





## Thank you for using the LG product.

LG has manufactured and tested this product to provide you with a reliable computing environment.

Please read this manual carefully before using the computer.




This sign calls attention to features and operations that may be dangerous to the user. Follow the instruction closely to reduce the risk of bodily 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.

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CYNOTE computer complies with the radio frequency and safety standards of any country or region in which it has been approved for wireless use.





# Contents

Contents .....	2
Important Safety Instructions .....	4

## 1. Overview

1. Package contents .....	15
2. Components .....	16
3. Status indicators .....	21

## 2. Basics

1. Using the AC adaptor .....	23
2. Using the battery pack .....	25
3. Turning the power on and off .....	27
4. Attaching external devices .....	30
5. Using the IrDA port .....	33

## 3. Input/Output

1. Using the keyboard .....	37
2. Hot keys .....	41
3. Using the touch pad .....	41

## 4. System Setup

1. Starting the system setup .....	47
2. Booting with a startup floppy disk .....	49
3. Setting a password .....	50
4. Changing or removing the password .....	53
5. Recovering the factory default settings .....	55

## 5. Installing Device Drivers

1. About the Software installation CD .....	57
2. Installing device drivers .....	58



## 6. Storage/Memory

- 1. Using the optical drive ..... 59
- 2. Playing an audio CD ..... 63
- 3. Using the floppy disk drive ..... 65
- 4. Installing memory ..... 67

## Features/Specification

- 1. Features ..... 71
- 2. Power specification ..... 74
- 3. Operating environment ..... 74



## Important Safety Instructions

Following these safety instructions will help 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 or 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 swimming pool.

The computer may not function correctly, and there is the risk of electric shock.

Operate the computer within a temperature range of 50 to 95 degrees F (10 to 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 damage to the computer.

Keep your computer away from electromagnetic fields.

Keep your computer away from electrical devices, such as speakers, that can generate strong electromagnetic fields. Exposure to the electromagnetic field may result in loss of data in the hard disk drive and/or damage to the 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

Do not charge the battery pack with devices other than the adaptor that comes with the computer.

There is the risk of fire and/or damage to the battery pack.

Do not put the battery pack in trash that is disposed of in landfills.

Incorrectly disposed battery packs may result in explosion or fire. Comply with local ordinances or regulation for safe disposal.

Do not throw or disassemble the battery pack.

Damage to the battery pack can result in injuries, explosion, and/or fire.

Use only a battery pack 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 away from children.

There is the risk of injury and damage to the battery pack.

## Connecting to an AC power source



### Warning

Do not use loose 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.  
Supplying improper levels of voltage/current may result in electric shock, fire, and/or damage to the computer.

If you hear a noise from the power cord or outlet, unplug the power cord immediately, and contact the sales representatives 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 or place a heavy object on top of the power cord. Keep children and pets from damaging the power cord.  
Damaged power cord may result in electric shock or fire.



## Connecting to an AC power source



### **Warning**

Keep the power cord and plug clean and free of dust.  
There is the risk of fire.

If an object or liquid enters the computer or adaptor, remove the power cord, battery, and any other cables from the computer, and then contact the sales representatives for help.

There is the risk of an electric shock, fire, or damage to the computer.

Before cleaning the computer, disconnect the power cord, battery, and any other cables from the computer.

There is the risk of electric shock or damage to the computer.





## Using the computer



### Warning

For cleaning your computer, use mild detergent or computer cleaning products. Be sure to dry completely before using the computer.

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

During a lightning storm, disconnect the power cord, telephone line, and LAN cable from the computer.

There is the risk of electric shock or fire.

Do not place water, chemicals, or liquid of any kind on the computer.

Liquid of any kind entering inside the computer may result in an electric shock, fire, or damage to the computer.

Do not connect the modem directly to a multi-line telephone.

There is the risk of fire or damage to the computer.

If you drop your computer, remove the power cord and battery pack, and then contact the sales representatives for help.

There is the risk of electric shock or fire.

Do not expose your computer to the 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.

Do not place a burning candle or cigarette on the computer.

There is the risk of fire.

If you see or smell smoke from the computer or adaptor, turn off the computer, remove the power cord, and then contact the sales representatives for help.

There is the risk of fire.

Do not push foreign objects into the fan louvers.

There is the risk of electric shock.

## Using the computer



### Warning

The fluorescent lamp in the LCD contains mercury. If the LCD breaks and the internal liquid gets into your eyes or on your skin, immediately wash the affected area with water. If any symptom arises, receive medical care.



### Caution

Do not place an object, such as a pen or clip, on the keyboard. If you close the LCD cover with an object on the keyboard, you may damage or break the LCD.

Do not touch or scratch the LCD with sharp objects. The LCD may be damaged.

Be sure to turn off the computer before closing the LCD cover. The computer may overheat, and be damaged or deformed.

Do not exert excessive pressure on the LCD. LCD is made of glass, and an excessive force can break the LCD.

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

Do not push objects into the PC Card slot. There is the risk of electric shock or injury.

## Using the computer



### Caution

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. You may not connect to the network or the connection may be slow.

Keep the computer away from heat.

The computer may deform and there is the risk of fire.

When attaching an external device, make sure the connector from the device and the port on the computer are of the same type.

There is the risk of damage to the computer.

Do not insert a damaged CD-ROM or floppy disk.

There is the risk of damage to the computer.

## Upgrading the computer



### Warning

Before disassembling the computer, turn off the power and remove the power cord, phone line, and battery pack.

There is the risk of electric shock or fire. Ask the sales representatives for help before disassembling the computer.

Do not disassemble the power supply.

There is the risk of electric shock.

Keep screws and other small parts away from children.

Children may choke on a screw or other small part. If a child swallows a small part, receive a medical care.



### Caution

Do not attempt to disassemble or modify the computer without consulting sales representatives.

There is the risk of electric shock.

Replace only with the parts approved by LG.

There is the risk of fire and damage to the computer.

