

# LCD TV | PLASMA TV OWNER'S MANUAL

LCD TV MODELS		PLASMA TV MODELS		
32LG30	37LG50	42PG25		
37LG30	42LG50	50PG25		
42LG30	47LG50			
42LGX	52LG50	50PG60		
		60PG60		
32LG60	32LG70			
37LG60	42LG70	50PG70		
42LG60	47LG70	60PG70		
47LG60	52LG70			
52LG60				

47LG90

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 LG Electronics USA, Inc. has determined that this product meets the ENERGY STAR guidelines for energy efficiency.

P/NO: SAC30708020 (0804-REV05)

# **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.

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.



When mounting a TV it on the wall, make sure not to install TV by the hanging power and signal cables on the back of the TV.

Oo 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.



Unplug this apparatus during lighting storms or 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

WARNING - To reduce the risk of fire or electric shock, do not expose this appliance to rain or moisture.



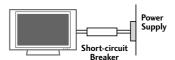
Wet Location Marking: Apparatus shall not be exposed to dripping or splashing and no objects filled with liquids, such as vases, shall be placed on or over apparatus.



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.



18 DISCONNECTING DEVICE FROM MAINS

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

# **CONTENTS**

WARNING / CAUTION 1	Channel Setup
SAFETY INSTRUCTIONS 2	- Auto Scan (Auto Tuning)
FEATURE OF THIS TV 6	- Add / Delete Channel (Manual Tuning) 57
TEATORE OF THIS TV	- Channel Editing
	Input List
PREPARATION	AV Mode61
Accessories	SIMPLINK62
Front Panel Information8	
Back Panel Information	
Stand Installation	USB
Cable Management	Entry Modes64
Desktop Pedestal Installation	Photo List65
Swivel Stand	Music List69
Attaching the TV to a Desk	
VESA Wall Mounting19	
Protection Cover	PICTURE CONTROL
Securing the TV to the wall to prevent falling 21	Picture Size (Aspect Ratio) Control72
Antenna or Cable Connection	Preset Picture Settings
	- Picture Mode - Preset74
EXTERNAL EQUIPMENT SETUP	- Color Tone - Preset
	Manual Picture Adjustment
HD Receiver Setup23	- Picture Mode - User Mode76
DVD Setup29	- Picture Mode - Expert Control
VCR Setup	Picture Improvement Technology
Other A/V Source Setup	Advanced Control - Black (Darkness) Level79
PC Setup	Advanced Control - Eye Care80
USB Connection	Advanced Control - Real Cinema/Film Mode 81
Audio Out Connection47	Advanced Control - Real Cinema/Film Mode 81  Advanced Control - TruMotion
WATCHING TV / CHANNEL CONTROL	TruMotion Demo
	Picture Reset
Remote Control Functions	Power Indicator
Turning On the TV	Image Sticking Minimization (ISM) Method86
Channel Selection	Power Saving Picture Mode87
Volume Adjustment	
Chick McIn	

## **SOUND & LANGUAGE CONTROL** Preset Sound Settings (Sound Mode) ......89 Sound Setting Adjustment - User Mode ......90 Clear Voice .......91 TV Speakers On/Off Setup ......93 Audio Reset ......94 Stereo/SAP Broadcast Setup ......95 Audio Language ......96 On-Screen Menus Language Selection ..........................97 Caption Mode - Analog Broadcasting System Captions ...... 98 - Digital Broadcasting System Captions ....... 99 - Caption Option ......100 **TIME SETTING Clock Setting** - Auto Clock Setup ......101 - Manual Clock Setup ......102 Sleep Timer Setting .......104 PARENTAL CONTROL / RATINGS Set Password & Lock System ...... 106 Channel Blocking .......109

APPENDIX	
Troubleshooting	118
Maintenance	120
Product Specifications	121
Programming the Remote Control	124
IR Codes	127
External Control Through RS-232C	129
Open Source License	136

# **FEATURE OF THIS TV**



SRS Labs, Inc.

TruSurround XT technology is incorporated under license from SRS Labs, Inc.



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

#### **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 (Only Hg lamp used LCD TV)

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

## **ACCESSORIES**

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

The accessories included may differ from the images below.









Owner's Manual

**CD** Manual

Remote Control, Batteries

**Power Cord** 



Polishing Cloth
(This feature is not available for all models.)

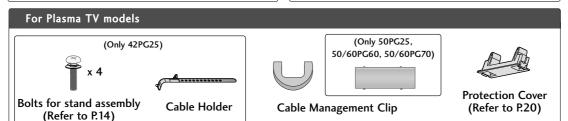
- \* Wipe spots on the exterior only with the polishing cloth.
- \* Do not wipe roughly when removing stain. Excessive pressure may cause scratch or discoloration.

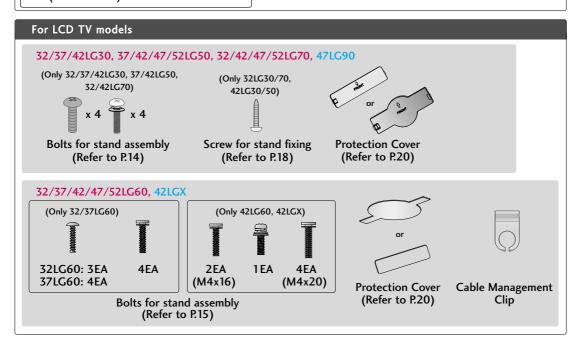




D-sub 15 pin Cable

When using the VGA (D-sub 15 pin cable) PC connection, the user must use shielded signal interface cables with ferrite cores to maintain standards compliance.



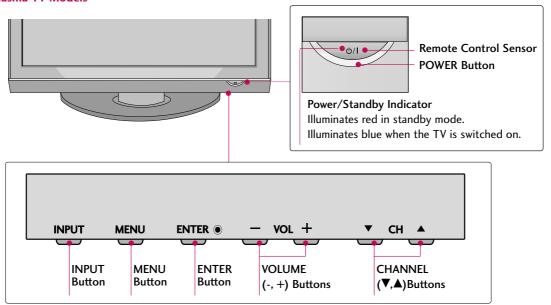


## FRONT PANEL INFORMATION

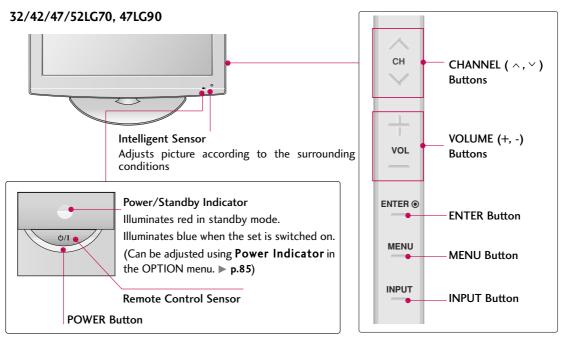
- Image shown may differ from your TV.
- NOTE: If your TV has a protection tape attached, remove the tape.

