APPENDIX F :

<u>USER'S MANUAL</u>

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.
Compiance 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 as enormous amount of energy, since it is often routinely left running continuously.

What does the environmenal 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), Naturckyddsföreningen (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.

Labelled 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:

TCo   **NUTEK**   **SEMKO**

Naturskydds föreningen   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-accumulative[1] 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 intermational 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.

TCO99

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)

ENERGYSATR 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

This unit has been engineered and manufactured to ensure your personal safety, however improper use may result in potential e shock or fire hazards. In order to allow the proper operation of all safeguards incorporated in this display, observe the following basic rules for its installation, use, and servicing.

On Safety

Use only the power cord supplied with the unit. In case you use another power cord, make sure that it is certified by the applicable national standards if not being provided by the supplier. If the power cable is faulty in any way, please contact the manufacturer or the nearest authorized repair service provider for a replacement.

The power supply cord is used as the main disconnection device. Ensure that the socket-outlet is easily accessible after installation.

Operate the display only from a power source indicated in the specifications of this manual or listed on the display. If you are not sure what type of power supply you have in your home, consult with your dealer.

Overloaded AC outlets and extension cords are dangerous. So are frayed power cords and broken plugs. They may result in a shock or fire hazard. Call your service technician for replacement.

Do not Open the Display.
- There are no user serviceable components inside.
- There are Dangerous High Voltages inside, even when the power is OFF.
- Contact your dealer if the display is not operating properly.

To Avoid Personal Injury :
- Do not place the display on a sloping shelf unless properly secured.
- Use only a stand recommended by the manufacturer.

To Prevent Fire or Hazards:
- Always turn the display OFF if you leave the room for more than a short period of time. Never leave the display ON when leaving the house.
- Keep children from dropping or pushing objects into the display's cabinet openings. Some internal parts carry hazardous voltages.
- Do not add accessories that have not been designed for this display.
- During a lightning storm or when the display is to be left unattended for an extended period of time, unplug it from the wall outlet.

On Installation

Do not allow anything to rest upon or roll over the power cord, and do not place the display where the power cord is subject to damage.

Do not use this display near water such as near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement, or near a swimming pool.
Displays are provided with ventilation openings in the cabinet to allow the release of heat generated during operation. If these openings are blocked, built-up heat can cause failures which may result in a fire hazard. Therefore, NEVER:
- Block the bottom ventilation slots by placing the display on a bed, sofa, rug, etc.
- Place the display in a built-in enclosure unless proper ventilation is provided.
- Cover the openings with cloth or other material.
- Place the display near or over a radiator or heat source.

Do not rub or strike the Active Matrix LCD with anything hard as this may scratch, mar, or damage the Active Matrix LCD permanently.

Do not press the LCD screen with your finger for a long time as this may cause some afterimages.

Some dot defects may appear as Red, Green or Blue spots on the screen. However, this will have no impact or effect on the display performance.

If possible, use the recommended resolution to obtain the best image quality for your LCD display. If used under any mode except the recommended resolution, some scaled or processed images may appear on the screen. However, this is characteristic of the fixed-resolution LCD panel.

On Cleaning

- Unplug the display before cleaning the face of the display screen.
- Use a slightly damp (not wet) cloth. Do not use an aerosol directly on the display screen because over-spraying may cause electrical shock.

On Repacking

- Do not throw away the carton and packing materials. They make an ideal container in which to transport the unit. When shipping the unit to another location, repack it in its original material.

Unpacking Your Display

Please make sure the following items are included with your monitor. If any items are missing, contact your dealer.

Display

Media Station

Remote control / Batteries (AAA x 2)
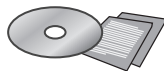
CD-Rom/Cards
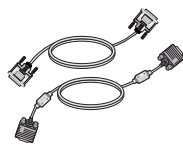
Signal Cable
(DVI-D/15-pin D-Sub)

Power Cord

USB Cable
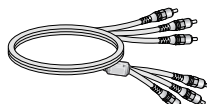
RCA Cable
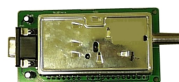
S-Video Cable

Audio Cable

Speaker (optional)

TV tuner (optional)

A3

Bright Window

This function provides exceptionally clear contrast and sharpness that can be applied to any specially sized section of the screen.

Swap

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

Spectacle

화면의 중앙부분은 4:3비율에 가깝게, 외곽부분은 16:9이상 비율로 늘여 위치별로 비율을 달리 변화시킵니다. 대부분의 사람들은 중앙 부분에 집중해서 보고 focus 맞추기 때문에 외곽부분의 비선형적인 비율증가는 잘 인식하지 못하게 되어 정상적인 4:3 TV 화면을 Wide 화면으로 무리없이 볼 수 있게 해줍니다. 단, TV와 동영상을 보는데 Spectacle을 선택하여 보면 유용하나, Graphic 작업이나 문서 작업을 하는 PC 환경에서는 적합하지 않은 점을 참고하시기 바랍니다.

Sleep Timer

You can set a time period after which the TV should switch itself to standby. Press the key repeatedly to select the number of minutes. : 60/90/120 minutes

BBE Fuction

Audio음질의 맑기 및 명료도를 향상시킵니다.

For detailed instructions of each button on the remote control, refer to the appropriate pages of this manual.

Remote Control

MUTE Button
To select mute on or off.

• SOURCE Selection Button
• TV/AV Button

• MENU Button
• EXIT Button

VOLUME(◄ ►) Buttons

SET Button

Number buttons

SOUND Button
To select the audio mode.
: MONO/STEREO/FOREIGN

VCR Buttons
These buttons are available for LG VCR remote controls only. Refer to the Owner's Manual for your VCR .

MUTE   POWER

SOURCE TV/AV SLEEP

MENU   EXIT   BRT.W

CH

SET

VOL   VOL

CH

1	2	3
4	5	6
7	8	9

SOUND   AUTO

0

PIP   POP   SWAP

POWER   CAPTION/*

REW — PLAY — FF

◄◄   ►   ►►

REC   STOP   P/STILL

●   ■   ❚❚

Power Button

SLEEP timer
With this key you can set a time period after which the TV should switch itself to standby. Press the key repeatedly to select the number of minutes.

Bright Window Button
This function provides exceptionally clear contrast and sharpness that can be applied to any specially sized section of the screen.

CH. (▼▲) Buttons

AUTO Button
•This function is to automatically search the available channels. It is available to the TV signal inputs only.
•This function is to automatically adjust your display image to the ideal settings for the current screen resolution size (display mode). It is available to the PC analog signal input only.

CAPTION Button
AFKN이나 CC가 표시된 videotape으로 시청할때 사용하세요.
(지역이나 나라에 따라 CAPTION기능이 동작되지 않을 수 있습니다.)

A5

PIP (Picture in Picture)

The sub-screen is changed in the order shown below.
: SMALL -> LARGE -> OFF

POP (Picture out Picture)
The sub-screen is changed in the order shown below.
: SMALL -> MEDIUM -> LARGE -> OFF

SWAP function

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

PIP

SWAP

POP
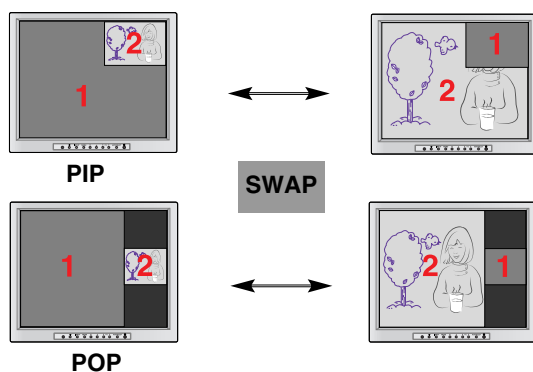
SOURCE **1**	SOURCE **2**
• **D-SUB** • **DVI-I ANALOG** • **DVI-I DIGITAL** • **HDTV YPbPr***	• **DVI-D** • **TV** • **CVBS** • **S-VIDEO** • **DVD YPbPr** • **HDTV YPbPr***

Main-screen 에 ”SOURCE 1”의 신호가 들어오면 Sub-screen에는 ”SOURCE 2”의 신호만이 들어옵니다. 반대로 Main-screen 에 ”SOURCE 2”의 신호가 들어오면 Sub-screen에는 ”SOURCE 1”의 신호만이 들어옵니다. ”SWAP”을 선택하여 ”SOURCE 1”과 ”SOURCE 2”의 위치를 변경할 수 있습니다.

