P/N:3828BPH013A

Rev.00

User's Guide

LG

User's Guide

FKseries

DESKTOP PC

NOTEBOOK PC

TOWER PC

X900

MOUSE

KEY BOARD

X900

FK series

P/N: 3828BPH013A(Rev.00)

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
>
> ---
>
> **1.Warning**: Not following the instruction could result in death or serious injury.
>
> **2.Caution**: Not following the instruction could result in minor or moderate injury and/or damage to the product.

This User's guide is for FK model.
Instructions may be different depending on models.
Check your model before reading User's guide.

Keep User's guide at a place where other users always can reach

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● 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 product.

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

Contents

LG

⚠ Important Safety Instructions

Following instructions are to help users to use the product safely and properly and to prevent any potential risk or damage. Please read the following instructions carefully before using the product.

Installation

<p align="center">⚠ Warning</p>

Do not use the product in damp places including a laundry room and bathroom.

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

Operate the computer within a temperature range of 41 to 95℉ (5℃~35℃) and 30 to 80% of relative humidity

Dispose of its desiccating agent and vinyl packages properly.

A child may get suffocated by swallowing the desiccating agent or wearing the packages on head.

<p align="center">⚠ Caution</p>

Use the product in a dust-free environment.

Otherwise, the product may malfunction.

Do not place any mechanical interference within a 15cm radius of the computer.

The computer may be heated from inside and result in a burn.

Keep away from the moisture condensation.

It may damage on the computer. If this happens, turn off the computer and make it dry before power is on

Operate the product in a place without electromagnetic interference.

Keep a proper distance between the computer and such electronic appliances as speakers that generate strong magnetic fields. Otherwise, data stored on the hard disk may be lost or the display color on the monitor may be impaired.

Power Connection

⚠ Warning

Do not use loose plugs or damaged power cords.

An electric shock or fire may occur.

Operate the product at the proper voltage.

Excessive voltage may result in damage on the product, electric shock or fire.

Use a socket with an earth pin equipped.

If not earthed, the product may cause an electric shock and get damaged.

Use power outlets with an earth pin installed and proper supply of rated electricity.

An electric leakage may cause an electric shock or fire.

Do not touch the power cord with your hands wet.

There is a possibility of an electric shock.

In the case that a strange noise is heard from the cord or plug, disconnect the power cord from the outlet immediately and contact the service center.

A fire or electric shock may occur.

Tightly connect the power cord to the outlet.

Loose connection of the power cord could cause a fire.

Pull the plug, not the cord, to disconnect the power.

Otherwise, a fire may occur or the product may get damaged.

Always keep the power cord and the outlet clean.

A fire may occur.

In the case that a watery or other alien substance enters inside the computer, disconnect the power and contact the service center.

Damaged parts may cause a fire or electric shock.

Use a socket with an earth pin equipped.

If not earthed, the product may cause an electric shock and get damaged.

Use power outlets with an earth pin installed and proper supply of rated electricity.

An electric leakage may cause an electric shock or fire.

Do not impair the cord by excessive bending or hard pressing. Keep the power cord out of reach of children and pets.

A damaged power cord may cause an electric shock or fire.

Using the Computer

⚠ **Warning**

Clean the computer with proper detergent and dry it completely before using it again.

Otherwise, a fire or electric shock may occur.

Disconnect the power and the Internet line from the modem, the LAN card and others in case of a lightning strike.

An electric shock or fire may occur.

Do not leave a cup or other containers filled with chemical or water near the computer.

In the case that liquid is spilt inside the computer, a fire or electric shock may occur.

Do not connect a key-phone line to the modem.

A fire may occur or the product may get damaged.

In the case that the computer is dropped or get damaged, disconnect the power and contact the service center.

If a damaged computer is used continuously, an electric shock or fire may occur.

Do not expose the computer to direct sunlight.

The product may be deformed or caught on fire due to a temperature rise.

Do not put a lit candle or burning cigarette on the computer.

A fire may occur or the product may get damaged.

If you smell or see smoke from the computer, stop using the computer and dis connect the power before contacting the service center.

A fire may occur.

Please ask one of our engineers to check the operational state after your com puter has been repaired.

Otherwise, there exists a possibility of an electric shock or fire.

Leave the product away from heat-generating devices such as a heater.

The product may get deformed or catch on fire.

Before turning on the system, switch on peripheral devices.

Otherwise, the product may get damaged.

Turn off the system before switching off peripheral devices.

Otherwise, the product may get damaged.

Connect allowed devices only.

Otherwise, the product may get damaged.

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

Otherwise, the product may get damaged or an injury may occur.

It is recommended not to use a wireless LAN connection within a 5m radius of a microwave or plasma light. If you have to use wireless LAN and a plasma bulb within the range, however, do it through a channel between 11 and 13.

Still, the connection may not be made, or the transmission rate may drop.

Do not press "Eject" button while the Floppy/CD-ROM drive is running.

The data may be lost or the disk may spin out unexpectedly to cause an injury.

Insert a memory card in the correct direction.

A forceful insertion of the memory card may damage the product and the memory.

Do not drop a part or device of a computer when ejecting it.

If dropped, they may get damaged and cause an injury.

Storing and Moving the Computer

⚠ Caution

Before moving the computer, turn off the power and disconnect all cables.

If not, one may trip over the wire, damaging the computer and getting an injury.

Upgrading the Computer

⚠ Warning

When disassembling the computer, do not take out the power supply unit and prevent children from swallowing nuts unscrewed.

If a child swallowed a nut, they may get suffocated. In that case, see the doctor immediately.

Do not disassemble the power supply unit.

You may get an electric shock.

Before disassembling the product, turn off the system and disconnect the power cable. In case the telephone line is connected to the modem, disconnect the telephone line also.

An electric shock or fire may occur.

Do not disassemble or moderate the computer arbitrarily.

An electric shock may occur.

When handling computer parts, follow the instructions included in the manual.

Soldered prickles on the board may cause an injury.

Please use parts certified by LG Electronics.

A fire may occur or the product may get damaged.

Please contact our service center before you connect an peripheral device not manufactured by LG Electronics to your computer.

The product may get damaged.

Safety Notes to Prevent Data Loss (HDD Management)

⚠ Caution

Handle the computer with care to prevent a data loss.

- Since the hard disk is sensitive to shocks, please make a back-up file of important data all the time.
- The manufacturer will not be responsible for any hard-disk data loss caused by a user's mistake.

Hard disk damage and data loss may occur when.

- External shocks are given on the computer while the computer is separated or installed.
- The computer is reset (rebooted) due to a power failure while the hard disk is running.
- The computer is infected with a virus, tainting the data recoverably.
- The power is abruptly disconnected.
- Moving, shaking or pounding the computer while the hard disk is running, and thus causing file damage or bad sectors.

It is recommended to back up the data to minimize damage caused by hard disk damage.

The manufacturer is not responsible for any data loss.

Help and Support

Click the "Help and Support" menu to learn Windows operation and troubleshooting, and receive technical supports. Please read the menu before using the computer.
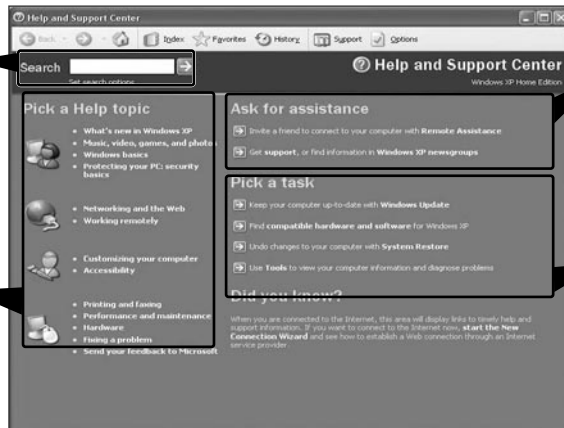
1 Click **[Start]** button, and then **Help and Support.**

2 Then, the following screen will appear.

Suggested items, text search result, Microsoft Knowledge Base and other contents are investigated. Microsoft Knowledge Base is supported only when the Internet is connected.

By selecting proper items, the user can check functions of Windows XP and troubleshooting.

Through the Internet connection, the user can ask others for a help and receive the telephone number of the technical support center.

The user can configure the optimal environment for computers.

1.Installing the system

1-1. Contents of the Product

Contents and the front design of the product may differ by model.

⚠ Caution

Be sure to use designated cleaning chemicals to clean your computer. Use of other chemicals such as thinner, benzene or alcohol may cause damage or deformation of the product.

Computer

Keyboard

Mouse

Power Cord
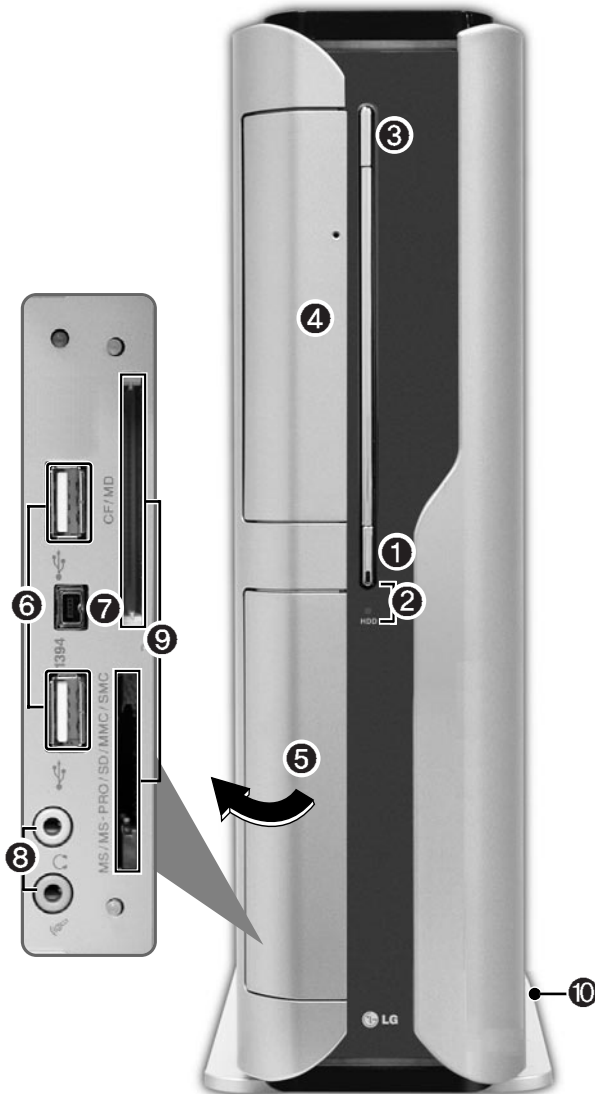
User's guidel

Troubleshooting guide

Modem cable

LG GILJABI CD
(Software installation CD)

Recovery CD

1-2. Composition

Front Part

❶ **Power Button**
Turns on/off the computer.

❷ **Power Lamp and H/D Indication Lamp**
Indicates the power and the hard disk state when the computer is turned on. (When the hard disk is running, the lamp will blink. - However, this feature may not function in some systems.)

❸ **CD-ROM Drive Button**
Inserts or ejects a CD in/from the CD-ROM drive.
(The cover is opened and closed automatically if the user presses this button.)

❹ **CD-ROM Drive**
Operates a large-capacity data CD or video/audio CD as one of auxiliary memory devices. (Depending on product model, CD-RW and DVD-ROM drives may be equipped.)

❺ **Input/Output Port Cover**
The user can open the cover by pulling the cover as shown in the figure.

⑥ USB (USB 1.0 Port) Connector

Connects USB devices or hubs (including a USB mouse or digital camera).

⑦ IEEE1394 Connector

Connects IEEE 1394-4 4-pin devices (including a camcorder).

⑧ Sound Connector

Earphone Connector

A port for external earphones.

Microphone Connector

A port for external microphone.

⑨ Multimedia Card Slot

Hosts various portable memory cards - CF, MD, MS, MS-PRO, SD, MMC, SMC and others.

⑩ Support

The support of for stable installation of the main body of the computer.

⚠️ **Caution**

Each slot is marked with a symbol indicating proper card types that can be accommodated. Check the symbol and insert a right type of memory card in the direction as shown in the figure.

Do not delete **[Safely Remove Hardware]** (🖴) icon. Otherwise, the computer needs rebooting to use the memory card slot.

■ Remove the support to use your computer laid down.

■ To use the computer with the body standing, install the support. Otherwise, the system may function unstably.

Note

■ Optional parts differ by product model. For more information about optional parts, see **Option Guide of GILJABI CD**.

