

LCD TV | PLASMA TV OWNER'S MANUAL

LCD TV MODELS

PLASMA TV MODELS

37LB5D / 42LB5D

60PY3D

47LB5D / 32LB4D

37LB4D / 42LB4D

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.

ENERGY STAR 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 ENERGY STAR guidelines for energy efficiency.



SRS(**O**) is a trademark of SRS Labs, Inc. TruSurround XT technology is incorporated under license from SRS Labs, Inc.



LG TV with this logo displays Full HD(high-definition) 1080p native resolution by receiving and processing a Full HD 1080p signal.



LG TV with this logo can play MP3 music from a MP3 player, such as iPOD, and JPEG images from a digital camera through the USB unit.



With HDMI CEC support of LG's audio/video device connected to the HDMI (high-definition multimedia interface), LG TV with this logo works easily with one remote control.



It has three HDMI ports that connect audio and video devices with one cable and produces the highest quality digital images and sound.



Manufactured under license from Dolby Laboratories. "Dolby "and the double-D symbol are trademarks of Dolby Laboratories.



High-definition television. High-resolution digital television broadcast and playback system composed of roughly a million or more pixels, 16:9 aspect-ratio screens, and AC3 digital audio. A subset of digital television, HDTV formats include 1080i and 720p resolutions.



HDMI[™], the HDMI logo and High-Definition Multimedia Interface are trademarks or registered trademarks of HDMI Licensing."



LG's own special digital image generator, consisting of a full digital image processor, six different main picture quality factors.

WARNING / CAUTION



WARNING / CAUTION

RISK OF ELECTRIC SHOCK
DO NOT OPEN



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

WARNING/CAUTION

TO REDUCE THE RISK OF FIRE AND ELECTRIC SHOCK, DO NOT EXPOSE THIS PRODUCT TO RAIN OR MOISTURE.

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.

WARNING / CAUTION

To prevent fire or shock hazards, do not expose this product to rain or moisture.

FCC NOTICE

Class B digital device

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 to 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. Unauthorized modification could void the user's authority to operate this product

SAFETY INSTRUCTIONS

IMPORTANT SAFETY INSTRUCTIONS

Important safety instructions shall be provided with each apparatus. This information shall be given in a separate booklet or sheet, or be located before any operating instructions in an instruction for installation for use and supplied with the apparatus.

This information shall be given in a language acceptable to the country where the apparatus is intended to be used.

The important safety instructions shall be entitled "Important Safety Instructions". The following safety instructions shall be included where applicable, and, when used, shall be verbatim as follows. Additional safety information may be included by adding statements after the end of the following safety instruction list. At the manufacturer's option, a picture or drawing that illustrates the intent of a specific safety instruction may be placed immediately adjacent to that safety instruction:

Read these instructions. Keep these instructions. Heed all warnings. Follow all instructions.



Do not use this apparatus near water



Clean only with dry cloth.



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



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



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 are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.



Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.



Only use attachments/accessories specified by the manufacturer.



Use only with the 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.





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



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 exposed to rain or moisture, does not operate normally, or has been dropped.



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.



Outdoor Use Marking:
WARNING - To Reduce The Risk Of Fire Or
Electric Shock, Do Not Expose This Appliance
To Rain Or Moisture



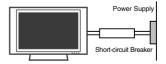
Wet Location Marking: Apparatus shall not be exposed to dripping or splashing and no objects filled with liquids, such as vases, shall be placed on or over apparatus.



GROUNDING

Ensure that you connect the earth ground wire to prevent possible electric shock. If grounding methods are not possible, have a qualified electrician install a separate circuit breaker.

Do not try to ground the unit by connecting it to telephone wires, lightening rods, or gas pipes.



DISCONNECTING DEVICE FROM MAINS Main plug is the disconnecting device. The plug must remain readily operable.

CONTENTS

WARNING / CAUTION1	MEDIA HOST
SAFETY INSTRUCTIONS2	5 · M · l
FEATURES OF THIS TV 6	Entry Modes47
	Photo List
	Music List
PREPARATION	
Accessories	PICTURE CONTROL
Back Panel Information	Picture Size (Aspect Ratio) Control54 Preset Picture Settings
Stand Installation	- Picture Mode - Preset55
Back Cover for Wire Arrangement 14	- Color Tone - Preset56
Desktop Pedestal Installation	Manual Picture Adjustment
Vesa Wall Mounting	- Picture Mode - User Mode
Antenna or Cable Connection	- Color Tone - User Mode
	XD - Picture Improvement Technology
EXTERNAL EQUIPMENT SETUP	Advanced - Black(Darkness) Level
HD Receiver Setup	Advanced - TruM
DVD Setup	Picture Reset63
VCR Setup	Image Sticking Minimization (ISM) Method 64
Other A/V Source Setup25	Low-Power Picture Mode
PC Setup	
USB In Setup32	COUNTRY A LANGUAGE CONTROL
Audio Out Setup	SOUND & LANGUAGE CONTROL
	Auto Volume Leveler (Auto Volume) 66
WATCHING TV / CHANNEL CONTROL	Preset Sound Settings (Sound Mode) 67
WATCHING IV / CHANNEL CONTROL	Sound Setting Adjustment - User Mode 68
Remote Control Functions	Balance
Turning on TV	Stereo / SAP Broadcast Setup
Channel Selection	TV Speakers On/ Off Setup
Volume Adjustment	Audio Language
On-Screen Menus Selection	On-Screen Menus Language Selection 74
Channel Setup	Caption Mode
- Auto Scan (Auto Tuning)	- Analog Broadcasting System Captions 75- Digital Broadcasting System Captions
- Add / Delete Channel (Manual Tuning) 41	- Digital Broadcasting System Captions/ - Caption Option
- Channel Editing	- Сарион Орион
Input List	
Julipellik	

TIME SETTING

Clock Setting
- Auto Clock Setup
- Manual Clock Setup80
Auto On/ Off Time Setting81
Sleep Time Setting82
Auto Shut-off Setting83
PARENTAL CONTROL / RATINGS
Set Password & Lock System
Channel Blocking
Movie & TV Rating
External Input Blocking 90
Key Lock90
APPENDIX
Troubleshooting91
Maintenance93
Product Specifications94
Programming the Remote Control96
IR Codes
External Control through RS-232C 102

FEATURES OF THIS TV

What is a Plasma TV?

Using plasma is the best way to achieve flat panel displays with excellent image quality and large screen sizes that are easily viewable. The Plasma TV can be thought of as a descendant of the neon lamp and or a series of fluorescent lamps.

How does it work?

Plasma TV is an array of cells, known as pixels, which are comprised of three sub-pixels, corresponding to the colors red, green, and blue. Gas in a plasma state is used to react with phosphors in each sub-pixel to produce colored light (red, green, or blue). These phosphors are the same types used in Cathode Ray Tube (CRT) devices such as televisions and common computer monitors.

Plasma TV offers a rich, dynamic display because each sub-pixel is individually controlled by advanced electronics to produce over 16 million different colors. This means that you get perfect images that are easily viewable in a display that is fewer than five inches thick.

160° - Wide angle range of vision

Your flat panel plasma screen offers an exceptionally broad viewing angle of over 160 degrees. This means that the display is clear and visible to viewers anywhere in the room.

Wide Screen

The wide screen offers a theater-like experience in your own home.

Multimedia

Connect your plasma display to a PC and use it for conferencing, games, and Internet browsing. The Picture-in-Picture feature allows you to view your PC and video images simultaneously.