* HDTV는 Source의 제약없이 PIP/POP 모두 지원됩니다.
 (단, 양쪽 Source가 모두 HDTV인 것은 불가능함)

Insert the batteries into the remote control to operate the monitor.

Preparing the Remote Control

1. Open the battery cover.
2. Insert batteries (AAA size).

Make sure to match the + and - on the batteries to the marks inside the battery compartment.

3. Close the cover.

Note
■ Do not insert the batteries into the remote control in the wrong direction.
■ Do not charge, heat, open, or short-circuit the batteries. Also do not throw the batteries into the fire.
■ Do not use different types of batteries together, nor mix old and new batteries.

This section shows you how to use the remote control.

Operating with the Remote Control

Point the remote control at the remote sensor and press the buttons.

30° 30°
Within about 23ft (about 7m)
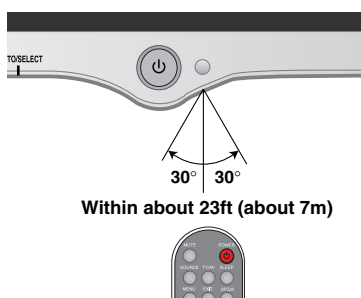
Distance : About 23 ft (7 m) from the front of the remote sensor.
Angle :   About 30° in each direction of the front of the remote sensor.

Do not expose the sensor of remote control in the monitor to a strong light source such as direct sunlight or illumination. If so, may not be able to operate the monitor with the remote control.

Note
■ Do not drop the remote control or handle it roughly.
■ Do not leave the remote control in extremely hot or humid conditions.
■ Do not expose the remote control to water or anything wet.

Display Rear
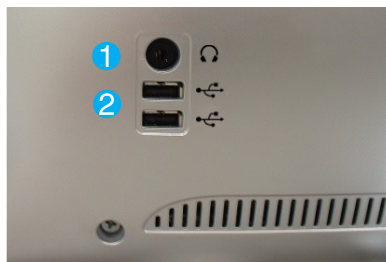
1 **Headphone/Earphone Input**
Automatically mutes the speaker volume when the headphones are plugged in.

2 **USB downstream ports**

Media Station Rear
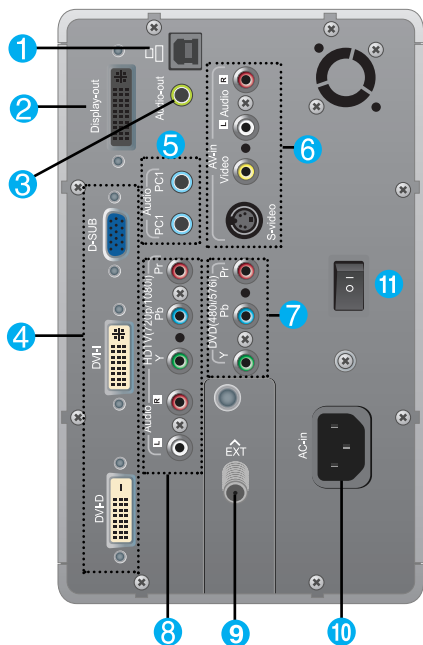
1 **USB upstream port**

2 **Connect the P&D cable**

3 **Connect to the speaker including a built-in amplifier(AMP)**

4 **PC signal inputs**

5 **Connect the audio cable to the *LINE OUT jack of the PC sound card.**
-PC1 : When connecting D-SUB/DVI-I signal cable
-PC2 : When connecting DVI-D signal cable

6 **AV Input ports**

7 **DVD(YPbPr) Input ports - 480i/576i**

8 **HDTV(YPbPr) Input ports - 720p/1080i**

9 **Connect the antenna (Optional)**

10 **Connect the power cord**

11 **Power ON/OFF switch of the monitor**

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*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).

A8

■ **Before setting up the monitor, ensure that the power to the monitor, the computer system, and other attached devices is turned off.**

Using the Computer

1. Connect the P&D (Plug and Display) cable. When attached, tighten the thumbscrews to secure the connection.

2. Connect the signal cable
   (2-1) When connecting D-SUB signal cable
   (2-2) When connecting DVI-I signal cabl
   (2-3) When connecting DVI-D signal cable

3. Connect the power cord into a proper power outlet that is easily accessible and close to the display.
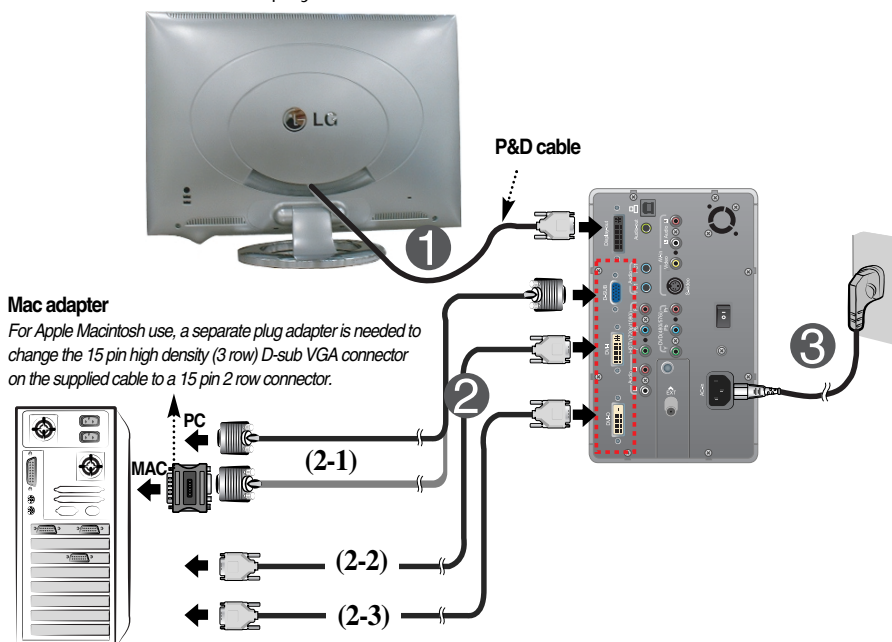
P&D cable

Mac adapter
For Apple Macintosh use, a separate plug adapter is needed to change the 15 pin high density (3 row) D-sub VGA connector on the supplied cable to a 15 pin 2 row connector.

