

**Installation and Operating Guide | Warranty**

Model Numbers | Z42PX3D / Z60PC1D | PLASMA TV



# 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  
QUALIFIED SERVICE PERSONNEL.



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



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

## WARNING/CAUTION

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

## 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

WARNING / CAUTION

# SAFETY INSTRUCTION

## 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.**



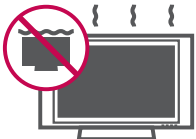
- 1** Do not use this apparatus near water



- 2** Clean only with dry cloth.



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



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



- 5** 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.



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



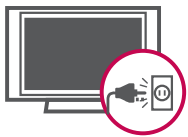
- 7** Only use attachments/accessories specified by the manufacturer.



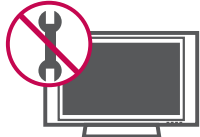
- 8** Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.



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



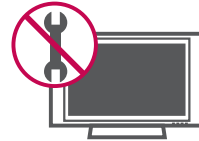
- 10** Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has exposed to rain or moisture, does not operate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



- 11** 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.



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



- 13** 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.



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# INTRODUCTION

## 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.



Official term for an HDTV that conforms to the plug-and-play digital cable TV standard using POD (Point of Deployment) access cards, also called CableCARDS, that allow users to plug the cable directly into an HDTV set and enjoy HDTV and digital cable without having to use a separate set-top box.



SRS<sup>®</sup> is a trademark of SRS Labs, Inc. TruSurround XT technology is incorporated under license from SRS Labs, Inc.



Manufactured under license from BBE Sound, Inc.

## 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.



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



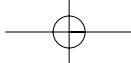
High-definition television. High-resolution digital television broadcast and playback system composed of roughly a million or more pixels, 16:9 aspect-ratio screens, and AC3 digital audio. A subset of digital television, HDTV formats include 1080i and 720p resolutions.



HDMI<sup>™</sup>, the HDMI logo and High-Definition Multimedia Interface are trademarks or registered trademarks of HDMI Licensing."

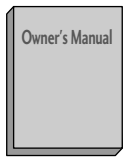


LG's own special digital image generator, consisting of a full digital image processor, APM mode & six different main picture quality factors.



## 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.



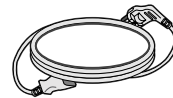
**Owner's Manual**



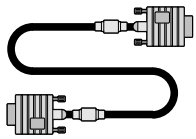
**Batteries**



**Remote Control**



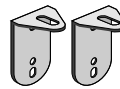
**Power Cord**



**D-sub 15 pin Cable**



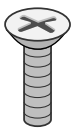
**75ohm Round Cable**



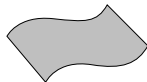
**2-Wall brackets**



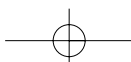
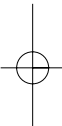
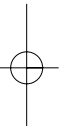
**2-eye-bolts**



**2-Bolts  
(Refer to p.15)**



**Polishing Cloth**  
Polish the screen with the cloth.





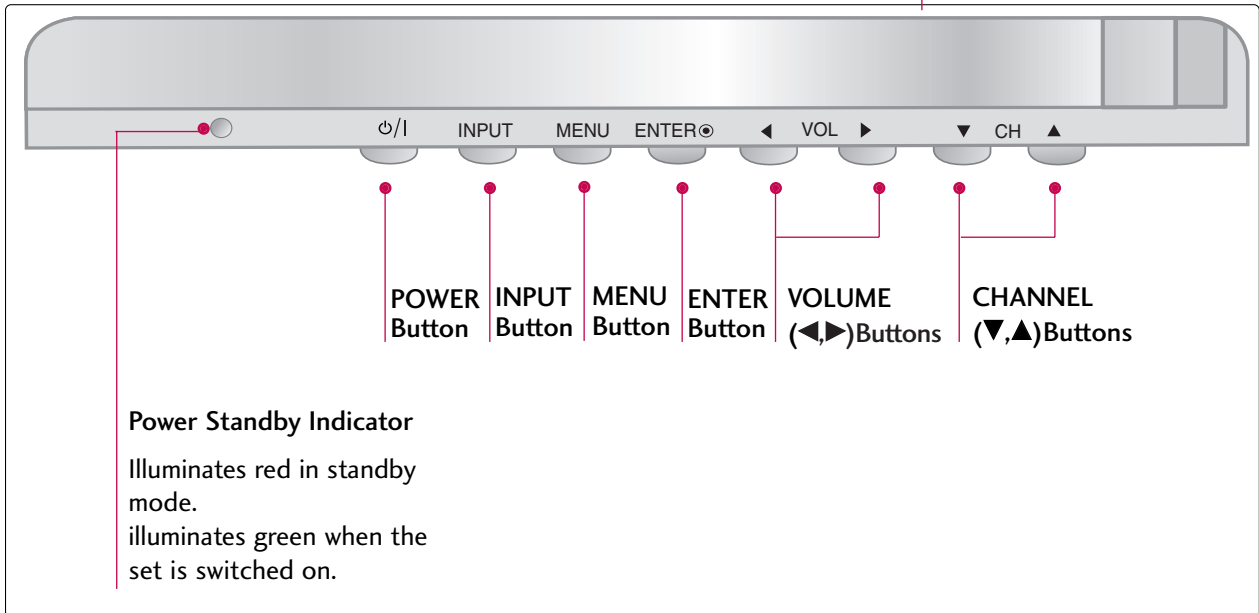
# INTRODUCTION

## CONTROLS

- Here shown may be somewhat different from your TV.

