

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

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

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

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

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

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

Shipping Package

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

CFC Compounds in Distribution Packaging

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

Design for Disassembly/Recycling

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

Monitor Disposal

WARNING

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

Regulatory Information cont.

TCO'99



Congratulations!

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

Why do we have environmentally labelled computers?

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

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

What does labelling involve?

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

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

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

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

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

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

TCO Development

SE-114 94 Stockholm, Sweden

Fax: +46 8 782 92 07

Email (Internet): development@tco.se

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

Environmental requirements

Flame retardants

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

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

Cadmium**

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

Regulatory Information cont.

Mercury**

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

CFCs (freons)

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

Lead**

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

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

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

EPA (U.S.A only)

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



EPA POLLUTION PREVENTER

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

NOM MARK (Mexico only)



GOST MARK



BZ03

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

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ENGLISH

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Safety Precautions

Please read these safety precautions carefully before using the product.

 **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 Product

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 product or sit upon it.**
 - If the product 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 product 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 product or the case is broken, turn off the product 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 product, 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 product, unplug the power cord and contact the service center.

Caution

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

Electrical Power Related Precautions

Warning

- **Make sure to connect the power cable to the grounded current.**
 - You may be electrocuted or injured.
- **Use the rated voltage only.**
 - The product 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 product for a long time, unplug the power cable from the product.**
 - 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 product is in use.**
 - Electrical shock can damage the product.

Precautions in Moving the Product

Warning

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

Safety Precautions

Caution

- **Do not shock the product when moving it.**
 - You may be electrocuted or the product 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 product, the damaged product can cause electric shock or fire. Contact with the service center for repair.

Precautions in Using the Product

Warning

- **Do not disassemble, repair or modify the product 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 product or scrub with an inflammable substance (thinner or benzene). Fire or electric shock accident can occur**
- **Keep the product away from water.**
 - Fire or electric shock accident can occur.

Caution

- **Do not put or store inflammable substances near the product.**
 - There is a danger of explosion or fire due to 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 product, which can cause electric shock or serious malfunction.
- **Take a rest from time to time to protect your vision.**
- **Keep the product clean at all times.**
- **Take a comfortable and natural position when working with a product to relax the muscles.**
- **Take a regular break when working with a product 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 product.**
 - Your vision may be impaired if you look at the product 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 product. (Do not use benzene, thinner or alcohol.)**
 - Product can be deformed.

On Disposal

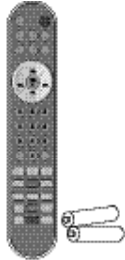
- The fluorescent lamp used in this product contains a small amount of mercury.
- Do not dispose of this product with general household waste.
Disposal of this product must be carried out in accordance to the regulations of your local authority.

Accessories

ENGLISH

Please check the accessories in the product package.

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



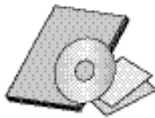
Remote Control
/Batteries (2ea)



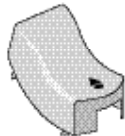
Speaker Cover (2ea)
/Cover Picker



Power Cord



User's Guide / Drive CD
Cards



Cable Cap



Audio Cable (PC)



D-Sub Signal Cable

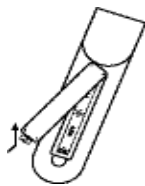


DVI-D Signal Cable



USB Cable
(only applies to the
20.1 inch product)

● Inserting batteries into remote control.



1. Take out the battery cap.

2. Insert the battery with correct polarity (+/-).

3. Close the battery cap.

- You can use a remote control 7 meter distance and 30 degree (left/right) within the receiving unit scope.

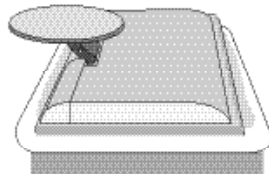
- Dispose of used batteries in the recycle bin to prevent environmental pollution.

Before Connecting to the PC

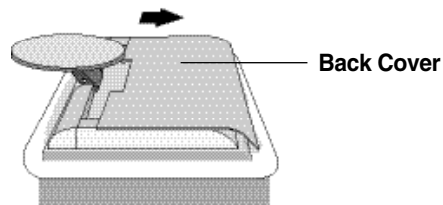
- Before setting up the product, ensure that the power to the product, the computer system, and other attached devices is turned off.

Unfolding the stand base

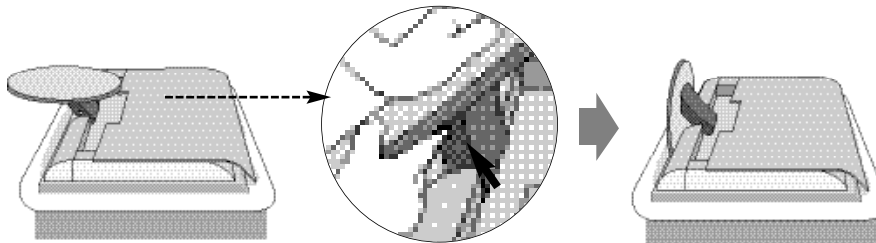
- 1 Place the product with its front facing downward on a cushion or soft cloth.



- 2 Push up the back cap.



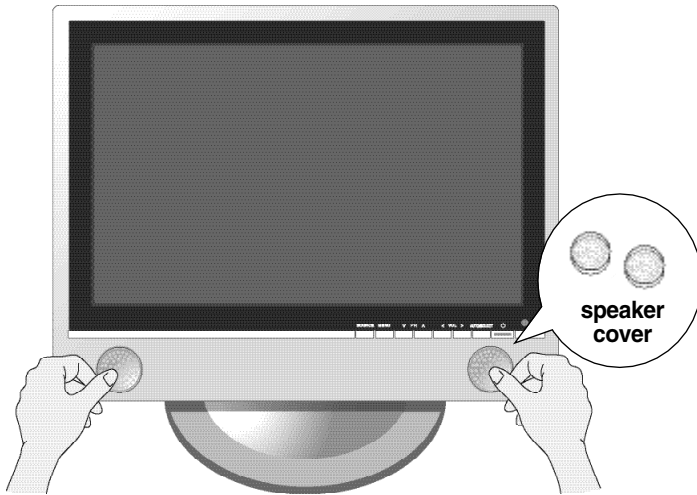
- 3 Hold down the release button inside the stand and strongly pull out the stand with your two hands.



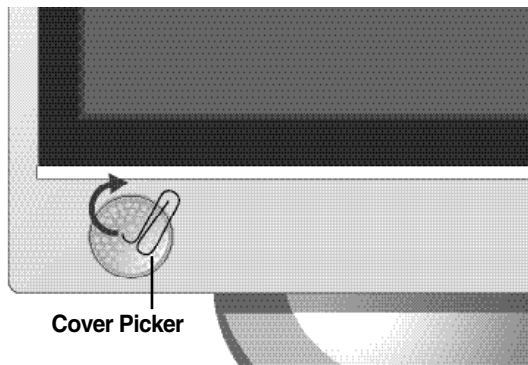
The stand won't move if you don't press release button.
If the release button does not operate easily, fold the stand a bit more, and then press the release button.

- Install the speaker covers on the both sides of the speaker for protection.

Installing and removing the cover on/from the speaker



Installing the speaker cover



Removing the speaker cover

Important Product Features

● **Swapping Function**

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

● **Spectacle Function**

The screen center area is close to a 4:3 ratio and the outskirts area is expanded by more than Spectacle. Therefore, the different screen ratio is applied for each area. Because most ordinary people concentrate their focus on the screen center, a non-linear ratio increase at the outskirts area is not recognized, which makes it possible to watch 4:3 TV screen with a wide screen.

However, the spectacle function is useful in watching TV or motion pictures but is not suitable for the PC environment in which you perform graphic or document work.

● **Sleep Function**

When watching AV/TV – The product will be automatically turned off after a certain period of time. Press this button repetitively to select an appropriate time duration.