Rear Part
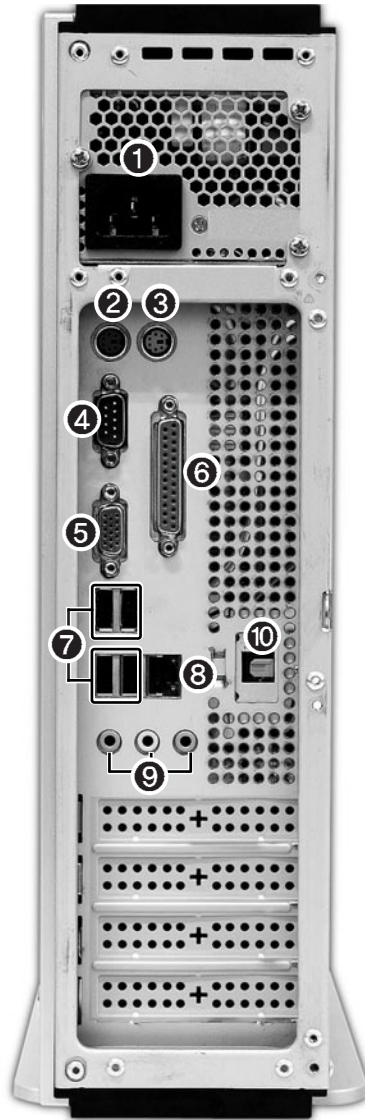
Note

■ The rear configuration may differ from the image depending on product model.

❶ **Computer Power Connector**
Connects the power cord to provide power to the computer.

❷ **Keyboard Connector**
Connects a PS/2 keyboard.

❸ **Mouse Connector**
Connects a PS/2-type mouse.

⚠ **Warning**
Do not disassemble power supplies.
There is a risk of electrical shock.

❹ **Serial Connector**
A serial communication connector to exchange data between the computer and external devices.

❺ **Video Connector**
Connects the monitor cable to use a built-in video. Does not function when a video card is installed.

❻ **Parallel Connector**
Parallel communication connector to transmit data from the computer to external devices, mostly to the printer.

❼ **USB (USB 2.0 Port) Connector**
Connects USB devices or hubs such as USB mouse or digital cameras.

❽ **LAN**
Connects other systems and hubs through the UTP at 10/100/1000 Mps.

❾ **Sound Connector**
External Speaker Connector
Hosts an external speaker Connector.

Line Input Connector
Hosts an external audio Connector.

Microphone Connector
Hosts an external microphone Connector.

❿ **Digital Sound Output Port (S/PDIF)**
An optic output port to produce digital sound.

Note

■ Modem cable is offered for models that support modem card.

1-3. Installation

Installation is not difficult, and we recommend users to install by themselves. Before installation, turn off the computer and all peripheral devices. As the keyboard and the mouse use same-shaped connectors, please check the symbols next to the mouse connector hole and the keyboard connector hole. Card composition is different from product to product.

⚠ Warning

■ Do not leave a liquid container on the computer. An electric shock may occur and the system could break downr.

■ Keep the ventilation hole of the power supply unit free of alien substances. Internal parts of the computer may get damaged and an electric shock may occur.

❶ Connecting the Keyboard

The connector of the keyboard cable is round in shape and consists of 6 pins.

Insert the keyboard connector pin correctly in the keyboard connector hole on the rear panel of the computer. Insert the keyboard cable connector as shown in the figure.

❷ Connecting a Mouse

The mouse cable has a round connector with 6 pins.

The round connector on the mouse cable fits into the PS/2 connector on the rear of the computer. Be sure to align the 6 pins on the cable with the corresponding holes on the connector.

❸ Using the Keyboard Support

Installed at the bottom of the keyboard.

Raise the keyboard supports to relieve fatigue on the wrists.

❹ Connecting Power

Power supply is 110V/220V (selection) or 220V only.

Connect the power cord to the computer and the outlet on the wall.

⚠ **Warning**

■ Power supply is 110V/220V (selection) or 220V only.

■ Check the location of the switching button when 110V/220V (selection) is used.

220V use   **110V use**

■ Operate the product at the proper voltage when selecting 110V or 220V power supply. Incorrect use of power supply may damage on the product or fire.
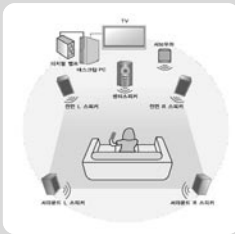
1-4. Connecting Peripheral Devices (To Be Separately Purchased)
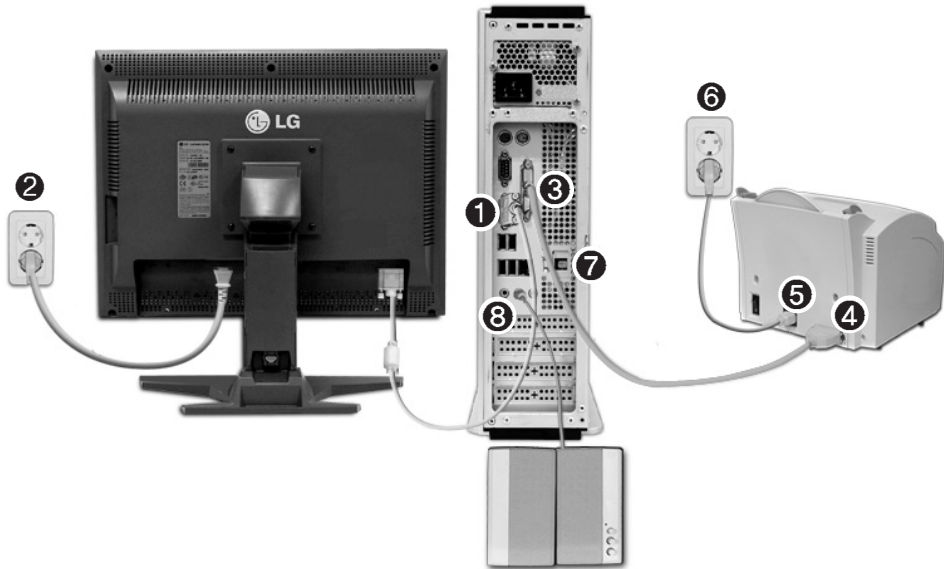
⚠ Warning

■ Do not connect too many cables to one extension cord. An electric shock may occur.

■ Do not leave the power cord below the body.

■ Do not touch the outlet when connecting or disconnecting the power cord. An electric shock may occur.

Note

■ The digital 5.1 channels require following environments.
- Title recorded at 5.1 channels (DVD titles with DTS or Dolby Digital 5.1 marks)
- DVD-playing program supporting digital 5.1 channels (for example, Power DVD 4.0 or higher)
- A/V receiver or digital speaker supporting digital 5.1 channels (Only optic ports are supported.)
- Basic specification is 5.1CH 48KHz, and 7.1CH 96KHz is optional.

Connecting Monitor (To Be Separately Purchase)

The monitor signal cable and the power cords are included in the package box.
For more information about using the monitor, see the monitor manual.

When using a
built-in video

When the video
card is installed

❶ Connect the monitor signal cable to the Video port to transmit computer signals to the monitor.

❷ Connect the monitor power cable both to the monitor and the power outlet to supply power to the monitor. When turning on/off the computer, turn on/off the monitor. When using the same power supply unit for the computer and the monitor, check the voltage of the monitor before turning on.

Connecting the Printer (To Be Separately Purchased)

The printer cable and the power cords are included in the package box.
For more information about using the printer, see the printer manual.

❸ Connect the printer cable to a parallel connector of the computer. (However if the printer supports USB ports, connect it to the USB connector.)

❹ Connect the other end of the printer cable to the printer parallel connector.

❺ Connect the power cord of the printer to the printer power connector.

❻ Connect the power plug of the printer to the power outlet.

Connecting an Optical Output Port (To Be Separately Purchased)

The user can listen to digital sound through optical output speakers using S/DIF function.

❼ Connect the optical cable to speakers with optical output port using S/PDIF function.

Connecting the Speakers (To BE Separately Purchased)

This product is not equipped with speakers.
To output sound, connect external speakers.

❽ Connect the speaker connector to External Speaker (⦅⦆) connector on the rear panel of the computer.

Note

■ In the case where sound is to low or mute, adjust the volume by clicking on the [**Master Volume**] icon on the right end of the Windows task bar.

memo

2.Using the System

2-1.Turning on the Computer

Check if the floppy disk drive on the front part of the computer is empty and the power cord and the peripheral devices are connected to the computer on the rear panel. After installing the system, register user information. Turn on the power of the main body, and register user information by following the Windows screen instructions.

● Registration process

1 Pressing the power switch starts the self-diagnostic procedures; then Windows(R) XP startup screen is displayed .In a moment, a dialogue box, saying **Welcome to Microsoft Windows** appears on the screen. Then Click **[Next].**

2 After **Help protect your PC** message appears on the screen, select **Help protect my PC by turning on Automatic Updates now** and then press **[Next]**.

**3** Internet connection option screen appears, follow the instruction.

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 **Who will use this computer?** message appears on the screen. Type the namesof the users and click **[Next]**.

⑥ "Thank you!" message appears on the screen.
  Click **[Finish]** to complete the registration process.
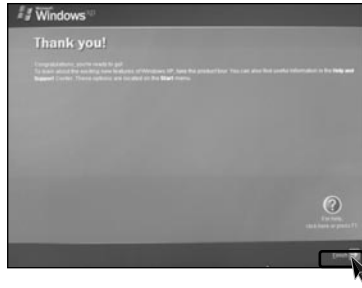
⚠ Caution

Certificate of Authenticity

The certificate of authenticity includes the Windows product key. This certificate is the unique indication that proves your Windows is authentic. Do not damage or remove this sticker (attached on the side of the product.).

※The certificate provided may be different from this image.

2-2.Using Windows XP

Windows XP is brilliant, fresh, and easy to use. The desktop and task bar images are simplified, and you can easily access applications through the Start menu. There are more "Desktop" options for you to customize the environment.

Windows XP Tour

Windows is an operation system of the computer. It is recommended to know basic functionality of Windows for better use of a computer.

Click the **[Start]** button and click **Windows XP Tour.**

Then, the window will appear. Select a feature of Windows XP to view detailed description.

Windows XP Desktop

❶ **[Start button**	Click the Start button to view Start menus. By clicking **[All Programs]** you can display a list of programs currently installed on the computer.
❷ **Start Menu**	Include necessary applications to start Windows.
❸ **Taskbar**	Indicates currently running programs.
❹ **Taskbar Icons and Clock**	You can set the screen resolution, color, audio, and date/time by clicking icons.
❺ **Recycle Bin**	You can delete files and folders which will be saved automatically in the **Recycle Bin.** Running Empty Recycle Bin will delete files and folders permanently from your computer.

Overview of Start Menu

Click the **[Start]** button to view menus that are most commonly used on the computer

❶ Fixed Topics
❷ Recently Used Programs
❸ All Programs
❹ Control Panel: Enables to customize computer setting.
❺ My Computer: Displays information on drives and networks, and enables you to retrieve or run files and folders

To Change Start Menu Style

❶ Right-click the **[Start]** button, and click **[Properties]**. Then, click an option under the Start menu tab.

❷ To select the default start menu, click **[Start Menu]** on the **[Taskbar and Start Menu Properties]** tab.
❸ To select the style in an older version of Windows, click the **Classic Start Menu.**
❹ Click **[OK]** to apply the new settings.

To Display Programs at the top of Start Menu

Fixed items

1 Select and right-click a program to display at the top of Start menu.

2 Click **[Pin to Start Menu].**

3 The selected program will be displayed on the upper part of boundary as a fixed topic.

To Display Recent Documents on Start Menu
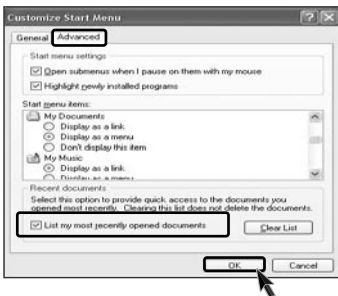
1 Right-click the **[Start]** button, and click the **[Properties].**

2 Click Start menu on the Start Menu tab, and click **[Customize].** Select **[List my most recently opened documents]** on the Advanced tab, and click **[OK].**

3 Click **[Apply]** → **[OK]** in **[Taskbar and Start Menu Properties]** window to save the new settings. Then, click the Start button to display the Recently Opened Documents folder where recent documents and files are saved will be displayed on the Start menu.

Note

■ To empty My Recent Documents folder, click the Clear List on the Advanced tab. Although the list is cleared, the documents will not be deleted in the computer.