PC

MAC

(2-1)

(2-2)

(2-3)

4. Select an input signal.

INPUT SELECT

DSUB ANALOG
DVI-I ANALOG
DVI-I DIGITAL
HDTV YPbPr
DVI-D DIGITAL
S-VIDEO
CVBS
T V
DVD YPbPr
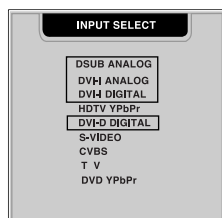
SOURCE → ▼▲ → SET

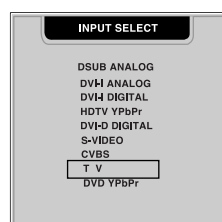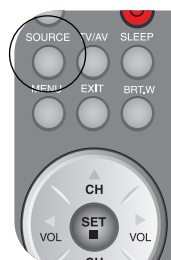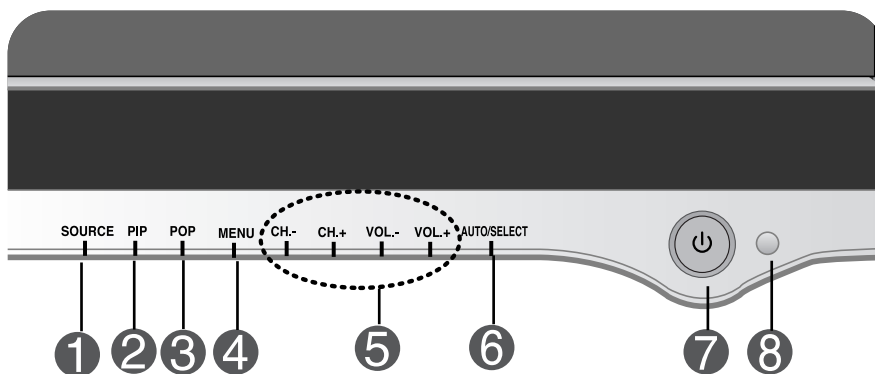Press the **SOURCE** button on the remote control to select an input.
• DSUB ANALOG: 15-pin D-sub analog signal
• DVI-I ANALOG: DVI-I analog signal
• DVI-I DIGITAL: DVI-I digital signal
• DVI-D DIGITAL: DVI-D digital signal

SOURCE   TV/AV   SLEEP

MENU   EXIT   BRT.W

CH
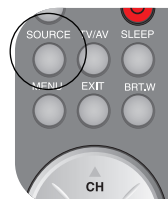
Connecting the Speakers -Optional

Connect the audio cable.
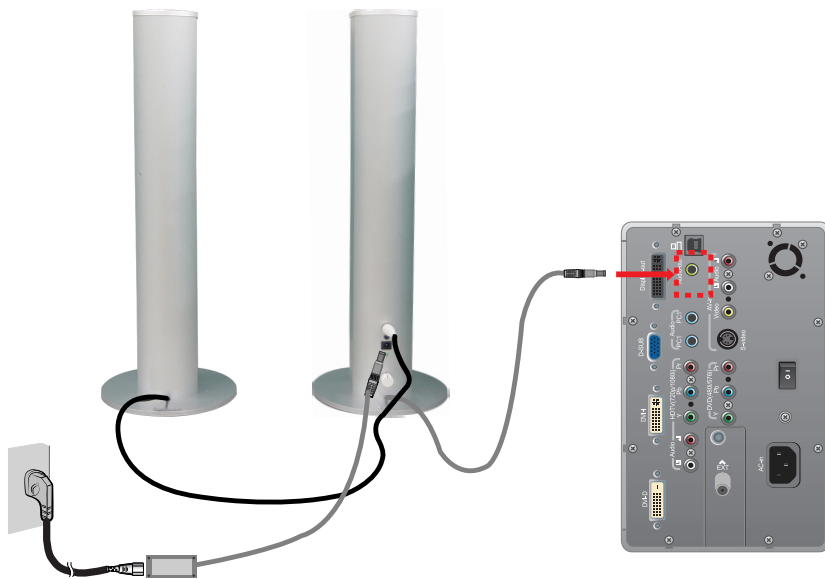
Connecting the VCR/DVD

1. Connect the each audio/video output jack of the VCR/DVD to the corresponding input port as shown on the Display (or Media station).
If you connect the S-Video input port to external equipment, you can have an improved definition image.
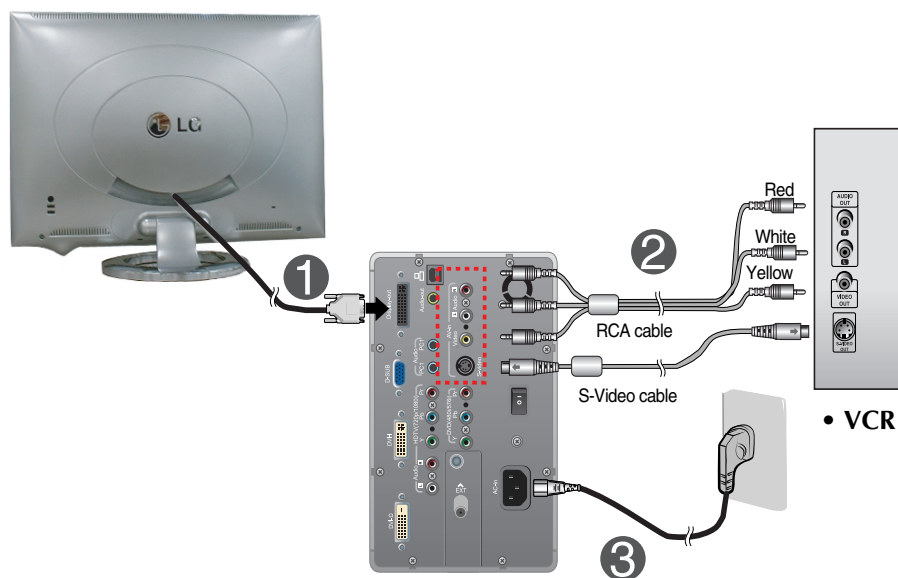
Red

White

Yellow

RCA cable

S-Video cable

• **VCR**

2. Select an input signal.

INPUT SELECT

DSUB ANALOG
DVI-I ANALOG
DVI-I DIGITAL
HDTV YPbPr
DVI-D DIGITAL
S-VIDEO
CVBS
T V
DVD YPbPr
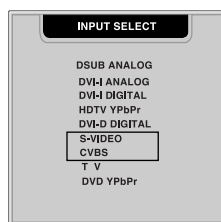
SOURCE → ▼▲ → SET

Press the **SOURCE** button on the remote control to select an input.

• S-VIDEO: S video
• CVBS: Composite video

SOURCE   TV/AV   SLEEP

MENU   EXIT   BRT.W

CH
SET
VOL   VOL
CH

A11
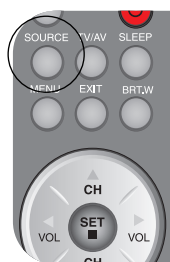
Connecting the DVD (480i/576i)

1. Connect the each audio/video output jack of the DVD to the corresponding input port as shown on the Display (or Media station).
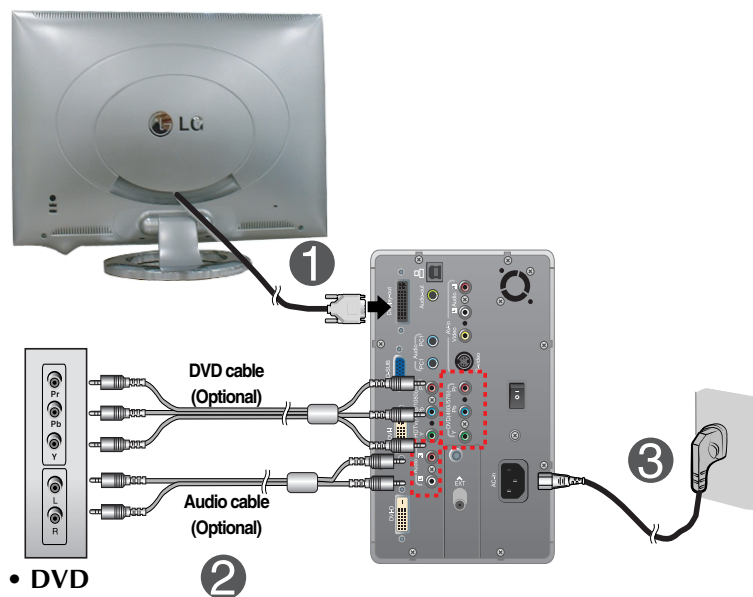
DVD cable
(Optional)

Audio cable
(Optional)

• **DVD**

2. Select an input signal.

INPUT SELECT

DSUB ANALOG
DVI-I ANALOG
DVI-I DIGITAL
HDTV YPbPr
DVI-D DIGITAL
S-VIDEO
CVBS
T V
DVD YPbPr
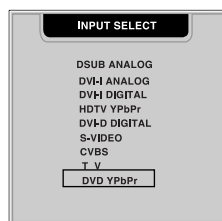
SOURCE → ▼▲ → SET

