

# **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), Naturkyddsfröningen (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  
Lindegatan 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:



Naturkydds  
föreningen



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-accumulative<sup>1</sup> 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.

<sup>1</sup> 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](mailto: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



# M1740A/M1940A/M2040A

## User's Guide

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.



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# Safety Precautions

Please read these safety precautions carefully before using

 **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.



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## 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.
-

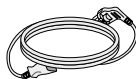
# Accessories

Please check the accessories in the product package.

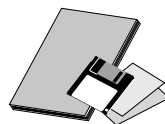
\* The monitor and the accessories can be different from the figures shown here.



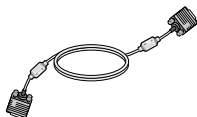
Remote Control  
/Batteries (AAA x 2)



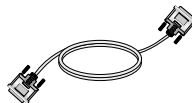
Power Cord



User's Manual/  
Cards/Driver Diskette



D-SUB Signal Cable



DVI-D Signal Cable

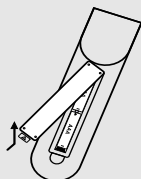


Audio Cable (PC)



Back cap

## ● Inserting batteries into remote controller.



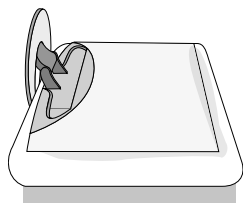
1. Take out the battery cap.
  2. Insert the battery with correct polarity (+/-).
  3. Close the battery cap.
- You can use a remote controller 7 meter distance and 30 degree (left/right) within the receiving unit scope.
  - Dispose of used batteries in the recycle bin to prevent environmental pollution.

# Before Connecting to the PC

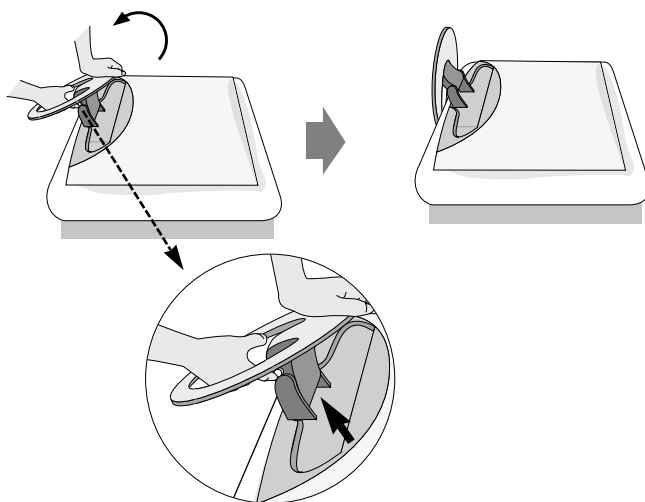
- Before setting up the monitor, ensure that the power to the monitor, the computer system, and other attached devices is turned off.

## Unfolding the stand base

- 1 Place the product with its front facing downward on a cushion or soft cloth.



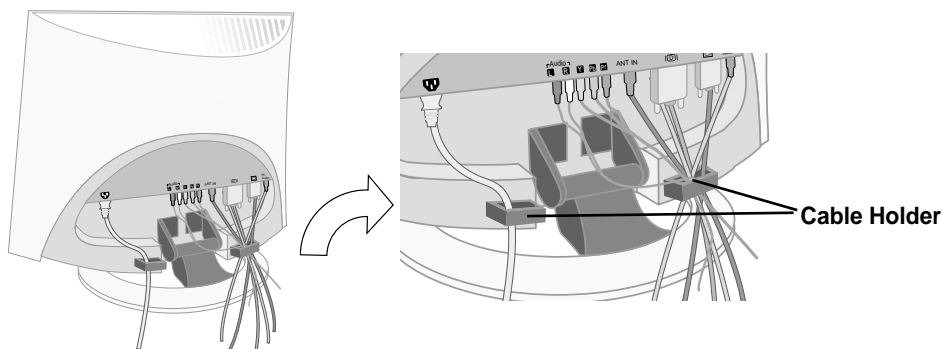
- 2 Hold down the release button inside the stand and strongly pull out the stand with your two hands.



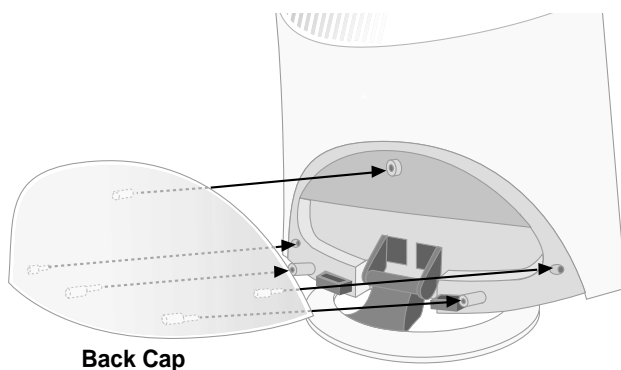
The stand won't move if you don't press release button.

## ■ ■ ■ To arrange the cables

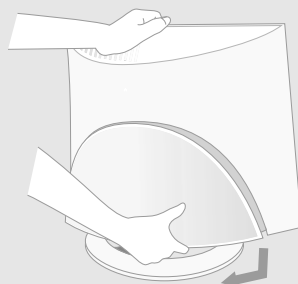
- 1 After connecting the cables neatly, arrange the cables to the **Cable Holder** as shown in the following figure.



- 2 Push the back cap shown in the following figure.

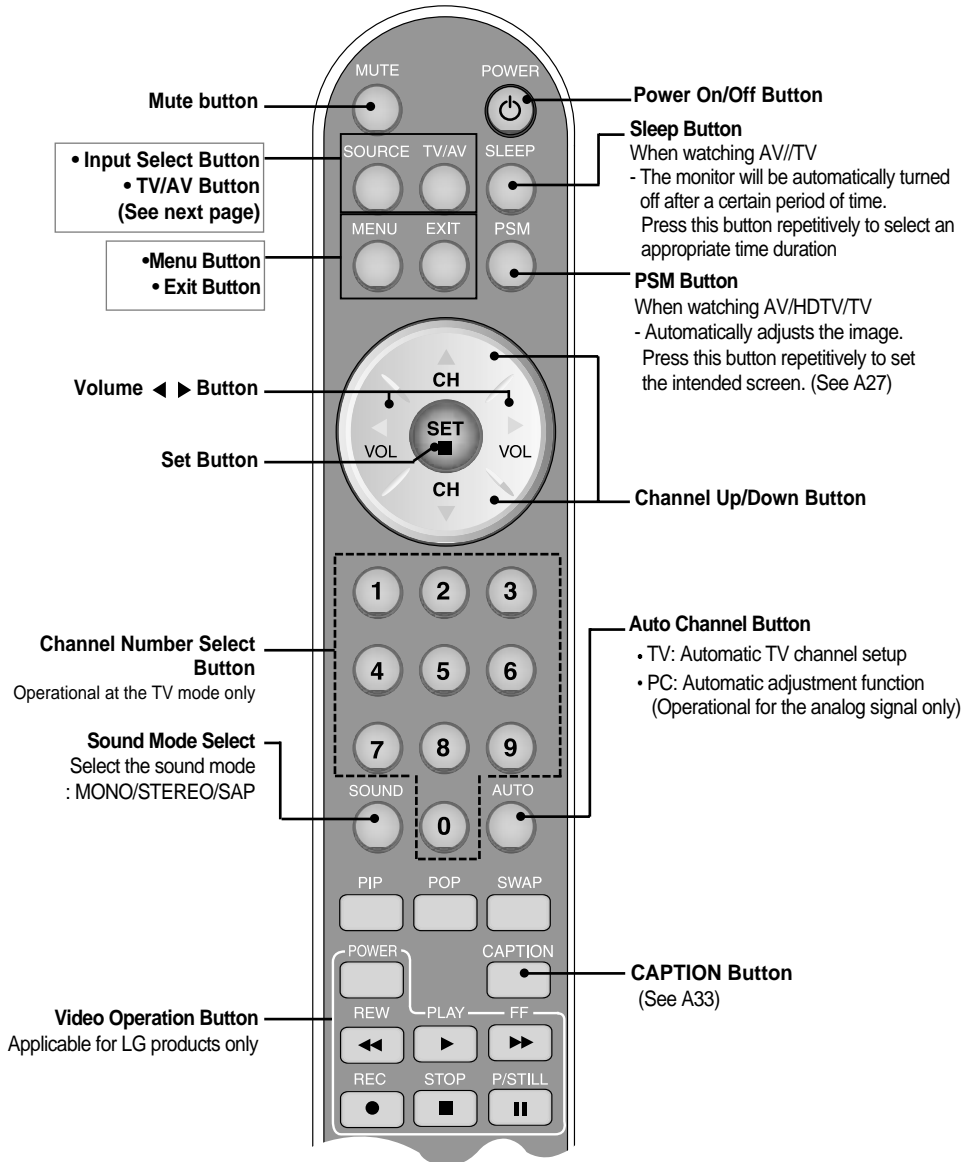


For remove the back cap,  
Pull it shown in the following  
figure.



