

LCD TV | PLASMA TV OWNER'S MANUAL

LCD TV MODELS PLASMA TV MODELS

37LB5D 50PY3D 42LB5D 60PY3D

47LB5D 52LB5D 47LC7DF

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 Constitution 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 device.



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.



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



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

A

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.



8 Unplug this apparatus when unused for long periods of time.



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.





- Never touch this apparatus or antenna during a thunder or lighting storm.
- Do not allow a impact shock or any objects to fall into the product, and do not drop onto the screen with something.
- 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.



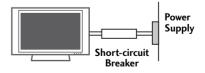
Wet Location Marking: Apparatus shall not be exposed to dripping or splashing and no objects filled with liquids, such as vases, shall be placed on or over apparatus.



16 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

Mains plug is the disconnecting device. The plug must remain readily operable.

CONTENTS

| WARNING AGAITION | _ | | |
|--|----|--|-----|
| WARNING / CAUTION | 1 | Input Label | |
| SAFETY INSTRUCTIONS | 2 | Key Lock | 45 |
| FEATURE OF THIS TV | 6 | MEDIAUGE | |
| | | MEDIA HOST | |
| PREPARATION | | Entry Modes | |
| Accessories | 7 | Photo List | |
| Front Panel Information | | Music List | 51 |
| Back Panel Information | | | |
| Stand Installation | | DISTURE CONTROL | |
| | | PICTURE CONTROL | |
| Not using the desk-type stand | | Picture Size (Aspect Ratio) Control | 53 |
| | | Preset Picture Settings | |
| Back Cover for Wire Arrangement | | - Picture Mode - Preset | 54 |
| Attaching the TV to a Wall | | | |
| Desktop Pedestal Installation | | - Color Tone - Preset | 55 |
| VESA Wall Mounting | | Manual Picture Adjustment | |
| Antenna or Cable Connection | 18 | - Picture Mode - User Mode | |
| | | - Color Tone - User Mode | |
| EVTERNAL FOLUDATAIT CETUR | | XD - Picture Improvement Technology | 58 |
| EXTERNAL EQUIPMENT SETUP | | Advanced - Cinema 3:2 Pulldown Mode | 59 |
| HD Receiver Setup | 19 | Advanced - Black (Darkness) Level | 60 |
| DVD Setup | 22 | Picture Reset | 61 |
| VCR Setup | 24 | Image Sticking Minimization (ISM) Method | 62 |
| Other A/V Source Setup | | Low - Power Picture Mode | |
| PC Setup | | Front Display | |
| USB In Setup | | Tronc Display | 0 1 |
| Audio Out Setup | | | |
| • | | SOUND & LANGUAGE CONTROL | |
| WATCHING TV / CHANNEL CONTR | OL | Auto Volume Leveller (Auto Volume) | 65 |
| | | Preset Sound Setting (Sound Mode) | 66 |
| Remote Control Key Functions | | Sound Setting Adjustment - User Mode | 67 |
| Turning On TV | | Balance | 68 |
| Channel Selection | | TV Speakers On/Off Setup | 69 |
| Volume Adjustment | | Stereo/SAP Broadcasts Setup | |
| On-Screen Menus Selection | 37 | Audio Language | |
| Channel Setup | | | |
| - Auto Scan (Auto Tuning) | | On-Screen Menus Language Selection | |
| - Add / Delete Channel (Manual Tuning) | | Caption Mode | |
| - Channel Editing | 40 | - Analog Broadcasting System Captions | |
| Input List | 41 | - Digital Broadcasting System Captions | 75 |
| Simplink | 42 | Caption Option | 76 |

TIME SETTING

| Clock Setting - Auto Clock Setup | 77 |
|--|----|
| - Manual Clock Setup | |
| Auto On/Off Time Setting | |
| Sleep Time Setting | |
| Auto Shut-off Setting | |
| , and the second | |
| PARENTAL CONTROL / RATINGS | 5 |
| Set Password & Lock System | 82 |
| Channel Blocking | |
| External Input Blocking | 84 |
| Movie & TV Rating | 85 |
| | |
| APPENDIX | |
| Troubleshooting | 88 |
| Maintenance | |
| Product Specifications | 91 |
| Programming the Remote Control | 93 |
| IR Codes | |
| External Control Through RS-232C | 99 |

FEATURE 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 product. 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.

