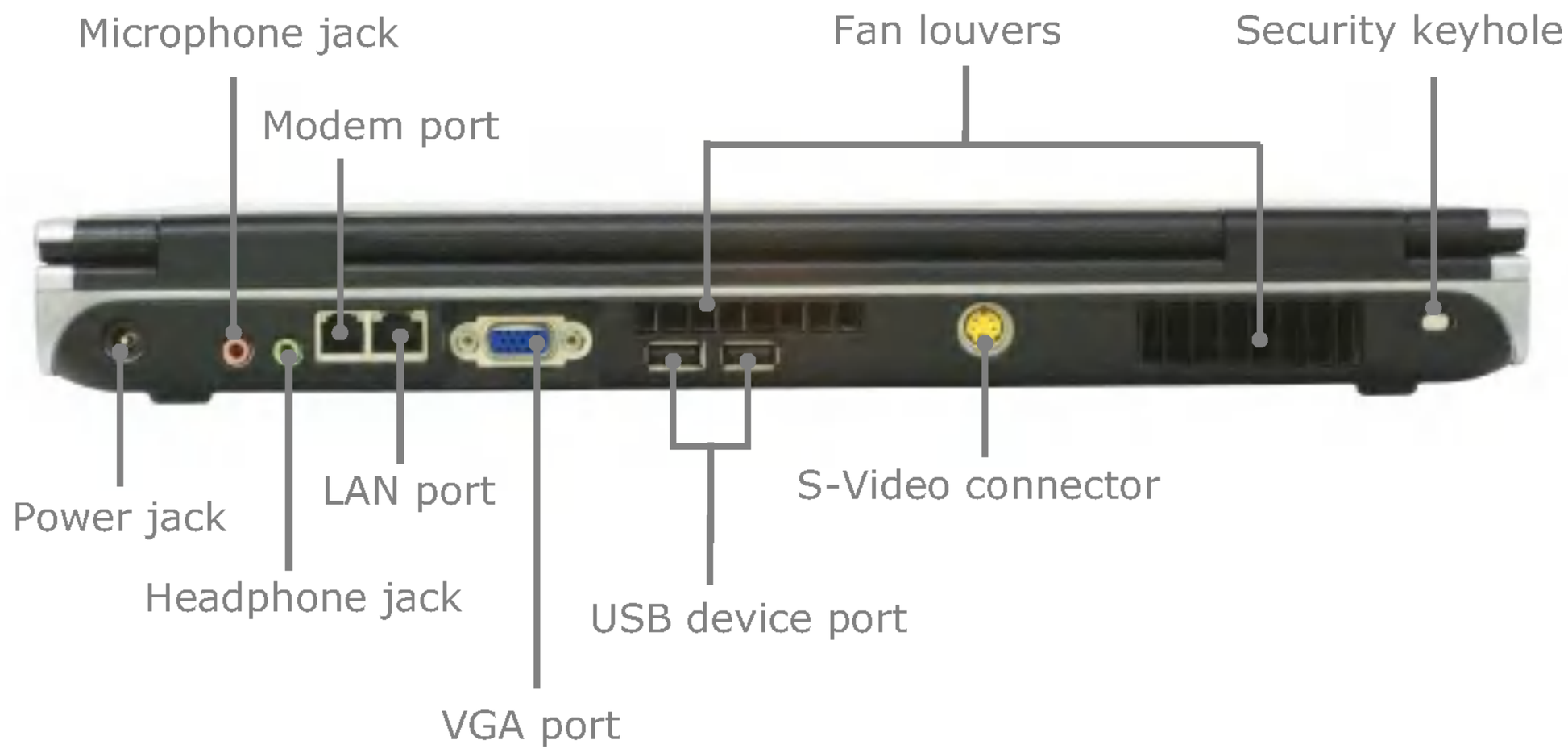
Push the latch button in the direction of the arrow **1**, and open the display panel as the direction of the arrow **2**.

Adjust an angle of the display for comfortable viewing. After using notebook PC, gently close display until you hear a click.



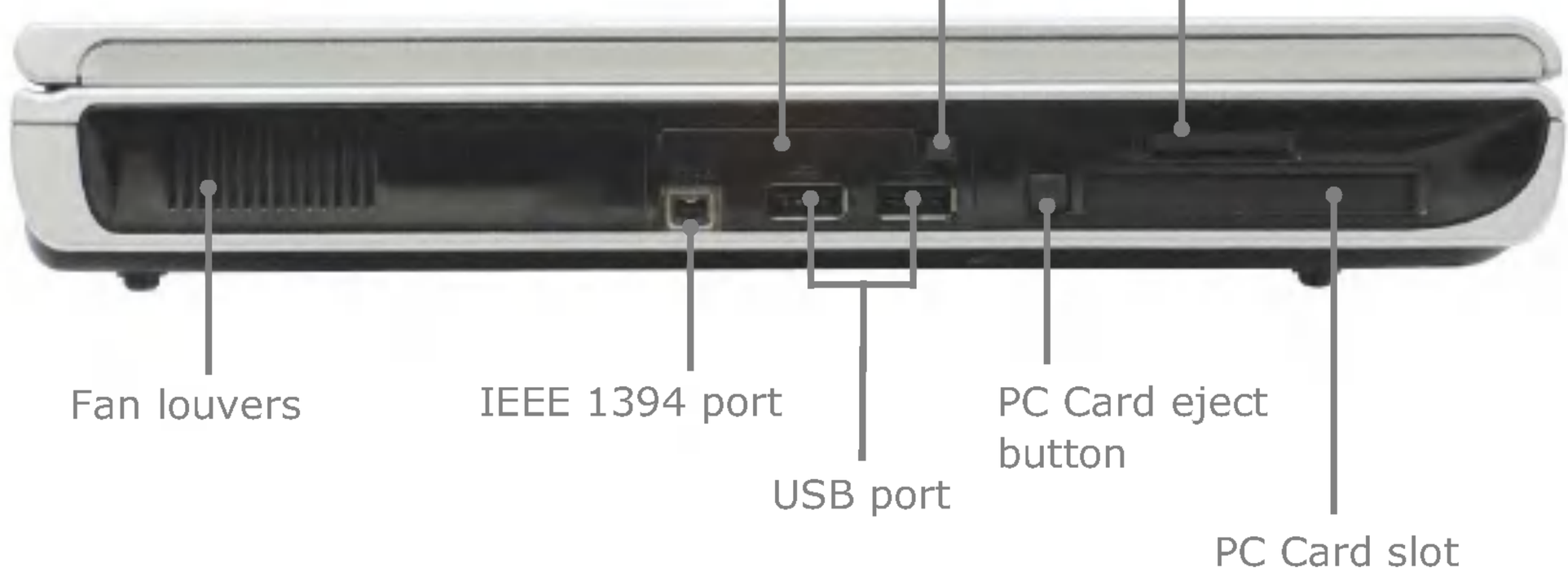
Rear view

Note: Images below may look different from the actual products.



Security keyhole: User can attach a separately purchased chain lock into the security keyhole which is to prevent a note book theft.

Left view



Right view

Emergency eject hole: Insert a thin and hard pin into this hole, and you can open the disc tray manually.

Note:

Your computer has a built-in DVD-ROM, DVD/CD-RW COMBO, DVD±RW Drive depending on your model. Speed of DVD-ROM, DVD/CD-RW COMBO, DVD±RW Drive depends on model.

Status indicators

1.AC Power indicater

2.Wireless LAN On indicater

3.Caps Lock:

Caps lock indicator is on when the Caps lock key is pressed. When this indicator is on, you can type capital letters without pressing the Shift key.

4.Num lock:

Num lock indicator is on when the combination of the Fn and Num lock key is pressed. When this indicator is on, you can use internal keypad. Num lock indicator can not be used when disabled from BIOS set up.

5.Drive in use:

Drive in use indicator is on when data is being written to or read from the hard disk or optical disk drive. Do not turn off the power when this indicator is on, data you have stored on your computer can be lost.

6.The Power On LED:

Below is how the LED would behave in different situations.

- Off: System is powered off, or in hibernation mode.
- On: System is powered by AC adapter or battery pack.
- Blinking: System is in standby mode.

7.The Battery Pack LED:

Below is how the LED would behave in different situations.

- On: Battery pack is being recharged.
- Blinking:
  Battery pack is consuming down to 10% level.
  Battery pack is waiting for recharge when battery temperature is too high after discharge.
  Battery pack error.
- Off: Battery pack is not under recharge.

This section describes how to use the basic features of your notebook PC. An AC adapter or battery pack is needed to supply power to your notebook PC. Read this section before using the notebook PC because it describes how to use the notebook PC step by step.

Using the battery pack

The battery pack must be fully charged before first time use.
(Refer to Page 33 "Using the AC adapter")

Caution

You must turn off the power before replacing the battery pack.
Use the battery pack that comes with your notebook PC only.

1. Turn the computer over so that the battery slot faces up.

2. Place the battery pack in the battery slot, and align the two protrusions on the battery pack with the two slits on the side of the battery slot.

3. Gently push the battery pack into the slot until it clicks. If you hear a click, the battery pack is inserted.
   Please lock the battery pack in place by sliding the latch on the battery pack in the direction shown below.
   If you don't lock the battery latch on the battery, the battery pack can come out from the slot.

4. Connect the AC adapter and open the LCD panel. Start charging the battery.

(Refer to Page 33 “Using the AC adapter”)

5. Check the battery status indicator.
   If the battery is fully charged, the indicator is turned off.
6. To remove the battery pack,
   (1) Unlock the left battery latch to the right until it clicks
   (2) Slide the right battery latch to the right and hold; then take the battery pack out of the slot.

Caution

When you are not using the computer for a long time, the battery pack can be self-discharged and damage to the notebook PC. Remove and store the battery pack at the cool place.

Note:

The battery pack has the following characteristics.

Self-discharge: The battery gradually loses its power over time without ever being used.

Periodic full discharge/charge: Frequent recharging of the battery pack can reduce the duration of the battery pack. Periodic performance of full discharge/charge will restore the capacity of the battery pack, in every 30 ~ 60 days. You should use the battery until its power is low; then fully charge the battery.

To use the battery pack safely and effectively,

1. Do not short-circuit the battery pack.
2. Keep the battery pack away from heat….
3. Store the battery pack at room temperature. (32 ~140 °F/0 ~ 60 °C)
4. Do not drop the battery pack into water.
5. Keep the battery pack out of reach of children.
6. Do not disassemble, crush, and puncture the battery pack.

Note:

Battery is consumable…, so its capacity and lifetime will gradually decrease.

Using the AC adapter

An AC adapter or battery pack is needed to supply power to your notebook PC. The AC adapter can be used with a 100~240V AC power source. Use only the AC adapter that comes with your computer. Using any other adapter may cause damage to your notebook PC. Using any other adaptor may cause damage to your notebook PC.

Note: When battery status indicator is on, the battery is charged.

1. Connecting the AC adapter to an AC outlet (100~240V)

Connect the power cord to the adapter, and then plug the other end into an AC outlet.

2. Connecting the AC adapter to the notebook PC.

Plug the adapter cable into the power jack.

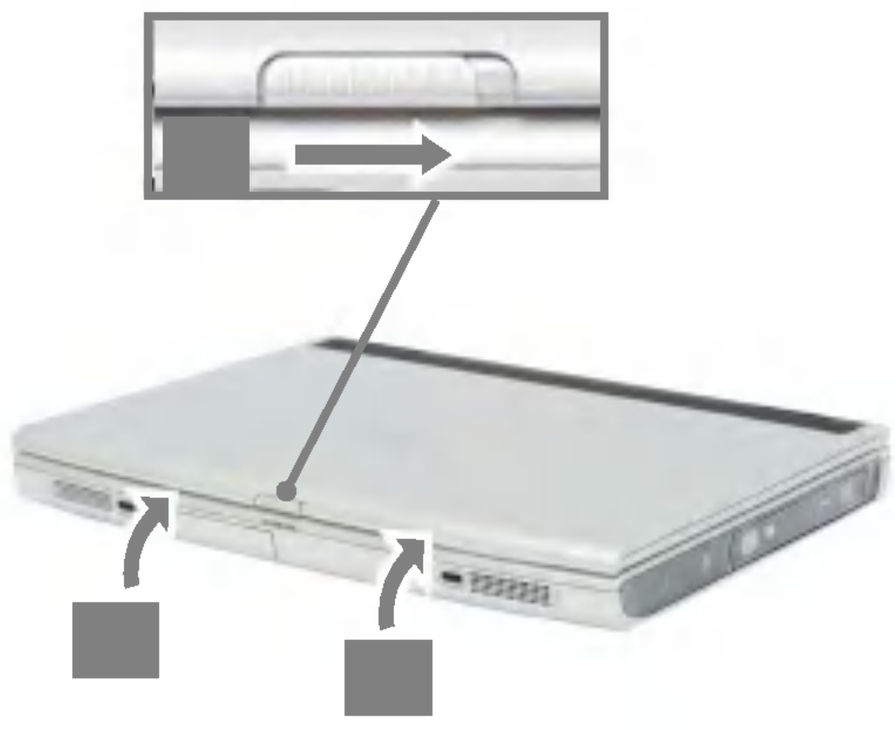
Warning

Do not overload an electrical outlet with connections to multiple devices.
Overloading an electrical outlet may result in fire or electric shock.

Do not touch the power cord or plug with wet hands. There is the risk of electric shock.

3. Opening and positioning the LCD display.

Slide the battery latch button in the direction of the arrow**1**, and open the display panel in the direction of the arrow **2**.
Adjust an angle of the display panel for comfortable use.



Power On

Press the power button to turn on the computer.

Note:
The power switch and volume up/down buttons are coated for preventing static electricity purposes. Do not put a liquid stuff on the notebook PC. It may result in electric shock.

Registration Window

Before turning on the computer, make sure the AC adaptor is connected and the battery is charged.

Turning on the computer

1. Slide the latch button and open the display panel. (refer to Page 24)

2. Press the power switch.

3. Pressing the power switch starts the self-diagnostic procedures; then Windows(R) XP startup screen is displayed.
4. If you turn the power on the computer for the first time, you have to register your copy of Windows XP. The registration process may differ depending on the model, but the difference does not affect the use of your computer.
5. In a moment, a dialogue box, saying "Welcome to Microsoft Windows" appears on the screen. Then Click [Next].

6. "End User License Agreement" message appears on the screen. Make sure to read the agreement, select "Yes, I accept," and click [Next].

7. "What's your computer's name?" message appears on the screen. Type the name and description for your computer, and click [Next].

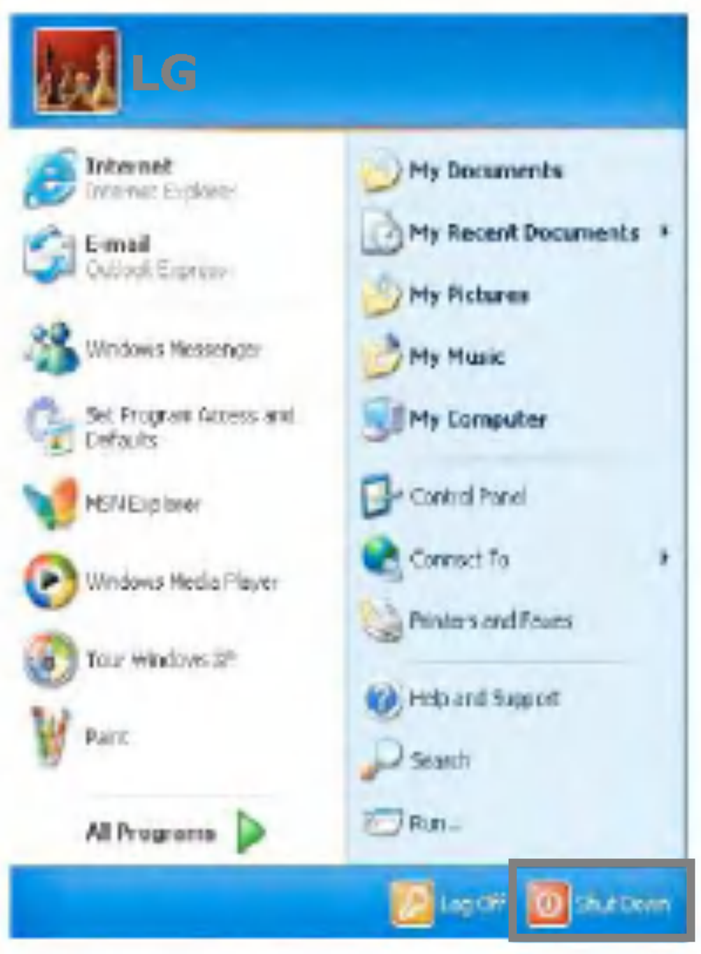
8. "Ready to register with Microsoft?" message appears on the screen. Select "No, not at this time" and click [Next].

9. "Who will use this computer?" message appears on the screen. Type the names of the users and click [Next].

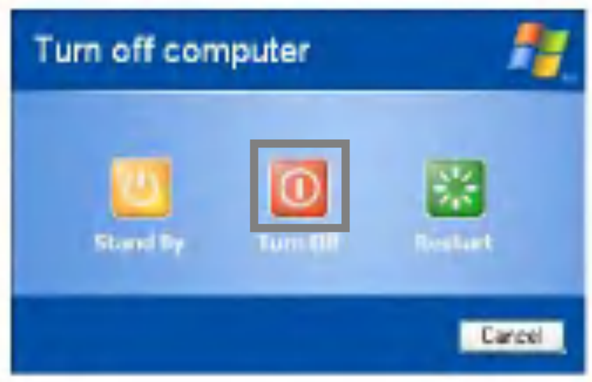
10. "Thank you!" message appears on the screen. Click [Finish] to complete the registration process.