Control Panel

Category View, a New View grouping similar topics, has been added to **Control Panel.** Classic View displays all topics individually. You can select either Category View or Classic View according to your taste.
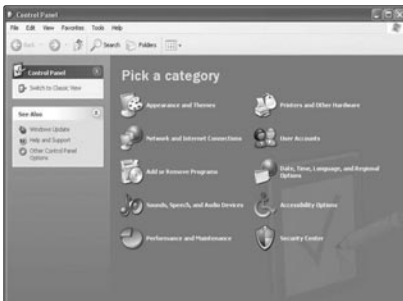

Category View

Classic View

● **Changing Desktop Appearance and Theme**

With Theme menu, you can customize the desktop including the background, the screen saver, icons, windows, the mouse pointer, and sound. If there are multiple users, each user can customize his/her own desktop using Theme menu.

To Use Windows Classic Configuration

1 Click **[Control Panel]** → **[Switch to Classic View]** → **[Display]**.

2 Click **[Windows Classic]** under Themes tab.
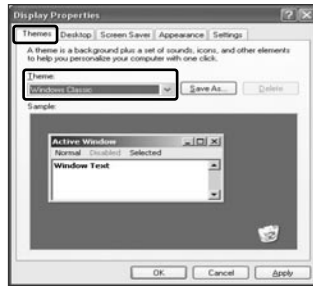
To Select an Other Theme

1 Click **[Control Panel]** → **[Switch to Classic View]** → **[Display]**.

2 Click **[Windows XP]** under Theme tab.

Note

■ To view display properties, click **[Start]** → **[Control Panel]** → **[Switch to Classic View]** and double-click Display.

After selecting Windows Classic, you can customize Windows elements such as window borders, icons, and menus.

Select Appearance tab, and click Advanced.

To Change Background

1 Click **[Control Panel]** → **[Switch to Classic View]** →
[Display], and select the Background tab. (Or locate the
mouse point on the Windows background, and right-click
it. Then, a popup menu will appear. Select **[Properties]**
from the popup menu.)

2 Click the scroll (triangle down) button, and check the
image list. Select an image to use it as the background,
and click **[Apply]**. Then, the background will be changed.
However, if there is no image that you would like to use as
the background, click **[Browse]** and select an image file.

To Set Screen Saver

1 Run **[Control Panel]** → **[Switch to Classic View]**
→ **[Display]**. And select **[Screen Saver]** tab.
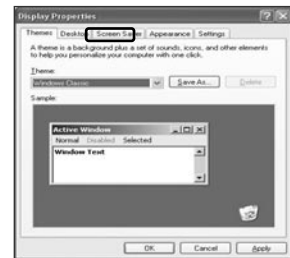
2 Select a screen saver from the list.
Click the scroll button of Wait field and set the time to
wait till the screen saver is activated. Select Password
Protected check box, then you will be requested to enter
the password when restarting Windows while the screen
saver is running. This feature is convenient for prevent-
ing others from accessing data and damaging them.

To Customize Background

1 Run **[Control Panel]** → **[Switch to Classic View]** → **[Display]**

2 Click the theme to change under **[Themes]** tab.

3 Change the theme.

4 After changing the theme, click **[Apply]** under Theme tab of Display Properties dialogue box and select **[Save As]**.

5 Input the name of the theme, and click **[OK]**.

Note

■ To view display properties, click **[Start]** → **[Control Panel]** → **[Switch to Classic View]**, and double-click on display.

If you change the theme without inputting the theme name, the new theme will be named **previous name (modified)**. However, if you select another theme, the changed theme will be deleted.

The new theme will be saved under My Documents folder. To open My Documents folder, click Start and My Documents.

Taskbar

If there are multiple documents and programs are running on the computer, the taskbar will group tasks and display each group. For example, if there are three Word Pad documents are running on the computer with other seven windows, three Word Pad tasks will be grouped under one Word Pad button. To view a Word Pad document, click the Word Pad group button and select the corresponding document.

For simple display of the taskbar, icons that are not used for a long time and located next to the clock icon will be hidden. Click the arrow button to display hidden icons. Or click on the icon to display it again.
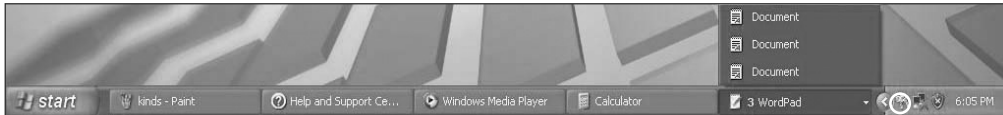
Desktop Cleanup

With Desktop Cleanup Wizard, you can delete hot icon paths that are not used on the desktop. Desktop Cleanup Wizard will be automatically executed every 60 days, or you can run this program when necessary.

To delete unused icons on the desktop, do the following

1 Open **[Control Panel]** → **[Switch to Classic View]** → **[Display].**

2 Click **[Customize Desktop]** under Background tab.

3 Click **[Clean Desktop Now]** under Desktop Cleanup tab.

4 Follow instructions of **[Desktop Cleanup Wizard]**.

2-3.Turning Off Computer

Abnormal turning-off of the computer may damage data stored in the hard disk.

1 Click the **[Start]** button and select **Turn Off Computer.**

2 When **Shutdown** screen appears, click **[Turn Off].**

3 The computer will be automatically turned off.

⚠ Warning

■ You may not be able to normally turn off the computer in Windows. When this happens, press the Power button for five seconds.

However, this is an emergency measure and taking this measure may result in errors in the system. It is recommended to click the **[Start]** button and select Turn off Computer menu on Windows desktop to shut down the computer.

Abnormal turning-off of the computer may damage data stored in the hard disk.

■ When the program suddenly stops, click [**Ctrl] + [Alt] + [Delete]** keys and terminate the program through Windows Task Manager or restart the system. If the some program files of Windows has been damaged due to abnormal turning-off of the computer, reinstall damaged programs. LG Electronics is not responsible for data loss caused by your mistakes and negligence**.**

2-4. Rebooting the Computer

The computer needs rebooting sometimes due to abnormal operation or incorrect use. When this happens, reboot the program as described below.

1 Press **[Ctrl] + [Alt] + [Delete]** keys to terminate the program or restart the computer.

2 In case the measure described above does not work, press the Power button for five seconds to turn off the computer. Then, restart the computer after 10 seconds.

2-5 Using the Mouse

This chapter describes functions of the generally used mouse. Depending on the model, a different mouse is provided. For FK models, an optic mouse is provided.
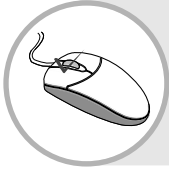
What Is Click (Select)?

You can select a program by clicking the left button of the mouse on the program. The mouse enables you to select or run the program by clicking on it without using the keyboard

What Is Double-click (Run)?

You can run the program by clicking the left button of the mouse twice consecutively on the program icon. This is called "Double-click."

What Is Right-click (Undo/Popup Menu)?

By clicking the right button of the mouse, you can open the popup menu that includes auxiliary functions of the corresponding program such as Copy, Move, and Rename.
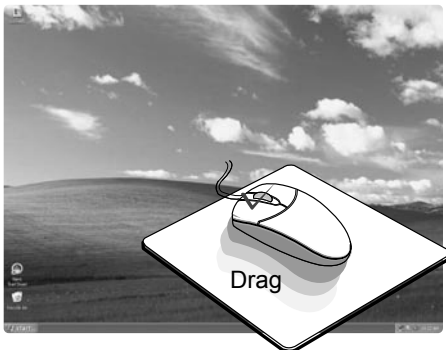

Drag

What Is Drag (Move while holding down)?

You can move an icon or a window by keeping pressing the left button and dragging the mouse pointer to the intended destination. This is called **Drag**.
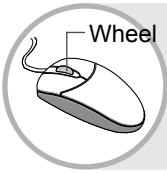
Wheel

What is Wheel (Move by rolling the wheel)?

If the program is displayed with a scroll bar, you can view the upper and the lower parts of the program by rolling the wheel of the mouse.
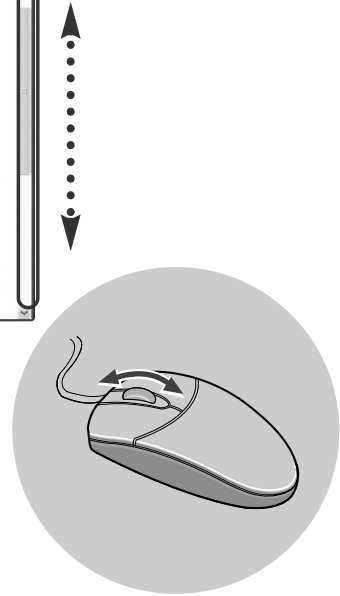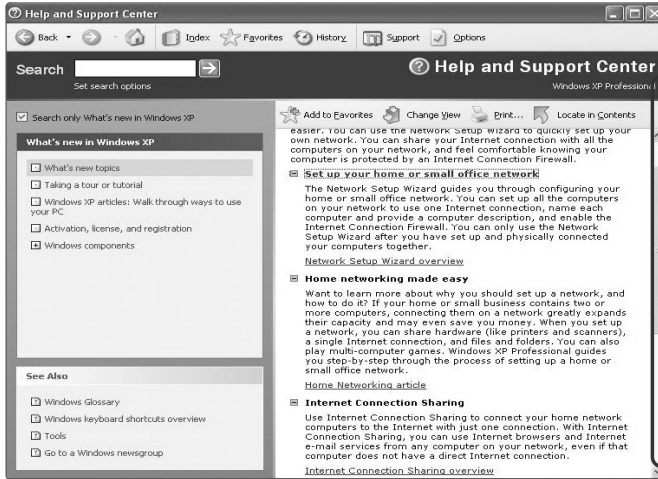
2-6.Cleaning the mouse

If the mouse does not work,clean up the mouse with cotton swap.
Do as follows.

1 Open up the cover in the direction of the arrow
as shown on the picture and take out the ball.

2 See if inside of the mouse is filled with dust.

3 Clean with cotton swab and alcohol.

4 Close the cover in the direction of the arrow
and use the mouse.

2-7. Using the Keyboard

The keyboard is a kind of communication tool between the computer and the user. You can input the data, execute commands, and perform certain types of tasks on the computer through the keyword.

❶ ESC key
Terminates or stops the program.

❷ Function Keypads
F1 ~ F12 keys are called function keys, and each function key has a unique role depending on the operating system and program.

F1 IGenerally displays Help menu of the application.

❸ Typewriter Keypad
(See page 36 of the user manual.)

❹ Other Keys (Special Control Key)

Print Screen
Prints or temporarily saves the screen.

Scroll Lock
Moves the entire screen while the cursor is not moving.

Pause/Break
Temporarily stops the operation of the computer.

❺ Cursor Keypad and Numeric Keypad
These keys are used to move the cursor on the monitor screen (up, down, right and left.) If Num Lock lamp is off on the numeric keypad, the numeric keypad functions the same as the cursor keypad.

Home
Moves the cursor to the beginning of the line.

End
Moves the cursor to the end of the line.

Page Up
Moves the cursor to the previous page.

Page Down
Moves the cursor to the next page.

❻ Multimedia/Internet Function Keys

Home
launches the Internet Explorer on your system.

Search
Functions while the Internet explorer or Windows Explorer is running. Functions as "Access Internet Search Engine" in Internet Explorer and "Find Files" in Windows Explorer.

E-mail
Runs e-mail programs installed in the system such as Outlook Express.

● Typewriter Keypad

The typewriter keypad functions the same as keys on the typewriter. The typewriter keypad includes alphabet, numeric, and Korean characters as well as **[Shift] + [Alt] + [Backspace]** keys.

❶ Tab key
Used to input data in the data input window and to move to the next data input window.

EX

Your name:	LG
2nd User:	LG User
3rd User:	
4th User:	
5th User:	
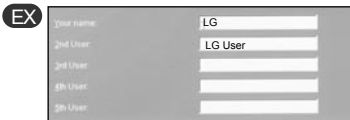
Inputting a name ● [Tab]

● Inputting initials of the name

❷ Caps Lock
Toggle cases.

❸ Shift key
Used to input the upper characters of keys or capital English letters.

❹,❽ Ctrl and Alt Keys
Ctrl and Alt keys are not normally used alone, but they are used with other keys in combination. They function differently for each program.

⚠ **Caution**

Spilling the water on the keyboard causes disfunction to the computer.

❺ Backspace
Used to move the cursor to the left place by one column and delete each character.

❻ Enter
Used to inform the computer of the completion of one command or to change the line

❼ Space
Used to make a blank space on the right.

❾ Windows
Used to select the Start menu without using the mouse.

❿ Press Shortcut menu key to view
Press Shortcut menu key to view Shortcuts for the current porgram(Shortcut menu key works the same as the right-click ing the mouse button).