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

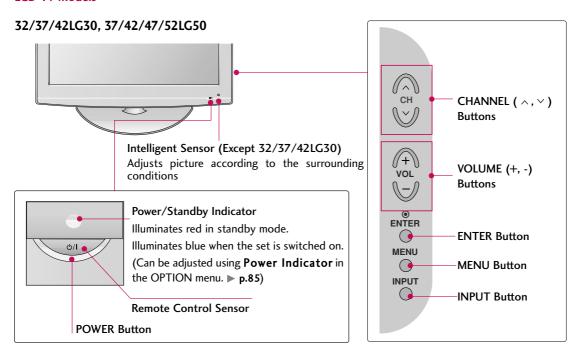
#### **Plasma TV Models**

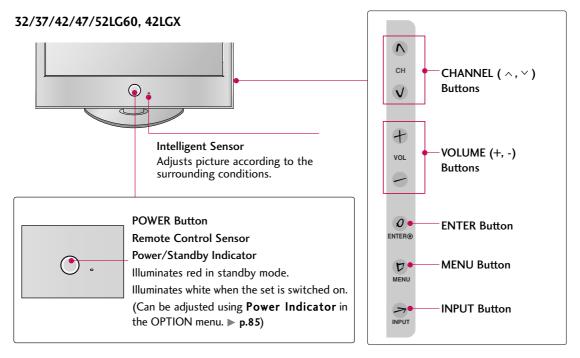


## **LCD TV Models**



#### **LCD TV Models**

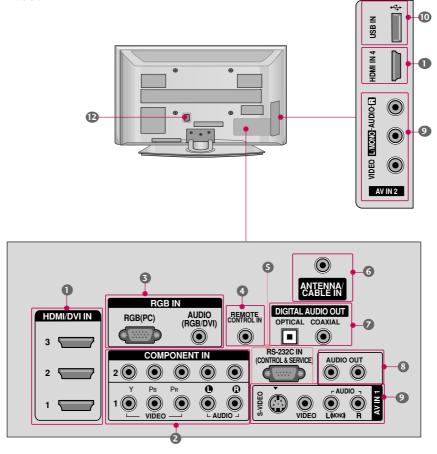




## **BACK PANEL INFORMATION**

■ Image shown may differ from your TV.

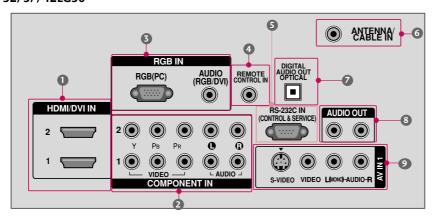
## **Plasma TV Models**

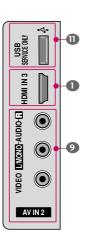


#### **LCD TV Models**

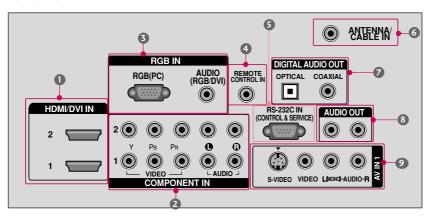


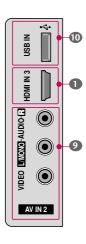
#### 32/37/42LG30





#### 37/42/47/52LG50



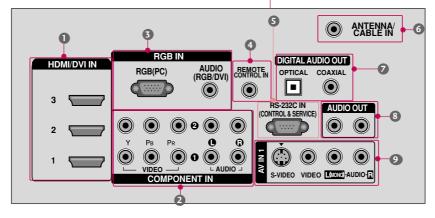


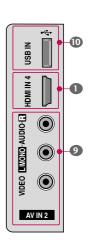
■ Image shown may differ from your TV.

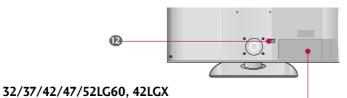
### **LCD TV Models**

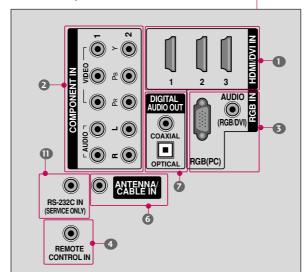


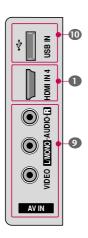
## 32/42/47/52LG70, 47LG90











#### HDMI/DVI IN, HDMI IN

Digital Connection.

Supports HD video and Digital audio. Doesn't support 480i.

Accepts DVI video using an adapter or HDMI to DVI cable (not included).

#### 2 COMPONENT IN

Analog Connection.

Supports HD.

Uses a red, green, and blue cable for video & red and white for audio.

#### RGB (PC)

Analog PC Connection. Uses a D-sub 15 pin cable (VGA cable).

#### AUDIO (RGB/DVI)

1/8" headphone jack for analog PC audio input.

#### **4** REMOTE CONTROL IN PORT

For a wired remote control.

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

Used by third party devices.

#### **6** ANTENNA/CABLE IN

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

#### DIGITAL AUDIO OUT

Digital audio output for use with amps and home theater systems.

Includes an optical and/or coaxial connection.

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

#### **3** AUDIO OUT

Analog audio output for use with amps and home theater systems.

#### AV (Audio/Video) IN

Analog composite connection. Supports standard definition video only (480i).

#### S-VIDEO

Better quality than standard composition. Supports standard definition video only (480i).

#### **10** USB INPUT

Used for viewing photos and listening to MP3s.

# ① USB SERVICE ONLY or RS-232C IN (SERVICE ONLY)

Used for software updates.

#### Power Cord Socket

For operation with AC power.