Ask the sales representatives before connecting and using the computer with any non-LG product.

There is the 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 trip over the loose cables and fall.

When traveling on an airplane, follow the airline's instruction. Using the computer on an airplane may result in an airline accident.

## Preventing data loss (Handling the hard disk drive)



### Caution

Be gentle when handling the hard disk drive. The hard disk drive is easily damaged from an impact. Always make backups for your data. LG is not responsible for the data loss due to user errors.

The data on the hard disk drive or the drive itself may be damaged in the following situations:

1. Exposure to a physical shock when disassembling the computer.
2. The computer is reset (rebooted), for example by power outage, while the hard disk drive is operating.
3. Exposure to virus.
4. The computer is turned off during operation.
5. Exposure to a physical shock while the hard disk drive is operating.

To minimize the loss of data due to hard disk drive damages, always backup your data.

LG is not responsible for the loss of data.

## Ergonomic information



### Warning

Adjust the display position to avoid glare or reflections from overhead lighting.

The top of the display should be on or below the level of your eyes.

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.

Using the computer in the same position for a prolonged period of time may cause discomfort to your body.

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

Stretch periodically to reduce muscular discomfort.

## Volume control



### Warning

Check the volume level

Check if the volume level is not too high before listening through headphones.

Do not use the headphones for a prolonged period of time.



# 1. Overview



## 1-1. Package contents

The following items are included in the CYNOTE package. Match the items on this list with the items in the box. Some items may look different from the pictures.



NZ2



NZ4

### Note:

NZ2 and NZ4 models use different AC adaptors. Make sure you have the correct AC adaptor before connecting it to the computer.



AC adaptor



Power cord



Battery



Software installation CD



User's guide



Telephone cable



### 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.

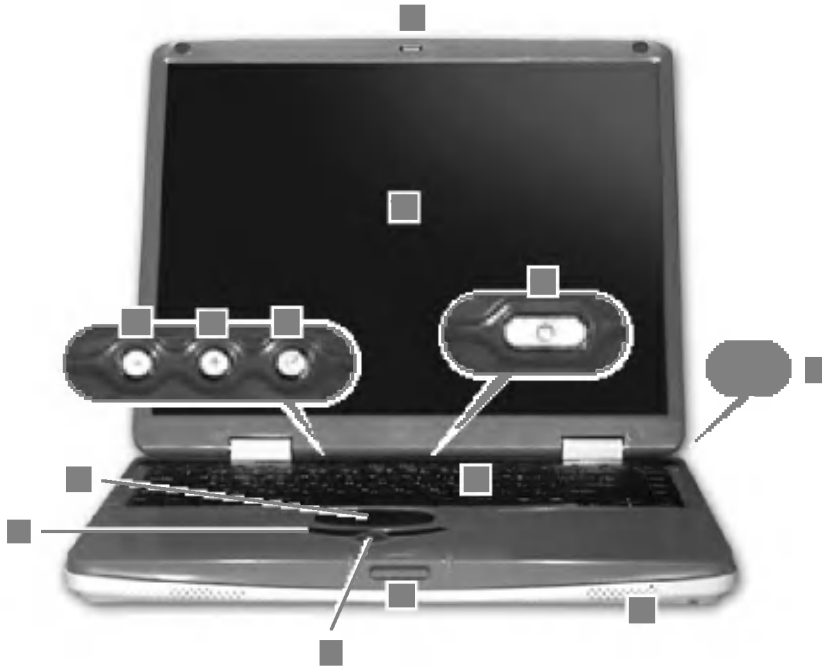




## 1-2. Components

You will get the most out of using CYNOTE by learning the components and their functions.

### Front view



**1. Latch:** Locks the display panel.

**2. Latch button:** Press the latch button to open the display panel.

**3. Power switch:** Press the power switch to turn on the computer.

**4. Keyboard:** Use the keyboard as an input device.

**5. Touch pad:** Gently place your finger on the touch pad, and move your fingertip across the touch pad to move the cursor. (The touch pad helps you use programs with graphical user-interfaces more easily)

**6. Touch pad buttons:** Works just like the mouse buttons on your desktop computer.



7. **Scroll button:** Press the top or bottom of the scroll button to scroll through a window.
8. **Built-in speakers:** Lets you hear sound when using audio applications.
9. **Power-saving mode switch:** If the power is on, closing the display panel puts your computer into the power-saving mode. (You can set the power-saving mode in the Windows(R) **Control Panel**)
10. **Volume down button:** Decreases the sound level.
11. **Volume up button:** Increases the sound level.
12. **Mute button:** Mutes the sound. (Press again to turn on the sound)
13. **LCD:** Displays text and graphics. (The size of display depends on the model type)

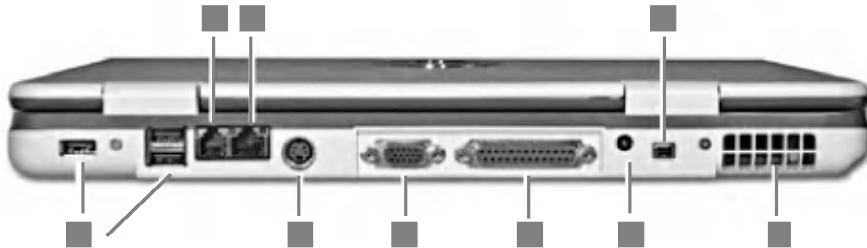
**Note: Opening the display panel**

Press and hold the latch button in the direction of the arrow **1**, and lift the display panel in the direction of the arrow **2**. Adjust the slope of the display panel for a comfortable viewing angle.