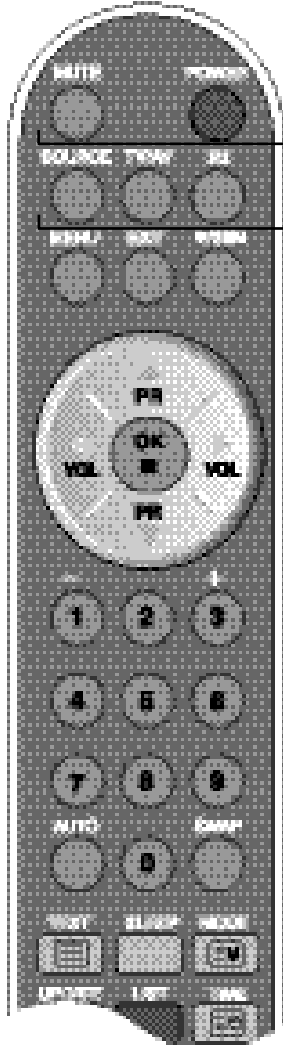
● **Media Manager (only 20.1 inch)**

With this card, you are free to watch pictures and video, and enjoy listening to music without turning on your computer.

Name and Function of the Parts

● Name of the Remote Control Buttons

Remote Control



MUTE

Use the this button so that no sound comes out temporarily.

POWER

Able to power On/Off.

SOURCE



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

* Card Reader : Optional

TV/AV : TV/AV button

TV > AV1 > AV2 > S-Video

I/II : Bilingual choice and sound mode selection

Press this button

[TV]

- to switch from **Stereo** to **Mono** sound in case of stereo transmission, or from **Nicam Stereo** to **Nicam Mono**, in case of digital transmission.
- to switch from **Nicam Dual I** to **Nicam Dual II** or **Nicam Dual I+II** in case of Nicam Dual transmission.
- to choose between **Dual I**, **Dual II** or **Dual I+II** in case of bilingual transmission :
 - Dual I** sends the primary broadcast language to the loudspeakers ;
 - Dual II** sends the secondary broadcast language to the loudspeakers ;
 - Dual I+II** sends a separate language to each loudspeakers.

[AV]

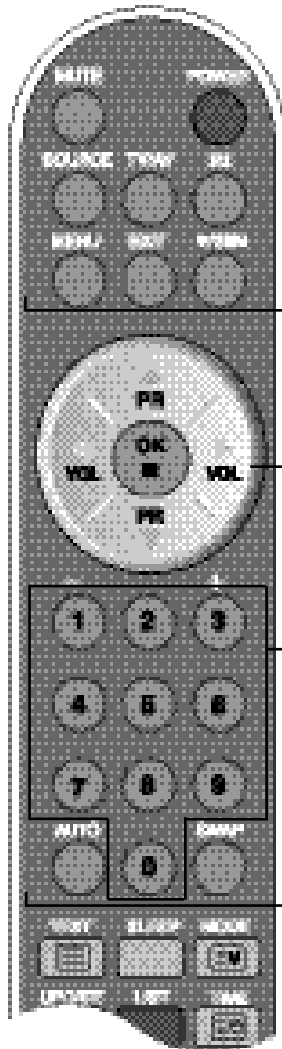
In AV mode, you can select output sound for the left and right loudspeakers.

Repeatedly press the I/II button to select the sound output.

- L+L : Audio signal from audio L input is sent to left and right loud-speakers.
- L+R : Audio signal from audio L input is sent to left loud-speaker and audio signal from audio R input is sent to right loud-speaker.
- R+R : Audio signal from audio R input is sent to left and right loud- speakers.

■ **NOTE** : In case of weak stereo sound signals, with stereo or Nicam stereo transmission, select mono reception.

Name and Function of the Parts



MENU
Use this button to enter the On Screen Display menu.

EXIT
Use this button to exit the On Screen Display menu.

***SSM (Sound Status Memory)**
Use this button to select the sound tone.
Press repeatedly to select Flat, Music, Movie, Speech, User sound tone.

PR (▲ ▼) Buttons
Able to change channel.

VOL (◀ ▶) Buttons
Able to adjust sound.

OK Button
Use when functional adjustment is completed.

Number buttons
Able to directly select and change channel.

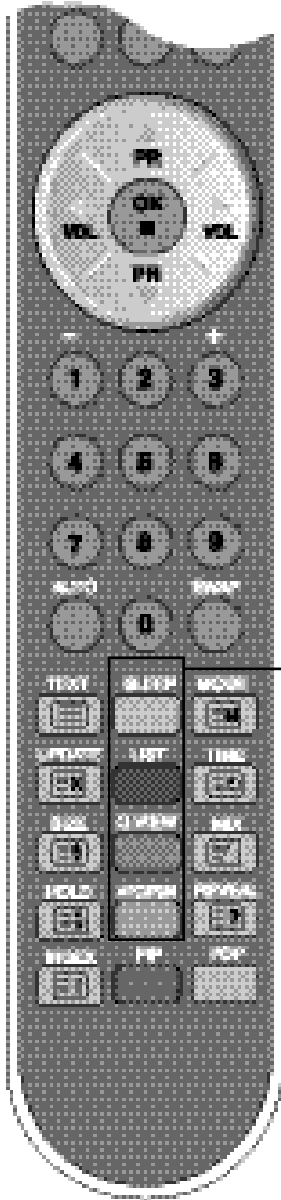
AUTO Button

- 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.

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

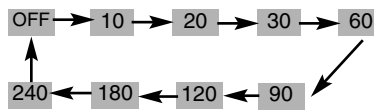
Remote Control

ENGLISH



SLEEP : SLEEP Timer

You can set a time period after which the TV / AV1 / AV2 / S-Video should switch itself to standby. Press the key repeatedly to select the number of minutes.



LIST : Programme list

To display the programme list (0~ 99).



Note: TV channels displayed in blue have been setup to be skipped in the Programme Edit menu

Q.VIEW : QUICK VIEW Button

To display the previously selected TV channel.

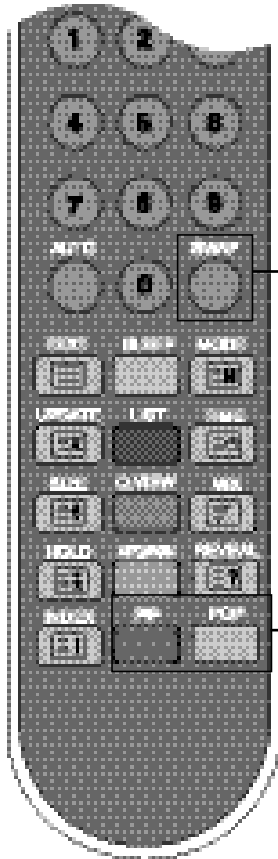
* Favourite Program On : Rotate Favourite channel

APC / PSM Button

Press repeatedly to select Dynamic, Standard, Mild, Game, User or Dynamic picture mode. This function is not supported in PC mode.

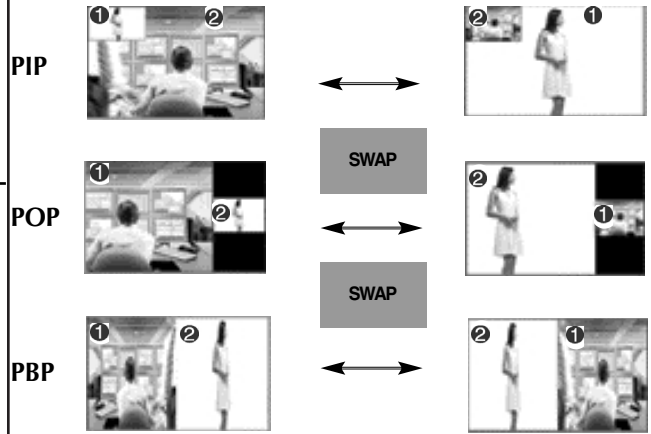
Name and Function of the Parts

Remote Control - PIP/POP/PBP function



1. Swap Button

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



2. PIP (Picture in Picture) Button

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

3. 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



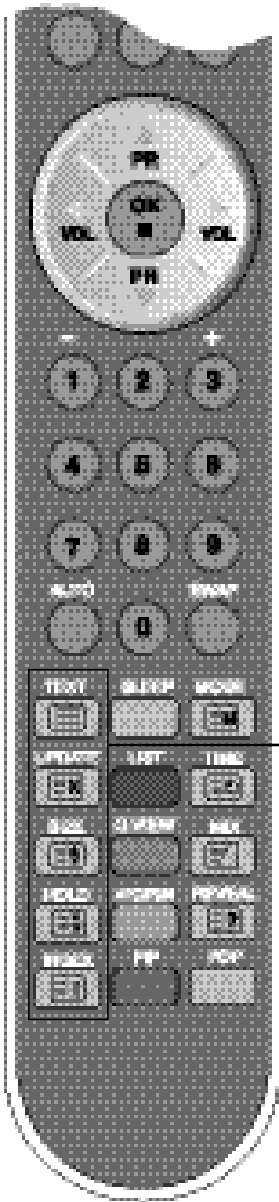
<Table of PIP/POP/PBP Function Support>

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

*CARD : optional

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.