Turning off the computer

Quit all running applications; click **[Start]** and choose **[Turn off computer]** from the start up menu.



In the Turn off computer window, choose Turn off.



The computer is turned off automatically. Close the LCD dispay until it clicks.

Caution

If the Drive in use indicator is on, do not turn off the computer, as doing so may damage the data being read from or written to the drive.

Warning

If Windows does not shut down properly, press and hold the power switch for more than 5 seconds; the system will shut down.
Turning off the computer this way may damage the system. It is recommended that you always turn off the computer by choosing Shut down from the Start menu.

If the computer does not shut down properly while running applications, the data in the hard disk drive may be damaged.

If your computer does not respond while runing appications, press the Ctrl+Alt+Delete combination to start the Task Manager; then quit the program or restart the system. If Windows or program file is damaged by shutting down the system incorrectly, reinstall the program. The user is responsible for the loss of data caused by incorrect use of the computer.

Using Windows XP

Windows XP is new, brilliant and easy-to-use. Background and title bar have been rearranged concisely, and it became easier to access the application programs from the start menu. Also, it allows users with more diverse options to choose from when decorating desktop's appearance.

Overview

Windows XP is an operating system that runs a computer. Learning the basics features in Windows is recommended to utilize a computer effectively. Click **[Start] -> [Tour Windows XP]** to explore the features and tools available in Windows XP.

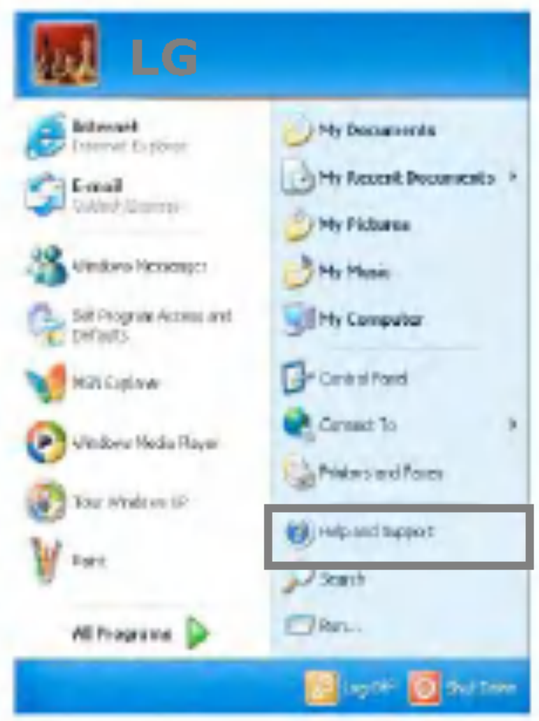
Window Buttons

1. Minimize
2. Maximize
3. Close

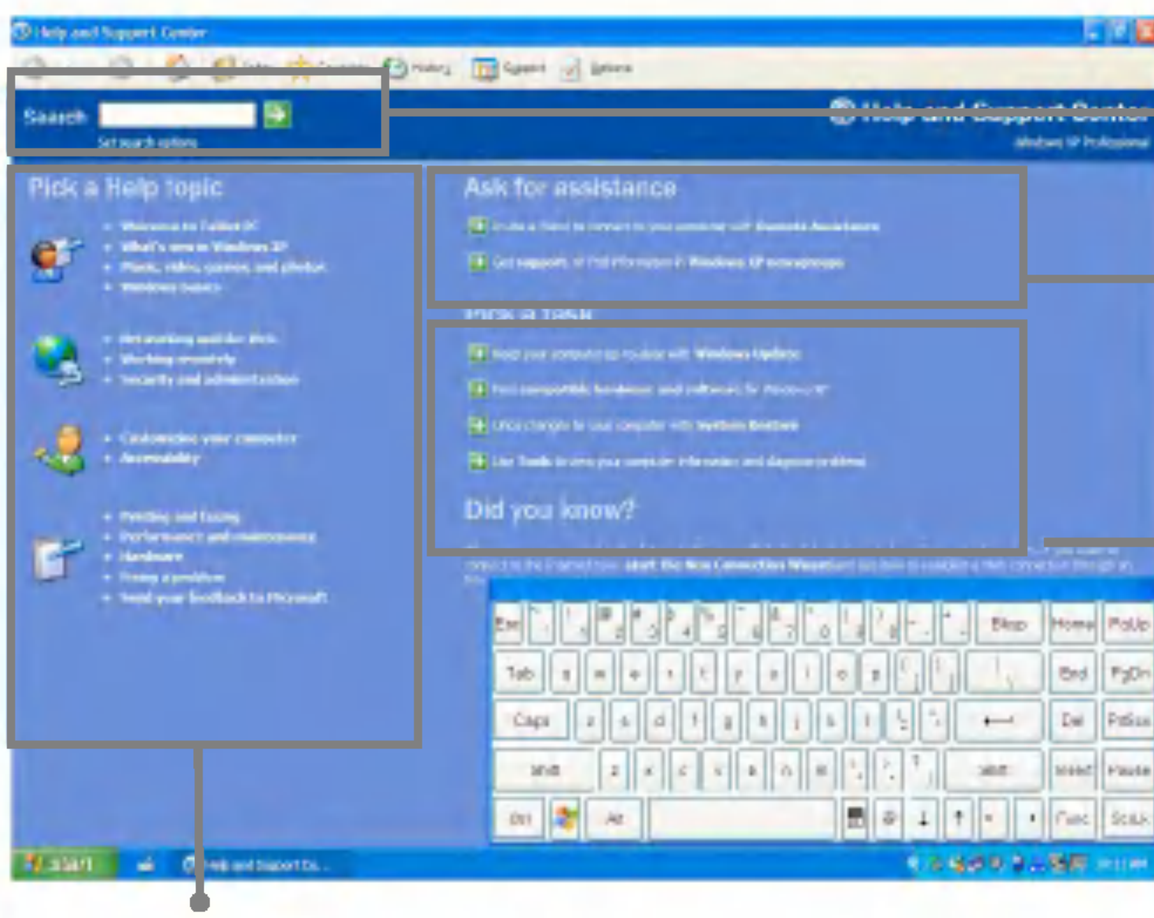
Help and Support

Click **[Help and Support]** to learn how to solve problems you may encounter while using the computer.

Click [Start] -> [Help and Support].



The following window appears.



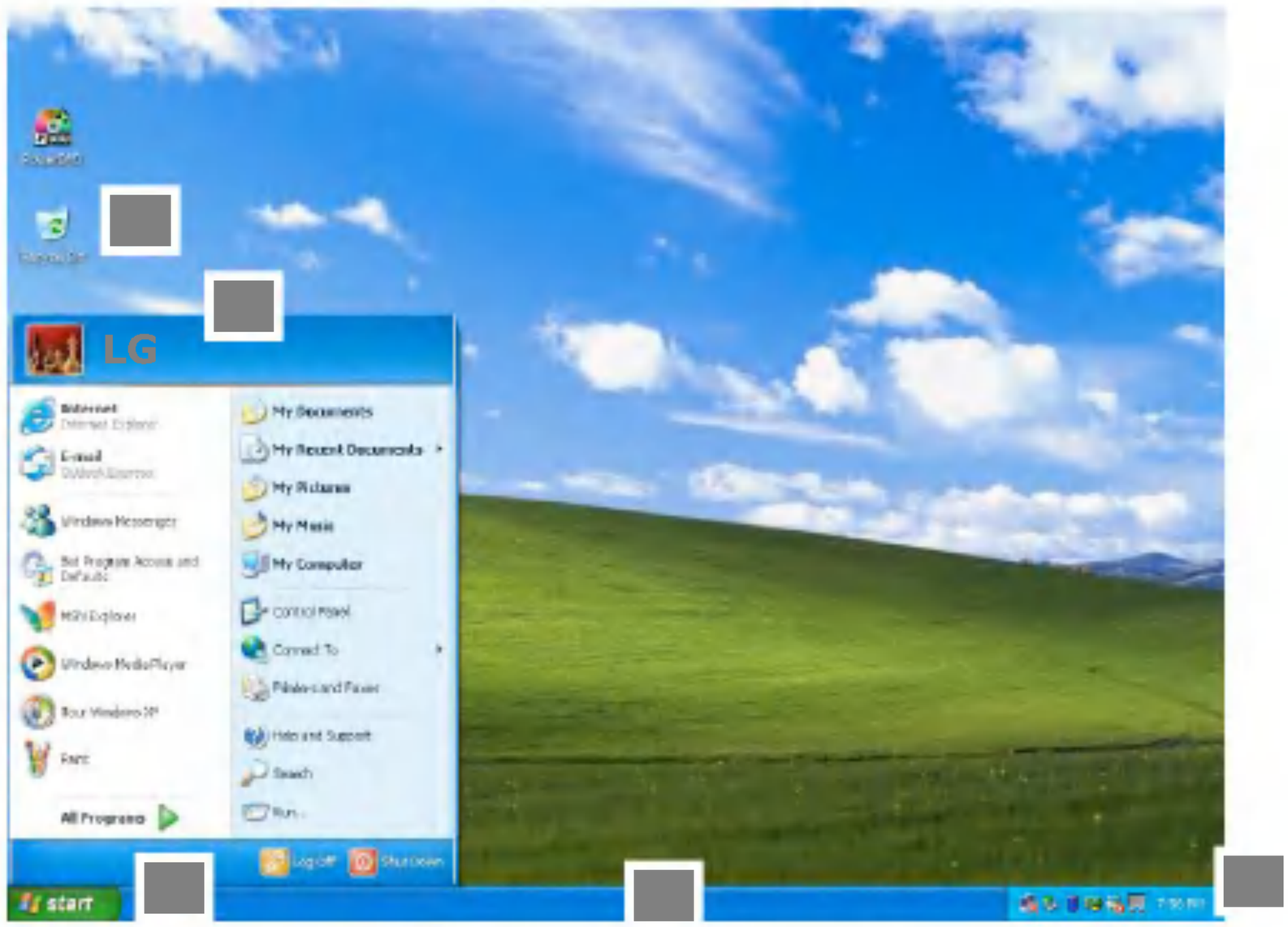
You can search for useful Help and Support information.

You can connect to the Internet and ask for assistance online.

You can setup and configure your computer to personalize your computing environment

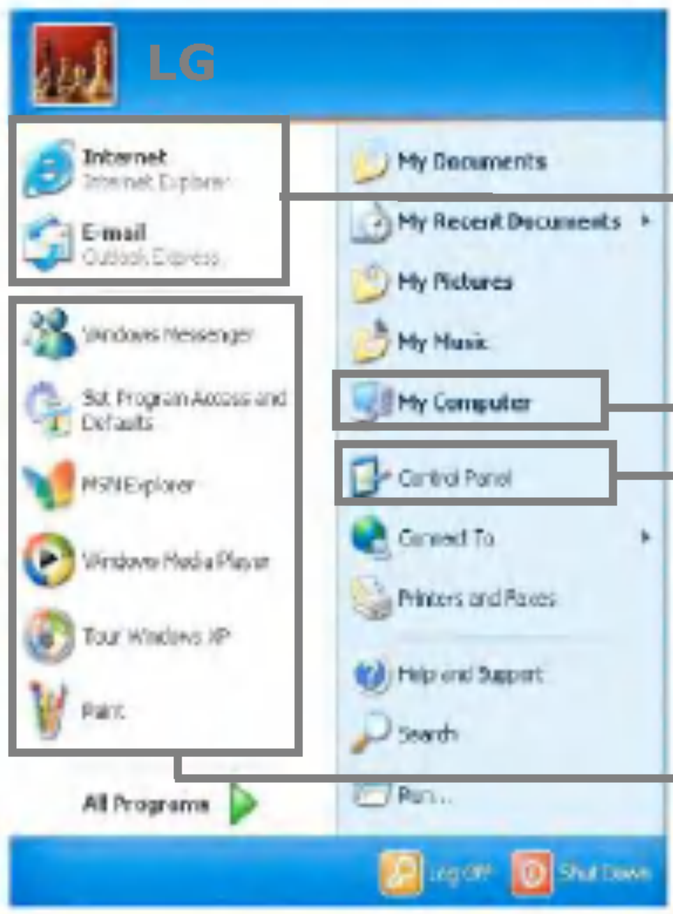
Click to learn the features and troubleshooting information

Windows XP desktop



1. **[Start] button**
   Click **[Start]** button to open the **[Start]** menu. Click **[All Programs]** to open the list of programs installed in the computer.
2. **[Start] menu**
   [Start menu] shows everything you need to start working in the Windows XP environment.
3. **Taskbar**
   Taskbar shows programs that are currently open and running.
4. **Taskbar icons and clock**
   Taskbar icons show and let you configure ongoing activities such as battery power status, display properties, LAN settings, etc.
5. **Recycle Bin**
   Put your unused items and files in the Recycle Bin. Right-click the Recycle Bin and select **[Empty Recycle Bin]** to permanently delete the items inside the Recycle Bin.

Start menu



Pinned items

My computer shows the drive and network information for your computer

Control Panel lets you change the settings in your computer

Recently used items

Changing the look of the Start menu

Right click **[Start]** button and select **[Properties]**.
In the Start menu tab, choose from either Start menu or Classic Start menu.
Click **[OK]** to apply the new setting.

Changing the pinned items in the Start menu

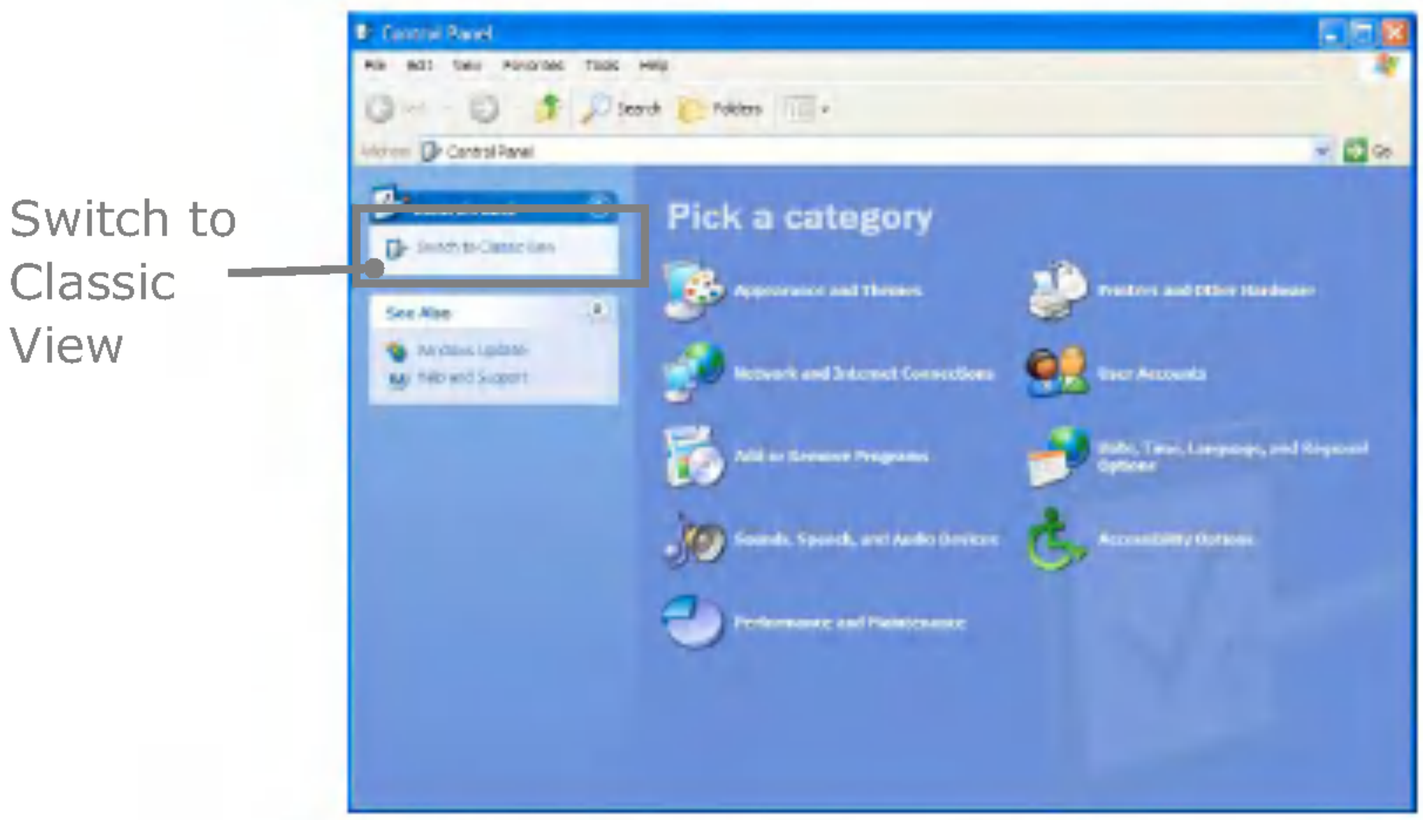
Right-click the item you want to pin it to the Start menu.
Select **[Pin To Start Menu]**.
The item is pinned at the top of the Start menu.

Showing the recently used items on the Start menu

Right-click on **[Start]** button and click **[Properties]**.
In **[Start Menu]** tab, select **[Start menu]** and click **[Customize]**.
In **[Advanced]** tab, check **[List my most recently opened documents]** and click **[OK]**.
In Taskbar and Start Menu Properties window, click **[Apply]->[OK]**.
If you click **[Start]** button the next time, recently used items appear on the Start Menu.

Control Panel

The Windows XP Control Panel can display items in either Category View or Classic View.