Versatile

The light weight and thin size makes it easy to install your plasma display in a variety of locations where conventional TVs do not fit.

The Plasma TV Manufacturing Process: a few minute colored dots may be present on the Plasma TV screen

The Plasma TV is composed of 0.9 to 2.2 million

cells. A few cell defects will normally occur in the Plasma TV manufacturing process. Several tiny, minute colored dots visible on the screen should be acceptable. This also occurs in other Plasma TV manufacturers' products. The tiny dots appearing does not mean that this Plasma TV is defective. Thus a few cell defects are not sufficient cause for the Plasma TV to be exchanged or returned. Our production technology minimizes these cell defects during the manufacture and operation of this product.

Cooling Fan Noise (This feature is not available for all models.) In the same way that a fan is used in a PC computer to keep the CPU (Central Processing Unit) cool, the Plasma TV is equipped with cooling fans to cool the Monitor and improve its reliability. Therefore, a certain level of noise could occur while the fans are operating and cooling the Plasma TV.

The fan noise doesn't have any negative effect on the Plasma TV's efficiency or reliability. The noise from these fans is normal during the operation of this product. We hope you understand that a certain level of noise from the cooling fans is acceptable and is not sufficient cause for the Plasma TV to be exchanged or returned.

FOR LCD TV

If the TV feels cold to the touch, there may be a small "flicker" 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.

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.
- c. Disposal of this product must be carried out in accordance to the regulations of your local authority.

PREPARATION

ACCESSORIES

Ensure that the following accessories are included with your plasma display. If an accessory is missing, please contact the dealer where you purchased the product.

User must use shielded signal interface cables (D-sub 15 pin cable) with ferrite cores to maintain standard compliance for the product.







Batteries



CD Manual



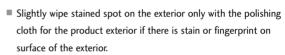
Remote Control



Power Cord



Polishing Cloth



Do not wipe roughly when removing stain. Please be cautions of that excessive power may cause scratch or discoloration.



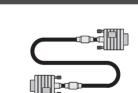
75 Ω Round Cable



2- TV Bracket Bolts



2- TV Brackets, 2- Wall Brackets



Option Extras

D-sub 15 pin Cable



Cable Management



Twist Holder
Arrange the wires with the twist holder.

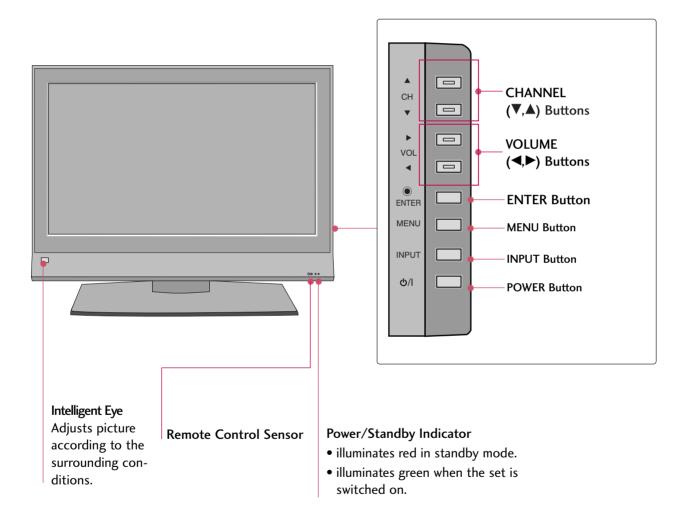


PREPARATION

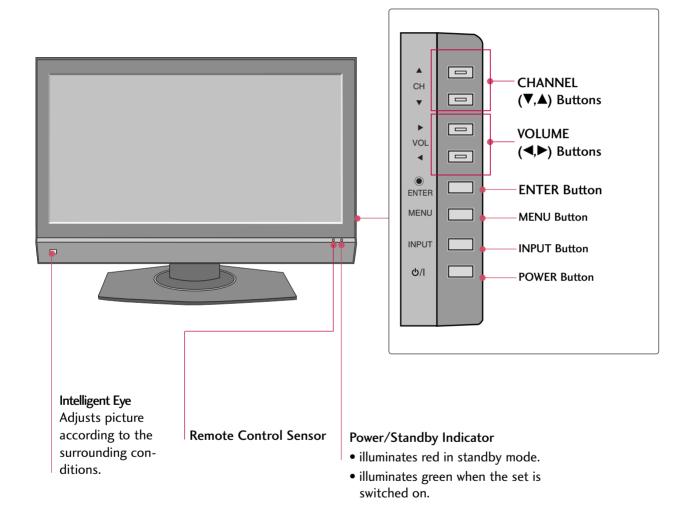
FRONT PANEL CONTROLS

■ Here shown may be somewhat different from your TV.

32/37/42LB4D



37/42/47LB5D

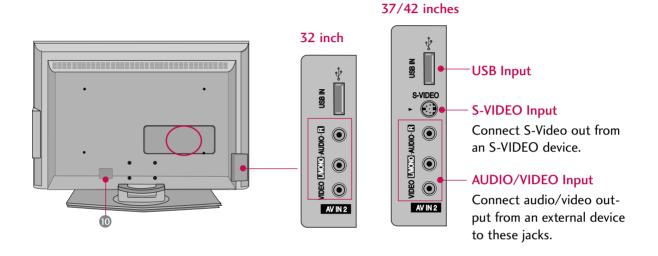


PREPARATION

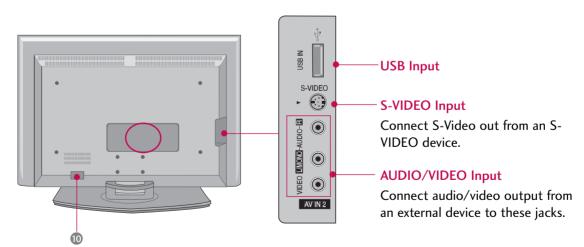
BACK PANEL INFORMATION

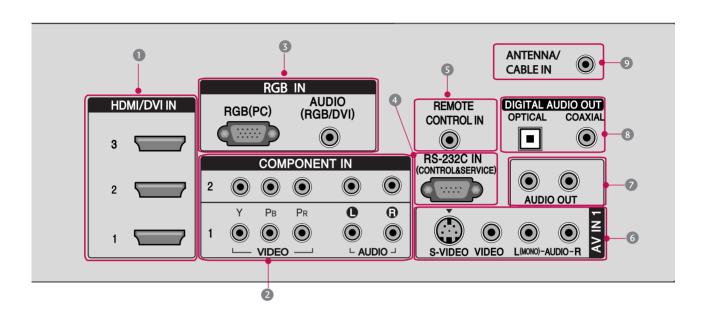
■ Here shown may be somewhat different from your TV.

32/37/42LB4D



37/42/47LB5D





HDMI/DVI IN

Connect a HDMI signal to 1, 2 or 3. Or DVI (VIDEO) signal to the 1, 2 or 3 port with a DVI to HDMI cable.

COMPONENT IN

Connect a component video/audio device to these jacks.

RGB(PC)

AUDIO (RGB/DVI)

Connect the monitor output from a PC to the appropriate input port.

4 RS-232C IN (CONTROL & SERVICE) PORT Connect to the RS-232C port on a PC.

⑤ REMOTE CONTROL PORT

Connect your wired remote control.

6 AV (Audio/Video) IN 1

Connect audio/video output from an external device to these jacks.

S-VIDEO

Connect S-Video out from an S-VIDEO device.

