APPENDIX H

: USER'S MANUAL



LCD TV

OWNER'S MANUAL

MODELS: 23LC1R*



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



As an ENERGY STAR Partner LGE U. S. A.,Inc. has determined that this product meets the ENER-GY STAR guidelines for

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.

> P/NO: 38289U0024A (0603-REV00) Printed in Korea

Warning







WARNING:

TO REDUCE THE RISK OF ELECTRIC SHOCK DO NOT REMOVE COVER (OR BACK). NO USER SERVICEABLE PARTS INSIDE. REFER TO QUALIFIED SERVICE PERSONNEL.



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

NOTE TO CABLE/TV INSTALLER:

This reminder is provided to call the CATV system installer's attention to Article 820-40 of the National Electric Code (U.S.A.). The code provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of the cable entry as practical.

REGULATORY INFORMATION

This equipment has been tested and found to comply with the limits for 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 off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and 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.

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

CAUTION:

Do not attempt to modify this product in any way without written authorization from LG Electronics Corporation. Unauthorized modification could void the user's authority to operate this product.

U.S.A. only -

COMPLIANCE:

The responsible party for this product's compliance is: LG Electronics U.S.A., Inc.

1000 Sylvan Avenue, Englewood Cliffs, NJ 07632

Phone: 1-201-816-2000

http://us.lge.com

Safety Instructions

WARNING:

To Reduce The Risk Of Fire Or Electric Shock, Do Not Expose This Apparatus To Rain Or Moisture.

Apparatus shall not be exposed to dripping or splashing and no objects filled with liquids, such as vases, shall be placed on the apparatus.

IMPORTANT SAFETY INSTRUCTIONS

- 1. Read these instructions.
- 2. Keep these instructions.



- 3. Heed all warnings.
- 4. Follow all instructions.
- 5. Do not use this apparatus near water.



6. Clean only with a dry cloth.



Do not block any of the ventilation openings. Install in accordance with the manufacturer's instructions.



8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.



- 9. Do not defeat the safety purpose of the polarized or grounding type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong is provided for your safety. When the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
- 10. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.



11. Only use the attachments / accessories specified by the manufacturer.

Safety Instructions continued

12. Use only with a cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart / apparatus combination to avoid injury from tip-over.



13. Unplug this apparatus during lightning storms or when unused for long periods of time.



14. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.



Note

- If the TV feels cold to the touch, there may be a small "flicker" when when it is turned on. This is normal, there is nothing wrong with TV.
- Some minute dot defects may be visible on the screen, appearing as tiny red, green, or blue spots. However, they have no adverse effect on the monitor's performance.
- Avoid touching the LCD screen or holding your finger(s) against it for long periods of time. Doing so may produce some temporary distortion effects on the screen.

CAUTION concerning the Power Cord

Most appliances recommend they be placed upon a dedicated circuit; that is, a single outlet circuit which powers only that appliance and has no additional outlets or branch circuits. Check the specification page of this owner's manual to be certain.

Do not overload wall outlets. Overloaded wall outlets, loose or damaged wall outlets, extension cords, frayed power cords, or damaged or cracked wire insulation are dangerous. Any of these conditions could result in electric shock or fire. Periodically examine the cord of your appliance, and if its appearance indicates damage or deterioration, unplug it, discontinue use of the appliance, and have the cord replaced with an exact replacement part by an authorized servicer.

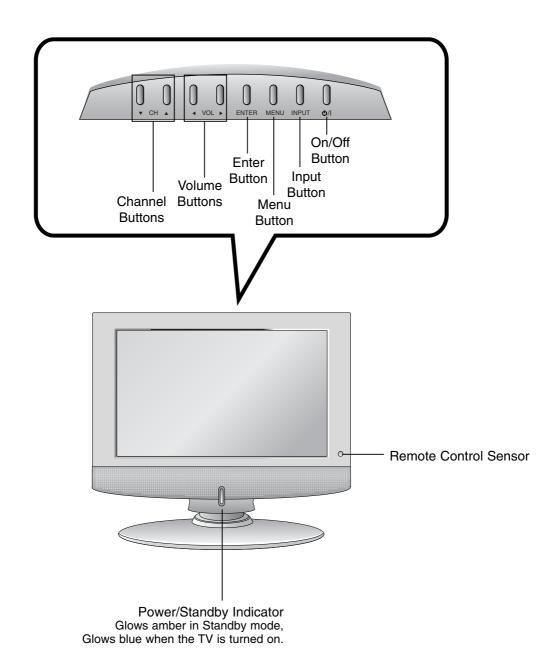
Protect the power cord from physical or mechanical abuse, such as being twisted, kinked, pinched, closed in a door, or walked upon. Pay particular attention to plugs, wall outlets, and the point where the cord exits the appliance.