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

## STAND INSTALLATION

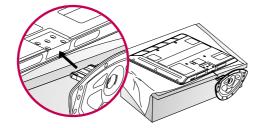
- Image shown may differ from your TV.
- When assembling the desk type stand, check whether the bolt is fully tightened. (If not tightened fully, the product can tilt forward after the product installation). If you tighten the bolt with excessive force, the bolt can deviate from abrasion of the tightening part of the bolt.
- You can remove the stand before installing the TV on a wall mount by performing the stand instructions in reverse.

#### Only 42PG25

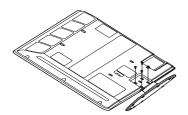
1 Carefully place the TV screen side down on a cushioned surface to protect the screen from damage.



Assemble the TV as shown.



Fix the 4 bolts securely using the holes in the back of the TV.

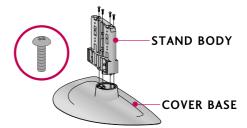


### Only 32/37/42LG30, 37/42LG50, 32/42LG70,

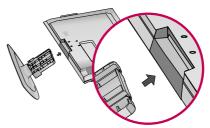
Carefully place the TV screen side down on a cushioned surface to protect the screen from damage.



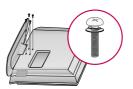
Assemble the parts of the STAND BODY with COVER BASE of the TV.



Assemble the TV as shown.



Fix the 4 bolts securely using the holes in the back of the TV.

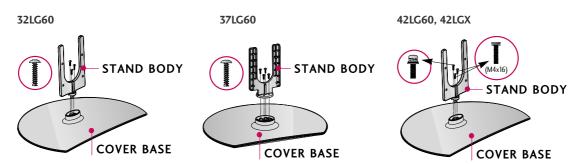


## Only 32/37/42LG60, 42LGX

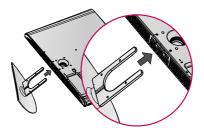
Carefully place the TV screen side down on a cushioned surface to protect the screen from damage.

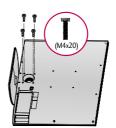


Assemble the parts of the STAND BODY with COVER BASE of the TV.



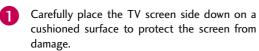
- 3 Assemble the TV as shown.
- Fix the 4 bolts securely using the holes in the back of the TV.





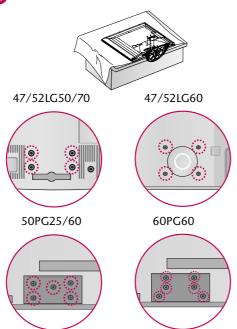
## STAND DETACHMENT

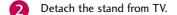
■ Image shown may differ from your TV.

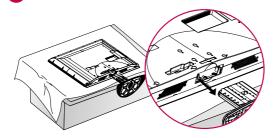




Loose the bolts from TV.







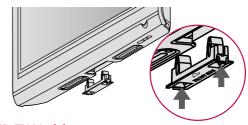
## PROTECTION COVER

■ Image shown may differ from your TV.

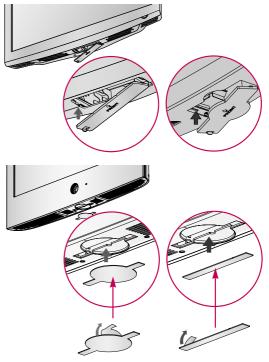
You can remove the stand before installing the TV on a wall mount by performing the previous stand instructions in reverse. After removing the stand, install the included **protection cover** over the hole for the stand.

Press the **PROTECTION COVER** into the TV until you hear it click.

#### **Plasma TV Models**



#### **LCD TV Models**



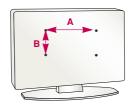
After removing the protection paper from the protection cover, adhere it to the TV as shown.

## **VESA WALL MOUNTING**

Install your wall mount on a solid wall perpendicular to the floor. When attaching to other building materials, please contact your nearest dealer.

If installed on a ceiling or slanted wall, it may fall and result in severe personal injury.

We recommend that you use an LG brand wall mount when mounting the TV to a wall.



Product	Model	VESA	Standard Screw	Quantity
LCD TV	32LG30, 32LG60, 32LG70	200 * 100	M4	4
	37LG30, 37LG60, 37LG50 42LG30, 42LG50, 42LG60, 42LG70, 42LGX 47LG50, 47LG60, 47LG70, 47LG90	200 * 200	М6	4
	52LG50, 52LG60, 52LG70	800 * 400	M6	4
PLASMA TV	42PG25 50PG25, 50PG60, 50PG70	400 * 400	М6	4
	60PG60, 60PG70	600 * 400	M8	4

#### NOTE

- Screw length needed depends on the wall mount used. For further information, refer to the instructions included with the mount.
- ➤ Standard dimensions for wall mount kits are shown in the table.
- ► When purchasing our wall mount kit, a detailed installation manual and all parts necessary for assembly are provided.
- ➤ Do not use screws longer then the standard dimension, as they may cause damage to the inside to the TV.
- ▶ For wall mounts that do not comply with the VESA
- standard screw specifications, the length of the screws may differ depending on their specifications.
- ▶ Do not use screws that do not comply with the VESA standard screw specifications.
  - Do not use fasten the screws too strongly, this may damage the TV or cause the TV to a fall, leading to personal injury. LG is not liable for these kinds of accidents.
- ▶ LG is not liable for TV damage or personal injury when a non-VESA or non specified wall mount is used or the consumer fails to follow the TV installation instructions.

### **A** CAUTION

▶ Do not install your wall mount kit while your TV is turned on. It may result in personal injury due to electric shock.

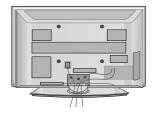
## **CABLE MANAGEMENT**

■ Image shown may differ from your TV.

#### **Plasma TV Models**

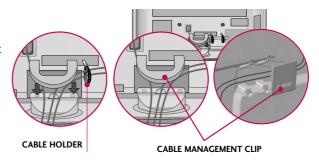
Connect the cables as necessary.

To connect additional equipment, see the EXTERNAL EQUIPMENT SETUP section.



2 Install the CABLE MANAGEMENT CLIP as shown.

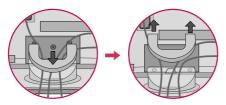
If your TV has the CABLE HOLDER, install it as shown and bundle the cables.