Press the **SOURCE** button on the remote control to select an input.
• DVD YPbPr
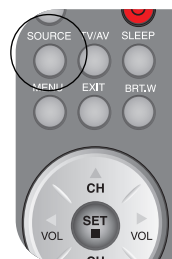
Watching HDTV (720p/1080i)

1. Connect both HDTV cable (Y/Pb/Pr) and audio cable (Audio L/R) to the Display (or Media station) jack and the Set-top box jack.
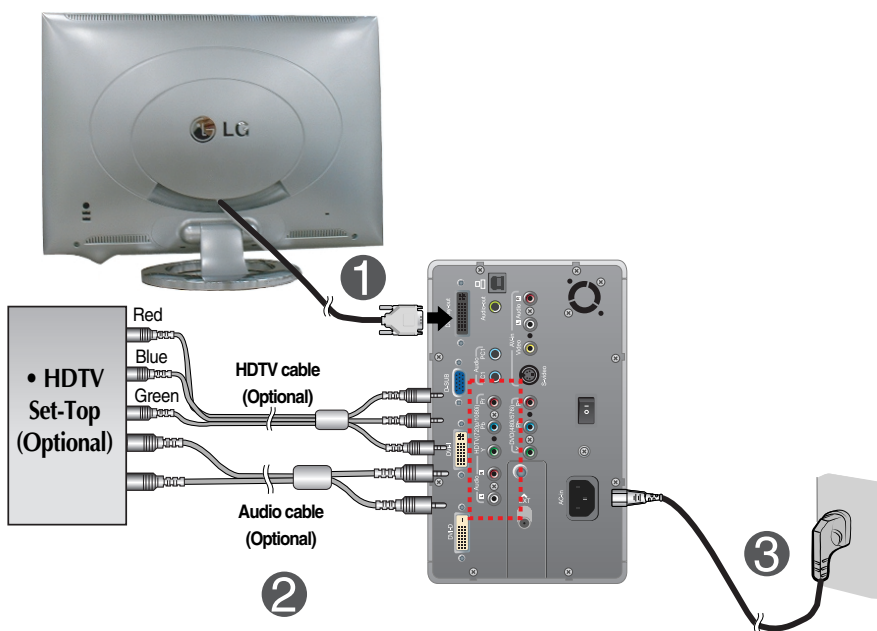
2. Select an input signal.

```
INPUT SELECT

DSUB ANALOG
DVI-I ANALOG
DVI-I DIGITAL
HDTV YPbPr
DVI-D DIGITAL
S-VIDEO
CVBS
T  V
DVD YPbPr
```
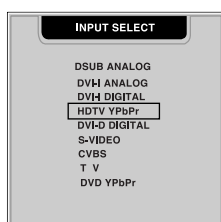
SOURCE → ▼▲ → SET

Press the **SOURCE** button on the remote control to select an input.

• HDTV YPbPr

A13

Watching TV- Optional

■ **Before setting up the monitor, ensure that the power to the monitor, the computer system, and other attached devices is turned off.**

1. Connect the antenna.
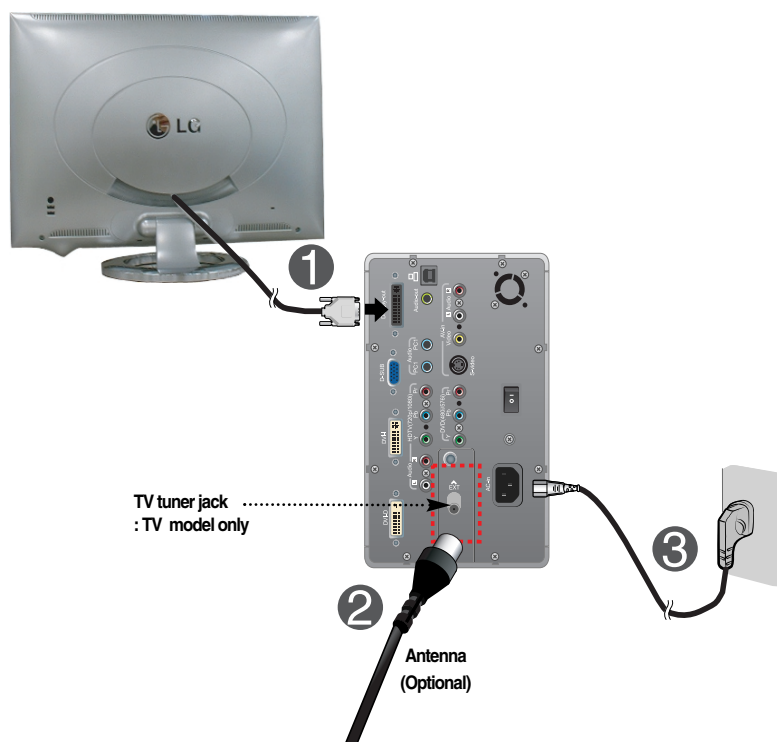
TV tuner jack
: TV model only

Antenna
(Optional)

2. Select an input signal.

INPUT SELECT

DSUB ANALOG
DVI-I ANALOG
DVI-I DIGITAL
HDTV YPbPr
DVI-D DIGITAL
S-VIDEO
CVBS
T V
DVD YPbPr

SOURCE → ▼▲ → SET

Press the **SOURCE** button on the remote control to select an input.

• TV

SOURCE   TV/AV   SLEEP

MENU   EXIT   BRT.W

CH

VOL   SET   VOL

CH

A14
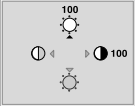
Front Panel Controls

Control	Function
❶ INPUT SELECT DSUB ANALOG DVI-I ANALOG DVI-I DIGITAL HDTV YPbPr DVI-D DIGITAL S-VIDEO CVBS T V DVD YPbPr	**Source Selection:** Use this button to select an input signal. • DSUB ANALOG: 15-pin D-sub analog signal • DVI-I ANALOG: DVI-I analog signal • DVI-I DIGITAL: DVI-I digital signal • HDTV YPbPr: HDTV • DVI-D DIGITAL: DVI-D digital signal • S-VIDEO: S video • CVBS: Composite video • TV: TV • DVD YPbPr: DVD
❷	**PIP (Picture in Picture) function** The sub-screen is changed in the order shown below. : SMALL -> LARGE -> OFF 리모컨의 ”SWAP”을 선택하여 ”SOURCE 1”과 ”SOURCE 2”의 위치를 변경할 수 있습니다.
❸	**POP (Picture out Picture) function** The sub-screen is changed in the order shown below. : SMALL -> MEDIUM -> LARGE -> OFF 리모컨의 ”SWAP”을 선택하여 ”SOURCE 1”과 ”SOURCE 2”의 위치를 변경할 수 있습니다.

| Control	Function
④ **MENU Button**	Use this button to enter or exit the On Screen Display.
⑤ (image: 100, contrast/brightness icons, ◑ 100)	**CH. - +** • Bring up Contrast and Brightness adjustment. It is available to the PC signal inputs only. • Use these buttons to go up and down the channel when the TV source is available.
(speaker icon) ◀||||||||‧‧‧‧‧‧‧‧‧‧‧‧▶ 37	**VOL. - +** Use these buttons to decrease or increase the volume level.
	Use these buttons to choose or adjust items in the On Screen Display.
⑥ AUTO IN PROGRESS	**AUTO adjustment function** When adjusting your display settings, always press the **AUTO/SELECT** button before entering the On Screen Display(OSD). This will automatically adjust your display image to the ideal settings for the current screen resolution size (display mode). It is available to the PC analog signal input only. The best display mode is **1920x1200 @60Hz**.
	Use this button to enter a selection in the On Screen Display.
⑦ **Power Button**	Use this button to turn the display on or off.
Power (DPMS) Indicator	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.
⑧ **Remote Control Sensor**	
CONTROLS LOCKED CONTROLS UNLOCKED	**CONTROLS LOCKED/UNLOCKED :** **MENU and ▶** This function allows you to secure the current control settings, so that they cannot be inadvertently changed. Press and hold the MENU button and ▶ button for 3 seconds: the message **"CONTROLS LOCKED"** appears. You can unlock the OSD controls at any time by pushing the MENU button and ▶ button for 3 seconds: the message **"CONTROLS UNLOCKED"** will appear.