The accssories can be different from the figures shown here.











Owner's Manual

CD Manual

Remote Control, **Batteries**

Power Cord

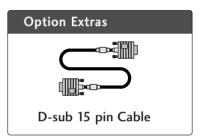
75 ohm Round Cable



Polishing Cloth

* Slightly wipe stained spot on the exterior only with the polishing cloth for the product exterior if there is stain or fingerprint on surface of the exterior.

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







Cable Management





2- TV Bracket Bolts (Refer to p.16)



2- TV Brackets, 2- Wall Brackets (Refer to p.16)



4-Bolts for stand assembly (Refer to p.12)

For Plasma TV models



Additional Cover (Refer to p.13)



3- Bolts (Refer to p.13)



2- Rubbers (Refer to p.13)



2- TV Bracket **Bolts** (Refer to p.16)



2- TV Brackets, 2- Wall Brackets (Refer to p.16)





2- Wall Brackets (Refer to p.16)



7

PREPARATION

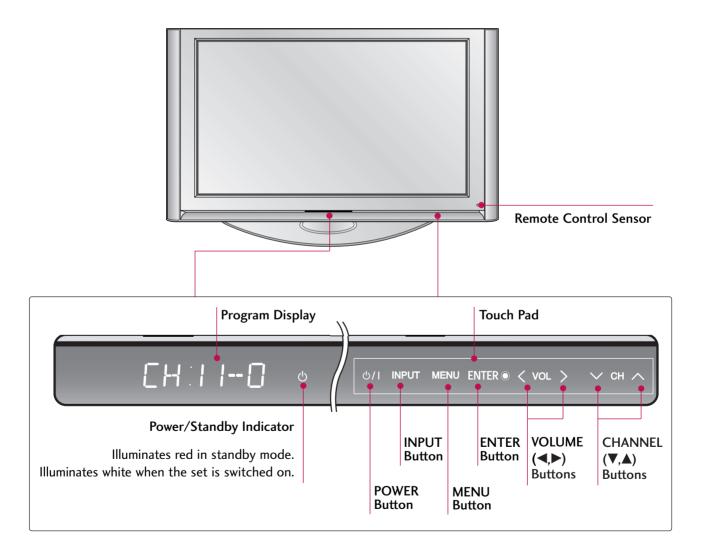
FRONT PANEL INFORMATION

- Here shown may be somewhat different from your TV.
- NOTE: If your product has a protection tape attached, remove the tape.

 And then wipe the product with a cloth (If a polishing cloth is included with your product, use it).