## How to remove the CABLE MANAGEMENT CLIP

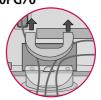
#### 42PG25

► First, press the cable management. Hold the CABLE MANAGEMENT CLIP with both hands and pull it upward.



#### 50PG25, 50/60PG60, 50/60PG70

► Hold the CABLE MAN-AGEMENT CLIP with both hands and pull it upward.



Separate CABLE MAN-AGEMENT CLIP from TV by pressing two latches.



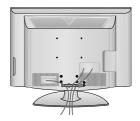
### NOTE

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

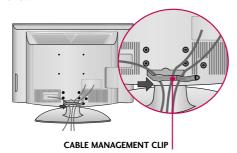
#### **LCD TV Models**

# 32/37/42LG30, 37/42/47/52LG50, 32/42/47/52LG70, 47LG90

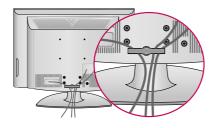
Connect the cables as necessary.
To connect additional equipment, see the EXTERNAL EQUIPMENT SETUP section.



2 Install the CABLE MANAGEMENT CLIP as shown.



Put the cables inside the CABLE MANAGEMENT CLIP and snap it closed.

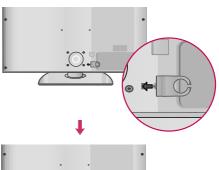


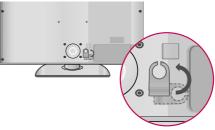
#### 32/37/42/47/52LG60, 42LGX

Align the hole with the tab on the CABLE MANAGEMENT CLIP.

Turn the **CABLE MANAGEMENT CLIP** as shown.

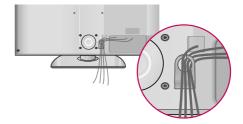
Note: This cable management clip can be broken by excessive pressure.





2 Connect the cables as necessary.

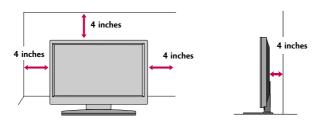
To connect additional equipment, see the EXTERNAL EQUIPMENT SETUP section.



## **DESKTOP PEDESTAL INSTALLATION**

■ Image shown may differ from your TV.

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

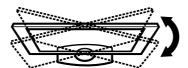




- ▶ Ensure adequate ventilation by following the clearance recommendations.
- ▶ Do not mount near or above any type of heat source.

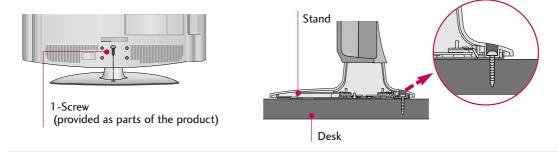
## **SWIVEL STAND**

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



# ATTACHING THE TV TO A DESK (Only 32LG30/70, 42LG30/50)

The TV must be attached to a desk so it cannot be pulled in a forward/backward direction, potentially causing injury or damaging the product.



## **M** WARNING

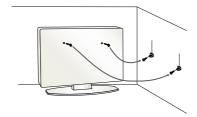
▶ To prevent TV from falling over, the TV should be securely attached to the floor/wall per installation instructions. Tipping, shaking, or rocking the machine may cause injury.

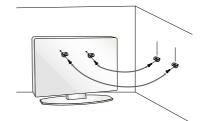
## SECURING THE TV TO THE WALL TO PREVENT FALLING

- You should purchase necessary components to prevent TV from falling off of the stand.
- Image shown may differ 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.





- 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.
  - \* Insert the eye-bolts or TV brackets/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.

### NOTE

- ▶ Use a platform or cabinet strong enough and large enough to support the size and weight of the TV.
- ▶ To use the TV safely make sure that the height of the bracket on the wall and the one on the TV are the same.

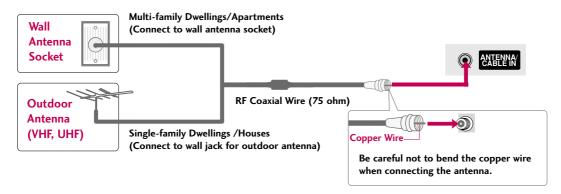
■ To prevent damage do not connect to the power outlet until all connections are made between the devices.

## ANTENNA OR CABLE CONNECTION

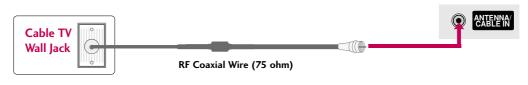
## 1. Antenna (Analog or Digital)

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

For optimum picture quality, adjust the antenna direction if needed.



### 2. Cable



- 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.
- Image shown may differ from your TV.

## HD RECEIVER SETUP

This TV can receive digital over-the-air/digital 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.

## **Component Connection**

### 1. How to connect

- Connect the video outputs (Y, PB, PR) of the digital settop box to the **COMPONENT IN VIDEO 1** jacks on the TV. 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 TV.

### 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 the Component 1 input source on the TV using the INPUT button on the remote control.
- If connected to COMPONENT IN2 input, select the Component 2 input source on the TV.

#### **Supported Resolutions**

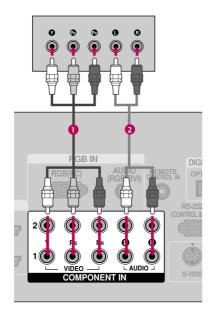
Signal	Component	HDMI
480i	Yes	No
480p	Yes	Yes
720p	Yes	Yes
1080i	Yes	Yes
1080p	Yes	Yes

#### Y, CB/PB, CR/PR

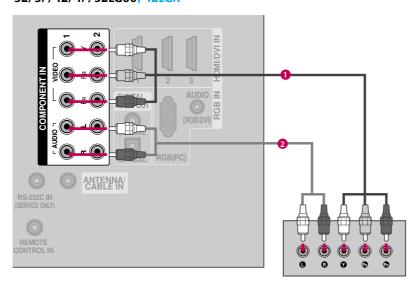
Resolution	Horizontal Frequency(KHz)	Vertical Frequency(Hz)
720x480i	15.73 15.73	59.94 60.00
720x480p	31.47 31.50	59.94 60.00
1280x720p	44.96 45.00	59.94 60.00
1920x1080i	33.72 33.75	59.94 60.00
1920x1080p	26.97 27.00 33.71 33.75 67.432 67.50	23.976 24.00 29.97 30.00 59.94 60.00

# **EXTERNAL EQUIPMENT SETUP**

Plasma TV, 32/37/42LG30, 37/42/47/52LG50, 32/42/47/52LG70, 47LG90



## 32/37/42/47/52LG60, 42LGX



## **HDMI Connection**

## 1. How to connect

- Connect the digital set-top box to HDMI/DVI IN1, 2, 3, or 4 jack on the TV.
- No separate audio connection is necessary.
  HDMI supports both audio and video.