Screen Adjustment

Making adjustments to the image size, position and operating parameters of the display is quick and easy with the On Screen Display Control system. A short example is given below to familiarize you with the use of the controls. The following section is an outline of the available adjustments and selections you can make using the OSD.

NOTE
- Allow the display to stabilize for at least 30 minutes before making image adjustments.

To make adjustments in the On Screen Display, follow these steps:
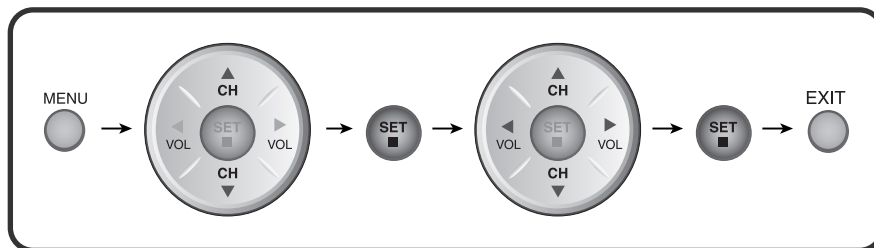
1 Press the **MENU Button**, then the main menu of the OSD appears.

2 To access a control, use the ▼ or ▲ **Buttons**. When the icon you want becomes highlighted, press the **SET Button**.

3 Use the ▼ ▲ ◄ ► **Buttons** to adjust the item to the desired level.

4 Accept the changes by pressing the **SET Button**.

5 Exit the OSD by Pressing the **EXIT Button**.

The following table indicates all the On Screen Display control, adjustment, and setting menus.

Using the computer

Main menu	Sub menu		A	D	Reference
BRIGHTNESS CONTRAST	BRIGHTNESS		●	●	To adjust the brightness and contrast of the screen
	CONTRAST		●	●	
COLOR ADJUSTMENT	PRESET	9300K	●		To customize the color of the screen
		6500K	●		
	R/G/B(User Color)		●		
IMAGE POSITION	V POSITION		●		To adjust the position of the screen
	H POSITION		●		
TRACKING	AUTO		●		To improve the clarity and stability of the screen
	CLOCK		●		
	PHASE		●		
AUDIO	MUTE		●	●	To adjust the audio function
	VOLUME		●	●	
	BASS		●	●	
	TREBLE		●	●	
	BBE EFFECT		●	●	
SETUP	LANGUAGE		●	●	To customize the screen status for a user's operating environment
	IMAGE SIZE		●	●	
	OSD POSITION		●	●	
	TRANSPARENCY		●	●	
	ZOOM		●	●	
PIP/POP	PIP MODE		●	●	To adjust the PIP/POP/BRIGHT WINDOW of the screen
	POP MODE		●	●	
	BRIGHT WINDOW		●	●	
● : Adjustable A : Analog Input D : Digital Input					

NOTE

■ The order of icons may differ depending on the model (A17~A27).
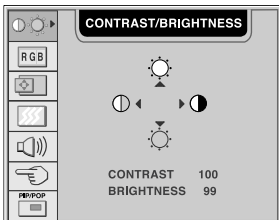
Using the VCR/DVD/TV/HDTV

Main menu	Sub menu	V	H	T	Reference
CHANNEL SETUP	CHANNEL			●	To select the TV channel settings and adjust the channel quality.
	ADD/DELL CH.			●	
	AUTO CHANNEL			●	
	SELECT			●	
	FINE TUNE			●	
ADJUSTMENT	CONTRAST	●	●	●	To improve the clarity and stability of the screen
	BRIGHTNESS	●	●	●	
	SHARPNESS	●		●	
	COLOR	●	●	●	
	TINT	●	●	●	
AUDIO	MUTE	●	●	●	To adjust the audio function
	VOLUME	●	●	●	
	BASS	●	●	●	
	TREBLE	●	●	●	
	BBE EFFECT	●	●	●	
	SOUND	●	●	●	
SETUP	LANGUAGE	●	●	●	To customize the screen status for a user's operating environment
	IMAGE SIZE	●	●	●	
	OSD POSITION	●	●	●	
	TRANSPARENCY	●	●	●	
PIP/POP	PIP MODE	●	●	●	To adjust the PIP/ POP/ BRIGHT WINDOW of the screen
	POP MODE	●	●	●	
	BRIGHT WINDOW	●	●	●	

● **: Adjustable   V : VCR/DVD   T : TV   H : HDTV**
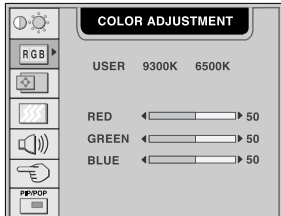
You were introduced to the procedure of selecting and adjusting an item using the OSD system. Listed below are the icons, icon names, and icon descriptions of the all items shown on the Menu.
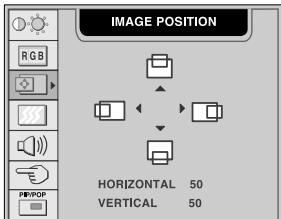
To adjust the screen when using the computer

To adjust the brightness and contrast of the screen

OSD Adjust	Description

CONTRAST/BRIGHTNESS

CONTRAST   100
BRIGHTNESS   99

BRIGHTNESS
To adjust the brightness of the screen.

CONTRAST
To adjust the contrast of the screen.

To customize the color of the screen

OSD Adjust	Description

COLOR ADJUSTMENT

USER   9300K   6500K

RED   ◄[   ]► 50
GREEN ◄[   ]► 50
BLUE   ◄[   ]► 50
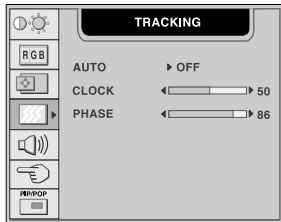
USER   **RED/GREEN/BLUE**
Set your own color levels.

9300K   Select the screen color.
6500K
• 9300K: Slightly bluish white.
• 6500K: Slightly reddish white.

To adjust the position of the screen

OSD Adjust	Description
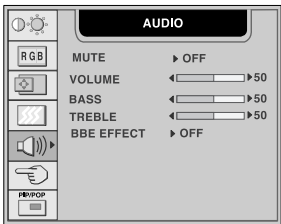
IMAGE POSITION

HORIZONTAL   50
VERTICAL   50

Horizontal Position
To move image left and right.

Vertical Position
To move image up and down.