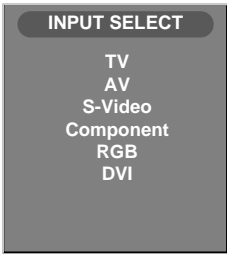
# Name and Function of the Parts

## ● Name of the Remote Controller Buttons



• **Input Select Button**

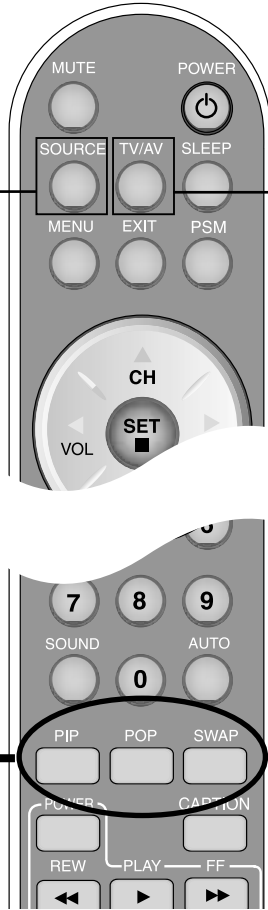
If you press the button once, the following Input Signal Window will appear. Select the signal type you want using the ▼▲ button.



• **TV/AV Button**

This button will be enabled only when you selected the TV/AV signal. The signal type will be changed with the following order. Set the signal type you want.

TV → AV → S-Video → Component

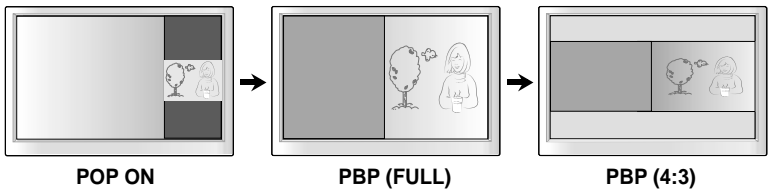


**1. PIP (Picture in Picture) Button**

The sub-screen moves to the next mode whenever you press this button.  
: Small -> Medium -> Large -> Off

**2. POP (Picture out Picture) Button**

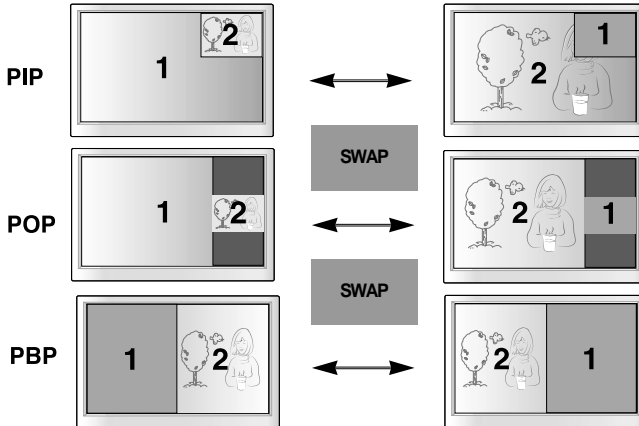
The sub-screen moves to the next mode whenever you press this button.  
: POP ON -> PBP(FULL) -> PBP(4:3) -> OFF



# Name and Function of the Parts

## 3. Swap Button

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

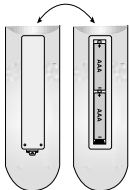


When 'Input Signal 1' comes on in the main screen, only 'Input Signal 2' can be displayed on the sub-screen. On the contrary, if the main screen displays 'Input Signal 2', the sub-screen can display 'Input Signal 1' only. You can swap 'Input Signal 1' and 'Input Signal 2' using the SWAP button.

<Table of PIP/POP/PBP Function Support>

Main Screen \ Sub-Screen	DVI	RGB	TV	AV1	AV2	S-Video
DVI	X	●	●	●	●	●
RGB	●	X	●	●	●	●
TV	●	●	X	X	X	X
AV1	●	●	X	X	X	X
AV2	●	●	X	X	X	X
S-Video	●	●	X	X	X	X

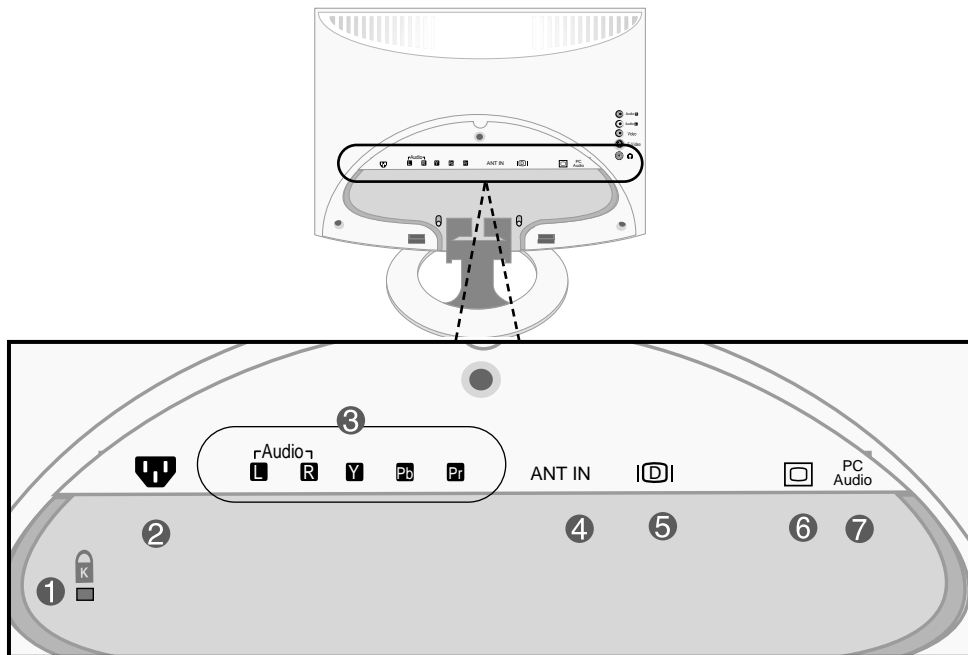
## Inserting batteries into remote controller.



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.



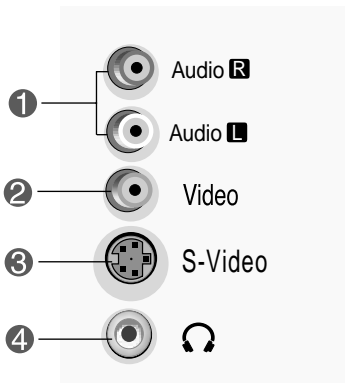
## Rear View



- ① Theft prevention locking device
- ② Power Cord Connector : Connect the power cord
- ③ AV Input Terminal
- ④ TV Tuner Jack: Connect the antenna.
- ⑤ DVI Signal Connector
- ⑥ D-SUB Analogue Signal Connector
- ⑦ Audio Jack :Connect to the jack in the PC sound card.

# Name and Function of the Parts

## ● AV Input Terminal



- ① AV(CVBS) Input Terminal(Audio)
- ② AV(CVBS) Input Terminal(Video)
- ③ S-Video Input Terminal
- ④ Headphone/Earphone Connection Terminal

## ● Connecting the sound card output terminal

- Make sure to check the sound card connection terminal in the PC before connecting to the monitor.  
If the PC sound card supports both Speaker Out and Line Out, change it to Line Out by setting the jumper or the PC application. (For more details, refer to the sound card user's manual.)
    - **Speaker Out** : The terminal connected to the speaker that is not equipped with an amplifier.
    - **Line Out** : The terminal connected to the speaker equipped with an amplifier.
- If Audio Out in the PC sound card has only Speaker Out, reduce the PC volume. This monitor is integrated with an amplifier.