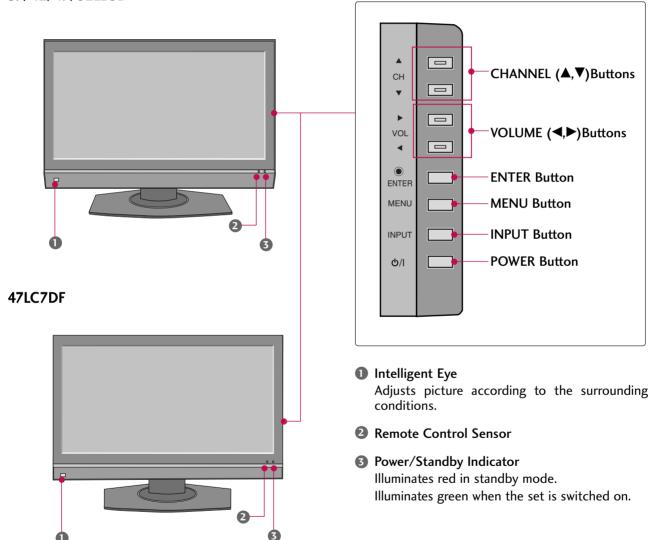
Plasma TV Model

50/60PY3D



LCD TV Model

37/42/47/52LB5D

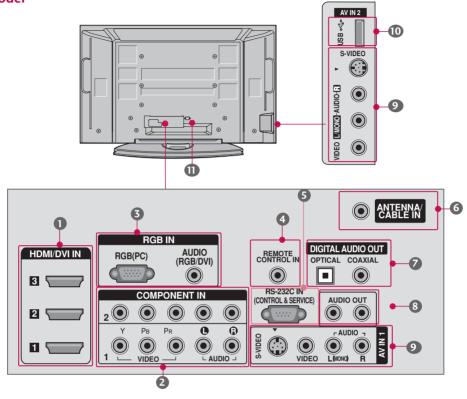


PREPARATION

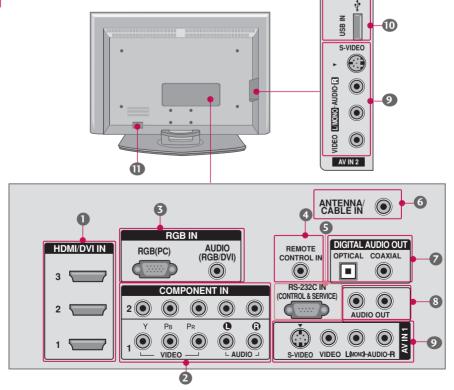
BACK PANEL INFORMATION

Here shown may be somewhat different from your TV.

Plasma TV Model



LCD TV Model



1 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.

3 RGB (PC)

AUDIO (RGB/DVI)

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

REMOTE CONTROL PORT

Connect your wired remote control.

S RS-232C IN (CONTROL & SERVICE) PORT

Connect to the RS-232C port on a PC.

6 ANTENNA/CABLE IN

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

DIGITAL AUDIO OUT

Connect digital audio to various types of equipment. Note: In standby mode, these ports do not work.

8 AUDIO OUT

Connect analog audio to various types of equipment.

AV (Audio/Video) IN 1/2

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

S-VIDEO

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

10 USB INPUT

Power Cord Socket

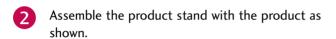
For operation with AC power.

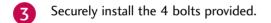
Caution: Never attempt to operate the TV on DC power.

PREPARATION

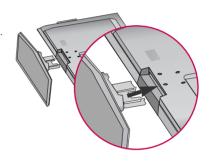
STAND INSTALLATION (Only 37LB5D)

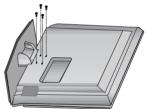
Carefully place the product screen side down on a cushioned surface that will protect product and screen from damage.





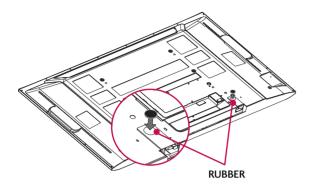






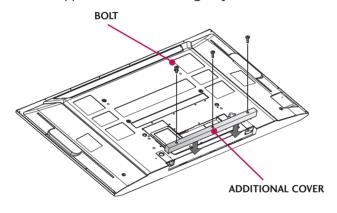
NOT USING THE DESK-TYPE STAND (For Plasma TV)

■ It is applied to when installing only the 60PY3D model as wall-type.



When not using the desk-type stand, install the supplied desk-type stand fixture protection rubber caps as shown at the figure.

■ It is applied to when installing only the 50/60PY3D model as wall-type.



To prevent the foreign materials from entering the desk-type stand fixture, fix the desk-type stand fixture protection cover(additional cover) by using the supplied bolts as shown at the figure.

SWIVEL STAND (For Plasma TV)

After installing the TV, you can adjust the the TV set manually to the left or right direction by 20 degrees to suit your viewing position.



NOTE

Before adjusting the angle, you must remove the cable management and loosen (to the left) the shaft bolt on the middle of stand's back. And when stand be level with TV, you must close (to the right) the shaft bolt to set the hole.