⓫,⓬ This key is used in conjunction with [Fn]
key to move on to the next or previous page.
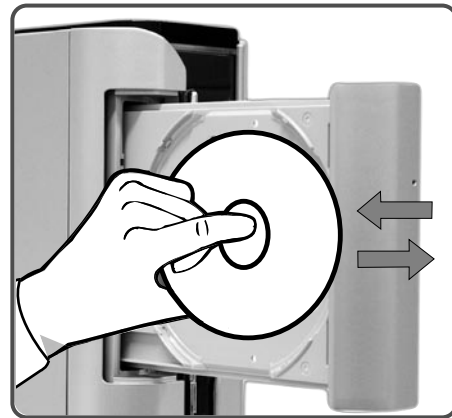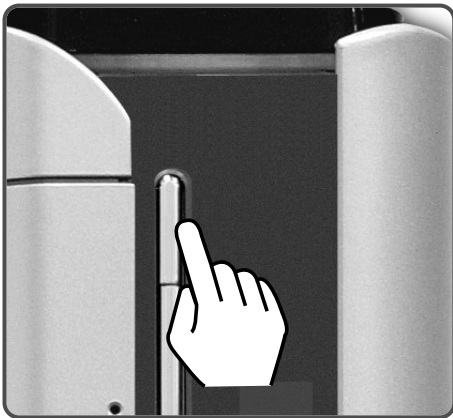
2-8.Using the CD-ROM Drive

CD stands for Compact Disc, and ROM stands for Read Only Memory. Unlike other auxiliary devices, you cannot write or delete data on the CD-ROM but only can read the data. The CD-ROM drive can read the CD and play audio and video CDs

● Using the CD-ROM
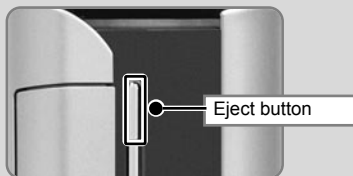
Turn on the computer, and press the Open/Eject button.

Put the CD with its labeled side up, and insert the CD in CD-ROM tray without touching the playing part.
(※The trademark must face upward.)

Note

Eject : Used to eject the CD. After pressing Eject button, take the hand off away from the CD-ROM drive.

Eject button

■ After inserting a CD, press the CD-ROM cover or press the Eject button again.

※This model adopted slim design for efficient use of space and the CD-ROM (RW/DVD/COMBO) drive is vertically installed. Therefore, a small-sized CD titles (80mm) may not be properly inserted. If necessary, lay down the product to insert such small-sized CD titles.

● **Using the Windows Media Player**

The Windows Media Player can play various kinds of audio and video files. You can play and reproduce a CD. If the computer is equipped with a DVD driver, you can play the DVD title, listen to Internet radio programs, play movie clips, and watch music video on an Internet sites. You can also create his/her own music CD with the Windows Media Player.

1 Click the **[Start]** button on the desktop, and select **All Programs →
Accessories → Entertainment → Windows Media Player.**

2 When the Windows Media Player is executed, click the **[Open]** button and select audio or video file to play.
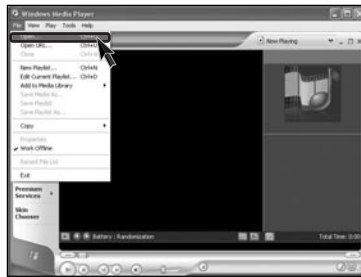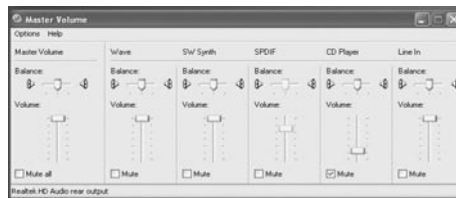

Adjusting the Volume

1 Click **[Master Volume]** icon from the taskbar.

2 Drag the slide bar to adjust the sound of the corresponding device.

2-9.Using the Disk Drive

Using the Hard Disk Drive

The hard disk drive is an auxiliary memory installed in the computer. The hard disk drive reads and writes data at a fast speed and saves large amount of data. As both the disk and the disk drive are installed in the hard disk, the "hard disk" and the "hard disk drive" are used as the same terms. After installing a new hard disk, set up the system and format the hard disk while referring to the "System Setup" part

Upon Data Damage in Hard Disk.

A hard disk is sensitive to the external environments and shocks. The manufacturer is not responsible for data loss or damage of the hard disk caused by errors. Therefore, it is recommended to back up important data

Notes on Removal or Separation of the Computer

■ Before removing or installing a computer, turn off the computer and correctly connect cables. In the case where cables are incorrectly linked, the hard disk may get damaged.

■ When installing a hard disk, use designated nuts only. Otherwise, defects may occur on the hard disk. If you uses thicker nuts than standard ones, critical damage may be done to electronic parts.

■ For stable use of the hard disk, fix the hard disk in the main body of the computer without any gap or vibration.

Notes on Operating Environment of the Computer

■ The hard disk may get damaged by external shocks during transportation.

■ Avoid direct sunlight and damp place because the hard disk is sensitive to high temperature and humidity.

■ Cover the hard disk with a static electricity-resistant envelope.

■ Put the hard disk away from appliances with strong magnets such as TV and stereo set.

■ The hard disk can get damaged by an electric shock from lightning. It is recommended, therefore, not to use the computer during thunder and lightening, and disconnect the power cord when not using the computer.

Notes on Operation of the Computer

■ Shocks on the hard disk during transportation may cause file damage or bad sectors.

■ When the computer is abruptly reset (rebooted) due to power failure, the hard disk may get damaged.

■ The hard disk may get damaged when infected with computer viruses.

■ BIO setup with wrong hard disk parameter values may damage the hard disk.

■ If necessary files are deleted by your mistake, the computer may not properly function.

■ Abrupt turning-off of the computer can damage the computer.

● Disk Defragmenter

The disk defragmenter will collect fragmented volumes so that the computer can operate efficiently and fast. Finish other application programs before running the Disk Defragmenter.
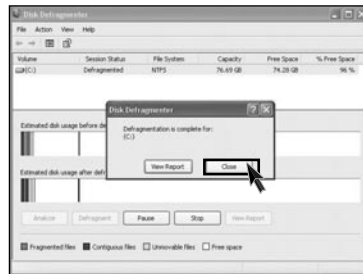
1 Click the **[Start]** button on the desktop, and select **Accessories → System Tools → Disk Defragmenter.**

2 When the following screen appears, select the drive, and click the **[Defragment]** button.
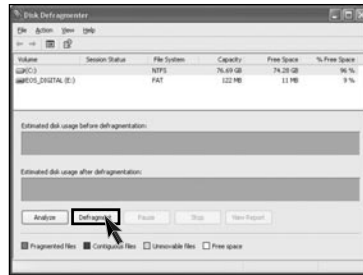
3 The progress bar will appear.
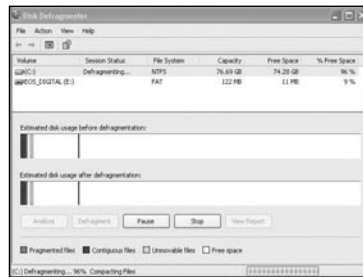
4 After the defragmentation is finished, click the **[Close]** button.

2-10.Computer virus

Computer viruses are programs that penetrate other programs and files. Computer viruses infect other files through replication, leaving the infected files and programs damaged and unusable. We provide "Norton AntiVirus," a vaccine program, to fight viruses. Services and automatic upgrades of Norton AntiVirus through LiveUpdate are available for one year after initial installation.

● Installing Norton Antivirus

1 Click the **Norton Antivirus** icon on the desktop.

2 Following windows appears. Click **[Next]**.
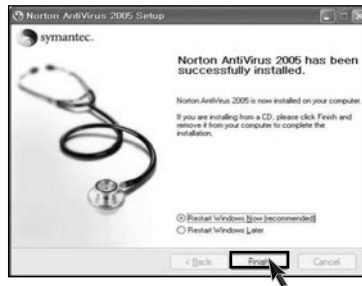

3 Click **[Next]** to install Norton Antivirus.

④ Following window appears.

⑤ **Norton Antivirus installation is complete** message appears. Click **[Finish]**.
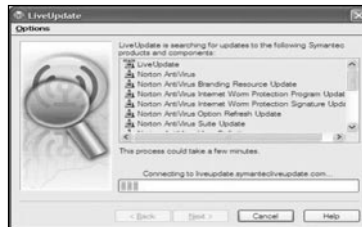
● **Norton Antivirus update**

You should have an internet access to process Norton Antivirus update.

1 Click **[Start]** and **[All programs]→[Norton Antivirus]→[LiveUpdate]→ [Norton AntiVirus]**.
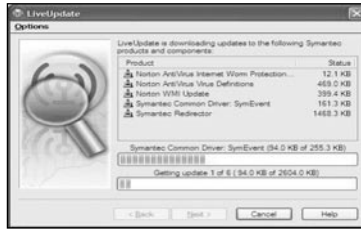
2 Click **[Next]**.

3 Following window appears.

4 Click **[Next]**.

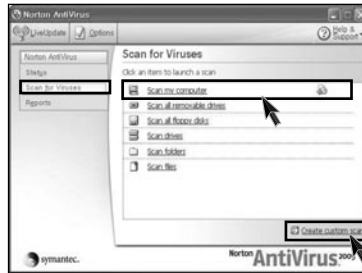⑤ Downloading update-items online.

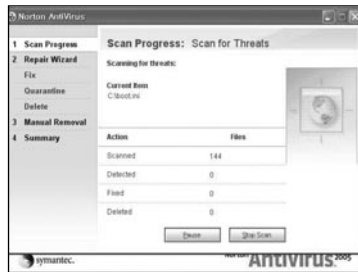⑥ Click **[Finish]** . Norton Antivirus Update is complete.

Running Norton Antivirus

1 Click **[Start]→[All programs]→[Norton Antivirus]→[Norton AntiVirus2005]**.

2 Click **[Scan for virus]** and select an item to scan.
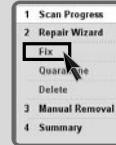

3 Norton AntiVirus is scanning virus.

Note

■ If any virus is detected, click **[Fix]** to repair.

4 Click **[Finish]**. Virus scanning is complete.

3. System setup

System setup means storing hardware configuration information of the computer in CMOS RAM. Through the System Setup, the computer gets various information -date of the day, time, memory capacity, H/D capacity and its type.

System Setup is to set passwords, to change booting orders, and to add new peripheral devices.

3-1. Entering System Setup

■ Booting with a USB device (Page 48).
■ Setting a password (Page 49).
■ Deleting or changing a password (Page 50).
■ Initializing system setup (Page 52).
■ Deciding the temporary booting orders (Page 53).

⚠ Caution

Wrong system setup may cause errors during system operation. Therefore, be careful when changing the System Setup, and it is recommended not to change the setup unless it is necessary.

For performance improvement, CMOS setup menu configuration and the initial setup status may be changed and may become different from images included in the user manual.

● Keys Used in System Setup

| Keys	Funtion
[Enter]	Select the current item.
[Esc]	Closes the current task or goes back to the previous screen.
[↑],[↓],[←],[→]	Moves up, down, right, and left.
+/-	Increases or decreases the item values.
[Page Up]	Goes to the beginning of the screen.
[Page Down]	Goes to the end of the screen.
[F10]	Saves changes and exits System Setup.

Note

■ **Cursor Pad**

These keys are used to move the cursors on the monitor screen up, down, right, and left.

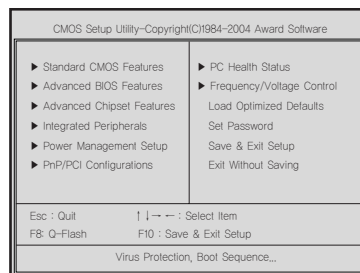When the Num Lock button is off on the numeric keypad, the numeric keypad functions the same as the cursor keypad.

<Cursor Keypad>

<Numeric Keypad>
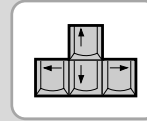
1 Turn on the computer and the monitor.

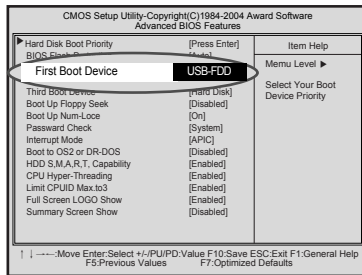**2** While the LG logo screen is on, press **[Delete]** key.