On Disposal

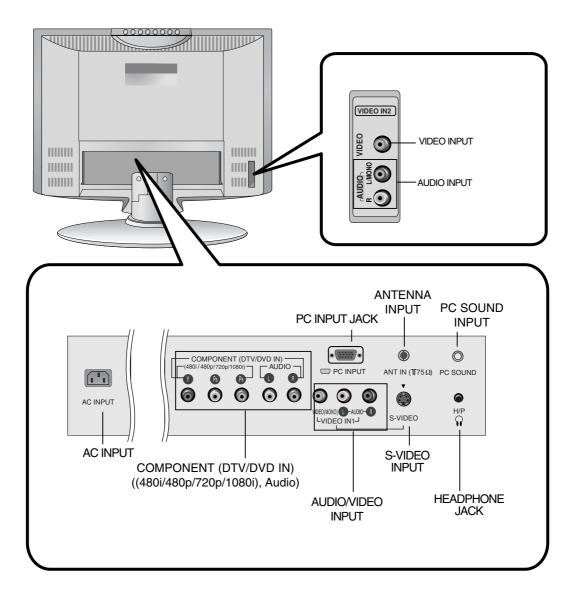
- a. The fluorescent lamp used in this product contains a small amount of mercury.
- b. Do not dispose of this product with general household waste.
 Disposal of this product must be carried out in accordance to the regulations of your local authority.

Introduction

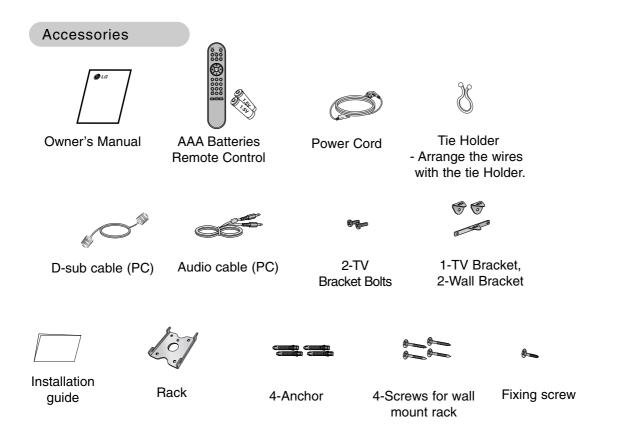
Controls



Connection Options



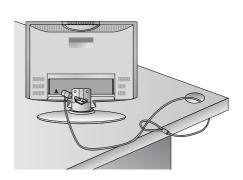
Installation



Kensington Security System

- The TV is equipped with a Kensington Security System connector on the back panel. Connect the Kensington Security System cable as shown below.
- For the detailed installation and use of the Kensington Security System, refer to the user's guide provided with the Kensington Security System.

For further information, contact http://www.kensington.com, the internet homepage of the Kensington company. Kensington sells security systems for expensive electronic equipment such as notebook PCs and LCD projectors.



NOTE

- The Kensington Security System is an optional accessory.

NOTES

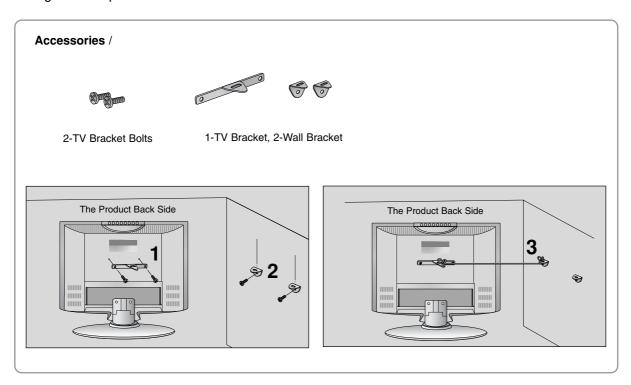
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- b. Some minute dot defects may be visible on the screen, appearing as tiny red, green, or blue spots. However, they have no adverse effect on the monitor's performance.
- c. Avoid touching the LCD screen or holding your finger(s) against it for long periods of time. Doing so may produce some temporary distortion effects on the screen.

Please set it up carefully so the product doesn't fall over

Set it up close to the wall so the product doesn't fall over when it is pushed backwards.

The instructions shown below is a safer way to set up the product, which is to fix it on the wall so the product doesn't fall over when it is pulled in the forward direction. It will prevent the product from falling forward and hurting people. It will also prevent the product from damage caused by fall. Please make sure that children don't climb on or hang from the product.