Remote Control - Using the Teletext function



TEXT

To select the teletext on or off. The main index page or the last selected page appears on the screen together with an information headline and an option line at the bottom of the screen.

UPDATE

Press the button to appear the TV programme. At the top of screen indicates that you are still in the teletext mode. Before interrupting teletext, you may select a page number. When the page has been found, the information line appears briefly on your screen. Press the button again to reappear teletext.

SIZE

Press the button repeatedly to display the upper part, the lower part and then to return to the normal page size.

HOLD

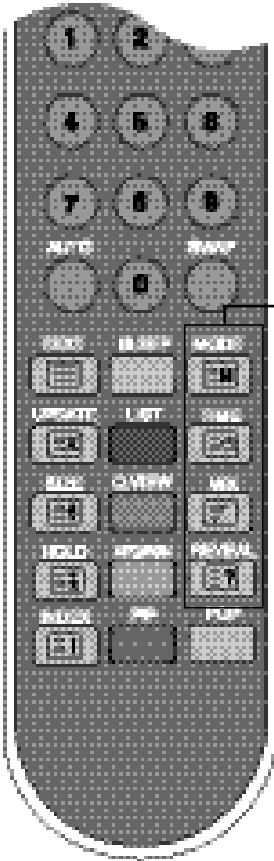
Press the button to stop the automatic rotating of the subpages. Press the button again to continue the automatic rotating again.

INDEX

To display the main index.

Name and Function of the Parts

Remote Control - Using the Teletext function



MODE

The mode will be switched in the Teletext mode.

TIME

press this button to select a sub-page number. The sub-page number is displayed at the bottom of the screen. To hold or change the sub page, press the RED/GREEN, ▲▼ or NUMBER buttons. Press again to exit this function.

MIX

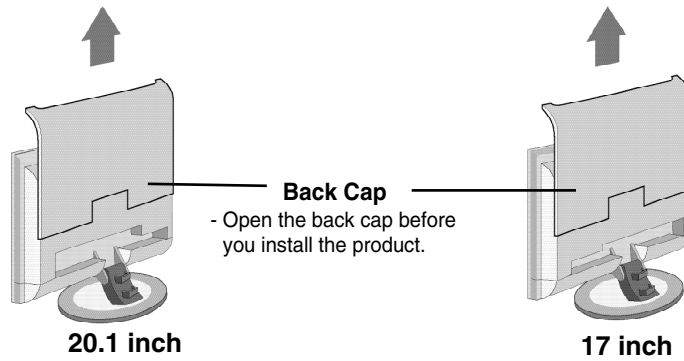
Display the teletext pages superimposed on the TV picture. To switch the TV picture off press this button again.

REVEAL

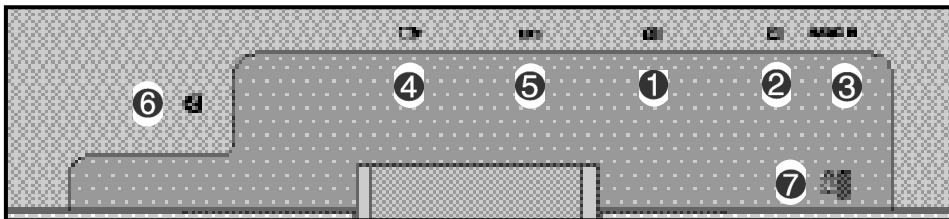
Press the button to reveal/conceal the hidden information, such as solutions to riddles and puzzles. Press this button again to remove the information from the display.

Rear View

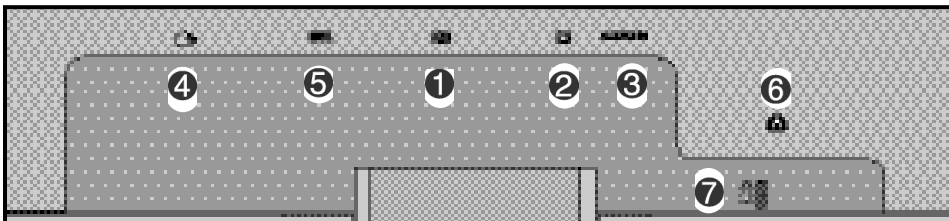
First, pull out the back cap attached to the rear of the product to detach, as shown.



17 inch



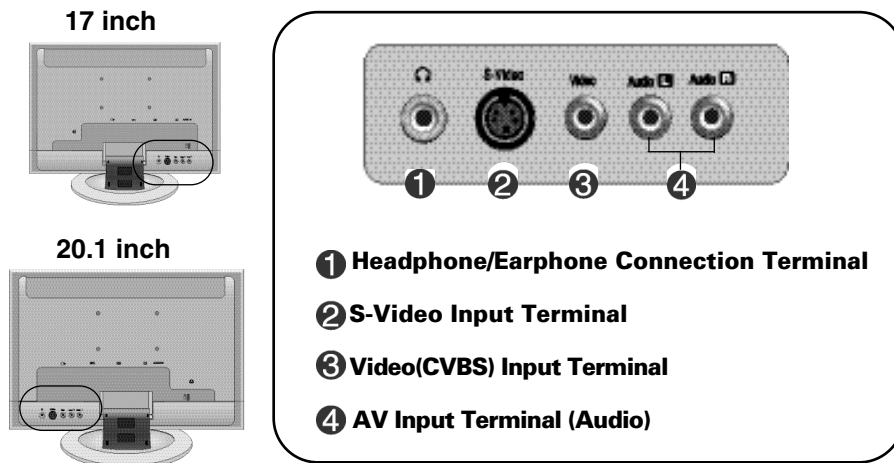
20.1 inch



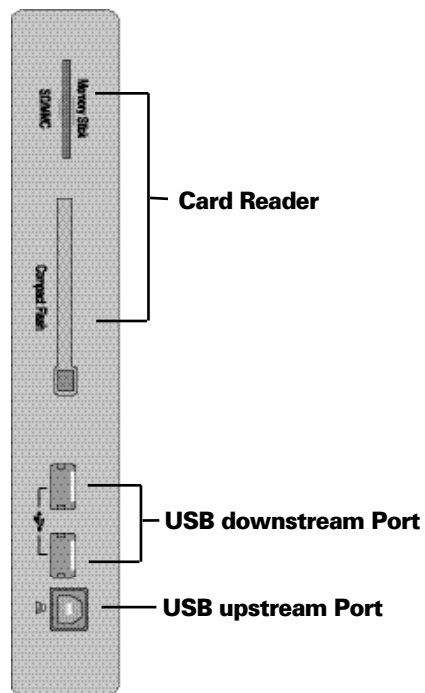
- ① DVI Signal Connector
- ② DSUB Analogue Signal Connector
- ③ Audio Jack :Connect to the jack in the PC sound card.
- ④ SCART Input/Output Terminal : Connect the SCART CABLE
- ⑤ TV Tuner Jack: Connect the antenna.
- ⑥ Power Cord Connector : Connect the power cord.
- ⑦ Theft prevention locking device

Name and Function of the Parts

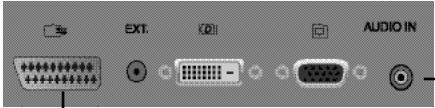
Rear View



Side View (Optional-20.1 inch)



● Sound card Connection Terminal Input Terminal



PC Audio Input Terminal
 - Connect the audio cable to the LINE OUT jack in the PC sound card.

