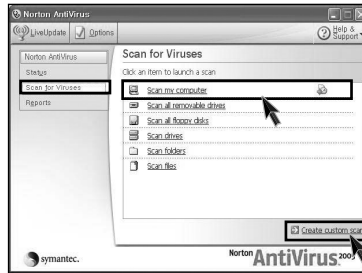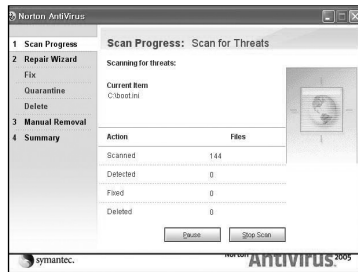## Running Norton Antivirus

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

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

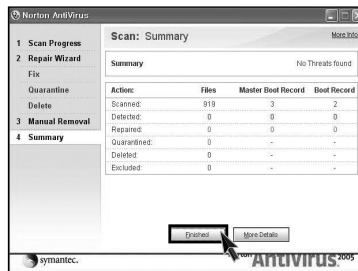**3** Norton AntiVirus is scanning virus.

Note

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

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

3.System setup

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

3-1. Starting the system setup

You may want to use the CMOS Setup Utility in the following situations:

- Booting with a bootable floppy disk(page 50).
- Setting a password(page 51).
- Changing or removing the password(page 52).
- Recovering the factory default settings(page 54).

⚠ Caution

Do not change the system setup arbitrarily. Incorrect system setup may result in errors while using the computer.

The menu and default factory settings of the CMOS Setup Utility may look different from this manual. They may have been changed to improve the performance of the system.

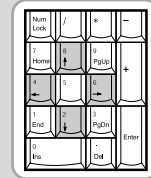### ● Keys used in the CMOS Setup Utility

Keys	Function
[Enter]	Select the current item.
[Esc]	Close the current window or move to the previous window.
[↑],[↓],[←],[→]	Move up, down, left, and right.
+/-	Increase or decrease the value
[Page Up]	Increase or decrease the value.
[Page Down]	Increase or decrease the value.
[F10]	Save or exit the system setup.

Note

■ Direction keys (arrow keys) move the cursor up, down, to the left and right. If Num Lock button is off, the arrow keys in the numeric keypad can be used just like the cursor control keys.
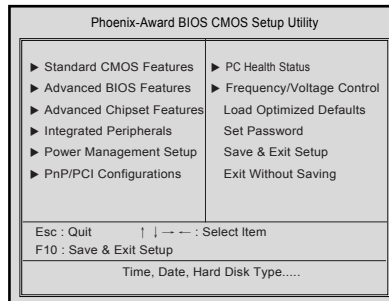
<Cursor keypad>

<Numeric keypad>
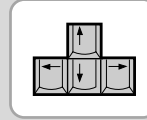
❶ Turn on the computer and monitor.

❷ When LG logo appears on the screen, press **[Delete].**

❸ The CMOS Setup Utility window appears.

Phoenix-Award BIOS CMOS Setup Utility	
▶ 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
F10 : Save & Exit Setup
Time, Date, Hard Disk Type.....
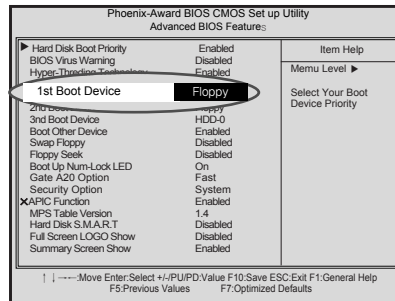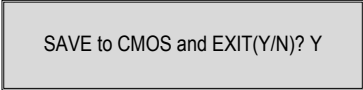
3-2. Booting with a bootable floppy disk

Follow the instruction below to set the floppy disk as start up disk.

