LG
Life's Good

PLASMA TV
OWNER'S MANUAL

42PG10   **50PG10**
42PG20   **50PG20**
42PG20C   **50PG20C**
50PG30   **60PG30**

NS-42PDP-09
NS-50PDP-09

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.

www.lgusa.com / www.lg.ca / www.lgcommercial.com

WARNING / CAUTION

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.

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.

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 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.

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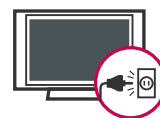
7 Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.

8 Only use attachments/accessories specified by the manufacturer.
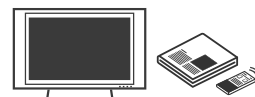
9 Unplug this apparatus when unused for long periods of time.

10 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.

S3125A

11 Never touch this apparatus or antenna during a thunder or lighting storm.

12 Do not allow a impact shock or any objects to fall into the product, and do not drop onto the screen with something.

13 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.

14 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.

15 Outdoor use marking :

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

16 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.

17 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.

Power Supply

Short-circuit Breaker
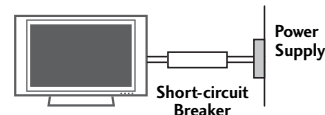
18 DISCONNECTING DEVICE FROM MAINS

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

CONTENTS

FEATURE OF THIS TV

SRS(O) is a trademark of 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.

PREPARATION

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.
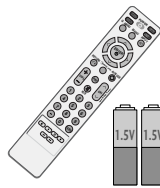The accessories included may differ from the images below.
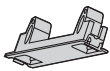
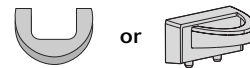| Owner's Manual	CD Manual	Remote Control, Batteries	Power Cord	75ohm Round Cable

| Protection Cover (Refer to P.13)	Bolts for stand assembly (Refer to P.10) (Only 42PG10/20/20C)	Cable Holder 42PG10/20/20C: 1EA, 50PG10/20/20C: 2EA	Cable Management Clip

x 4

or

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. Please be cautions of that excessive pressure may cause scratch or discoloration.

Option Extras
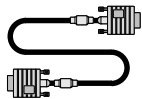
D-sub 15 pin Cable

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.
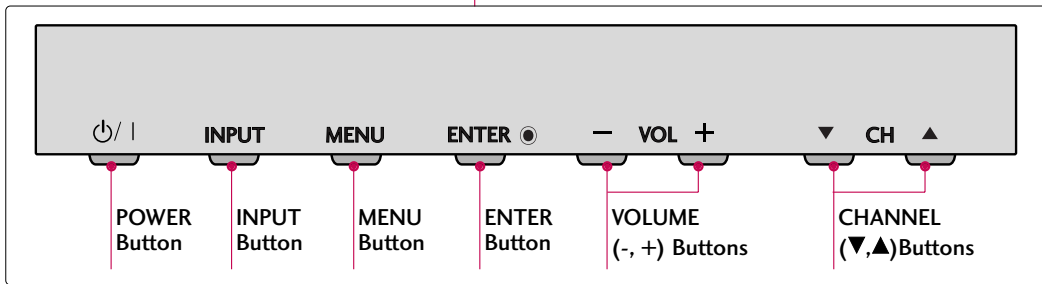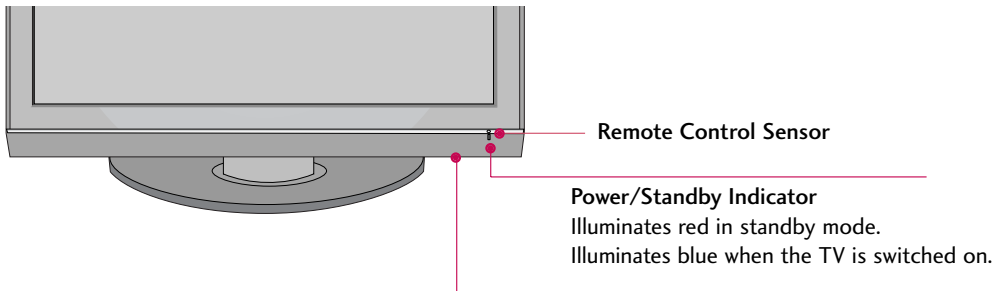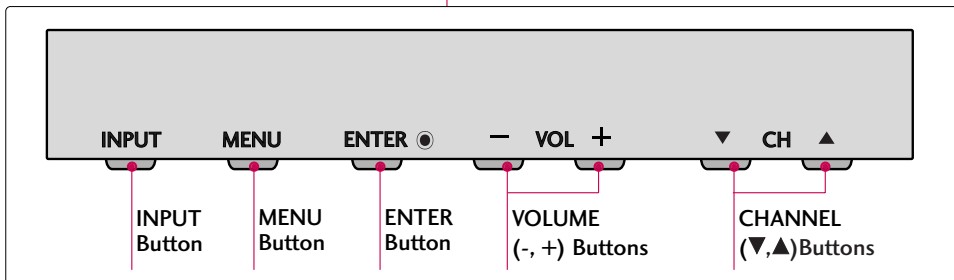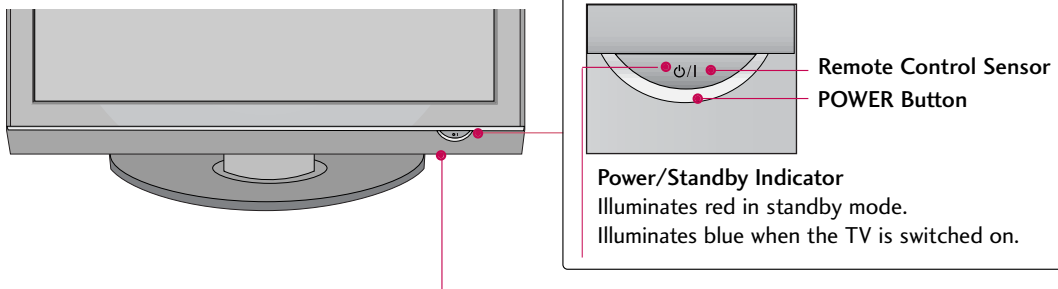
PREPARATION