## 2. How to use

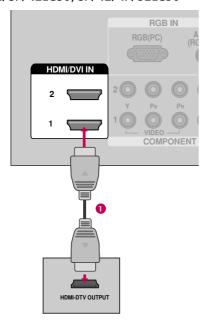
- Turn on the digital set-top box. (Refer to the owner's manual for the digital set-top box.)
- Select the HDMI1, HDMI2, HDMI3, or HDMI4 input source on the TV using the INPUT button on the remote control.

### HDMI-DTV

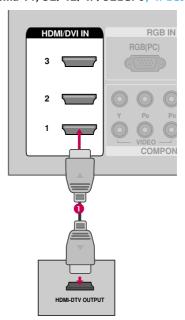
Resolution	Horizontal Frequency(KHz)	Vertical Frequency(Hz)
720x480p	31.47 31.50	59.94 60.00
1280x720p	44.96 45.00	59.94 60.00
1920x1080i	33.72 33.75	59.94 60.00
1920x1080p	26.97 27.00 33.71 33.75 67.432 67.50	23.976 24.00 29.97 30.00 59.939 60.00

# **EXTERNAL EQUIPMENT SETUP**

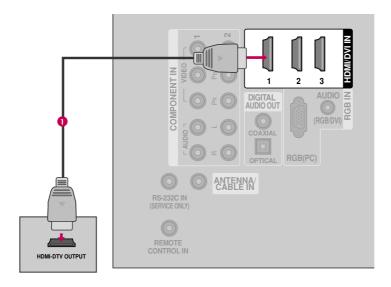
## 32/37/42LG30, 37/42/47/52LG50



## Plasma TV, 32/42/47/52LG70, 47LG90



## 32/37/42/47/52LG60, 42LGX



## **DVI to HDMI Connection**

#### 1. How to connect

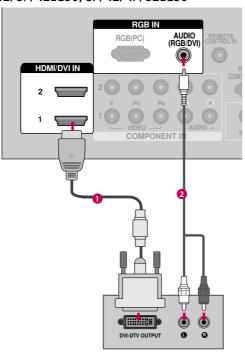
- 32/37/42LG30, 37/42/47/52LG50, Plasma TV
  - Connect the DVI output of the digital set-top box to the **HDMI/DVI IN 1, 2**, or **3** jack on the TV. 32/37/42/47/52LG60, 32/42/47/52LG70, 42LGX, 47LG90
  - Connect the DVI output of the digital set-top box to the HDMI/DVI IN 1, 2, 3, or 4 jack on the TV.
- 2 Connect the PC audio output to the AUDIO (RGB/DVI) jack on the TV.

## 2. How to use

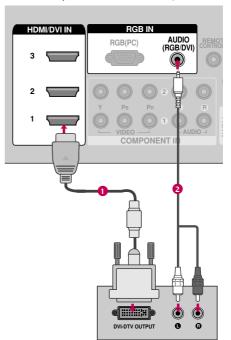
- Turn on the digital set-top box. (Refer to the owner's manual for the digital set-top box.)
- 32/37/42LG30, 37/42/47/52LG50, Plasma TV
- Select the HDMI1, HDMI2, or HDMI3 input source on the TV using the INPUT button on the remote control.
- 32/37/42/47/52LG60, 32/42/47/52LG70, 42LGX, 47LG90
  - Select the **HDMI1**, **HDMI2**, **HDMI3**, or **HDMI4** input source on the TV using the **INPUT** button on the remote control.
- NOTE
- ▶ A DVI to HDMI cable or adapter is required for this connection. DVI doesn't support audio, so a separate audio connection is necessary.

# **EXTERNAL EQUIPMENT SETUP**

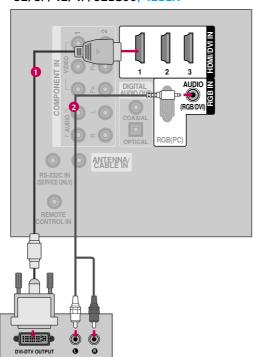
## 32/37/42LG30, 37/42/47/52LG50



Plasma TV, 32/42/47/52LG70, 47LG90



32/37/42/47/52LG60, 42LGX



## **DVD SETUP**

## **Component Connection**

## 1. How to connect

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

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 TV.

### 2. How to use

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

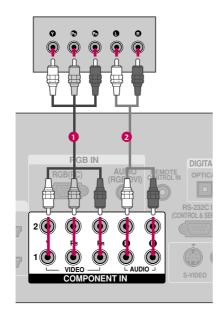
#### **Component Input ports**

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

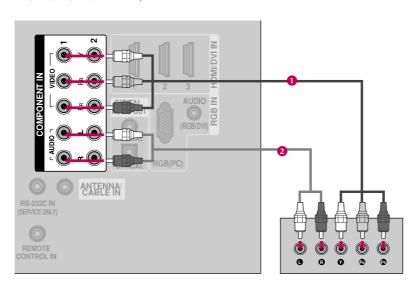
Component ports on the TV	Y	Рв	PR
	Y	Рв	Pr
Video output ports	Y	B-Y	R-Y
on DVD player	Y	СЬ	Cr
	Y	Pb	Pr

# **EXTERNAL EQUIPMENT SETUP**

Plasma TV, 32/37/42LG30, 37/42/47/52LG50, 32/42/47/52LG70, 47LG90



## 32/37/42/47/52LG60, 42LGX



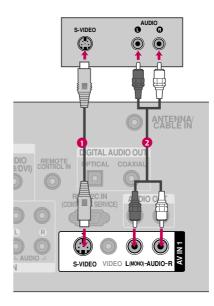
## S-Video Connection (Except 32/37/42/47/52LG60, 42LGX)

## 1. How to connect

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

## 2. How to use

- Turn on the DVD player, insert a DVD.
- Select the AV1 input source on the TV using the INPUT button on the remote control.
- Refer to the DVD player's manual for operating instructions.