To improve the clarity and stability of the screen

OSD Adjust	Description

<table>
<tr><td rowspan="3">

```
⊙·☼
R G B        TRACKING
◇
         AUTO      ▶ OFF
         CLOCK     ◀▭▭▭▭▭▶ 50
         PHASE     ◀▭▭▭▭▭▶ 86
◁))
⤲
PIP/POP
▭
```

</td><td>**AUTO**</td><td>This function is suitable for analog signal input only. This button is for the automatic adjustment of the screen position, clock and phase.</td></tr>
<tr><td>**CLOCK**</td><td>To minimize any vertical bars or stripes visible on the screen background.The horizontal screen size will also change.</td></tr>
<tr><td>**PHASE**</td><td>To adjust the focus of the display. This item allows you to remove any horizontal noise and clear or sharpen the image of characters.</td></tr>
</table>

To adjust the audio function

OSD Adjust	Description

<table>
<tr><td rowspan="5">

```
⊙·☼
R G B        AUDIO
◇        MUTE      ▶ OFF
         VOLUME    ◀▭▭▭▶ 50
         BASS      ◀▭▭▭▶ 50
         TREBLE    ◀▭▭▭▶ 50
◁))      BBE EFFECT ▶ OFF
⤲
PIP/POP
▭
```

</td><td>**MUTE**</td><td>Used to select mute on (means sound off) and mute off (means sound on).</td></tr>
<tr><td>**VOLUME**</td><td>To decrease or increase volume level.</td></tr>
<tr><td>**BASS**</td><td>To decrease or increase bass level.</td></tr>
<tr><td>**TREBLE**</td><td>To decrease or increase treble level.</td></tr>
<tr><td>**BBE EFFECT**</td><td>Audio 음질의 맑기 및 명료도를 향상시키는 기능입니다.</td></tr>
</table>

To customize the screen status for a user's operating environment

OSD Adjust	Description

SETUP

RGB

LANGUAGE ▶ ENGLISH
IMAGE SIZE ▶ FULL
OSD POSITION ▶ ▣
TRANSPARENCY ◀▣ ▶50
ZOOM ▶ ▣

1280x1024 79.9kHz / 75Hz

PIP/POP
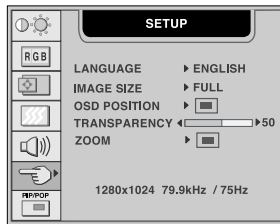
**LANGUAGE** To choose the language in which the control names are displayed.

IMAGE SIZE 화면의 Image size를 선택합니다.: FULL/SPECTACLE/1:1/4:3

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

OSD POSITION

RGB

⊟
▲
▢ ◀ ▶ ▢
▼
▢

HORIZONTAL 50
VERTICAL 50

PIP/POP
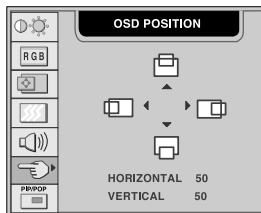
TRANSPARENCY To adjust the transparency of the OSD menu screen.

ZOOM To adjust horizontal and vertical image size simultaneously.
If you want to move the zooming point, use the H/V POSITION function in the sub-menu. However, if the monitor turns off when zooming in and out the screen, the monitor will be returned to original screen.

ZOOM

RGB

ZOOM ◀▣ ▶0
H POSITION ◀▣ ▶50
V POSITION ◀▣ ▶50

PIP/POP
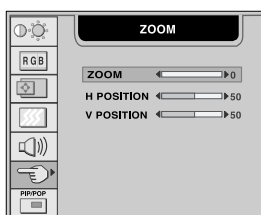
To adjust the screen when using the VCR/DVD/HDTV/TV

To select TV channel settings and adjust the channel quality

OSD Adjust	Description

CHANNEL SETUP

CHANNEL ▶ 11
ADD/DELL CH. ▶ ADD
AUTO CHANNEL ▶ OFF
SELECT ▶ AIR
FINE TUNE ◀▭▶50

CHANNEL To change the channel.

ADD/DELL CH. To add/delete the selected channels.

AUTO CHANNEL To automatically search the available channels.

SELECT To select the channel reception type.
: AIR/CABLE

FINE TUNE To adjust the channel quality.

To improve the clarity and stability of the screen

OSD Adjust	Description

ADJUSTMENT

CONTRAST ◀▭▶50
BRIGHTNESS ◀▭▶50
SHARPNESS ◀▭▶50
COLOR ◀▭▶50
TINT ◀▭▶50
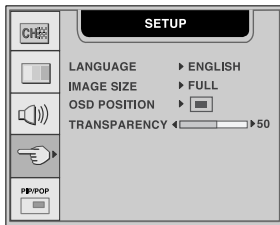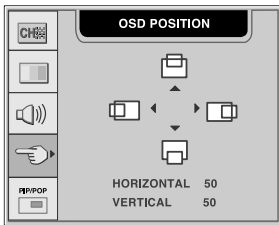
CONTRAST To adjust the contrast of the screen

BRIGHTNESS To adjust the brightness of the screen.

SHARPNESS To adjust the clearness of the screen.

COLOR To adjust the color to desired level.

TINT To adjust the tint to desired level.
This function is available only in NTSC broadcasting mode.

To adjust the audio function

OSD Adjust	Description

	MUTE — Used to select mute on (means sound off) and mute off (means sound on).
	VOLUME — To decrease or increase volume level.
	BASS — To decrease or increase bass level.
	TREBLE — To decrease or increase treble level.
	BBE EFFECT — To adjust th clearness and sharpness of the sound.
	SOUND — To select the audio mode. : MONO/STEREO/FOREIGN VCR과 DVD 입력신호일때는 FOREIGN은 지원되지 않습니다.
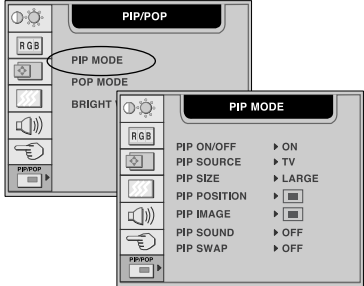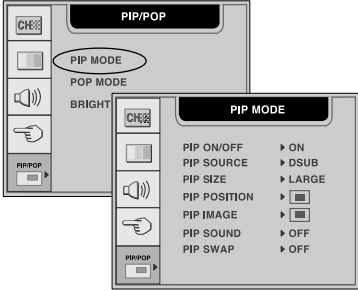
AUDIO

MUTE ▶ OFF
VOLUME ◀☐☐▶50
BASS ◀☐☐▶50
TREBLE ◀☐☐▶50
BBE EFFECT ▶ OFF
SOUND ▶ STEREO

To customize the screen status for a user's operating environment

OSD Adjust	Description

SETUP

LANGUAGE ▶ ENGLISH
IMAGE SIZE ▶ FULL
OSD POSITION ▶ ☐
TRANSPARENCY ◀☐☐▶50

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

IMAGE SIZE This function displays the image in its original size or enlarged size so as to fit in the full screen of the LCD panel.

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

OSD POSITION

HORIZONTAL 50
VERTICAL 50

TRANSPARENCY To adjust the transparency of the OSD menu screen.

A24

PIP/POP/BRIGHT WINDOW function

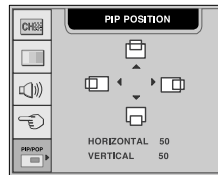### To adjust the PIP(Picture in Picture) of the screen

OSD Adjust	Description

[PC]   **[VCR/DVD/TV/HDTV]**

PIP ON/OFF menu에서 ON을 선택하시면 다음메뉴들을 조정하실 수 있습니다.

PIP SOURCE   To select an input signal for PIP.

PIP SIZE   To adjust the size of the PIP screen: SMALL/LARGE

PIP POSITION   To adjust the position of PIP screen. Press the ◀ ▶ button to display the submenu for PIP POSITION.
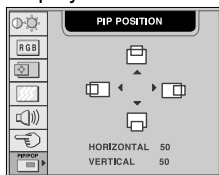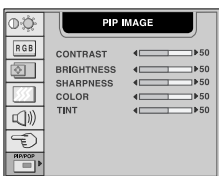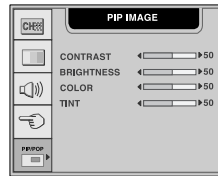

[PC]   **[VCR/DVD/TV/HDTV]**

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. Sub-menu는 source의 종류에 따라 달라질 수 있습니다.
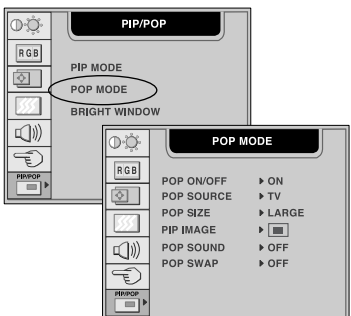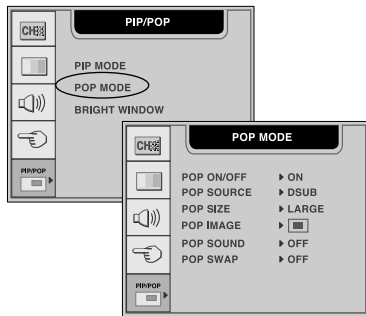

[PC]   **[VCR/DVD/TV/HDTV]**

PIP CONTRAST   To adjust the contrast of the screen.
PIP BRIGHTNESS   To adjust the brightness of the screen.
PIP SHARPNESS   To adjust the clearness of the screen.
PIP COLOR   To adjust the color to desired level.
PIP TINT   To adjust the tint to desired level. This function is available only in NTSC broadcasting mode.