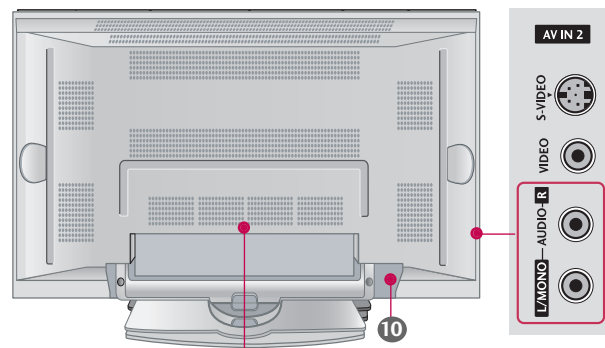
### Front Panel Controls

INTRODUCTION



## CONNECTION OPTIONS

### Back Connection Panel



#### S-VIDEO Input

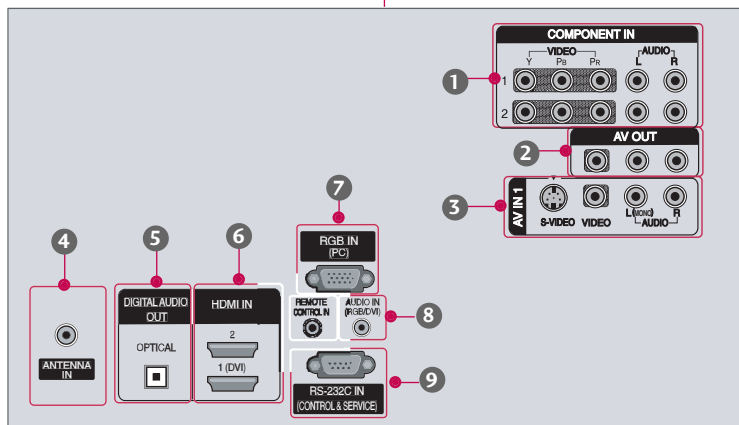
Provides better picture quality than the video input.

#### VIDEO Input

Connects the video signal from a video device.

#### AUDIO Input

Connections are available for listening to stereo sound from an external device.



#### 1 COMPONENT IN

Connect a component video/audio device to these jacks.

#### 2 AV OUT

Connect a second TV or monitor.

#### 3 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.

#### 4 ANTENNA IN

Connect over-the air signals to this jack.

#### 5 DIGITAL AUDIO OUT

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

#### 6 HDMI IN

Connect a HDMI signal to 1 (DVI) or 2.

Or DVI(VIDEO)signal to the 1 (DVI) port with a DVI to HDMI cable.

#### 7 RGB IN (PC/DTV)

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

#### 8 Remote Control Port

Connect your wired remote control.

#### AUDIO IN (RGB/DVI)

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

#### 9 RS-232C IN (CONTROL & SERVICE) PORT

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

#### 10 Power Cord Socket

For operation with AC power.

Caution:

Never attempt to operate the TV on DC power.

# INTRODUCTION

## REMOTE CONTROL KEY FUNCTIONS

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

**TV INPUT** In AV 1-2, Component 1-2, RGB-PC (or RGB-DTV), HDMI1/DVI, and HDMI2 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 (or RGB-DTV), HDMI1/DVI and HDMI2.  
(AV 1-2, Component 1-2, RGB-PC (or RGB-DTV), HDMI1/DVI, and HDMI2 input sources are linked automatically, only if these are connected.)

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

**RATIO** Change the aspect ratio. ► **p.92-93**

- +/-**
- Adjust brightness on screen.
  - It turns to the default settings brightness by changing mode source.

**THUMBSTICK** (Up/Down/Left Right/ENTER) Navigate the on-screen menus and adjust the system settings to your preference.

**ENTER** Accepts your selection or displays the current mode.

**VOLUME UP /DOWN** Increase/decrease the sound level.

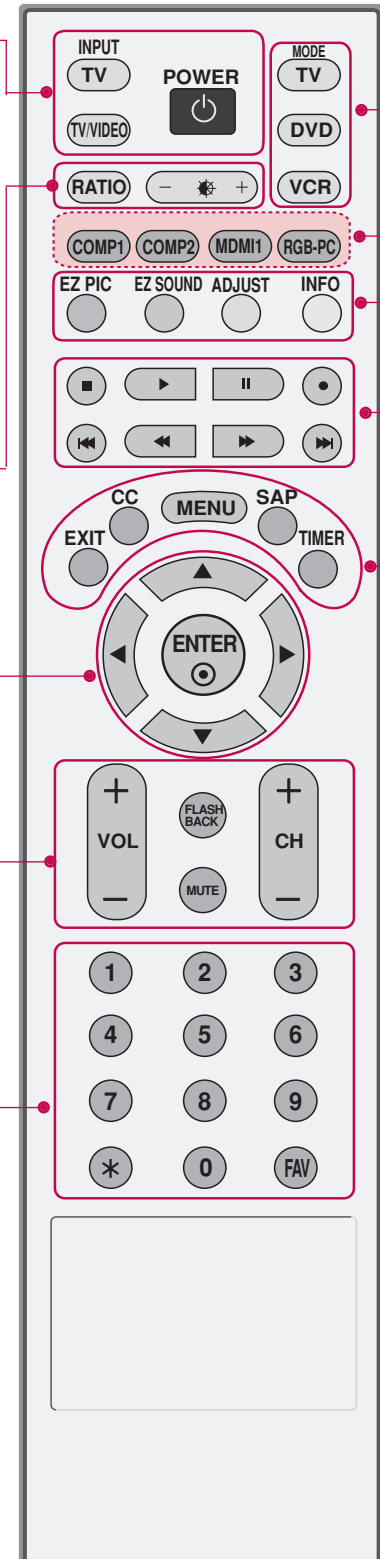
**MUTE** Switch the sound on or off. ► **p.38**

**FLASHBK** Tune to the last channel viewed.

**CHANNEL UP/DOWN** Select available channels.

**NUMBER button**

**FAV** Scroll through the programmed Favorite channels.



**TV, DVD, VCR** Selects the remote operating mode: TV, VCR, DVD. Select other operating modes, for the remote to operate external devices.

**COMP1**

**COMP2**

**HDMI1**

**RGB-PC**

**EZ PIC** Adjust the factory preset picture depend on the viewing environment. ► **p.69**

**EZ SOUND** Select the appropriate type of sound for type of program. ► **p.80**

**ADJUST** Adjust the screen position, size, and phase in PC mode. ► **p.34**

**INFO** Display information at the top of the screen. ► **p.34**

**VCR/DVD control buttons** Control video cassette recorders or DVD players.

**EXIT** Clear all on-screen displays and return to TV viewing from any menu.

**CC** Select a closed caption. ► **p.94** (\*In DTV/CADTV mode ► **p.95**)

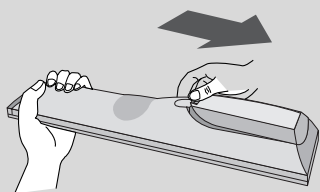
**MENU** Displays the main menu.

**SAP**

- Analog mode: Selects MTS sound(Mono, Stereo, and a SAP)
- DTV mode: Change the audio language.