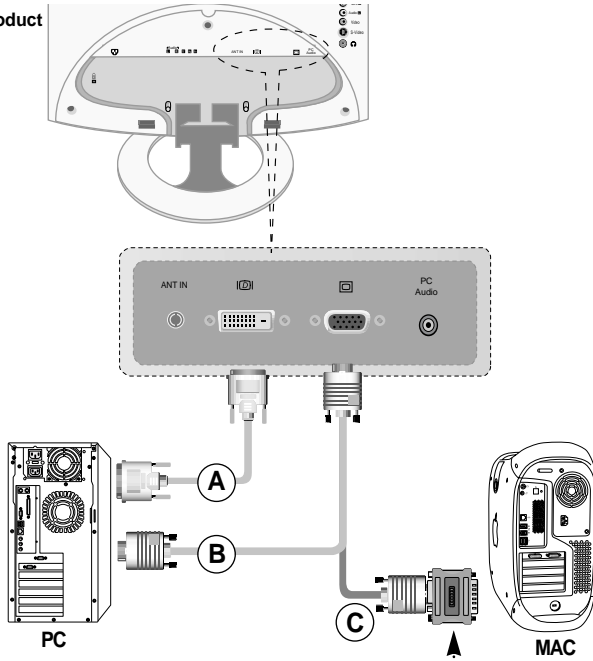
# Connecting to External Devices

## ■ ■ ■ When Connecting to your PC

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

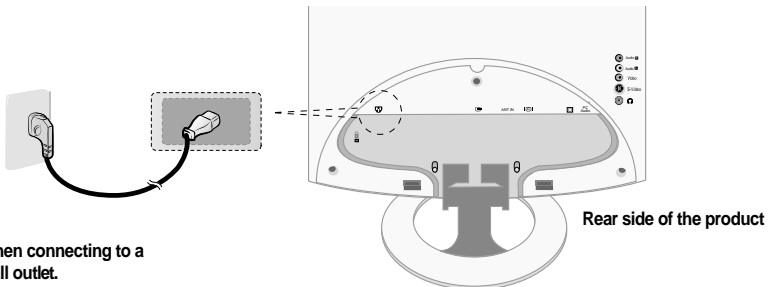
- (A)** When connecting with the DVI signal input cable.
- (B)** When connecting with the D-SUB signal input cable. (IBM compatible PC)
- (C)** When connecting with the D-SUB signal input cable. (Macintosh)

Rear side of the product



**Macintosh Adapter (Optional)**  
Use the standard Macintosh adaptor since an incompatible adaptor is available in the market. (Different signaling system)

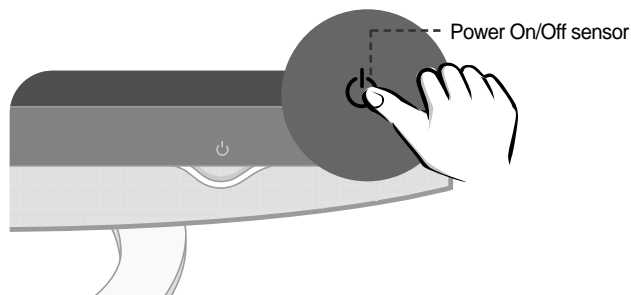
**2** Connect the power cord.



\* When connecting to a wall outlet.

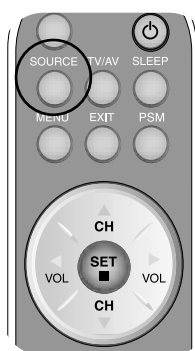
# Connecting to External Devices

- 3 Turn on power by touching the Power On/Off sensor on the product.

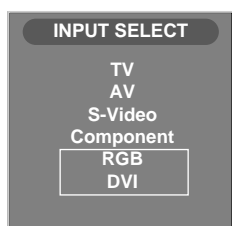


- 4 Turn on the PC.

- 5 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.



- A When connecting with a DVI signal input cable.  
• Select **DVI**
- B When connecting with a D-SUB signal input cable.  
• Select **RGB**



SOURCE → ▼▲ → OK



Note

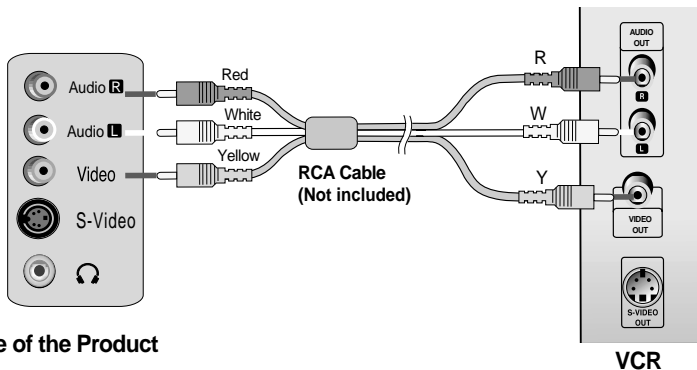
- **How to connect to two computers.**  
Connect the signal cables (DVI and D-Sub) to each computer.  
Press the SOURCE button in a remote controller to select the computer to use.
- **Directly connect to a grounded power outlet on the wall or a power bar with a ground wire.**

## ■ ■ ■ When watching VCR

**1** Connect the video cable as shown in the below figure and then connect the power cord (See page A12).

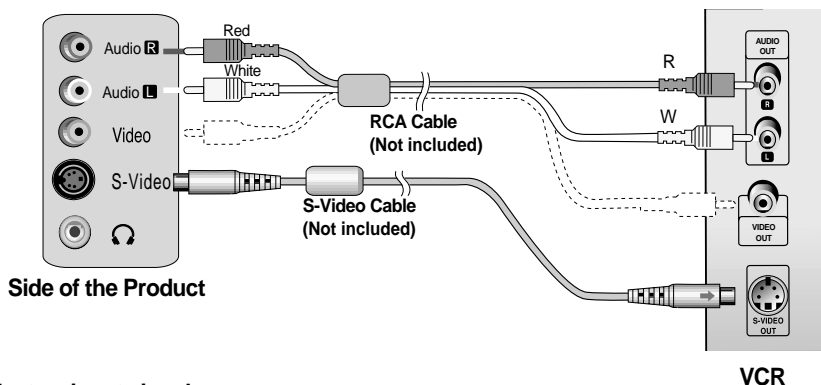
**A** When connecting with an RCA cable.

- 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.



**2** Select an input signal.

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

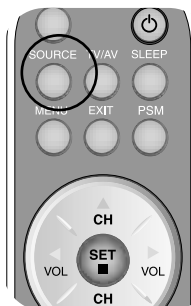
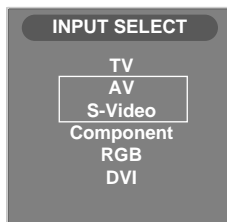
multimedia → ▼▲ → enter

**A** When connecting with a RCA cable.

- Select AV

**B** When connecting with a S-Video cable.

- Select S-Video



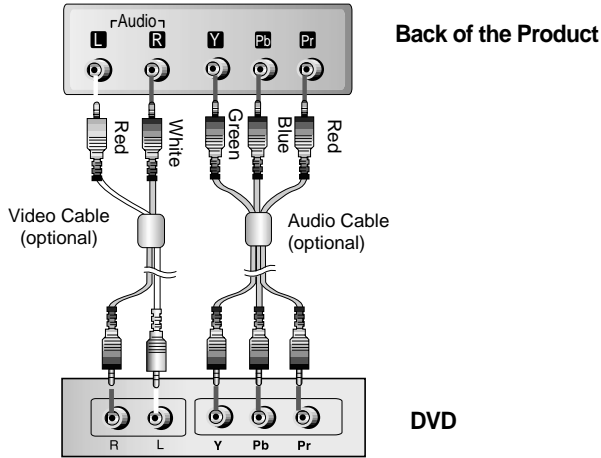
# Connecting to External Devices

## ■ ■ ■ When watching DVD

**1** Connect the video/audio cable as shown in the below figure and then, connect the power cord (See page A12).

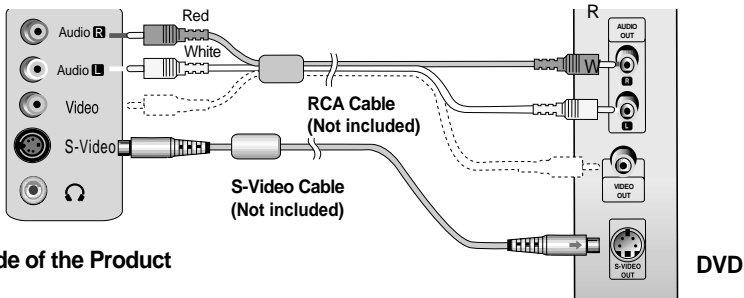
**(A)** When connecting with an Component cable.

- Connect the input terminal with a proper color match.