OSD Adjust	Description
PIP SOUND	To turn the PIP sound on/off.
PIP SWAP	To switch the main-screen and sub-screen in PIP mode.

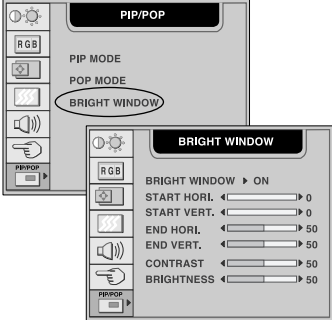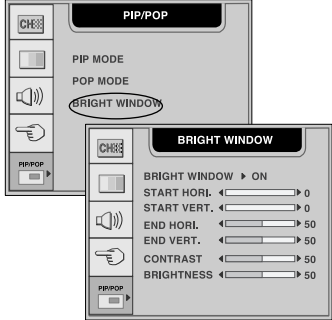## To adjust the POP(Picture out Picture) of the screen

OSD Adjust	Description

[PC]

[VCR/DVD/TV/HDTV]

POP ON/OFF menu에서 ON을 선택하시면 다음메뉴들을 조정하실 수 있습니다.

POP SOURCE	To select an input signal for POP.
POP SIZE	To adjust the size of the POP screen: SMALL/MEDIUM/LARGE
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 SOUND	To turn the POP sound on/off.
POP SWAP	To switch the main-screen and sub-screen in POP mode.

To adjust the BRIGHT WINDOW of the screen

OSD Adjust	Description

This function provides exceptionally clear contrast and sharpness that can be applied to any specially sized section of the screen. BRIGHT WINDOW menu에서 ON을 선택하시면 다음메뉴들을 조정하실 수 있습니다.

START HORI. To decrease or increase horizontal starting position.

START VERT. To decrease or increase vertical starting position.

END HORI. To decrease or increase horizontal ending position.

END VERT. To decrease or increase vertical ending position.

CONTRAST To adjust the contrast of the BRIGHT WINDOW.

BRIGHTNESS To adjust the brightness of the BRIGHT WINDOW.

Check the following before calling for service.

No image appears	
⦿ **Is the power cord of the display connected?**	• Check and see if the power cord is connected properly to the power outlet.
⦿ **Is the power indicator light on?**	• Press the Power button.
⦿ **Is the power on and the power indicator green?**	• Adjust the brightness and the contrast.
⦿ **Is the power indicator amber?**	• If the display is in power saving mode, try moving the mouse or pressing any key on the keyboard to bring up the screen. • Make sure if the power is on. • Try to turn on the PC.
⦿ **Do you see an "OUT OF RANGE" message on the screen?**	• This message appears when the signal from the PC (video card) is out of horizontal or vertical frequency range of the display. See the 'Specifications' section of this manual and configure your display again.
⦿ **Do you see a "CHECK SIGNAL CABLE " message on the screen?**	• This message appears when the signal cable between your PC and your display is not connected. Check the signal cable and try again.

Do you see a "CONTROLS LOCKED" message on the screen.	
⦿ **Do you see "CONTROLS LOCKED" when you push MENU button?**	• You can secure the current control settings, so that they cannot be inadvertently changed. You can unlock the OSD controls at any time by pushing the **MENU** button and ▶ button for 3 seconds: the message **"CONTROLS UNLOCKED"** will appear.

Display image is incorrect

● **Display Position is incorrect.**	• Press the **AUTO** button to automatically adjust your display image to the ideal setting. If the results are unsatisfactory, adjust the image position using the **H position and V position** icon in the on screen display.
	• Check **Control Panel --> Display --> Settings** and see if the frequency or the resolution were changed. If yes, readjust the video card to the recommend resolution**.**
● **On the screen background, vertical bars or stripes are visible.**	• Press the **AUTO** button to automatically adjust your display image to the ideal setting. If the results are unsatisfactory, decrease the vertical bars or stripes using the **CLOCK** icon in the on screen display.
● **Any horizontal noise appearing in any image or characters are not clearly portrayed.**	• Press the **AUTO** button to automatically adjust your display image to the ideal setting. If the results are unsatisfactory, decrease the horizontal bars using the **PHASE** icon in the on screen display.
	• Check **Control Panel --> Display --> Settings** and adjust the display to the recommended resolution or adjust the display image to the ideal setting. Set the color setting higher than 24 bits (true color).
● **The screen color is mono or abnormal.**	• Check if the signal cable is properly connected and use a screwdriver to fasten if necessary.
	• Make sure the video card is properly inserted in the slot.
	• Set the color setting higher than 24 bits (true color) at **Control Panel - Settings**.
● **The screen blinks.**	• Check if the screen is set to interlace mode and if yes, change it to the recommend resolution.

"IMAGE SIZE" function on OSD menu does not work.

◉ **"IMAGE SIZE" function on OSD menu does not work?**	• Check if the resolution is set as 1920x1200. The optimal resolution is 1920x1200 and the image is fully displayed on the monitor and is not converted as 1:1 image size.

Have you installed the display driver?

◉ **Have you installed the display driver?**	• Be sure to install the display driver from the display driver CD (or diskette) that comes with your display. Or, you can also download the driver from our web site: http://www.lge.com.
◉ **Do you see an "Unrecognized monitor, Plug&Play (VESA DDC) monitor found" message?**	• Make sure to check if the video card supports Plug&Play function.

USB function

◉ **USB function cannot be setup.**	• Check if the USB cable is correctly connected. • Check if the PC and OS are USB compliant. For verification of USB support, consult the manufacturer of each system.

Audio function

◉ **No sound.**	• Check if the audio cable is correctly connected. • Check the volume level.
◉ **Sound is too high pitched or too low piched.**	• Adjust the **TREBLE** to an appropriate level. • Adjust the **BASS** to an appropriate level.
◉ **Sound level is too low.**	• Check the volume level.

TV function

◉ **TV signal is not received.**	• Check the channel system and make sure you chose the correct channel system. • Check the **AUTO CHANNEL** function to automatically search the available channels. • Check and see if the TV adapter is properly connected between your display and antenna cable.

Specifications

Display	23 inches (58.4cm) Flat Panel Active matrix-TFT LCD Anti-Glare coating 23 inches viewable 0.258mm pixel pitch	
Sync Input	Horizontal Freq.	D-SUB : 30 - 96kHz (Automatic) DVI-I : 30 - 80kHz (Automatic) DVI-D : 30 - 71kHz(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) DVI - I connector (Digital/Analog) Composite video S video HDTV
	Input Form	RGB Analog (0.7Vp-p/75ohm), Digital, S-VIDEO, CVBS, Y/C, Y Pb Pr
Resolution	Max	D-SUB : 1920 x 1200 @60Hz (1600x1200 @75Hz) DVI-I : 1600 x1200 @60Hz (1280x1024 @70Hz) DVI-D : 1280 x1024 @60Hz
	Recommend	WUXGA 1920 x 1200 @60Hz
Plug&Play	DDC 2B	
Power Input	AC 100-240V, 50 /60Hz, 1.5A	
Power Consumption	Normal Stand-by/Suspend DPMS Off Power cut-off switch off	: 98W ≤ 5W ≤ 3W ≤ 1W

Dimensions &Weight	Display (with tilt stand)
	  Width
	  Height
	  Depth
	  Net
		
		58.75cm / 23.13 inches
		44.65 cm / 17.58 inches
		26.0cm / 10.24 inches
		11.56Kg / 25.49lbs

	Media Station
	  Width
	  Height
	  Depth
	  Net
		
		12.96 cm / 5.10 inches
		19.16 cm / 7.54 inches
		20.56 cm / 8.09 inches
		2.7 Kg / 5.95lbs

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
Tilt Range	0˚~20˚	
Tilt Stand	Attached(O), Detached ( )	

NOTE
■ Information in this document is subject to change without notice.