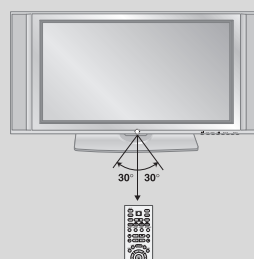
**TIMER** Select the amount of time before your TV turns off automatically. ► **p.90**

## 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.

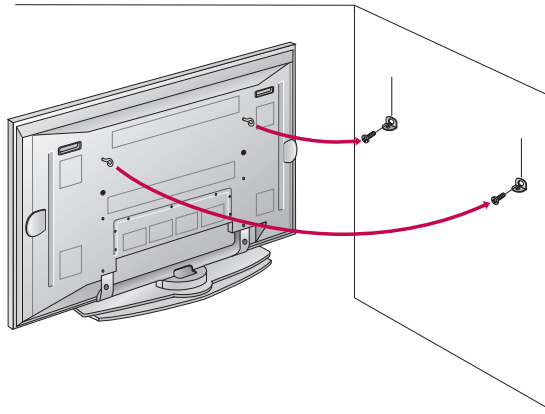
# INSTALLATION

## ATTACHING THE TV TO A WALL

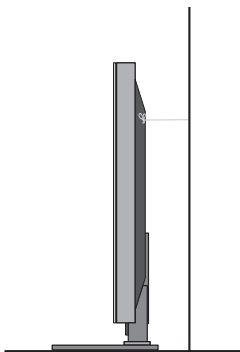
We recommend that you set up the TV close to a wall so it cannot fall over if pushed backwards. Additionally, we recommend that the TV be attached to a wall so it cannot be pulled in a forward direction, potentially causing injury or damaging the product.

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

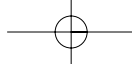
INSTALLATION



- 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) on 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.

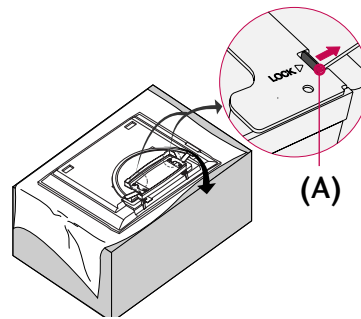


- Use a sturdy rope (not provided as parts of the product, must purchase separately) to tie the product. It is safer to tie the rope so it becomes horizontal between the wall and the product.

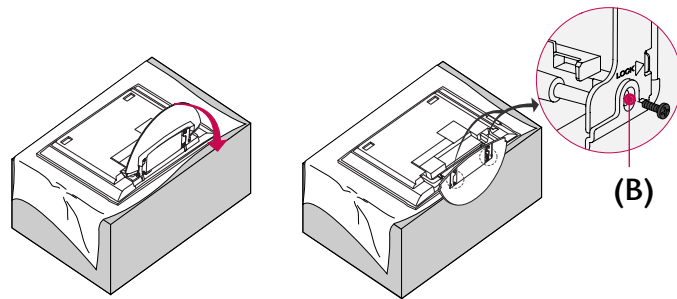


## UNFOLDING THE STAND BASE

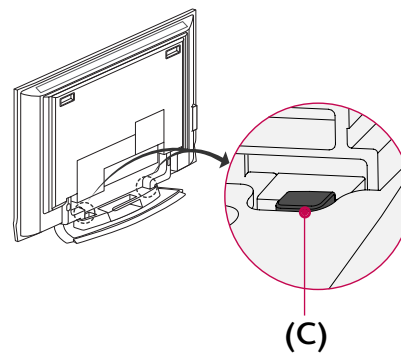
- 1** Place the set with the screen facing down on a cushion or soft cloth as shown.  
Before unfolding the stand, please make sure two locks (A) on the bottom of the stand push outward.



- 2** Pull the stand out as shown.  
After unfolding the stand, please insert and tighten the screws (provided as parts of the product) in the holes (B) on the bottom of the stand.



- 3** When connecting cables to the set, Do not disengage the lock (C).  
This may cause the set to fall, causing serious bodily injury and serious damage to the set.

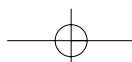
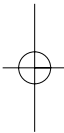
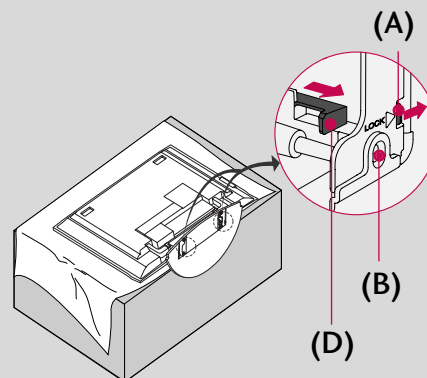


### NOTE

Image shown here may be slightly different from your set.

#### ► When closing the stand for storage

- First remove the screws in the holes (B) on the bottom of the stand. And then pull two Hooks (D) of the stand bottom and fold the stand into the back of the set.
- After folding, push the two Locks (A) of the stand bottom outward.

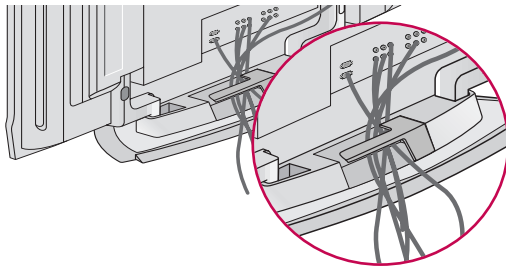


# INSTALLATION

## WIRE ARRANGEMENT

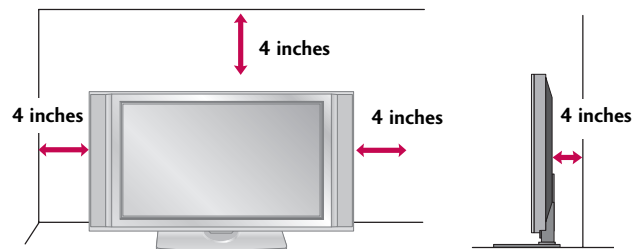
- 1** Connect the cables as necessary.  
After connecting the cables neatly, arrange the cables to the Cable Holder.  
To connect an additional equipment, see the **Connections & Setup** section.

- 2** Arrange the cable as shown.



