

APPENDIX F :

USER'S MANUAL

Regulatory Information

FCC Compliance Statement

This equipment has been tested and found to comply within the limits of a Class B digital device pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses, and can radiate radio frequency energy and if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception (which can be determined by turning the equipment on and off), the user is encouraged to try to correct the interference by using one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver 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 compliance could void the user's (or your) authority to operate the equipment. Only peripherals (digital input/output devices, terminals, printers, etc.) certified to comply with the Class B limits may be attached to this monitor. Operation with non-certified peripherals is likely to result in interference to radio and TV reception.

Only shielded signal cables may be used with this System.

NOTICE

The regulations are applied only to the products with the ID LABEL indicating specific requirements.

Canadian DOC Notice

This Class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations. Cet appareil numérique de la classe B respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.

NOTICE

The regulations are applied only to the products with the ID LABEL indicating specific requirements.

CE Conformity Notice (for Europe)

Products with the "CE" Marking comply with the EMC Directive(89/336/EEC) and LOW VOLTAGE Directive (73/23/EEC) issued by the Commission of the European Community.

Compliance with these directives implies conformity to the following European Norms :

- EN 55022:1998 ; Radio Frequency Interference
- EN 55024:1998 ; Electromagnetic Immunity
- EN 61000-3-2 ; Power Line Harmonics
- EN 61000-3-3 ; Voltage Fluctuations
- EN 60950 ; Product Safety

NOTICE

The regulations are applied only to the products with the ID LABEL indicating specific requirements.

Low Radiation Compliance (MPR II)

This monitor meets one of the strictest guidelines available today for low radiation emissions, offering the user extra shielding and an antistatic screen coating. These guidelines, set forth by a government agency in Sweden, limit the amount of emission allowed in the Extremely Low Frequency (ELF) and Very Low Frequency (VLF) electromagnetic range.

TCO95



Congratulations!

You have just purchased a TCO'95 approved and labelled product! Your choice has provided you with a product developed for professional use. Your purchase has also contributed to reducing the burden on the environment and to the further development of environmentally-adapted electronic products.

Why do we have environmentally labelled computers?

In many countries, environmental labelling has become an established method for encouraging the adaptation of goods and services to the environment. The main problem as far as computers and other electronic equipment are concerned is that environmentally harmful substances are used both in the products and during their manufacture. Since it has not been possible so far for the majority of electronic equipment to be recycled in a satisfactory way, most of these potentially damaging substances sooner or later enter Nature.

There are also other characteristics of a computer, such as energy consumption levels, that are important from both the working and natural environment viewpoints. Since all types of conventional electricity generation have a negative effect on the environment (acidic- and climatic-influencing emissions, radioactive waste, etc.), it is vital to conserve energy. Electronic equipment in offices consumes an enormous amount of energy, since it is often routinely left running continuously.

What does the environmental labelling involve?

This product meets the requirements for the TCO'95

Regulatory Information cont.

scheme, which provides for international environmental labelling of personal computers. The labelling scheme was developed as a joint effort by the TCO (The Swedish Confederation of Professional Employees), Naturkyddsforeningen (The Swedish Society for Nature Conservation), and NUTEK (The National Board for Industrial and Technical Development in Sweden), and SEMKO AB (an international certification agency).

The requirements cover a wide range of issues: environment, ergonomics, usability, emission of electrical and magnetic fields, energy consumption and electrical and fire safety.

The environmental demands concern, among other things, restriction on the presence and use of heavy metals, brominated and chlorinated flame retardants, CFCs (freons), and chlorinated solvents. The product must be prepared for recycling, and the manufacturer is obliged to have an environmental plan, which must be adhered to in each country where the company implements its operational policy.

The energy requirements include a demand that the computer and/or display, after a certain period of inactivity, shall reduce its power consumption to a lower level, in one or more stages. The length of time to reactivate the computer shall be reasonable for the user.

Labeled products must meet strict environmental demands, for example, in respect of the reduction of electric and magnetic fields, along with physical and visual ergonomics and good usability.

The following is a brief summary of the environmental requirements met by this product. The complete environmental criteria document may be ordered from:

TCO Development Unit
Linnegatan 14, S-11494 Stockholm, Sweden
FAX +46-8 782 92 07
E-mail (Internet): development@tco.se

Current information regarding TCO'95 approved and labelled products may also be obtained on the Internet using the address: <http://www.tco-info.com/>

TCO'95 is a co-operative project between:



Naturskydds
foreningen



NUTEK

SEMKO

Närings- och teknikutvecklingsverket

Environmental requirements

Brominated flame retardants are present in printed circuit boards, cabling, casings, and housings, and are added to delay the spread of fire. Up to 30% of the plastic in a computer casing can consist of flame-retardant substances. These are related to another group of environmental toxins, PCBs, and are suspected of giving rise to similar harm, including reproductive damage in fish-eating birds and mammals. Flame retardants have been found in human blood, and researchers fear that they can disturb fetus development.

Bio-accumulative¹ TCO'95 demands require that plastic components weighing more than 25 grams must not contain flame retardants with organically bound chlorine or bromine.

Lead can be found in picture tubes, display screens, solder, and capacitors. Lead damages the nervous system and in higher doses causes lead poisoning. The relevant bio-accumulative TCO'95 requirement permits the inclusion of lead, as no replacement has yet been developed.

Cadmium is present in rechargeable batteries and in the color-generating layers of certain computer displays. Cadmium damages the nervous system and is toxic in high doses. The relevant bio-accumulative TCO'95 requirement states that batteries may not contain more than 25 ppm (parts per million) of cadmium. The color-generating layers of display screens must not contain any cadmium.

Mercury is sometimes found in batteries, relays and switches. Mercury damages the nervous system and is toxic in high doses. The relevant bio-accumulative TCO'95 requirement states that batteries may not contain more than 25 ppm of mercury and that no mercury is present in any of the electrical or electronic components concerned with the display unit.

CFCs (freons) are sometimes used for washing printed circuit boards and in the manufacture of expanded foam for packaging. CFCs break down ozone and thereby damage the ozone layer in the atmosphere, causing increased reception on Earth of ultra-violet light with consequent increased risks of skin cancer (malignant melanoma). The relevant TCO'95 requirement: Neither CFCs nor HCFCs may be used during the manufacture of the product or its packaging.

¹ Bio-accumulative means that the substance accumulates within living organisms.

Shipping Package

The packaging material can be recycled, or you can save it to return the monitor to a service center for repair or disposal.

CFC Compounds in Distribution Packaging

Cushioning material used for shipping finished monitors are not manufactured with nor do they contain any CFC compounds.

Design for Disassembly/Recycling

These monitors have been designed for easy end-of-life disassembly and recycling. Fasteners are generally of the same type for efficient disassembly. Components made of different materials can be easily separated and plastics have been identified using international symbols to aid in recycling.

Monitor Disposal

WARNING

If you need to dispose of a monitor, ask a qualified service representative for the proper procedure. Improper disposal could result in personal injury from implosion.

Regulatory Information cont.

TCO'99



Congratulations!

You have just purchased a TCO'99 approved and labelled product! Your choice has provided you with a product developed for professional use. Your purchase has also contributed to reducing the burden on the environment and also to the further development of environmentally adapted electronics products.

Why do we have environmentally labelled computers?

In many countries, environmental labelling has become an established method for encouraging the adaptation of goods and services to the environment. The main problem, as far as computers and other electronics equipment are concerned, is that environmentally harmful substances are used both in the products and during their manufacture. Since it is not so far possible to satisfactorily recycle the majority of electronics equipment, most of these potentially damaging substances sooner or later enter nature.

There are also other characteristics of a computer, such as energy consumption levels, that are important from the viewpoints of both the work (internal) and natural (external) environments. Since all methods of electricity generation have a negative effect on the environment (e.g. acidic and climate-influencing emissions, radioactive waste), it is vital to save energy. Electronics equipment in offices is often left running continuously and thereby consumes a lot of energy.

What does labelling involve?

This product meets the requirements for the TCO'99 scheme which provides for international and environmental labelling of personal computers. The labelling scheme was developed as a joint effort by the TCO (The Swedish Confederation of Professional Employees), Svenska Naturskyddsforeningen (The Swedish Society for Nature Conservation) and Statens Energimyndighet (The Swedish National Energy Administration).

Approval requirements cover a wide range of issues: environment, ergonomics, usability, emission of electric and magnetic fields, energy consumption and electrical and fire safety.

The environmental demands impose restrictions on the presence and use of heavy metals, brominated and chlorinated flame retardants, CFCs (freons) and chlorinated solvents, among other things. The product must be prepared for recycling and the manufacturer is obliged to have an environmental policy which must be adhered to in each country where the company implements its operational policy.

The energy requirements include a demand that the computer and/or display, after a certain period of inactivity, shall reduce its power consumption to a lower level in one or more stages. The length of time to reactivate the computer shall be reasonable for the user.

Labelled products must meet strict environmental demands, for example, in respect of the reduction of electric and magnetic fields, physical and visual ergonomics and good usability.

Below you will find a brief summary of the environmental requirements met by this product. The complete environmental criteria document may be ordered from:

TCO Development

SE-114 94 Stockholm, Sweden

Fax: +46 8 782 92 07

Email (Internet): development@tco.se

Current information regarding TCO'99 approved and labelled products may also be obtained via the Internet, using the address: <http://www.tco-info.com/>

Environmental requirements

Flame retardants

Flame retardants are present in printed circuit boards, cables, wires, casings and housings. Their purpose is to prevent, or at least to delay the spread of fire. Up to 30% of the plastic in a computer casing can consist of flame retardant substances. Most flame retardants contain bromine or chloride, and those flame retardants are chemically related to another group of environmental toxins, PCBs. Both the flame retardants containing bromine or chloride and the PCBs are suspected of giving rise to severe health effects, including reproductive damage in fish-eating birds and mammals, due to the bio-accumulative* processes. Flame retardants have been found in human blood and researchers fear that disturbances in foetus development may occur.

The relevant TCO'99 demand requires that plastic components weighing more than 25 grams must not contain flame retardants with organically bound bromine or chlorine. Flame retardants are allowed in the printed circuit boards since no substitutes are available.

Cadmium**

Cadmium is present in rechargeable batteries and in the colour-generating layers of certain computer displays. Cadmium damages the nervous system and is toxic in high doses. The relevant TCO'99 requirement states that batteries, the colour-generating layers of display screens and the electrical or electronics components must not contain any cadmium.

Regulatory Information cont.

Mercury**

Mercury is sometimes found in batteries, relays and switches. It damages the nervous system and is toxic in high doses. The relevant TCO'99 requirement states that batteries may not contain any mercury. It also demands that mercury is not present in any of the electrical or electronics components associated with the labelled unit.

CFCs (freons)

The relevant TCO'99 requirement states that neither CFCs nor HCFCs may be used during the manufacture and assembly of the product. CFCs (freons) are sometimes used for washing printed circuit boards. CFCs break down ozone and thereby damage the ozone layer in the stratosphere, causing increased reception on earth of ultraviolet light with e.g. increased risks of skin cancer (malignant melanoma) as a consequence.

Lead**

Lead can be found in picture tubes, display screens, solders and capacitors. Lead damages the nervous system and in higher doses, causes lead poisoning. The relevant TCO'99 requirement permits the inclusion of lead since no replacement has yet been developed.

* Bio-accumulative is defined as substances which accumulate within living organisms

** Lead, Cadmium and Mercury are heavy metals which are Bio-accumulative.

EPA (U.S.A only)

ENERGYSTAR is a set of power-saving guidelines issued by the U.S. Environmental Protection Agency(EPA).



EPA POLLUTION PREVENTER

As an ENERGY STAR Partner LG Electronics U.S.A.,Inc. has determined that this product meets the ENERGY STAR guidelines for energy efficiency.