Category View

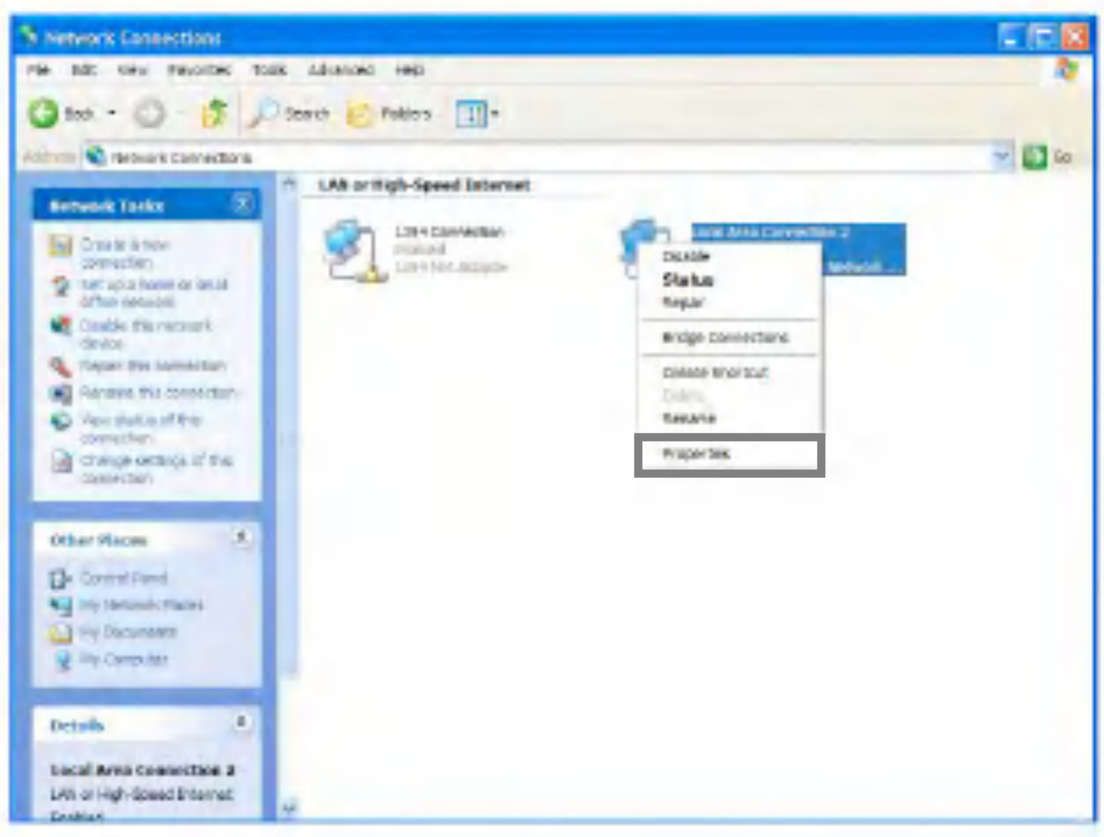
Classic View

Setting up Local Area Network (LAN) connections

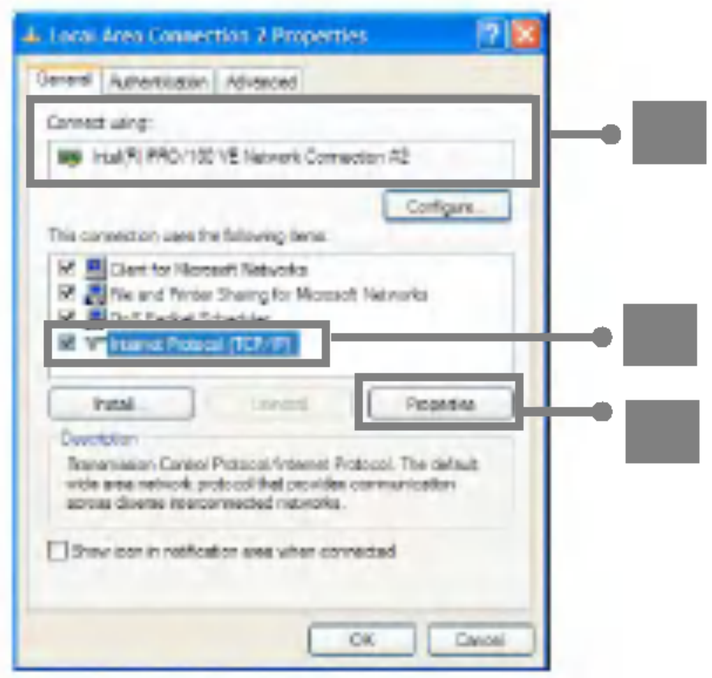
Local Area Network (LAN) connection provides high-speed network connection for your home or company. When using Wireless LAN, refer to “Using Wireless LAN” (page 60).

Attach a LAN cable to the Ethernet (LAN) connector.
Click [Start] -> [Control Panel] -> [Switch to Classic View] -> [Network Connections].

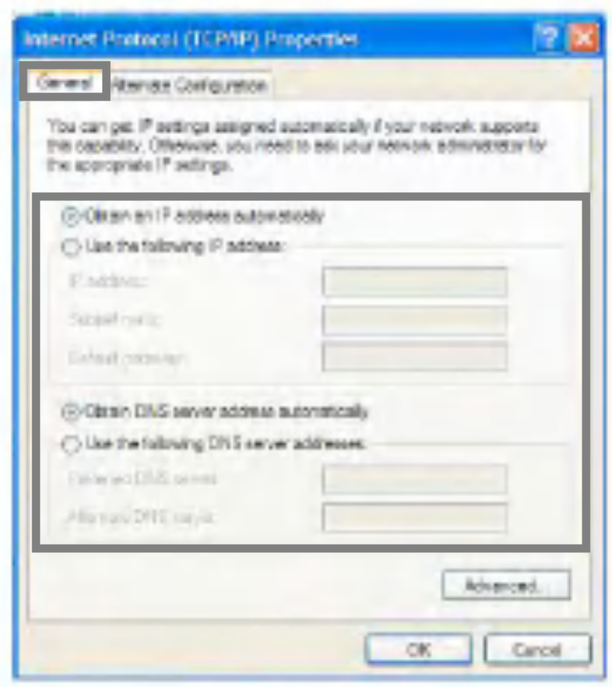
Right-click a Local Area Connection and select **[Properties].**



If the following window appears, click **[General]** tab and **1.** Check if Broadcom 440x Integrated Fast Ethernet Controller is installed in the computer **2.** Then, check Internet Protocol, and **3.** Click on **[Properties]**



Click on [General] tab, and Select [Obtain an IP address automatically]



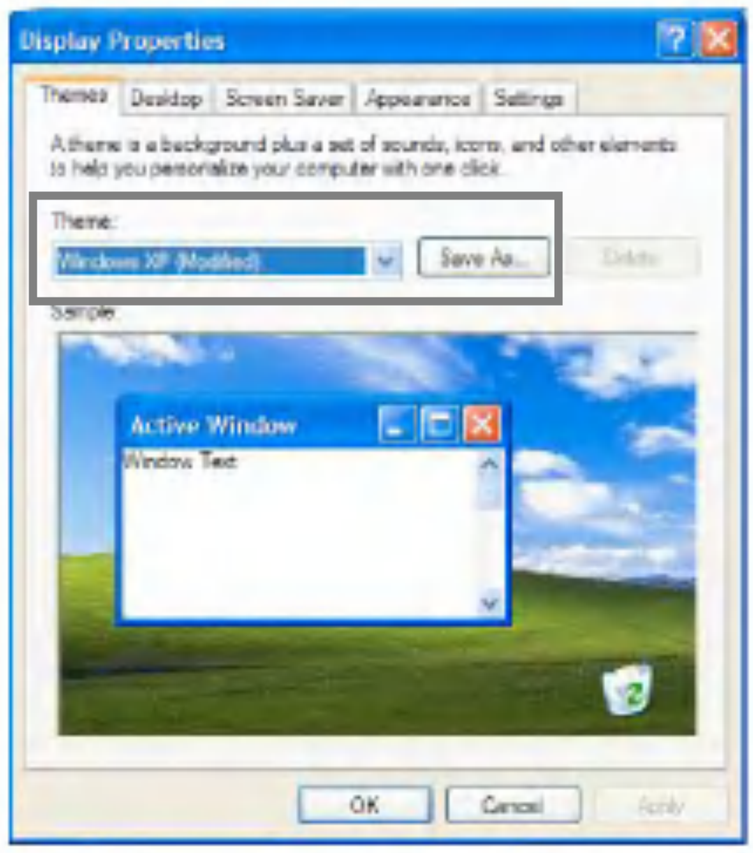
Click **[Ok]** when Internet protocol (TCP/IP) setting is completed.

Note:
Ask your network administrator for the appropriate IP settings.
When using LAN or Wireless LAN, refer to "Using IP Operator" (page 61).
IP Operator is useful to access to network everywhere when you use notebook PC.

Changing the Themes and Desktop background

Using the Windows Classic Theme

Click **[Start]->[Control Panel]->[Switch to Classic View]->[Display].**
Click **[Themes]** tab
Select **[Windows Classic]** from the **[Theme]** drop down menu.



Using a different theme

1. Click [Start] -> [Control Panel] -> [Switch to Classic View] -> [Display].
2. Click **[Themes]** tab
3. Select another theme from the **[Theme]** drop down menu.

Note:
In Appearance tab, you can click [Advanced] button and change the color scheme, font size, and windows and button styles.
In Themes tab, you can change the overall appearance of the desktop.
If there are more than one user using the computer, each user can apply different theme and desktop appearances.

Changing the desktop background

Click **[Start]->[Control Panel]->[Switch to Classic View]->[Display].**

Click **[Desktop]** tab. (OR you can right click on the mouse while in desktop background. When a short cut menu pops up, choose **[Properties]**

Scroll down the **[Background]** drop down menu and select an image for the background. You can also click **[Browse]** button and select an image you have saved.

Setting the Screen Saver

Click **[Start]->[Control Panel]->[Switch to Classic View]->[Display].**

Click **[Screen Saver]** tab.

Select the idle time before activating the Screen Saver from **[Wait]** drop down menu. Check **[On resume, password protect]** to protect the computer from unauthorized users.

Taskbar

Taskbar displays programs and files that are currently open. If there are many programs running on the computer, the Taskbar group together files from the same program to prevent taskbar icons from cluttering up the Taskbar.

Desktop cleanup

Desktop Cleanup Wizard removes unused desktop items to a folder. The Desktop Cleanup Wizard runs every 60 days but you can also run it manually.

1. Click **[Start]->[Control Panel]->[Switch to Classic view] -> [Display].**
2. Click **[Desktop]** tab.
3. Click **[Customize Desktop] -> [Clean Desktop Now]** button.

Using the Power Options

Windows XP uses its own power-saving program to manage the battery power.

Click [Start] -> [Control Panel] -> [Switch to Classic View].
Double-click [Power Options].

In Power Options Properties window, change the settings best suited for your computing environment.

Power Options Properties

Click [Power Schemes] tab.
Drop down the menu and select **[Portable/Laptop]** to set notebook PC with the appropriate power schemes. This includes detailed timeline for **[Turn off monitor]**, **[Turn off hard disks]**, **[System standby]**, and **[System hibernates]**.

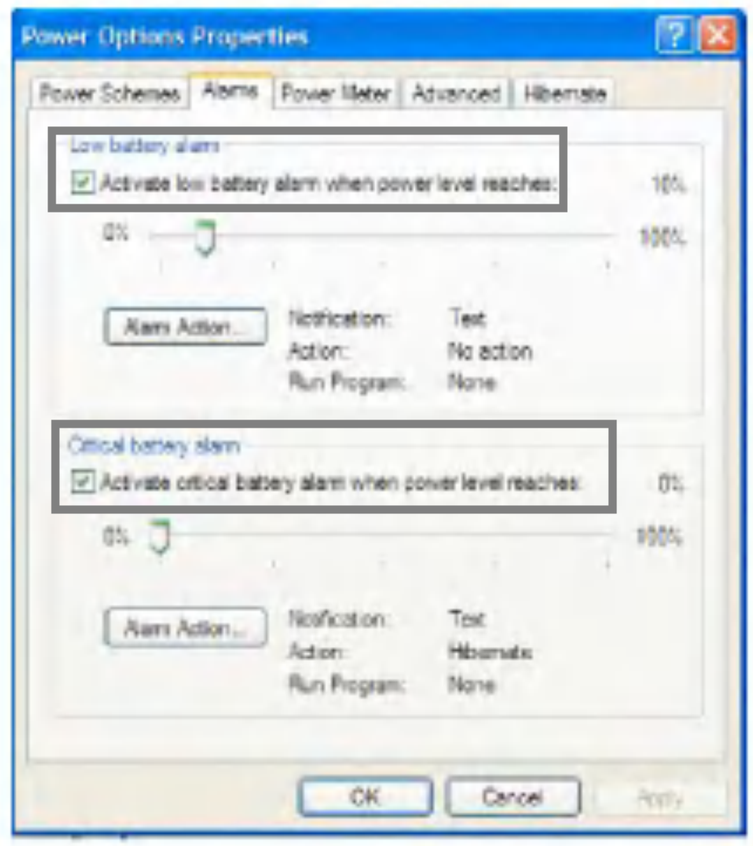
Note:
If the computer enters System standby mode, the hard disk is turned off to conserve the battery power.
In System standby mode, you cannot save your work. Be sure to save your work before entering System standby mode.
When the computer enters System hibernation, the computer saves all your work in the hard disk and turns off the computer.

Caution

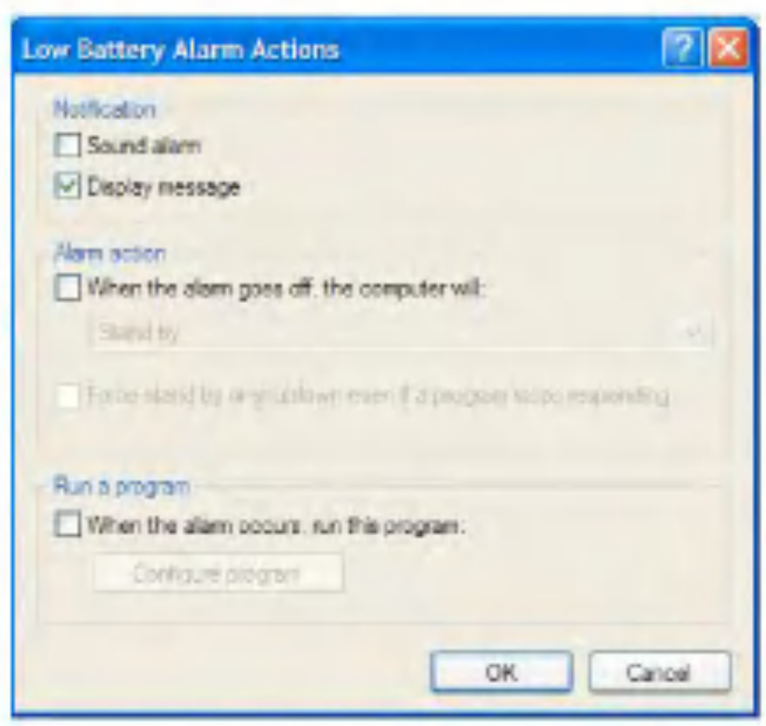
If the computer enters System standby or hibernation mode while playing a computer game, a serious error may occur. Be sure to quit the computer game before entering a power-saving mode.

Power Options Properties

Click **[Alarms]** tab. Check **[Low battery alarm]** and **[Critical battery alarm]**, and move the sliders to set the power level to activate low battery alarm and critical battery alarm.

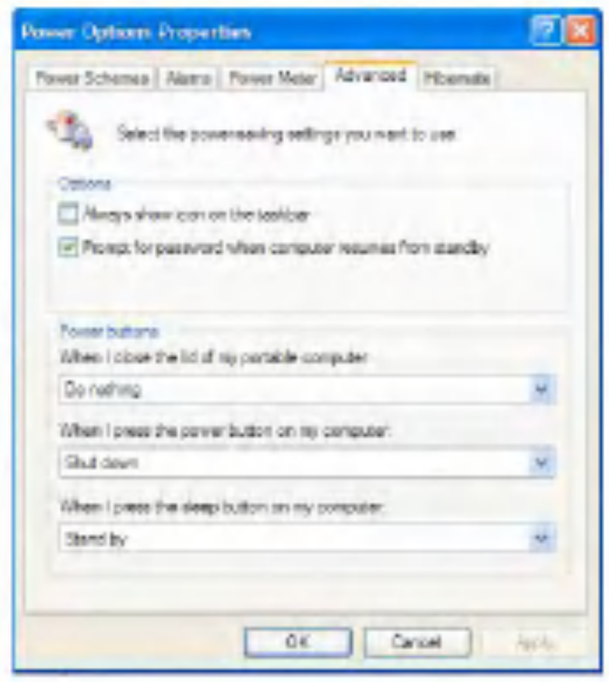


You can be notified with Sound alarm or Display message. You can also set the alarm action which automatically puts the computer into System standby mode or System hibernation mode. You can also enable the computer automatically run a specific program when the alarm goes off.



Advanced tab

In Options, you can set the computer to prompt for password when computer resumes from standby. You can also set the computer to enter a power-saving mode when closing the display panel. By pressing the combination of Fn+F4, your computer enters a power saving mode, leaving the display panel open.