**(B)** When connecting with an S-Video cable.

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



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

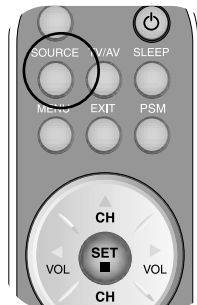
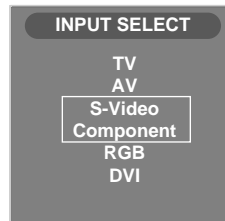
multimedia → ▼▲ → enter

**(A)** When connecting with a Component cable.

- Select **Component**

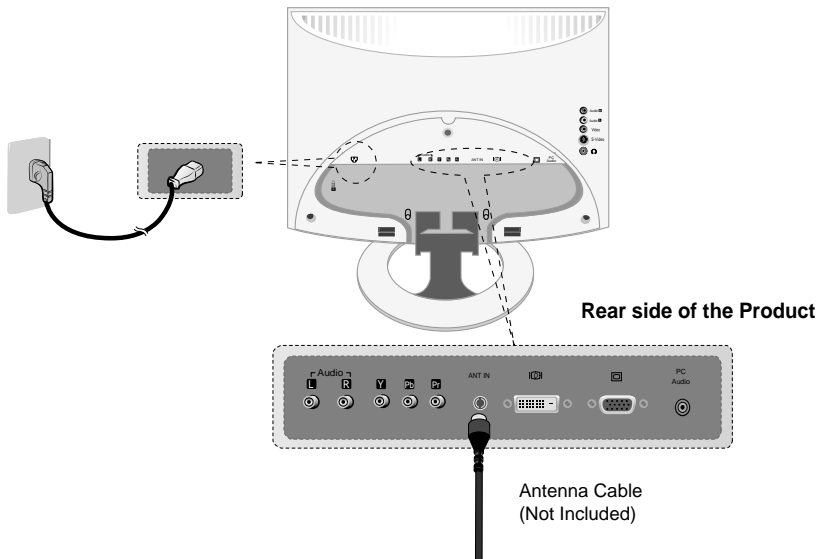
**(B)** When connecting with a S-Video cable.

- Select **S-Video**

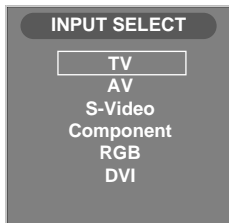
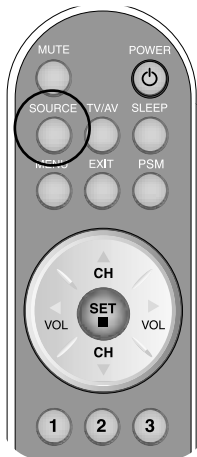


■ ■ ■ When watching TV

- 1 See if the antenna cable is connected at the rear side of the monitor and then, connect the power cord .



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

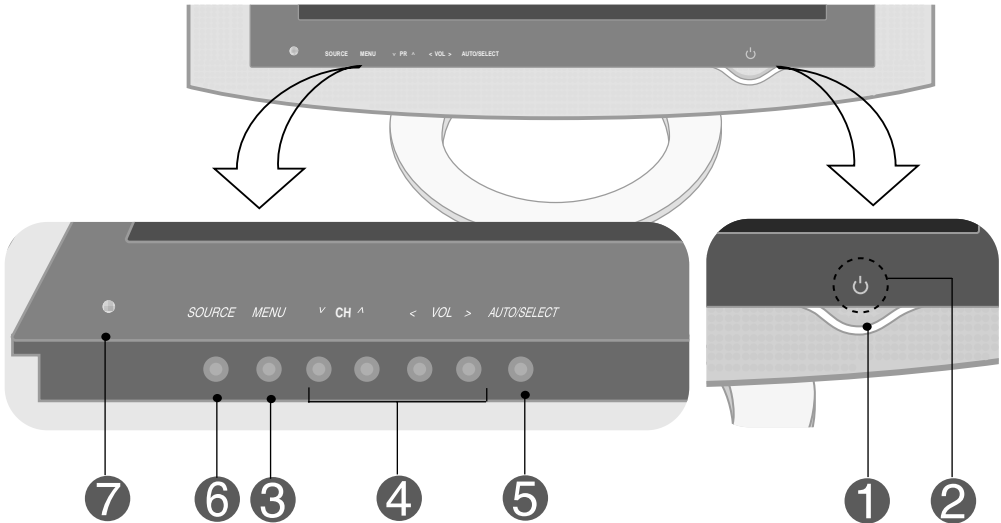


SOURCE → ▼▲ → OK

- Select TV

# Selecting and Adjusting the Screen

## ● Name of the Buttons in the Screen Adjustment Unit



1

### Power LED

- This indicator lights up blue when the display operates normally. If the display is in DPM (Energy Saving) mode, this indicator color changes to amber.

2

### Power On/Off sensor

- Touch the button to turn on the power. Touch the button again to turn it off.

3

### MENU Button

- Use this button to show/hide the OSD (On Screen Display) menu screen.

4

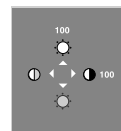
### OSD Select / Adjust Button

- Use these buttons to select an icon or adjust the setting in the OSD screen.



- Use these buttons to directly control brightness and contrast of the PC signal (RGB, DVI)

- Use these buttons to control the channel for the TV signal.



- < > • Adjust the volume.



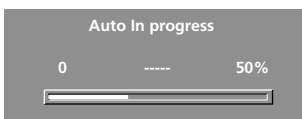


## ● Name of the Buttons in the Screen Adjustment Unit

### 5 AUTO/SELECT Button [For PC Analogue signal-RGB]



[For TV]



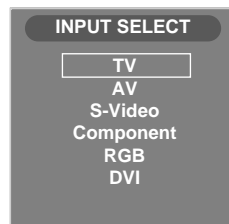
[Other signals]

- The current signal and mode information will be displayed.

### 6 SOURCE Button SOURCE → V Λ → AUTO/SELECT

- Select the input signal








<b>TV</b>	Television
<b>AV</b>	Composite video
<b>S-Video</b>	Separate Video
<b>Component</b>	Component signal
<b>RGB</b>	D-SUB analog signal
<b>DVI</b>	DVI digital signal



### 7 ● • The unit that receives the signal from the remote controller.

# Selecting and Adjusting the Screen

## OSD Menu

Icon	Function Description
 STATION	Set/Selects the channel.
 PICTURE	Adjusts screen brightness, contrast and color that you prefer.
 SOUND	Adjusts the audio function.
 TIMER	Adjusts the timer function.
 SPECIAL	Adjusts the screen status according to the circumstances.
 SCREEN	Adjusts the screen video.
 PIP/POP/PBP	Adjusts PIP/POP/PBP mode function.

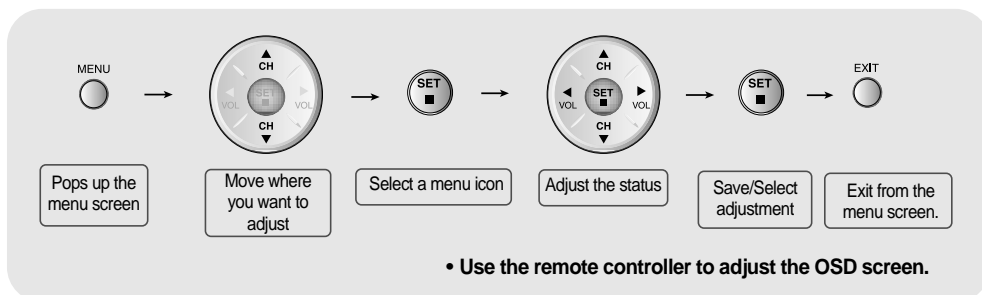


### Note

#### 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 product to a new computer or changing the mode. Refer to the following section to set an optimal product screen.

Auto In progress

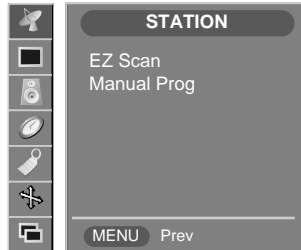
Press the **AUTO/SELECT** button (**AUTO** button in a remote controller) in the PC analog signal. Then, an optimal screen status will be selected that fits into the current mode.

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

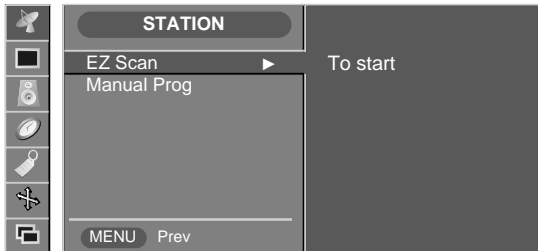
# Selecting and Adjusting the Screen



## Set/Selects the channel when using the TV



### EZ Scan



To automatically search the available TV channels.

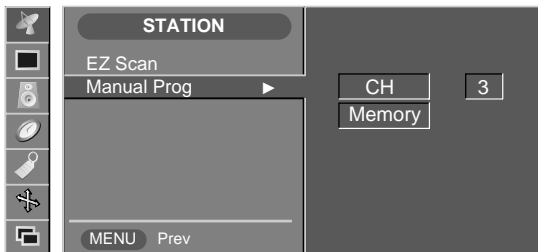
#### To Start

Press ► button to start automatic programming. all available TV channels are searched and stored automatically.