Connect the SCART CABLE

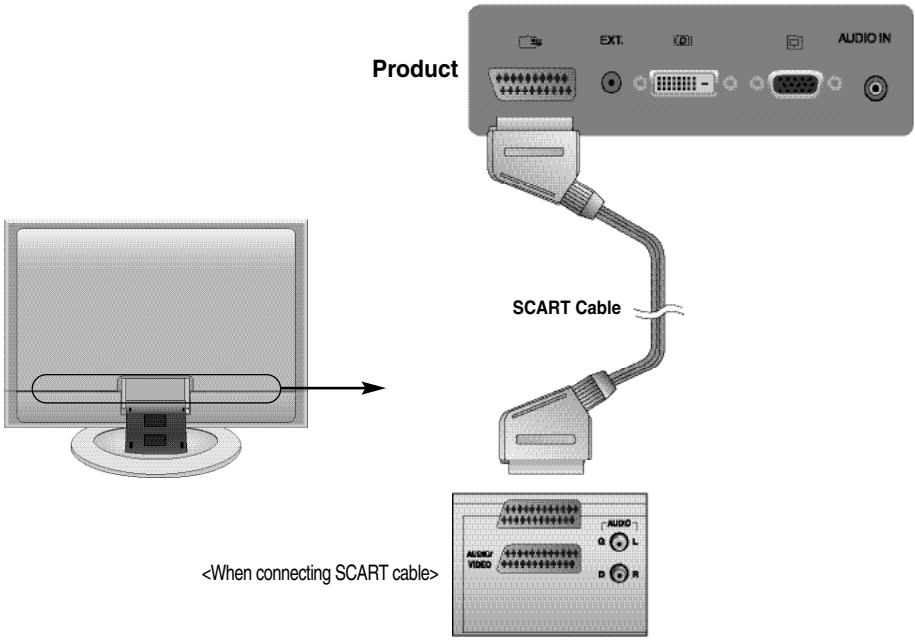
● Connecting the sound card output terminal

- Make sure to check the sound card connection terminal in the PC before connecting to the product. 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 product is integrated with an amplifier.

● TV Output Terminal

Connect to the external device if you record the broadcasting.

- When you set the input signal of the main screen as 'TV', you can transmit the signal that you're watching to the Scart output terminal.

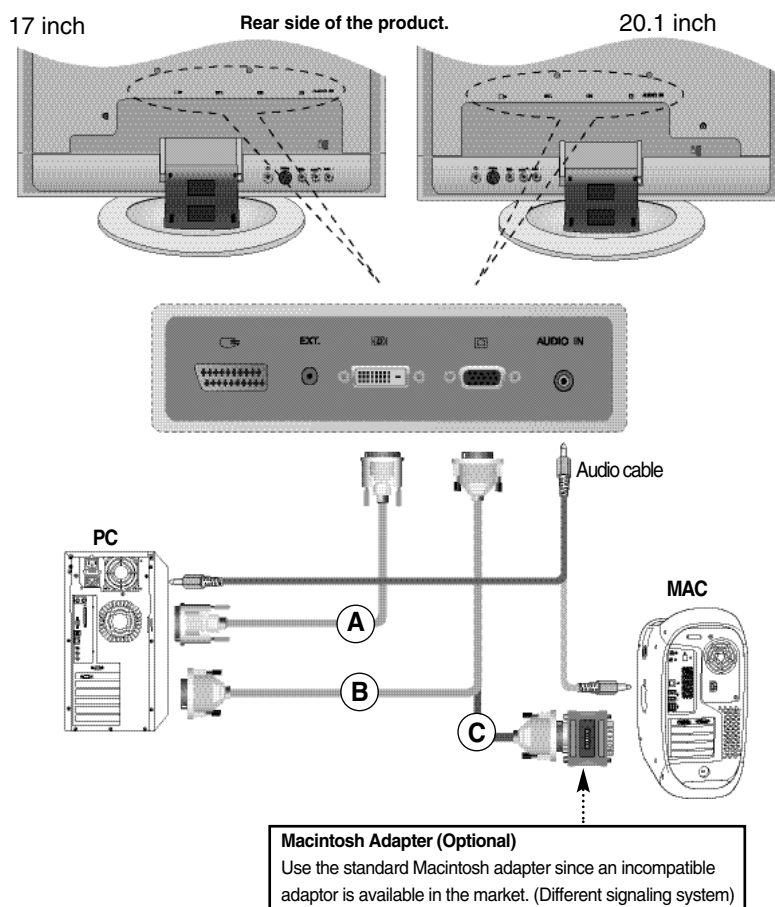


Connecting to External Devices

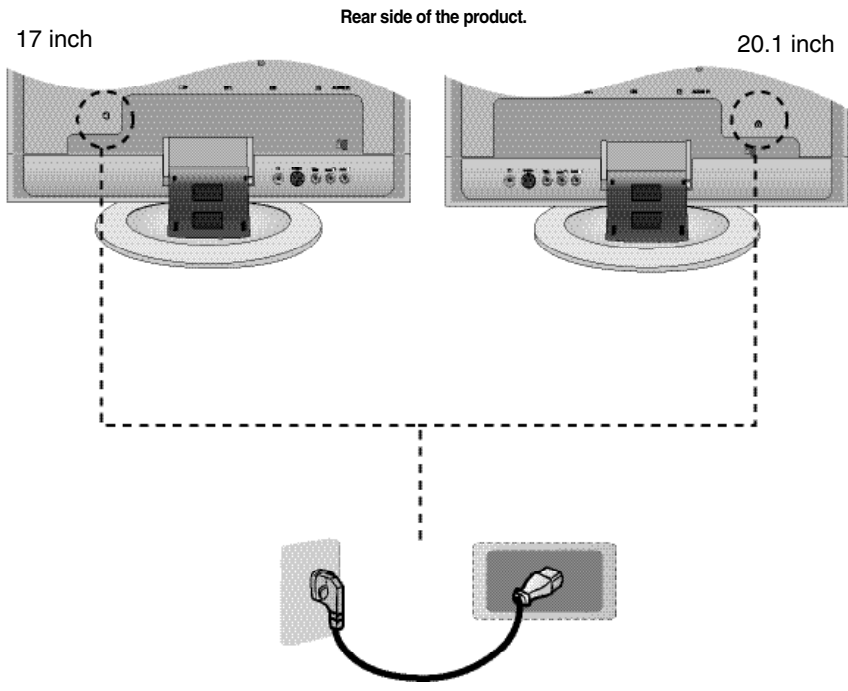
■ ■ ■ When Connecting to your PC

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

- A** When connecting with the DVI-D 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)



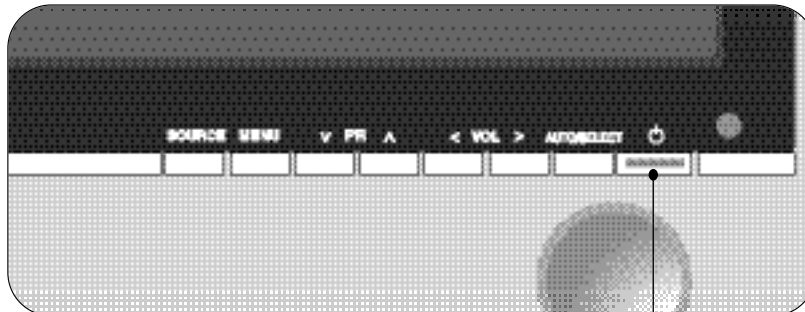
2 Connect the power cord.



* When connecting to a wall outlet.

Connecting to External Devices

- 3 Turn on power by pressing the power button on the product.



Power button

- 4 Turn on the PC.

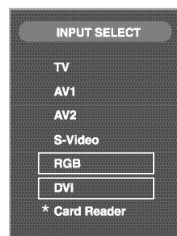
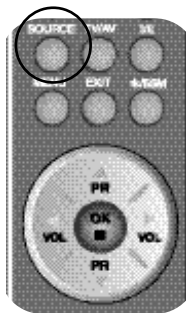
- 5 Select an input signal.
Press the SOURCE button on the remote control to select the input signal.

SOURCE → ▼▲ → OK

Or, press the SOURCE button at the front side of the product.