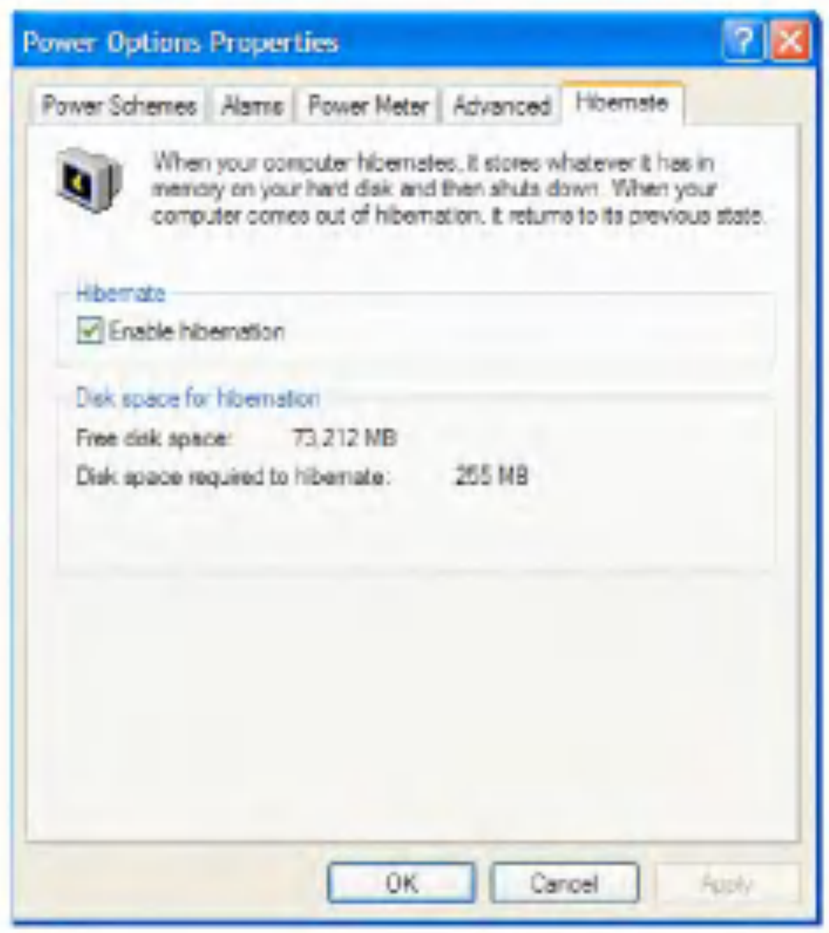


Power Meter

Click the Power Meter icon on the Taskbar to check the power level of your computer.

System Hibernation

In Hibernate tab, you can enable or disable System hibernation mode and check the disk space needed for hibernation.



Caution

Do not remove the battery pack when the AC adapter is not connected to the computer.

If you keep using the computer while low on the battery power, you may lose the data when the battery power goes out. If you are notified of low battery power, save your data and connect the AC adapter, or turn off the computer and change the battery pack.

Attaching external devices

Attaching a USB device

USB mouse (not included)

You can use keyboard, hub, digital camera and other devices that support USB.

Attaching a television using an S-Video port

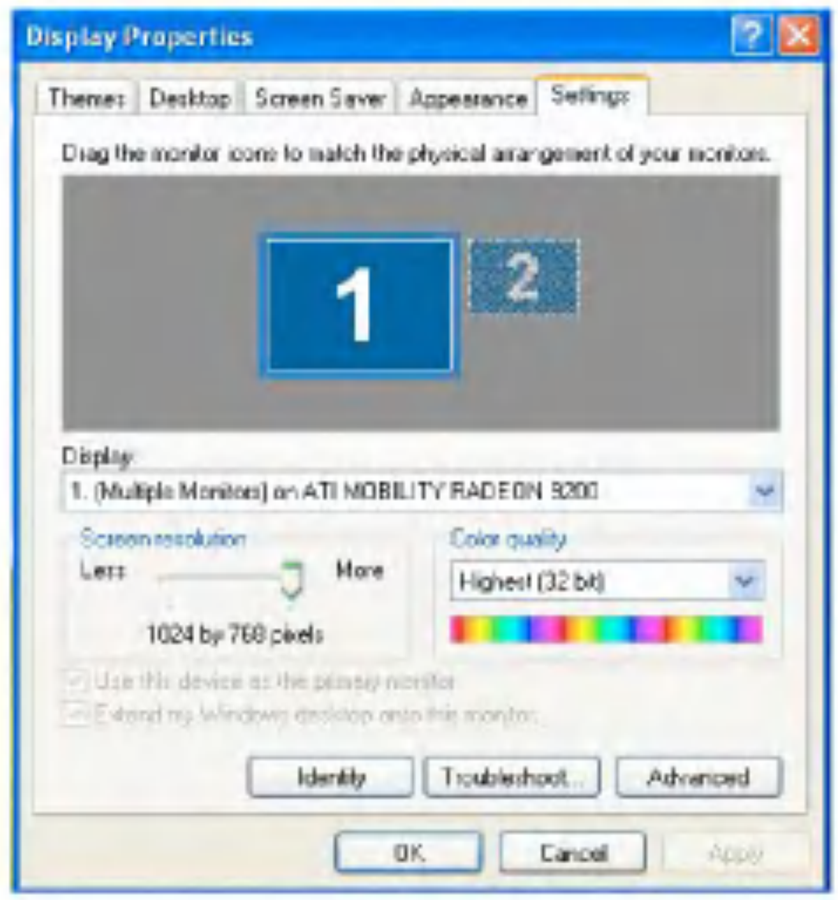
1. Attach the S-Video cable from a TV to the S-Video connector on the computer

Connecting to system

Connecting to TV

(Works only with TV that has S-Video port)

2. Click **[Start]->[Control Panel] ->[Switch to Classic View]-> [Display] -> [Settings] tab -> [Advanced]**.



3. In **[Display]**tab, select **TV** as the main display

4. You can also switch the main display from the external monitor to LCD by pressing the combination of Fn+F7

Note: You cannot switch the main display while playing a game. You cannot display a movie or game on a TV and LCD at the same time.

Attaching an external monitor

Note: Turn off the computer before attaching an external monitor.

External monitor
(not included)

Monitor toggle function (switch the monitor by short-cut keys)
After install the external monitor to the notebook PC, use Fn + F7 to switch the main monitor to LCD only, monitor only, and LCD + monitor both, in sequence.

Attaching an IEEE 1394 device

You can connect external hard disk drive, external CD-RW, digital camera, video camcorder and other devices that support IEEE1394.

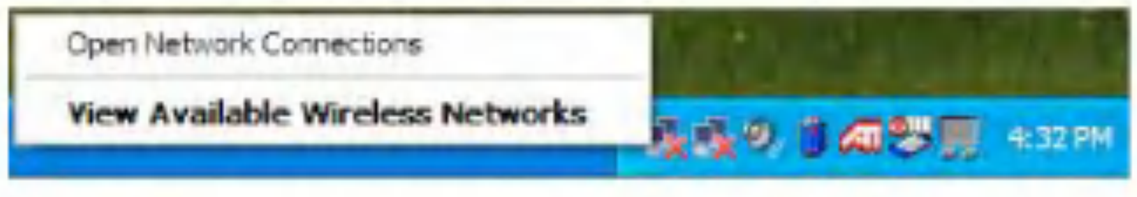
Using Wireless LAN

You can use Wireless LAN to connect to the network and use the Internet in your home and office. You can share files and folders over the network without the attaching network cables to the computer. It is built-in device in your computer.

Note:
Wireless LAN is not offered by each product
When using LAN or Wireless LAN, refer to "Using IP Operator" (page 61).
IP Operator is useful to access to network everywhere when you use notebook PC.

Connecting and using the wireless network

Right-click the Wireless network icon on the Taskbar and select **[View available wireless network]**.



Select AP (Access Point) you want to connect to and type necessary information. Click **[Connect]**. If you are having difficulty connecting to a network, click **[Advanced]**.

If you place the mouse pointer on the Wireless network icon on the Taskbar, you can see the status of the wireless network.

Using IP Operator

IP Operator is useful to access to network everywhere when you use notebook PC. User can access to network at many places (Home, Office, and Vendor etc.) by saving and modifying the network environment (IP address, Domain, Workgroup). For more detailed information, refer to **[IP Operator]**.

Double click **[IP Operator]** icon on the Taskbar.

If the following window appears, select LAN or High-Speed Internet at the drop down menu and give a name to your computer.

Type the name that is appropriate at **[Profile List]** after making a decision whether a user is belonging to **[Domain]**, or a member of **[Work Group]**.

Choose one of setting options as follows.
When setting [Obtain an IP address automatically] option,

- IP address, Subnet mask, Default Gateway windows are automatically changed as grey.
When setting [Use the following IP address] option
Insert IP address, Subnet mask, Default Gateway window. Then, insert DNS Server.
Click the **[Profile Save]** button when finishing inserting items in **[Profile List]**

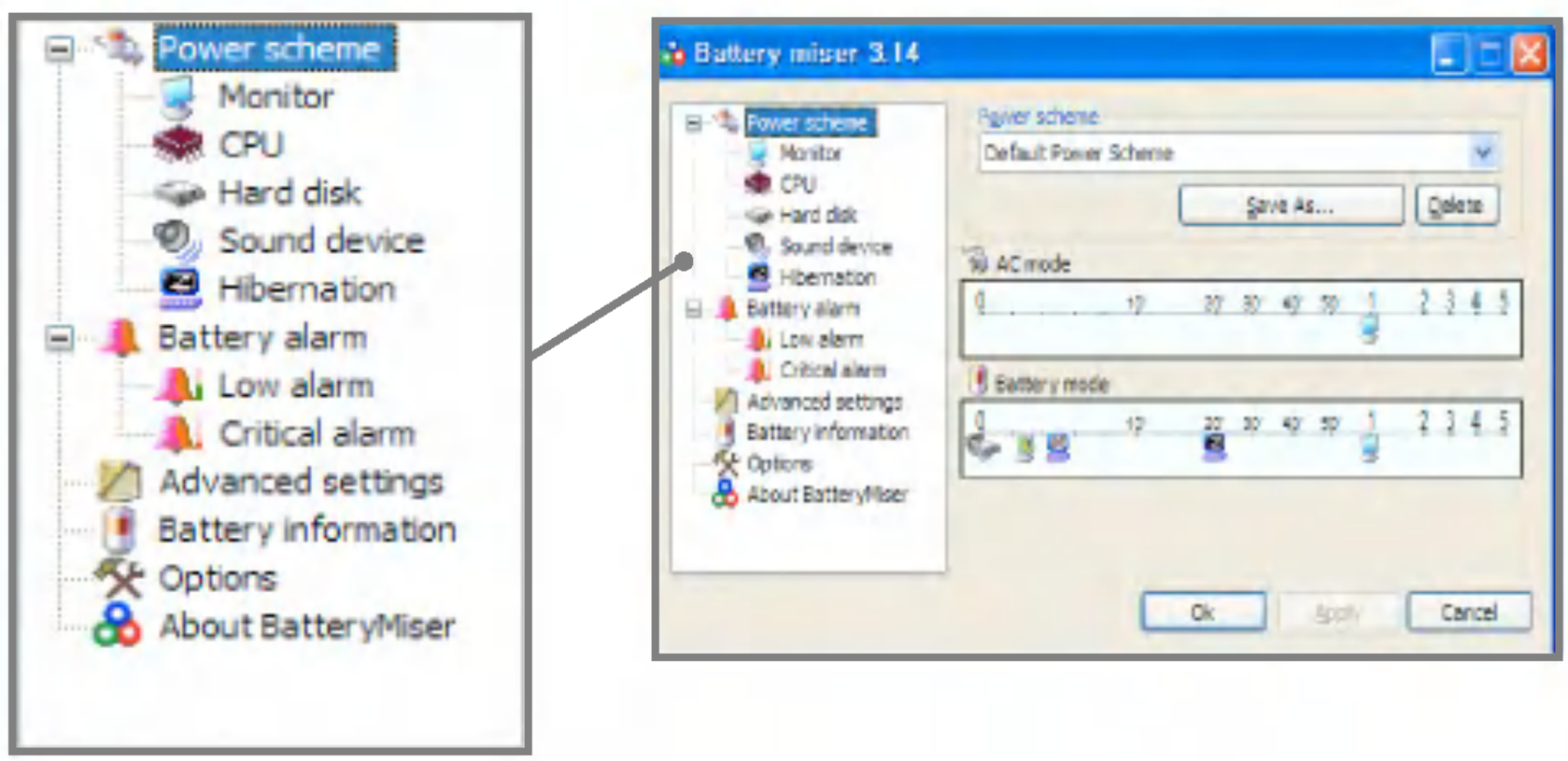
Note:
When setting [Obtaining an IP address automatically] option, it is unavailable to insert IP address, Subnet masks, and Default gateway.
When pressing **[Profile Apply]**, no items appear at **[Profile List]**.
If a user needs to apply the specific item, select one of items from [Profile List], and then click [Profile Apply].

Using Battery Miser

Battery Miser is an application program to manage energy saving function that makes the maximum battery life of your notebook computer. When using Battery Miser, it is available to use both original power management functions of Windows and the advanced power management functions of battery miser. For more detailed information, refer to **[About Battery Miser]** in the following screen image.

Double click **[Battery Miser]** icon on Desktop System tray.

Battery Miser main screen appears as below.



Power scheme:
Manages the power consumption of computer.

Battery alarm:
User can define the option how the battery alarm works.

Note:
When pressing the keys Fn + F9, monitor is always on
When pressing one more, it return to the original set point.

Using the keyboard

The keyboard is used for entering text and commands in the computer.

About the keyboard

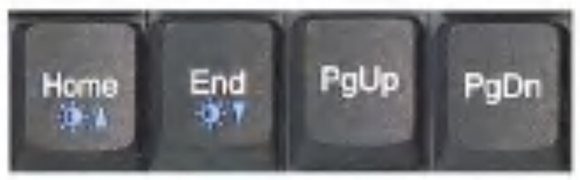
The keyboard is composed of character, number, and other special function keys.

Function keys: Function keys enable you to perform different operations depending on the operating system and application program you use.

Hot keys: Hot keys (shortcuts) are used in conjunction with Fn key to provide shortcuts for some of the predefined operations, such as entering power-saving mode.

Cursor control keys: You can move the cursor in the direction of the arrows.

Editing keys: You can move the cursor to the beginning or end of the current line, or up and down the screen.



Character and number keys: consist of character keys, number keys, special character keys, and spacebar. Spacebar is used for creating a space between characters.

Embedded numeric keys: You can press the combination of **Fn** and **ScrLk** keys to enable the embedded numeric keypad. **Num Lock** indicator lights up and enables you to use the embedded numeric keypad shown below. You can press the combination of **Fn** and **ScrLk** keys again to disable the embedded numeric keys. (To use the numeric keys, you must set the **Advanced** -> **Internal Keypad** setting to **Enabled** in the **BIOS Setup Utility**.)

Caution

Do not spill water, juice, coffee, etc on the keyboard as it may damage the computer and cause an electric shock.

Note:
In the middle of entering characters, if numbers are entered instead of characters, press the combination of **Shift** and **ScrLk** to disable the embedded numeric keys.

Modifier and special function keys

Shift key: Hold **Shift** key down and press another key to enter the upper case letter for the key.

Caps Lock key: Press **Caps Lock** key to lock the keyboard in the upper case position. When the Caps Lock indicator lights up, you can press another key in combination with **Shift** to enter the lower case letter for the key.

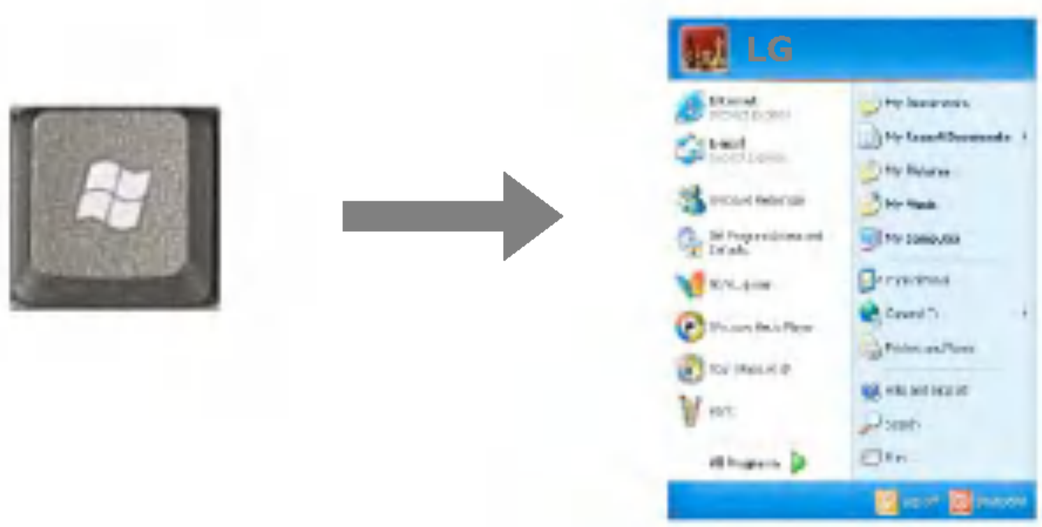
Esc key: Use **Esc** key to quit programs or cancel an operation in the program.

PrtSc (Print Screen) key: Press **PrtSc** key to take the snapshot of the entire area visible on your screen and store it in the clipboard.

Enter key: Press **Enter** key to enter a command or to end a line.