AUDIO OUT

Connect analog audio to various types of equipment.

8 DIGITAL AUDIO OUT

Connect digital audio to various types of equipment.

Note: In standby mode, these ports do not work.

ANTENNA/CABLE IN

Connect over-the air signals to this jack. Connect cable signals to this jack.

n Power Cord Socket

For operation with AC power.

Caution:

Never attempt to operate the TV on DC power.

PREPARATION

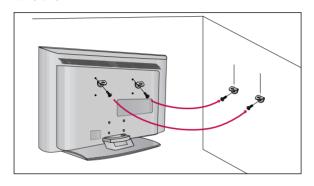
ATTACHING THE TV TO A WALL

We recommend that you set up the TV close to a wall so it cannot fall over if pushed backwards. Additionally, we recommend that the TV be attached to a wall so it cannot be pulled in a forward direction, potentially causing injury or damaging the product.

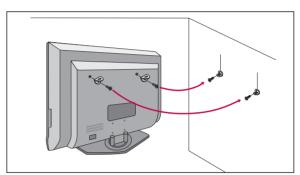
Caution: Please make sure that children don't climb on or hang from the TV.

■ Here shown may be somewhat different from your TV.

32/37/42LB4D

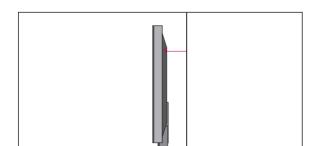


37/42/47LB5D



■ Insert the eye-bolts (or TV brackets and bolts) to tighten the product to the wall as shown in the picture.
*Insert the eye-bolts and tighten them securely in the upper holes.

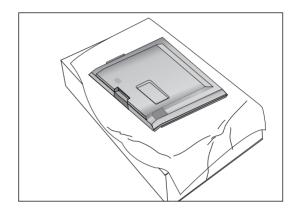
Secure the wall brackets with the bolts (not provided as parts of the product, must purchase separately) to the wall. Match the height of the bracket that is mounted on the wall to the holes in the product. Ensure the eye-bolts or brackets are tightened securely.



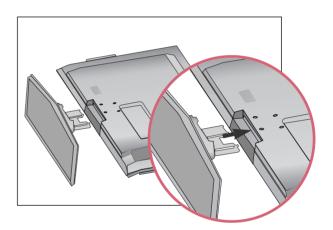
■ Use a sturdy rope (not provided as parts of the product, must purchase separately) to tie the product. It is safer to tie the rope so it becomes horizontal between the wall and the product.

STAND INSTALLATION (Only 32/37 inches models)

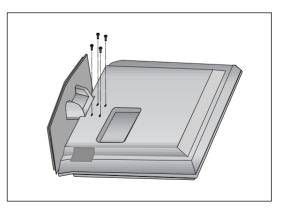
Carefully place the product screen side down on a cushioned surface that will protect product and screen from damage.



Assemble the product stand with the product as shown.



Install the 4 bolts securely, in the back of the product in the holes provided.



PREPARATION

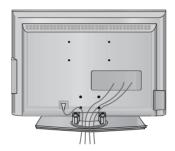
BACK COVER FOR WIRE ARRANGEMENT

■ Here shown may be somewhat different from your TV.

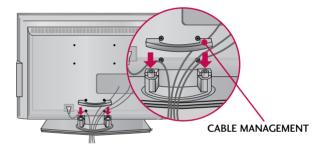
32/37/42LB4D

Connect the cables as necessary.

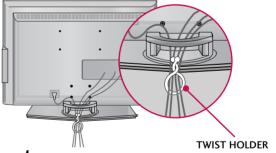
To connect an additional equipment, see the **External equipment Connections** section.



Install the CABLE MANAGEMENT as shown.

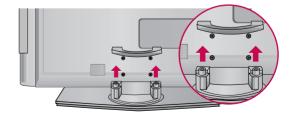


Bundle the cables using the supplied twist



How to remove the cable management

Hold the **CABLE MANAGEMENT** with both hands and pull it upward.



NOTE

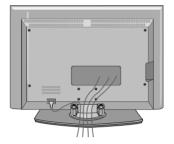
- ▶ Do not hold the CABLE MANAGEMENT when moving the product.
- If the product is dropped, you may be injured or the product may be broken.

■ Here shown may be somewhat different from your TV.

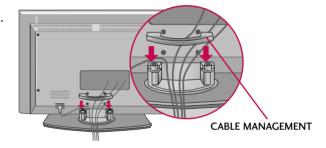
37/42/47LB5D

Connect the cables as necessary.

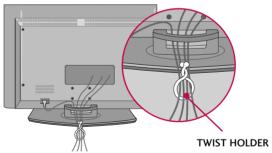
To connect an additional equipment, see the **External equipment Connections** section.



Install the CABLE MANAGEMENT as shown.



Bundle the cables using the supplied twist holder.



How to remove the cable management

Hold the **CABLE MANAGEMENT** with both hands and pull it upward.

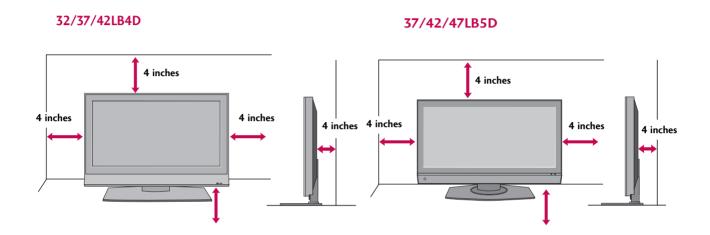


NOTE

- ▶ Do not hold the CABLE MANAGEMENT when moving the product.
- If the product is dropped, you may be injured or the product may be broken.

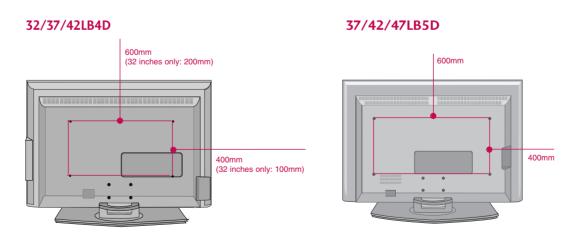
DESKTOP PEDESTAL INSTALLATION

For proper ventilation, allow a clearance of 4 in. on each side and the top, 2.36 in. on the bottom, and 4 in. from the wall.



VESA WALL MOUNTING

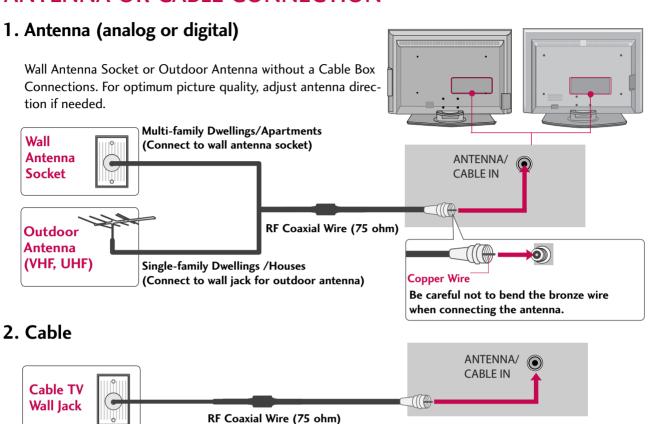
This product accepts a VESA-compliant mounting interface pad. (optional) There 4 threaded holes are available for attaching the bracket.