SOURCE → ▼▲ → SELECT

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



* Card Reader : Optional



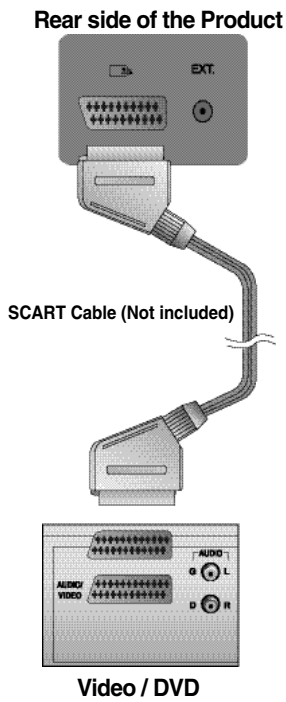
Note

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

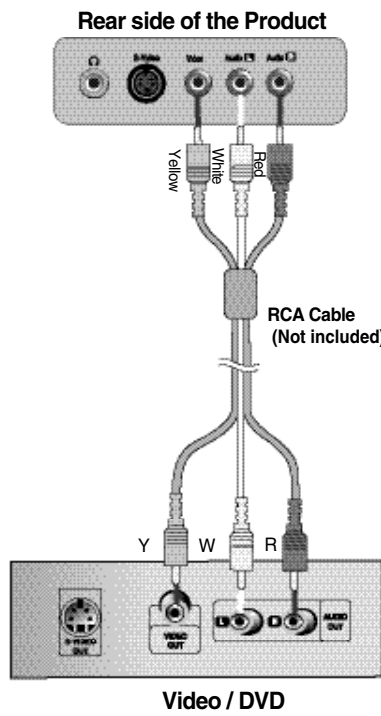
■ ■ ■ When watching Video / DVD

1 Connect the video cable as shown in the below figure and then connect the power cord.
(See page A17)

A When connecting with an SCART cable.



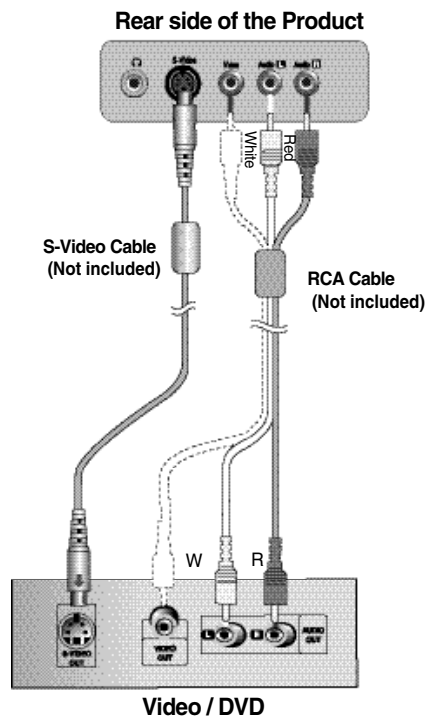
B When connecting with an RCA cable.
• Connect the input terminal with a proper colour match. (Video – Yellow, Sound (left) – White, Sound (right) – Red)



Connecting to External Devices

C 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.

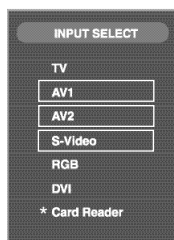
Press the SOURCE button on the remote control to select the input signal.

SOURCE → ▼▲ → OK

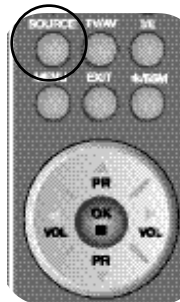
Or, press the SOURCE button at the front side of the product.

SOURCE → ▼▲ → SELECT

- A** When connecting with a SCART cable.
 - Select AV1 (Video)
- B** When connecting with a RCA cable.
 - Select AV2 (Video)
- C** When connecting with a S-Video cable.
 - S-Video

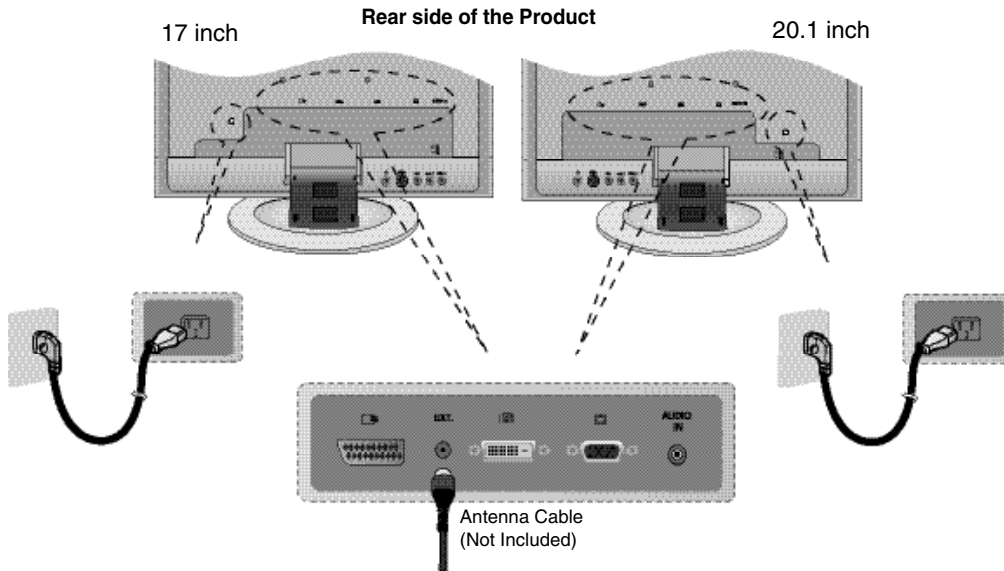


* Card Reader : Optional



■ ■ ■ When watching TV

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



2 Select an input signal.
Press the SOURCE button on the remote control to select the input signal.

SOURCE → ▼▲ → OK

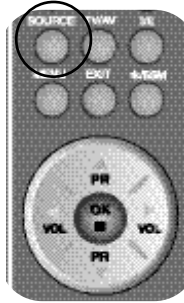
Or, press the SOURCE button at the front side of the product.

SOURCE → ▼▲ → SELECT

- Select TV



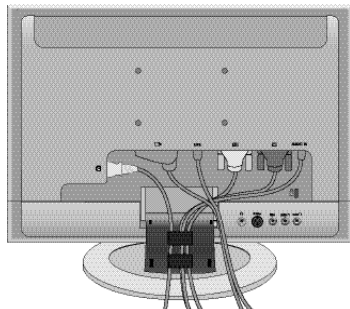
* Card Reader : Optional



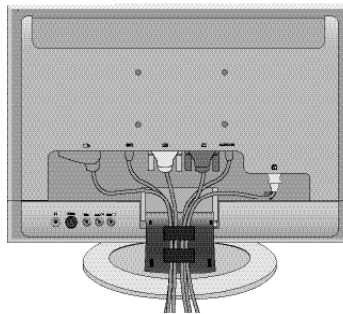
Connecting to External Devices

■ ■ ■ To arrange the cables

- 1 Connect the signal input cable and the audio cable to use in order to arrange the power cord, D-sub cable and DVI-D cable as shown in the following figure.