## DESKTOP PEDESTAL INSTALLATION

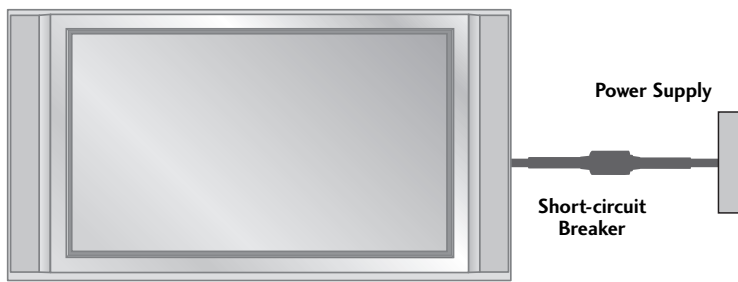
For proper ventilation, allow a clearance of 4 inches on each side from the wall.



### ⚠ CAUTION

- ▶ Ensure adequate ventilation by following the clearance recommendations.

- Here shown may be somewhat different from your TV.



### 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, lightning rods, or gas pipes.

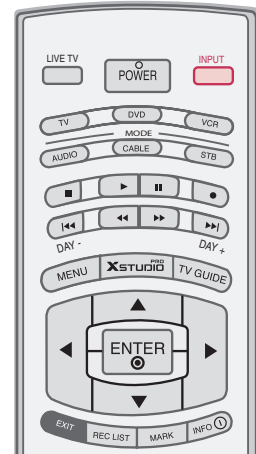
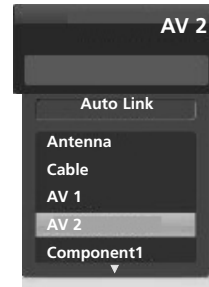


# CONNECTIONS & SETUP

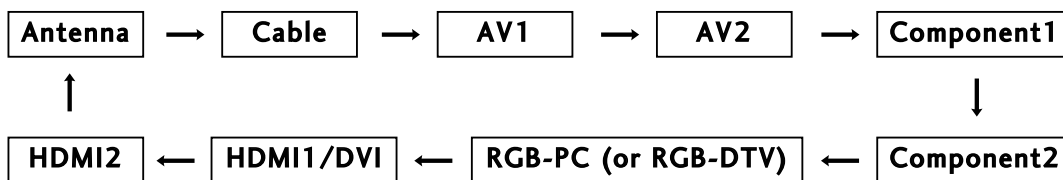
## AUTO LINK

Press the **INPUT** button and then displays the connected external equipment list on the screen.

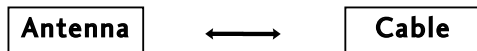
Press the **ENTER** button to change the main input to the active external equipment. Use the **▲** or **▼** button to select the main input source.



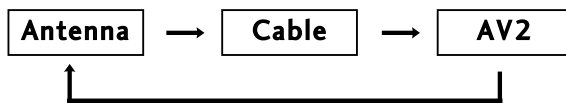
- 1 When every external equipment is connected:



- 2 When any external equipment is not connected:

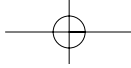


- 3 When some External Equipment is connected:  
(ex: When connected to AV 2)



- You can also select **Main Input** in the **SETUP** menu.

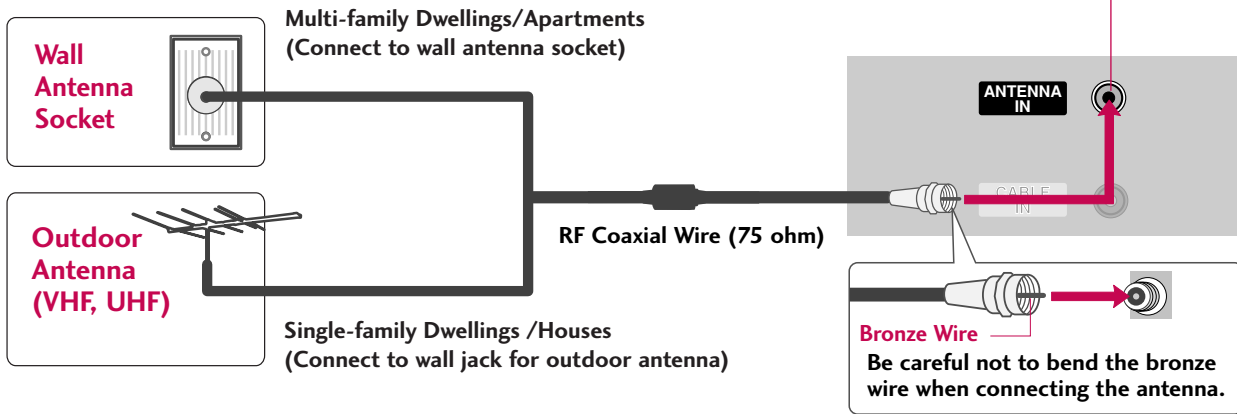
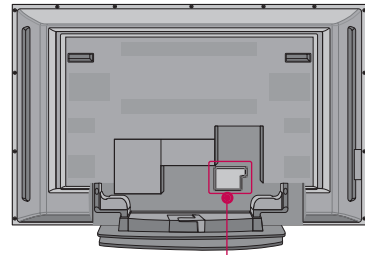
- **Antenna:** Select it when watching the TV/DTV.
- **Cable:** Select it when watching the CATV/CADTV.
- **AV 1-2:** Select it when watching the VCR or external equipment.
- **Component 1-2:** Select it when using the DVD or the Digital set-top box depend on connector.
- **RGB-PC/RGB-DTV:** Select it when using PC or Digital set-top box depend on connector.
- **HDMI1/DVI, HDMI2:** Select it when using DVD, PC or Digital set-top box depend on connector.