3 The initial setup screen will appear.

CMOS Setup Utility-Copyright(C)1984-2004 Award Software

▶ Standard CMOS Features   ▶ PC Health Status
▶ Advanced BIOS Features   ▶ Frequency/Voltage Control
▶ Advanced Chipset Features   Load Optimized Defaults
▶ Integrated Peripherals   Set Password
▶ Power Management Setup   Save & Exit Setup
▶ PnP/PCI Configurations   Exit Without Saving

Esc : Quit   ↑ ↓ → ← : Select Item
F8: Q-Flash   F10 : Save & Exit Setup

Virus Protection, Boot Sequence…

3-2. Booting with a USB Drive

A booting with a USB device (USB-FDD, USB-ZIP, USB-CD-ROM, or USB-HDD) proceeds as follows.

1 Execute the initial screen of System Setup, and select **Advance Bios Features** by pressing [↑],[↓],[←], and [→] keys. Then, press **[Enter]** key.

2 When the following screen appears, select **First Boot Device** by pressing [↑],[↓],[←], and [→] keys. Then, select the device and press **[Enter]** key.

```
CMOS Setup Utility-Copyright(C)1984-2004 Award Software
              Advanced BIOS Features
► Hard Disk Boot Priority        [Press Enter]    Item Help
  BIOS Flash P                   [Auto]
                                               Menu Level ►
    First Boot Device          USB-FDD
                                               Select Your Boot
  Third Boot Device              [Hard Disk]    Device Priority
  Boot Up Floppy Seek            [Disabled]
  Boot Up Num-Loce               [On]
  Password Check                 [System]
  Interrupt Mode                 [APIC]
  Boot to OS2 or DR-DOS          [Disabled]
  HDD S,M,A,R,T, Capability      [Enabled]
  CPU Hyper-Threading            [Enabled]
  Limit CPUID Max.to3            [Enabled]
  Full Screen LOGO Show          [Enabled]
  Summary Screen Show            [Disabled]

↑ ↓ ←→:Move Enter:Select +/-/PU/PD:Value F10:Save ESC:Exit F1:General Help
       F5:Previous Values      F7:Optimized Defaults
```

Note

Bootable devices will be displayed only when bootable devices are equipped.

3 To save changes in System Setup, press the **[F10]** key.

4 When the following message appears on the screen, press the **[Enter]** key to restart the screen.
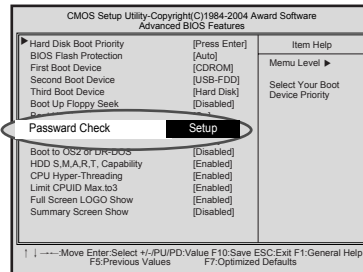
SAVE to CMOS and EXIT(Y/N)? Y

3-3. Setting a Password

To prevent other users from changing computer settings, you can register a password. A password can be registered during booting or System Setup.

⚠ Caution

Without the registered password, if any, access to the system will be denied. Write down and keep your password in a safe place.

▉ Execute the initial screen of System Setup and select **Advanced Bios Features** by pressing [↑],[↓],[←], and [→] keys. Then, press **[Enter]** key.

▉ When the next screen appears, select **Password Check** by pressing [↑],[↓],[←], and [→] keys and the **Setup** or **System** by pressing the **[Page Up]** and **[Page Down]** keys. Then, press **[Enter]** key.

```
              CMOS Setup Utility-Copyright(C)1984-2004 Award Software
                              Advanced BIOS Features
 ► Hard Disk Boot Priority           [Press Enter]       Item Help
   BIOS Flash Protection             [Auto]
   First Boot Device                 [CDROM]         Menu Level ►
   Second Boot Device                [USB-FDD]
   Third Boot Device                 [Hard Disk]     Select Your Boot
   Boot Up Floppy Seek               [Disabled]      Device Priority

   Passward Check                    Setup

   Boot to OS2 or DR-DOS             [Disabled]
   HDD S,M,A,R,T, Capability         [Enabled]
   CPU Hyper-Threading               [Enabled]
   Limit CPUID Max.to3               [Enabled]
   Full Screen LOGO Show             [Enabled]
   Summary Screen Show               [Disabled]

 ↑ ↓ ←→:Move Enter:Select +/-/PU/PD:Value F10:Save ESC:Exit F1:General Help
           F5:Previous Values          F7:Optimized Defaults
```

Note

■ You will be asked to input the password only when you select "Setup" in Security Option or when you select "Setup" by pressing [Delete] key on the initial screen. The password protects the computer by stopping others from changing computer settings and system setup.

▉ Select Set Password by pressing [↑],[↓],[←], and [→] keys on the initial setup screen, and press **[Enter]**.

4 When the following message appears on the screen, input the password and press **[Enter]** key. The password must be alphanumeric and not exceed eight digits.

```
Enter Password :
```

5 When asked to confirm the password, input the password again and press **[Enter]** key.

```
Confirm Password :
```
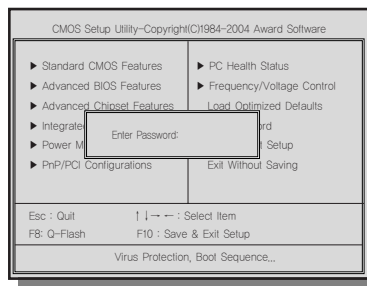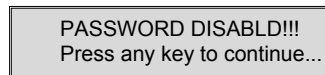
6 To save changes in System Setup, press **[F10]**.

7 When the following message appears, press **[Enter]** key to restart the computer.

```
SAVE to CMOS and EXIT(Y/N)? Y
```

3-4. Deleting or Changing a Password

You can delete or change the password only after inputting the current password.

1 Execute the initial screen of System Setup, enter the password, and press the **[Enter]** key.

```
CMOS Setup Utility–Copyright(C)1984–2004 Award Software

▶ Standard CMOS Features          ▶ PC Health Status
▶ Advanced BIOS Features          ▶ Frequency/Voltage Control
▶ Advanced Chipset Features         Load Optimized Defaults
▶ Integrate                                      rd
▶ Power M        Enter Password:               Setup
▶ PnP/PCI Configurations            Exit Without Saving

Esc : Quit          ↑↓→←: Select Item
F8: Q–Flash              F10 : Save & Exit Setup
           Virus Protection, Boot Sequence,,,
```

▶ **Changing the Password**

 Change the password in the same procedure as that of password setting.

▶ **Deleting the Password**

2 Select **Set Password** by pressing [↑],[↓],[←], and [→] keys on the initial screen of the Setup menu, and press the **[Enter]** key.

```
        CMOS Setup Utility-Copyright(C)1984-2004 Award Software

  ▶ Standard CMOS Features        ▶ PC Health Status
  ▶ Advanced BIOS Features        ▶ Frequency/Voltage Control
  ▶ Advanced Chipset Features       Load Optimized Defaults
  ▶ Integrated Peripherals          Set Password
  ▶ Power Management Setup         Save & Exit Setup
  ▶ PnP/PCI Configurations         Exit Without Saving

  Esc : Quit            ↑ ↓ → ← : Select Item
  F8: Q-Flash           F10 : Save & Exit Setup
                Virus Protection, Boot Sequence...
```

3 When the following message appears, press the **[Enter]** key.

```
          Enter Password :
```
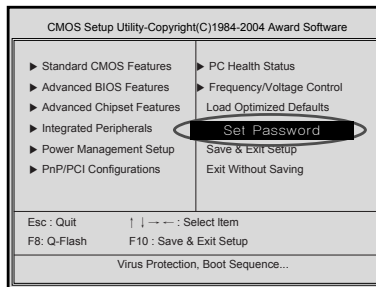
4 A message will appear saying that the password has been deleted. Press the **[Enter]** key.

```
          PASSWORD DISABLD!!!
          Press any key to continue...
```

5 To save the change in System Setup, press the **[F10]**.

6 When the following message appears on the screen, press the **[Y]** key and the **[Enter]** key. Then, the computer will restart.

```
      SAVE to CMOS and EXIT(Y/N)? Y
```
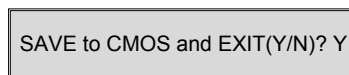
System setup   51

3-5. Initializing System Setup

If you changed the system setup by mistake, it can be recovered to the default setting.

1 Execute the initial screen of System Setup, and select the **Load Optimized Defaults** item by pressing arrow keys. Then, press **[Enter]**.

2 When the following message appears on the screen, press **[Y]** and **[Enter]**. System setup will be return to the factory setting.

> Load Optimized Defaults (Y/N) ? Y

3 To save the change in System Setup, press **[F10]**.

4 When the following message appears, press the **[Enter]** key to restart the computer.

> SAVE to CMOS and EXIT(Y/N)? Y

3-6. Deciding the Temporary Booting Orders

The following instruction explains a way to decide the temporary booting orders without affecting CMO setup.

1 Turn on the computer and the monitor.

2 While LG logo screen is on, press **[F12]**.

3 Select **USB-FDD** from the **Boot Menu** to restart the computer.

Note

■ The menus may differ by product model : USB-FDD, USB-ZIP, USB-HDD, and USB-CD-ROM. Bootable devices will be displayed only when they are equipped in before turning the computer on

3-7. Setting the Power Saver Mode

Regardless of BIOS setup, you can use the Power Saver mode in Windows as follows.

1 Select **[Start] → [Control Panel] → [Switch to Classic View].**

2 Double-click the **Power option icon** on the Control Panel window.

3 After setting Power Scheme items in the **Power Schemes** tab, click the **[OK]** button.
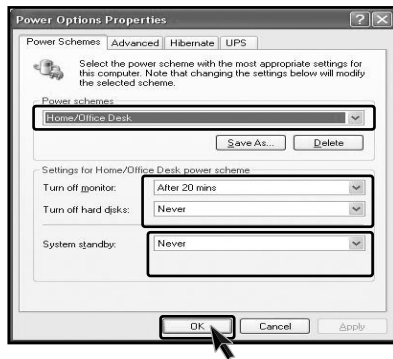
⚠ Warning

TWhen the device connected to the computer does not support Power Saver functions, the Standby mode or Hibernate mode may not be properly function.

In this case, deactivate Power Saver feature.

4 Press the **advanced tab** and set options appropriately. Then, click the **[OK]** button.
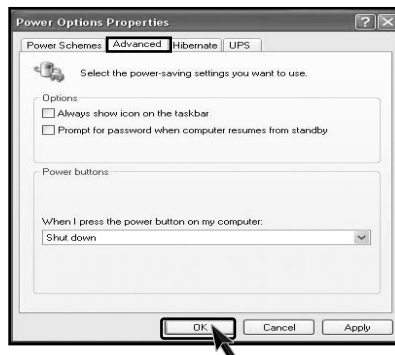
Note

■ **Hibernate Mode** : The current work states are saved intact on the H/D before the power goes off. The states will be recovered as they were when the power is on later.

3-8. Using Hyper-Threading Feature

The Hyper-threading feature improves the performance of the CPU greatly as if two CPUs were running. This feature is especially efficient for multimedia tasks such as games and graphic jobs. Hyper-threading is supported only by the CPU with Hyper-Threading (HT) feature. Check the "Intel" sticker on the side of the computer to see if the CPU supports hyper-threading.

1 Execute the initial screen of System Setup, and select **Advanced Bios Features** by pressing [↑],[↓],[←], and [→] keys. Then, press the **[Enter]** key.

2 When the following screen appears, select **Hyper-Threading Technology** and **Enabled.**

```
            CMOS Setup Utility-Copyright(C)1984-2004 Award Software
                         Advanced BIOS Features
 ▶ Hard Disk Boot Priority        [Press Enter]       Item Help
   BIOS Flash Protection          [Auto]
   First Boot Device              [CDROM]           Memu Level ▶
   Second Boot Device             [USB-FDD]
   Third Boot Device              [Hard Disk]       Select Your Boot
   Boot Up Floppy Seek            [Disabled]        Device Priority
   Boot Up Num-Loce               [On]
   Passward Check                 [System]
   Interrupt Mode                 [APIC]
   Boot to OS2 or DR-DOS          [Disabled]
   HDD
   Hyper-Threading Technology      Enabled
   Full Screen LOGO Show          [Enabled]
   Summary Screen Show            [Disabled]

 ↑ ↓ ─←→:Move Enter:Select +/-/PU/PD:Value F10:Save ESC:Exit F1:General Help
           F5:Previous Values        F7:Optimized Defaults
```

3 To save changes in System Setup, press **[F10]**.

4 When the following message appears, press the **[Enter]** key to restart the computer.

SAVE to CMOS and EXIT(Y/N)? Y

Note

■ Hyper-threading is supported only by Windows XP. If you execute software or games that does not support hyper-threading, an error may occur. When this happens, disable the "Hyper-Threading Technology" featuree.