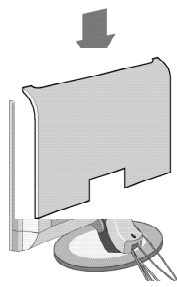
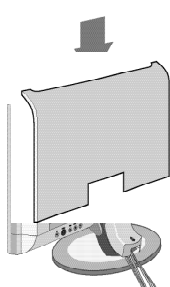
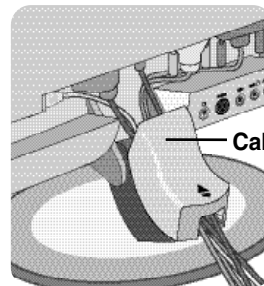
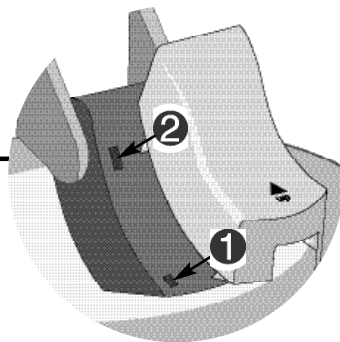
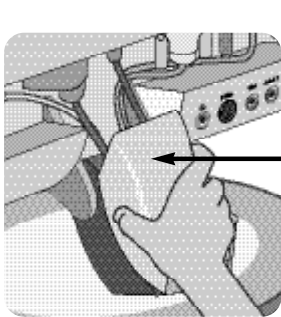


17 inch



20.1 inch

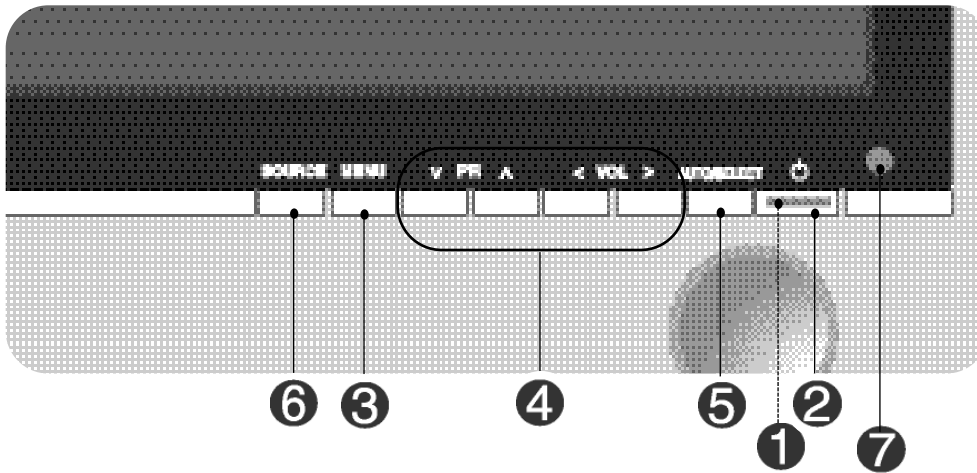
- 2 Connect the cable cap according to the steps shown in the following figure.



To remove the cable cap, hold and pull forward its bottom.

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(On Mode). If the display is in sleep (Energy Saving) mode, this indicator colour changes to amber.

2

Power Button

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

3

MENU Button

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

4

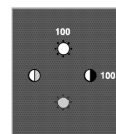
OSD Select / Adjust Button

• Use the button to select an icon or adjust the setting in the OSD screen.



• Use this button to directly control brightness and contrast of the PC signal (RGB, DVI)

• Use this button to control the channel for the TV signal.



• Adjust the volume.



Selecting and Adjusting the Screen

5 Name of the Buttons in the Screen Adjustment Unit

5 AUTO/SELECT Button [For PC Analogue signal]

Auto in progress

[For AV1, AV2, S-Video]

- The current signal and mode information will be displayed.

6 SOURCE Button SOURCE → ▼▲ → AUTO/SELECT

- Select the input signal








TV	Television
AV1	SCART
AV2	Composite video
S-Video	SeparateVideo
RGB	D-SUB analog signal
DVI	DVI digital signal
Card Reader	Media Manager



* Card Reader : Optional

7 IR Receiver • The unit that receives the signal from the remote control.

● OSD (On Screen Display) Screen Tracking Order

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



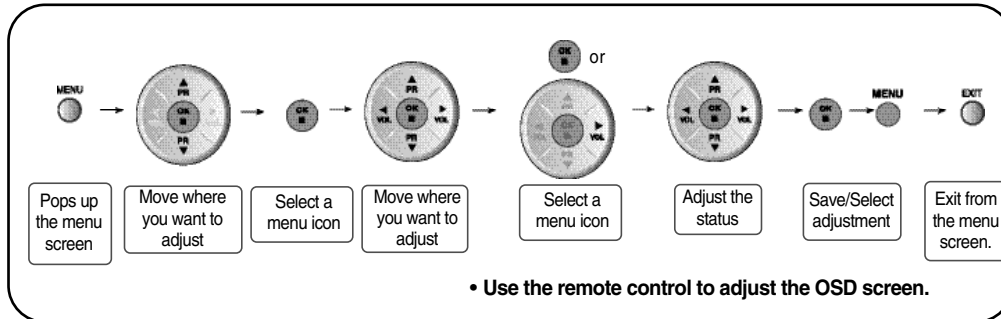
Note

OSD(On Screen Display)

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

Selecting and Adjusting the Screen

● 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 **OK** Button.
- 4 Use the ▼ ▲ ◀ ▶ Buttons to adjust the item to the desired level.
- 5 Accept the changes by pressing the **OK** Button and **MENU** 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 control) in the PC analog signal. Then, an optimal screen status will be selected that fits into the current mode.

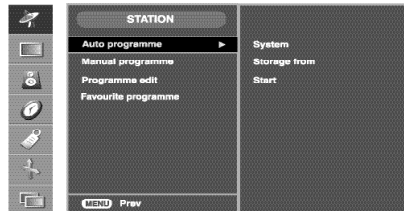
If adjustment is not satisfactory, you need to adjust screen position, clock and phase in the OSD menu.



Set/Selects the channel when using the TV

ENGLISH

Auto programme



System Press the ▼▲ buttons to select the TV system of the country or part of the world from where you want to receive the TV channels. If you want to receive 'SECAM L' channel, change the SYSTEM menu to 'L' before launching an automatic search.

L: SECAM L/L (France)
BG : PAL B/G, SECAM B/G (Europe/East Europe)
I : PAL I/II (U.K/Ireland)
DK : PAL D/K, SECAM D/K (East Europe)

Storage from To select a programme number or enter the programme number with the number buttons from where you want to start searching for new channels. If you want to keep the channels 1 to 10 stored earlier, enter programme number 11. Your TV search for new channels from number 11 onwards.

Start Press **OK** button to start automatic programming. all available TV channels are searched for and stored automatically. To stop auto programming, press the **MENU** or **EXIT** button. When auto programming is completed, the programme list menu appears.

Manual programme



To change the channel.
(Change each item in Manual Program and press the "Menu" button to save the settings)

System Press the ▼▲ buttons to select the TV system of the country or part of the world from where you want to receive the TV channels.

L: SECAM L/L (France)
BG : PAL B/G, SECAM B/G (Europe/East Europe)
I : PAL I/II (U.K/Ireland)
DK : PAL D/K, SECAM D/K (East Europe)

Storage Press the ▼▲ buttons to select the channel number or enter the programme number with the number buttons in where you want to store channel.

Channel Press the ▼▲ buttons to select V/UHF for aerial channels or CABLE for cable channels. If you know the C-(01~69) or S-channel number(01~47), enter it directly with the digit buttons 0 to 9.
To select the channel reception type. : V/UHF / CABLE

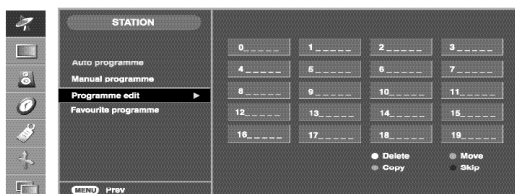
Selecting and Adjusting the Screen



Set/Selects the channel when using the TV

- Name** To see the assigned channel name.
It is possible to change the name stored in the memory or to assign a name to a TV channel which has not yet been entered. A name with up to 5 letters or numbers can be given to the programme numbers 0 to 99.
- Press the ◀ ▶ buttons to move cursor to be changed. -> Press the ▼ ▲ buttons to select a character.(space, number 0~9, and alphabet A~Z, +,-) -> Press **OK** button and **MENU** button).
- Search** Use the ◀ ▶ buttons to search next channel backward or forward direction.

Programme edit



To adjust the **Edit** submenu function, Press the **OK** --> ◀ ▶ button on the remote control

- Delete** Press the ▼ ▲ ◀ ▶ buttons to select a TV channel to be deleted.
-> Press the red key on the remote control -> The background colour of the selected channel will change to red.
Press the Delete button one more time to delete the selected channel.
All the following channels are shifted up one position.
- Copy** Press the ▼ ▲ ◀ ▶ buttons to select a TV channel to be copied. -> Press the green key on the remote control. All the following channel numbers are shifted down one position.
- Move** Press the ▼ ▲ ◀ ▶ buttons to select a channel number to be moved. -> Press the yellow key on the remote control. -> Press the ▼ ▲ ◀ ▶ buttons to move the TV channel to the desired channel number. -> Press the yellow key again to release this function.
- Skip** Press the ▼ ▲ ◀ ▶ buttons to select a channel number to be skipped. -> Press the blue key on the remote control. The skipped TV channel is displayed in blue.