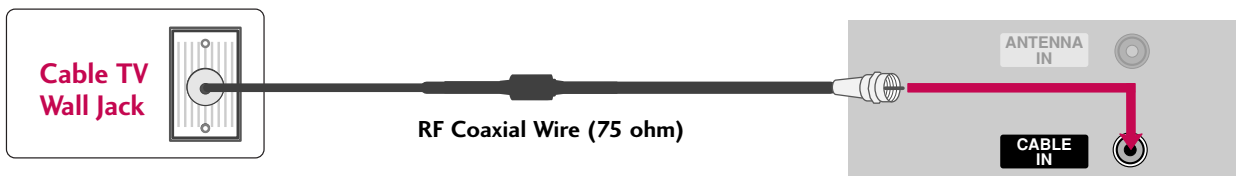
# ANTENNA OR CABLE CONNECTION

## 1. Antenna (Analog or Digital)

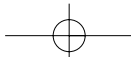
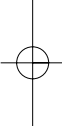
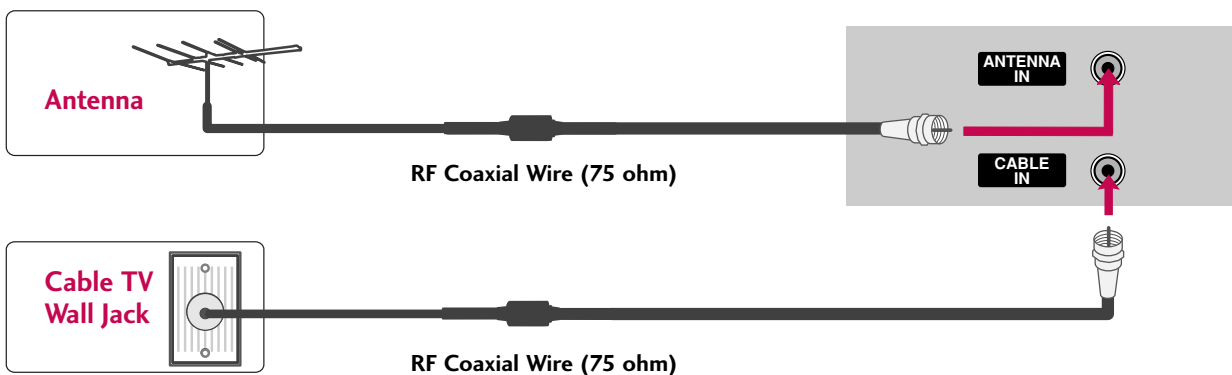
Wall Antenna Socket or Outdoor Antenna without a Cable Box Connections.  
For optimum picture quality, adjust antenna direction if needed.



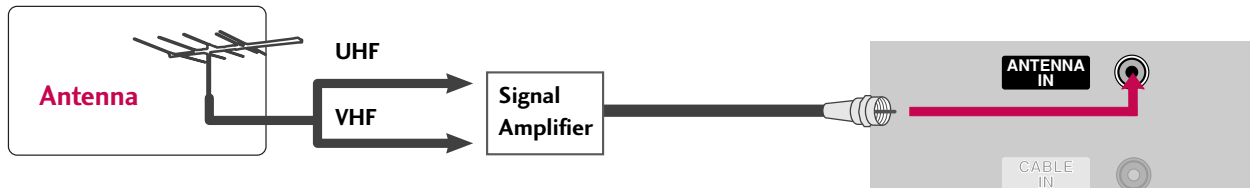
## 2. Cable



## 3. Using both Cable and Antenna



## CONNECTIONS & SETUP



- 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.

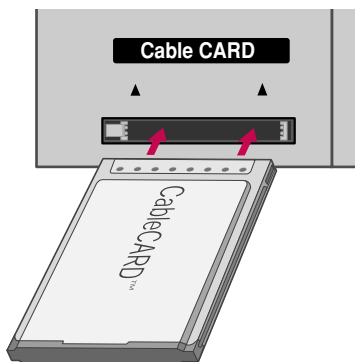
### NOTE

- ▶ The TV will let you know when the analog, cable, and digital channel scans are complete.

## CABLECARD™ SETUP

### 1. How to use

Insert the CableCARD™ from your cable service provider into the CableCARD™ slot on the back of your TV. If pairing information about this TV and the CableCARD is displayed on the screen, contact your cable service provider.



### NOTE

- ▶ This TV supports CableCARD™ technology from Motorola, Scientific Atlanta, and SCM.

### CAUTION

- ▶ When removing, do not drop it as this may cause damage to the CableCARD™.

## HDSTB 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

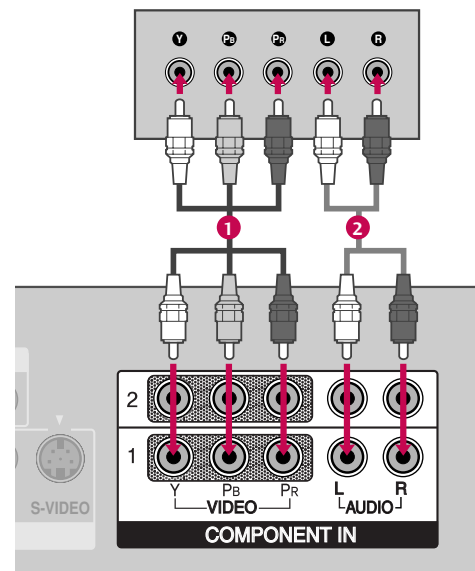
#### 1. How to connect

- 1 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).
- 2 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 IN2** input, select **COMPONENT 2** input source.

Signal	Component 1/2	HDMI1/DVI, RGB-DTV, HDMI2
480i	Yes	No
480p	Yes	Yes
720p	Yes	Yes
1080i	Yes	Yes



# CONNECTIONS & SETUP

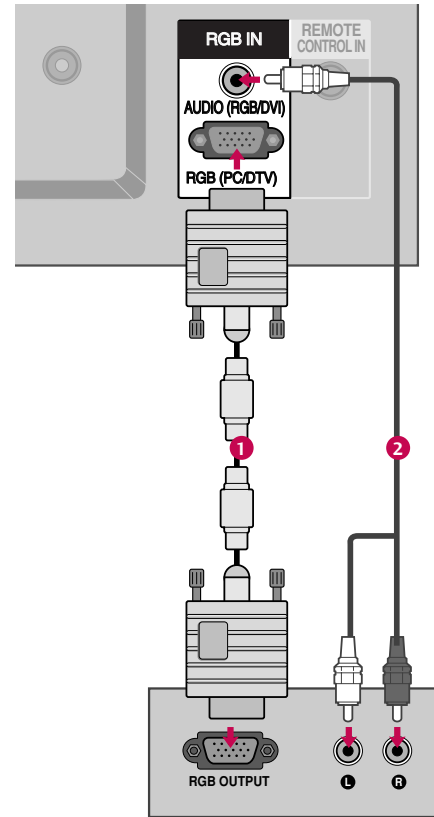
## When connecting D-sub 15pin cable

### 1. How to connect

- 1 Connect the RGB output of the digital set-top box to the **RGB (PC/DTV)** jack on the set.
- 2 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 digital set-top box.  
(Refer to the owner's manual for the digital set-top box.)
- Select **RGB-DTV** input source with using the **INPUT** button on the remote control.