To stop auto CH progress, press the **MENU** button.

- Wait for auto CH progress to complete the channel search cycle before choosing a channel. The TV scans for over-the-air channels and then channels provided by a cable service.

### Manual Prog.



#### Channel

Press ► button and then use ◀/▶ button to select the channel.

#### Memory / Erase

User can do manual channel selection and store or erase individual channels. Press ▲/▼ button and then use ► button to select a channel you want to add to memory or erase. Press the ▼ button and then use ◀/▶ button to select **Memory**(add) or **Erase**(delete).

## Adjusting the picture function

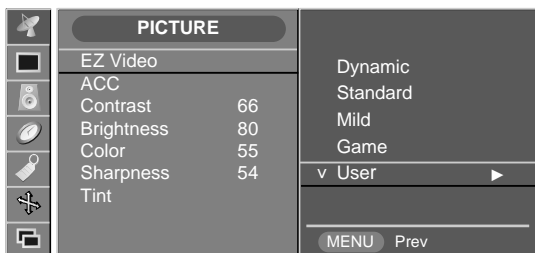
### EZ Video



TV/AV1/AV2/S-Video input only

The **EZ Video** function automatically adjusts the screen image quality depending on the AV/TV usage environment.

- **Dynamic** : Select this option to display with a sharp image.
- **Standard** : The most general and natural screen display status.
- **Mild** : Select this option to display with a mild image.
- **Game** : Select this option to enjoy dynamic image when playing a game.
- **User** : Select this option to use the user-defined settings.



**Contrast**  
To adjust the contrast of the screen.

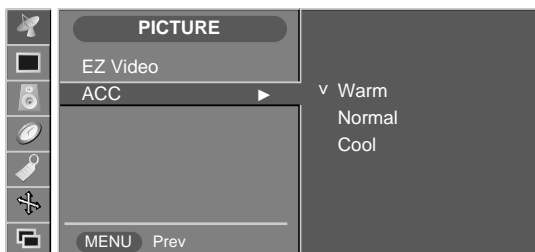
**Brightness**  
To adjust the brightness of the screen.

**Color**  
To adjust the color to desired level.

**Sharpness**  
To adjust the cleanness of the screen.

**Tint**  
To adjust the tint to desired level. (only 60Hz signal)

### ACC



Selecting a factory setting color set.

- **Warm** : Slightly reddish white.
- **Normal** : Slightly bluish white.
- **Cool** : Slightly purplish white.



#### Note

If the input is RGB PC(D-Sub analogue)/DVI PC(DVI Digital), the adjustable items in the ACC function are color temp (9300K / 6500K).

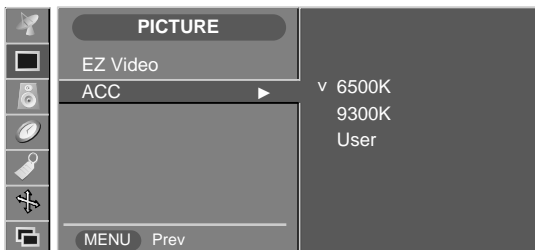
If the **PSM'** setting in the Picture menu is set to Dynamic, Standard, Mild or Game the subsequent menus will be automatically set.

# Selecting and Adjusting the Screen



## Adjusting the picture function

CSM

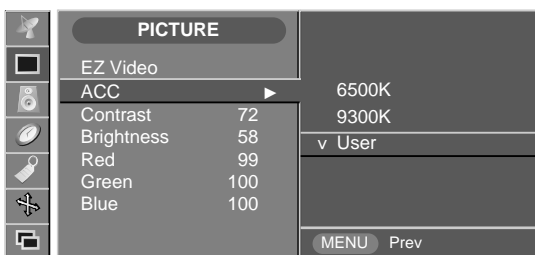


RGB PC / DVI PC input only

- **6500K/9300K**

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

- **User** : Select this option to use the user-defined settings.



- **Contrast**

To adjust the contrast of the screen.

- **Brightness**

To adjust the brightness of the screen.

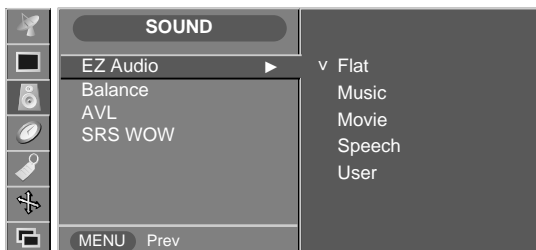
- **Red / Green / Blue**

Set your own color levels.



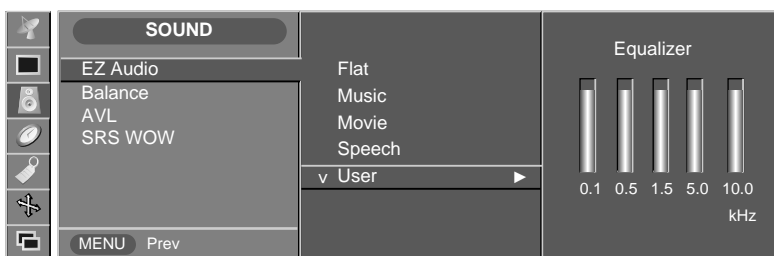
## Adjusting the sound function

### EZ Audio



- **Flat**  
The most commanding and natural audio.
- **Music**  
Select this option to enjoy the original sound when listening to the music.
- **Movie**  
Select this option to enjoy sublime sound.
- **Speech**  
Select this option to watch sports broadcasting.

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



### Equalizer

- 1) Press the **MENU** button and then use ▲ / ▼ button to select the **SOUND** menu.
- 2) Press the ► button and then use ▲ / ▼ button to select the **EZ Audio** menu.
- 3) Press ► button and then use ▲ / ▼ button to select **User**.
- 3) Press ► button and then use ◀ / ▶ button to select the band. Then press the ▲ / ▼ button to adjust the band level.

### Balance

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

### AVL

To adjust uneven sound volumes across all channels or signals automatically to the most appropriate level. To use this feature, select ON. (It is adjustable to the TV input signal only.)

### 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, user audio setting can not be adjusted.



### Note

When connected to your computer and the 'EZ Audio' setting in the audio menu is one of Flat, Movie, Music or Speech, the available menus are Balance, SRS WOW .

# Selecting and Adjusting the Screen



## Adjusting the timer function

### Clock



### Auto Clock Setup

This function is used to set up of current time.

You must set the time correctly before using on/off timer function.

- 1) Press the **MENU** button and then use ▲ / ▼ button to select the **TIMER** menu.
- 2) Press the ► button and then use ▲ / ▼ button to select the **Clock** menu.
- 3) Press ► button and then use ▲ / ▼ button to select **Auto**.
- 4) Press ► button and then use ◀ / ▶ button to select the time zone for your viewing area. Your choices are : AUTO, E.S.T(Eastern Standard Time), C.S.T(Central Standard Time), M.S.T(Mountain Standard Time), P.S.M(Pacific Standard Time), Alaska and Hawaii.
- 5) Press ▼ button and then use ◀ / ▶ button to set PBS channel.
- 6) Press ▼ button and then use ◀ / ▶ button to set D.ST (Daylight Savings Time) Auto, off or On, depending in whether or not your viewing area observes Daylight Savings Time.
- 7) Press **SET** button to save.

### Manual Clock Setup

You must set the time correctly before using on/off timer function.

- 1) Press the **MENU** button and then use ▲ / ▼ button to select the **TIMER** menu.
- 2) Press the ► button and then use ▲ / ▼ button to select the **Clock** menu.
- 3) Press ► button and then use ▲ / ▼ button to select **Manual**.
- 3) Press ► button and then use ▲ / ▼ button to set the hour(01~12).
- 4) Press ► button and then use ▲ / ▼ button to set the minutes(00~59).
- 5) Press ► button and then use ▲ / ▼ button to set the morning(AM) or afternoon(PM).
- 6) The default value is \_\_:\_\_.

### Off / On Timer

The off timer automatically switches the set to Off Mode at the pre-set time.

- 1) Press the **MENU** button and then use ▲ / ▼ button to select the **TIMER** menu.
- 2) Press the ► button and then use ▲ / ▼ button to select **Off Timer** or **On Timer**.
- 3) Press the ► button and then use ▲ / ▼ button to set the hour(01~12).
- 4) Press the ► button and then use ▲ / ▼ button to set the minutes(00~59).
- 5) Press ► button and then use ▲ / ▼ button to set the morning(AM) or afternoon(PM).
- 6) Press the ► button and then use ▲ / ▼ button to select **On** or **Off**.
- 7) **Only ON Timer function**; Press the ► button and then ▲ / ▼ button to adjust volume level and channel number.
- 8) Press the **SET/MENU** button to save.