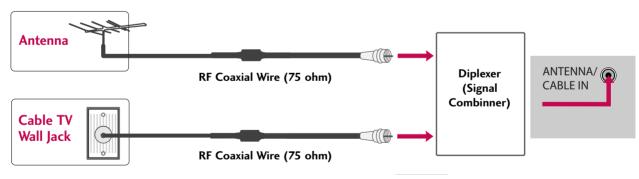
NOTE

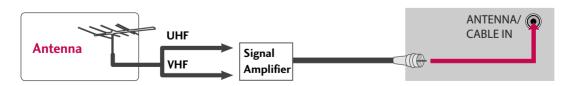
Screw length needed depends on the wall mount used. For further information, refer to the VESA Wall Mounting Instruction Guide.

ANTENNA OR CABLE CONNECTION



3. Using both cable and antenna





- To improve the picture quality in a poor signal area, please purchase a signal amplifier and install properly.
- If the antenna needs to be split for two TV's, install a 2-Way Signal Splitter.
- If the antenna is not installed properly, contact your dealer for assistance.
 - The TV will let you know when the analog, cable, and digital channel scans are complete.

HD RECEIVER SETUP

This TV can receive Digital Over-the-air/Cable signals without an external digital set-top box. However, if you do receive digital signals from a digital set-top box or other digital external device, refer to the figure as shown below.

This TV supports HDCP (High-bandwidth Digital Contents Protection) protocol for Digital Contents (480p,720p,1080i).

When connecting Component cable

1. How to connect

- Connect the video outputs (Y, PB, PR) of the digital set top box to the **COMPONENT IN VIDEO 1** jacks on the set. Match the jack colors

 (Y = green, PB = blue, and PR = red).
- Connect the audio output of the digital set-top box to the COMPONENT IN AUDIO 1 jacks on the set.

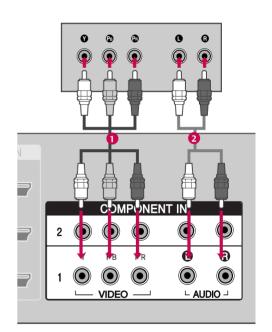
2. How to use

- Turn on the digital set-top box.

 (Refer to the owner's manual for the digital set-top box.)
- Select **COMPONENT 1** input source with using the **INPUT** button on the remote control.
- If connected to COMPONENT IN 2 input, select COMPONENT 2 input source.

Signal	Component 1/2	HDMI/DVI1, 2 or 3
480i	Yes	No
480p	Yes	Yes
720p	Yes	Yes
1080i	Yes	Yes
1080p	Yes	Yes

* Only 37/42/47LB5D models



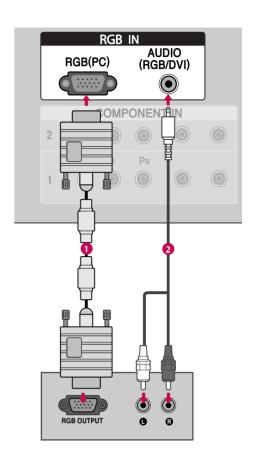
When connecting D-sub 15pin cable

1. How to connect

- Connect the RGB output of the digital set-top box to the RGB (PC) jack on the set.
- Connect the audio outputs of the set-top box to the AUDIO (RGB/DVI) jack on the set.

2. How to use

- Turn on the PC and the set.
- Select **RGB-PC** input source with using the **INPUT** button on the remote control.



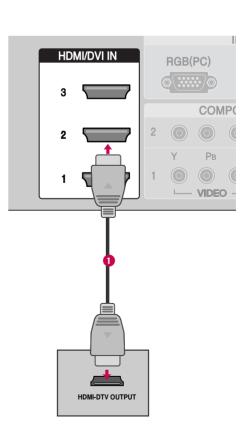
When connecting HDMI cable

1. How to connect

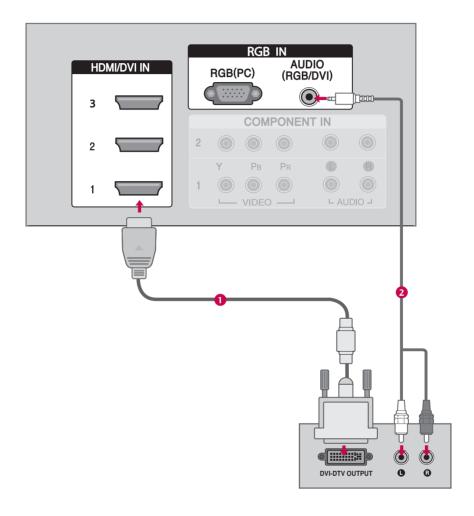
- Connect the digital set-top box to HDMI/DVI IN1, 2 or 3 jack on the set.
- No separated audio connection is necessary.

2. How to use

- Turn on the digital set-top box.(Refer to the owner's manual for the digital set-top box.)
- Select HDMI1, HDMI2 or HDMI3 input source with using the INPUT button on the remote control.
- If the digital set-top box player does not support Auto HDMI, you need to set the output resolution appropriately.



When connecting HDMI to DVI cable



1. How to connect

- Connect the DVI output of the digital set-top box to the HDMI/DVI IN1, 2 or 3 jack on the set.
- Connect the audio output of the digital set-top box to the AUDIO(RGB/DVI) jack on the set.

2. How to use

- Turn on the digital set-top box. (Refer to the owner's manual for the digital set-top box.)
- Select HDMI1, HDMI2 or HDMI3 input source with using the INPUT button on the remote control.

DVD SETUP

When connecting Component cable

1. How to connect

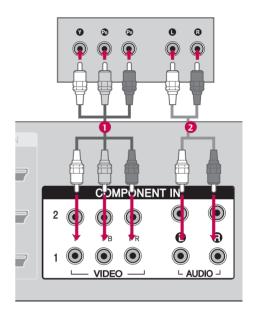
- Connect the video outputs (Y, PB, PR) of the DVD to the COMPONENT IN VIDEO1 jacks on the set.

 Match the jack colors

 (Y = green, PB = blue, and PR = red).
- Connect the audio outputs of the DVD to the COMPONENT IN AUDIO1 jacks on the set.

2. How to use

- Turn on the DVD player, insert a DVD.
- Select **COMPONENT 1** input source with using the **INPUT** button on the remote control.
- If connected to COMPONENT IN 2 input, select COM-PONENT 2 input source.
- Refer to the DVD player's manual for operating instructions.



Component Input ports

To get better picture quality, connect a DVD player to the component input ports as shown below.

Component ports on the TV	Y	Рв	PR
	Y	Рв	PR
Video output ports	Y	Pb	Pr
on DVD player	Y	B-Y	R-Y
	Y	СЬ	Cr

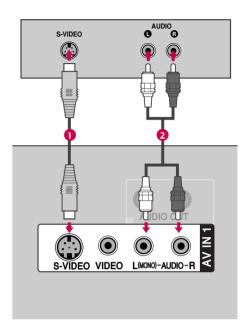
When connecting with an S-Video cable

1. How to connect

- Connect the S-VIDEO output of the DVD to the S-VIDEO input on the set.
- Connect the audio outputs of the DVD to the AUDIO input jacks on the set.

2. How to use

- Turn on the DVD player, insert a DVD.
- Select AV1 input source with using the INPUT button on the remote control.
- If connected to AV IN 2, select AV2 input source.
- Refer to the DVD player's manual for operating instructions.