## When connecting HDMI cable

### 1. How to connect

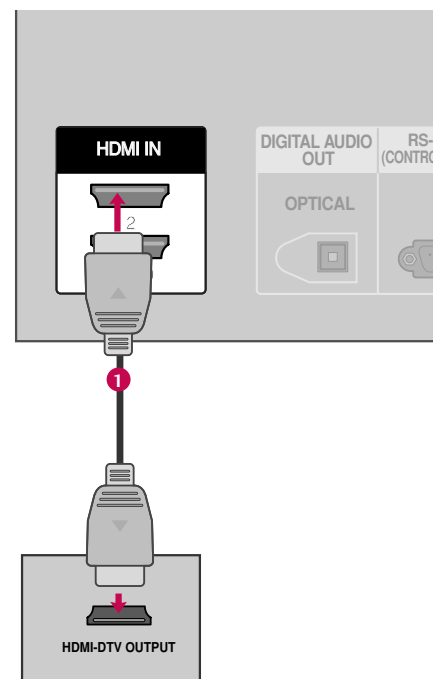
- 1 Connect the digital set-top box to **HDMI IN 1 (DVI)** or **2** jack on the set.
- 2 No separated audio connection is necessary.

### 2. How to use

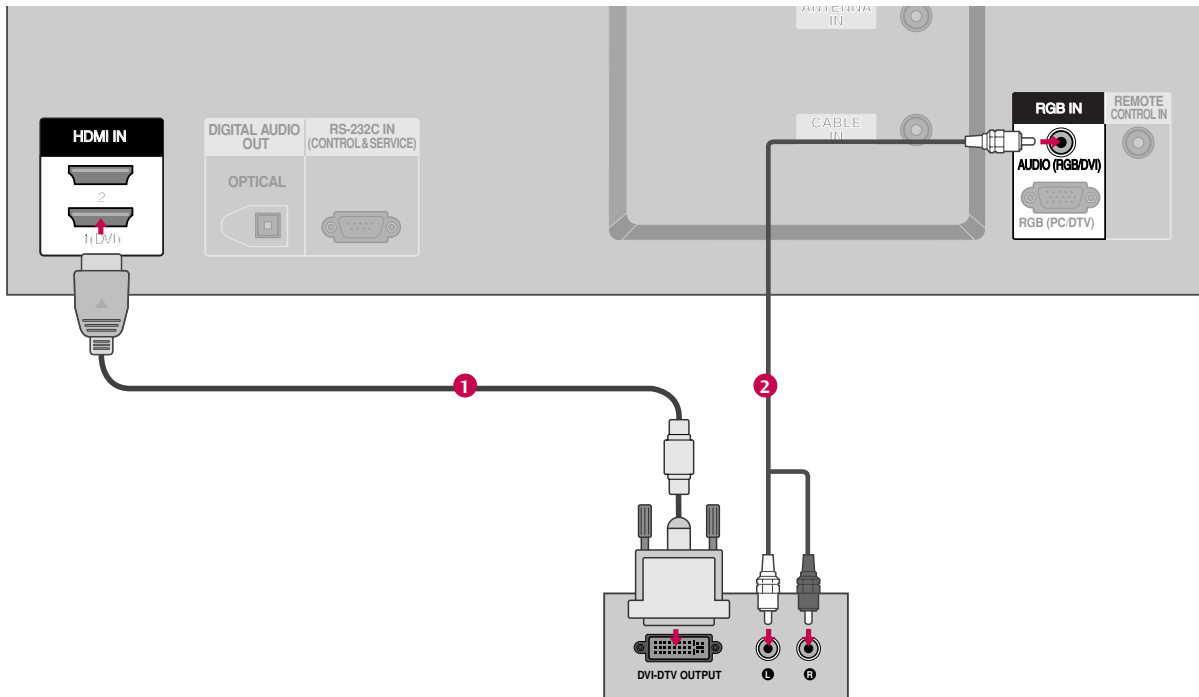
- Turn on the digital set-top box.  
(Refer to the owner's manual for the digital set-top box.)
- Select **HDMI1/DVI** or **HDMI2** input source with using the **INPUT** button on the remote control.

#### NOTE

- ▶ If the digital set-top box supports Auto HDMI function, the output resolution of the source device will be automatically set to 1280x720p.
- ▶ If the digital set-top box player does not support Auto HDMI, you need to set the output resolution appropriately.  
To get the best picture quality, adjust the output resolution of the source device to 1280x720p.



## When connecting HDMI to DVI cable



### 1. How to connect

- 1 Connect the DVI output of the digital set-top box to the **HDMI IN 1 (DVI)** jack on the set.
- 2 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/DVI** input source with using the **INPUT** button on the remote control.

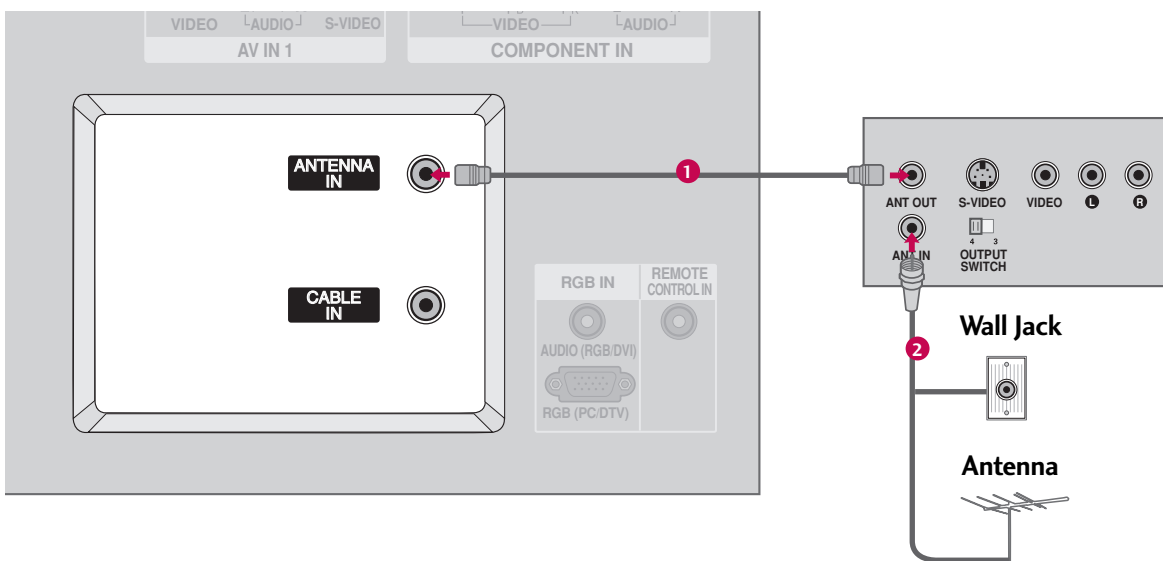
# CONNECTIONS & SETUP

## 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. 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

CONNECTIONS & SETUP



### 1. How to connect

- 1 Connect the RF antenna out socket of the VCR to the **Antenna** socket on the set.
- 2 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.)