Favourite programme

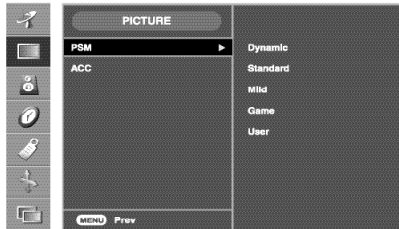


This function lets you select your favourite programmes directly. (8 channel)
Press the ▼ ▲ ◀ ▶ buttons to select a channel number.

* **Q.VIEW button(remote control)** :
Favourite channel Rotation

Adjusting Screen Colour

PSM



TV/AV1/AV2/S-Video input only

The **PSM** 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.

Colour

To adjust the colour to desired level.

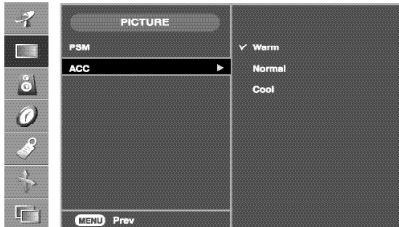
Sharpness

To adjust the cleanliness of the screen.

Tint

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

ACC



Selecting a factory setting colour set.

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



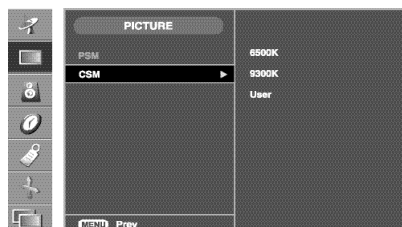
Note

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 Screen Colour

CSM



RGB / DVI input only

- **6500K/9300K**

Selecting a factory setting colour 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

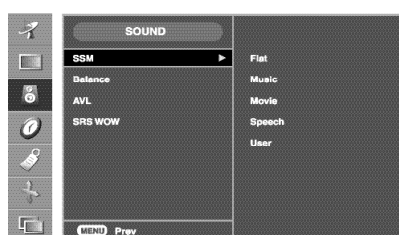
To adjust the brightness of the screen.

Red / Green / Blue

Set your own colour levels.

Adjusting the audio function

SSM



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

- **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.

- **User**

Select this option to use the user-defined audio settings.

1) Select a sound band by pressing the ◀▶ button.

2) Make appropriate sound level with the ▼▲ button.

3) Press the OK button to store it for sound User.



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, SSM setting can not be adjusted.



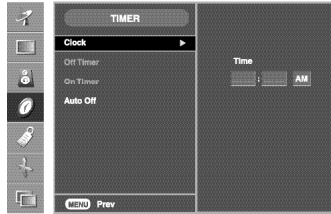
Note

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



Adjusting the timer function

Clock



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 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).

The default value is **__:__.**

Off / On Timer (Setting is available, however, operation is only allowed upon TV/AV1/AV2/S-Video input)
The off timer automatically switches the set to standby 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 the **▶** 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 program number.
- 8) Press the **OK** or **MENU** button to save.

Auto Off (Setting is available, however, operation is only allowed upon TV/AV1/AV2/S-Video input)
If **Auto Off** is active and there is no input signal, Make sure there is no remote control input. the TV switches to Standby mode automatically after 10 minutes.

- 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 **Auto Off** menu.
- 3) Press the **▶** button and then use **▼▲** button to select **On** or **Off**.
- 4) Press the **OK/MENU** button to save .



Note

- In the event of power interruption (disconnection or power failure), the clock must be reset.
- Once the on or off time is set, these functions operate daily at the preset time.
- The set must be in standby mode for the On timer to work.

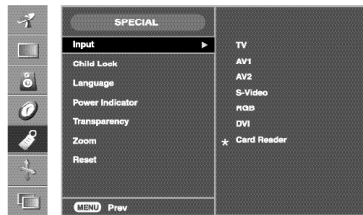
Selecting and Adjusting the Screen



Selecting the SPECIAL



Input



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

* Card Reader : Optional

Child lock

Use the ▼▲ buttons to select ON or OFF. The TV 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 Child lock tab to the 'on' position. In order to unlock it, do the following :

* Push the **MENU** button on the remote control and set Child 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 product to ON or OFF.

Transparency

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 product to the factory default. However, language selection will not be initialized. (PICTURE, SOUND, TIMER, SPECIALmenu)



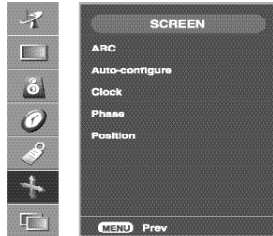
Note

the **Zoom menu** will be disabled if the screen size is not Full or PIP/POP/PBP is in use.



Adjusting Screen CLOCK/PHASE and Position

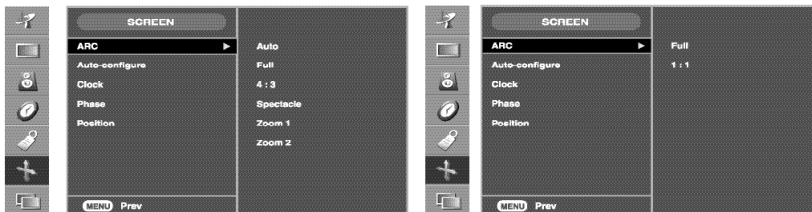
ENGLISH



ARC

To select the image size of the screen.
(Auto/Full / 4:3 / Spectacle / Zoom 1 / Zoom 2)
* In only TV/AV1/AV2/S-Video

* FULL/1:1 in DVI/RGB



The screen aspect ratio is changed according to broadcasting system signal.



Auto Full 4:3 Spectacle Zoom1 Zoom2

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.

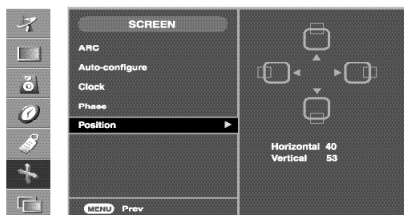
Clock

This function is suitable for analogue signal input only. To minimize any vertical bars or stripes visible on the screen background. The horizontal screen size will also change.

Phase

This function is suitable for analogue signal input only. To adjust the focus of the display. This item allows you to remove any horizontal noise and clear or sharpen the image of characters.

Position



This function is suitable for analogue signal input only. To adjust position of the screen. Press the ► button to display the submenu for position.

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

Selecting and Adjusting the Screen



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

(To adjust the sub screen)



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/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. (TV/AV1/AV2/S-Video)

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

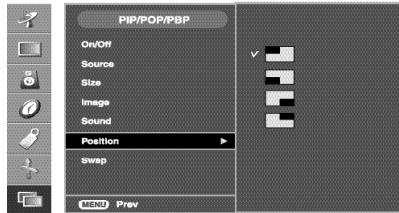
Sound To turn the PIP/POP/PBP sound on/off.



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

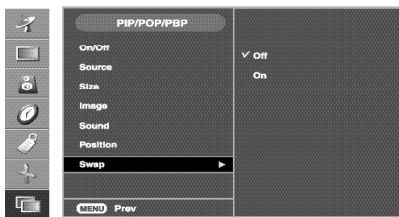
ENGLISH

Position



To adjust the position of PIP screen.

Swap



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

PIP



POP



PBP



Troubleshooting

No image is displayed

- Is the product power cord connected?
 - Does the power LED is turned on?
 - Power is on, power LED is blue 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**
 - 17inch : 1280 x 1024 @60Hz
 - 20.1inch : 1680 x 1050 @60Hz
 - The signal cable between PC and product is not connected. Check the signal cable.
 - Press the 'SOURCE' button in the remote control 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 control.



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.

The screen image looks abnormal.