NOM MARK (Mexico only)



GOST MARK



BZ03

Internet Address:<http://www.lg.ru>
Информационная служба LG
Electronics (095)742-77-77



L4200A

User's Guide
Benutzerhandbuch
Manuel d'utilisation
Manuale d'istruzioni
Guía del usuario
Guia do usuário
Gebruikshandleiding
Felhasználói útmutató



Please read this manual carefully before operating your set.

Retain it for future reference.

Record model number and serial number of the set.

See the label attached on the back cover and quote this information to your dealer when you require service.

<http://www.lge.com>

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ENGLISH


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Safety Precautions

Please read these safety precautions carefully before using the monitor.

 **Warning** If you ignore the warning message, you may be seriously injured or there is a possibility of accident or death.

 **Caution** If you ignore the caution message, you may be slightly injured or the product may be damaged

Precautions in installing the Monitor

Warning

- **Keep away from heat sources like electrical heaters.**
 - Electrical shock, fire, malfunction or deformation may occur.
- **Keep the packing anti-moisture material or vinyl packing out of the reach of children.**
 - Anti-moisture material is harmful if swallowed. If swallowed by mistake, force the patient to vomit and visit the nearest hospital. Additionally, vinyl packing can cause suffocation. Keep it out of the reach of children.
- **Do not put heavy objects on the monitor or sit upon it.**
 - If the monitor collapses or is dropped, you may be injured. Children must pay particular attention.
- **Do not leave the power or signal cable unattended on the pathway.**
 - The passerby can falter, which can cause electrical shock, fire, product breakdown or injury.
- **Install the monitor in a neat and dry place.**
 - Dust or moisture can cause electrical shock, fire or product damage.
- **If you can smell smoke or other odors or hear a strange sound unplug the power cord and contact the service center.**
 - If you continue to use without taking proper measures, electrical shock or fire can occur.
- **If you dropped the monitor or the case is broken, turn off the monitor and unplug the power cord.**
 - If you continue to use without taking proper measures, electrical shock or fire can occur. Contact the service center.
- **Do not drop metallic objects such as coins, hair pins, chopsticks or wire into the monitor, or inflammable objects such as paper and matches. Children must pay particular attention.**
 - Electrical shock, fire or injury can occur. If a foreign object is dropped into the monitor, unplug the power cord and contact the service center.

Caution

- **Make sure the monitor ventilation hole is not blocked. Install the monitor in a suitably wide place (more than 10cm from the wall)**
 - If you install the monitor too close to the wall, it may be deformed or fire can break out due to internal heat.
- **Do not block the ventilation hole of the monitor by a tablecloth or curtain.**
 - The monitor can be deformed or fire can break out due to overheating inside the monitor.
- **Install the monitor on a flat and stable place that has no risk of dropping the monitor.**
 - If the monitor is dropped, you may be injured or the monitor may be broken.
- **Install the monitor where no EMI occurs.**
- **Keep the monitor away from direct sunlight.**
 - The monitor can be damaged.

Electrical Power Related Precautions

Warning

- **Make sure to connect the power cable to the grounded current.**
 - You may be electrocuted or injured.
- **Use the rated voltage only.**
 - The monitor can be damaged, or you may be electrocuted.
- **During a thunder or lightning storm, unplug the power cable or signal cable.**
 - You may be electrocuted or a fire can break out.
- **Do not connect several extension cords, electrical appliances or electrical heaters to a single outlet. Use a power bar with a grounding terminal designed for exclusive use with the computer.**
 - A fire can break out due to overheating.
- **Do not touch the power plug with wet hands. Additionally, if the cord pin is wet or covered with dust, dry the power plug completely or wipe dust off.**
 - You may be electrocuted due to excess moisture.
- **If you don't intend to use the monitor for a long time, unplug the power cable from the monitor.**
 - Covering dust can cause a fire, or insulation deterioration can cause electric leakage, electric shock or fire.
- **Fix the power cable completely.**
 - If the power cable is not fixed completely, a fire can break out.
- **Hold the plug when pulling out the power cable. Do not bend the power cord with excessive force or put heavy objects on the power cord.**
 - The power line can be damaged, which may cause electric shock or fire.
- **Do not insert a conductor (like a metal chopstick) into one end of the power cable while the other end is connected to the input terminal on the wall. Additionally, do not touch the power cable right after plugging into the wall input terminal.**
 - You may be electrocuted.

Caution

- **Do not unplug the power cord while the monitor is in use.**
 - Electrical shock can damage the monitor.

Precautions in Moving the Monitor

Warning

- **Make sure to turn off the monitor.**
 - You may be electrocuted or the monitor can be damaged.
- **Make sure to remove all cables before moving the monitor.**
 - You may be electrocuted or the monitor can be damaged.

Safety Precautions

Caution

- **Do not shock the monitor when moving it.**
 - You may be electrocuted or the monitor can be damaged
- **Do not dispose the product-packing box. Use it when you move.**
- **Make the panel face forward and hold it with both hands to move.**
 - If you drop the monitor, the damaged monitor can cause electric shock or fire. Contact with the service center for repair.

Precautions in Using the Monitor

Warning

- **Do not disassemble, repair or modify the monitor at your own discretion.**
 - Fire or electric shock accident can occur.
 - Contact the service center for check, calibration or repair.
- **Do not spray water on the monitor or scrub with an inflammable substance (thinner or benzene). Fire or electric shock accident can occur**
- **Keep the monitor away from water.**
 - Fire or electric shock accident can occur.

Caution

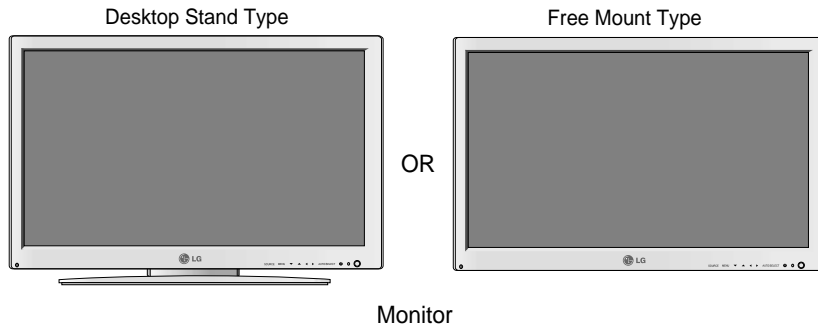
- **Do not put or store inflammable substances near the monitor.**
 - There is a danger of explosion or fire due careless handling of the inflammable substances.
- **When cleaning the brown tube surface, unplug the power cord and scrub with soft cloth to prevent scratching. Do not clean with a wet cloth.**
 - The water can sink into the monitor, which can cause electric shock or serious malfunction.
- **Take a rest from time to time to protect your vision.**
- **Keep the monitor clean at all times.**
- **Take a comfortable and natural position when working with a monitor to relax the muscles.**
- **Take a regular break when working with a monitor for a long time.**
- **Do not press strongly upon the panel with a hand or sharp object such as nail, pencil or pen, or make a scratch on it.**
- **Keep the proper distance from the monitor.**
 - Your vision may be impaired if you look at the monitor too closely.
- **Set the appropriate resolution and clock by referring to the User's Manual.**
 - Your vision can be impaired.
- **Use authorized detergent only when cleaning the monitor. (Do not use benzene, thinner or alcohol.)**
 - Monitor can be deformed.

Accessories

Please check the accessories in the product package.

* The monitor and the accessories can be different from the figures shown here.

ENGLISH



Diskette/User's Guide/Cards



15-pin D-Sub Signal Cable



DVI-D Signal Cable



Power Cord



Audio Cable (PC)

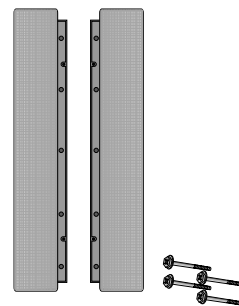


Remote Controller/Batteries (AAA x 2)

● **별매 품**

Wall-mount Rack

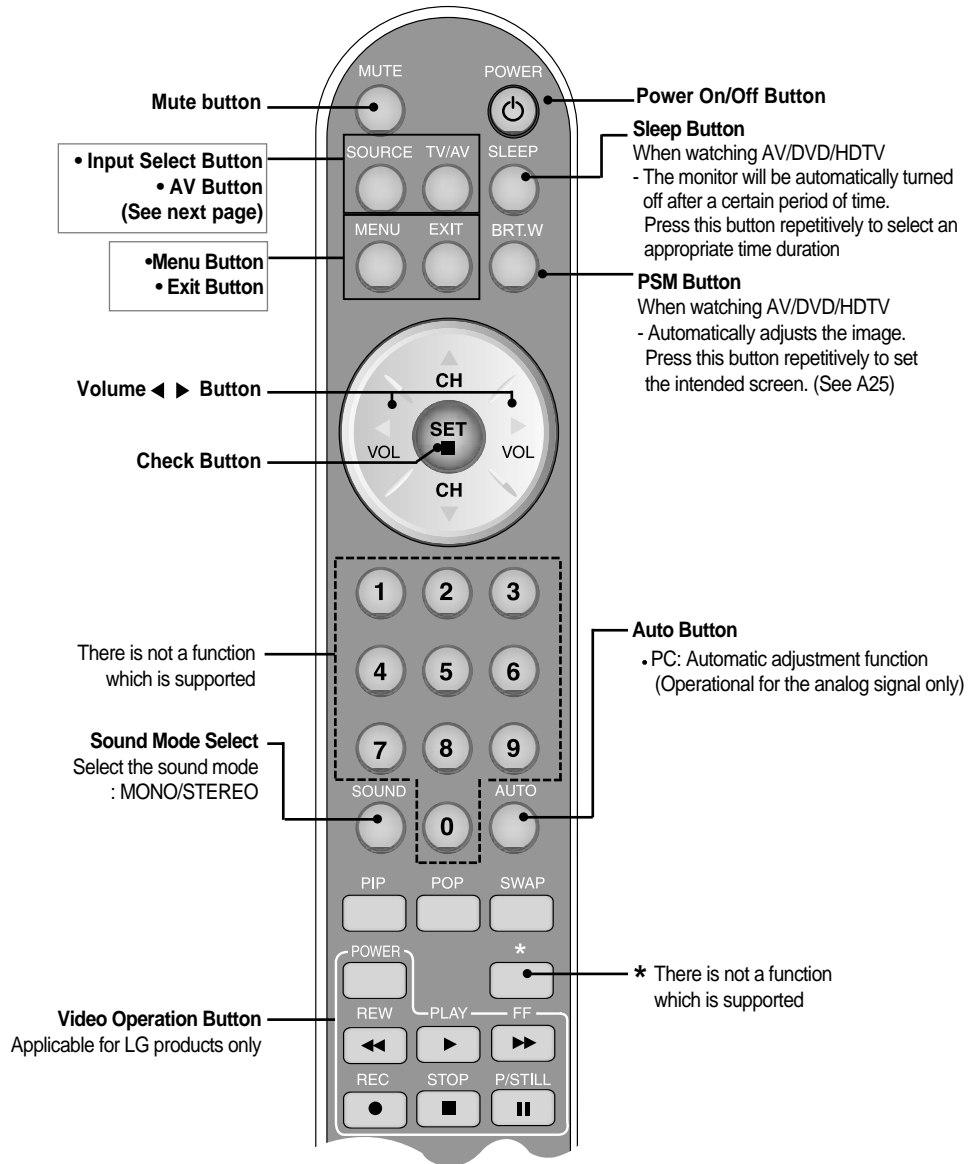
Wall-mount Rack Install을 위해서는 Rack과 같이 동봉된 Installation Guide 내용을 참고하시기 바랍니다.