Shortcut menu key: Press **Shortcut menu** key to view shortcuts for the current program. (**Shortcut menu** key works the same as the right-clicking the mouse button)

7. Windows(R) key: Press **Windows** key to view the **Start** menu.



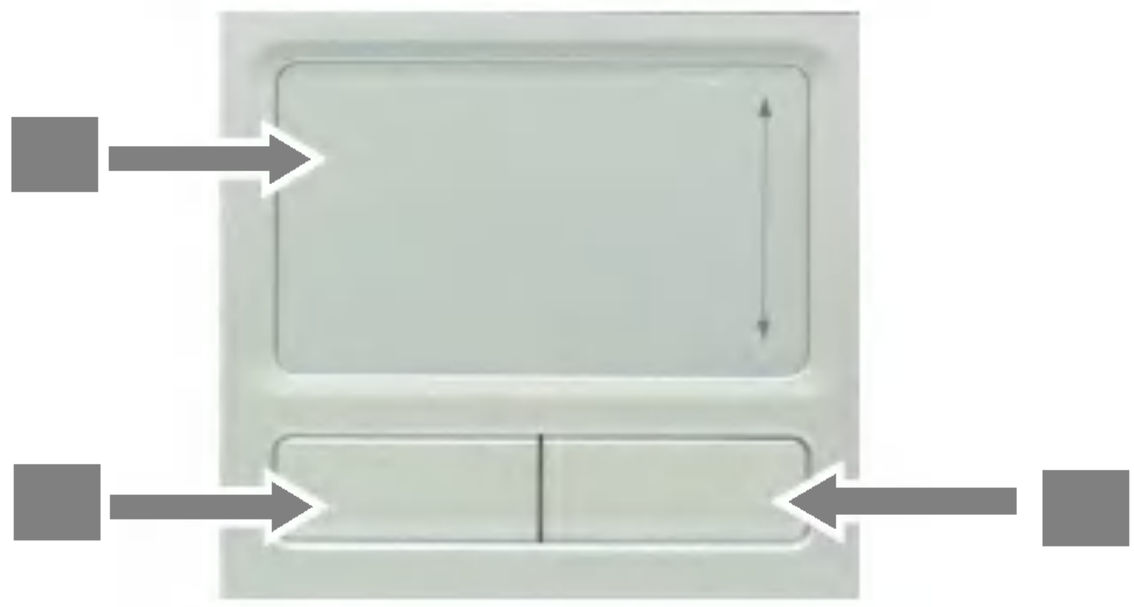
Note:
You can lock the keyboard in the upper/lower case position by pressing Caps Lock key. Caps Lock indicator is lighted up in upper case position. You can use the combination of Shift and a character key to enter its upper/lower case letter.

Hot keys

The following **Hot keys** provide you with shortcuts to operations, such as adjusting the brightness of the computer display.

Fn+F4:
Force the computer to enter power-saving mode. (ex: system standby and hibernation)
Fn+F5:
Press the combination once to disable the touch pad, and press again to auto-disable the touch pad. If USB mouse isn't used, touch pad will be enabled again. And after next press Touch pad will be enabled. (The touch pad initialization takes 1~2 seconds, so wait for the initialization to end before using the touch pad)
Fn+F6:
Wireless LAN Enable/Disable Toggle
Fn+F7:
When the computer is attached to an external monitor, you can change the display output location with Fn+F7 combination. You can switch to and from the three types of display modes, LCD display only, the external monitor only, or both at the same time.
Fn+Home:
The computer display becomes brighter.
Fn+End:
The computer display becomes darker.
Fn+F9:
Enable/disable Monitor Power Management. (Both Auto Brightness Control and Turn Off Monitor)
Refer to Battery Miser Help.
Fn+F12:
Hibernation (Maximum power-saving) mode. (when OSD is installed)

Using the touch pad



The touch pad can be used with a mouse at the same time. It has a scroll button, which functions similar to a scroll wheel on a mouse.

1. **Touch pad**: To move the pointer.
2. **Left button**: To select or click items.
3. **Right button**: functions similar to the right button on a mouse.

Caution

Guidelines on using the touch pad

Do not touch the touch pad with a sharp or pointed object as doing so may damage the touch pad.

Do not remove the cover sheet of the touch pad as doing so may damage the touch pad.

Do not use the touch pad with two fingers, wearing gloves, or wet hand as it may not function properly. Using the touch pad with a dirty or oily finger may damage the touch pad.

Do not give too much pressure on the touch pad as doing so may result in injuries to your finger or wrist.

Moving the pointer on the screen

Gently place your finger on the touch pad and slide it in the direction in which you want the pointer to move.

Making the selection (Click)

To click for making the selection, press the left button and then release it, or gently tap the touch pad once to select an item on a menu or an icon on the screen, or position the cursor in a document.

OR

Double-click (Run)

To double-click, quickly press the left button twice and then release it. You can also tap the touch pad twice to get the same result. To launch an application, you can select and double-click the .exe file or the application's icon.

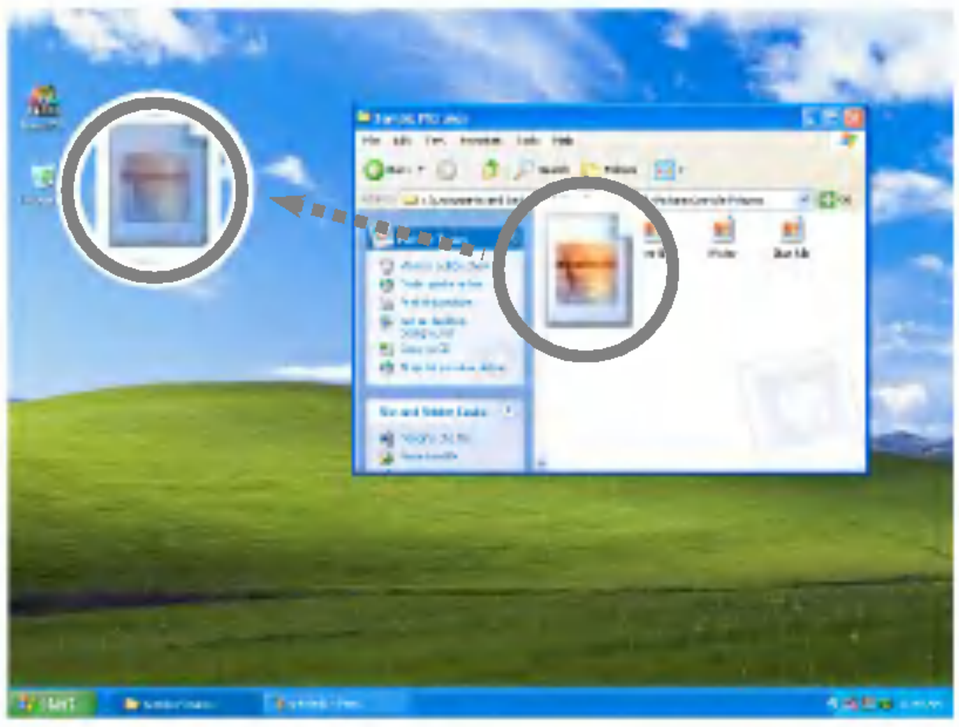
Drag and drop

To drag an object, select and move the object by clicking and holding the left button and sliding the finger across the touch pad without releasing the button.

To drop the object you have just dragged, release the left button.

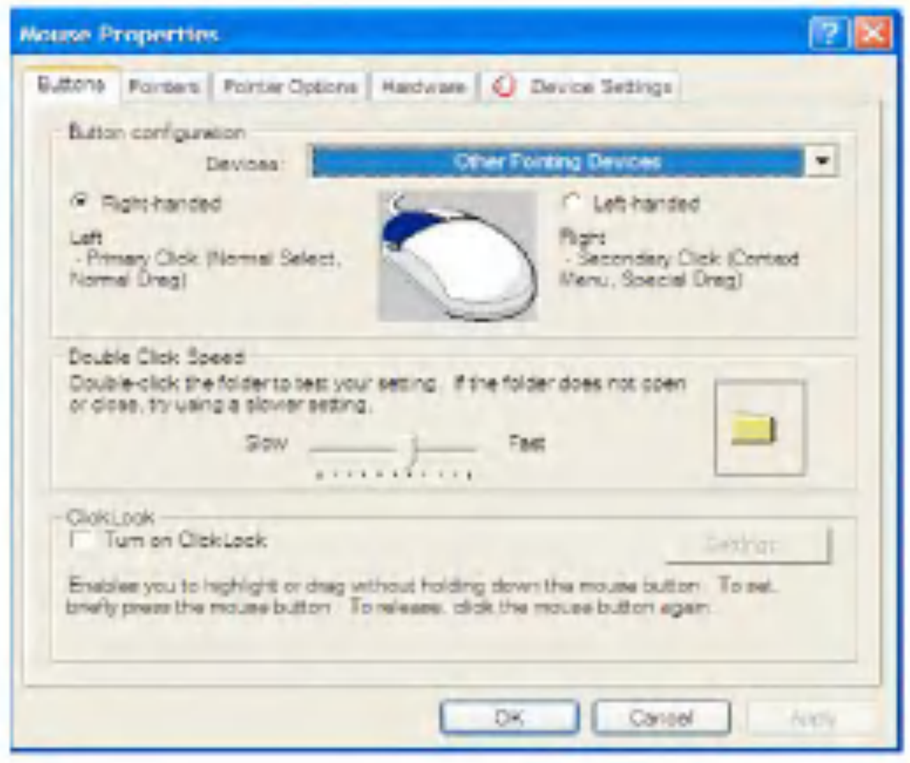
You can use drag and drop to move files from one location to another.

For example, if you want to place a file in the recycle bin, place the pointer above the file you want to move, press the left button and hold, slide your finger across the touch pad to move the file and release the left button above the recycle bin.



Drag: Move the icon without releasing the left button
Drop: Release the left button above the recycle bin.
ClickLock: enables you to select text or drag a file without holding down the mouse button or touch pad button.
Follow the instruction below to enable ClickLock. If ClickLock is enabled, simply hold down the mouse button or touch pad button for a moment and then release it, you still get the same effect as continuously holding down the button. You can drag an object with ClickLock enabled and press again to release the button and drop the object.

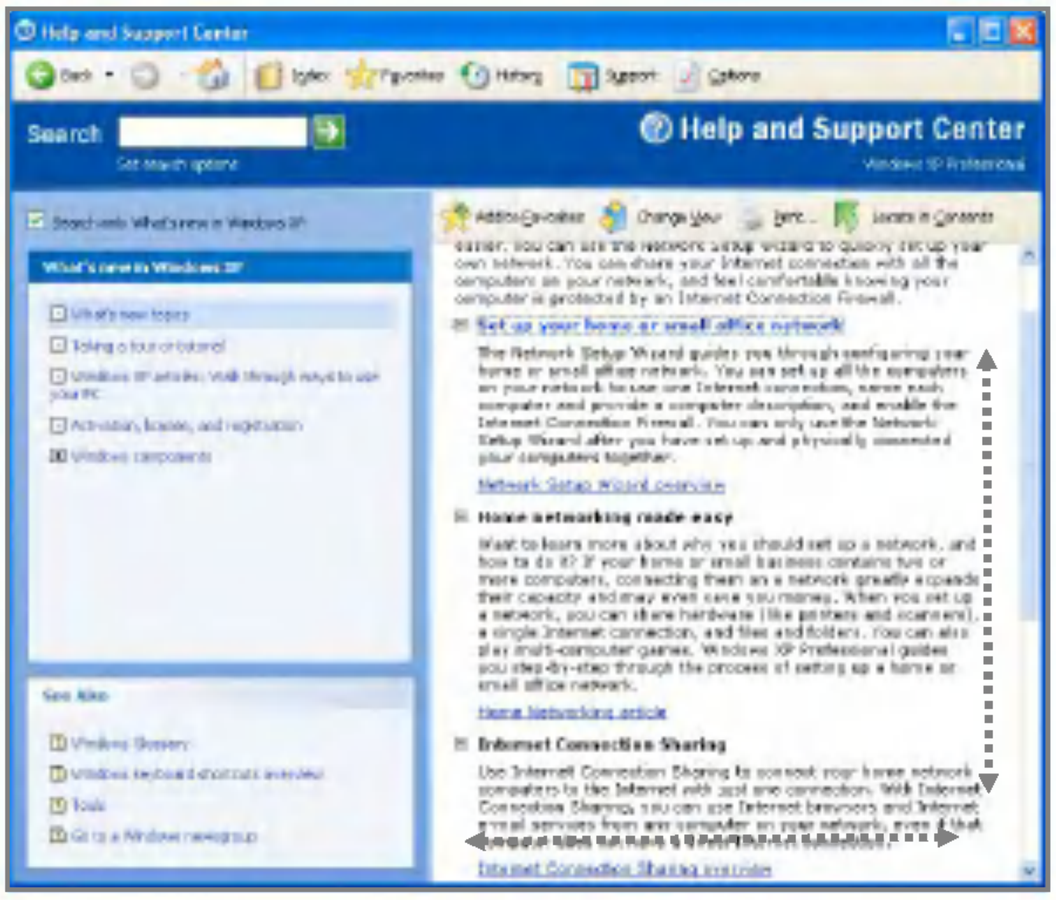
Click and open the **Mouse Properties** window.
On the **Buttons** tab, under **ClickLock**, select **Turn on ClickLock** check box.



Click **Settings** and adjust how long you need to hold down a mouse or touch pad button to enable ClickLock, and then Select OK.

Using the scroll up/down function

Your computer has a built-in scroll up/down button. In a program window with a scroll bar, you can move up and down the windows using the scroll up/down button. When you scroll a window using the scroll up/down button, the pointer on the screen does not move.



You can also use the scroll up/down function by using Touch pad.
In a program window with a scroll bar, you can move up and down the windows by using Touch pad.

System Setup

The system setup saves your computer's hardware configurations in **CMOS RAM**. The system setup provides you with information, such as the size and type of your hard disk, size of the installed memory, date, and time.

Starting the system setup

Setting a password. (Page 78)
Boot Password Required (Page 82)
Changing or removing the password. (Page 83)
Setting Load Optimal Defaults. (Page 85)

Caution

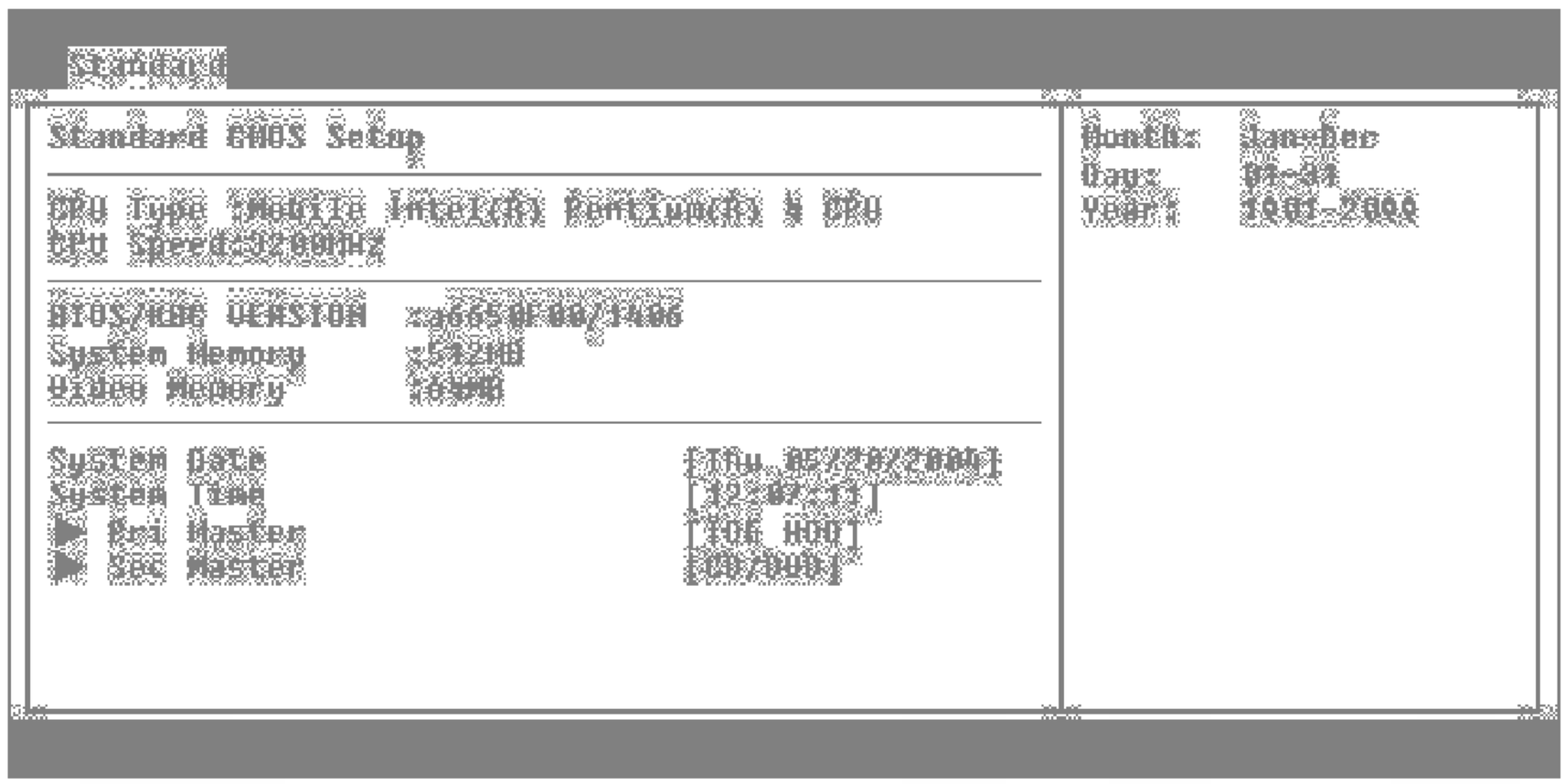
Do not change the system setup arbitrarily. Incorrect system setup may result in errors while using the computer.
The menu and default factory settings of the **BIOS Setup Utility** may look different from this manual. They may have been changed to improve the performance of the system.