## Rear view

**Note:** Some models may look different from the picture below.

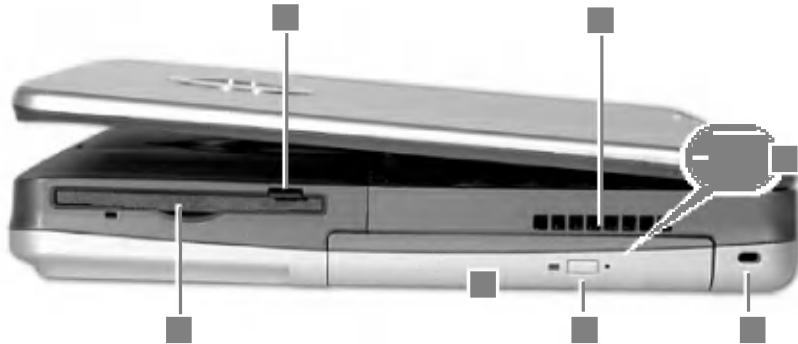


- 1. USB connectors:** Connects to USB devices.
- 2. Modem connector:** Connects to a telephone cable.
- 3. Ethernet connector:** Connects to a LAN cable.
- 4. S-Video connector:** Connects to a VCR or TV with an S-Video connector.
- 5. Monitor connector:** Connects to an external monitor.
- 6. Parallel connector:** Connects to a parallel device such as printer or scanner.
- 7. Power jack:** Connects to an AC adaptor.
- 8. IEEE 1394 connector:** Connects to IEEE 1394 devices. IEEE 1394 is a serial bus standard for high-speed/ high-capacity data transfer.
- 9. Fan louvers:** Enables air to circulate inside the computer, and thus prevents overheating. Do not place any object in front of the fan louvers; blocking the fan louvers may result in overheating and damage the computer.



## Right view

**Note:** NZ2 model does not have a floppy disk drive.



- 1. Floppy disk drive:** A storage device capable of reading from and writing to a 3.5 inch floppy disk. (NZ2 model does not have a floppy disk drive)
- 2. Floppy disk eject button:** Press the button to eject the floppy disk. (NZ2 model does not have a floppy disk drive)
- 3. CD-ROM drive:** A storage device capable of reading a data, video, or audio CD. (Some models have a CD-RW/DVD-ROM combo drive)
- 4. CD-ROM drive eject button:** If the power is on, press the button to eject the disk tray.
- 5. Fan louvers:** Enables air to circulate inside the computer, and thus prevents overheating. Do not place any object in front of the fan louvers; blocking the fan louvers may result in overheating and damage the computer.
- 6. Security keyhole:** Attach a user-purchased lock and cable to the keyhole, and secure the cable to a stationary object to prevent theft.
- 7. Emergency eject hole:** Insert a thin, stiff pin into the hole and press it to manually eject the disk tray.

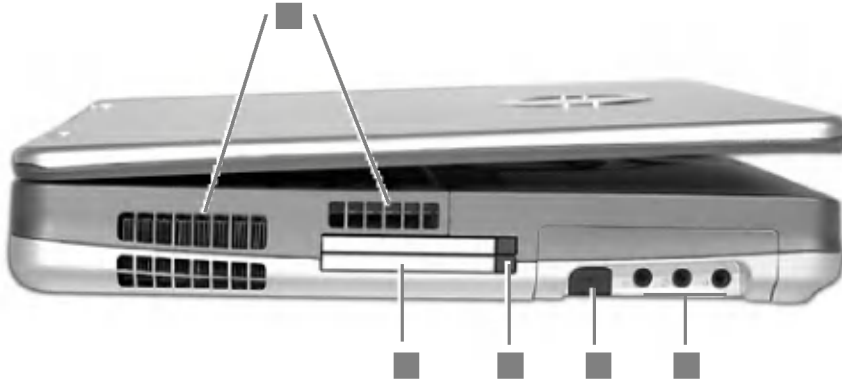
### Note

Your computer has a built-in CD-ROM or CD-RW/DVD-ROM combo drive depending on the model type.



## Left view

**Note:** NZ2 model has only one PC Card slot.



**1. Fan louvers:** Enables air to circulate inside the computer, and thus prevents overheating. Do not place any object in front of fan louvers. Blocking the fan louvers may result in overheating and damage the computer.

**2. PC Card slots:** You can insert two type II PC Cards or one type III PC Card. (NZ2 model has only one type II PC Card slot.)

**3. PC Card eject button:** Press the eject button to remove the PC Card.

**4. IrDA(R) port:** IrDA port enables wireless data transfer between your computer and a computer, printer, or any other devices supporting IrDA.

### 5. Audio jacks



**Speaker jack:** Connects to external speakers.



**Line-in:** Connects to an external audio source for sound input.



**Microphone jack:** Connects to a microphone.



## 1-3. Status indicators

**Note:** Some models may look different from the picture below.



- 1. Drive in use:** Drive in use indicator lights up when data is being written to or read from the hard disk or optical disk drive.
- 2. Caps lock:** Caps lock indicator lights up when the Caps lock key is pressed. When this indicator lights up, you can type capital letters without pressing the Shift key.
- 3. Num lock:** Num lock indicator lights up when the combination of the Shift and Num lock key is pressed. When this indicator lights up, you can use the embedded numeric keys. (To use the numeric keys, you must enable the **Internal Keypad** setting under the **Advanced** menu in the **BIOS Setup Utility**)
- 4. Scroll lock:** Scroll lock indicator lights up when the Scroll lock key is pressed.





**5. Power:** Power status indicator indicates the following status of the computer.

**Green:** The computer is turned on.

**Off:** The computer is turned off or is in hibernation mode.

**Blinking:** The computer is in standby mode.

**6. Battery:** Battery status indicator indicates the following status of the battery.

**Red:** The computer is connected to an AC adaptor and is being charged.

**Off:** The battery is fully charged OR the computer is not connected to an AC Adaptor.

**Blinking:** The battery power is under 10% of its maximum capacity.

This section describes how to use CYNOTE. Read this section before using your computer.

### 2-1. Using the AC adaptor

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

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

Connect the power cord to the adaptor, and then plug the power cord into an AC outlet.