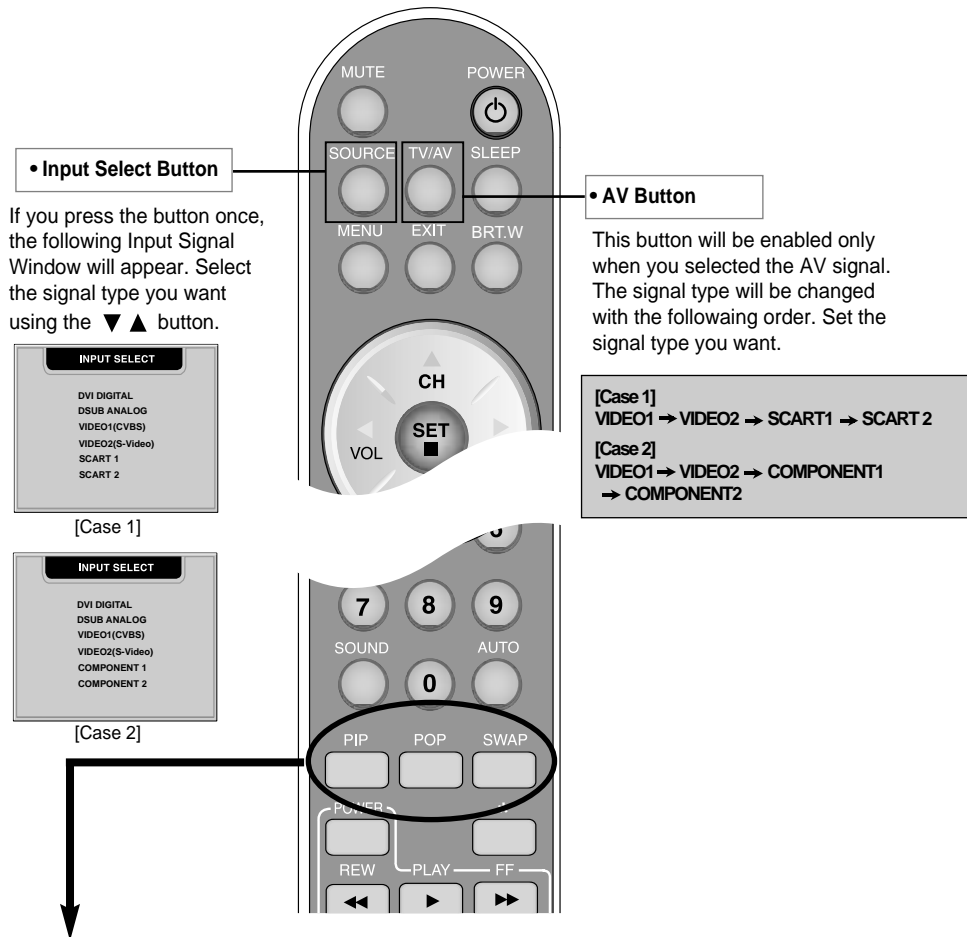


Speaker kit / Screws
(Speaker 지원모델에 한함)

Using the Remote Control

● Name of the Remote Controller Buttons





1. PIP (Picture in Picture) Button

The sub-screen moves to the next mode whenever you press this button.
 : SMALL -> LARGE -> OFF

2. POP (Picture out Picture) Button

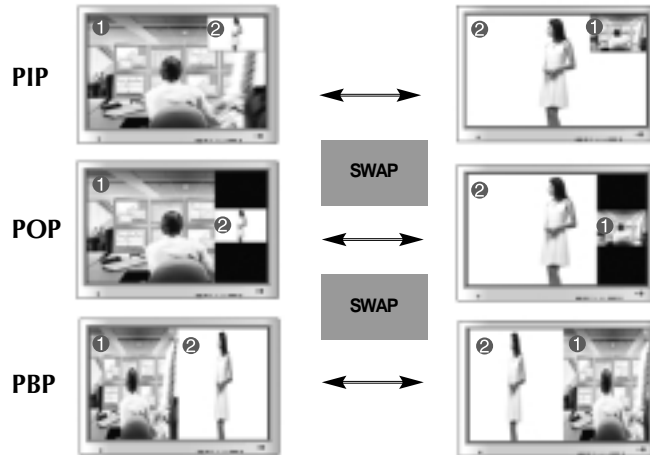
The sub-screen moves to the next mode whenever you press this button.
 : POP ON -> PBP(FULL) -> PBP(4:3) -> OFF



Using the Remote Control

3. Swap Button

You can swap the main screen and the sub-screen when the PIP/POP/PBP function is used..

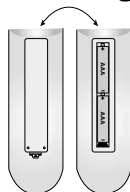


When 'Input Signal 1' comes on in the main screen, only 'Input Signal 2' can be displayed on the sub-screen. On the contrary, if the main screen displays 'Input Signal 2', the sub-screen can display 'Input Signal 1' only. You can swap 'Input Signal 1' and 'Input Signal 2' using the SWAP button.

<Table of PIP/POP/PBP Function Support>

Main Screen / Sub-Screen	D-SUB	DVI	CVBS	S-VHS	SCART 1 COMPONENT 1	SCART 2 COMPONENT 2
D-SUB	X	●	●	●	●	●
DVI	●	X	●	●	●	●
CVBS	●	●	X	X	X	X
S-VHS	●	●	X	X	X	X
SCART 1 COMPONENT 1	●	●	X	X	X	X
SCART 2 COMPONENT 2	●	●	X	X	X	X

Inserting batteries into remote controller.

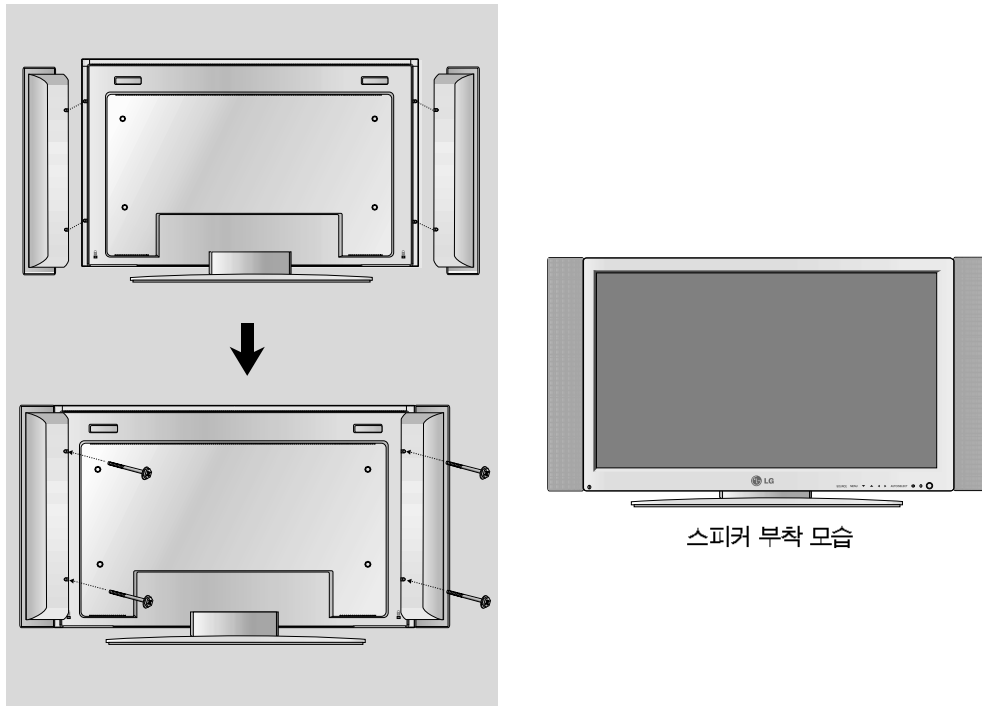


1. Take out the battery cap.
2. Insert the battery with correct polarity (+/-).
3. Close the battery cap.
 - You can use a remote controller 7 meter distance and 30 degree (left/right) within the receiving unit scope.
 - Dispose of used batteries in the recycle bin to prevent environmental pollution.

Connecting the Speakers - Optional

* 스피커 지원모델에만 해당되는 내용입니다.

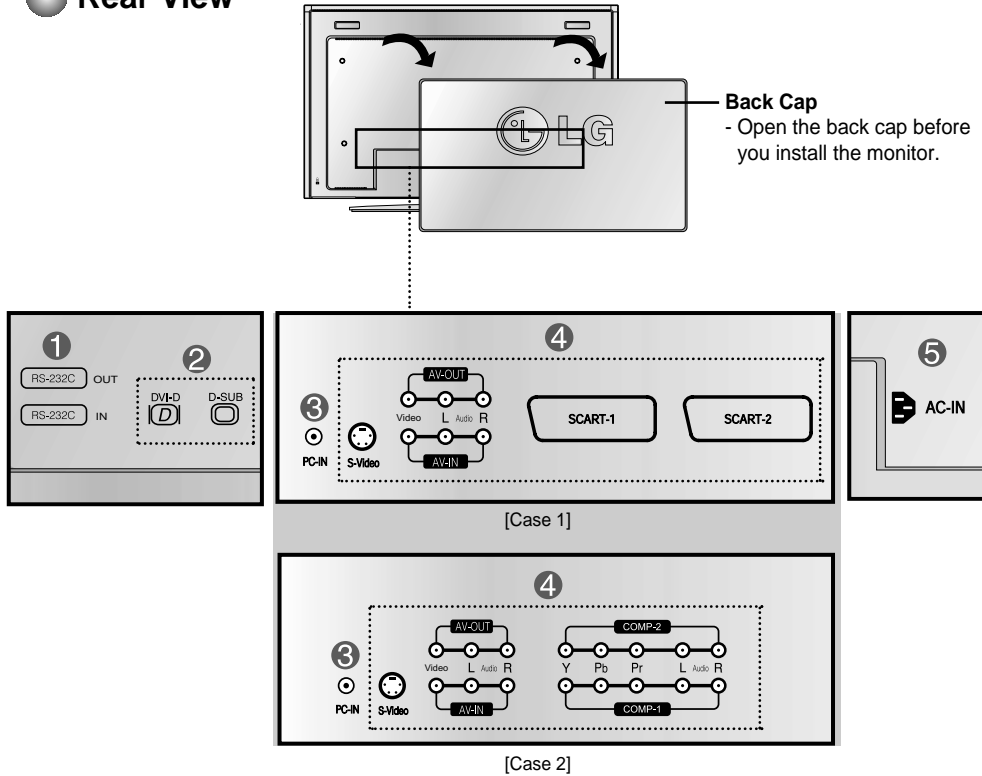
Use the screws to secure the speakers on the rear side of the monitor as shown in the below figure.



ENGLISH

Name and Function of the Parts

Rear View



- ① RS-232C Serial ports
- ② PC signal inputs
- ③ Connect the audio cable to the *LINE OUT jack of the PC sound card.
- ④ AV Input ports
- ⑤ Connect the power cord

*LINE OUT

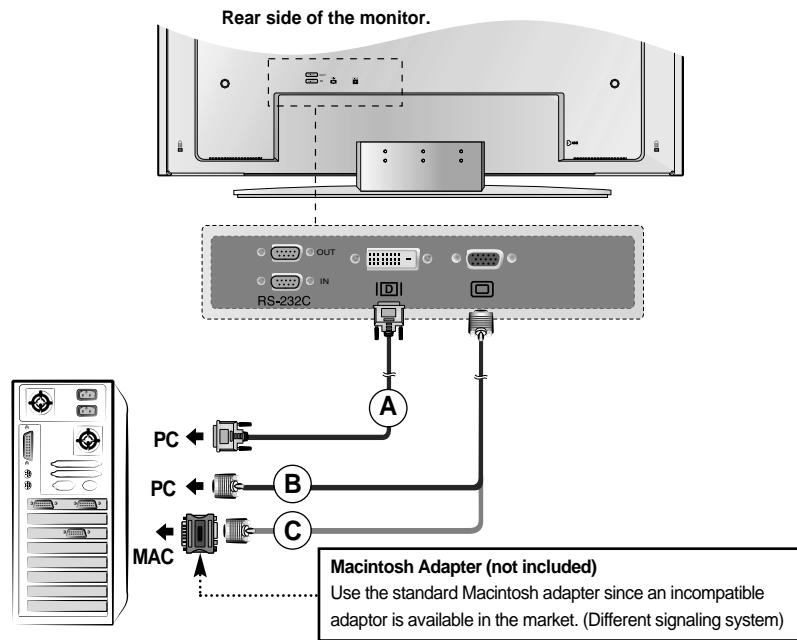
A terminal used to connect to the speaker including a built-in amplifier (Amp). Make sure that the connecting terminal of the PC sound card is checked before connecting. If the Audio Out of PC sound card has only Speaker Out, reduce the PC volume.