1 Open the CMOS Setup Utility. Use the arrow keys to select **Advanced BIOS Features** and press **[Enter]**.

2 Use [↑],[↓],[←], and [→] keys to select **1st Boot Device**. Use page up/down keys to select **Floppy**.

Phoenix-Award BIOS CMOS Set up Utility		
Advanced BIOS Features		
▶ Hard Disk Boot Priority	Enabled	Item Help
BIOS Virus Warning	Disabled	Memu Level ▶
Hyper-Threading Technology	Enabled	
1st Boot Device	Floppy	Select Your Boot Device Priority
2nd Boot Device	Floppy	
3nd Boot Device	HDD-0	
Boot Other Device	Enabled	
Swap Floppy	Disabled	
Floppy Seek	Disabled	
Boot Up Num-Lock LED	On	
Gate A20 Option	Fast	
Security Option	System	
✕ APIC Function	Enabled	
MPS Table Version	1.4	
Hard Disk S.M.A.R.T	Disabled	
Full Screen LOGO Show	Disabled	
Summary Screen Show	Enabled	

↑ ↓ →←: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 the **[F10]** key.

4 When the following message appears, press **[Enter]**. The computer restarts.

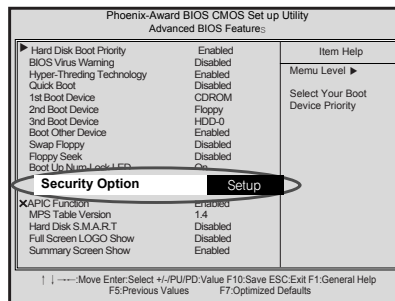SAVE to CMOS and EXIT(Y/N)? Y

3-3. Setting a password

If you want to protect the system setup from unauthorized users, follow the
instruction below to set a password.
You can set a password in the CMOS Setup Utility program.

⚠ Caution

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

1 Start the CMOS Setup Utility. Use the arrow keys to select **Advanced BIOS
Features**, and then press **[Enter]**.

2 Use the arrow keys to select **Security Option**. Use the Page Up and Page
Down keys to select **Setup** or **System**, and then press **[Enter]**.

```
                Phoenix-Award BIOS CMOS Set up Utility
                     Advanced BIOS Features

 ▶ Hard Disk Boot Priority          Enabled          Item Help
   BIOS Virus Warning               Disabled
   Hyper-Threding Technology        Enabled       Memu Level ▶
   Quick Boot                       Disabled
   1st Boot Device                  CDROM         Select Your Boot
   2nd Boot Device                  Floppy        Device Priority
   3nd Boot Device                  HDD-0
   Boot Other Device                Enabled
   Swap Floppy                      Disabled
   Floppy Seek                      Disabled
   Boot Up Num Lock LED             On
   Security Option            Setup
 ×APIC Function                     Enabled
   MPS Table Version                1.4
   Hard Disk S.M.A.R.T              Disabled
   Full Screen LOGO Show            Disabled
   Summary Screen Show              Enabled

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

Note

■ If you select Setup in the Security Option, the computer asks for a password next time
you try to enter the CMOS Setup Utility. If you select System, the computer asks for a
password next time you start the computer and also when you try to enter the CMOS
Setup Utility. Setting the System password prevents unauthorized users from using the
computer or changing the system setup.

3 Use the arrow keys to select **Set Password**, and then press **[Enter]**.

4 If the following message appears, enter the new password and then press **[Enter]**. A password must consist of characters A~Z and numbers 0~9, and has the maximum length of 8.

Enter Password :

5 If the following message appears, enter the password again, and then press **[Enter]**.

Confirm Password :
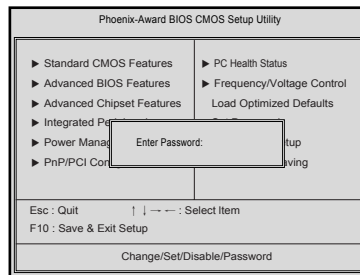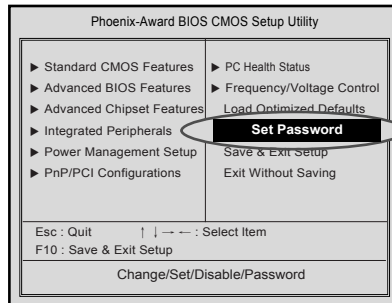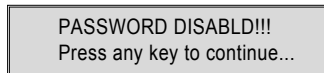
6 Press **[F10]** to save the new settings.

7 If the following message appears, press **[Enter]**. The computer restarts.

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

3-4. Changing or removing the password

You must know the password to change or remove it.

1 Start the CMOS Setup Utility, enter your password, and then press **[Enter]**.