#### Note

NZ2 and NZ4 models use different AC adaptors. Make sure you have the correct AC adaptor before connecting it to your computer.



#### 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. Doing so may result in electric shock.



## 2. Connecting the AC adaptor to the computer

Plug the adaptor cable into the power jack.



## 3. Opening and positioning the LCD panel

Press the latch button and open the display panel. Adjust the slope of the display panel for comfortable viewing.

## 4. Power switch

Press the power switch to turn on the computer.



### **Note**

You can switch from using 220V AC power to 110V by simply exchanging the 220V plug with the 110V plug.

For NZ4 models, if a floppy disk is in the drive when the computer is turned on, Windows(R) will not start.



## 2-2. Using the battery pack

The battery pack must be fully charged before first use.



**Caution:** You must turn off the computer before changing the battery pack.

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



2. Align the two small protrusions on the side of the battery pack with the grooves on the side of the battery slot; then insert the battery pack into the slot.



**Caution:** Use only the battery pack that comes with the computer.

3. Gently push the battery pack into the slot until it clicks.



4. The battery pack is inserted.



5. Connect the AC adaptor and open the LCD panel. Start charging the battery. (Refer to Page 23 **Using the AC adaptor**)

6. Check the battery status indicator.  
If the battery is fully charged, the indicator is turned off.



**Red:** The computer is connected to the AC adaptor and is being charged.

**Off:** The battery is fully charged OR the computer is not connected to the AC Adaptor.

**Blinking:** The battery power is under 10% of its maximum capacity.

7. To remove the battery pack, slide the battery latch in the direction of the arrow and hold; then lift the battery pack from the slot.



### Caution

When you are not using the computer, remove the battery pack.



**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 capacity of the battery pack. When this happens, you can perform the full discharge/charge to restore the capacity of the battery pack. To improve the capacity of the battery pack, periodic full discharge/charge should be performed once 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,**

Do not short-circuit the battery pack.

Keep the battery pack away from heat or fire.

Store the battery pack at room temperature. (32 ~140 degrees F/0 ~ 60 degrees C)

Do not disassemble the battery pack.

Do not expose the battery pack to water.

Keep the battery pack away from children.

**If the temperature of the battery pack drops below 50 degrees F(10 degrees C),** the trickle charging begins. The trickle charging may take 16hours for the battery pack to be fully charged.

**If the temperature of the battery pack drops below 32 degrees F(0 degrees C),** the battery pack cannot be charged.

## **2-3. Turning the power on and off**

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

### **Turning on the computer**

1. Press and hold the latch button(1) and open the display panel(2).



2. Press the power switch.



3. Pressing the power switch starts the self diagnostics; then Windows(R) XP startup screen is displayed.

## Turning off the computer

1. Quit all running applications; click **Start** and choose **Shut down** from the start up menu.



### 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.

2. In the **Shut Down Windows**, choose **Shut down**.



3. The computer is turned off automatically.



### Warning

If Windows does not shut down correctly, 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** in the **Start** menu.

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

If a program does not respond, press the **Ctrl+Alt+Delete** combination to start the **Task manager**; then quit the program or restart the system.

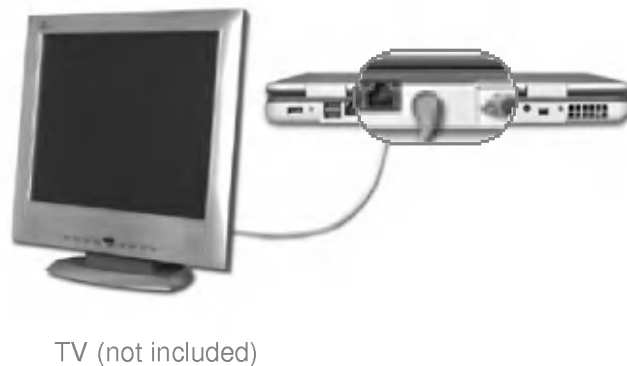
If Windows or program file is damaged by shutting down the system incorrectly, re-install the program. The user is responsible for the loss of data caused by incorrect use of the computer.

## 2-4. Attaching external devices

### Attaching a USB device



### Attaching a television using an S-Video connector





## Attaching an external monitor



External monitor  
(not included)

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

## Attaching a printer



Printer (not included)



## Attaching an IEEE 1394 device



## Attaching audio equipment





## 2-5. Using the IrDA port

Your computer supports IrDA (Infrared Data Association) standard for infrared communication.

### About IrDA port

**Range:** 1m

The range of communication is affected by its surroundings. Removing electronic devices, which may obstruct an IrDA communication, will increase the range of communication. For IrDA communication to work, there cannot be an object between the computer and the other IrDA device.

**Beam angle:** +-15

**Data transmission speed:** 4.0 Mbps

Your computer has an IrDA V3.0 Fast Infrared port allowing the data transmission speed of Serial Infrared(115.2Kbps) and Fast Infrared(4Mbps). Transmission speed depends on programs and devices used in IrDA communication.

**IrDA communication programs**

General serial communication programs can be used, but programs specifically designed for IrDA communication is recommended.

Your computer is configured to use COM port for IrDA communication in FIR mode.

### Using IrDA port

Your computer can communicate with another IrDA standard compatible device supporting FIR data communication. IrDA communication provides useful wireless communication between your computer and other computer or devices. The following section describes how to establish IrDA communication between 2 computers.

1. Make sure **Wireless Link** program is installed in your computer.

1. Turn on the computer.
2. Click **Start** button and right-click **My computer** to select **Properties**.
3. On **Hardware** tab, click **Device Manager**.