If the Audio Out of the PC sound card supports both Speaker Out and Line Out, convert to Line Out using the card jumper of the program (Refer to the Sound Card Manual).

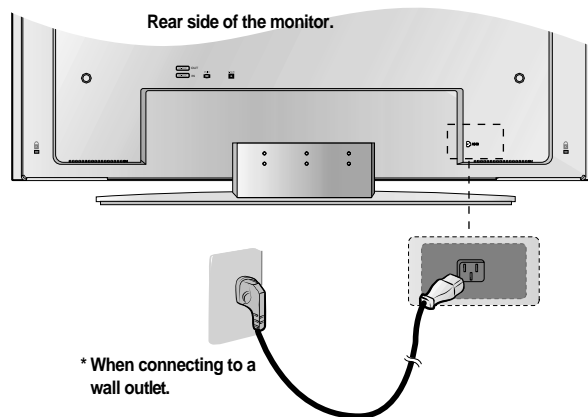
Connecting the Monitor

1 First of all, see if the computer, monitor and the peripherals are turned off. Then, connect the signal input cable.

- A** When connecting with the DVI signal input cable.
- B** When connecting with the DSub signal input cable. (IBM compatible PC)
- C** When connecting with the DSub signal input cable. (Macintosh)

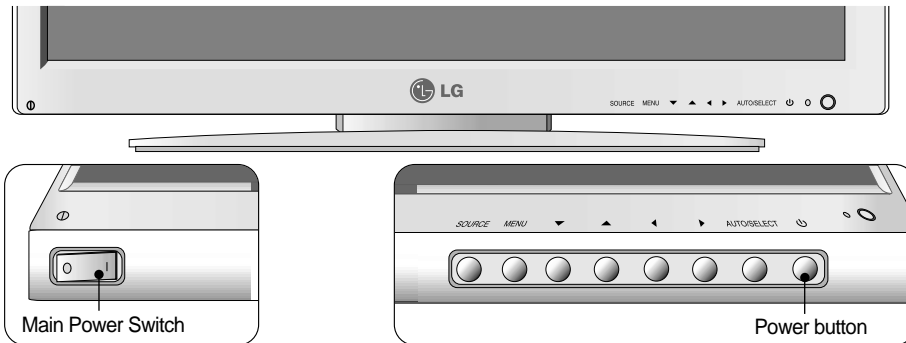


2 Connect the power cord.



Connecting the Monitor

- 3** **A** Turn on power by pressing the power button on the monitor. If the system is not powered up, check if the main power switch is in the 'on' position.

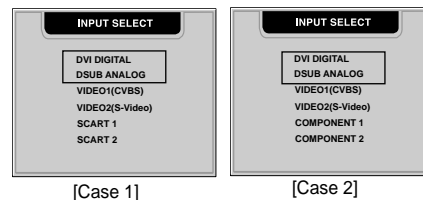


- B** Turn on the PC.

- 4** Select an input signal.
Press the Input Select button on the remote controller to select the input signal.
Or, press the SOURCE button at the front side of the monitor.

SOURCE → ▼▲ → SET

- A** When connecting with a DVI-D signal input cable.
• Select DVI DIGITAL: DVI-D digital signal.
- B** When connecting with a D-Sub signal input cable.
• Select DSUB ANALOG: 15-pin D-Sub analog signal



[Case 1]

[Case 2]



Note

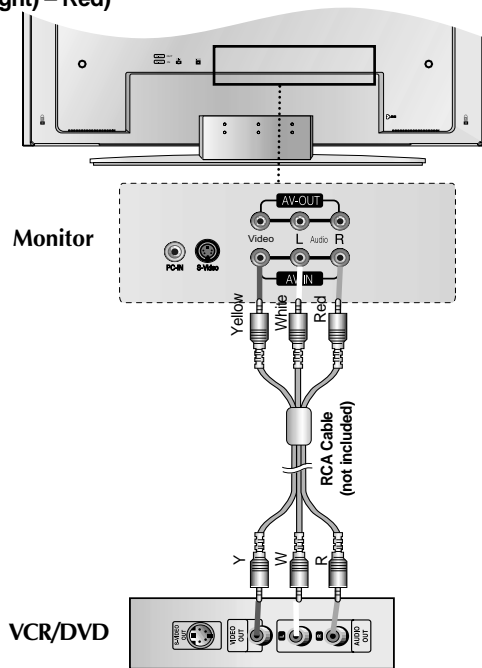
- **How to connect to two computers.**
Connect the signal cables (DVI and D-Sub) to each computer.
Press the Input Select button in a remote controller to select the computer to use.
* Directly connect to a grounded power outlet on the wall or a power bar with a ground wire.

Connecting the VCR/DVD

1 Connect the video cable as shown in the below figure and then connect the power cord (See page A10).

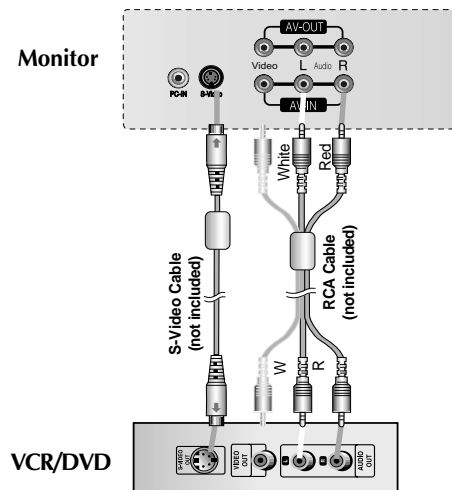
A When connecting with an RCA cable.

- Connect the input terminal with a proper color match. (Video – Yellow, Sound (left) – White, Sound (right) – Red)



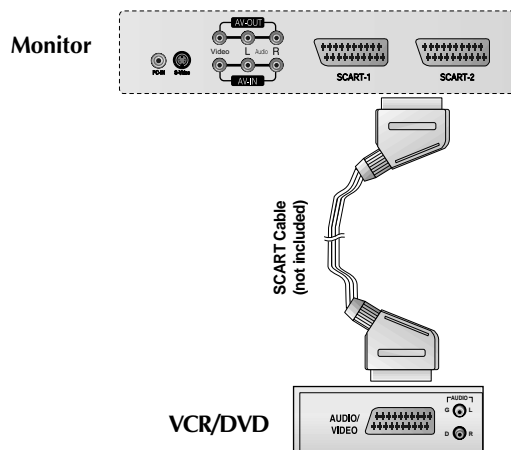
B When connecting with an S-Video cable.

- Connect to the S-Video input terminal to watch high image quality movies.



Connecting the VCR/DVD

C When connecting with a SCART cable.

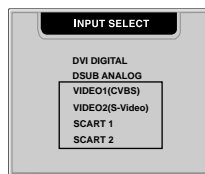


2 Select an input signal.

Press the Input Select button on the remote controller to select the input signal. Or, press the SOURCE button at the front side of the monitor.

SOURCE → ▼▲ → SET

- A** When connecting with an RCA cable.
 - Select VIDEO 1 (CVBS)
- B** When connecting with an S-Video cable.
 - Select VIDEO 2 (S-Video)
- C** When connecting with a SCART cable.
 - Select SCART 1 / SCART 2



[Case 1]



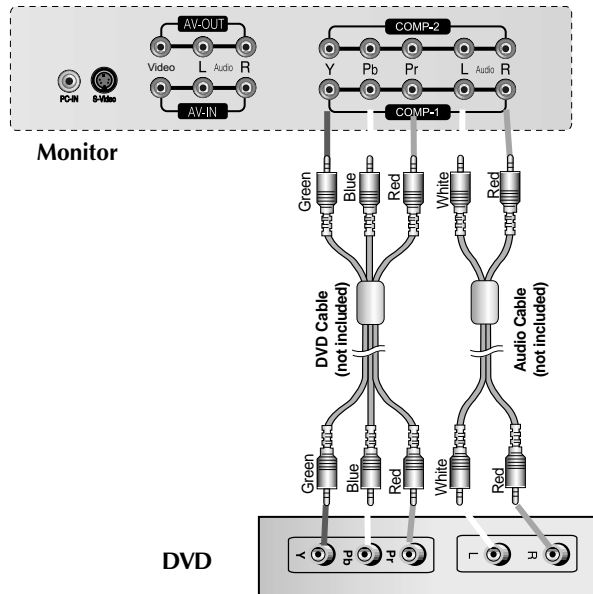
Note

* SCART 2에 연결하면 Teletext 화면이 제공되지 않습니다.

Connecting the DVD(480i)

- Connect the video/audio cable as shown in the below figure and then, connect the power cord (See page A10).

 - Connect the input terminal with a proper color match.
 - 단자는 COMP-1/COMP-2 들 중에서 연결하기 편한 쪽에 연결하여 사용하세요.

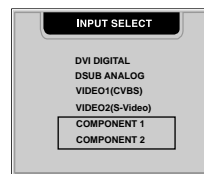


- Select an input signal.

Press the Input Select button on the remote controller to select the input signal. Or, press the SOURCE button at the front side of the monitor.

SOURCE → ▼▲ → SET

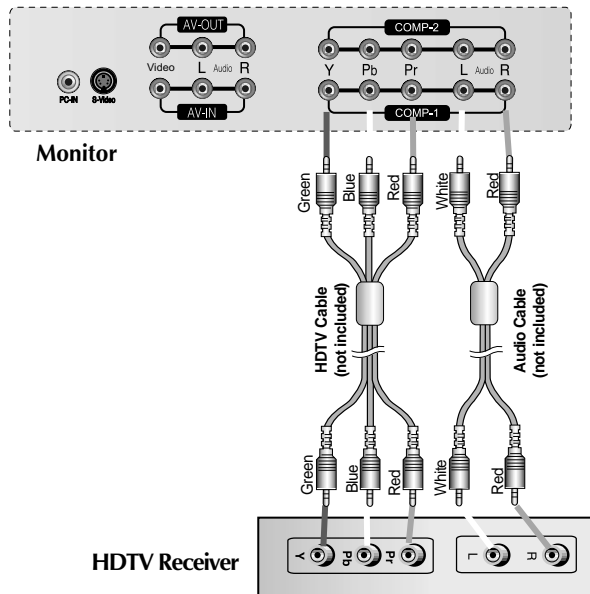
When connecting with a DVD/audio cable.
 • Select COMPONENT 1 / COMPONENT 2



[Case 2]

Connecting the HDTV(720p/1080i)

- 1 Connect the video/audio cable as shown in the below figure and then, connect the power cord (See page A10).
 - Connect the input terminal with a proper color match.
 - 단자는 COMP-1/COMP-2 들 중에서 연결하기 편한 쪽에 연결하여 사용하세요.



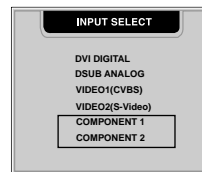
* The HDTV terminal also supports SDTV (480i/480p).