- 1. Use the bracket and the bolt to fix the product to the wall as shown in the picture.
- 2. Secure the bracket with the bolt (not provided as parts of the product, must purchase separately) on the wall.
- **3.** Use a sturdy rope (not provided as parts of the product, must purchase separately) to tie the product. It is safer to tie the rope so it becomes horizontal between the wall and the product.

Notes

- When moving the product to another place undo the ropes first.
- Use a product holder or a cabinet that is big and strong enough for the size and weight of the product.
- To use the product safely make sure that the height of the bracket that is mounted on the wall is same as that of the product.

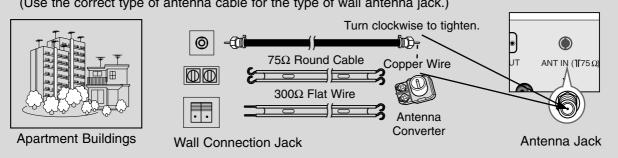
External Equipment Connections

Antenna Connection

- For optimum picture quality, adjust antenna direction.

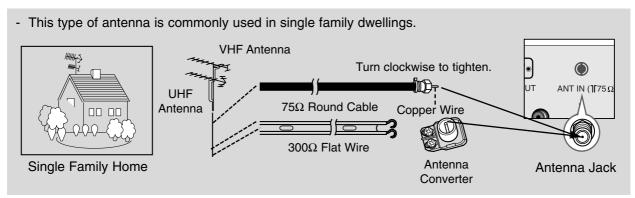
Connecting to an Inside Antenna Setup

- Typical wall antenna jack used in apartment buildings, connect the antenna cable as shown below. (Use the correct type of antenna cable for the type of wall antenna jack.)

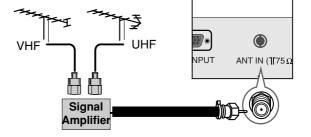


- If you have a 75Ω round cable, insert the bronze wire and then tighten the connection nut. If you have a 300Ω flat wire, connect the twisted wire to the antenna converter and then connect the converter to the antenna jack on the TV.
- If using 75 Ω round cable, do not bend the bronze wire. It may cause poor picture quality.

Connecting to an Outdoor Antenna Setup



- In poor signal areas, to get better picture quality, install a signal amplifier to the antenna as shown to the right.
- If signal needs to be split for two TVs, use an antenna signal splitter for connection.



DTV Setup

To watch digitally broadcast programs, purchase and connect a digital set-top box.

Connections

Connect the digital set-top box video outputs to the COM-PONENT (Y, PB, PR) jacks and connect the digital set-top box audio outputs to the AUDIO jacks.

Viewing Setup

- 1. Turn on the digital set-top box. (Refer to the owner's manual for the digital set-top box.)
- 2. Use the **INPUT** button on the remote control to select **Component.**

Using Headphones

- Plug headphones in to H/P jack as shown.
- Adjust sound level to a headphone using the volume
 (◄, ►) buttons. While you are listening to sound through a headphone(s), TV speakers will not be heard.

ANT IN (¶75Ω) PC SOUND S-VIDEO H/P

0 0

0

DTV Receiver (Set-top Box)

PC Setup

- After setup, be sure to select RGB-PC source on TV.

Connections

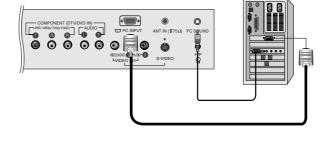
- 1. Set the monitor output resolution on the PC before connecting to the TV.
- 2. Connect the TV to the PC with the PC cable.
- 3. Connect the PC audio output to the TV's PC SOUND input.

Viewing Setup

- 1. Turn on the PC.
- 2. Use the INPUT button on the remote control to select PC.

Monitor Display Specifications

MODE	Resolution	Horizontal Frequency(kHz)	Vertical Frequency(Hz)
VGA	640x480	31.4	60
SVGA	800x600	37.8	60
XGA	1024x768	48.3	60
WXGA	1360x768	47.6	60



NOTES

- a. For optimum picture quality, use standard 1360x768@60Hz computer output at a 60Hz refresh rate. Using other formats (VGA, SVGA, etc.) or refresh rates may result in reduced picture quality. (To change the computer video output format, please refer to the operating manual for the computer you are using).
- b. If the message "**Out of range**" appears on the screen, adjust the PC output to a format listed in the 'Monitor Display Specifications' chart above.
- c. The synchronization input form for Horizontal and Vertical frequencies is separate.

DPM (Display Power Management) mode

If the PC goes to power saving mode, the monitor automatically switches to DPM mode. If you don't use the PC cable provided, DPM mode may not work.

PC Menu Options

- After setup, be sure to select PC source to see the PC image on TV screen.