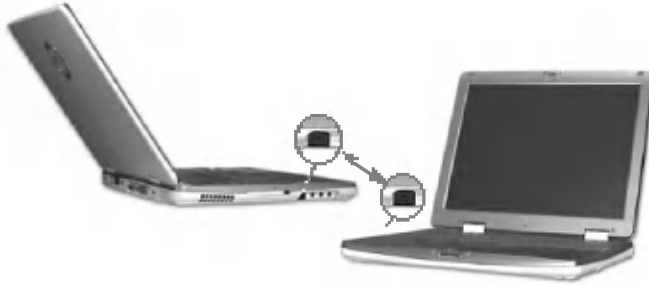


4. Right-click **IrDA Fast Infrared Port** and select **Properties**. Click **Advanced** tab, and configure the device.





2. Align 2 computers so that their IrDA ports point to each other.



3. The distance and the beam angle between the ports must be less than 1m and smaller than  $\pm 15$  degrees respectively.

4. Remove any obstruction between the ports.

5. When the connection is established, **Wireless Link** program starts automatically. **Wireless Link** icon appears on the **taskbar**, and shortcut to **Wireless link** is created on the desktop.



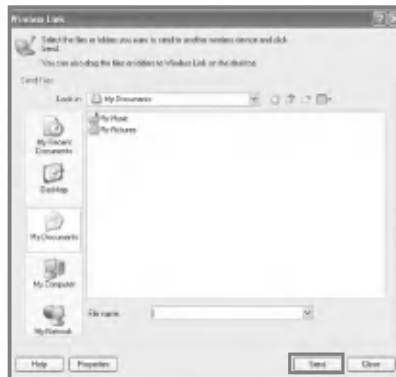
Shortcut to Wireless link



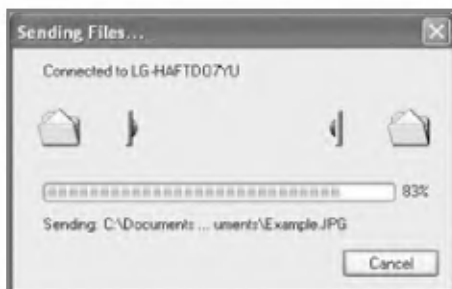
Wireless link icon

6. Double-click **Wireless link** icon on the **taskbar**; **Wireless Link** windows opens.

7. Select the file that you want to send, and click **Send**.



8. Sending and receiving computers show the following windows. Click **Yes** to start a data transfer.



Sender



Receiver

9. The data transfer is complete.



#### Note

The default directory for the received data is **C:\Documents and Settings\UserName\Desktop**. To change the default directory, open **Wireless Link** and click **Properties**, and then choose a new default directory.

## 3. Input Output



### 3-1. 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 **Shift** 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 **Shift** 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



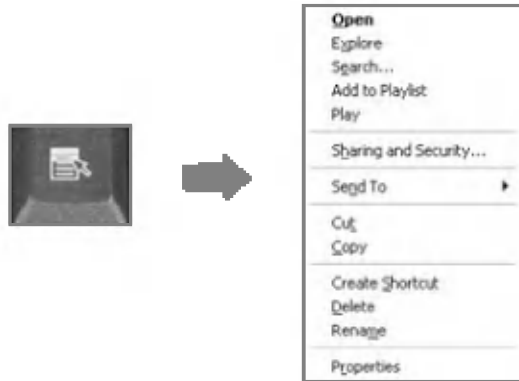
- 1. Shift key:** Hold **Shift** key down and press another key to enter the upper case letter for the key.
  - 2. Caps Lock key:** Press **Caps Lock** key to lock the keyboard in the upper case position. When the Caps Lock indicator lights up, you can press another key in combination with **Shift** to enter the lower case letter for the key.
- Note**  
You can lock the keyboard in the upper/lower case position by pressing **Caps Lock** key. Caps Lock indicator lights up in upper case position.  
You can use the combination of **Shift** and a character key to enter its upper/lower case letter.
- 3. Esc key:** Use **Esc** key to quit programs or cancel a operation in a program.
  - 4. 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.
  - 5. Enter key:** Press **Enter** key to enter a command or to end a line.



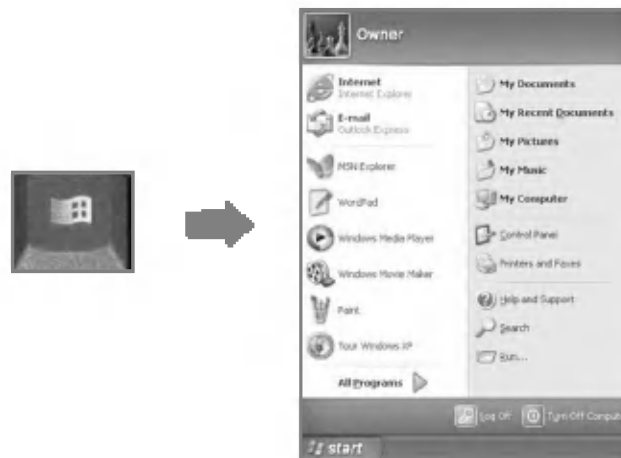




**6. Shortcut menu key:** Press **Shortcut menu** key to view shortcuts for the current program. (**Shortcut menu** key works the same as the right-clicking the mouse button).



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





## 3-2. 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 a power-saving mode. (ex: system standby and hibernation)

**Fn+F5:** Press the combination once to disable the touch pad, and press again to enable the touch pad. (The touch pad initialization takes 1~2 seconds, so wait for the initialization to end before using the touch pad)

**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+F8:** Enable/disable **Auto Brightness control**. Refer to **Battery Miser Help**.

**Fn+F9:** Enable/disable **Auto Sound driver**. Refer to **Battery Miser Help**.

## 3-3. 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:** used to move the pointer.
2. **Left button:** used to select or click items.
3. **Right button:** functions similar to the right button on a mouse.
4. **Scroll Up/Down button:** functions similar to the scroll wheel 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.

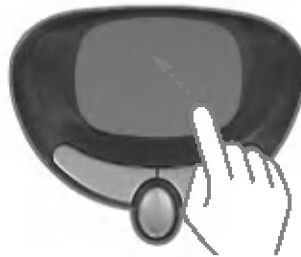
Do not remove the cover sheet of the touch pad as doing so may damage the touch pad.