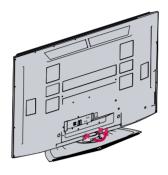
PREPARATION

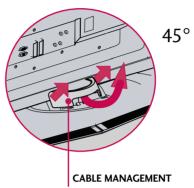
BACK COVER FOR WIRE ARRANGEMENT

■ Here shown may be somewhat different from your TV.

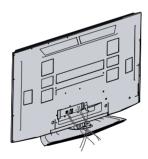
Plasma TV Model

Hold the **CABLE MANAGEMENT** with both hands and pull it backward as shown.

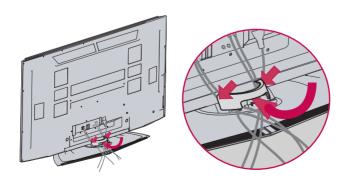




Connect the cables as necessary.
To connect an additional equipment, see the EXTERNAL EQUIPMENT SETUP section.

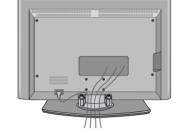


Install the CABLE MANAGEMENT as shown.

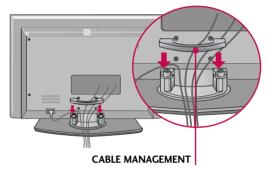


LCD TV Model

Connect the cables as necessary.
To connect an additional equipment, see the EXTERNAL EQUIPMENT SETUP section.



2 Install the CABLE MANAGEMENT as shown.



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.

How to remove the CABLE MANAGEMENT

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



PREPARATION

ATTACHING THE TV TO A WALL

■ Here shown may be somewhat different from your TV.

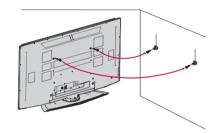
We recommend that you set up the TV close to a wall so it cannot fall over if pushed backwards. Additionally, we recommend that the TV be attached to a wall so it cannot be pulled in a forward direction, potentially causing injury or damaging the product.

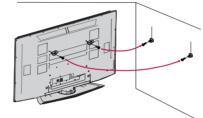
Caution: Please make sure that children don't climb on or hang from the TV.

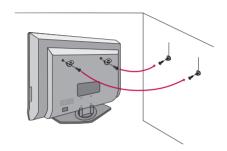
Plasma TV Model LCD TV Model

50PY3D

60PY3D







- Insert the eye-bolts (or TV brackets and bolts) to tighten the product to the wall as shown in the picture.
- * If your product has the bolts in the eye-bolts position before inserting the eye-bolts, loosen the bolts.

 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.

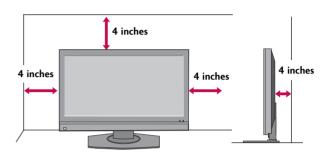
DESKTOP PEDESTAL INSTALLATION

For proper ventilation, allow a clearance of 4inches on all four sides from the wall.

Plasma TV Model

4 inches 4 inches 4 inches

LCD TV Model



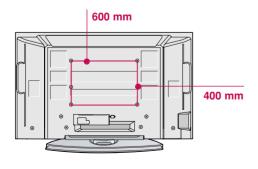
A CAUTION

▶ Ensure adequate ventilation by following the clearance recommendations.

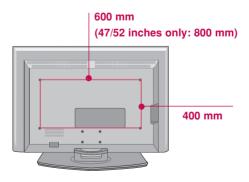
VESA WALL MOUNTING

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

Plasma TV Model



LCD TV Model



NOTE

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

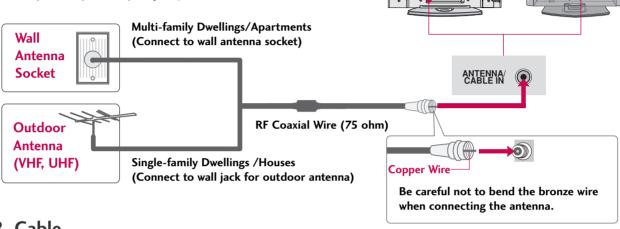
ANTENNA OR CABLE CONNECTION

■ Here shown may be somewhat different from your TV.