4.System Recovery

You can restore the system in two ways depending on the current status of the system. However, to restore the hard disk, you need to back up necessary software and data files in advance. After completing Windows installation, you need to register the User Properties when booting the system as if you did your new computer.

● Installation with Recovery CD

Installation

1 Back up the data stored in the computer.

2 Insert the Restore CD in the CD-ROM drive. When **"Press any key to boot from CD..."** message appears on the screen, press the [Enter] key.

3 Continue installation by following instructions on the screen.

4 After completing installation of Windows, remove the CD and restart the system. When the following screen appears, register the User Properties according to instructions on the screen.

5 After the Windows operating system installation is complete, install the LG GILJABI CD (software installation CD) on your computer, and then you can use all application programs and device drivers.

● **Installation of Windows XP Upgrade**

1. If Windows XP is already installed on the hard disk, you can upgrade existing Windows XP without formatting the hard disk

2. In the case that Windows XP is already running on the hard disk, upgrade Windows XP as follows.

For Windows users

1 Turn on the system where Windows XP is installed.

2 Click the **[Start]** and **[Run]** button.

3 Insert the Restore CD, and input **D:\i386\winnt32.exe/unattend**. Then, click the **[OK]** button. (When the CD-ROM drive is D drive.)
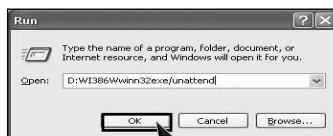
Note

■To execute "winnt32.exe" without using "Unattend" option, you must input the product key attached on the computer. You also need to have the computer certified within 30 days after this

LG

5-1.Reinstalling Printer Driver

You must install the printer driver after connecting the printer. Windows XP can automatically detect printer drivers. However, if Windows XP does not detect your printer driver, install the printer driver as follows.

1 Select **[Start]** → **[Control Panel]** → **[Class Desktop].**

2 Double click the **[Printer and Fax]** on the Control Panel window.

3 When the following screen appears, click the **[Add Printer]** button.
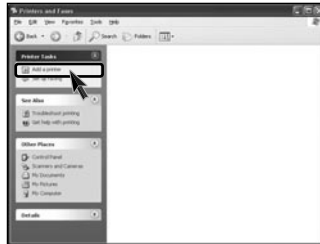
4 When the Add Printer Wizard appears, click the **[Next]** button.

5️⃣ When the following screen appears, check the connection type of the printer - local or network. Then, select a printer and click the **[Next]** button.

6️⃣ **New Printer Detection** screen will appear. Click the **[Next]** button.

7️⃣ When Set Printer Port screen appears, select LPT1 or LPT2 before clicking the **[Next]** button.
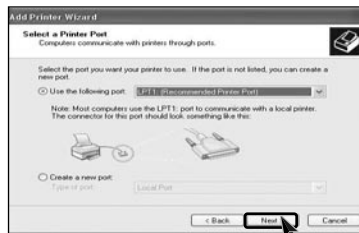
8️⃣ Select the manufacturer and model of your printer on the **Select Printer** screen. If your printer came with an installation disk, click **[Have Disk]**. If not, just click the **[Next]** button.

When [Have Disk] is selected.

9 Insert the diskette or driver CD in the driver and click the **[OK]** button.
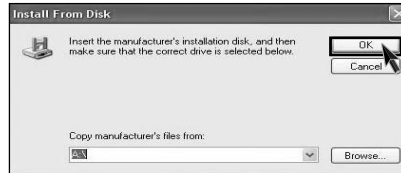
When [Next] is selected

9 Name the printer, and click the **[Next]** button.

10 When **Print Test Page** screen appears, click the **[Yes]** and **[Next]**.

11 After the test page is properly printed out, click the **[OK]** button.
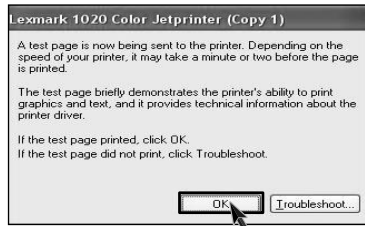
12 When the following screen appears, check the printer and click the **[Finish]** button.

13 Now, the printer has been added. .
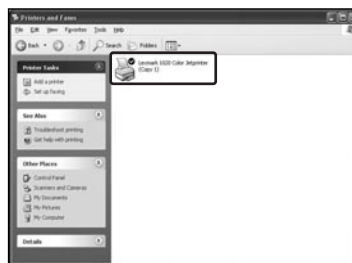
5-2.Reinstalling Sound Driver

You must install a sound driver to listen to music files and CDs on the computer. A sound driver basically comes out with the computer. If it has to be reinstalled, however, follow the process below.

1 Turn on the computer and the monitor.

2 Insert LG GILJABI CD in the CD-ROM driver. Select the sound driver to install from the list.

3 The driver installation process will start. Follow instructions on the screen.

5-3.Reinstalling Video Driver

The video driver displays on the monitor data stored on the computer. The video driver is included in basic specification of the computer. However, in the case that it is necessary to reinstall the video driver, carry out the following process.

1 Turn on the computer and the monitor.

2 Insert LG GILJABI CD in the CD-ROM driver. Select the video driver to install from the list.

3 The driver installation process will start. Follow instructions on the screen.

Note

■ When the computer uses the Intel Onboard Video, some games and programs that does not support Screen Rotation may not be executed on the screen. When this happens, disable the Screen Rotation.

6.System Expansion

6-1. Opening the computer case

Always consult with your service representatives before opening the computer case.

Note the following when opening the computer cover.

■ Quit all programs in use.
■ Turn off the computer and the monitor before disconnecting the power.
■ Keep magnetic tools (for example, drivers) away from the computer since parts inside the computer are electrically charged and sensitive to magnetic force.
■ Install the computer in a clean, easily-accessible place.
■ A small electric shock inside the computer may cause operational problems. Before touching the computer, put hands on an unpainted metallic surface for two or three seconds to remove static electricity before opening the cover.
■ When disassembling the computer, wear gloves to protect internal parts of the computer and slot cards from damage.

Opening the computer cover
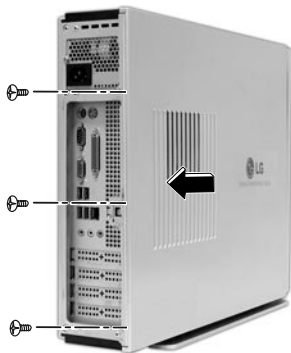
Loosen three screws on the computer cover, and pull the cover off.

Closing the computer cover
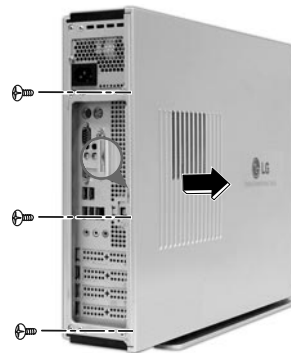
Adjust the computer cover to the main body, and fasten three screws through the cover.

⚠ Warning

Before assembling the computer cover, check if there is any metallic material left inside the main body. A metallic substance inside the main body can cause an electric shock or fire.

6-2. Main Board

The model name of the computer depends on the main board type. When extending the computer, check the model name on the label attached on the rear panel of the computer and the following. Before extending the computer, check the main board first

❶ **Expansion slot (PCI-E x1)**

❷ **Expansion slot (PCI)**

❸ **Expansion slot (PCI-E x16)**

❹ **CPU socket (with Pentium4 × 16 LGA 775)**

❺ **Memory socket (DIMM)**

❻ **Floppy disk connector**

❼ **Hard disk/CD-ROM connector**

❽ **Serial ATA-type hard disk connector**

No
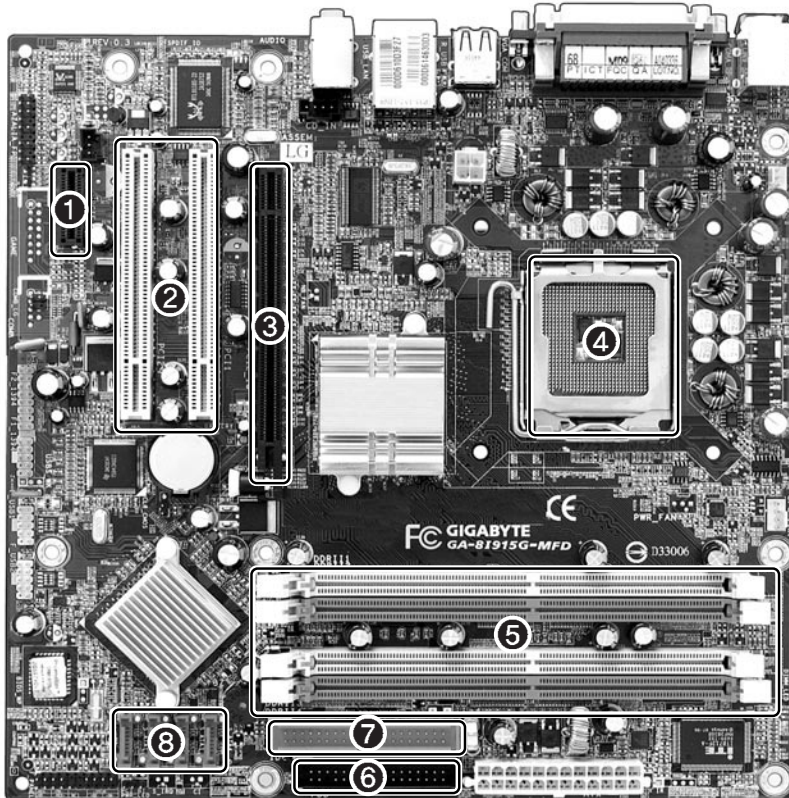
■ The main board in your computer may look different from the picture.

6-3. Internal Connectors

Connectors are configured in a certain way at the factory, and connectors show the connection status between the main board of the computer and peripherals. (Connector configuration depends on product models.)
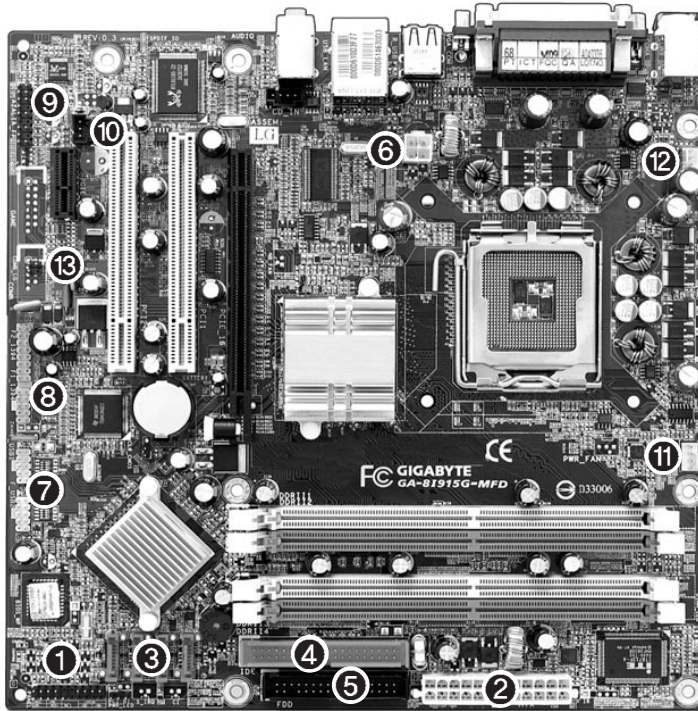
⚠ Caution

■ Before separating the connector, check the connection state of the connectors and leave a record on the state.

■ Link the floppy disk driver connector and the hard disk/CD-ROM connector in the correct direction.

■ The Pin Number and the color of the connector cable must match. Otherwise, an error may occur in the computer.

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

■ There is a risk of explosion if the backup(standby) RTC battery is replaced by an incorrect type. Dispose of used backup(stadby) RTC battery according to your local ordinances or regulation.

❶ Power on/off and power/hard disk operation status indication lamp connector (F_PANEL)
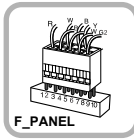
Connects the power on/off switch and the power/hard disk operation status indication lamp.

❸ Hard disk connector (S_ATA1, S_ATA2, S_ATA3, S_ATA4: 7 pins)
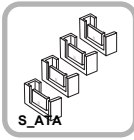
S_ATA connector is linked to the hard disk driver.

❺ Floppy disk driver connector (FDD: 34 pins)
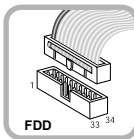
Connects the floppy disk driver.

❼ USB connector (F_USB1, F_USB1: 10 pins)
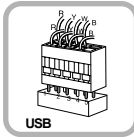
Connects the front USB.

❾ Audio connector (AZALIA_FP: 10 pins)
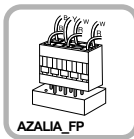
Connects a front ear-phone and microphone.