- 2 Select an input signal.
 - Press the Input Select button on the remote controller to select the input signal.
 - Or, press the SOURCE button at the front side of the monitor.

SOURCE → ▼▲ → SET

When connecting with an HDTV/audio cable.

- Select COMPONENT 1 / COMPONENT 2

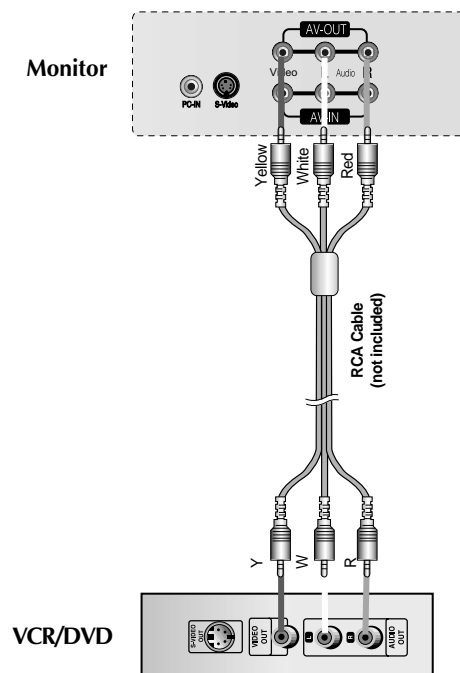


[Case 2]

Connecting AV Outputs

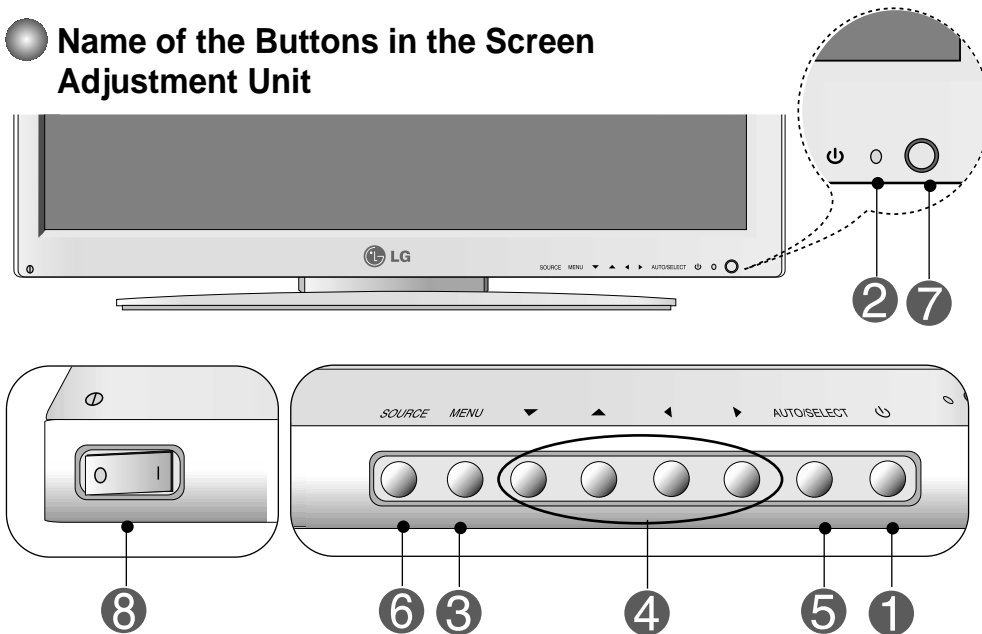
Connect to the external device if you record the broadcasting.

- When you set the input signal of the main screen as 'VIDEO1 (CVBS)', you can transmit the signal that you're watching to the AV output terminal.
- If you set other signals than 'VIDEO1 (CVBS)', as the main screen, the signal type you set in the PIP input signal would be displayed. (However, it is supported when the PIP input signal is 'VIDEO1 (CVBS)')



Selecting and Adjusting the Screen

● Name of the Buttons in the Screen Adjustment Unit



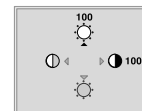
1 Power Button • Press the button to turn on the power. Press the button again to turn it off.

2 Power LED • This Indicator lights up green when the display operates normally. If the display is in DPM (Energy Saving) mode, this indicator color changes to amber.

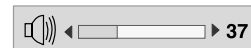
3 MENU Button • Use this button to show/hide the OSD (On Screen Display) menu screen.

4 OSD Select Adjust Button • Use the button to select an icon or adjust the setting in the OSD screen.

▼ ▲ • Use this button to directly control brightness and contrast of the PC signal (DSUB/DVI).



◀ ▶ • Adjust the volume.



● Name of the Buttons in the Screen Adjustment Unit

- 5** **AUTO/SELECT Button** [For DSUB signal]
- Select the icon to adjust on the OSD screen.
 - If you press the [AUTO/SELECT] button, automatic screen adjustment will be started.

AUTO IN PROGRESS

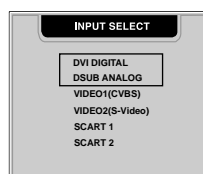
[Other signals that DSUB]

- The current signal and mode information will be displayed.

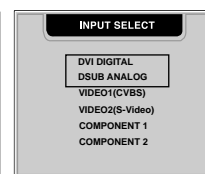
- 6** **SOURCE Button** SOURCE → ▼▲ → AUTO/SELECT

- Select the input signal

DVI DIGITAL	DVI digital signal
DSUB ANALOG	15-pin D-Sub analog signal
VIDEO1(CVBS)	Composite video
VIDEO2(S-Video)	S-Video
SCART 1/ 2	Composite
COMPONENT 1/ 2	YPbPr (Y/CbCr)



[Case 1]



[Case 2]

- 7** • The unit that receives the signal from the remote controller.

- 8** **Main Power Switch** • Use this button to turn on/off the monitor.

OSD Lock/Unlock Button

Menu button + ►

- Use this button to lock/unlock OSD screen adjustment.
(Activated when pressed together longer than 5 seconds.)

CONTROLS LOCKED






- OSD is locked

CONTROLS UNLOCKED





- OSD is unlocked.

Selecting and Adjusting the Screen

● OSD Menu – When Connected to Your PC

Icon	Function Description
 Adjustment	Adjusts screen brightness, contrast and color that you prefer.
 Tracking	Adjusts position of the screen, clock or phase.
 Audio	Adjusts the audio function.
 Setup	Adjusts the screen status according to the circumstances.
 PIP/POP/PBP	Adjusts PIP/POP/PBP mode function.

● OSD Menu – When Watching Video/DVD/HDTV

Icon	Function Description
 Video	Adjusts the screen video.
 Audio	Adjusts the audio function.
 Setup	Adjusts the screen status according to the circumstances.
 PIP/POP/PBP	Adjusts PIP/POP/PBP mode function.

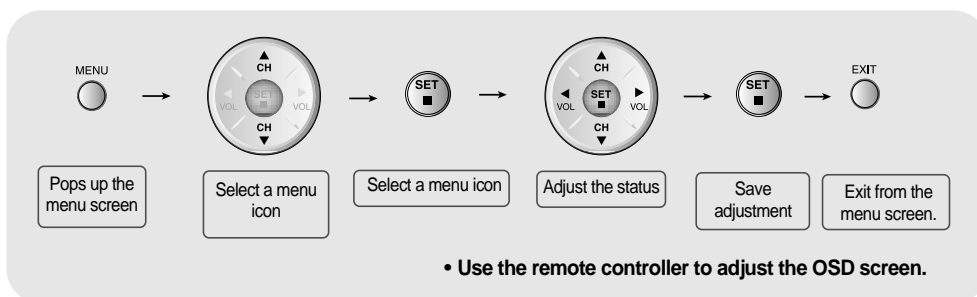


Note

OSD(On Screen Display)

The OSD function enables you to adjust the screen status conveniently since it provides graphical presentation.

● How to adjust the OSD (On Screen Display) screen



- 1 Press the **MENU** Button, then the main menu of the OSD appears.
- 2 To access a control, use the ▼ ▲ Buttons.
- 3 When the icon you want becomes highlighted, press the **SET** Button.
- 4 Use the ▼ ▲ ◀ ▶ Buttons to adjust the item to the desired level.
- 5 Accept the changes by pressing the **SET** Button.
- 6 Exit the OSD by Pressing the **EXIT** Button.

● How to adjust the screen automatically

You need to adjust the screen display when connecting the monitor to a new computer or changing the mode. Refer to the following section to set an optimal monitor screen.

AUTO IN PROGRESS

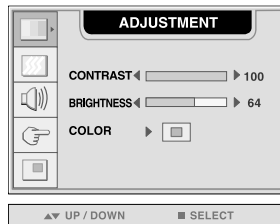
Press the AUTO/SELECT button (**AUTO button** in a remote controller) in the PC analog signal. Then, an optimal screen status will be selected that fits into the current mode.

If adjustment is not satisfactory, you need to adjust screen position, clock and phase in the OSD menu.

Selecting and Adjusting the Screen

OSD Menu – When Connected to Your PC

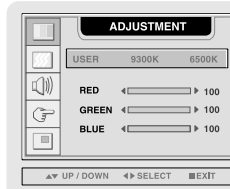
Adjusting Screen Color



CONTRAST To adjust the contrast of the screen.

BRIGHTNESS To adjust the brightness of the screen.

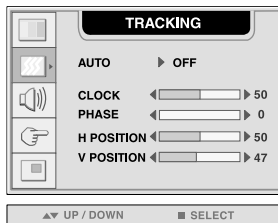
COLOR Adjusting screen color. Press the ► button to display the submenu for COLOR.



USER 9300K/6500K
Selecting a factory setting color set.
• 9300K: Slightly bluish white.
• 6500K: Slightly reddish white.

RED GREEN BLUE
Set your own color levels.

Adjusting Screen CLOCK/PHASE and Position



AUTO This function is suitable for analog signal input only. This button is for the automatic adjustment of the screen position, clock and phase.

CLOCK To minimize any vertical bars or stripes visible on the screen background. The horizontal screen size will also change.

PHASE To adjust the focus of the display. This item allows you to remove any horizontal noise and clear or sharpen the image of characters.

H POSITION To move image left or right.

V POSITION To move image up or down.

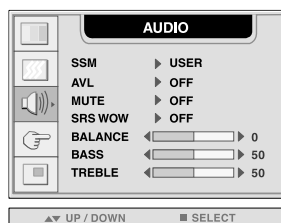


Note

When connected to your computer and the digital input signal (DVI-DIGITAL), only ADJUSTMENT, AUDIO, SETUP and PIP/POP/PBP menu are enabled. Other menu items will be automatically adjusted.



Adjusting the audio function



SSM

The best sound tone quality will be selected automatically depending on the video type that you're currently watching.

- **USER** : Select this option to use the user-defined audio settings.
- **FLAT** : The most commanding and natural audio.
- **MOVIE** : Select this option to enjoy sublime sound.
- **MUSIC** : Select this option to enjoy the original sound when listening to the music.
- **SPORTS** : Select this option to watch sports broadcasting.

AVL

To adjust uneven sound volumes across all channels or signals automatically to the most appropriate level. To use this feature, select ON.

MUTE

Used to select mute ON(means sound off) and mute OFF(means sound on).

SRS WOW

Set the SRS WOW menu on.

The SRS WOW function plays back the mono or stereo sound input with the dynamic surround effects. It will provide rich and profound sound tone. If you set the SRS WOW on, bass/treble will be automatically adjusted.

BALANCE

Use this function to balance sound from the left and right speakers.

BASS

To raises or lowers Bass level.

TREBLE

To raises or lowers Treble level.