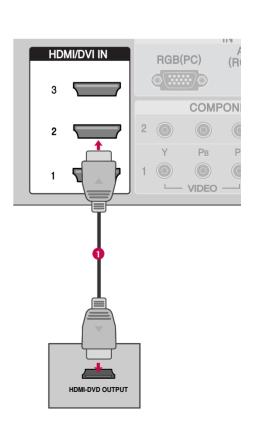
When connecting HDMI cable

1. How to connect

- Connect the HDMI output of the DVD to the HDMI/DVI IN1, 2 or 3 jack on the set.
- 2 No separated audio connection is necessary.

2. How to use

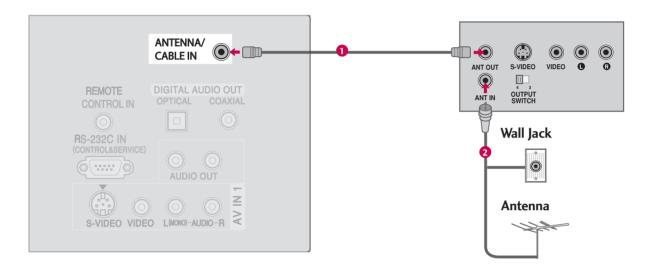
- Select HDMI1, HDMI2 or HDMI3 input source with using the INPUT button on the remote control.
- Refer to the DVD player's manual for operating instructions.
- If the DVD does not support Auto HDMI, you need to set the output resolution appropriately.



VCR SETUP

- To avoid picture noise (interference), leave an adequate distance between the VCR and TV
- Use the ISM feature in the Option menu to avoid having a fixed image remain on the screen for a long period of time. If the 4:3 picture format is used; the fixed images on the sides of the screen may remain visible on the screen.

When connecting with an antenna



1. How to connect

- Connect the RF antenna out socket of the VCR to the Antenna socket on the set.
- Connect the antenna cable to the RF antenna in socket of the VCR.

2. How to use

- Set VCR output switch to 3 or 4 and then tune TV to the same channel number.
- Insert a video tape into the VCR and press PLAY on the VCR. (Refer to the VCR owner's manual.)

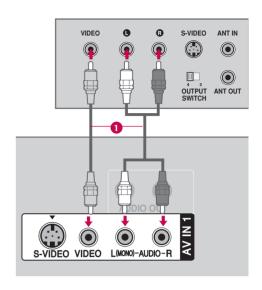
When connecting with a RCA cable

1. How to connect

Connect the AUDIO/VIDEO jacks between TV and VCR. Match the jack colors(Video = yellow, Audio Left = white,and Audio Right = red)

2. How to use

- Insert a video tape into the VCR and press PLAY on the VCR. (Refer to the VCR owner's manual.)
- Select AV1 input source with using the INPUT button on the remote control.
- If connected to AV IN 2, select AV2 input source.



NOTE

If you have a mono VCR, connect the audio cable from the VCR to the AUDIO
 L/MONO jack of the set.

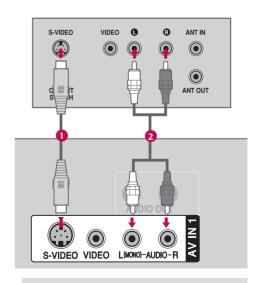
When connecting with an S-Video cable

1. How to connect

- Connect the S-VIDEO output of the VCR to the S-VIDEO input on the set. The picture quality is improved; compared to normal composite (RCA cable) input.
- Connect the audio outputs of the VCR to the AUDIO input jacks on the set.

2. How to use

- Insert a video tape into the VCR and press PLAY on the VCR. (Refer to the VCR owner's manual.)
- Select AV1 input source with using the INPUT button on the remote control.
- If connected to AV IN 2, select AV2 input source.

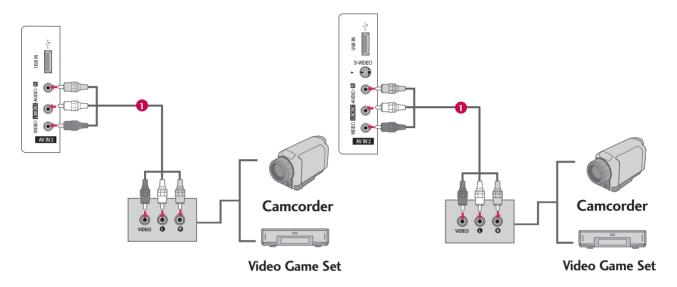


A CAUTION

▶ Do not connect to both Video and S-Video at the same time.

OTHER A/V SOURCE SETUP

32 inches 37/42/47 inches



1. How to connect



Connect the **AUDIO/VIDEO** jacks between TV and external equipment. Match the jack colors.

(Video = yellow, Audio Left = white, and Audio Right = red)

2. How to use

- Select AV1 input source with using the INPUT button on the remote control.
- If connected to AV IN 2 input, select AV2 input source.
- Operate the corresponding external equipment.

PC SETUP

This TV provides Plug and Play capability, meaning that the PC adjusts automatically to the TV's settings.

When connecting D-sub 15 pin cable

1. How to connect

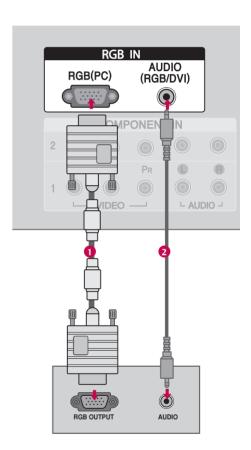
- Connect the RGB output of the PC to the RGB (PC) jack on the set.
- Connect the PC audio output to the AUDIO (RGB/DVI) jack on the set.

2. How to use

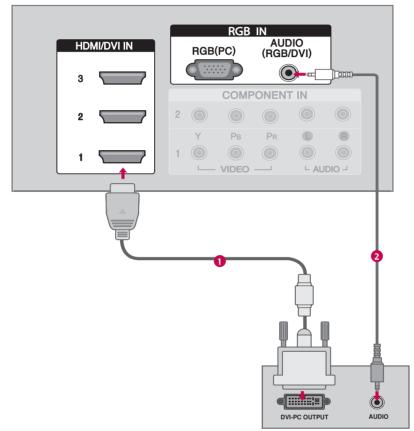
- Turn on the PC and the set.
- Select RGB-PC input source with using the INPUT button on the remote control.

NOTE

▶ Check the image on your TV. There may be noise associated with the resolution, vertical pattern, contrast or brightness in PC mode. If noise is present, change the PC output to another resolution, change the refresh rate to another rate or adjust the brightness and contrast on the VIDEO menu until the picture is clear. If the refresh rate of the PC graphic card can not be changed, change the PC graphic card or consult the manufacturer of the PC graphic card.



When connecting HDMI to DVI cable



1. How to connect

- Connect the DVI output of the PC to the HDMI/DVI IN1, 2 ou 3 jack on the set. (Use the HDMI to DVI cable)
- Connect the PC audio output to the AUDIO(RGB/DVI) jack on the set.

2. How to use

- Turn on the PC and the set
- Select HDMI1, HDMI2 or HDMI3 input source with using the INPUT button on the remote control.