Keys used in the system setup

Enter: Select the current item.
Esc: Close the current window or move to the previous window.
Cursor Control Keys: Move up, down, left, and right.
+ -: Increase and decrease the value.
Page Up: Move to the first item.
Page Down: Move to the last item.
F10: Save and exit the system setup.

Note:
Cursor control keys (arrow keys) move the cursor up, down, to the left and right.

1. Turn on the computer.
2. When LG logo appears on the screen, press F2.
3. The BIOS Setup Utility window appears.



Setting a password

If you want to protect the system setup from an unauthorized user, follow the instructions below to set a password.
You can set a password in the **BIOS Setup Utility** program.

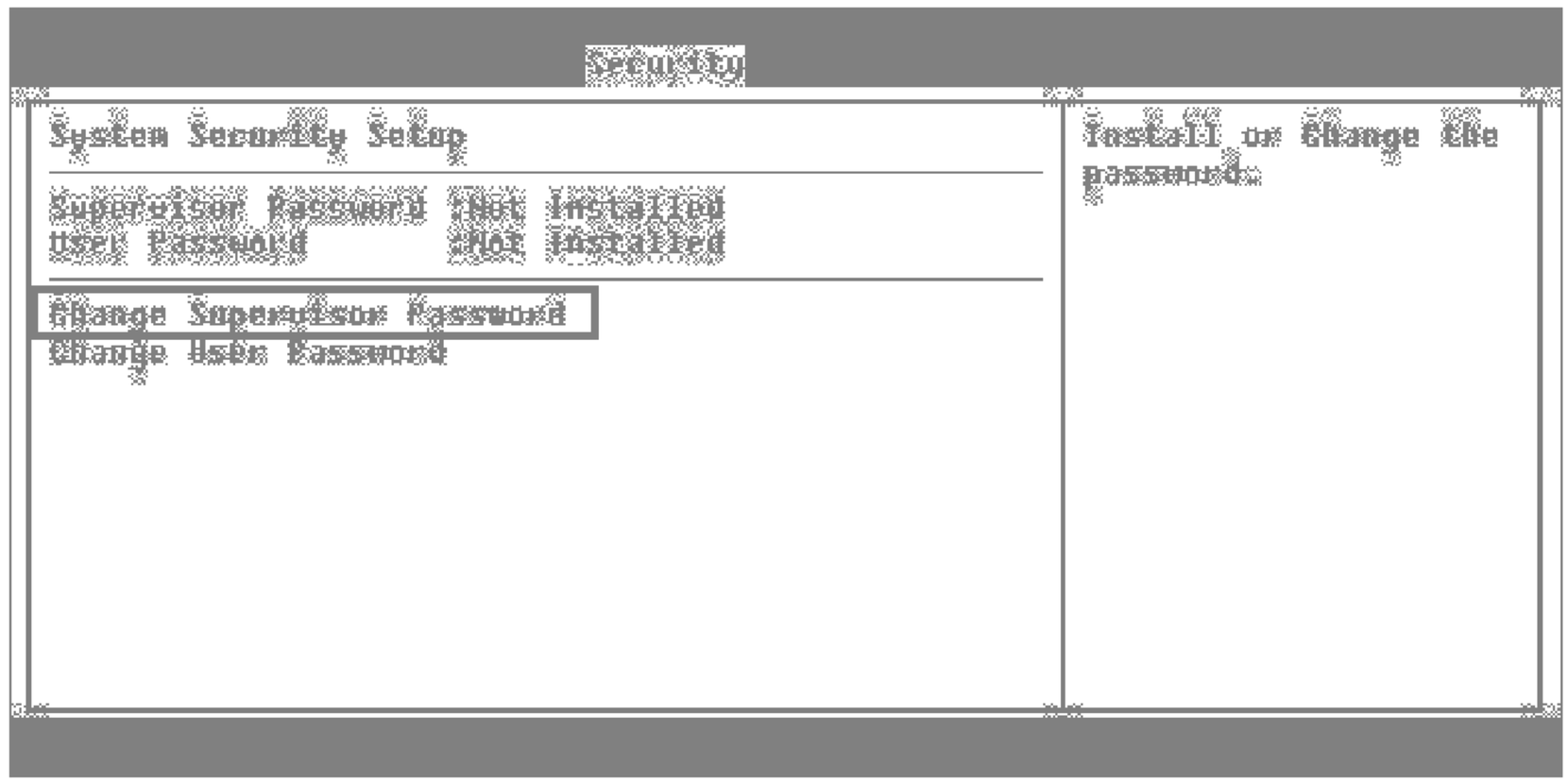
Caution

If you forget the password, you cannot gain access to your system. Make sure you write down the password in a safe place only you can refer to in case you forget the password.

Change Supervisor Password

A password protects your computer from unauthorized users. The factory default setup does not have a password. A supervisor password prevents unauthorized users from changing the system setup.

Start the **BIOS Setup Utility**.
Use arrow keys to select **Set Supervisor Password** under **Security** menu, and then press Enter.



Note:
You can change supervisor password to gain access and change items in the **BIOS Setup Utility**, and select **Power on Boot**. We recommend to set up a user password for different users if your computer is shared by someone else.

If the following message appears, enter a new password and press Enter. A password must be consisted of character A~Z and numbers 0~9, and have the maximum length of 8.

If the following message appears, enter the new password again to confirm.

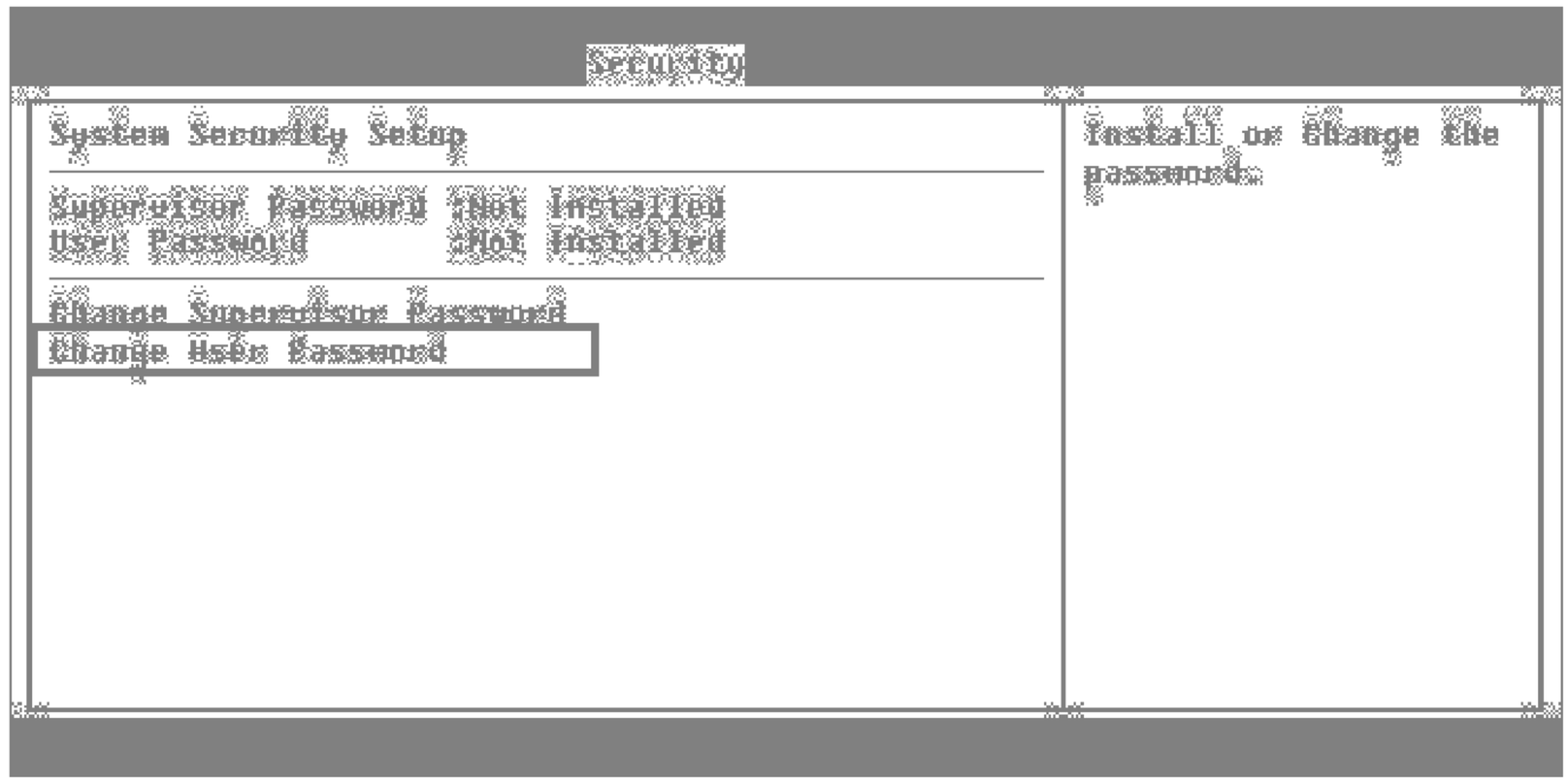
If the following message appears, press Enter.

If the following message appears, select OK to save and exit setup.

Change User Password

User password is a secondary compared to a supervisor password. You must set a supervisor password in order to set a user password.

1. Start the **BIOS Setup Utility** and use arrow keys to select **Security** menu.
2. Use arrow keys to select **Set User Password** and press Enter.

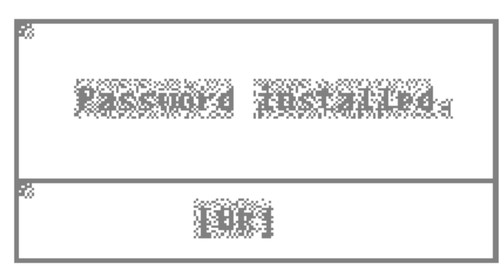


Note:
A user password gives limited access for changing the settings in the **BIOS Setup Utility** compared to a supervisor password.

If the following message appears, enter a new password and then press Enter. A password must be consisted of character A~Z and numbers 0~9, and have the maximum length of 8.

If the following message appears, enter a new password to confirm.

If the following message appears, press Enter.



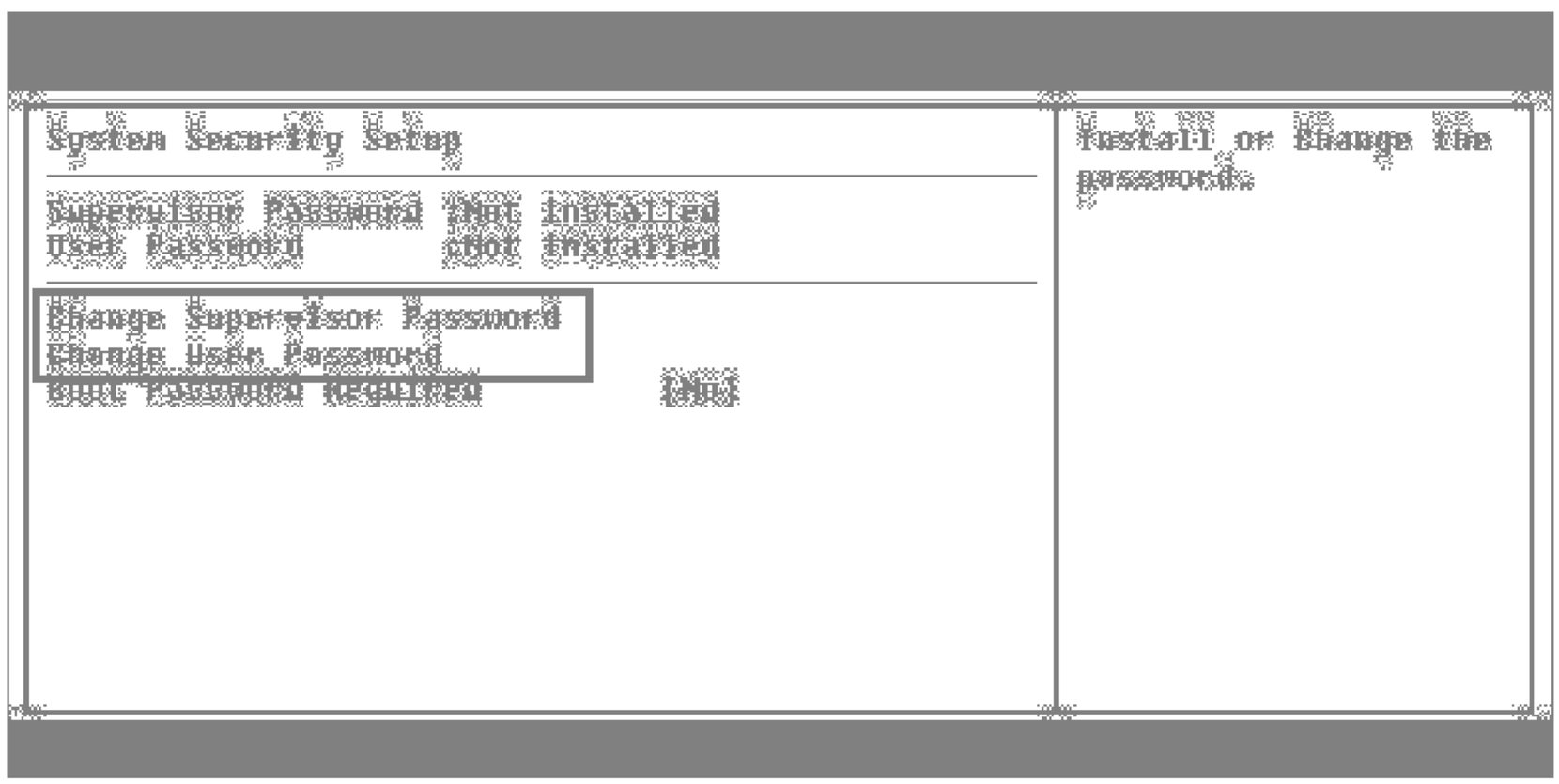
If the following message appears, select OK to exit setup and restart.

Boot Password Required

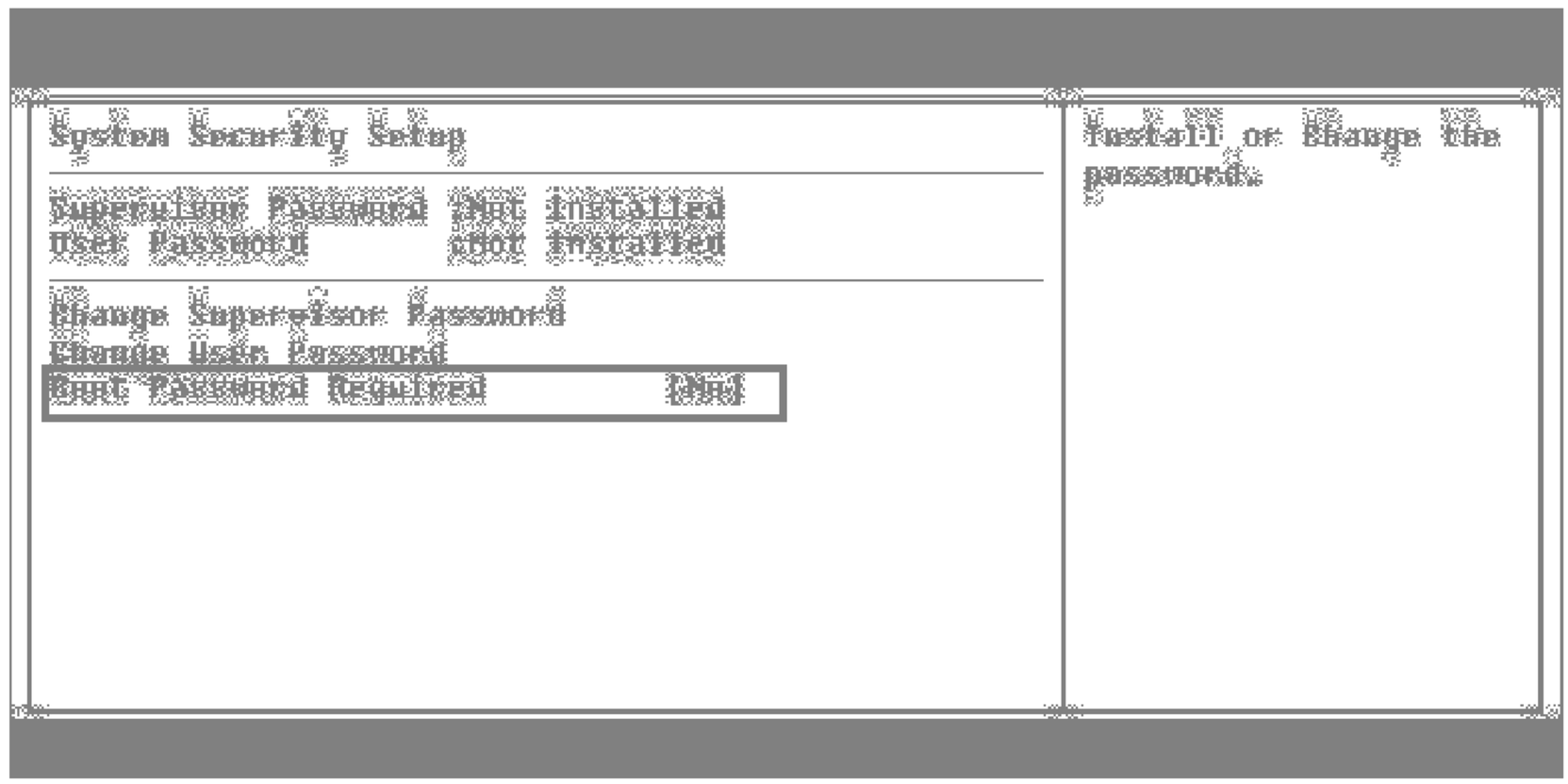
User can set up a boot password which protects the system by selecting Change User Password and Change Supervisor Password.