### Auto Off

(TV input only)

If **Auto Off** is active and there is no input signal, the TV switches to off mode automatically after 10 minutes.

- 1) Press the **MENU** button and then use ▲ / ▼ button to select the **Auto Off** menu.
- 2) Press the ► button and then use ▲ / ▼ button to select **On** or **Off**.
- 3) Press the **SET/MENU** button to save .



Note

- In the event of power interruption (disconnection or power failure), the clock must be reset.
- Two hours after the set is switched on by the on time function it will automatically switch back to off mode unless a button has been pressed.
- Once the on or off time is set, these functions operate daily at the preset time.
- Off Timer function overrides On Timer function if they are set to the same time.
- The set must be in Off Mode mode for the On timer to work.





## Adjusting the special function



If you press the ?? button once, the following Input Signal Window will appear. Select the signal type you want using the ▲ / ▼ button.

**key lock** Use the ▲ / ▼ buttons to select ON or OFF. It can be set up so that it can only be used with the remote control. This feature can prevent unauthorized viewing.

In order to lock the OSD screen adjustment, set the Key lock tab to the 'on' position. In order to unlock it, do the following :

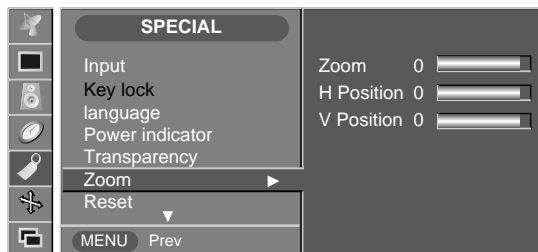
1) Push the **MENU** button on the remote control and set Key lock to the 'off' position.

**Language** To choose the language in which the control names are displayed.

**Power Indicator** Use this function to set the power indicator on the front side of the monitor to **ON** or **OFF**. If you set **OFF**, it will go off after 15 seconds when the power is turned on. If you set **ON** at any time, the power indicator will automatically be turned on.

**Transparency** Use this function to adjust the transparency of the OSD menu screen.

### Zoom



Use this function to zoom in the screen. When you turn the product off and on again, the default screen size will be restored.

Press the ► button to display the submenu for Zoom.

\* 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 and Volume will not be initialized.

# Selecting and Adjusting the Screen

## Closed Captions

Closed captioning is a process which converts the audio portion of a television program into written words which then appear as subtitles on the television screen. Closed captions allow viewers to read the dialogue and narration of television programs.

### Using Closed Captions

Captions are the subtitles of the dialogue and narration of television programs. For prerecorded programs, program dialogue can be arranged into captions in advance. It is possible to caption a live program by using a process called real-time captioning, which creates captions instantly. Real-time captioning is normally done by professional reporters using a machine shorthand system and computer for translation into English.

Captioning is an effective system for the hearing-impaired, and it can also aid in teaching language skills.

### Caption Tips

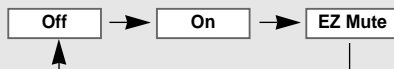
1. Not all TV broadcasts include closed caption signals.
2. Sometimes TV stations broadcast four different caption signals on the same channel. By selecting **From CC1 ~ CC4, TEXT1 ~ TEXT4** you can choose which signal you view **CC1** is usually the signal with the captions, while **Another mode** might show demonstration or programming information.
3. Your TV might not receive caption signals normally in the following situations.
  - Poor reception conditions are encountered :
    - **IGNITION** :  
Picture may flutter, drift, suffer from black spots, or horizontal streaking. Usually caused by interference from automobile ignition systems, neon lamps, electrical drills, and other electrical appliances.
    - **GHOSTS** :  
Ghosts are caused when the TV signal splits and follows two paths. One is the direct path and the other is reflected off tall buildings, hills or other objects. Changing the direction or position of the antenna may improve reception.
    - **SNOW** :  
If your receiver is located at the weak, fringe area of a TV signal, your picture may be marred by small dots. It may be necessary to install a special antenna to improve the picture.
  - An old, bad or illegally recorded tape is playing.
  - Strong, random signals from a car or airplane interfere with the TV signal.
  - The signal from the antenna is weak.
  - The program wasn't captioned when it was produced, transmitted, or taped.

### Captions (only TV mode)

Use the ▲ / ▼ buttons to select captions.

#### [Remote Control]

- Press the **CC** button repeatedly to display the caption option as shown below. Press the **SET** button to select the caption option.



#### \* EZ Mute

If sound is on, the caption will be off. On the contrary, if sound is off, the caption will be on.

#### Caption / Text

Use the ▲ / ▼ buttons to select caption mode.

Text services give a wide variety of information on all kind of subjects(ex. captioned program lists, weather forecasts, stock exchange topics, news for hearing-impaired...) on up to half of the TV screen. But not all stations offer text services, even though they might offer captioning.

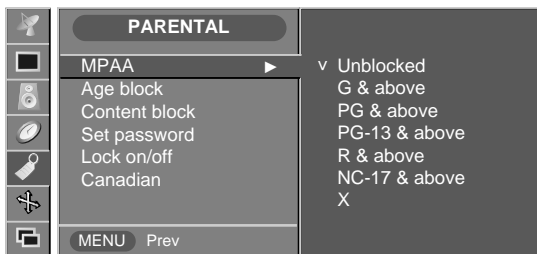
In the event you are receiving a poor signal, an empty black box may appear and disappear, even when the text mode is selected. This is a normal when receiving a poor signal.

This TV is programmed to remember the CAPTION / TEXT mode it was last set to, when you turn the power off.

■ **V-CHIP rating and categories**

- Rating guidelines are provided by broadcast station. Most television programs and television movies can be blocked by TV rating and/or individual categories. Movies that have been shown at the theaters or direct-to-video movies use the Movies Rating System(MPAA) only.

■ **For movies previously shown in theaters.**

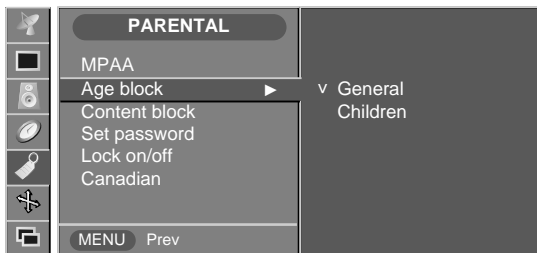


**MPAA**

■ **MOVIE Ratings :**

- Unblocked
- G&above : General audience
- PG&above : Parental guidance suggested
- PG-13&above : 13 years and up
- R&above : Restricted
- NC-17&above : 17 years and up
- X : Adult

If you set PG-13&above, G and PG movies will be available : PG-13, R, NC-17, and X will be blocked.



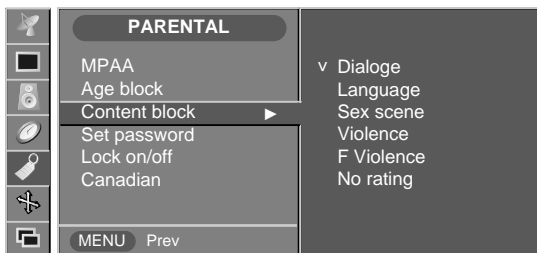
**Age Block**

■ **GENERAL TV Rating :**

- Unblocked
- TV-G&above : General audience / Individual categories do not apply.
- TV-PG&above : Parental guidance suggested
- TV-14&above : 14 years and up
- TV-MA : Mature audience

■ **CHILDREN TV Rating :**

- Unblocked
- TV-Y&above : Youth/Individual content categories do not apply.
- TV-Y7 : Youth, 7 years and up.



**Content Block**

■ **CONTENT Categories :**

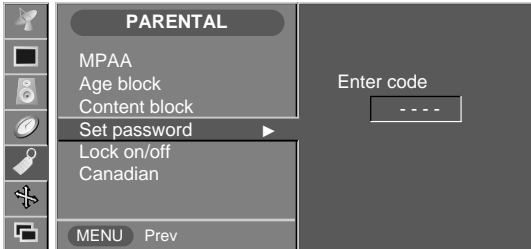
- Dialogue(sexual dialogue)  
: Applies to TV-PG&above, TV-14.
- Language(adult language)  
: Applies to TV-PG&above, TV-14&above, TV-MA.
- Sex (sexual situations)  
: Applies to TV-PG&above, TV-14&above, TV-MA.
- Violence  
: Applies to TV-PG&above, TV-14&above, TV-MA.
- F Violence(fantasy violence)  
: Applies only to TV-PG&above.