# **EXTERNAL EQUIPMENT SETUP**

## **HDMI Connection**

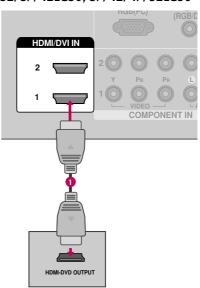
## 1. How to connect

- Connect the HDMI output of the DVD to the HDMI/DVI IN1, 2, 3 or 4 jack on the TV.
- No separate audio connection is necessary. HDMI supports both audio and video.

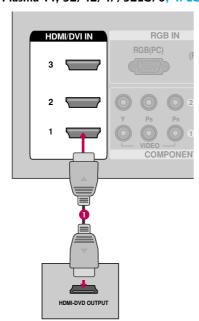
### 2. How to use

- Select the HDMI1, HDMI2, HDMI3, or HDMI4 input source on the TV using the INPUT button on the remote control
- Refer to the DVD player's manual for operating instructions.

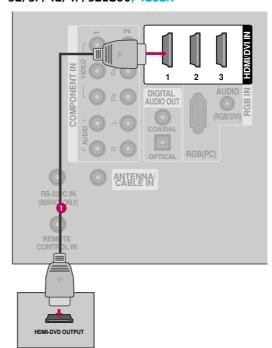
#### 32/37/42LG30, 37/42/47/52LG50



## Plasma TV, 32/42/47/52LG70, 47LG90



## 32/37/42/47/52LG60, 42LGX



## **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 (Plasma TV models only). 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 TVs and is not covered by warranty.

#### **Antenna Connection**

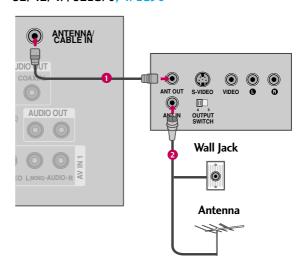
#### 1. How to connect

- Connect the RF antenna out socket of the VCR to the ANTENNA/CABLE IN socket on the TV.
- Connect the antenna cable to the RF antenna in socket of the VCR.

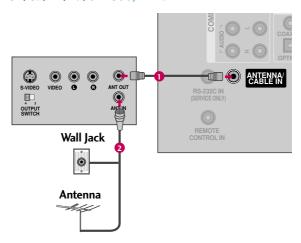
#### 2. How to use

- 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.)

Plasma TV, 32/37/42LG30, 37/42/47/52LG50, 32/42/47/52LG70, 47LG90



#### 32/37/42/47/52LG60, 42LGX



## **EXTERNAL EQUIPMENT SETUP**

## Composite (RCA) Connection

### 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)

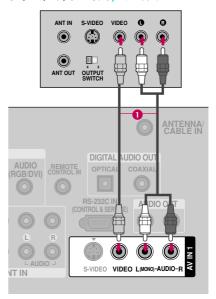
### 2. How to use

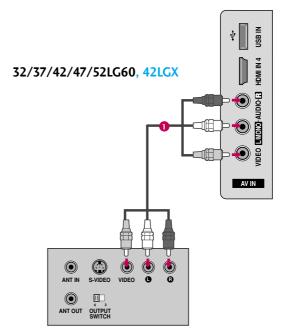
- Insert a video tape into the VCR and press PLAY on the VCR. (Refer to the VCR owner's manual.)
- Select the AV1 input source on the TV using the INPUT button on the remote control.
- If connected to AV IN2, select AV2 input source on the TV.

### NOTE

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

Plasma TV, 32/37/42LG30, 37/42/47/52LG50, 32/42/47/52LG70, 47LG90





## S-Video Connection (Except 32/37/42/47/52LG60, 42LGX)

### 1. How to connect

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

## 2. How to use

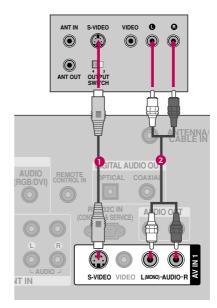
- Insert a video tape into the VCR and press PLAY on the VCR. (Refer to the VCR owner's manual.)
- Select the AV1 input source on the TV using the INPUT button on the remote control.



➤ S-Video provides better quality than composite. Use it when available.

## **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.



# OTHER A/V SOURCE SETUP

### 1. How to connect

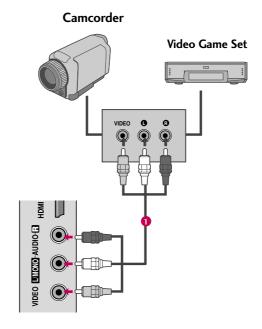


Connect the **AUDIO/VIDEO** jacks between TV and external equipment. Match the jack colors.

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

### 2. How to use

- Select the AV2 input source on the TV using the INPUT button on the remote control.
- If connected to AV IN1 input, select the AV1 input source on the TV.
- Operate the corresponding external equipment.



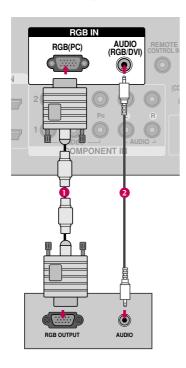
# **PC SETUP**

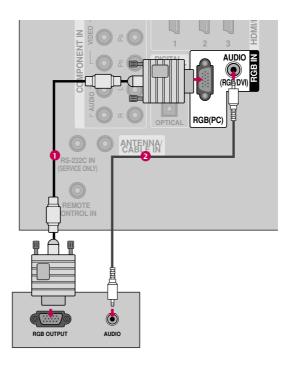
This TV provides Plug and Play capability, meaning that the PC adjusts automatically to the TV's settings.

# VGA (D-Sub 15 pin) Connection

Plasma TV, 32/37/42LG30, 37/42/47/52LG50, 32/42/47/52LG70, 47LG90

32/37/42/47/52LG60, 42LGX





#### 1. How to connect

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

#### 2. How to use

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

#### **DVI to HDMI Connection**

#### 1. How to connect

- 32/37/42LG30, 37/42/47/52LG50, Plasma TV
  - Connect the DVI output of the PC to the **HDMI/DVI IN 1**,  $\bf 2$ , or  $\bf 3$  jack on the TV. 32/37/42/47/52LG60, 32/42/47/52LG70, 42LGX, 47LG90
  - Connect the DVI output of the PC to the HDMI/DVI IN 1, 2, 3, or 4 jack on the TV.
- Connect the PC audio output to the AUDIO (RGB/DVI) jack on the TV.