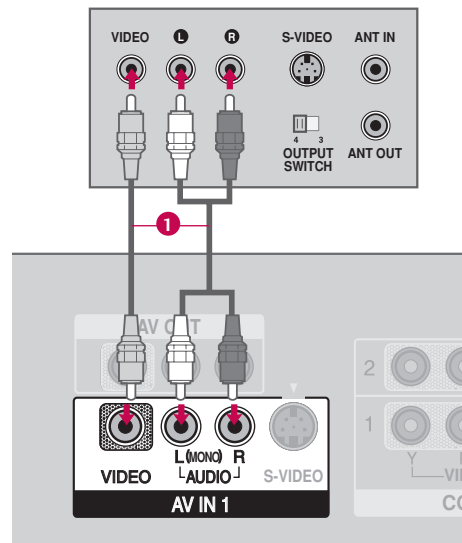
## When connecting with a RCA cable

### 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 with using the **INPUT** button on the remote control.
- If connected to **AV IN2**, 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

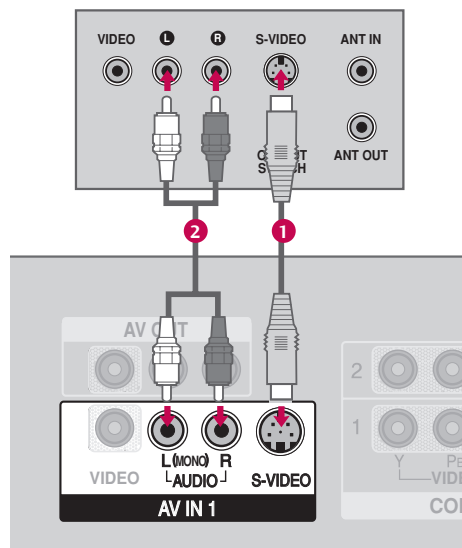
- 1 Connect the S-VIDEO output of the VCR to the **S-VIDEO** input on the set.
- 2 Connect the audio outputs of the VCR to the **AUDIO** input jacks on the set.

### 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 IN2**, select **AV2** input source.

#### NOTE

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



#### 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.



# CONNECTIONS & SETUP

## AV OUT SETUP

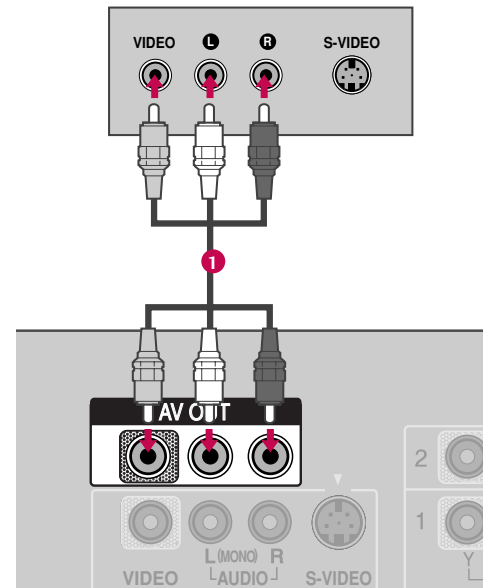
The TV has a special signal output capability which allows you to hook up the second TV or monitor.

### 1. How to connect

- 1 Connect the second TV or monitor to the TV's **AV OUT** jacks.
- 2 See the Operating Manual of the second TV or monitor for further details regarding that device's input settings.

#### NOTE

- ▶ Component1-2, RGB-PC/RGB-DTV, HDMI1/DVI, HDMI2, DTV input sources cannot be used for AV out.
- ▶ We recommend to use the AV OUT jacks for VCR recording.



## DIGITAL AUDIO OUTPUT

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

### 1. How to connect

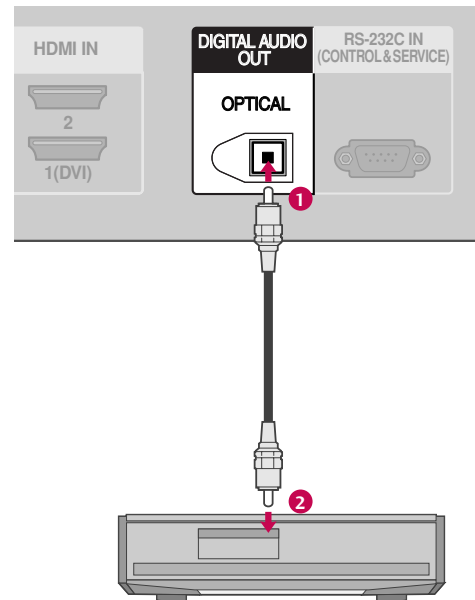
- 1 Connect one end of an optical cable to the TV Digital Audio (Optical) Output port.
- 2 Connect the other end of the optical cable to the digital audio (optical) input on the audio equipment.
- 3 Set the "TV Speaker option - Off" in the AUDIO menu. (▶ p.84). See the external audio equipment instruction manual for operation.