# Selecting and Adjusting the Screen



## Selecting the options

(To adjust the **CAPTION & VCHIP** function)



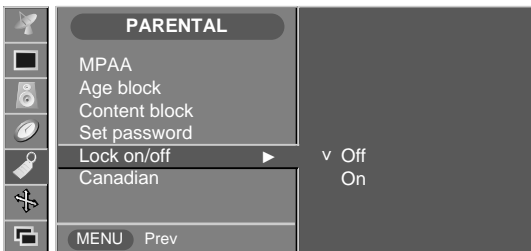
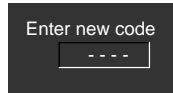
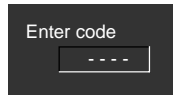
### Set Password

This menu is to be used to change password. Once the correct current password is entered using the number panel in a remote control, the window for new password will appear. Enter your choice of new four-digit password.

## Setting a password

You control access to the parental controls with a password. The default password is '0000'. You can change the password to any four-digit number.

1. Open the OSD. -> Press the **▲ / ▼** buttons to select the **Special** menu, then press the **▶** button to open the menu. -> Press the **▲ / ▼** buttons to select the **Parental** sub-menu, then press the **▶** button to open the sub-menu.
2. Use the number pad to enter your password when prompted.  
If you have not set a password, enter **0000**.  
If you are unable to correct the problem yourself, contact the service center.
3. Press the **▲ / ▼** buttons to select the **Set Password** sub-menu, then press the **▶** button to change the setting. Use the number button pad to enter a new four-digit password when prompted.
4. Re-enter the new four-digit password when prompted.



### Lock On/Off

To select the VCHIP function ON/OFF.



## Selecting the options (To adjust the CAPTION & VCHIP function - Canadian Only)

### ■ V-CHIP rating and categories (Optional) - Canadian Rating System

- Rating guidelines are provided by broadcast station. Most television programs and television movies can be blocked by TV rating and/or individual categories.

#### Canadian



#### English

##### ■ MOVIE Ratings :

- Unblocked
- C&Above : Under 8 years
- C8&Above : 8 years and up
- G&Above : General audience
- PG&Above : Parental guidance suggested
- 14+&Above : 14 years and up
- 18+ : Adult

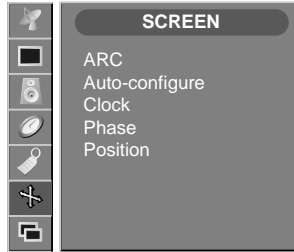
#### Français

##### ■ MOVIE Ratings :

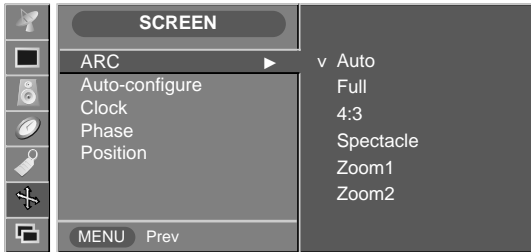
- Unblocked
- G&Above : General audience
- 8 ans + : 8 years and up
- 13 ans + : 13 years and up
- 16 ans + : 16 years and up
- 18 ans + : 18 years and up

# Selecting and Adjusting the Screen

## Adjusting Screen CLOCK/PHASE and Position(only PC)



### ARC



To select the image size of the screen.

**Full / 4:3 / 16:9 / Zoom** In only TV/AV1/AV2/S-Video **4:3** aspect ratios is not available in 20 inches model.

**FULL/1:1** in DVI/RGB

### Auto-Configure

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

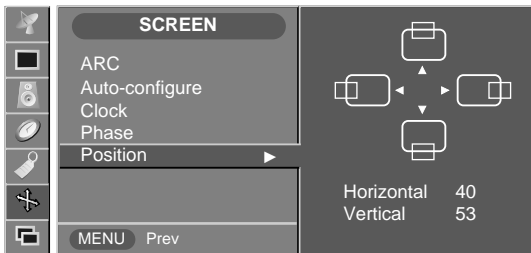
### Clock

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

### Phase

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

### Position



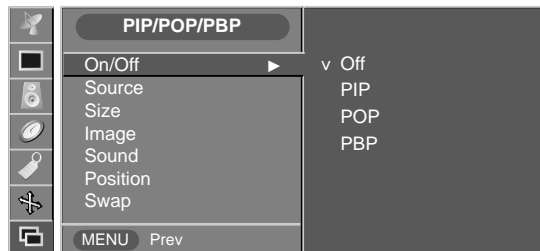
To adjust position of the screen.

Press the ► button to display the submenu for position.

- ◀ Left
- ▶ Right    Moving the screen position horizontally.
- ▲ Up
- ▼ Down    Moving the screen position vertically.



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

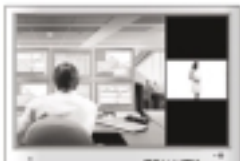


### On/Off



#### PIP

After selecting **PIP/POP/PBP** in the **PIP On/Off** menu, the following menu items can be adjusted.



#### POP

After selecting **PIP/POP/PBP** in the **POP On/Off** menu, the following menu items can be adjusted.



#### PBP

After selecting **PIP/POP/PBP** in the **PBP On/Off** menu, the following menu items can be adjusted.

### Source

To select an input signal for PIP/POP/PBP.

### Size

To adjust the size of the PIP/POP/PBP screen. (PIP : Small, Medium, Large / PBP : Full, 4:3)

### Image

To adjust the image of the PIP/POP/PBP screen; Press the ► button to display the submenu for PIP/POP/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.



#### ■ Contrast

Adjust PIP/POP/PBP screen contrast.

#### ■ Brightness

Adjust PIP/POP/PBP screen brightness.

#### ■ Colour

Adjust the PIP/POP/PBP screen colour.

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

### Sound

To turn the PIP/POP/PBP sound on/off.

# Selecting and Adjusting the Screen



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

Position

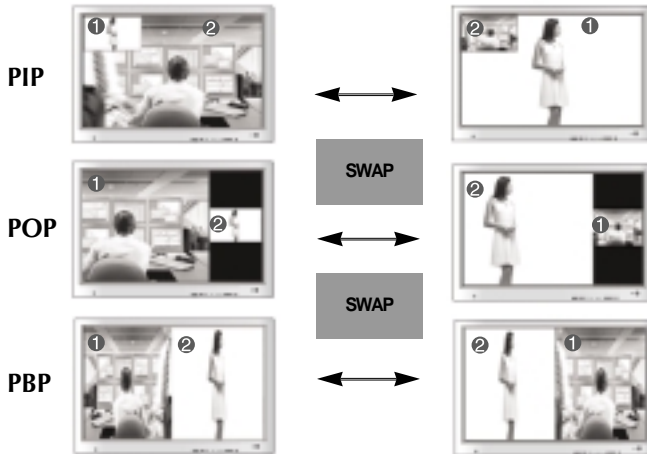


To adjust the position to PIP screen.

Swap



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





# Troubleshooting

## No image is displayed

- Is the product 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 amber?
  - 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 product 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 product. Adjust the frequency range by referring to the Specifications in this manual.
    - \* **Maximum resolution**
    - 17, 19 inches : 1280 x 1024 @75Hz
    - 20.1 inches : 1600 x 1200 @60Hz
  - The signal cable between PC and product is not connected. Check the signal cable.
  - Press the 'SOURCE' button in the remote controller to check the input signal.

## 'Unknown Product' message appears when the product is connected.

- Did you install the driver?
- Install the product driver, which is provided with the product, 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 local key.
- The control locking function prevents unintentional OSD setting change due to careless usage. To unlock the controls.(You can only set this function using the remote controller.)



### Note

\* **Vertical frequency:** To enable the user to watch the product 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 the 1 is divided by horizontal interval, the number of horizontal lines displayed every second can be tabulated as the horizontal frequency. The unit is kHz.

# Troubleshooting

## 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 menu in OSD .
  - See if the video card resolution and frequency are supported by the product. 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 menu in OSD.
- 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 menu in OSD.
- 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.
- No sound appears in the TV channel display window.
  - See if the TV sound is set to mono. If it is, the sound will not be displayed.
- Brightness differs in the main and sub screen when connected to the PC.
  - You cannot adjust brightness 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.
- The screen is displayed abnormally.
  - The proper input signal is not connected to the signal port. Connect the signal cable that matches with the source input signal.
- No sound appears in the TV channel display window.
  - See if the TV sound is set to mono. If it is, the sound will not be displayed.

## 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 equalize sound.
- Sound is too low.
  - Adjust the volume.

## The TV function does not work.

- The TV signal is not being received.
  - See if you have selected the proper channel mode.
  - Use the automatic channel setup function.
  - See if the TV antenna is properly connected.