```
                Phoenix-Award BIOS CMOS Setup Utility

  ▶ Standard CMOS Features       ▶ PC Health Status
  ▶ Advanced BIOS Features       ▶ Frequency/Voltage Control
  ▶ Advanced Chipset Features      Load Optimized Defaults
  ▶ Integrated Pe
  ▶ Power Manag         Enter Password:            tup
  ▶ PnP/PCI Co                                      ving

  Esc : Quit        ↑ ↓ → ← : Select Item
  F10 : Save & Exit Setup
                Change/Set/Disable/Password
```

■ To change the password, follow the instructions on Setting a password.

■ To remove the password, follow the instructions below.

2 Use arrow keys to select **Set Password**, and then press **[Enter]**.

```
              Phoenix-Award BIOS CMOS Setup Utility

  ▶ 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
  F10 : Save & Exit Setup
              Change/Set/Disable/Password
```

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

```
      Enter Password :
```

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

```
      PASSWORD DISABLD!!!
      Press any key to continue...
```
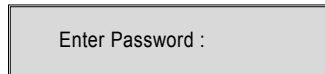
5 Press **[F10]** to save the new setting.

6 If the following message appears, press **[Y]** key and **[Enter]**. The computer restarts.

```
  SAVE to CMOS and EXIT(Y/N)? Y
```
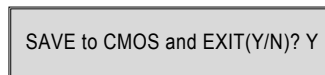
3-5. Recovering the factory default settings

You can follow the instructions below to recover the factory default settings.

1 Start the CMOS Setup Utility. Use the arrow keys to select **Load Optimized Defaults** and press **[Enter]**.

2 If the following message appears, press **[Y]** key and then **[Enter]**. The factory default settings have been recovered.

Load Optimized Defaults (Y/N) ? Y

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

4 If the following message appears, press **[Enter]**. The computer restarts.

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

3-6. Using Power saving function

You can use power saving function in Windows OS no matter how you set the BIOS setup.

1 Click **[Start]→[Control panel]→[Switch to classic view]**.

2 Double click Power option icon from the control panel.

3 Set the Power option properties and click **[OK]**.
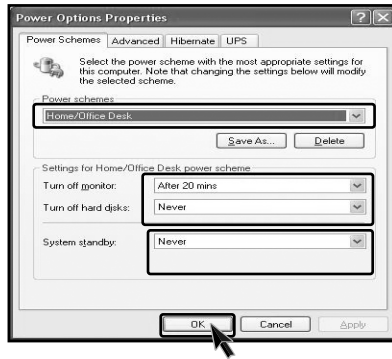
⚠ **Warning**

There are some devices which do not support the power saving function properly. If you have installed such devices, you should disable power saving function.

4 Click **[Advanced]** for setup if necessary and then click **[OK]**.
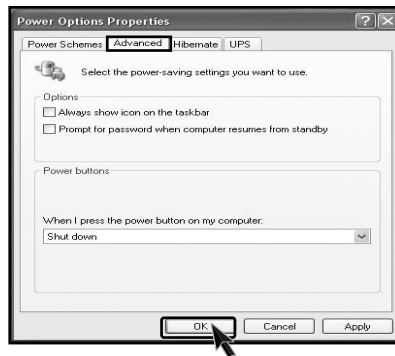
Note

■ **Hibernation mode**: It saves data and turns off the power and then restores data when the system starts again.

Your computer support ACPI power saving and you can change Sleep State in the BIOS system setup. Set to S3(STR) to manage power more effectively in standby mode. Use the power button to exit standby mode. If you want to use a keyboard stroke or mouse movement to exit standby mode, change S3(STR) to S1(POS).
 Note: S1(Power On Suspend), S3(Save to Ram)

❶ Start the CMOS Setup Utility. Use the arrow keys to select **Power Management Setup** and then press **[Enter]**.

❷ Use the arrow keys to select **Sleep State**, and PageUp and PageDown keys to set **S1(POS)**.