#### ! NOTE

- ▶ When connecting with external audio equipments, such as amplifiers or speakers, please turn the TV speakers off. (▶ p.84)

#### ⚠ CAUTION

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



# CONNECTIONS & SETUP

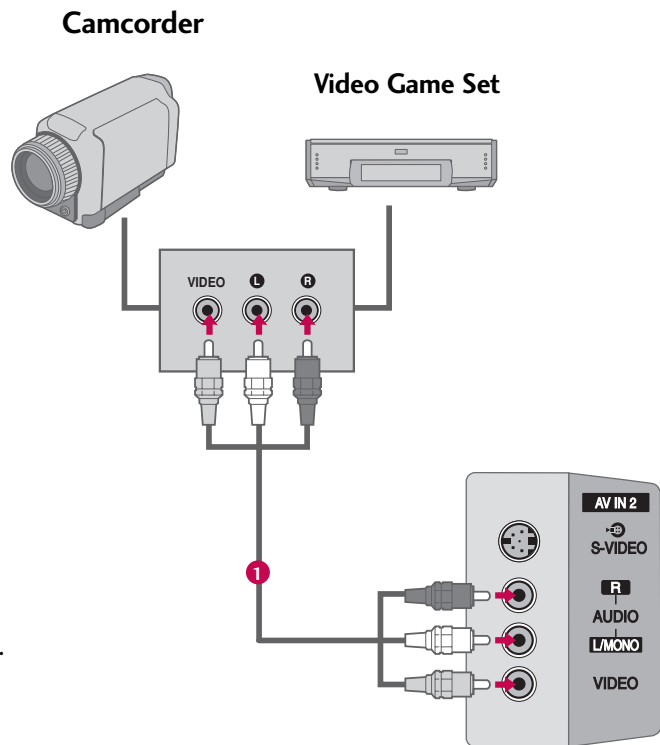
## EXTERNAL A/V SOURCE SETUP

### 1. How to connect

- 1 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 IN2** input, select **AV2** input source.
- Operate the corresponding external equipment.



## DVD SETUP

### When connecting Component cable

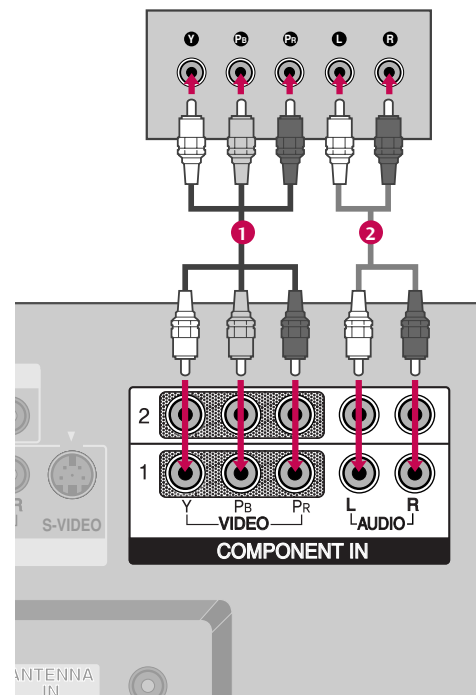
#### 1. How to connect

- 1 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).

- 2 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 **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	P <sub>B</sub>	P <sub>R</sub>
Video output ports on DVD player	Y	P <sub>B</sub>	P <sub>R</sub>
	Y	B-Y	R-Y
	Y	C <sub>b</sub>	C <sub>r</sub>
	Y	P <sub>b</sub>	P <sub>r</sub>

# CONNECTIONS & SETUP

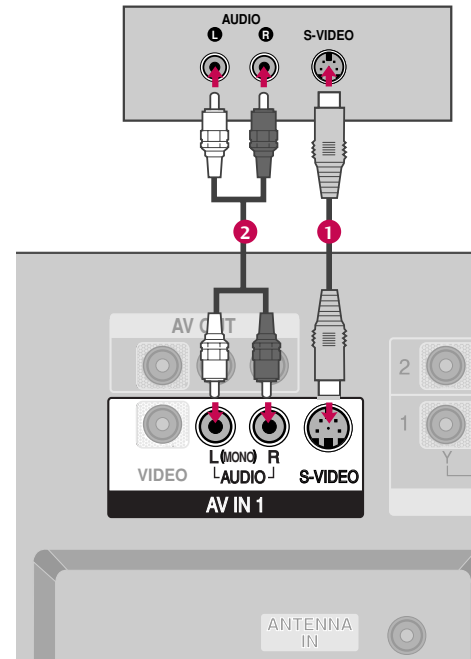
## When connecting with an S-Video cable

### 1. How to connect

- 1 Connect the S-VIDEO output of the DVD to the **S-VIDEO** input on the set.
- 2 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 IN2**, select **AV2** input source.
- Refer to the DVD player's manual for operating instructions.



## When connecting HDMI cable

### 1. How to connect

- 1 Connect the HDMI output of the DVD to the **HDMI IN 1 (DVI)** or **2** jack on the set.
- 2 No separated audio connection is necessary.

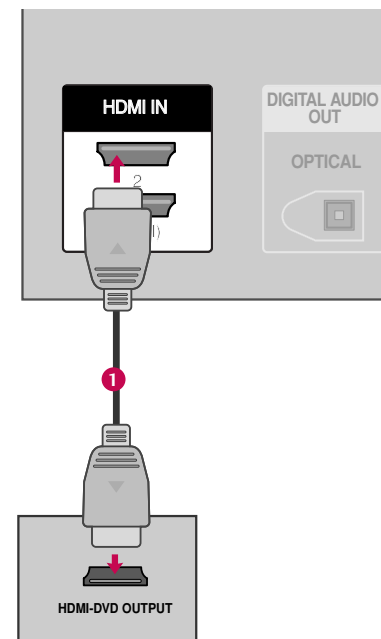
### 2. How to use

- Select **HDMI1/DVI** or **HDMI2** input source with using the **INPUT** button on the remote control.
- Refer to the DVD player's manual for operating instructions.

#### NOTE

- ▶ If the DVD supports Auto HDMI function, the DVD output resolution will be automatically set to 1280x720p.
- ▶ If the DVD does not support Auto HDMI, you need to set the output resolution appropriately.

To get the best picture quality, adjust the output resolution of the DVD to 1280x720p.



## PC SETUP

This TV provides Plug and Play capability, meaning that the PC adjusts automatically to the TV's settings. The TV perceives 640x480, 60Hz as DTV 480p based on the PC graphic card. If necessary, change the screen scanning rate for the graphic card accordingly.

### When connecting D-sub 15pin cable

#### 1. How to connect

- 1 Connect the RGB output of the PC to the **RGB (PC/DTV)** jack on the set.
- 2 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 in main input option of **SETUP** menu. (▶ p.67)
- Once you select **RGB-PC** in main input option of **SETUP** menu, **INPUT** button is also available for this purpose.

#### ! 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.