## 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.

## After-image appears on the product.

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

# Specifications

## [17 inches]

<b>LCD Panel</b>	<b>Screen Type</b>	17 inches (431.8mm) TFT (Thin Film Transistor) LCD (Liquid Crystal Display) Panel Visible diagonal size: 431.8mm
	<b>Pixel Pitch</b>	0.264mm
<b>Video Signal</b>	<b>Max. Resolution</b>	1280X1024 @75Hz
	<b>Recommended Resolution</b>	1280X1024 @60Hz
	<b>Horizontal Frequency</b>	D-SUB : 30 - 83 kHz DVI-D : 30 - 71 kHz
	<b>Vertical Frequency</b>	56 - 75 Hz
	<b>Synchronization Type</b>	Separate/Composite/SOG (Sync On Green)/Digital
<b>Input Connector</b>		15-pin D-Sub type, DVI-D (digital), S-Video, composite video, Scart
<b>Power</b>	<b>Rated Voltage</b> <b>Power Consumption</b>	AC 100-240V~ 50/60Hz 1.0A Normal operation: 55W Power saving preparation state: ≤ 4W Power saving state: ≤ 4W Power switch off: ≤ 2W
<b>Tilt</b>	<b>Tilt Range</b>	-5° ~25°
	<b>Tilt Stand</b>	Attached
<b>Dimension/Weight</b>	<b>Size (WxLxH)</b>	501.5mm x 158.2 mm x 500.3 mm
	<b>Weight (excl. package)</b>	6.65 kg (14.66 lbs)
<b>Environmental Conditions</b>	<b>Operational Condition</b>	Temperature: 10°C ~ 35°C , Humidity: 10% ~ 80%
	<b>Storage Condition</b>	Temperature: -20°C ~ 60°C , Humidity: 5% ~ 95%

**[19 inches]**

<b>LCD Panel</b>	<b>Screen Type</b>	19 inches (482.6mm) TFT (Thin Film Transistor) LCD (Liquid Crystal Display) Panel Visible diagonal size: 482.6mm
	<b>Pixel Pitch</b>	0.294mm
<b>Video Signal</b>	<b>Max. Resolution</b>	1280X1024 @75Hz
	<b>Recommended Resolution</b>	1280X1024 @60Hz
	<b>Horizontal Frequency</b>	D-SUB : 30 - 83 kHz DVI-D : 30 - 71 kHz
	<b>Vertical Frequency</b>	56 - 75 Hz
	<b>Synchronization Type</b>	Separate/Composite/SOG (Sync On Green)/Digital
<b>Input Connector</b>		15-pin D-Sub type, DVI-D (digital), S-Video, composite video, Scart
<b>Power</b>	<b>Rated Voltage</b> <b>Power Consumption</b>	AC 100-240V~ 50/60Hz 1.0A Normal operation: 60W Power saving preparation state: ≤ 4W Power saving state: ≤ 4W Power switch off: ≤ 2W
<b>Tilt</b>	<b>Tilt Range</b>	-5° ~25°
	<b>Tilt Stand</b>	Attached
<b>Dimension/Weight</b>	<b>Size (WxLxH)</b>	542.5mm x 222.8 mm x 541.4 mm
	<b>Weight (excl. package)</b>	7.75 kg (17.09 lbs)
<b>Environmental Conditions</b>	<b>Operational Condition</b>	Temperature: 10°C ~ 35°C , Humidity: 10% ~ 80%
	<b>Storage Condition</b>	Temperature: -20°C ~ 60°C , Humidity: 5% ~ 95%

# Specifications

## [20.1 inches]

<b>LCD Panel</b>	<b>Screen Type</b>	20.1 inches (510mm) TFT (Thin Film Transistor) LCD (Liquid Crystal Display) Panel Visible diagonal size: 510mm
	<b>Pixel Pitch</b>	0.2805mm
<b>Video Signal</b>	<b>Max. Resolution</b>	1600X1200 @60Hz
	<b>Recommended Resolution</b>	1600X1200 @60Hz
	<b>Horizontal Frequency</b>	D-SUB : 30 - 92 kHz DVI-D : 30 - 80 kHz
	<b>Vertical Frequency</b>	56 - 85 Hz
	<b>Synchronization Type</b>	Separate/Composite/SOG (Sync On Green)/Digital
<b>Input Connector</b>		15-pin D-Sub type, DVI-D (digital), S-Video, composite video, Scart
<b>Power</b>	<b>Rated Voltage</b> <b>Power Consumption</b>	AC 100-240V~ 50/60Hz 1.2A Normal operation: 70W Power saving preparation state: ≤ 4W Power saving state: ≤ 4W Power switch off: ≤ 2W
<b>Tilt</b>	<b>Tilt Range</b>	-5° ~25°
	<b>Tilt Stand</b>	Attached
<b>Dimension/Weight</b>	<b>Size (WxLxH)</b>	575.1mm x 221.1 mm x 557.5 mm
	<b>Weight (excl. package)</b>	8.7 kg (19.18 lbs)
<b>Environmental Conditions</b>	<b>Operational Condition</b>	Temperature: 10°C ~ 35°C , Humidity: 10% ~ 80%
	<b>Storage Condition</b>	Temperature: -20°C ~ 60°C , Humidity: 5% ~ 95%

**PC Mode – Preset Mode**

**[17, 19 inches]**

Preset mode		Horizontal Frequency (kHz)	Vertical Frequency (Hz)	Preset mode		Horizontal Frequency (kHz)	Vertical Frequency (Hz)
1	VGA 640 x 350	31.469	70	8	VESA 1024 x 768	48.363	60
2	VGA 720 x 400	31.468	70	9	VESA 1024 x 768	60.123	75
3	VGA 640 x 480	31.469	60	10	MAC 1152 x 870	68.681	75
4	VESA 640 x 480	37.500	75	11	MAC 1152 x 900	61.805	66
5	VESA 800 x 600	37.879	60	12	VESA 1280 x 1024	63.981	60
6	VESA 800 x 600	46.875	75	13	VESA 1280 x 1024	79.980	75
7	MAC 832 x 624	49.725	75				

**[20.1 inches]**

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	60.020	75
2	VGA 640 x 480	31.469	60	12	VESA 1024 x 768	68.680	85
3	VGA 640 x 480	37.500	75	13	MAC 1152 x 870	68.680	75
4	VGA 640 x 480	43.270	85	14	MAC 1152 x 900	61.800	66
5	VGA 720 x 400	31.469	70	15	VESA 1280 x 1024	63.980	60
6	VESA 800 x 600	37.880	60	16	VESA 1280 x 1024	79.980	75
7	VESA 800 x 600	46.880	75	17	VESA 1600 x 1024	62.110	60
8	VESA 800 x 600	53.670	85	18	VESA 1600 x 1200	75.000	60
9	MAC 832 x 624	49.720	75	19	VESA 1600 x 1200	73.530	60
10	VESA 1024 x 768	48.360	60				

Mode 18 : Analogue only

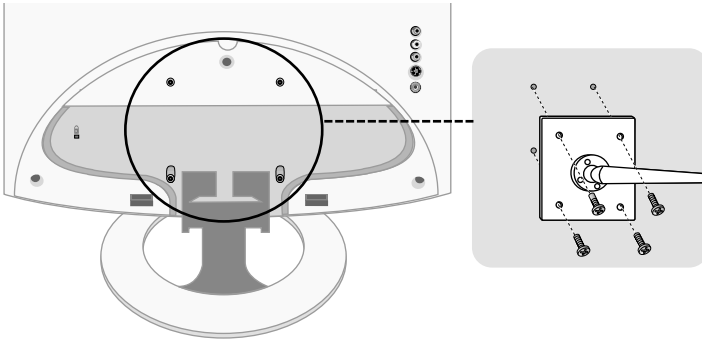
Mode 19 : Digital only

**Power LED**

Mode	Product
Normal Operation	Blue
Pre-power Saving State	Amber
Power Saving State	Amber
Power Switch Off	-

# Specifications

## ● VESA wall mounting



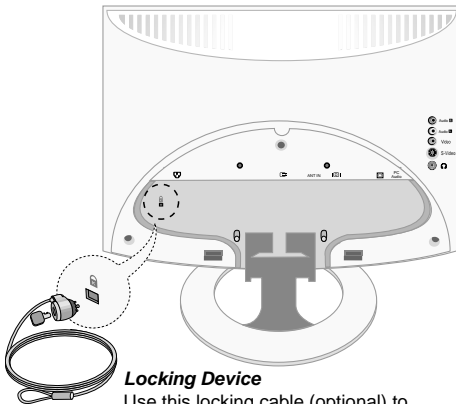
### VESA wall mounting

Connected to another object (stand type and wall-mounted type.

This monitor accepts a VESA-compliant mounting interface pad (optional)

For further information, refer to the VESA Wall Mounting Instruction Guide.

## ● Theft prevention locking device



### Locking Device

Use this locking cable (optional) to prevent theft.







<http://www.lge.com>

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