```
                  Phoenix-Award BIOS CMOS Set up Utility
                        Power Management Setup
 Sleep State                        S1 (POS)        Item Help
 Power Management                  [User Define]     Menu Level ▶
 Video Off Method                  [DPMS]
 Video Off In Suspend              [YES]
 Suspend Type                      [Stop Grant]
 MODEM Use IRQ                     [3]
 Suspend Mode                      [Disabled]
 HDD Power Down                    [Disabled]
 Power Button Function             [Suspend]
 CPU THRM-Throtting                [**.*%]
 Wake Up On PME                    [Disabled]
×USB KB Wake-Up From S3            Disabled
 Resume by Alarm                   [Disabled]
×Date(of Month) Alarm              0
×Time(hh:mm:ss) Alarm              0:0:0

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

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

❹ If the following message appears, press **[Enter]**.The computer restarts.

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

memo

4.System Recovery

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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.)
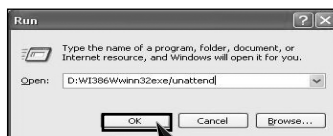
Note

■ 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

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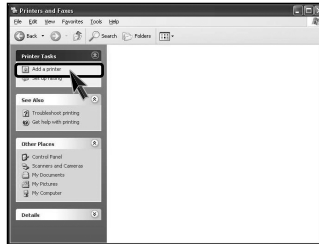
4 When the Add Printer Wizard appears, click the **[Next]** button.

5 When the following screen appears, check the connection type of the printer - local or network. Then, select a printer and click the **[Next]** button.
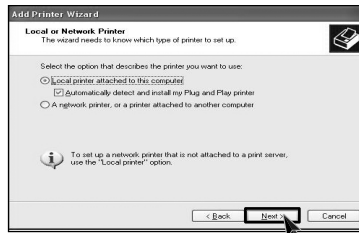
6 **New Printer Detection** screen will appear. Click the **[Next]** button.

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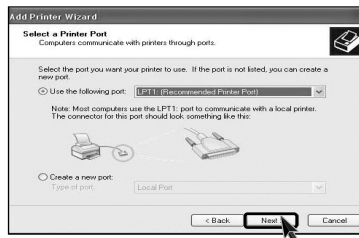
8 Select the manufacturer and model of your printer on the **Select Printer** screen. If your printer came with an installation disk, click **[Have Disk]**. If not, just click the **[Next]** button.
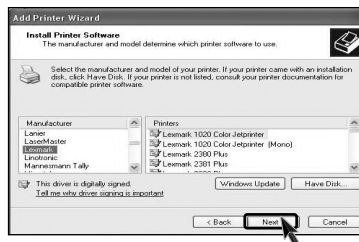
When [Have Disk] is selected.

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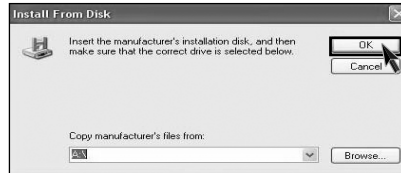
When [Next] is selected

9 Name the printer, and click the **[Next]** button.
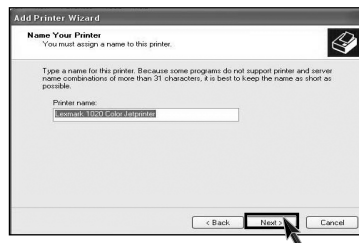
10 When **Print Test Page** screen appears, click the **[Yes]** and **[Next]**.
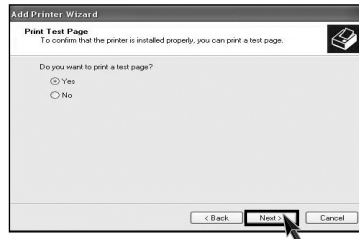
⓫ After the test page is properly printed out, click the **[OK]** button.
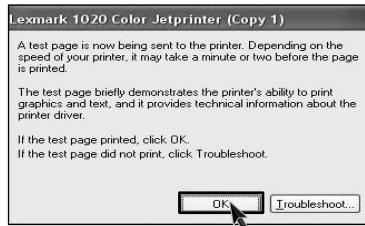
⓬ When the following screen appears, check the printer and click the **[Finish]** button.

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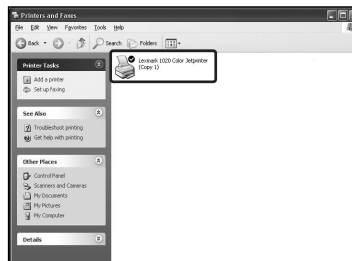
5-2.Reinstalling Sound Driver

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

LG

6-1. Opening the computer case

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

Follow the guidelines below when opening the case.