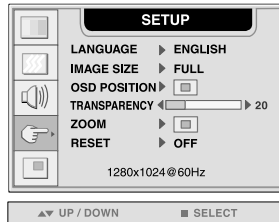
Note

When connected to your computer and the 'SSM' setting in the audio menu is one of FLAT, MOVIE, MUSIC or SPORTS, the available menus are AVL, MUTE and BALANCE.

Selecting and Adjusting the Screen



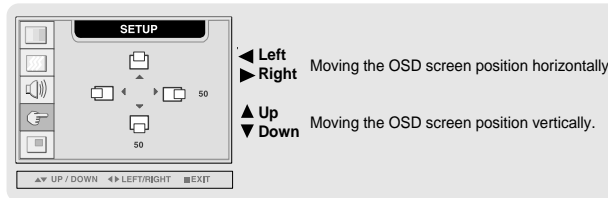
Selecting the Options



LANGUAGE To choose the language in which the control names are displayed.

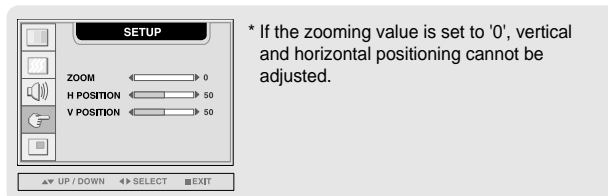
IMAGE SIZE To select the image size of the screen. (FULL/1:1)

OSD POSITION To adjust position of the OSD window on the screen. Press the ► button to display the submenu for OSD POSITION.



TRANSPARENCY To adjust the transparency of the OSD menu screen.

ZOOM Use this function to zoom in the screen. When you turn the monitor off and on again, the default screen size will be restored. Press the ► button to display the submenu for OSD POSITION.



* If the zooming value is set to '0', vertical and horizontal positioning cannot be adjusted.

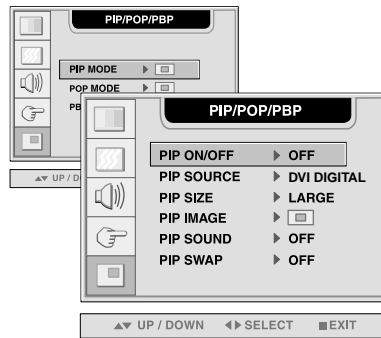
RESET Use this function to reset the monitor to the factory default. However, language selection will not be initialized.



Note When connected to your computer, the **Zoom menu** will be disabled if the screen size is 1:1 or PIP/POP/PBP is in use.

Adjusting PIP/POP/PBP Mode (Multiple Screen) Functions

To adjust the PIP(PICTURE IN PICTURE) of the screen



PIP ON/OFF After selecting **ON** in the **PIP ON/OFF** menu, the following menu items can be adjusted.



PIP SOURCE To select an input signal for PIP.

PIP SIZE To adjust the size of the PIP screen. (SMALL/LARGE)

PIP IMAGE To adjust the image of the PIP screen; Press the **▶** button to display the submenu for PIP IMAGE. Use the **◀ ▶** buttons to adjust the item to the desired level. The items of the sub-menu may vary depending on the type of the source.

The image shows the PIP IMAGE submenu with four sliders: PIP CONTRAST (92), PIP BRIGHTNESS (63), PIP SHARPNESS (0), and PIP COLOR (50). Navigation arrows are shown at the bottom: UP/DOWN, SELECT, and EXIT.

- **PIP POSITION** Adjust the PIP screen position.
- **PIP CONTRAST** Adjust PIP screen contrast.
- **PIP BRIGHTNESS** Adjust PIP screen brightness.
- **PIP SHARPNESS** Adjust PIP screen sharpness.
- **PIP COLOR** Adjust the PIP screen color.

* The sub-menu can differ according to the type of the input signal.

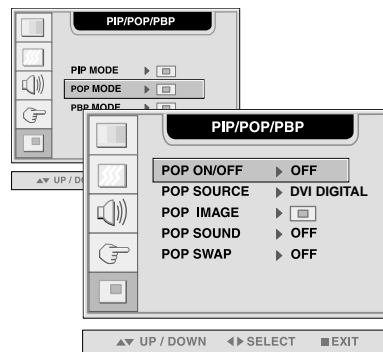
PIP SOUND To turn the PIP sound on/off.

PIP SWAP To switch the main-screen and sub-screen in PIP mode.

Selecting and Adjusting the Screen

Adjusting PIP/POP/PBP Mode (Multiple Screen) Functions

To adjust the POP(PICTURE OUT PICTURE) of the screen



POP ON/OFF After selecting **ON** in the **POP ON/OFF** menu, the following menu items can be adjusted.



POP SOURCE To select an input signal for POP.

POP IMAGE To adjust the image of the POP screen; Press the **▶** button to display the submenu for POP IMAGE. Use the **◀ ▶** buttons to adjust the item to the desired level.

The screenshot shows the POP IMAGE submenu with the following sliders:

- POP CONTRAST: 92
- POP BRIGHTNESS: 63
- POP SHARPNESS: 0
- POP COLOR: 50

Navigation buttons at the bottom: UP / DOWN, SELECT, EXIT.

- **POP CONTRAST** Adjust POP screen contrast.
- **POP BRIGHTNESS** Adjust POP screen brightness.
- **POP SHARPNESS** Adjust POP screen sharpness.
- **POP COLOR** Adjust the POP screen color.

* The sub-menu can differ according to the type of the input signal.

POP SOUND To turn the POP sound on/off.

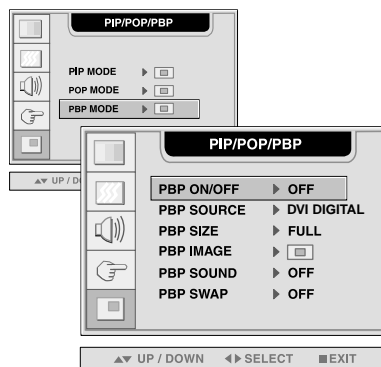
POP SWAP To switch the main-screen and sub-screen in POP mode.



Note | The '**POP IMAGE**' menu will be disabled if the POP screen input is a PC signal.

Adjusting PIP/POP/PBP Mode (Multiple Screen) Functions

To adjust the PBP(PICTURE BY PICTURE) of the screen



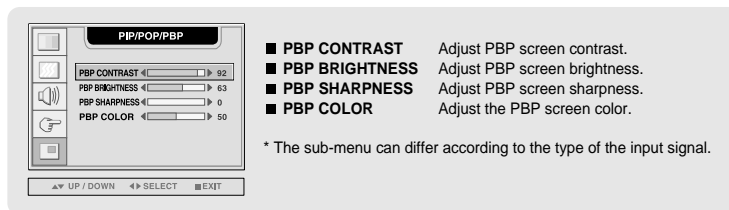
PBP ON/OFF After selecting **ON** in the **PBP ON/OFF** menu, the following menu items can be adjusted.



PBP SOURCE To select an input signal for PBP.

PBP SIZE To adjust the size of the PBP screen. (FULL/4:3)

PBP IMAGE To adjust the image of the PBP screen; Press the **▶** button to display the submenu for PBP IMAGE. Use the **◀ ▶** buttons to adjust the item to the desired level. The items of the sub-menu may vary depending on the type of the source.



PBP SOUND To turn the PBP sound on/off.

PBP SWAP To switch the main-screen and sub-screen in PBP mode.



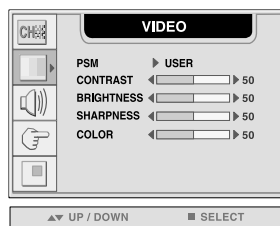
Note | The '**PBP IMAGE**' menu will be disabled if the PBP screen input is a PC signal.

Selecting and Adjusting the Screen

■■■ OSD Menu – When Watching VCR/DVD/HDTV



Adjusting Screen Image



PSM

The PSM function automatically adjusts the screen image quality depending on the AV usage environment.

- **USER** : Select this option to use the user-defined settings.
- **GAME** : Select this option to enjoy dynamic image when playing a game.
- **STANDARD** : The most general and natural screen display status.
- **DYNAMIC** : Select this option to display with a sharp image.
- **MILD** : Select this option to display with a mild image.

CONTRAST To adjust the contrast of the screen.

BRIGHTNESS To adjust the brightness of the screen.

SHARPNESS To adjust the clearness of the screen.

COLOR To adjust the color to desired level.

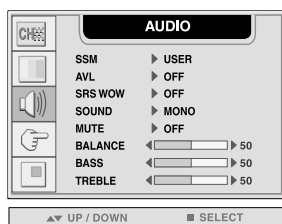


Note

If the '**PSM**' setting in the Video menu is set to GAME, STANDARD, DYNAMIC or MILD the subsequent menus will be automatically set.



Adjusting the audio function



SSM

The best sound tone quality will be selected automatically depending on the video type that you're currently watching.

- **USER** : Select this option to use the user-defined audio settings.
- **FLAT** : The most commanding and natural audio.
- **MOVIE** : Select this option to enjoy sublime sound.
- **MUSIC** : Select this option to enjoy the original sound when listening to the music.
- **SPORTS** : Select this option to watch sports broadcasting.

AVL

To adjust uneven sound volumes across all channels or signals automatically to the most appropriate level. To use this feature, select ON.

SRS WOW

Set the SRS WOW menu on. The SRS WOW function plays back the mono or stereo sound input with the dynamic surround effects. It will provide rich and profound sound tone. If you set the SRS WOW on, bass/treble will be automatically adjusted.

SOUND

To select the audio mode.
: MONO/STEREO

MUTE

Used to select mute ON(means sound off) and mute OFF(means sound on).

BALANCE

Use this function to balance sound from the left and right speakers.

BASS

To raises or lowers Bass level.

TREBLE

To raises or lowers Treble level.

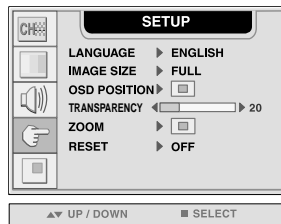


Note

If the '**SSM**' setting in the audio menu is one of FLAT, MOVIE, MUSIC or SPORTS, the available menus are AVL, SOUND, MUTE and BALANCE. Other menu items will be automatically adjusted.

Selecting and Adjusting the Screen

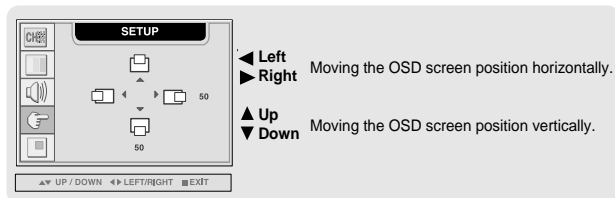
Selecting the Options



LANGUAGE To choose the language in which the control names are displayed.

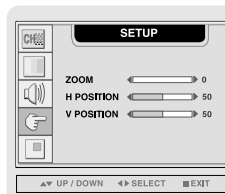
IMAGE SIZE To select the image size of the screen. (FULL/4:3/SPECTACLE/1:1)

OSD POSITION To adjust position of the OSD window on the screen. Press the ► button to display the submenu for OSD POSITION.



TRANSPARENCY To adjust the transparency of the OSD menu screen.

ZOOM Use this function to zoom in the screen. When you turn the monitor off and on again, the default screen size will be restored. Press the ► button to display the submenu for OSD POSITION.



* If the zooming value is set to '0', vertical and horizontal positioning cannot be adjusted.

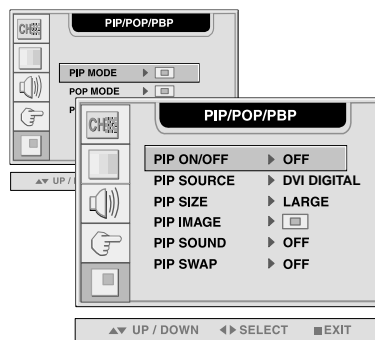
RESET Use this function to reset the monitor to the factory default. However, language selection will not be initialized.