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VESA wall mounting
Connected to another object (stand type and wall-mounted type. This monitor accepts a VESA-compliant mounting interface pad.)
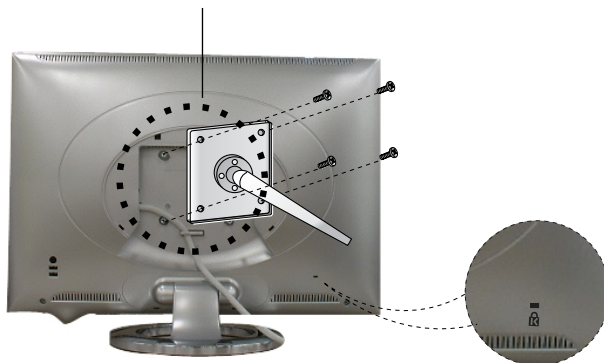
Kensington Security Slot- optional
Connected to a locking cable that can be purchased separately at most computer stores

Display Modes (Resolution)

■ PC mode

|	Display Modes (Resolution)		Horizontal Freq. (kHz)	Vertical Freq. (Hz)
1	VGA	640 x 350	31.469	70
2	VGA	720 x 400	31.468	70
3	VGA	640 x 480	31.469	60
4	VESA	640 x 480	37.500	75
5	VESA	640 x 480	43.269	85
6	VESA	800 x 600	37.879	60
7	VESA	800 x 600	46.875	75
8	VESA	800 x 600	53.674	85
9	MAC	832 x 624	49.725	75
10	VESA	1024 x 768	48.363	60
11	VESA	1024 x 768	60.123	75
12	VESA	1024 x 768	68.677	85
13	MAC	1152 x 870	68.681	75
14	VESA	1152 x 900	61.805	65.96
15	VESA	1280 x 1024	63.981	60
16	VESA	1280 x 1024	79.976	75
17	VESA	1600 x 1200	75.000	60
18	VESA	1600 x 1200	93.750	75
19	VESA	1920 x 1200	74.556	60

■ HDTV mode
  Component Video Input(YPbPr)

	Display Modes (Resolution)	Horizontal Freq. (kHz)	Vertical Freq. (Hz)
1	640 x 480	15.73	60.00
2	640 x 480	15.63	59.94
3	720 x 483	31.50	59.94
4	1280 x 720	45.00	60.00
5	1280 x 720	44.96	59.94
6	1920 x 1080	33.75	60.00
7	1920 x 1080	33.72	59.94

Signal Connector Pin Assignment
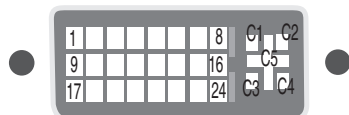
■ DVI-D/ DVI-I Connector

Pin	Signal		Pin	Signal
1	T. M. D. S. Data2-		16	Hot Plug Detect
2	T. M. D. S. Data2+		17	T. M. D. S. Data0-
3	T. M. D. S. Data2/4 Shield		18	T. M. D. S. Data0+
4	T. M. D. S. Data4-		19	T. M. D. S. Data0/5 Shield
5	T. M. D. S. Data4+		20	T. M. D. S. Data5-
6	DDC Clock		21	T. M. D. S. Data5+
7	DDC Data		22	T. M. D. S. Clock Shield
8	Analog Vertical Sync.		23	T. M. D. S. Clock+
9	T. M. D. S. Data1-		24	T. M. D. S. Clock-
10	T. M. D. S. Data1+		C1	Analog Red
11	T. M. D. S. Data1/3 Shield		C2	Analog Green
12	T. M. D. S. Data3-		C3	Analog Blue
13	T. M. D. S. Data3+		C4	Analog H. Sync.
14	+5V Power		C5	Analog Ground
15	Ground (return for +5V, H. Sync. and V. Sync.)			

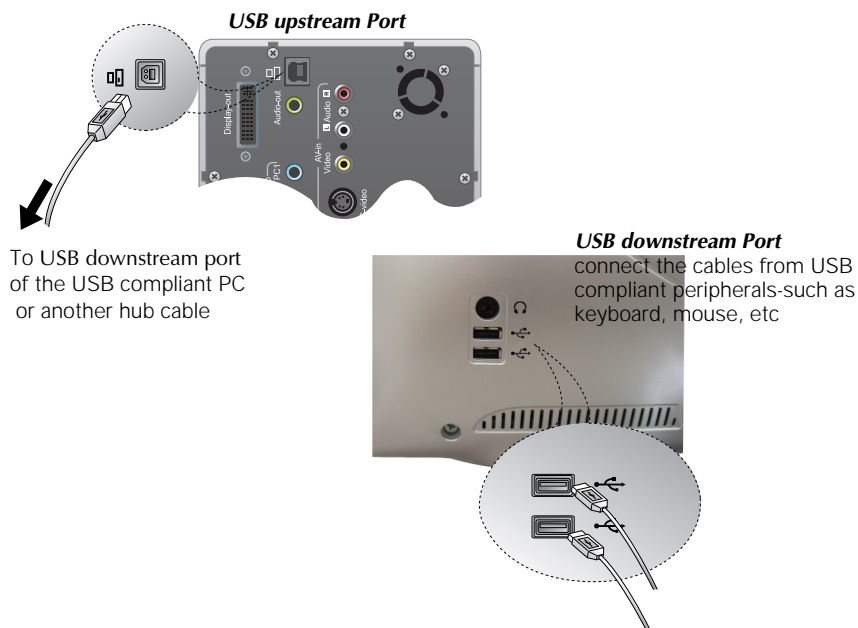T. M. D. S. (Transition Minimized Differential Signaling)

C1~C5 : DVI-I only

USB (Universal Serial Bus) is an innovation in connecting your different desktop peripherals conveniently to your computer. By using the USB, you will be able to connect your mouse, keyboard, and other peripherals to your display instead of having to connect them to your computer. This will give you greater flexibility in setting up your system. USB allows you to connect a chain of up to 120 devices on a single USB port; and you can "hot" plug (attach them while the computer is running) or unplug them while maintaining the Plug and the Plug auto detection and configuration. This display has an integrated Self-powered USB hub, allowing up to 2 other USB devices to be attached it.

USB connection

1. Connect the upstream port of the display (or media station) to the downstream port of the USB compliant PC or another hub using the USB cable. (Computer must have a USB port)

2. Connect the USB compliant peripherals to the downstream ports of the display.

USB upstream Port

To USB downstream port
of the USB compliant PC
or another hub cable

USB downstream Port
connect the cables from USB
compliant peripherals-such as
keyboard, mouse, etc

NOTE
- To activate the USB hub function, the display must be connected to a USB compliant PC(OS) or another hub with the USB cable(enclosed).
- When connecting the USB cable, check that the shape of the connector at the cable side matches the shape at the connecting side.
- Even if the display is in a power saving mode, USB compliant devices will function when they are connected the USB ports(both the upstream and downstream) of the display.

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USB Specifications

USB standard	Rev. 1.0 complied Self-powered hub
Downstream power supply	500mA for each (MAX)
Communication speed	12 Mbps (full), 1.5 Mbps (low)
USB port	1 Upstream port 2 Downstream ports