■ Quit all running programs.
■ Turn off the computer and monitor, and unplug and remove the power cords.
■ Keep magnetic objects such as screw driver away from the parts inside the computer.
■ Open the computer case in a safe, clean area.
■ The static electricity can damage the parts inside the computer. Touch a bare, unpainted metal part of the computer for 2~3 seconds to remove the static electricity before opening the computer case.
■ Always wear gloves to avoid injury when disassembling the computer.

Opening and closing the computer case

Remove 3 screws from the cover and then push the cover as the direction of the arrow.

Push the cover in the direction of arrow as it aligns the groove of computer cover with body shown on the picture and fasten 3 screws.

⚠ Warning

Make sure that there is no metallic object left inside the computer before closing the case. There is the risk of electric shock or fire.

6-2. Main board

The main board determines the model name of your computer. Check the model name on a label located at the rear of your computer before system expansion.

❶ **PCI slot**

❷ **AGP slot**

❸ **CPU socket**

❹ **Memory socket (DIMM)**

❺ **Floppy disk connector**

❻ **Hard disk/CD-ROM connector**
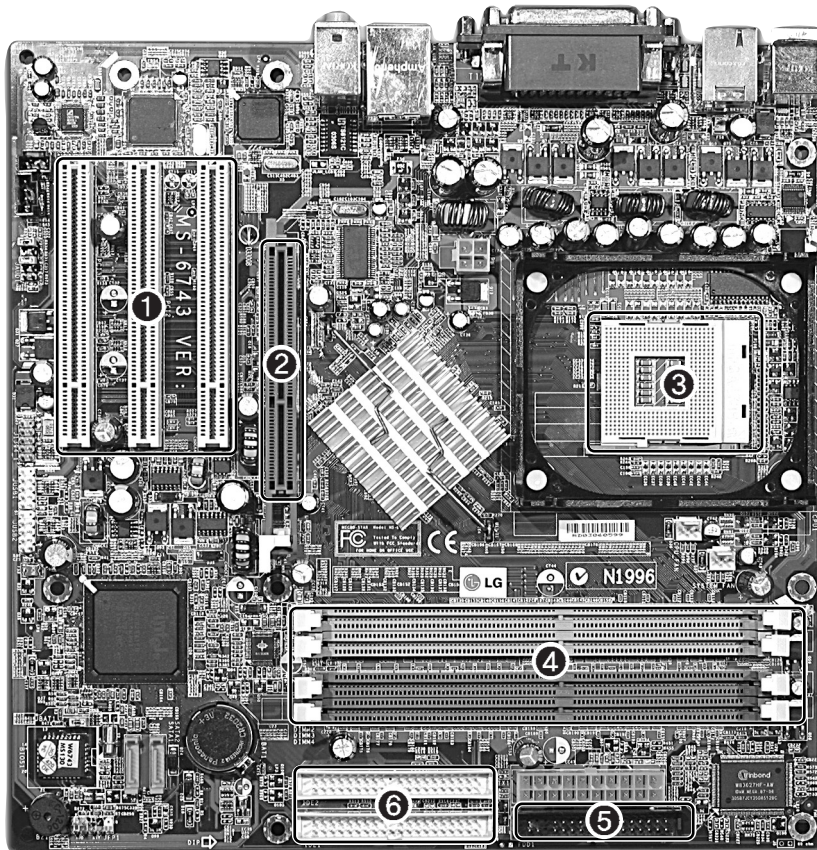
Note

■ The main board in your computer may look different from the picture.