NOTE

- ▶ If the PC has a DVI output and no HDMI output, a separated audio connection is necessary.
- ▶ If the PC does not support Auto DVI, you need to set the output resolution appropriately. To get the best picture quality, adjust the output resolution of PC graphics card's output resolution to 1360x768, 60Hz.(37/42/47LB5D models: 1920x1080, 60Hz)

NOTES

- ▶ Depending on the graphics card, DOS mode may not work if a HDMI to DVI Cable is in use.
- ➤ Check the image on your TV. There may be noise associated with the resolution, vertical pattern, contrast or brightness in PC mode. If noise is present, change the PC output to another resolution, change the refresh rate to another rate or adjust the brightness and contrast on the PIC-TURE menu until the picture is clear. If the refresh rate of the PC graphic card can not be changed, change the PC graphic card or consult the manufacturer of the PC graphic card.
- Avoid keeping a fixed image on the screen for a long period of time. The fixed image may become permanently imprinted on the screen.
- ► The synchronization input form for Horizontal and Vertical frequencies is separate.

Supported Display Specifications (RGB/HDMI-PC)

Resolution	Horizontal Frequency(KHz)	Vertical Frequency(Hz)
640x350	31.468	70.09
720x400	31.469	70.08
640x480	31.469 37.861 37.500	59.94 72.80 75.00
800x600	35.156 37.879 48.077 46.875	56.25 60.31 72.18 75.00
1024x768	48.363 56.476 60.023	60.00 70.06 75.02
1280x768	47.776	59.870
1280x768	60.289	74.893
1360x768	47.712	60.015
1280x1024	60.981 79.976	60.020 75.025
1600x1200	75.00	60.00
1920x1080	67.50	60.00

* RGB-PC mode only: 1280x768(H-60.289, V-74.893)

Supported Display Specifications (HDMI-DTV)

Resolution	Horizontal Frequency(KHz)	Vertical Frequency(Hz)
720x480	31.47 31.47	60.00 59.94
1280x720	45.00 44.96	60.00 59.94
1920x1080	33.75 33.72 67.50 67.432 27.00 26.97 33.75 33.71	60.00 59.94 60.00 59.939 24.00 23.94 30.00 29.97

Supported Display Specifications (Y, C_B/P_B , C_R/P_R)

Resolution	Horizontal Frequency(KHz)	Vertical Frequency(Hz)
	15.73	60.00
720x480	15.73	59.94
	31.47	59.94
	31.47	60.00
1280x720	45.00	60.00
1200x/20	44.96	59.94
	33.75	60.00
	37.72	59.94
	67.50	60.00
1020 1000	67.432	59.939
1920x1080	27.00	24.00
	26.97	23.94
	33.75	30.00
	33.71	29.97

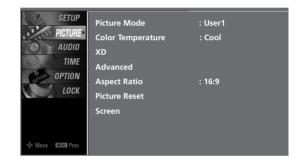
Screen Setup for PC mode

Overview

When the RGB input, of the set is connected to a PC Output, Select RGB-PC with using the **INPUT** button on the remote control.

When you change the resolution, select the proper resolution in present input to see the best picture appearance.

- Press the MENU button and then use ▲ or ▼ button to select the PICTURE menu.
- Press the ▶ button and then use ▲ or ▼ button to select **Screen**.
- Press the button to enter the screen adjustment menu.





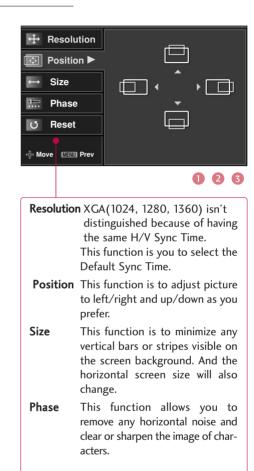
Adjustment for screen Resolution, Position, Size, Phase, Reset

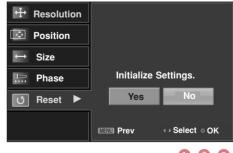
- Use ▲ or ▼ button to select **Resolution**, **Position**, **Size**, or **Phase**.
- Press the ENTER button and then use ▲ / ▼ or ◀ / ► button to make appropriate adjustments.
 - The **Phase** adjustment range is -16 ~ +16.
 - The **Size** adjustment range is **-30** ~ **+30**.
- Press the ENTER button.

Initializing (Reset to original factory values)

To initialize the adjusted values.

- Use ▲ or ▼ button to select **Reset**.
- Press the ENTER button and then use ◀ or ▶ button to select Yes.
- Press the ENTER button.



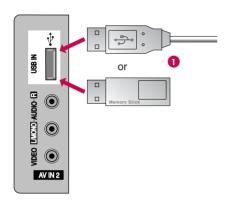




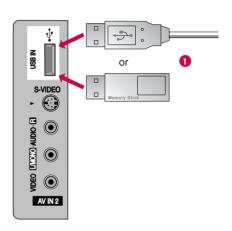
USB IN SETUP

The TV has a special signal output capability which allows you to hook up the second TV or monitor.

32 inches



37/42/47 inches



1. How to connect

0

Connect the USB device to the **USB IN** jacks on the side of TV.

2. How to use

■ After connecting the **USB IN** jacks, you use the **MEDIAHOST** function. (▶ p.47)

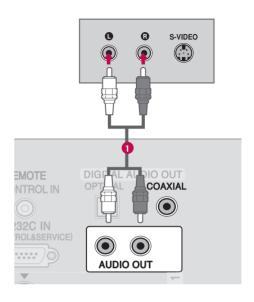
AUDIO OUT SETUP

Send the TV's audio to external audio equipment via the Audio Output (Optical) port.

1. How to connect

Analog

- Connect audio outputs to the TV's AUDIO OUT or DIGITAL AUDIO OUT COAXIAL jacks.
- Set the "TV Speaker option Off" in the AUDIO menu. (▶ p.72). See the external audio equipment instruction manual for operation.



Digital

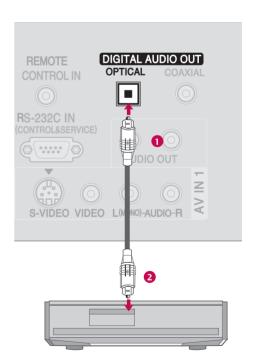
- Connect one end of an optical cable to the TV Digital Audio (Optical) Output port.
- Connect the other end of the optical cable to the digital audio (optical) input on the audio equipment.
- Set the "TV Speaker option Off" in the AUDIO menu. (▶ p.72). See the external audio equipment instruction manual for operation.

NOTE

 When connecting with external audio equipment, such as amplifers or speakers, please turn the TV speakers off.
 (▶ p.72)

A CAUTION

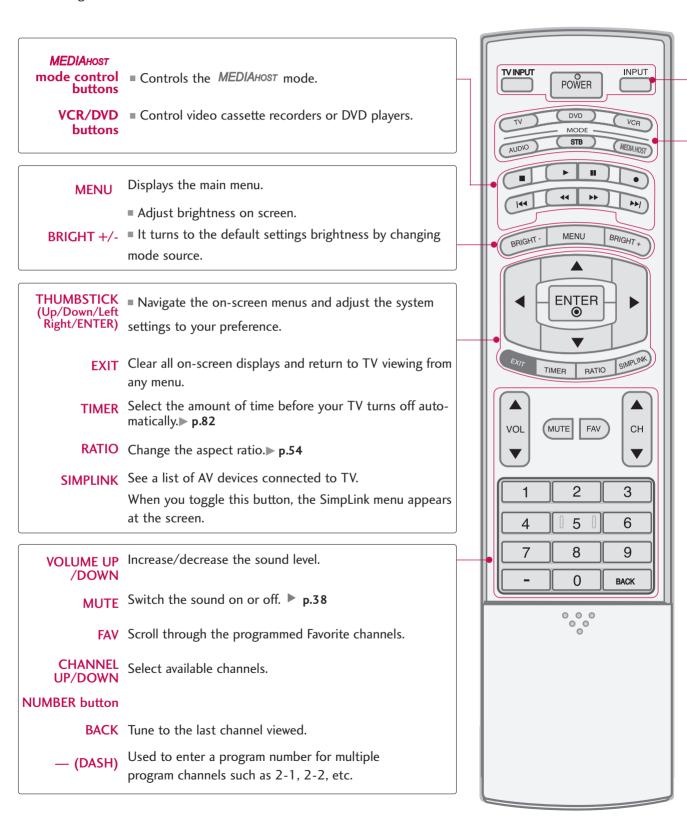
▶ Do not look into the optical output port. Looking at the laser beam may damage your vision.