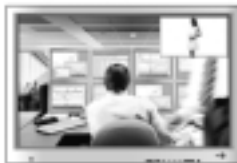
Note The '**ZOOM**' menu will be disabled when the screen size is 4:3, spectacle or 1:1, or PIP/POP/PBP is activated.

Adjusting PIP/POP/PBP Mode (Multiple Screen) Functions

To adjust the PIP(PICTURE IN PICTURE) of the screen



PIP ON/OFF After selecting **ON** in the **PIP ON/OFF** menu, the following menu items can be adjusted.



PIP SOURCE To select an input signal for PIP.

PIP SIZE To adjust the size of the PIP screen. (SMALL/LARGE)

PIP IMAGE To adjust the image of the PIP screen; Press the ▶ button to display the submenu for PIP IMAGE. Use the ◀ ▶ buttons to adjust the item to the desired level. The items of the sub-menu may vary depending on the type of the source.

PIP POSITION ▶ [Icon]

PIP CONTRAST ◀ [Slider] ▶ 92

PIP BRIGHTNESS ◀ [Slider] ▶ 63

Navigation buttons: UP / DOWN, SELECT, EXIT.

- **PIP POSITION** Adjust the PIP screen position.
- **PIP CONTRAST** Adjust PIP screen contrast.
- **PIP BRIGHTNESS** Adjust PIP screen brightness.

* The sub-menu can differ according to the type of the input signal.

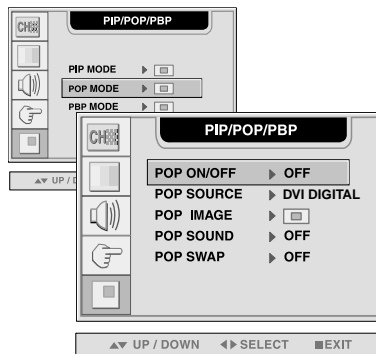
PIP SOUND To turn the PIP sound on/off.

PIP SWAP To switch the main-screen and sub-screen in PIP mode.

Selecting and Adjusting the Screen

Adjusting PIP/POP/PBP Mode (Multiple Screen) Functions

To adjust the POP(PICTURE OUT PICTURE) of the screen

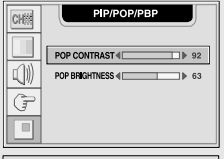


POP ON/OFF After selecting **ON** in the **POP ON/OFF** menu, the following menu items can be adjusted.



POP SOURCE To select an input signal for POP.

POP IMAGE To adjust the image of the POP screen; Press the **▶** button to display the submenu for POP IMAGE. Use the **◀ ▶** buttons to adjust the item to the desired level.



- **POP CONTRAST** Adjust POP screen contrast.
- **POP BRIGHTNESS** Adjust POP screen brightness.

* The sub-menu can differ according to the type of the input signal.

POP SOUND To turn the POP sound on/off.

POP SWAP To switch the main-screen and sub-screen in POP mode.

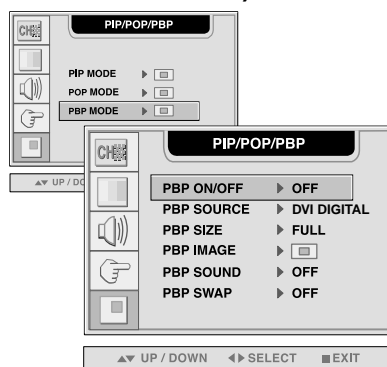


Note

The 'POP IMAGE' menu will be disabled if the POP screen input is video.

Adjusting PIP/POP/PBP Mode (Multiple Screen) Functions

To adjust the PBP(PICTURE BY PICTURE) of the screen



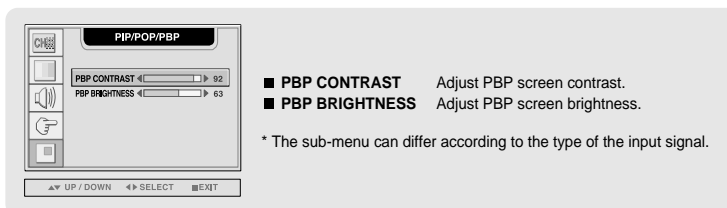
PBP ON/OFF After selecting **ON** in the **PBP ON/OFF** menu, the following menu items can be adjusted.



PBP SOURCE To select an input signal for PBP.

PBP SIZE To adjust the size of the PBP screen. (FULL/4:3)

PBP IMAGE To adjust the image of the PBP screen; Press the **▶** button to display the submenu for PBP IMAGE. Use the **◀ ▶** buttons to adjust the item to the desired level. The items of the sub-menu may vary depending on the type of the source.



PBP SOUND To turn the PBP sound on/off.

PBP SWAP To switch the main-screen and sub-screen in PBP mode.



Note

The '**PBP IMAGE**' menu will be disabled if the PBP screen input is video.

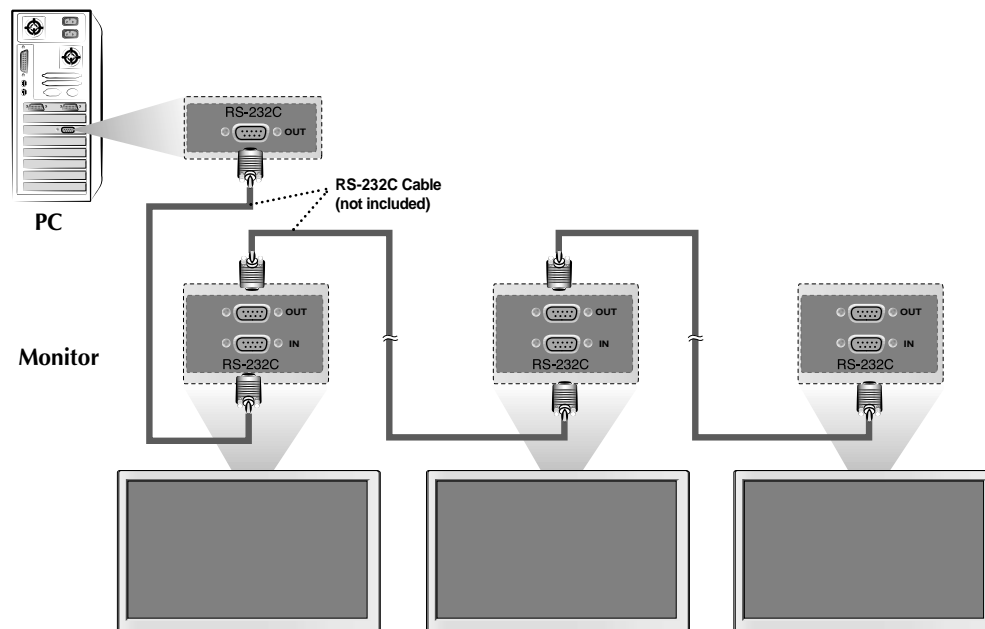
Controlling the Multiple Monitors

한 PC에 여러 개의 Monitor 를 연결하여 Display하는데 사용하세요.
한 PC로 여러 개의 Monitor를 한꺼번에 제어할 수 있습니다.

● Connecting the cable

Connect the RS-232C cable as shown in the picture.

* The RS-232C protocol is used for communication between the PC and monitor. You can turn the monitor on/off, select an input source or adjust the OSD menu from your PC.



● Communication Parameter

- ▶ Baud Rate : 115200bps
- ▶ Data Length : 8bits
- ▶ Parity Bit : NONE
- ▶ Stop Bit : 1bit
- ▶ Flow Control : NONE

한 PC에서 여러개의 Monitor를 한꺼번에 제어할 수 있습니다.

● Commands Related with User Control

1. Reset

(1) Send Command

0	1	2	3	4	5
Length	Flag	Address	Command	Value	Checksum
06h	6Eh	00h	F0h	00h	

* Checksum 값은 메시지의 내용을 모두 더하였을 때 00h값을 가지도록 설정함

(2) Reply from monitor

* Reset 명령에 의한 Reply는 없음

2. Assign Address

(1) Send Command

0	1	2	3	4	5
Length	Flag	Address	Command	Value	Checksum
06h	6Eh	00h	F2h	xxh	

(2) Reply from Monitor

0	1	2	3	4	5
Length	Flag	Address	Command	Value	Checksum
6h	50h	xxh	F2h	00h	

3. Presence Check

(1) Send Command

0	1	2	3	4	5
Length	Flag	Address	Command	Value	Checksum
06h	6Eh	xxh	F7h	00h	

(2) Reply from Monitor

0	1	2	3	4	5
Length	Flag	Address	Command	Value	Checksum
06h	50h	xxh	F7h	00h	

4. Set Parameter

(1) Send Command

0	1	2	3	4	5	6	7
Length	Flag	Address	Command	Parameter	Value#1	Value#2	Checksum
08h	6Eh	xxh	03h				

(2) Reply from Monitor

0	1	2	3	4	5
Length	Flag	Address	Command	Value	Checksum
06h	50h	xxh	03h	00h	

Controlling the Multiple Monitors

(3) Parameter

FUNCTION		COMMAND(HEX)	PARAMETER1(HEX)	PARAMETER2(HEX)
MAIN POWER ON/OFF		01h	00h	00h/OFF, 01h/ON
MAIN INPUT	DSUB ANALOG	0Fh	00h	00h
	DVI DIGITAL		00h	01h
	VIDEO1(CVBS)		00h	02h
	VIDEO2(S-Video)		00h	03h
	DVD		00h	04h
	HDTV		00h	05h
SUB INPUT	DSUB ANALOG	10h	00h	00h
	DVI DIGITAL		00h	01h
	VIDEO1(CVBS)		00h	02h
	VIDEO2(S-Video)		00h	03h
	DVD		00h	04h
	HDTV		00h	05h
PSM	USER	02h	00h	00h
	GAME		00h	01h
	STANDARD		00h	02h
	DYNAMIC		00h	03h
	MILD		00h	04h
CONTRAST		03h	00h	00h~64h
BRIGHTNESS		04h	00h	00h~64h
SHARPNESS		05h	00h	00h~64h
COLOR		06h	00h	00h~64h
9300K		08h	00h	00h
6500K		09h	00h	00h
USER(READ)		0Ah	00h	00h
USER(WRITE)	RED	0Bh	00h	00h~FFh
	GREEN		01h	00h~FFh
	BLUE		02h	00h~FFh
SOUND	USER	0Ch	00h	00h
	FLAT		00h	01h
	MOVIE		00h	02h
	MUSIC		00h	03h
	SPORTS		00h	04h
TREBLE		0Dh	00h	00h~14h
BASS		11h	00h	00h~14h
BALANCE		12h	00h	00h~20h
VOLUME		13h	00h	00h~64h
SRS WOW		14h	00h	00h/OFF, 01h/ON
MUTE		15h	00h	00h/OFF, 01h/ON
PIP		18h	00h	00h/OFF, 01h/ON
POP		19h	00h	00h/OFF, 01h/ON
PBP		1Ah	00h	00h/OFF, 01h/ON
PIP SIZE	LARGE	1Bh	00h	00h
	SMALL		00h	01h

(3) Parameter

.....Continue

FUNCTION		COMMAND(HEX)	PARAMETER1(HEX)	PARAMETER2 (HEX)
PBP SIZE	LARGE	1Ch	00h	00H
	SMALL		00h	01H
PIP POSITION	RIGHT/TOP	1Dh	00h	00h
	LEFT/TOP		00h	01h
	LEFT/BOTTOM		00h	02h
	RIGHT/BOTTOM		00h	03h
SCALING	STANDARD	21h	00h	00h
	4:3		00h	01h
	FULL		00h	02h
	SPECTACLE		00h	03h
	PC 4:3(1:1)		00h	04h
AUTO ADJUST		22h	00h	00h
PHASE		23h	00h	0h~64h
OSD HOR.		25h	00h	00h~64h
OSD VER.		26h	00h	00h~64h
TRANSPARENCY		27h	00h	00h~0Fh
OSD LOCK		29h	00h	00h/OFF, 01h/ON
LANGUAGE	ENGLISH	2Ah	00h	00h
	DEUTSCH		00h	01h
	FRANÇAIS		00h	02h
	ESPAÑOL		00h	03h
	ITALIANO		00h	04h
	KOREAN		00h	05h
RESET	ALL	2Bh	00h	00h
ZOOM		35h	00h	0h~0ah

ENGLISH

Troubleshooting

No image is displayed

- Is the monitor power cord connected?
 - Does the power LED is turned on?
 - Power is on, power LED is green but the screen appears extremely dark.
 - Does the power LED look yellow?
 - Does the 'OUT OF RANGE' message appear?
 - Does the 'CHECK SIGNAL CABLE' message appear?
- See if the power cord is properly connected to the outlet.
 - See if the power switch is turned on.
 - Adjust brightness (☀) and contrast (●) again.
 - If the monitor is in power saving mode, move the mouse or press any key.
 - The signal from the PC (video card) is out of the vertical or horizontal frequency range of the monitor. Adjust the frequency range by referring to the Specifications in this manual.
 - * **Maximum resolution**
 - D-Sub : 1600x1200 @60Hz
 - DVI-D : 1280x1024 @60Hz
 - The signal cable between PC and monitor is not connected. Check the signal cable.
 - Press the 'SOURCE' menu in the remote controller to check the input signal.