6-3. Connectors

The peripheral devices are connected to the main board through the connectors shown below. (The main board in your computer may look different from the picture below)
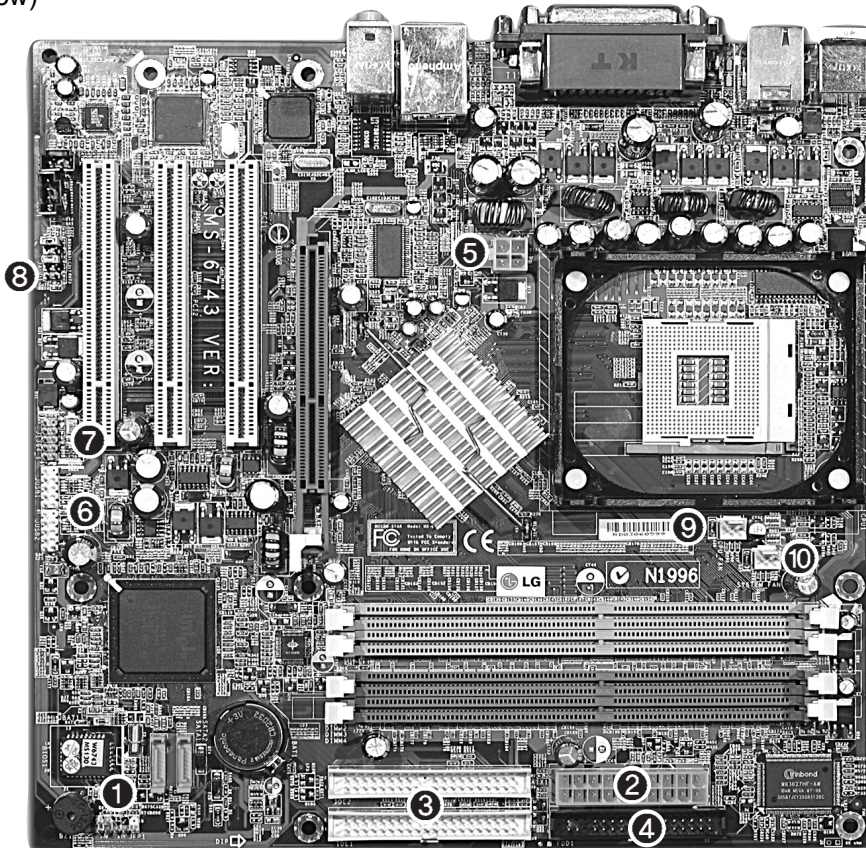
⚠ Caution

■ Before removing the connector, check the status of connection and make a note.
■ Aline the groove to the right direction when connecting floppy disk drive connector, hard disk/CD-ROM connector.
■ Match the pin number with the color of cable. There is a risk of disfunction to the computer.
■ There is a risk of explosion 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.

LG

❶ Power switch, power/ hard disk activity LED connector (JFP1)
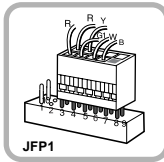
Connects power switch and hard disk activity LED .

❷ Power connector (CONN1: 20 pins)
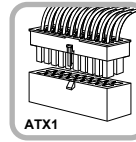
Connects to the power.

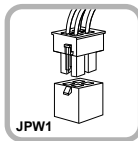**❸ Hard disk/CD-ROM drive connectors (IDE1, IDE2: 40 pins)**
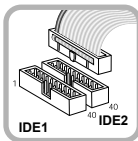
IDE connector connects hard disk and CD-ROM drive. If only one hard disk is connected, it should be connected to IDE1 hard disk connector.
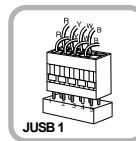
❹ Floppy disk drive connector (FDD1: 34 pins)
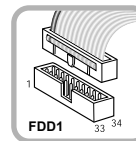
Connects to the floppy disk drive.

❺ Power connector (JPW1: 4 pins)

Connects to the power supply.

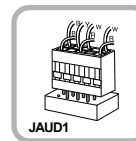**❻ USB connector(JUSB1: 10 pins)**

Connects to the USB on the front of the computer.

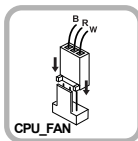**❼ 1394 connector (J1394 : 7pins)**
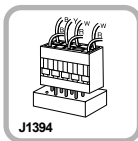
Connects to the IEEE 1394 on the front of the computer.
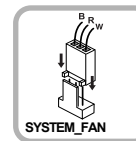
❽ Audio connector(JAUD1: 7 pins)

Connects to the head-phone and microphone jacks on the front of the computer.

❾ CPU fan (CPU_FAN: 3 pins)

Connects and supplies power to the CPU fan.

❿ System fan (System_FAN)

Connects and supplies power to the system fan at the bottom of the computer.