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).

42/50PG10

Remote Control Sensor

Power/Standby Indicator
Illuminates red in standby mode.
Illuminates blue when the TV is switched on.

⏻/❘	INPUT	MENU	ENTER ◉	— VOL +	▼ CH ▲
POWER Button	INPUT Button	MENU Button	ENTER Button	VOLUME (-, +) Buttons	CHANNEL (▼,▲)Buttons

42/50PG20/20C, 50/60PG30

⏻/❘

Remote Control Sensor
POWER Button

Power/Standby Indicator
Illuminates red in standby mode.
Illuminates blue when the TV is switched on.

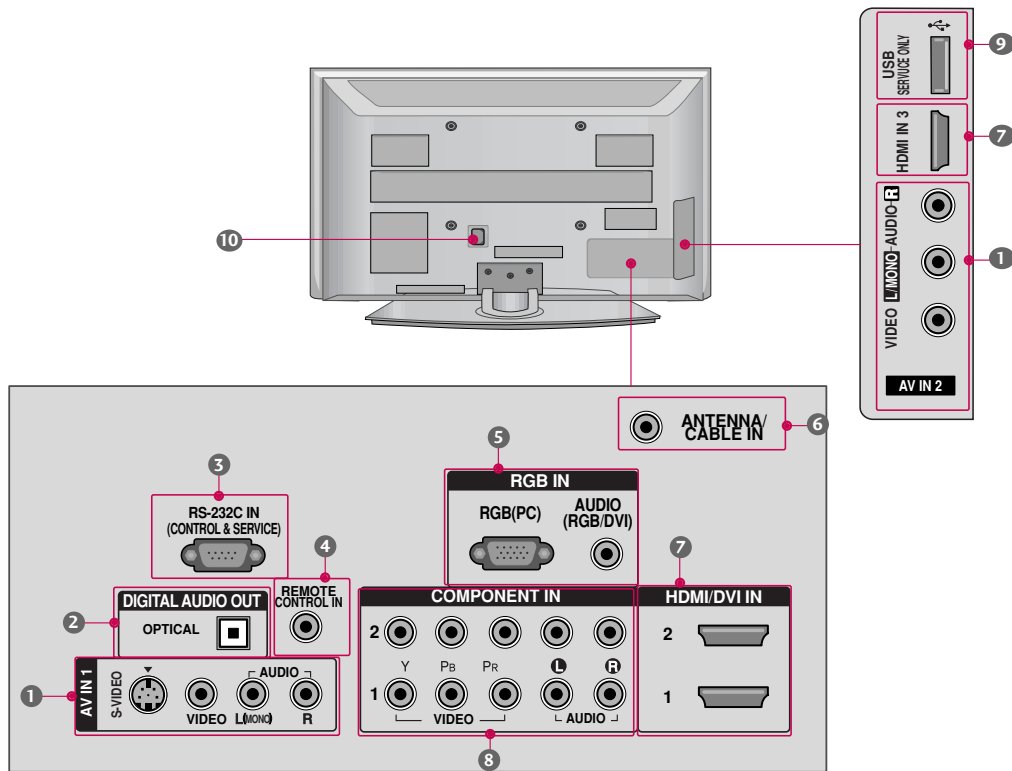| INPUT	MENU	ENTER ◉	— VOL +	▼ CH ▲
INPUT Button	MENU Button	ENTER Button	VOLUME (-, +) Buttons	CHANNEL (▼,▲)Buttons