'Unknown Monitor' message appears when the monitor is connected.

- Did you install the driver?
- Install the monitor driver, which is provided with the monitor, or download it from the web site. (<http://www.lge.com>)
 - See if the plug&play function is supported by referring to the video card user manual.

'CONTROLS LOCKED' message appears.

- The 'CONTROLS LOCKED' message appears when pressing the Menu button.
- The control locking function prevents unintentional OSD setting change due to careless usage. To unlock the controls, simultaneously press the Menu button and ► button for 5 seconds. (You cannot set this function using the remote controller buttons. You can set this function in the monitor only.)



Note

* **Vertical frequency:** To enable the user to watch the monitor display, screen image should be changed tens of times every second like a fluorescent lamp. The vertical frequency or refresh rate is the times of image display per second. The unit is Hz.

* **Horizontal frequency:** The horizontal interval is the time to display one vertical line. When 1 is divided by the horizontal interval, the number of horizontal lines displayed every second can be tabulated as the horizontal frequency. The unit is kHz.

The screen image looks abnormal.

- **Is the screen position wrong?**
 - D-Sub analog signal – Press the “AUTO” button in the remote controller to automatically select the optimal screen status that fits into the current mode. If adjustment is not satisfactory, use the Position OSD menu.
 - See if the video card resolution and frequency are supported by the monitor. If the frequency is out of range, set to the recommended resolution in the Control Panel – Display – Setting menu.
- **Do thin lines appear on the background screen?**
 - D-Sub analog signal – Press the “AUTO” button in the remote controller to automatically select an optimal screen status that fits into the current mode. If adjustment is not satisfactory, use the Clock OSD menu.
- **Horizontal noise appears or the characters look blurred.**
 - D-Sub analog signal – Press the “AUTO” button in the remote controller to automatically select an optimal screen status that fits into the current mode. If adjustment is not satisfactory, use the Phase OSD menu.
- **Unable to adjust the horizontal/vertical position in the Zoom menu.**
 - See if the Zoom value is set to 0. If it is, you cannot adjust the H/V Position value.
- **Screen size is automatically adjusted when connected to the PC.**
 - If the screen size is not full when connected to the PC, execute the PIP/POP/PBP to change to full screen mode.
- **Brightness differs in the main and sub screen when connected to the PC.**
 - You cannot adjust brightness and tint in the PIP/POP/PBP Screen menu for the sub-screen among PIP/POP/PBP menus. Therefore, brightness can be different for the sub-screen.

After-image appears on the monitor.

- **After-image appears when the monitor is turned off.**
 - If you use a fixed image for a long time, the pixels may be damaged quickly. Use the screensaver function.

Troubleshooting

The audio function does not work.

- **No sound?**
 - See if the audio cable is connected properly.
 - Adjust the volume.
 - See if the sound is set properly.
- **No sound is available when the PIP/POP/PBP mode is engaged.**
 - See if the Sound is set to On in the PIP/POP/PBP menu.
- **Sound is too dull.**
 - Select the appropriate treble sound.
 - Select the appropriate bass sound.
- **Sound is too low.**
 - Adjust the volume.

The screen size function in the OSD menu does not work.

- **The screen size function in the OSD menu does not work.**
 - See if the PIP/POP/PBP function is in use. If the PIP/POP/PBP function is in use, the screen size function may not work.

Screen color is abnormal.

- **Screen has poor color resolution (16 colors).**
 - Set the number of colors to more than 24 bits (true color)
Select Control Panel – Display – Settings – Color Table menu in Windows.
- **Screen color is unstable or mono-colored.**
 - Check the connection status of the signal cable.
Or, re-insert the PC video card.
- **Do black spots appear on the screen?**
 - Several pixels (red, green, white or black color) may appear on the screen, which can be attributable to the unique characteristics of the LCD panel. It is not a malfunction of the LCD.

Specifications

ENGLISH

Display	42 inches (106.68cm) Flat Panel Active matrix-TFT LCD Anti-Glare coating 42inches viewable 0.681mm pixel pitch	
Sync Input	Horizontal Freq.	D-SUB : 30 - 83kHz (Automatic) DVI-D : 30 - 66kHz (Automatic)
	Vertical Freq.	56 - 85Hz (Automatic)
	Input Form	Separate TTL, Positive/Negative Composite TTL, Positive/Negative SOG (Sync On Green) Digital
Video Input	Signal Input	15 pin D-Sub Connector DVI - D connector (Digital) Composite video S video SCART 1/SCART 2 or COMPONENT 1/COMPONENT 2
	Input Form	RGB Analog (0.7Vp-p/75ohm), Digital, S-video, CVBS
Resolution	Max	D-SUB : 1600 x 1200 @60Hz DVI-D : 1280 x 1024 @60Hz
	Recommend	1360 x 768 @60Hz
Plug&Play	DDC 2B	
Power Input	AC 100-240V~ 50/60Hz 2.8A	
Power Consumption	Normal	: 300W
	Stand-by/Suspend	≤ 5W
	DPMS Off	≤ 5W
	Power switch Off	≤ 5W
	Power cut-off switch off	: 0W

* 스피커 지원모델에만 해당되는 내용입니다.

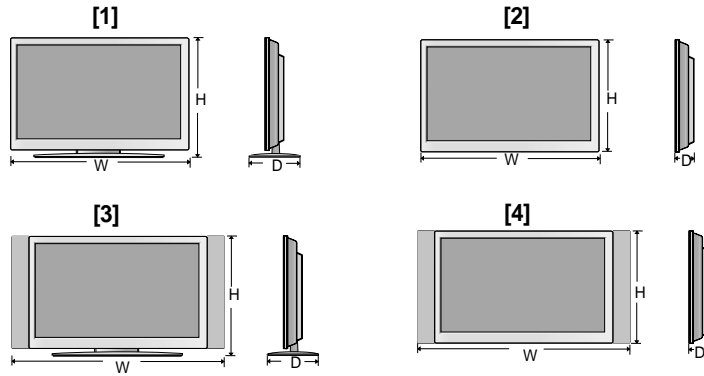
Audio	RMS Audio Output	10W+10W(R+L)
	Input Sensitivity	0.7Vrms
	Speaker Impedance	8Ω

NOTE

- Information in this document is subject to change without notice.

Specifications

Dimensions & Weight



WidthxHeightxDepth

[1] 105.7 cm(41.61 inches) x 69.70 cm(27.44 inches) x 29.45 cm(11.59 inches)

[2] 105.7 cm(41.61 inches) x 65.30 cm(25.71 inches) x 11.91 cm(4.69 inches)

[3] 125.9 cm(49.57 inches) x 69.70 cm(27.44 inches) x 29.45 cm(11.59 inches)

[4] 125.9 cm(49.57 inches) x 65.30 cm(25.71 inches) x 11.91 cm(4.69 inches)

Net

[1] 34.65kg (76.39 lbs)

[2] 30.25kg (66.69 lbs)

[3] 37.25kg (82.12 lbs)

[4] 32.85kg (72.42 lbs)

Environmental Conditions

Operating Conditions

Temperature 10 °C to 35 °C

Humidity 10 % to 80 % non-Condensing

Storage Conditions

Temperature -20 °C to 60 °C

Humidity 5 % to 95 % non-Condensing



Kensington Security Slot- optional

Connected to a locking cable that can be purchased separately at most computer stores

● **PC Mode – Preset Mode**

Preset mode		Horizontal Frequency (kHz)	Vertical Frequency (Hz)	Preset mode		Horizontal Frequency (kHz)	Vertical Frequency (Hz)
1	VGA 640 x 350	31.469	70	11	VESA 1024 x 768	60.123	75
2	VGA 720 x 400	31.468	70	12	VESA 1024 x 768	68.68	85
3	VGA 640 x 480	31.469	60	13	VESA 1280 x 720	44.772	60
4	VESA 640 x 480	37.500	75	14	VESA 1360 x 768	47.72	60
5	VESA 640 x 480	43.269	85	15	VESA 1280 x 1024	63.981	60
6	VESA 800 x 600	37.879	60	16	VESA 1280 x 1024	79.98	75
7	VESA 800 x 600	46.875	75	17	VESA 1600 x 1200	75	60
8	VESA 800 x 600	53.674	85	D-SUB : Mode 1 ~ Mode 17 DVI-D : Mode 1 ~ Mode 15			
9	MAC 832 x 624	49.725	75				
10	VESA 1024 x 768	48.363	60				

● **HDTV Mode
Composite Video Input YPbPr**

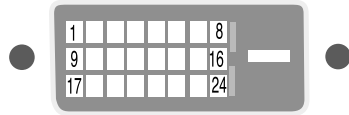
Preset mode	Horizontal Frequency (kHz)	Vertical Frequency (Hz)
1	720 x 483	31.50
2	1280x 720	45.00
3	1280x 720	44.96
4	1920x 1080	33.75
5	1920x 1080	33.72

● **Power LED**

Mode	Monitor
Normal Operation	Green
Pre-power Saving State	Amber
Power Saving State	Amber
Power Switch Off	-
Power Cut-off Switch Off	-

Specifications

DVI-D



No.	Signal
1	T. M. D. S. Data 2-
2	T. M. D. S. Data 2+
3	T. M. D. S. Data 2/4 Shield
4	T. M. D. S. Data 4-
5	T. M. D. S. Data 4+
6	DDC Clock
7	DDC Data
8	Analog Vertical Synchronization
9	T. M. D. S. Data 1-
10	T. M. D. S. Data 1+
11	T. M. D. S. Data 1/3 Shield
12	T. M. D. S. Data 3-
13	T. M. D. S. Data 3+
14	+5V Power
15	Grounding (return for +5V, horizontal sync and vertical sync)
16	Hot Plug Detect
17	T. M. D. S. Data 0-
18	T. M. D. S. Data 0+
19	T. M. D. S. Data 0/5 Shield
20	T. M. D. S. Data 5-
21	T. M. D. S. Data 5+
22	T. M. D. S. Clock Shield
23	T. M. D. S. Clock+
24	T. M. D. S. Clock

T.M.D.S. (Transition Minimized Differential Signaling)