WATCHING TV / CHANNEL CONTROL

REMOTE CONTROL FUNCTIONS

When using the remote control, aim it at the remote control sensor on the TV.



POWER Turns your TV or any other programmed equipment on or off, depending on the mode.

TV INPUT In AV 1-2, Component 1-2, RGB-PC, HDMI1, HDMI2 and HDMI3 input sources, screen returns to the last TV channel.

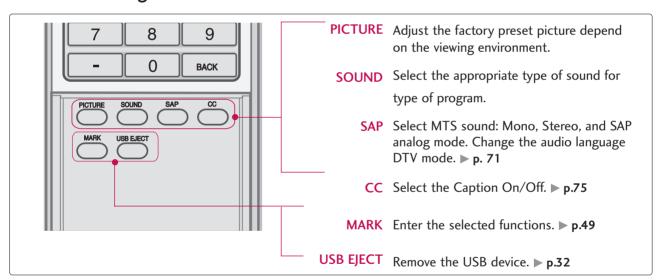
INPUT External input modes rotate in regular sequence: Antenna, Cable, AV1-2, Component 1-2, RGB-PC, HDMI1, HDMI2, HDMI3 (Antenna, Cable, AV 1-2, Component 1-2, RGB-PC, HDMI1, HDMI2, HDMI3 input sources are linked automatically, only if these are connected).

MODE Select the remote operating mode: TV, DVD, VCR, AUDIO, CABLE or STB.

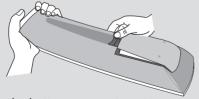
* If the mode of another product is selected, a button on the remote control which is not used for the selected product can control the TV.

MEDIAHOST Enter to the **MEDIAHOST** mode.

Inside the Sliding Cover



Installing Batteries



- Open the battery compartment cover on the back side and install the batteries matching correct polarity (+with +,-with -).
- Install two 1.5V AA batteries. Don't mix old or used batteries with new ones.
- Close cover.

Remote control effective range



- Use a remote control up to 7 meters distance and 30 degree (left/right) within the receiving unit scope.
- Dispose of used batteries in a recycle bin to preserve environment.

TURNING ON TV

- First, connect power cord correctly.
 At this moment, the TV switches to standby mode.
 - In standby mode, press the ტ/I (or ON/OFF), INPUT, CH (▲ or ▼) button on the TV or press the POWER, INPUT, TV INPUT, CH(▲ or ▼), Number (0~9) button on the remote control.
- Select the viewing source by using the **INPUT** button on the remote control.
 - This TV is programmed to remember which mode it was last set to, even if you turn the TV off.
- When finished using the TV, press the **POWER** button on the remote control. The TV reverts to standby mode.

NOTE

- ▶ If you intend to be away on vacation, disconnect the power plug from the wall power outlet.
- ▶ When the TV is turned on, the indicator will blink red before the picture is seen.



CHANNEL SELECTION



Press the $\mathbf{CH} \blacktriangle$ or \blacktriangledown or \mathbf{NUMBER} buttons to select a channel number.



VOLUME ADJUSTMENT

Adjust the volume to suit your personal preference.

- Press the VOL ▲ or ▼ button to adjust the volume.
- If you want to switch the sound off, press the MUTE button.
- You can cancel the Mute function by pressing the MUTE or VOL ▲ or ▼ button.



ON-SCREEN MENUS SELECTION

Only Plasma TV model

Your TV's OSD (On Screen Display) may differ slightly from what is shown in this manual.

- Press the MENU button and then use ▲ or ▼ button to select each menu.
- Press the ▶ button and then use ▲ ▼ ◀ ▶ button to display the available menus.

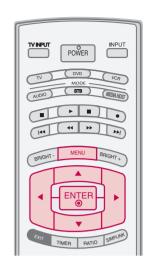


CHANNEL SETUP

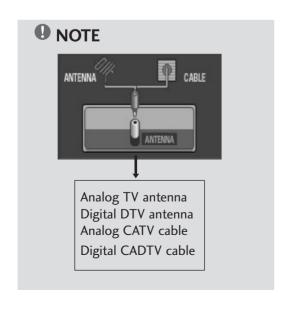
Auto Scan(Auto Tuning)

Automatically finds all channels available through antenna or cable inputs, and stores them in memory on the channel list. Run Auto Tuning again after any Antenna/Cable connection changes.

A password is required to gain access to Auto Tuning menu if the Lock System is turned on.



- Press the MENU button and then use ▲ or ▼ button to select the SETUP menu.
- Press the ▶ button and then use ▲ or ▼ button to select **Auto Tuning**.
- Press the ENTER button to begin the channel search. Allow Auto Tuning to complete the channel search cycle for ANTENNA and CABLE.









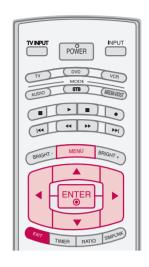
Add/Delete Channel (Manual Tuning)

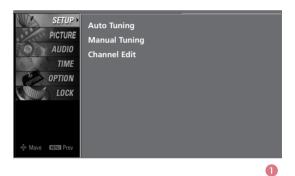
A password is required to gain access to Manual Tuning menu if the Lock System is turned on.

If selecting DTV or CADTV input signal, you can view the on-screen signal strength monitor to see the quality of the signal being received.

- Press the MENU button and then use ▲ or ▼ button to select the **SETUP** menu.
- Press the ▶ button and then use ▲ or ▼ button to select Manual Tuning.
- Press the ▶ button and then use ▲ or ▼ button to select DTV, TV, CADTV, and CATV.
- Press the ▶ button and then use ▲ or ▼ button to select channel number you want to add or delete.
- Press the **ENTER** button to add or delete for the channel number.
- Press **EXIT** button to return to TV viewing or press **MENU** button to return to the previous menu.
 - NOTE

▶ This digital channel number is a physical channel number, which is different from the normal channel number shown in Channel Edit.











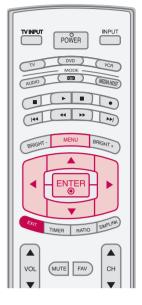


Channel Editing

From the default channel list created from the Auto Tuning channel search, you can create two different types of channel lists in memory: "custom list" and "favorite channel list".

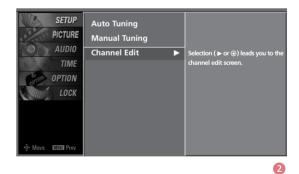
A custom list can be created by toggling each channel on or off with ENTER button. The channels in the Custom List are displayed in black and the channels deleted from the Custom List are displayed in gray. Once a channel is highlighted you can add or delete the channel by referring to the small window at the top-left corner of the screen.

You can create your own Favorite List. Use the FAV button on the remote control when a channel is highlighted and then add or delete the channel to/from your Favorite List.