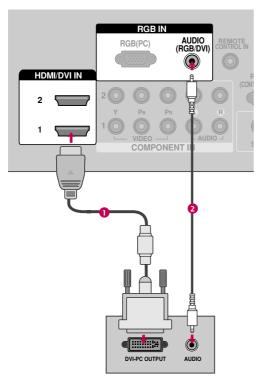
#### 2. How to use

- Turn on the PC and the TV.
- 32/37/42LG30, 37/42/47/52LG50, Plasma TV
  - Select the HDMI1, HDMI2, or HDMI3 input source on the TV using the INPUT button on the remote control.
- 32/37/42/47/52LG60, 32/42/47/52LG70, 42LGX, 47LG90
  - Select the HDMI1, HDMI2, HDMI3, or HDMI4 input source on the TV using the INPUT button on the remote control.

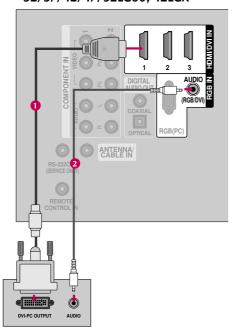
#### NOTES

- ➤ 32/37/42LG30, 42/50PG25: To get the the best picture quality, adjust the PC graphics card to 1360x768.
- 37/42/47/52LG50, 32/37/42/47/52LG60, 32/42/47/52LG70, 42LGX, 47LG90, 50/60PG60, 50/60PG70: To get the the best picture quality, adjust the PC graphics card to 1920x1080.
- ▶ Depending on the graphics card, DOS mode may not work if a HDMI to DVI Cable is in use.
- ▶ In PC mode, there may be noise associated with
- the resolution, vertical pattern, contrast or brightness. 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 PICTURE menu until the picture is clear.
- ➤ Avoid keeping a fixed image on the screen for a long period of time. The fixed image could become permanently imprinted on the screen.
- The synchronization input form for Horizontal and Vertical frequencies is separate.

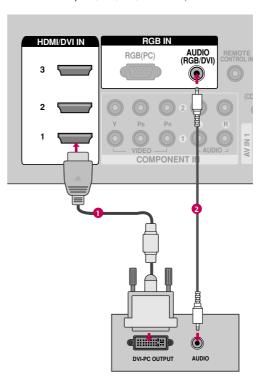
### 32/37/42LG30, 37/42/47/52LG50



32/37/42/47/52LG60, 42LGX



### Plasma TV, 32/42/47/52LG70, 47LG90



# Supported Display Specifications (RGB-PC, HDMI-PC)

### NOTE

- ▶ Depending on the graphics card, some resolution settings may not allow the image to be positioned on the screen properly.
- ▶ If there are overscan in HDMI-PC 1920x1080, change aspect ratio to **Just scan**.

#### For 32/37/42LG30

Resolution	Horizontal Frequency(KHz)	Vertical Frequency(Hz)
640x350	31.469	70.08 •
720x400	31.469	70.08 •
640x480	31.469	59.94
800x600	37.879	60.31
1024x768	48.363	60.00
1280x768	47.776	59.87
1360x768	47.720	59.799
1366x768	47.130	59.65

\* Only RGB-PC mode

# For 37/42/47/52LG50, 32/37/42/47/52LG60, 32/42/47/52LG70, 42LGX, 47LG90

Resolution	Horizontal Frequency(KHz)	Vertical Frequency(Hz)
640x350	31.468	70.09
720x400	31.469	70.08
640x480	31.469 37.500 37.861	59.94 75.00 72.80
800x600	35.156 37.879 46.875 48.077	56.25 60.31 75.00 72.18
1024x768	48.363 56.476 60.023	60.00 70.06 75.02
1280x768	47.776 60.289	59.87 74.893
1280x1024	63.981 79.976	60.02 75.025
1360x768	47.712	60.015
1600x1200	75.00	60.00
1920x1080 RGB-PC	66.587	59.934
1920x1080 HDMI-PC	67.5	60.00

\* Only RGB-PC mode

For 42/50PG25, 50/60PG60, 50/60PG70

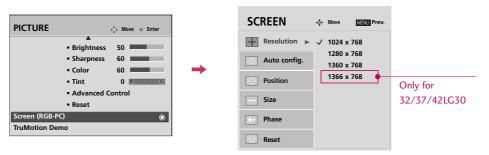
Resolution	Horizontal Frequency(KHz)	Vertical Frequency(Hz)
640x350	31.468	70.09
720x400	31.469	70.08
640x480	31.469 37.500 37.861	59.94 75.00 72.80
800x600	35.156 37.879 46.875 48.077	56.25 60.31 75.00 72.18
1024x768	48.363 56.476 60.023	60.00 70.06 75.02
1280x768	47.776 60.289	59.87 74.893 ●
1280x1024	63.981 79.976	60.02 75.025
1360x768	47.712	60.015
1600x1200	75.00	60.00
1920x1080	66.587	59.934

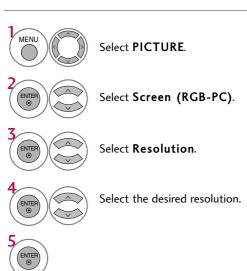
<sup>\*</sup> Only RGB-PC mode

# Screen Setup for PC mode

# **Selecting Resolution**

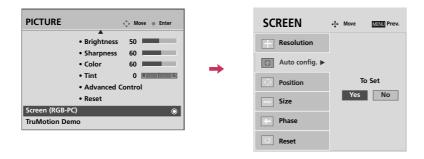
You can choose the resolution in RGB-PC mode.
The **Position**, **Phase**, and **Size** can also be adjusted.

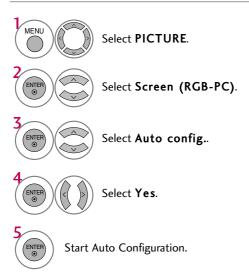




### **Auto Configure**

Automatically adjusts picture position and minimizes image instability. After adjustment, if the image is still not correct, try using the manual settings or a different resolution or refresh rate on the PC.