1. Antenna (Analog or Digital)

Wall Antenna Socket or Outdoor Antenna without a Cable Box Connections.

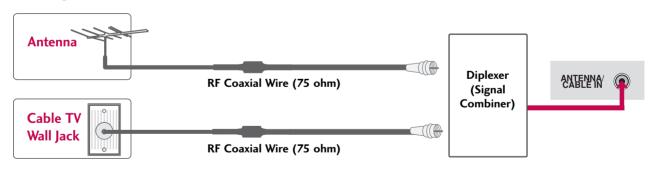
For optimum picture quality, adjust antenna direction if needed.

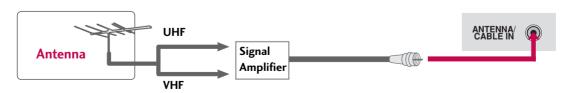


2. Cable



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.

EXTERNAL EQUIPMENT SETUP

- To prevent the equipment damage, never plug in any power cords until you have finished connecting all equipment.
- This part of EXTERNAL EQUIPMENT SETUP mainly use picture for LCD TV model.

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.

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

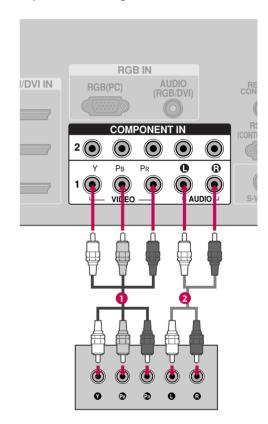
(Y = green, PB = blue, and PR = red).

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. operation)
- Select Component 1 input source by using the INPUT button on the remote control.
- If connected to COMPONENT IN2 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 |



Y, CB/PB, CR/PR

| Resolution | Horizontal Frequency(KHz) | Vertical Frequency(Hz) |
|--------------|---|---|
| 720 x 480i | 15.73 15.73 | 60.00 59.94 |
| 720 x 480p | 31.47 31.47 | 59.94 60.00 |
| 1280 x 720p | 45.00 44.96 | 60.00 59.94 |
| 1920 x 1080i | 33.75 37.72 | 60.00 59.94 |
| 1920 x 1080i | 67.50 67.432 27.00 26.97 33.75 33.71 | 60.00 59.939 24.00 23.94 30.00 29.97 |

When connecting HDMI cable

1. How to connect

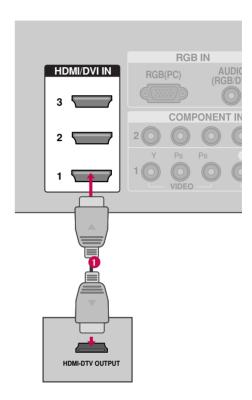
- Connect the digital set-top box to HDMI/DVI IN1, 2 or 3 jack on the set.
- No separated audio connection is necessary.

 HDMI supports both audio and video.

2. How to use

- Turn on the digital set-top box.

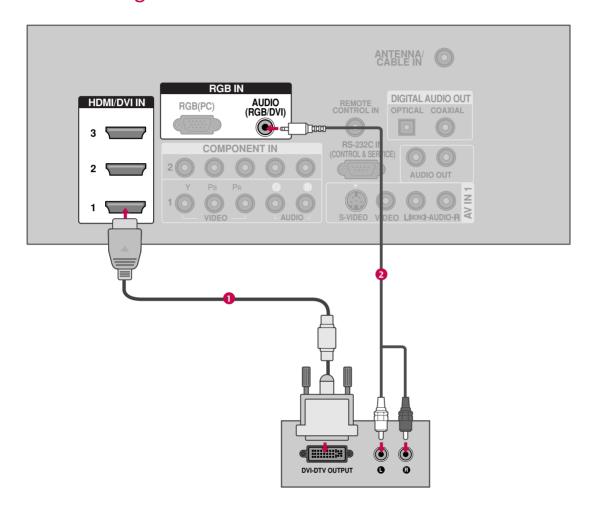
 (Refer to the owner's manual for the digital set-top box.)
- Select HDMI1, HDMI2 or HDMI3 input source with using the INPUT button on the remote control.
- If the digital set-top box player does not support Auto HDMI, you need to set the output resolution appropriately.