- 1. Press the **MENU** button and then use ▲ / ▼ button to select the **PC** menu.
- 2. Press the ▶ button and then use ▲ / ▼ button to select desired item.
- 3. Use the ◀ / ▶ button to make appropriate adjustments.
- H-position/V-position

Adjusts picture left/right and up/down.

The adjustment ranges of H-Position is 0~100.

(Based on the input mode, the adjustment range may change.)

Clock

Minimizes any vertical bars or stripes appearing on the screen background.

The adjustment range is 0~100. (Based on the input mode, the adjustment range may change.)

Phase

Remove any horizontal noise and clear up or sharpen the character images.

The range adjustment is 0~100. (Based on the input mode, the adjustment range may change.)

• Auto-configure

Automatically adjusts the screen position, clock, and clock phase.

(The displayed image will disappear for a few seconds while Auto-configuration is in progress.)

Reset

Returns to the default settings programmed at the factory; default settings cannot be changed.

4. Press the **ENTER** button to save.

Maintenance

- Early malfunctions can be prevented. Careful and regular cleaning can extend the amount of time you will have your new TV. Be sure to turn the power off and unplug the power cord before you begin any cleaning.

Cleaning the Screen

- 1. Here's a great way to keep the dust off your screen for a while. Wet a soft cloth in a mixture of lukewarm water and a little fabric softener or dish washing detergent. Wring the cloth until it's almost dry, and then use it to wipe the screen.
- 2. Make sure the excess water is off the screen, and then let it air-dry before you turn on your TV.

Cleaning the Cabinet

To remove dirt or dust, wipe the cabinet with a soft, dry, lint-free cloth. Please be sure not to use a wet cloth.

Extended Absence



If you leave your TV dormant for a long time (such as a vacation), it's a good idea to unplug the power cord to protect against possible damage from lightning or power surges.

Troubleshooting Checklist

The operation does not work normally.				
The remote control doesn't work	 Check to see if there is any object between the product and the remote control causing obstruction. Are batteries installed with correct polarity (+ to +, - to -)? Correct remote operating mode set: TV, VCR etc.? Install new batteries. 			
Power is suddenly turned off • Is the sleep timer set? • Check the power control settings. Power interrupted • No broadcast on station tuned with Auto off activated.				

The video function does not work.		
No picture & No sound	 Check whether the product is turned on. Try another channel. The problem may be with the broadcast. Is the power cord inserted into wall power outlet? Check your antenna direction and/or location. Test the wall power outlet, plug another product's power cord into the outlet where the product's power cord was plugged in. 	
Picture appears slowly after switching on	This is normal, the image is muted during the product startup process. Please contact your service center, if the picture has not appeared after five minutes.	
No or poor color or poor picture	 Adjust Color in menu option. Keep a sufficient distance between the product and the VCR. Try another channel. The problem may be with the broadcast. Are the video cables installed properly? Activate any function to restore the brightness of the picture. 	
Horizontal/ vertical bars or picture shaking	Check for local interference such as an electrical appliance or power tool.	
Poor reception on some channels	 Station or cable product experiencing problems, tune to another station Station signal is weak, reorient antenna to receive weaker station. Check for sources of possible interference. 	
Lines or streaks in pictures	Check antenna (Change the direction of the antenna).	

The audio function does not work.			
Picture OK & No sound	 Press the VOL (or Volume) button. Sound muted? Press MUTE button. Try another channel. The problem may be with the broadcast. Are the audio cables installed properly? 		
No output from one of the speakers	Adjust Balance in menu option.		
Unusual sound from inside the product • A change in ambient humidity or temperature may reunusual noise when the product is turned on or off and indicate a fault with the product.			

There is a problem in PC mode. (Only PC mode applied)				
The signal is out of range.	 Adjust resolution, horizontal frequency, or vertical frequency. Check the input source. 			
Vertical bar or stripe on background & Horizontal Noise & Incorrect position	• Work the Auto configure or adjust clock, phase, or H/V position. (option)			
Screen color is unstable or single color	Check the signal cable. Reinstall the PC video card.			

Product Specifications

Power Requirement/ Power Consumption		AC100-240V~ 50/60Hz 1.1A 100W		
Dimensions (Width x Height x Depth)	including stand	611.6mm x 485.2mm x 272.7mm 24.0inches x 18.0inches x 10.7inches		
	excluding stand	611.6mm x 450.1mm x 111.5mm 24.0inches x 17.7inches x 4.3inches		
Weight	including stand	10.8kg (23.8lbs)		
	excluding stand	9.4kg (20.7lbs)		
Television System		NTSC		
Television Channel		VHF : 2 ~ 13, UHF : 14 ~ 69, Cable : 01 ~ 135		
Television Screen		LCD Panel		
External Antenna Impedance		75 Ω		
Audio Output		7W+7W		