Start the BIOS Setup Utility, Use arrow keys to move Security.

The following screen appears, set up password (Change User Password and Change Supervisor Password)



After Select Boot Password Required, choose Yes using "-" key and press Enter.



Changing or removing the password

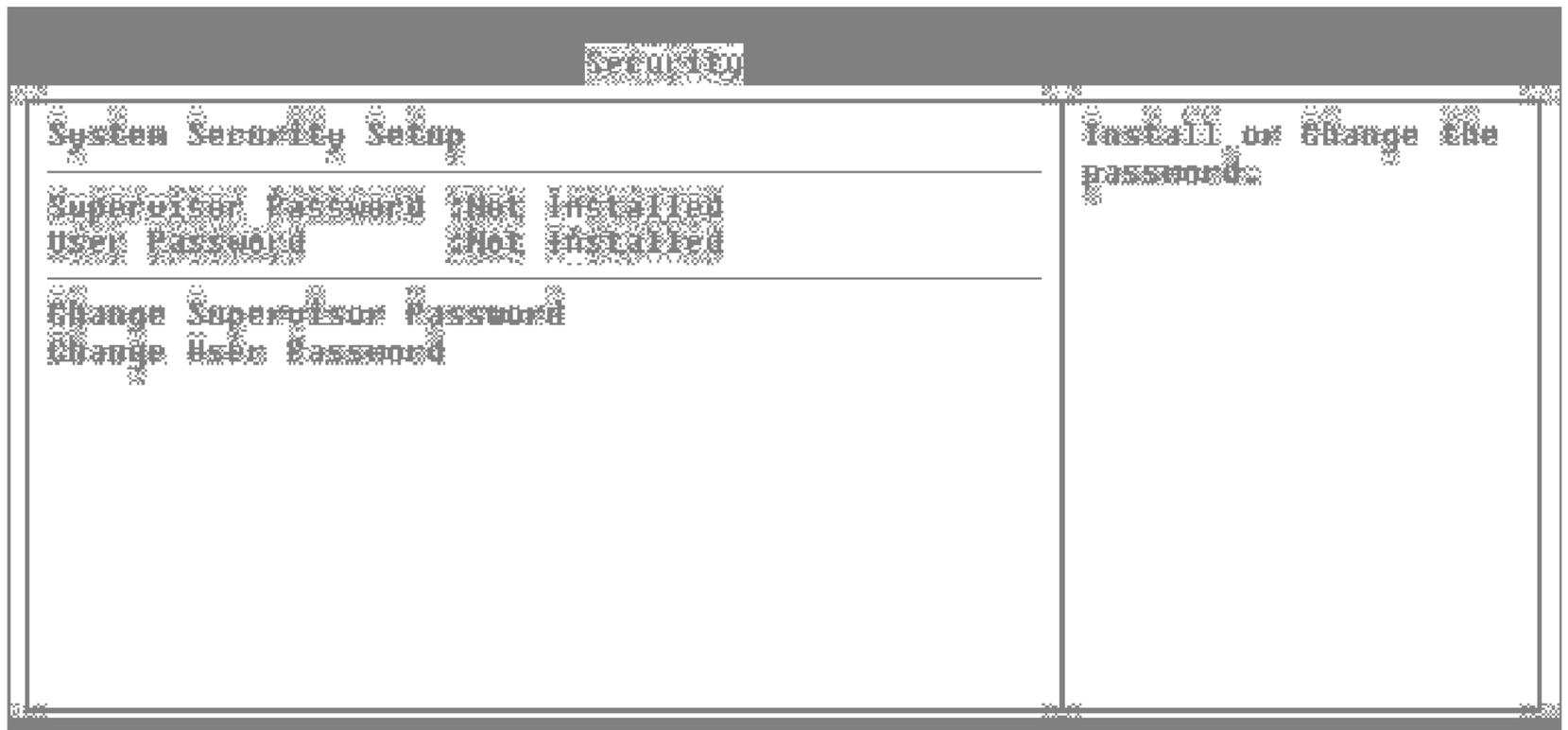
Start the BIOS Setup Utility, enter your password, and then press Enter.

To change the password, follow the instruction on Setting a password.

To remove the password, follow the instructions below.

Use arrow keys to select Security menu, and select a password you want to remove, and then press Enter.

If the following message appears, enter the current password in the bracket next to Enter Current Password, and then press Enter. Press Enter without entering a password in the brackets next to Enter New Password and Confirm New Password.

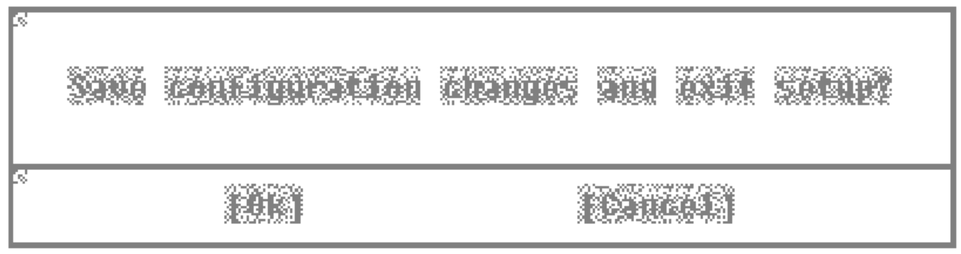


If the following message appears, input a new password and press Enter.

If the following message appears, enter a new password to confirm. .

If the following message appears, press Enter.

Press F10 to save the new settings.
If the following message appears, select OK to exit setup and restart.



Setting Load Optimal Defaults

If a user accidentally modifies the system setup, follow the instruction below to recover Load Optimal Defaults.

Start the BIOS Setup Utility, and use arrow keys to select Exit.
Use arrow keys to select Load Optimal Defaults, and press Enter.

Select Yes and press Enter to recover Load Optimal Defaults.

Press F10 to save the new settings.
If the following message appears, select OK and press Enter to restart the computer.

System Recovery

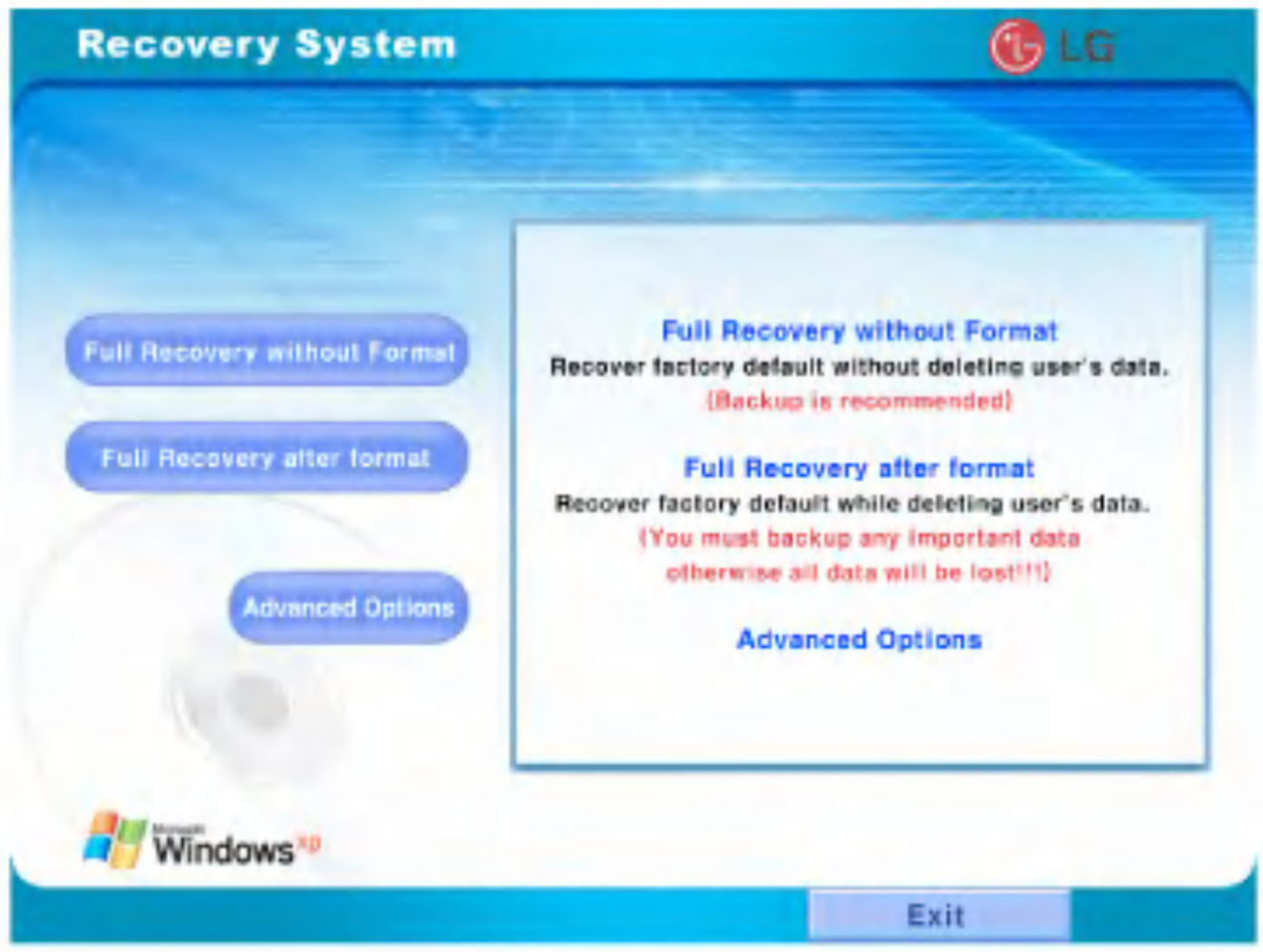
System Recovery offers to format the hard disk as shipping status of the product. User must make backup files to minimize a risk of losing data. Windows CD is provided with the product that offers system recovery contracted by Microsoft.

Using Full Recovery

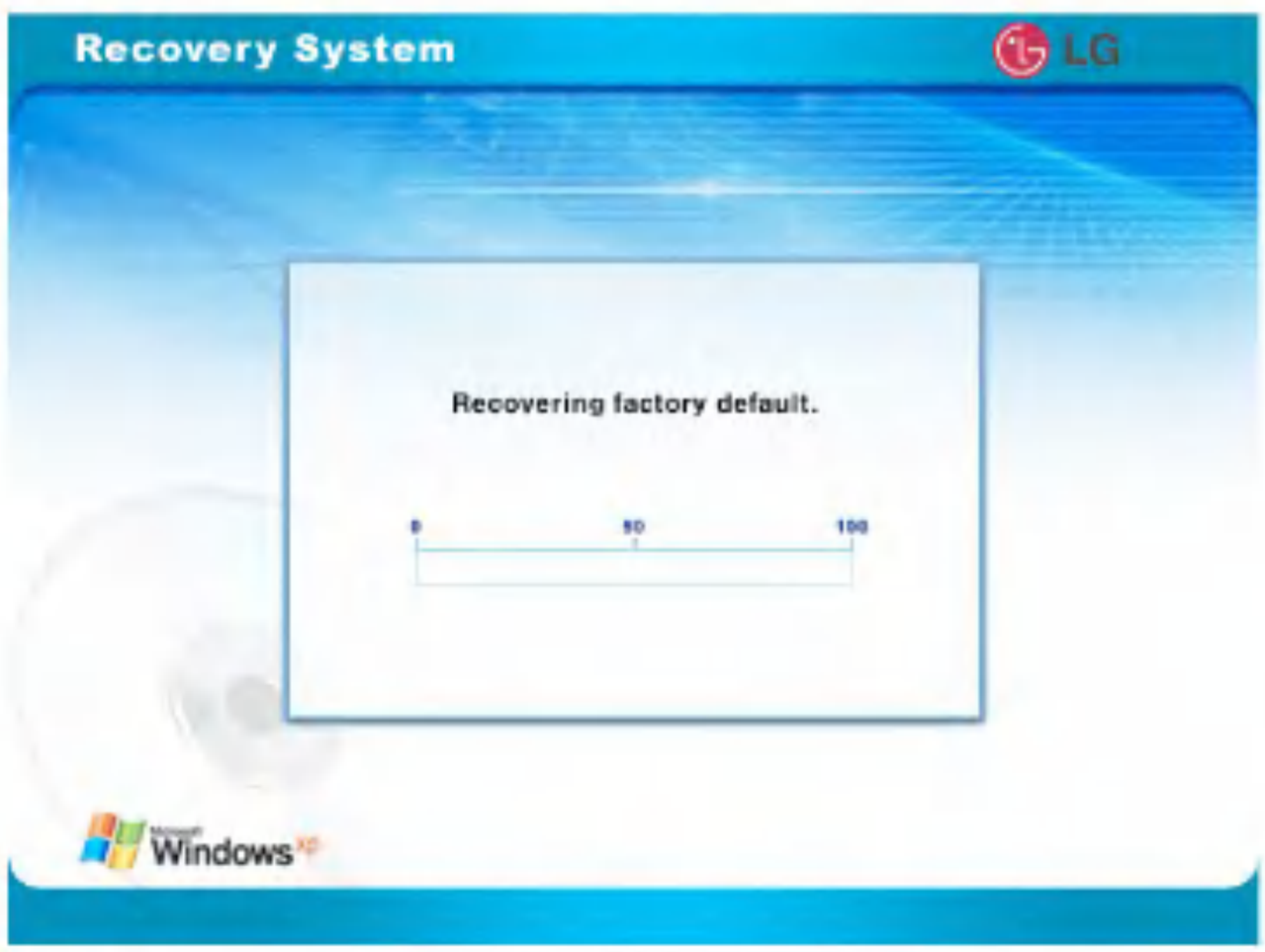
To recover hard disk completely, you must make backup for all software and data on the computer.
If Windows installation is complete, you must fill out "Windows user Registration information" as the first time to buy the product.

Press F11 with appearing preload image on the screen.

2. If the following screen appears, select one of items that works.

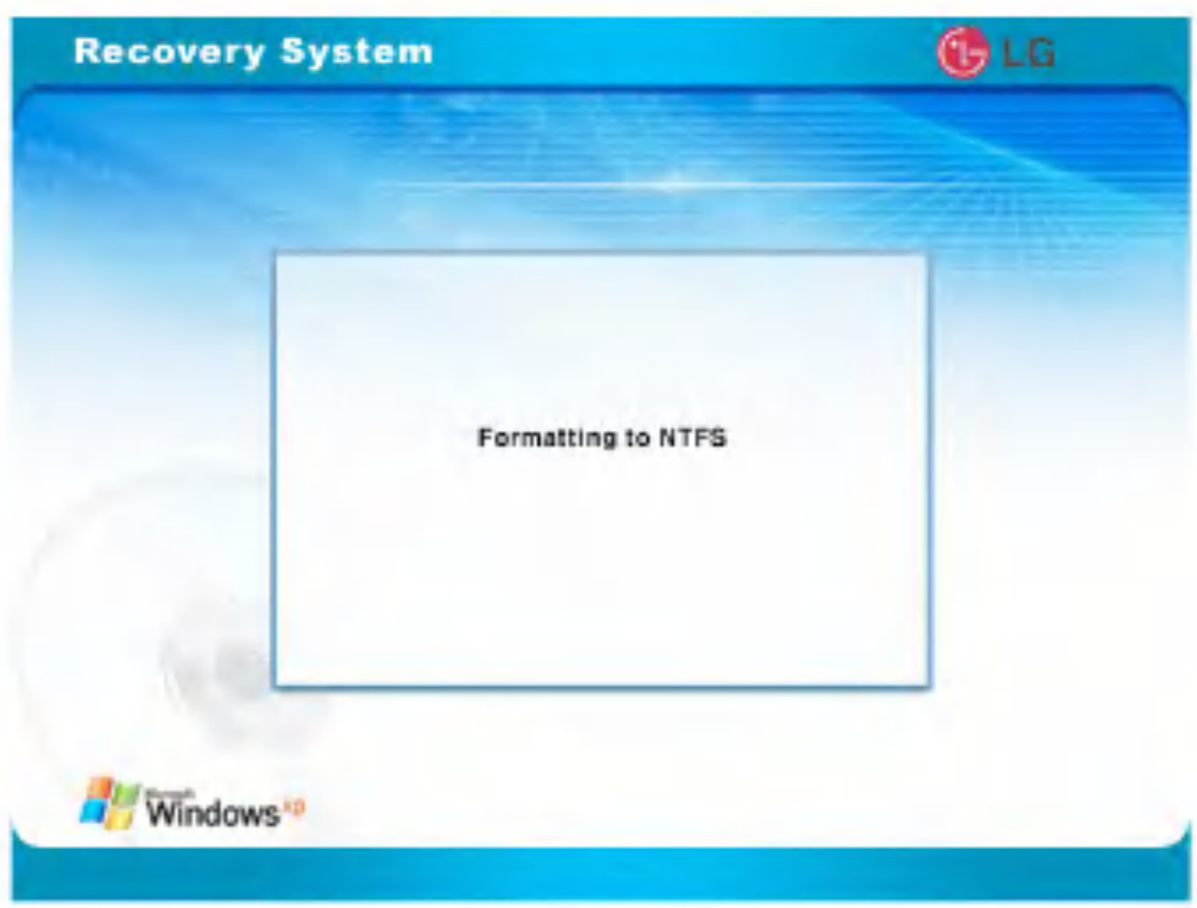


3. Select [Full Recovery without Format], or [Full Recovery after format].
   * In the case of selecting [Full Recovery without Format].