- Press the MENU button and then use ▲ or ▼ button to select the **SETUP** menu.
- Press the ▶ button and then use ▲ or ▼ button to select Channel Edit.
- Press the button. You will now see a screen filled with channel numbers and a preview picture.
- Use ▲ ▼ ◀ ▶ button to select a channel and then use the **ENTER** button to add or delete it. Press **FAV** button to add the channel to the Favorite List. The surfing icon will appear in front of that channel number.
- Press **EXIT** button to return to TV viewing or press MENU button to return to the previous menu.





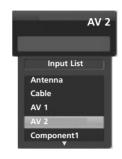


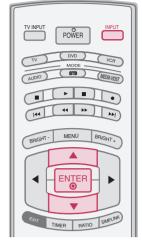


INPUT LIST

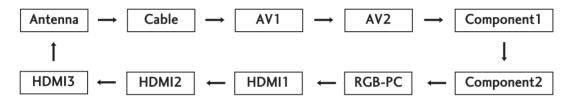
Press the **INPUT** button to display external device that is connected to the unit, on screen.

Press the **ENTER** button to change the input to the active external device. Use the ▲ or ▼ button to select the input source.

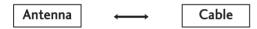




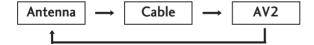
1 If all external input sources are connected:



If no external input sources are not connected:



If there is any external input source connected: (ex: When connected only to AV 2)



Antenna: Select it when watching the DTV/TV.

Cable: Select it when watching the CADTV/CATV.

AV 1, AV 2: Select it when watching the VCR or external equipment.

Component 1-2: Select it when using the DVD or the Digital set-top box depend on connector.

RGB-PC: Select it when using PC depend on connector.

HDMI, HDMI2, HDMI3: Select it when using DVD, PC or Digital set-top box depend on connector.



This operates only for the devices with the Smplink logo. Please check the Smplink logo.

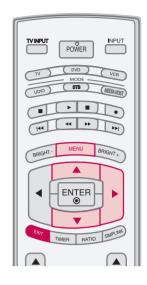
This allows you to control and play other AV devices connected to the display through HDMI cable without additional cables and settings.

SimpLink Preparations

1 Connect the HDMI/DVI IN 1, 2 or 3 terminal of the TV to the rear terminal (HDMI output) of the SimpLink device with the HDMI cable.

After connecting the HDMI jack for the home theater with simpLink function in the above method, connect the DIGITAL AUDIO OUT OPTICAL on the back of the TV to the DIGITAL AUDIO OUT terminal on the back of the simpLink device with the Optical cable.

- Press the MENU button and then use ▲ or ▼ button to select the OPTION menu.
- Press the ▶ button and then use ▲ or ▼ button to select SimpLink.
- Press the ▶ button and then use ▲ or ▼ button to select On.
- Press EXIT button to return to TV viewing or press MENU button to return to the previous menu.











NOTE

- ▶ When operating the external device with SimpLink, press the TV button among the MODE button on the remote control.
- ▶ When you switch the Input source with the INPUT button on the remote control, you can stop the operation of device worked by SimpL fink.
- ▶ When you select or operate the media device with home theater function, the speaker automatically switches to home theater speaker (HT speaker).
- ▶ When you execute 'Photo List, Music List 'function during DVD playback included in home theater supported the SimpLink stops and the applicable function is executed after switching the input to TV.

SimpLink Functions

Direct Play

After connecting AV devices to TV, you can directly control the devices and play media without additional settings.

Select AV device

Enables you to select one of AV devices connected to TV and play it.

Disc playback

Power off all devices

When you power off TV, all connected devices are turned off.

Switch audio-out

Offers an easy way to switch audio-out.

(A device, which is connected to TV through HDMI cable but does not support Simplink, does not provide this function)

- 1 After selecting the TV button of the MODE on the remote control, press the SIMPLINK button.
- Use ▲ ▼ ◆ ▶ button to select the desired device and then press the ENTER button.



POWER

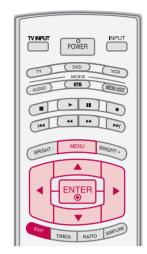
SimpLink Menu

- TV viewing: Switch to the previous TV channel regardless of the current mode.
- ② DISC playback: Select and play discs. When multiple discs are available, the titles of the discs are conveniently displayed at the bottom of the screen.
- **3 VCR playback**: Play and control the connected VCR.
- 4 HDD Recordings playback: Play and control recordings stored in HDD.
- S Audio Out to HT speaker/Audio Out to TV: Select HT speaker or TV speaker for Audio Out.



INPUT LABEL

Sets a label to each input source which is not in use when you press INPUT button.



- Press the MENU button and then use ▲ or ▼ button to select the **OPTION** menu.
- Press the ▶ button and then use ▲ or ▼ button to select Input Label.
- Press the ▶ button and then use ▲ or ▼ button to select the source: AV1, AV2, Component1, Component2, RGB-PC, HDMI1, HDMI2 or HDMI3.
- Press the ◀ or ▶ button to select the label.
- Press **EXIT** button to return to TV viewing or press MENU button to return to the previous menu.



Component2 Set Top Box VCR HDMI1

2 3



NOTE

▶ When selecting the PC of HDMI mode, the picture is changed to full screen.

MEDIAHOST

ENTRY MODES

When you connect a USB device or press the button, this screen is displayed, automatically.

In USB device, you can not add a new folder or delete the existing folder.

- lacktriangle Press the lacktriangle or lacktriangle button to select the desired item.
- Press the ENTER button to move to Photo List or Music List of USB device.
- Press the USB EJECT button of remote control before removing the USB device.

[Media Host Menu]





• NOTE

- Press the USB EJECT button of remote control before removing the USB device.
- ▶ Only a USB storage device is recognizable.
- ▶ If the USB storage device is connected through a USB hub, the device is not recognizable.
- ▶ A USB storage device using an automatic recognition program may not be recognized.
- ▶ A USB storage device which uses its own driver may not be recognized.
- In case of a card reader, up to four memory cards are concurrently recognizable.
- ▶ The recognition speed of a USB storage device may depend on each device.
- ▶ Please do not turn off the TV or unplug the USB device when the connected USB storage device is working. When such device is suddenly separated or unplugged, the stored files or the USB storage device may be damaged. To unplug the USB storage device, please press the USB EJECT button on the remote control, and then unplug it safely.
- ▶ Please do not connect the USB storage device which was artificially maneuvered on the PC. The device may cause the product to malfunction or fail to be played. Never forget to use only a USB storage device which has normal music files or image files.
- ▶ Please use only a USB storage device which was formatted as a FAT or a NTFS file system provided with the Windows operating system. In case of a storage device formatted as a different utility program which is not supported by Windows, it may not be recognized.
- ▶ In case of a hard disk drive (HDD) formatted as NTFS, writing and deletion are not allowable.
- ▶ Please connect power to a USB storage device which requires an external power supply. If not, the device may not be recognized.
- Please connect a USB storage device with cable is offered by USB maker. If connected with cable is not offered by USB maker or an excessively long cable, the device may not be recognized.
- Some USB storage devices may not be supported or operated smoothly.
- ▶ If the name of a folder or file is too long, it will not be displayed or recognized.

MEDIAHOST

PHOTO LIST

It's available to playback the photo file(*.jpg) in the USB device.

The On Screen Display may be different from your set. Images are an example to assist with the TV operation.

Screen Components

Usable USB memory



- Current page/Total pages
- 3 Total number of marked thumbnail photos
- Corresponding buttons on the remote control