⓫ CPU fan (CPU_FAN: 4 pins)
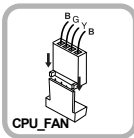
Provides power to the CPU fan.

❷ Power connector (ATX: 24 pins)
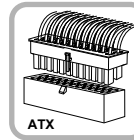
Connects the power supply unit.

❹ Optic drive connector (IDE : 40 pins)
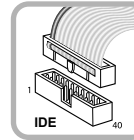
CDROM, hard disk driver.

❻ Power connector (ATX_12V: 4 pins)
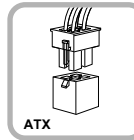
Connects the power supply unit.

❽ 1394 connector (F1_1394: 10 pins)
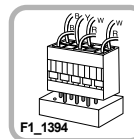
Connects camcorders supporting IEEE1394.

❿ SPDIF connector (SPDIF_LG: 3 pins)
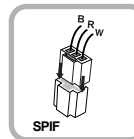
Connects the SPDIF port with optic output feature.

⓬ System fan (SYSTEM_FAN: 3 pins)
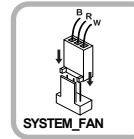
Installed at the bottom (rear panel) of the system, and connects the VFD.
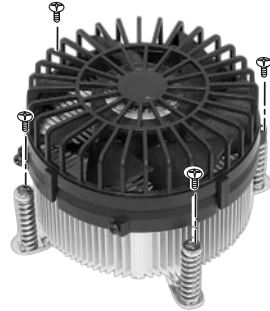
**⓭ VFD connector**
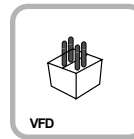
Connects the VFD.

6-4 Replacing the CPU

To upgrade the CPU for better performance of the computer, you need to replace the CPU first. Check the location and the type of the CPU in the main board, and do the following. (Shape of the CPU FAN and CPU replacement methods may differ by model.)

1 Remove four screws fixing the CPU fan as shown in the figure.

2 Remove the CPU fan as shown in the figure.
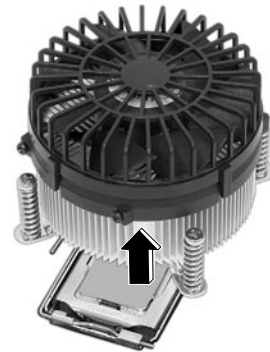
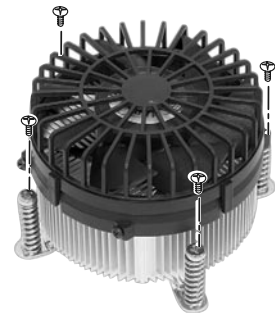3 Turn the CPU socket handle as shown in the figure of Step ❶, and open the cover as shown in the figure of Step ❷.

▟ Lift the CPU up carefully to remove it from the main l

▟ Insert the new CPU with caution in the CPU sock
the correct direction and put down the handle ol
CPU socket ❶ and close the cover ❷.

▟ Insert the CPU FAN as shown in the figure, and
fix it with four screws.

⚠️ **Caution**

If you force the CPU into the socket without
aligning the mark, you may break the pins.

6-5. Expanding the Computer Memory

You may expand the memory capacity, if needs be.

About Memory

This system uses a 240-pin memory module called Double Data Rate-2 (DDR-2), not the old 184-pin memory module called Double Data Rate (DDR). The main board can support maximum 2GB in memory.

Note

■ Windows 95, 98SE, and ME support maximum 512MB. Installing a memory with higher capacity than 512MB may cause malfunctioning of the system.

Before Expanding the Memory

■ When disassembling the computer, wear gloves to protect internal parts of the computer and slot cards from damage.
■ As the memory is sensitive to static electricity, be careful with the static electricity when removing or installing a memory.
■ Check the specifications of the current memory and the new memory before expanding the memory.
■ Unlike SIMM, DIMM is of 64 bits. Therefore, single DIMM can function, and you can add DIMM by one.

Note

■ When expanding the memory, add a memory with the same specification (DDR-2 SDRAM for 1.8V). (The shape of the memory may differ depending on the product model.)

■ The DDR-2 memory provides greatly improved transmission rate than existing memories, and is differently shaped.
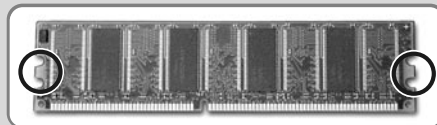
DDR-2

⚠ Caution

- This computer supports PC3200/4300, DDR-2 specification.
- When expanding the memory, use only unbuffered DDR SDRAM DMM
- When inserting two same memories in same-colored DIMM slots, the computer will operate in Dual Channel mode.

FSB Frequency	Usable Memory
400/533 MHz	PC3200/4300-DDR-2 SDRAM 400/533MHz

Preparing a Memory

Before purchasing memory, study the specifications and features of the current memory.

Specification : PC3200/4300 (240-pin DDR-2 SDRAM)

Rate   : 400MHz (200MHz $\times$ 2), 533MHz (266MHz $\times$ 2)

Type   : 256MB, 512MB

Composing the Memory

Refer to the following when expanding memory.

Total memory capacity	DIMM 1	DIMM 2	DIMM 3	DIMM 4	DUAL/SINGLE
256MB	256 (One out of four slots)				SINGLE
512MB	256MB		256MB		DUAL
512MB		256MB		256MB	DUAL
512MB	512 (One out of four slots)				SINGLE
1024MB	256MB	256MB	256MB	256MB	DUAL
1024MB	512MB		512MB		DUAL
1024MB		512MB		512MB	DUAL
2048MB	512MB	512MB	512MB	512MB	DUAL

Note

- The computer operates faster in Dual Channel mode.
- Use the same memory to operate the computer in Dual Channel mode.
- It is recommended to use Dual Channel mode.

Replacing the Memory

Main board configuration, memory socket and memory type may differ by model.

1 Loosen the screws on the rear panel of the computer, and remove the cover.

Note

■ Before opening the computer cover, turn off the power and all peripherals connected to the computer. Disconnect all power cables.

2 Release the latches from both flanks of the memory. The memory will be removed automatically.
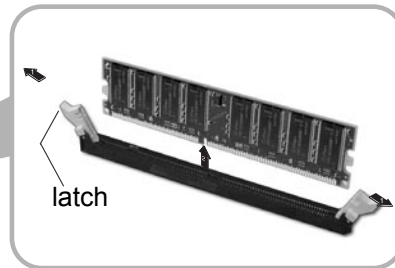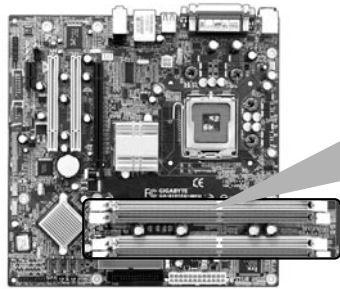
latch

Installing Memory

1 Lay the latches outwards from the memory socket.

Note

■ When using a DDR-2 memory, the memory must be installed in each channel for Dual Channel mode.

1-3 and 2-4 of dual Channels No. 1 ~ 4

The memory will be automatically installed even if not latched. However, it is recommended to fasten the latches until the memory is completely fixed.
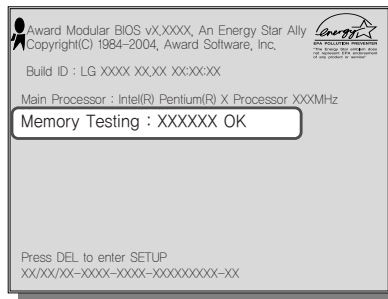
❶
❷
❸
❹

2 Insert the memory (DIMM) vertically in the socket in line with the grooves as shown in the figure.
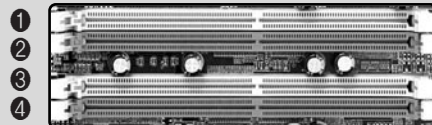
The memory will be automatically installed even if not latched. However, it is recommended to fasten the latches until the memory is completely fixed

● **Checking the Expanded Memory**

Turn on the power after installing the memory. Then, the computer will detect the mem-
ory so that you don't need to change the system setup. The capacity of the installed
memory is checked as follows.

1 Connect the power cord and other cables, and turn on the computer and the moni-
tor. Then, the initial screen to check the status of the computer will appear.

2 When the following screen appears, press **[Esc]** key. Then, **POST** screen will
appear.

3 On the next screen, press **[Pause]** to freeze the screen temporarily and to check
the **Memory Testing : XXXXXX OK** part.

Award Modular BIOS vX.XXXX, An Energy Star Ally
Copyright(C) 1984–2004, Award Software, Inc.

Build ID : LG XXXX XX.XX XX:XX:XX

Main Processor : Intel(R) Pentium(R) X Processor XXXMHz

Memory Testing : XXXXXX OK

Press DEL to enter SETUP
XX/XX/XX–XXXX–XXXX–XXXXXXXX–XX

Note

■ In the case that the logo screen is processed too fast to stop, press **[Delete]** key on the
LG logo screen. Then, select **Advanced BIOS Features ▶ Full Screen Logo Show
Selectable**, and change status from **Enabled** to **Disabled**.

4 After checking the memory, press the **[Esc]** key. Windows screen will proceed.
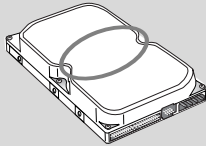
6-6. Adding a Hard Disk

This computer supports up to four serial ATA controllers, and you can add one hard disk drive.

Before Adding a Hard Disk

The following is when you purchase a hard disk and installs it, and describes the most common case when you add a hard disk to a computer that is already equipped with one hard disk
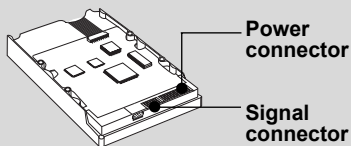
Note

■ Write down the capacity, the cylinder count, the numbers of heads and sectors of the hard disk marked on the upper part of the hard disk. They are necessary for system setup (depending on the product model.)

Adding a Hard Disk

Note

Power connector

Signal connector

■ Prepare the hard disk to install.

■ The hard disk must be serial ATA type.

⚠ Caution

■ When disassembling the computer, wear gloves to protect internal parts of the computer and slot cards from damage.

■ Use screws compatible with specification when installing the hard disk in the main body. Otherwise, critical damage may be done to electronic parts. For stable use of the hard disk, fix the hard disk in the main body of the computer to prevent vibration.

1 As shown in Figure ❶, open the CD-RI-ROM drive by inserting a thin and solid pin that is not bent in the emergency hold of the CD-RIM drive drawer. Then, push the CD-RIOM drive drawer and remove it as shown in Figure ❷.
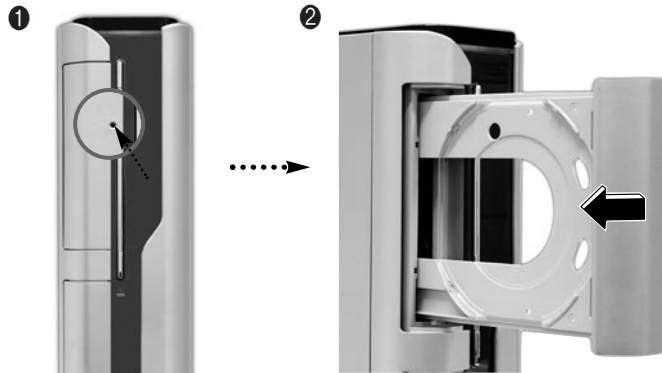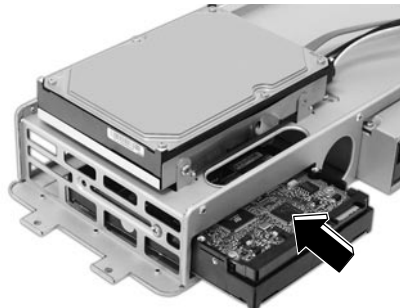

! **Caution**

Turn off the system and disconnect the cable before disassembling the product. Otherwise, an electric shock may occur.

2 Remove the computer cover as described in **[Cover Open]** on Page 64. Remove four screws from the hard case, and lift the hard case as shown in the figure.
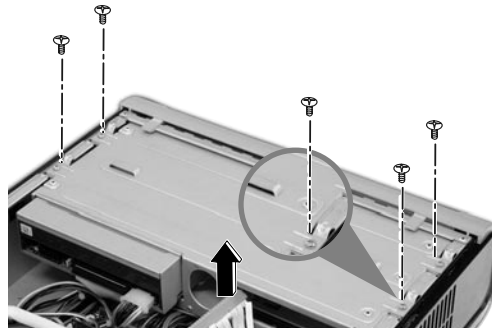

3 Insert the additional hard case in the separated hard disk case as shown in the figure.


! **Warning**

Correctly connect the signal cable and the power cable. Otherwise, malfunctioning, product damage, or an electric shock may occur.