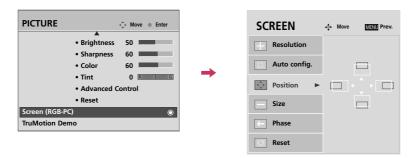


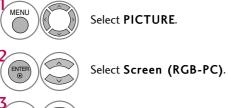
- If the position of the image is still not correct, try Auto adjustment again.
- If picture needs to be adjusted again after Auto adjustment in RGB-PC, you can adjust the **Position**, **Size** or **Phase**.

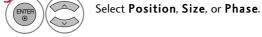
### Adjustment for screen Position, Size, and Phase

If the picture is not clear after auto adjustment and especially if characters are still trembling, adjust the picture phase manually.

This feature operates only in RGB-PC mode.





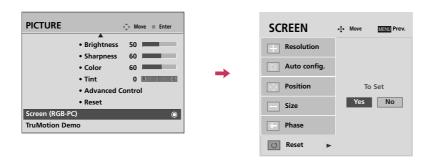


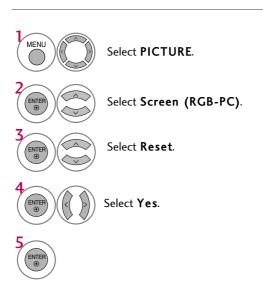


- **Position**: This function is to adjust picture to left/right and up/down as you prefer.
- **Size**: This function is to minimize any vertical bars or stripes visible on the screen background. And the horizontal screen size will also change.
- **Phase**: This function allows you to remove any horizontal noise and clear or sharpen the image of characters.

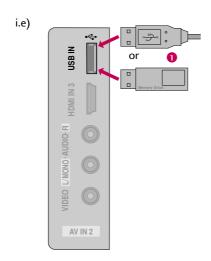
# Screen Reset (Reset to original factory values)

Returns **Position**, **Size**, and **Phase** to the default factory settings. This feature operates only in RGB-PC mode.





# USB CONNECTION (Except 32/37/42LG30)



### 1. How to connect

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

### 2. How to use

■ After connecting the **USB IN** jack, you use the USB function. (▶ **p.64**)

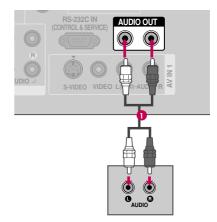
### **AUDIO OUT CONNECTION**

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

### Analog (Except 32/37/42/47/52LG60, 42LGX)

#### 1. How to connect

- Connect audio outputs to the TV's AUDIO OUT jacks.
- Set the "TV Speaker option Off" in the AUDIO menu. (▶ p.93). See the external audio equipment instruction manual for operation.



### **Digital**

#### 1. How to connect

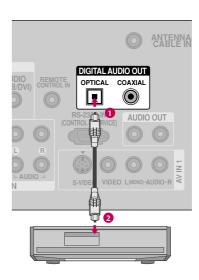
- Connect one end of the optical or coaxial cable to the TV's **OPTICAL** or **COAXIAL** (Except 32/37/42LG30) port of **DIGITAL AUDIO OUT**.
- Connect the other end of the optical or coaxial cable to the digital audio input on the audio equipment.
- 3 Set the "TV Speaker option Off" in the AUDIO menu. (▶ p.93). See the external audio equipment instruction manual for operation.

### NOTE

▶ When connecting with external audio equipments, such as amplifiers or speakers, you can turn the TV speakers off in the menu. (▶ p.93)

#### **A** CAUTION

- ▶ Do not look into the optical output port. Looking at the laser beam may damage your vision.
- ▶ Block the SPDIF out (optical/coaxial) about the contents with ACP(Audio Copy Protection) function.



# WATCHING TV / CHANNEL CONTROL

### REMOTE CONTROL FUNCTIONS

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

POWER DVD (TV) TV/STB/DVD/VCR Select the remote operating mode: TV, STB, DVD, or VCR. VCR STB POWER Turns your TV or any other programmed equipment on or **INPUT** Q. MENU off, depending on the mode.  $(\mathbf{\Phi})$ Q.MENU Select the desired quick menu source. ▶ p.51 MENU Displays the main menu. Clear all on-screen displays and return to TV viewing from any menu. **INPUT** External input modes rotate in regular sequence. RETURN SIMPLINK AV MODE **VOLUME UP** Increase/decrease the sound level. /DOWN FAV Scroll through the programmed Favorite channels. ▶ p.51 MUTE Switch the sound on or off. ▶ p.50 VOL СН **CHANNEL** Select available channels. **UP/DOWN** PAGE Move from one full set of screen information to the next one. 3 UP/DOWN **NUMBER** button 5 — (DASH) Used to enter a program number for multiple program channels such as 2-1, 2-2, etc. FLASHBK Tune to the last channel viewed. (FLASHBK • Control video cassette recorders or DVD players. VCR/DVD, USB, SIMPLINK • Control USB menu (PHOTO LIST and MUSIC LIST.) **Control buttons** • Control the SIMPLINK compatible devices. (**4**) (**b**)

THUMBSTICK (Up/Down/Left Right/ENTER)

Navigate the on-screen menus and adjust the system settings to your preference.

**RETURN** Allows the user to move return one step in an interactive application or other user interaction

function.

**SIMPLINK** See a list of AV devices connected to TV.

When you toggle this button, the SIMPLINK menu appears at the screen. ▶ p.62-63

AV MODE It helps you select and set images and sounds. ▶ p.61

### **Installing Batteries**



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

# WATCHING TV / CHANNEL CONTROL

### TURNING ON THE TV

- First, connect power cord correctly.
  - At this moment, the TV switches to standby mode.
  - In standby mode to turn TV on, press the ७/۱, INPUT, CH (▲▼ or ^ ∨ ) button on the TV or press the POWER, 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 power state it was last set to, even if the power cord is out.
- 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.

### **CHANNEL SELECTION**

Press the CH ( ^ or ~ ) or NUMBER buttons to select a channel number.

# **VOLUME ADJUSTMENT**

Adjust the volume to suit your personal preference.

- 1 Press the VOL (+ or -) button to adjust the volume.
- 2 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.