- **Is the screen position wrong?**
 - DSUB analog signal – Press the “AUTO” button in the remote control 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?**
 - DSUB analog signal – Press the “AUTO” button in the remote control 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.**
 - DSUB analog signal – Press the “AUTO” button in the remote control 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.

Troubleshooting

The audio function does not work.

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

- **Screen has poor colour resolution (16 colours).**
 - Set the number of colours to more than 24 bits (true colour)
Select Control Panel – Display – Settings – Colour Table menu in Windows.
- **Screen colour is unstable or mono-coloured.**
 - 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 colour) 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.


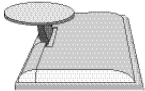
After-image appears on the product.

- **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

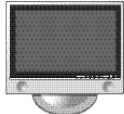
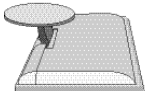
[17inches]

ENGLISH

LCD Panel	Screen Type	17 inches (434.38mm) TFT (Thin Film Transistor) LCD (Liquid Crystal Display) Panel Visible diagonal size: 434.38mm
	Pixel Pitch	0.291mm
Video Signal	Max. Resolution	D-Sub :1280X1024 @60Hz DVI-D : 1280X1024 @60Hz
	Recommended Resolution	D-SUB : WXGA 1280X768 @60Hz DVI-D : WXGA 1280X768 @60Hz
	Horizontal Frequency	D-SUB : 30 - 66 kHz DVI-D : 30 - 66 kHz
	Vertical Frequency	56 - 75 Hz
	Synchronization Type	Separate/Composite/SOG (Sync On Green)/Digital
Input Connector		15-pin D-Sub type, DVI-D (digital), S-Video, composite video, Scart, TV
Power	Rated Voltage	AC 100-240V~ 50/60Hz 1.0A
	Power Consumption	On Mode : 70W Sleep Mode : ≤ 4W Off Mode : ≤ 2W
Tilt	Tilt Range	-5°~20°
	Tilt Stand	Attached
Dimension/Weight	Size (WxLxH)	 438.2mm x 241.4 mm x 378.9mm  438.2mm x 139.2 mm x 403.5mm
	Weight (excl. package)	7.1 kg (15.6 lbs)
Environmental Conditions	Operational Condition	Temperature: 10°C ~ 35°C , Humidity: 10% ~ 80%
	Storage Condition	Temperature: -20°C ~ 60°C , Humidity: 5% ~ 95%

Specifications

[20.1Inches]

LCD Panel	Screen Type	20.1inches (481.84mm) TFT (Thin Film Transistor) LCD (Liquid Crystal Display) Panel Visible diagonal size: 481.84mm
	Pixel Pitch	0.294mm
Video Signal	Max. Resolution	D-SUB : 1680X1050 @60Hz DVI-D : 1680X1050 @60Hz
	Recommended Resolution	D-SUB : WXGA + 1680X1050 @60Hz DVI-D : WXGA+ 1680X1050 @60Hz
	Horizontal Frequency	D-SUB : 30 - 83 kHz DVI-D : 30 - 83 kHz
	Vertical Frequency	55 - 75 Hz
	Synchronization Type	Separate/Composite/SOG (Sync On Green)/Digital
Input Connector	15-pin D-Sub type, DVI-D (digital), S-Video, composite video, Scart, TV	
Power	Rated Voltage	AC 100-240V ~ 50/60Hz 1.2A
	Power Consumption	On Mode : 74W Sleep Mode : ≤ 4W Off Mode : ≤ 2W
Tilt	Tilt Range	-5° ~ 20°
	Tilt Stand	Attached
Dimension/Weight	Size (WxLxH)	 496.4mm x 241.4mm x 424.1mm
	Weight (excl. package)	 496.4mm x 135.2mm x 448.7mm 8.2 kg (18.0 lbs)
Environmental Conditions	Operational Condition	Temperature: 10°C ~ 35°C , Humidity: 10% ~ 80%
	Storage Condition	Temperature: -20°C ~ 60°C , Humidity: 5% ~ 95%

PC Mode – Preset Mode

ENGLISH

[17inches]

Preset mode		Horizontal Frequency (kHz)	Vertical Frequency (Hz)	Preset mode		Horizontal Frequency (kHz)	Vertical Frequency (Hz)
1	VGA 640 x 350	31.468	70	8	VESA 1024 x 768	48.363	60
2	VGA 720 x 400	31.469	70	9	VESA 1280 x 1024	63.981	60
3	VGA 640 x 480	31.469	59	10	VESA 1280 x 768	47.776	59
4	VESA 640 x 480	37.500	75				
5	VESA 800 x 600	37.879	60				
6	VESA 800 x 600	46.875	75				
7	MAC 832 x 624	49.725	74				

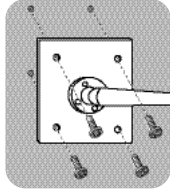
[20.1inches]

Preset mode		Horizontal Frequency (kHz)	Vertical Frequency (Hz)	Preset mode		Horizontal Frequency (kHz)	Vertical Frequency (Hz)
1	VGA 720 x 400	31.468	70	8	VESA 1152 x 864	67.500	75
2	VGA 640 x 480	31.469	59	9	MAC 1280 x 1024	63.981	60
3	VGA 640 x 480	37.500	75	10	VESA 1280 x 1024	79.976	75
4	VESA 800 x 600	37.897	60	11	VESA 1680 x 1050	65.290	59
5	VESA 800 x 600	46.875	75				
6	VESA 1024 x 768	48.363	60				
7	VESA 1024 x 768	60.123	75				

Power LED

Mode	Product
On Mode	Blue
Sleep Mode	Amber
Off Mode	-

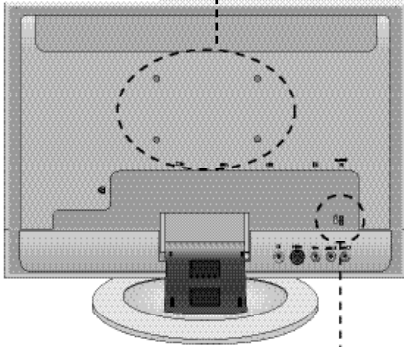
Specifications



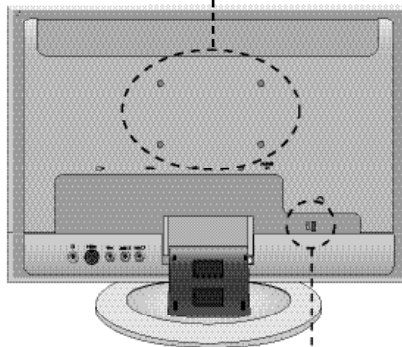
VESA wall mounting

Connected to another object (stand type and wall-mounted type). This product accepts a VESA-compliant mounting interface pad. (optional)
For further information, refer to the VESA Wall Mounting Instruction Guide.

17 inch



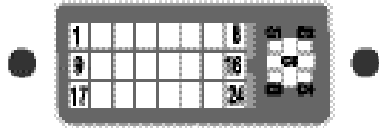
20.1 inch



Locking Device

Use this locking cable (optional) to prevent theft.

DVI-I



ENGLISH

No.	Signal
1	T. M. D. S. Data 2-
2	T. M. D. S. Data 2+
3	T. M. D. S. Data 2/4 Shield
4	T. M. D. S. Data 4-
5	T. M. D. S. Data 4+
6	DDC Clock
7	DDC Data
8	Analogue Vertical Synchronization
9	T. M. D. S. Data 1-
10	T. M. D. S. Data 1+
11	T. M. D. S. Data 1/3 Shield
12	T. M. D. S. Data 3-
13	T. M. D. S. Data 3+
14	+5V Power
15	Grounding (return for +5V, horizontal sync and vertical sync)
16	Hot Plug Detect
17	T. M. D. S. Data 0-
18	T. M. D. S. Data 0+
19	T. M. D. S. Data 0/5 Shield
20	T. M. D. S. Data 5-
21	T. M. D. S. Data 5+
22	T. M. D. S. Clock Shield
23	T. M. D. S. Clock+
24	T. M. D. S. Clock
C1	Analogue Red
C2	Analogue Green
C3	Analogue Blue
C4	Analogue Horizontal Synchronization
C5	Analogue Grounding(return for analogue R,G&B)

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