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

Do not exert 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 a button, quickly press and release the left button. You can click the left button 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 a button, quickly press and release the left button twice. 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 program 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

ClickLock enables you to select text or drag a file without having to continuously hold down the mouse button or touch pad button.

Follow the instruction below to enable ClickLock. If ClickLock is enabled, you can hold down the mouse button or touch pad button for a moment and then release it, and 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.

1. Click and open the **Mouse Properties** window.



2. On the **Buttons** tab, under **ClickLock**, select **Turn on ClickLock** check box.



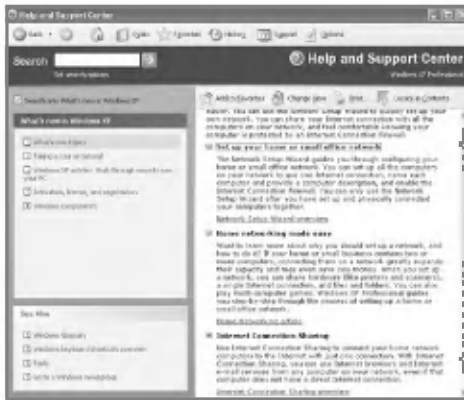
3. Click **Settings** and adjust how long you need to hold down a mouse or touch pad button to enable ClickLock, and then Select **OK**.





## Using the scroll up/down button

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.





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.

## 4-1. Starting the system setup

Booting the system using a startup floppy disk. (Page 49)

Setting a password. (Page 50)

Changing or removing the password. (Page 53)

Recovering the factory default settings. (Page 55)



### 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.

**CursorControl 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.

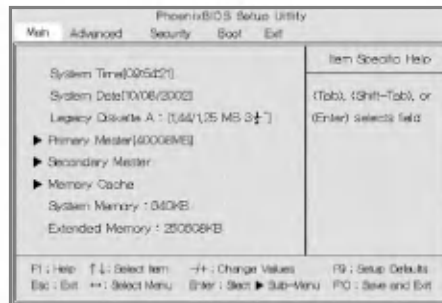




1. Turn on the computer.
2. When LG logo appears on the screen, press **F2**.



3. The **BIOS Setup Utility** window appears.



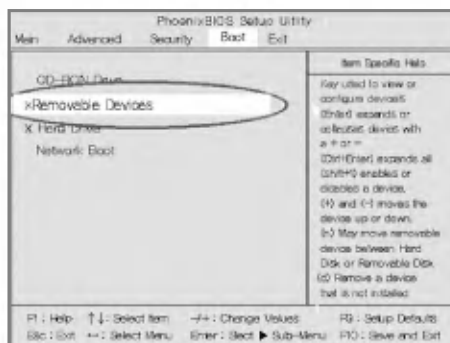


## 4-2. Booting with a bootable floppy disk

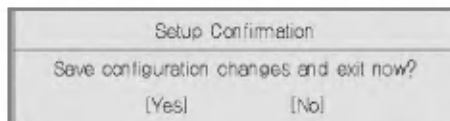
To boot your system using a floppy disk, you can either change the boot order or remove the bootable CD from the CD-ROM drive.

Follow the instructions below to set the floppy disk drive to the first on the boot order.

1. Open the **BIOS Setup Utility** and use arrow keys to select **Boot** menu.
2. Use arrow keys to select **Removable Devices**, and press **Shift** and **+** keys to move the item to the top of the list.



3. Press **F10** to save the new setting.
4. When the following message appears, select **Yes** and then press **Enter** to restart the computer.



## 4-3. 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.



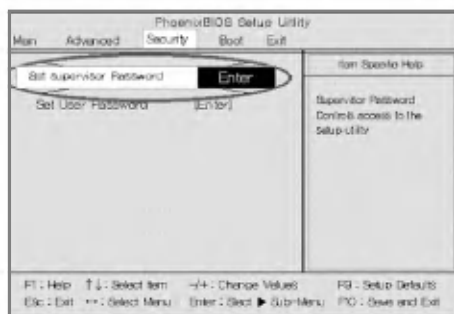
### Caution

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.

## Setting a 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.

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



### Note

You can use a supervisor password to gain access and change items in the **BIOS Setup Utility**, and select **Power on Boot**. If your computer is used by someone else, he or she should only use a user password.



3. 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.

Set Supervisor Password
Enter New Password [     ]
Confirm New password [     ]

4. If the following message appears, press **Enter**.

Setup Notice
Changes have been saved
[ Continue ]

5. Press **F10** to save the new settings.
6. If the following message appears, select **Yes** and press **Enter** to restart the computer.

Setup Confirmation
Save configuration changes and exit now?
[Yes]                    [No]

## Setting a user password

A 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**.

PhoenixBIOS Setup Utility				
Main	Advanced	Security	Boot	Exit
Set Supervisor Password (Enter)		Item Specific Help		
Set User Password <b>Enter</b>		User Password controls access to the system at boot.		
F1: Help    ↑↓: Select Item    ←→: Change Values    F9: Setup Defaults				
Esc: Exit    ←: Select Menu    Enter: Select Sub-Menu    F10: Save and Exit				



### Note

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

3. 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.

Set User Password	
Enter New Password [	]
Confirm New password [	]

4. If the following message appears, press **Enter**.

Setup Notice
Changes have been saved
[ Continue ]

5. Press **F10** to save the new settings.

6. If the following message appears, select **Yes** and press **Enter** to restart the computer.

Setup Confirmation	
Save configuration changes and exit now?	
[Yes]	[No]



## 4-4. Changing or removing the password

You must know the password to change or remove it.