HDMI-DTV

| Resolution | Horizontal Frequency(KHz) | Vertical Frequency(Hz) |
|--------------|---|---|
| 720 x 480p | 31.47 31.47 | 60.00 59.94 |
| 1280 x 720p | 45.00 44.96 | 60.00 59.94 |
| 1920 x 1080i | 33.75 33.72 | 60.00 59.94 |
| 1920 x 1080p | 67.50 67.432 27.00 26.97 33.75 33.71 | 60.00 59.939 24.00 23.94 30.00 29.97 |

When connecting HDMI to DVI cable



1. How to connect

- 1 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.

EXTERNAL EQUIPMENT SETUP

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.

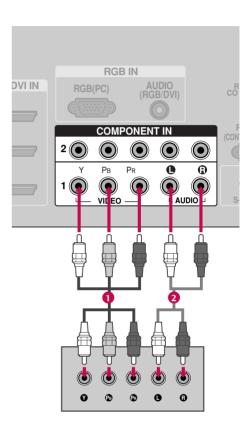
Match the jack colors

(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 by using the INPUT button on the remote control.
- If connected to COMPONENT IN 2 input, select Component 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 | B-Y | R-Y |
| on DVD player | Y | СЬ | Cr |
| | Y | Pb | Pr |

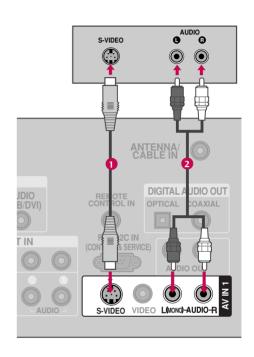
When connecting with an S-Video cable

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 by using the INPUT button on the remote control.
- If connected to AV IN2, select AV2 input source.
- Refer to the DVD player's manual for operating instructions.



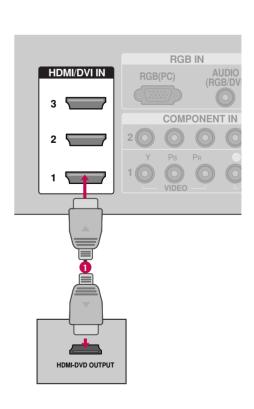
When connecting HDMI cable

1. How to connect

- Connect the HDMI output of the DVD to the HDMI/DVI IN 1, 2, or 3 jack on the set.
- No separated audio connection is necessary. HDMI supports both audio and video.

2. How to use

- Select HDMI1, HDMI2, or HDMI3 input source by 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.

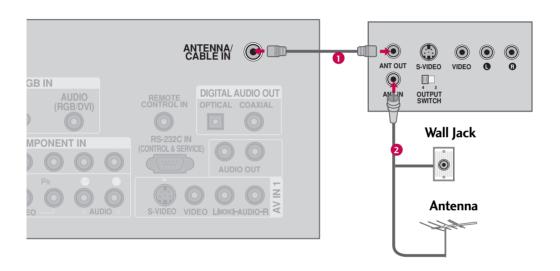


EXTERNAL EQUIPMENT SETUP

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 (Only Plasma TV model). If the 4:3 picture format is used; the fixed images on the sides of the screen may remain visible on the screen. This phenomenon is common to all manufactures and in consequence the manufactures warranty does not cover the product bearing this phenomenon.