4 Connect the power cable to Hard Disk ❶ (slave hard) to add, and connect the signal cable as shown in the figure ❷ below. Fasten two screws in the hard disk case.

signal cable

power cable
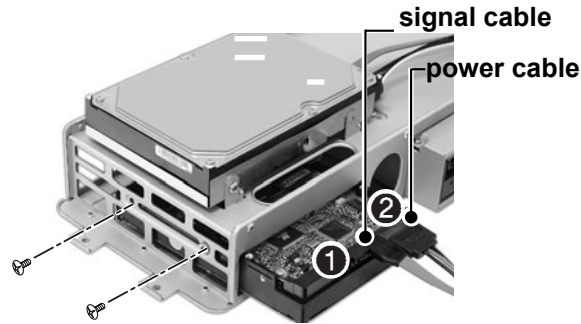
5 After installed the cable-connected hard disk, fasten four screws. Put the cover as described in Closing Computer Cover on. Install the CD-ROM drive drawer.
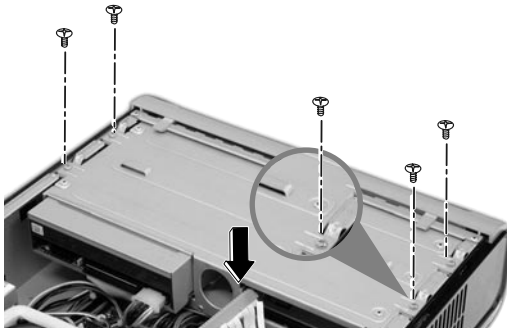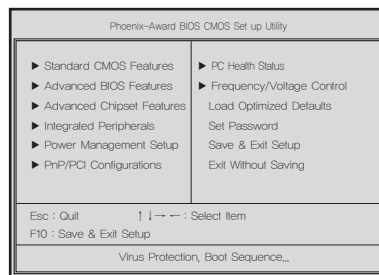

Note

■ After installing an additional hard disk, you need to set up and format the hard disk. See Hard Disk Setup on.

⬤ **Hard disk drive setup**

1 Turn on the computer and the monitor.

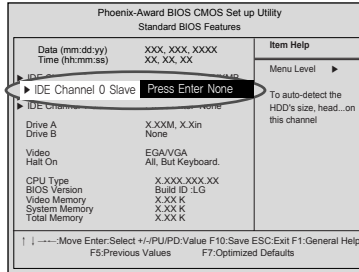**2** While the **LG logo** screen is on, press **[Delete]** key.

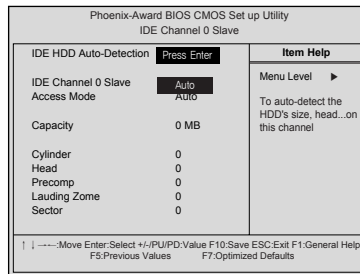**3** Then, the initial screen of System Setup menu will appear.

4 Execute the initial screen of the System Setup menu, and select **Standard CMOS Features** by pressing [↑],[↓],[←], and [→] keys. Then, press **[Enter]**.

5 When the following appears, select I**DE Channel 0 Salve** by pressing
[↑],[↓],[←], and [→] keys and press **[Enter]** key.

Phoenix-Award BIOS CMOS Set up Utility
Standard BIOS Features

		Item Help
Data (mm:dd:yy)	XXX, XXX, XXXX	Menu Level ▶
Time (hh:mm:ss)	XX, XX, XX	
IDE	MB	To auto-detect the HDD's size, head...on this channel
▶ IDE Channel 0 Slave	Press Enter None	
▶ IDE Channel	None	
Drive A	X.XXM, X.Xin	
Drive B	None	
Video	EGA/VGA	
Halt On	All, But Keyboard.	
CPU Type	X.XXX.XXX.XX	
BIOS Version	Build ID :LG	
Video Memory	X.XX K	
System Memory	X.XX K	
Total Memory	X.XX K	

↑ ↓ →←:Move Enter:Select +/-/PU/PD:Value F10:Save ESC:Exit F1:General Help
F5:Previous Values   F7:Optimized Defaults

6 Press **[Enter]** key on **IDE Channel 0 Slave** to set it as Auto, and press **[Enter**]
key again on **IDE HDD Auto-Detection** to set it as Slave. Then, the additionally
installed hard disk will be automatically detected.

Phoenix-Award BIOS CMOS Set up Utility
IDE Channel 0 Slave

		Item Help
IDE HDD Auto-Detection	Press Enter	Menu Level ▶
IDE Channel 0 Slave	Auto	To auto-detect the HDD's size, head...on this channel
Access Mode	Auto	
Capacity	0 MB	
Cylinder	0	
Head	0	
Precomp	0	
Lauding Zome	0	
Sector	0	

↑ ↓ →←:Move Enter:Select +/-/PU/PD:Value F10:Save ESC:Exit F1:General Help
F5:Previous Values   F7:Optimized Defaults

7 To save changes in System Setup, press the **[F10]** key.

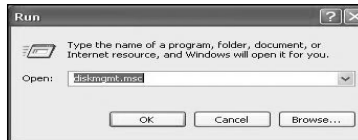8 When the following message appears, press the **[Enter]** key to restart the computer.

SAVE to CMOS and EXIT(Y/N)? Y
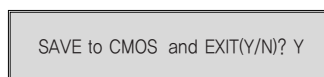
⬤ **Configuring the Hard Disk** (in Factory Setting Status)

1 Select the **[Start]** button on the desk top, and click the **[Execute]**.

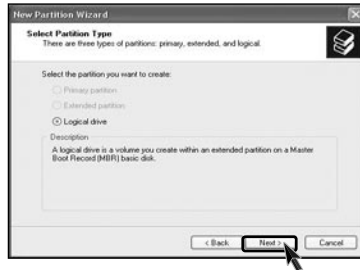**2** Input **diskmgmt.msc**, and click **[OK]**.

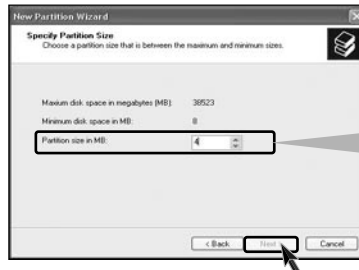**3** Select Added Disk 1 on Disk Management screen. Right-click and select **[New LogIcal Drive]**.
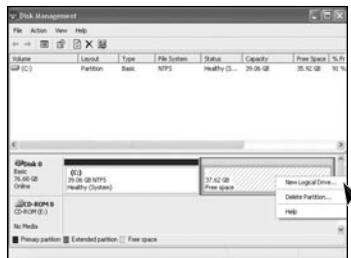
4 When New Partition Wizard screen appears, click the **[Next]** button.

5 When the partition type selection screen appears, select the main partition and click the **[Next]** button.
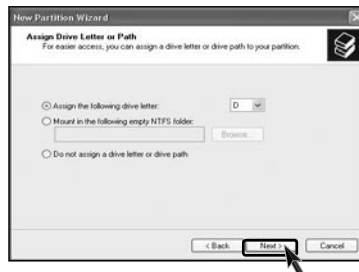

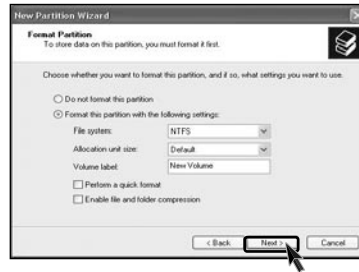**6** Select the maximum size, and click the **[Next]** button.

You can use as much space as you select in the above window.

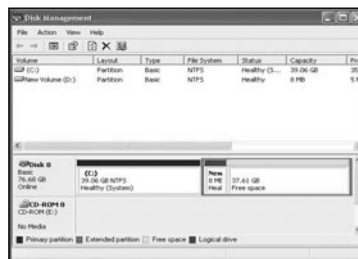**7** Select the Drive Letter and click the **[Next]** button.

8 When the partition format appears, set the file system, allocation unit, and volume label suitable for the User Environment and click the **[Next]** button.

9 The Partition Wizard has been completed. Click the **[Finish]** button.

10 After the completion, the additional hard disk will normally function.

6-7.Installing an Expansion Card

You sometimes need to disassemble and reconfigure the computer to expand the performance. The following describes how to install an expansion card for this purpose.

1 Open the computer cover as described in **Opening the computer Cover on**.

⚠️ Warning

■ Use proper tools (for example, drivers) when removing metallic slot covers to prevent hand injuries.
■ When disassembling the computer, wear gloves to protect internal parts of the computer and slot cards from damage.

2 Remove the metallic slot cover to install the extension card using a proper tool (for example, + driver)
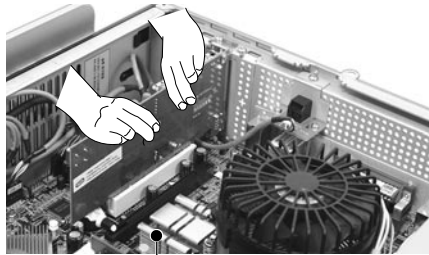
※Remove the slot cover only when installing an additional card.

⚠️ Caution

This computer adopted a slim design, and general ATX products cannot be installed in this computer. Please prepare a slim-designed extension card. (Ask the dealer when purchasing an extension card.)

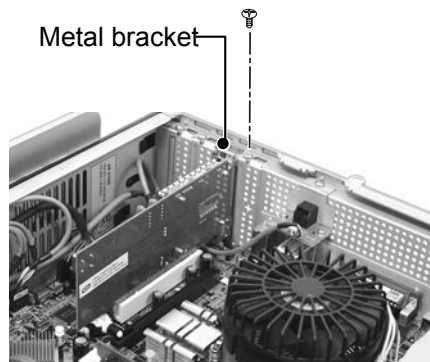3 Grab the card with two hands, and insert the card in the extension slot in the right direction.

Expansion slot

!⃝ **Caution**

When the card is not properly installed, the card or the main board may get damaged or malfunction.

4 After a metallic bracket is completely installed, fix it with screws.

Metal bracket

!⃝ **Warning**

Close the computer cover before using the computer. Otherwise, an electric shock, injury, or breakdown may occur.

5 Put the computer cover as described in Closing the Computer Cover on.

6 installing a new card, you also need to install the driver of the corresponding card.

memo

memo

memo

Product Specifications *FK Model

※ **Specifications below differ depending on the models.**

CPU	Supports Pentium4/ LGA775 2.8/3.0/3.2/3.4/3.6 GHz or higher (FSB: 533/800MHz)
System memory	128MB or higher. Differs depending on the model. (FK models allocate minimum 8MB or maximum 64MB as the local video memory [frame buffer] using a built-in VGA.)
Cache memory	256KB/512KB or 1024KB L2 cache is equipped in the CPU.
Hard disk drive	40 GB or higher (Serial ATA type).
Keyboard	PS/2 keyboard (104keys)
Mouse	PS/2 mouse or USB (ball / wheel)
Video	Equipped in PCI-E 16x video card (one 15-pin connector) or in the main board.
Sound	Equipped in the main board (MIC connector, speaker connector, line-in connector) and in the extension connector on the rear part of the system.
USB	Equipped in the main board (four) and in the front (two).
Serial I/O	Installed in the main board. (one 9-pin connector).
Front I/O	Two USB ports and audio ports (SPEAKER-OUT and MIC-IN)
Parallel I/O	One printer port (25pins)
Extension slot	One PCI-E 16x slot, One PCI-E 1x slot, Two PCI slots.
Product size	Width 100 x Height 365 x depth 460(mm)
Power spec	100~127 / 200~240VAC, 5A / 4A, 50/60Hz or 200~240VAC. 4A, 50/60Hz
Environmental requirement	Temperature:Average temperature:77℉(25℃) Operating temperature:41℉~95℉ (5~35℃) Storage temperature:-4℉~131℉(-25~55℃)/Humidity:Average humidity:60%(RH) Operating humidity:30%~80%(RH)/Storage humidity:30%~80%(RH)

-NOTE

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to pro-vide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radi-ate radio frequency energy and, if not in-stalled and used in accordance with the in-structions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equip-ment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the fol-lowing measures:

-. Reorient or relocate the receiving antenna.

-. Increase the separation between the equip-ment and receiver.

-. Connect the equipment into an outlet on a circuit different from that to which the re-ceiver is connected.

-. Consult the dealer or an experienced radio/TV technician for help.

⚠ Caution

Changes or modifications not expressly approved by the party responsible for com-pliance could void the user's authority to operate the equipment.