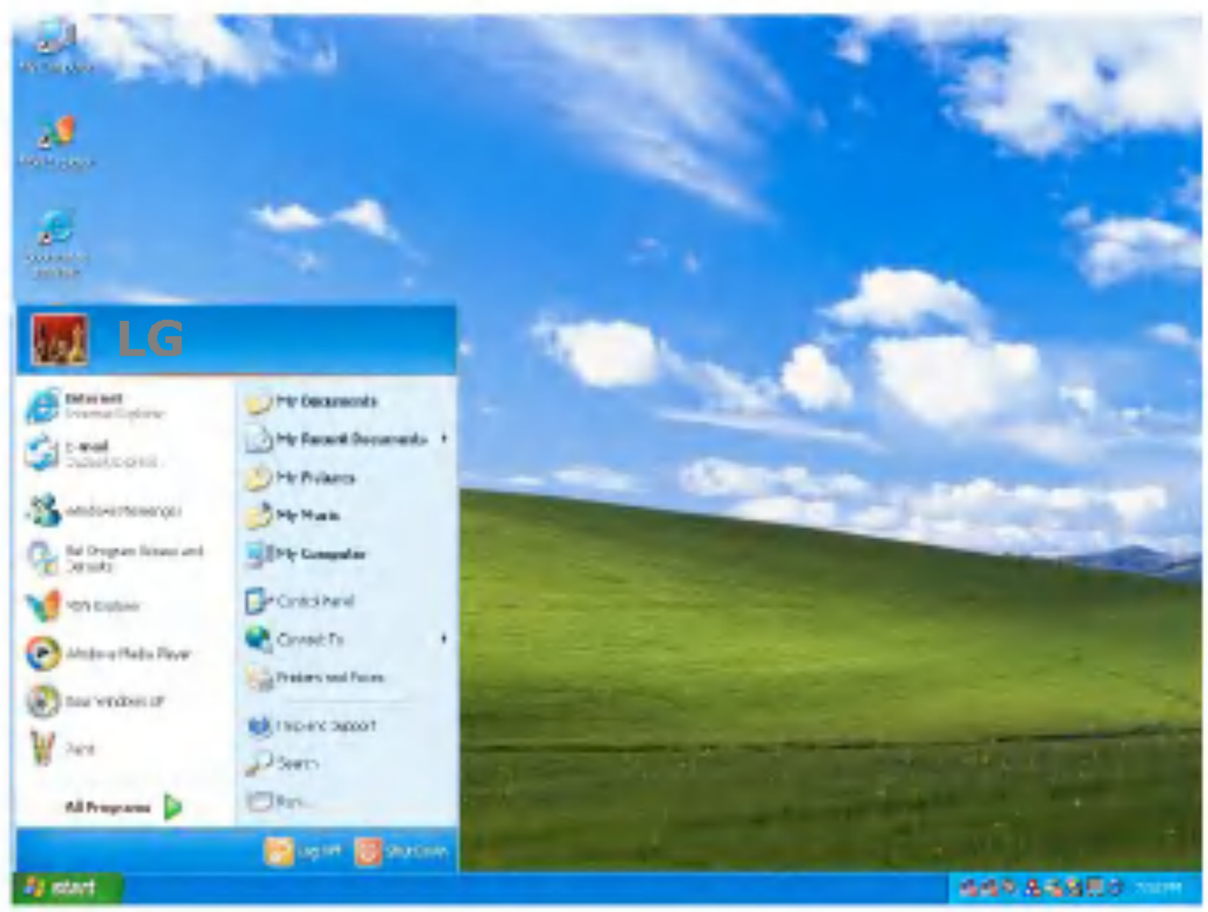


[Recovering factory default] appears.

* In the case of selecting [Full Recovery after format]
Click [Start Recovery] .



"Formatting to NTFS" appears.
When starting [Full Recovery], next procedures appears on the screen.
If the following screen appears after restarting system, fill out Windows user registration information.
When clicking [Finish], the system returns to normal.



Driver re-installation

1. Turn on the computer and go to [Start]-[All Programs]-[LG GILJABI].
2. Select the device driver you want to install.
3. Follow the instructions to complete the installation. Some device drivers require you to restart the computer after the installation.

Using the optical disk drive

Different model types provide different optical disk drives. (Some models have DVD-ROM drives and others have DVD/CD-RW COMBO/DVD±ROM COMBO drives)

Inserting a CD

Turn on the computer, and press the eject button on the CD-ROM drive.

Place the CD in the middle of the tray. (Label on the CD must face upward)

Push the tray into the CD-ROM drive.

Note:
When you use the DVD-ROM OR DVD/CD-RW COMBO, DVD±RW drive place your computer on
a flat surface. The drive may not function correctly on an uneven surface.
Your computer has a CD-ROM drive with the speed of 24X or faster; therefore, the drive may rattle when you first insert a CD.
Be careful not to scratch the surface of a CD-ROM or CD-RW/DVD-ROM disk.
Do not clean a CD-ROM or CD-RW/DVD-ROM disk with abrasive chemicals, such as Benzene or Paint thinner.
Do not drop or bump a CD-ROM or CD-RW/DVD-ROM disk.
Use a clean, soft cloth when removing dust or fingerprints on a CD-ROM or CDRW/DVD-ROM disk.

Removing a CD

1. Press the eject button on the CD-ROM drive to eject the disk tray.
2. Lift the CD in the middle of the disk tray.
3. Place the CD in its protective case.
4. Push the disk tray into the drive.

Playing an audio CD

Using Windows Media Player

You can use Windows(R) Media Player to play various types of audio and video files.
You can play and make a copy of an audio CD, listen to the Internet radio broadcast, play movie clips, and listen to music or watch a video on a web site. If you have a DVD drive, you can play a DVD. If you have a CD-RW drive, you can use Windows Media Player to make your own music CD.

Starting Windows Media Player 1

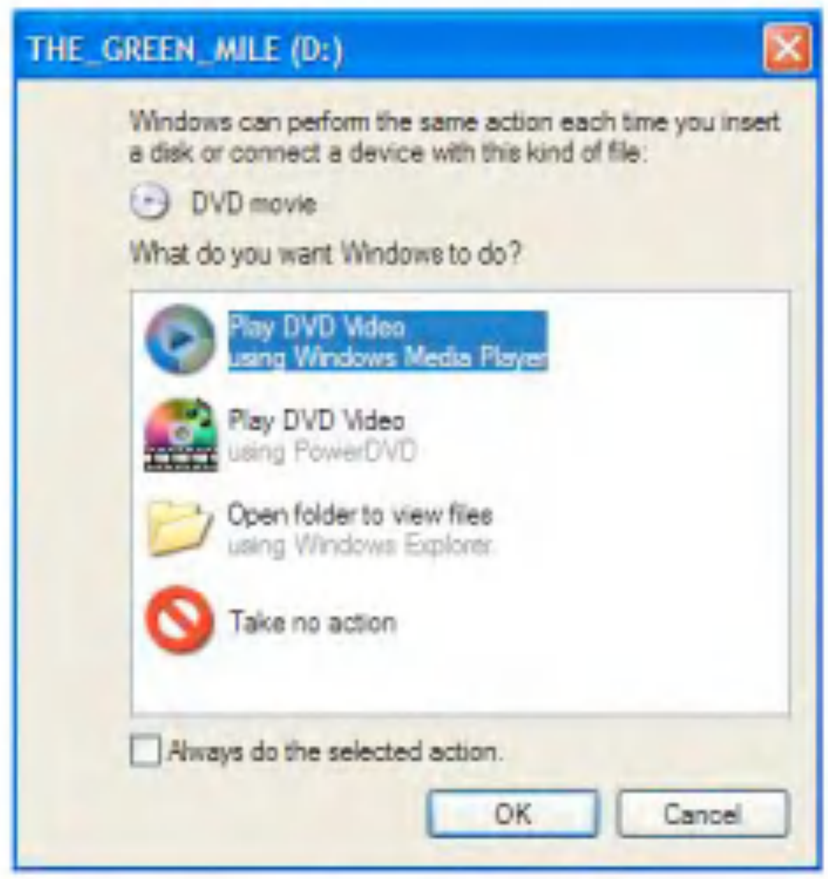
Turn on the computer.
Press the eject button on the drive to open the disk tray, and then insert an audio CD and close the tray.
Select the Windows Media Player and click OK. Windows Media Player starts playing the audio CD. (If you select another audio CD program, that program will play the CD instead of Windows Media Player)

Starting Windows Media Player 2

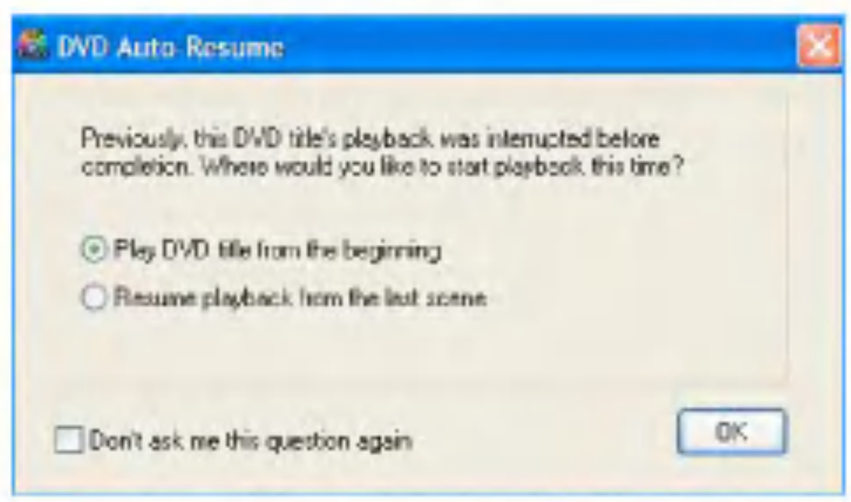
Press Start -> All Programs -> Accessories -> Entertainment -> Windows Media Player.
When Windows Media Player opens, press Open under File menu, and then select an audio or video file you want to play.

Using Power DVD

1. Insert DVD title in the DVD-COMBO drive, and close the tray.
When the following window opens, select Play DVD Play and click [Ok]



2. As you insert the DVD title, the DVD Auto-Resume window will open as shown below. Set the preference and click [Ok]. If you check "Don't ask me this question again," it will not open next time automatically and play as you preferred.



3. Power DVD will now play. You can read the detailed instruction of the Power DVD in the Help menu from the main control.

Note:
If unchecked on "Don't ask me this question again," you will receive the message every time you open the Power DVD. If you delete the DVD title and play it again, you will also receive the preference window.

You can change the region counter only 5 times. After the 5th change, it is not possible to change. Be cautious when you try to change the regional code.

Do not open the DVD tray and remove the DVD title while it is still playing. It may damage the system or the DVD title.

Using SD Memory Card

Your computer can read from and write to SD Memory Card.

Note: Photo images may look different from the actual product.

Inserting SD Memory Card

Turn on the computer, and place SD Memory Card in SD Memory Card slot.

Push SD Memory Card into the slot until it clicks.

Removing the SD Memory Card

1. Press SD Memory Card with the tip of your finger.
2. SD Memory Card ejects.

Using Memory Stick (SONY)

Your computer can read from and write to Memory Stick.

Note: Photo images may look different from the actual product.

Inserting Memory Stick

Turn on the computer, and place Memory Stick into slot.

Push Memory Stick into the slot until it clicks.

Removing the SD Memory Card

1. Press Memory Stick with the tip of your finger.
2. Memory Stick ejects.

Using PC Card

Your computer can read from and write to PC Card.

Note: Photo images may look different from the actual product.

Inserting PC Card

Turn on the computer, and place PC Card in PC Card slot.

Push PC Card into the slot until it clicks.

Removing PC Card

1. Press PC Card with the tip of your finger.
2. PC Card ejects.

Expanding memory

When you are using the computer, you may want to expand the memory capacity.

About memory

Your computer uses DDR (Double Data Rate) SDRAM SO-DIMM (Dual In-Line Memory Module) with 200 pins.
Each memory socket can support a memory module from 64MB to 1024MB, and the maximum memory capacity of the computer is 2GB.

Before installing memory

When installing or removing the memory modules, be careful not to expose them to the static electricity as it can damage the modules.
Make sure the type of memory installed in your computer is the same as the memory you are about to install.

Note:
Use only the correct type of memory module (DDR SDRAM using 2.5V).
Different models of computer can use different memory modules.
DDR memory has higher data-transfer rate and different shape compared to the typical memory.

DDR SDRAM SDRAM

Caution

Your computer supports PC2700/DDR SDRAM SO-DIMM
333MHz/266MHz/200MHz with FSB Frequency of 400MHz.

Warning

Before disassembling the computer for upgraing purposes, turn off the power and remove the power cord, phone line, and battery pack.
There is the risk of electric shock or fire. If you need to open the computer cover, contact the customer service for help.

Purchasing memory

Be sure to buy the correct type of memory modules for your computer.
Type: PC2700 (200 pin DDR SDRAM SO-DIMM)
Speed: 333MHz (166MHz X2),266MHz (133MHz X2)
Size: 128MB, 256MB, 512MB, 1024MB

Installing memory

Main board configuration, memory socket, and memory module may look different from models of computer.
Loosen the screw at the bottom of the computer, and remove the memory slot cover.

Note:

Before removing the cover, shut down your computer, remove AC adapter and battery pack, and detach any device or cable that are attached to the computer.

Use the notch on the memory to make sure the memory aligns with the socket, and then inserts the memory into the socket.

Note:

Push down the memory until the latch firmly secures the memory on the socket.

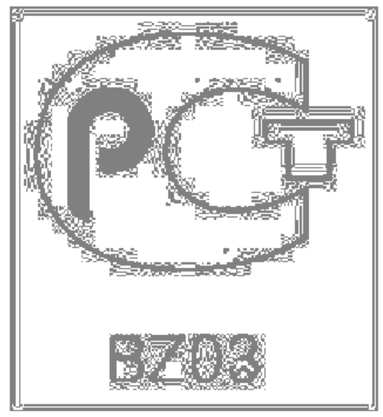
Push down the memory until you hear a click.

Caution

Use only the memory module sold by LG. Using other memory modules can damage your computer.

Close the cover and tighten the screw.
After the installation, reboot the computer. If you see an error message regarding memory capacity, click F2 to enter the BIOS Setup Utility and save the settings.

Note:
When rebooting the computer, make sure the size of installed memory is correct. If different, re-install the memory module.



Model

LP60

Processor

- Intel Mobile Pentium 4 Processor with 1-MB L2 Cache (Mobile Prescott Processor)
(L2 cache : 1024KB, Micro-FCPGA 478 package: 2.80GHz, 3.06GHz, 3.20GHz)

Note:

The CPU cannot be replaced or upgraded by the user. The computer is equipped with a different CPU depending on the model type.

Memory

Built-in: 256MB/512MB DDR SDRAM SO-DIMM (It depends on the model type.)
Maximum: 1024MB on each slot and 2048MB combined
Memory Type: DDR SDRAM SO-DIMM (128MB, 256MB, 512MB, and 1024MB)

BIOS ROM

ROM: 4Mbit

Storage devices

2.5-inch hard disk drive (The capacity of the hard disk drive is different depending on the model type.)
PC Card slot
SD Memory Card slot / Memory Stick / MMC Card / CF Card
Optical drive (DVD/CD-RW Combo, DVD-ROM drive or DVD±RW)

Note: The specification for the optical drive depends on the model type.

External I/O Interfaces

VGA port
4 –in-1 PC Card slot
PCMCIA card slot
Compat Flash card slot
3 instant keys (www, email, search)
Microphone jack
Speaker/Headphone jack
4 Universal Serial Bus (USB) devices
RJ11 Modem port
RJ45 Ethernet port
IEEE 1394 port
S-Video port

Display

ATI Mobility Radeon 9600 Graphics Controller
4XAGP
Video Memory: 64MB
15.4” WXGA(Resolution: 1280 X 800) TFT Color LCD

Sound

CONEXANT AC’97 2.3 CODEC
Speaker (built-in)

LAN

BROADCOM BCM4401
RJ45 Ethernet port

Modem

56K Modem On Board, AC’97 Interface
RJ11 Modem port

Power specification

AC Adapter (Free Voltage)
Input: AC 100 ~ 240V, 2.0A, 50 ~ 60Hz
Output: DC 19V, 6.3A, 120W
Note: Use the correct adapter for your computer.

Battery pack (Li-Ion)
DC 14.8V, 4400mAh (8-cell)

Charging time
Less than 3 hours with the power off in room temperature (10 ~ 40 °C/ 50 ~ 104 °F)
Less than 4 hours with the power off in low temperature (0 ~ 10 °C/ 32 ~ 50 °F)

Battery Life
More than 2 hours (Battery Mark(TM) V4.0.1)

Back-up battery
RTC Battery Lithium manganese dioxide coin 3V 36mAH
Recommended battery: CR1220 manufactured by Maxell or equivalent type.

Note:
The temperature indicated above is the temperature inside the battery pack; the actual temperature may be different.

Operating environment

Operating

10 ~ 35 °C (50 ~ 95 °F), 20 ~ 80% relative humidity

Non-operating

-10 ~ 60 °C (14 ~ 140 °F), 10 ~ 80% relative humidity