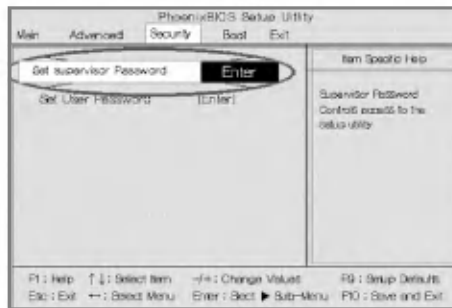
1. Start the **BIOS Setup Utility**, enter your password, and then press **Enter**.



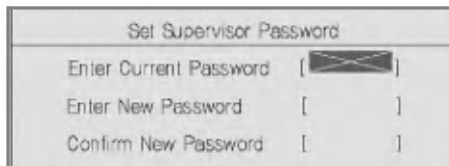
To change the password, follow the instruction on **Setting a password**.

To remove the password, follow the instructions below.

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



3. If the following message appears, enter the current password in the bracket next to **Enter Current Password**, and then press **Enter**.



4. Press **Enter** without entering a password in the brackets next to **Enter New Password** and **Confirm New Password**.

Set Supervisor Password	
Enter Current Password	[       ]
Enter New Password	[    ❌    ]
Confirm New Password	[    ❌    ]

5. If the following message appears, press **Enter**.

Setup Notice
Changes have been saved
[ Continue ]

6. Press **F10** to save the new settings.

7. If the following message appears, select **Yes** and press **Enter** to restart the computer.

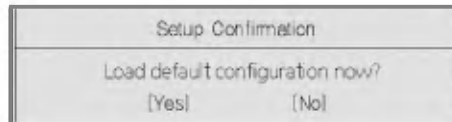
Setup Confirmation
Save configuration changes and exit now?
[Yes]                      [No]



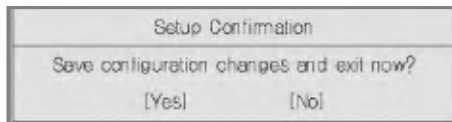
## 4-5. Recovering the factory default settings

If a user accidentally modifies the system setup, follow the instruction below to recover the factory default settings.

1. Start the **BIOS Setup Utility**, and use arrow keys to select **Exit**.
2. Use arrow keys to select **Load Setup Defaults**, and press **Enter**.
3. If the following message appears, select **Yes** and press **Enter** to recover the factory default settings.



4. Press **F10** to save the new settings.
5. If the following message appears, select **Yes** and press **Enter** to restart the computer.









## 5. Installing Device Drivers

### 5-1. About the Software installation CD

The **Software installation CD** enables you to install or restore device drivers and certain programs. Use this CD after you install **Windows** or if you experience frequent system errors.

The **Software installation CD** includes the following device drivers. Installing the device drivers improves the functionality of your computer, and helps you get the most out of your computing environment.

**Intel(R) Chipset driver** enables you to get the most out of **Intel Chipset**, and thus improves the functionality of the computer.

**ATI(R) Video driver** enables the computer to display information on the LCD.

**SoundMax driver** enables the computer to play audio files and CDs.

**Intel LAN driver** enables **Intel LAN controller** to function correctly.

**Cardbus driver** enables **Cardbus controller** to function correctly.

**TouchPad driver** enables **TouchPad controller** to function correctly.

**Battery Miser** extends the life of the battery by shutting down the power on the periph-

### Optional device drivers

The following optional device drivers may or may not be displayed when you open the **Software installation CD**.

**Windows(R) update** corrects problems that may occur during the use of **Windows XP**.

**Note:** **Windows update** is displayed only if **Windows XP** is installed in your system. It is not displayed if **Windows XP SP1** is installed.

**Wireless LAN driver** enables **Wireless LAN controller** to function correctly.



**Agere Systems AC'97 Modem driver** enables the modem to function correctly.

**Lucent Win Modem driver** enables the modem to function correctly.

**Note:** **Wireless LAN, Agere Systems AC'97 Modem, and Lucent Win Modem drivers** are included only if you have purchased and installed an optional **LGE Mini-PCI Card** in your system.

**Intel SpeedStep Technology Applet** enables the computer to function more efficiently by changing the CPU clock according to the computing environment.

**Note:** **Intel Speed Step Technology Applet** is displayed only if **Windows 2000** is installed in your system.

## 5-2. Installing device drivers

Follow the instructions below to install device drivers:

1. Turn on the computer and insert the **Software installation CD**.
2. Select the device driver you want to install.
3. Follow the instructions to complete the installation.

**Note:** Some device drivers require you to restart the computer after the installation.



## 6-1. Using the optical drive

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

### Inserting a CD

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



2. Pull out the disk tray from the CD-ROM drive.



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



4. Push the tray into the CD-ROM drive.



**Note**

When you use the CD-ROM or CD-RW/DVD-ROM 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 CD-RW/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. Place the CD in its protective case.

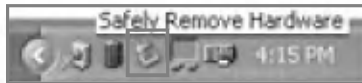


3. Push the disk tray into the drive.



## Replacing the optical drive

1. Click **Safely Remove Hardware** icon on the **taskbar**.



2. Select the hardware you want to remove, and press **Stop**.



3. When the following screen appears, press **OK**.



4. When a message, **Safe to Remove Hardware** appears, push the latch toward the left and hold.



5. Pull out the device from the computer.





6. Insert and push the new device until you hear a click.



## 6-2. 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 a 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.

- 
1. Turn on the computer.

2. Press the eject button on the drive to open the disk tray, and then insert an audio CD and close the tray.







3. 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)

---

1. Press **Start -> All Programs -> Accessories -> Entertainment -> Windows Media Player**.

2. When Windows Media Player opens, press **Open** under **File** menu, and then select an audio or video file you want to play.



## 6-3. Using the floppy disk drive (NZ4 model only)

**Note:** NZ2 model does not have a floppy disk drive. If your computer does not have a built-in floppy disk drive, you can purchase a replaceable floppy disk drive that fits into the optical disk drive bay of your computer.

A floppy disk drive does not store data on the drive. The actual data is stored in a floppy disk, and the drive reads and writes the data on the floppy disk. A floppy disk can store only a small amount of data, but its small size and light weight makes it easy to carry around.