When connecting with an antenna



1. How to connect

- Connect the RF antenna out socket of the VCR to the ANTENNA/CABLE IN 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

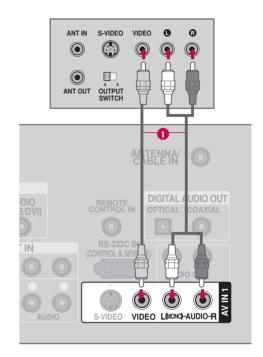
1. How to connect

1

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 by using the INPUT button on the remote control.
- If connected to AV IN2, select AV2 input source.



● 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

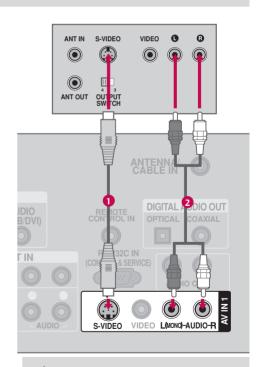
- Connect the S-VIDEO output of the VCR to the S-VIDEO input on the set.
- Connect the audio outputs of the VCR to the AUDIO input jacks on the set.

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 by using the INPUT button on the remote control.
- If connected to AV IN2, select AV2 input source.

NOTE

➤ The picture quality is improved: compared to normal composite (RCA cable) input.



A CAUTION

▶ Do not connect to both Video and S-Video at the same time. In the event that you connect both Video and the S-Video cables, only the S-Video will work.

EXTERNAL EQUIPMENT SETUP

OTHER A/V SOURCE SETUP

1. How to connect

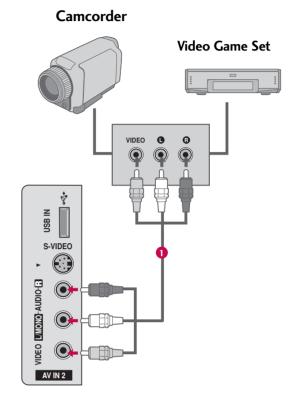


Connect the **AUDIO/VIDEO** jacks between TV and external equipment. Match the jack colors.

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

2. How to use

- Select AV2 input source by using the INPUT button on the remote control.
- If connected to AV IN1 input, select AV1 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.

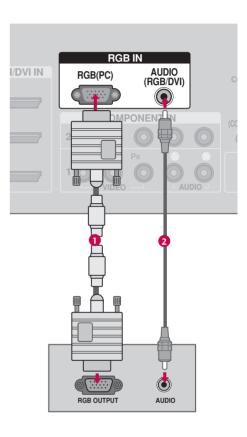
When connecting D-sub 15 pin cable

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.

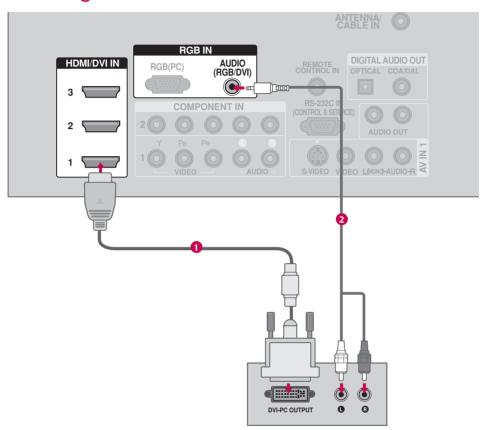
2. How to use

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



EXTERNAL EQUIPMENT SETUP

When connecting HDMI to DVI cable



1. How to connect

- Connect the DVI output of the PC to the HDMI/DVI IN1, 2 or 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 TV.
- Select HDMI1, HDMI2 or HDMI3 input source by 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.

NOTES

- ➤ To get the the best picture quality, adjust the PC graphics card to 1920x1080, 60Hz.
- ▶ 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 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.
- ➤ 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-PC, 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 60.289 | 59.870 74.893 |
| 1360x768 | 47.712 | 60.015 |
| 1280x1024 | 63.981 79.976 | 60.020 75.025 |
| 1600x1200 | 75.00 | 60.00 |
| 1920x1080 | 67.50 | 60.00 |

^{*} RGB-PC mode only

EXTERNAL EQUIPMENT SETUP

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.