Backup your important data on a different floppy disk.

Store floppy disks safely in a protective case.

Hold your floppy disk by the plastic side where the label is.

Write on the label before attaching it to the floppy disk.

If you need to write on a label that is already attached to a disk, use a soft felt pen.

Do not hold a floppy disk by the metal side where the opening is.

Remove the old label before placing a new one.

Keep your floppy disks away from a TV and other electronic appliances that may generate magnetic fields.

Keep your floppy disks away from heat and direct sun light.

You can lock your floppy disk with the write-protect tab. Move the write-protect tab to close and open the square hole. If the hole is open, the floppy disk is locked and you can not write or erase data on the disk.



**Closed:** Read and Write



**Open:** Read only

**Note:** Do not eject a floppy disk from the drive when the floppy disk drive indicator is on.

Using the floppy disk drive

1. Turn the power on.
2. Insert a floppy disk into the disk drive.



### Caution

Insert a floppy disk with the label side facing up.



### Note

If you insert a bootable floppy disk and turn the power on, you can boot with the floppy disk. If you insert a floppy disk while Windows(R) is running, you can read and write data on the disk.

3. Press the eject button to remove the floppy disk.





## 6-4. Installing memory

When you are using the computer, you may want to increase 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 512MB, and the maximum memory capacity of the computer is 1024MB.

### 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

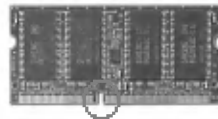
Use only the correct type of memory module (DDR SDRAM using 2.5V).

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 PC2100/DDR SDRAM SO-DIMM 266MHz/200MHz with FSB Frequency of 400MHz.



## Purchasing memory

Be sure to buy the correct type of memory modules for your computer.

Type: PC2100 (200 pin DDR SDRAM SO-DIMM)

Speed: 266MHz (133MHz X2), 200MHz (100MHz X2)

Size: 128MB, 256MB, 512MB

## Installing memory

Main board configuration, memory socket, and memory module may look different in different models of computer.

1. 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 adaptor and battery pack, and detach any device or cable that are attached to the computer.

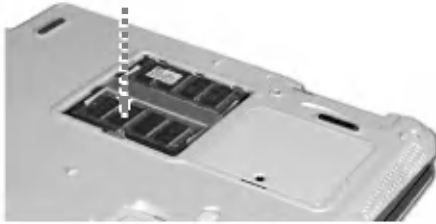
2. Use the notch on the memory to make sure the memory aligns with the socket, and then insert the memory into the socket at an angle of approximately 30 degrees.





3. Push down the memory until you hear a click

**Note:** Push down the memory until the latch firmly secures the memory on the socket.



### Attention

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

4. Close the cover and tighten the screw.



5. 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.







## Features

### Processor

#### **NZ2:**

Intel Mobile Pentium4 Processor-M

(L2 cache: 512KB, Micro-FCPGA package: 1.8GHz, 1.9GHz, 2.0GHz, 2.2GHz)

Intel Mobile Celeron Processor

(L2 cache: 256KB, Micro-FCPGA package: 1.8GHz)

#### **NZ4:**

Intel Pentium4 Processor

(L2 cache: 512KB, Micro-FC-PGA2 package: 2.4GHz)

### 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 DDR SDRAM SO-DIMM

Maximum: 512MB on each slot and 1024MB combined

Memory Type: DDR SDRAM SO-DIMM (128MB, 256MB, and 512MB)

### BIOS ROM

4MB of ROM

### 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

1.44MB 3.8-inch floppy diskette drive(NZ2 model does not have a floppy diskette drive)

Optical drive (CD-ROM or CD-RW/DVD combo drive)

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





## External I/O Interfaces

### **NZ2:**

- External monitor connector
- 25-pin parallel connector
- PC Card slot
- Microphone jack
- Speaker/Headphone jack
- Audio Line-in jack
- IrDA port
- 3 Universal Serial Bus (USB) connectors
- RJ11 telephone connector
- RJ45 Ethernet connector
- IEEE 1395 connector
- S-Video connector

### **NZ4:**

- External monitor connector
- 25-pin parallel connector
- 2 PC Card slots
- Microphone jack
- Speaker/Headphone jack
- Audio Line-in jack
- IrDA port
- 3 Universal Serial Bus (USB) connectors
- RJ11 telephone connector
- RJ45 Ethernet connector
- IEEE 1395 connector
- S-Video connector

## **Graphics**

- ATI Mobility Radeon M6-C Graphics Controller
- 4X AGP
- 16MB of Video memory

## **Sound**

- Analog Devices AC'97 SoundMax CODEC (AD1886A)
- Stereo speakers



**Display**

XGA (1024X768) TFT LCD

Note: The size of display is different depending on the model type.

**LAN**

Intel 82562 ET

RJ45 Ethernet connector

**Modem**

Ambit JO7M040.05 (Mini PCI Card)

RJ11 telephone connector





## Power specification

### AC Adaptor (Free Voltage)

#### **NZ2:**

Input: AC 100 ~ 240V, 1.6A, 50 ~ 60Hz

Output: DC 18.5V, 3.5A, 65W

#### **NZ4:**

Input: AC 100 ~ 240V, 1.5A, 50 ~ 60Hz

Output: DC 18.5V, 4.9A, 90W

**Note:** Use the correct adaptor 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

(9.6 ~ 40 degrees C/ 49.28 ~104 degrees F)

Less than 16 hours with the power off in low temperature

(0 ~ 9.6 degrees C/ 32 ~ 49.28 degrees F)

**Note:** The battery cannot be charged below 0 degrees C(32 degrees F).

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

### Battery Life

**NZ2** (Mobile CPU): More than 4hours (BatteryMark(TM) V4.0.1)

**NZ4** (Desktop CPU): More than 2hours (BatteryMark V4.0.1)

## Operating environment

### Operating

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

### Non-operating

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