BACK PANEL INFORMATION

■ Image shown may differ from your TV.

① **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).

② **DIGITAL AUDIO OUT**
Digital audio output for use with amps and home theater systems.
Includes an optical connection.
Note: In standby mode, this port do not work.

③ **RS-232C IN (CONTROL & SERVICE) PORT**
Used by third party devices.

④ **REMOTE CONTROL PORT**
For a wired remote control.

⑤ **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.

⑥ **ANTENNA/CABLE IN**
Connect over-the air signals to this jack.
Connect cable signals to this jack.

⑦ **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)

⑧ **COMPONENT IN**
Analog Connection. Supports HD.
Uses a red, green, and blue cable for video & red and white for audio.

⑨ **USB SERVICE ONLY**
Used for software updates.

⑩ **Power Cord Socket**
For operation with AC power.
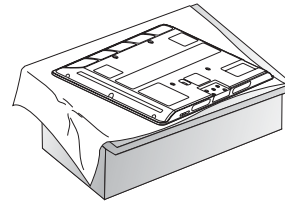Caution: Never attempt to operate the TV on DC power.

PREPARATION

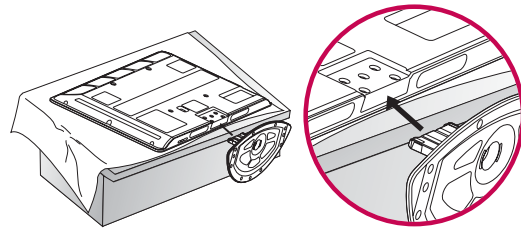## STAND INSTALLATION (Only 42PG10/20/20C)
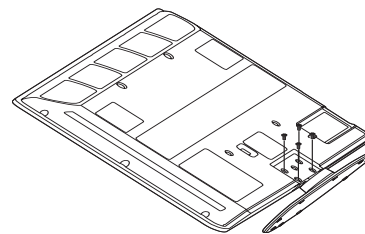
■ Image shown may differ from your TV.

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

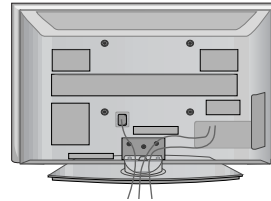**2** Assemble the TV as shown.

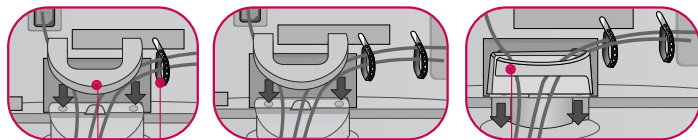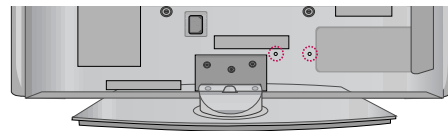**3** Fix the 4 bolts securely using the holes in the back of the TV.

CABLE MANAGEMENT

■ Image shown may differ from your TV.

1 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
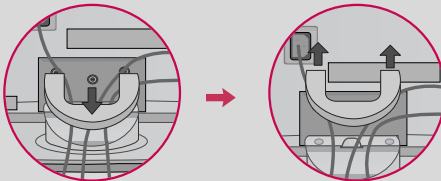shown and bundle the cables.

CABLE HOLDER

CABLE MANAGEMENT CLIP

CABLE MANAGEMENT CLIP

CABLE MANAGEMENT CLIP

How to remove the CABLE MANAGEMENT CLIP
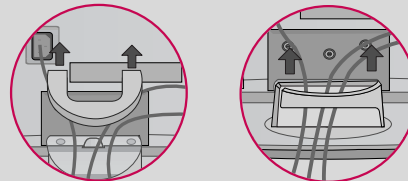
42PG10/20/20C

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

50PG10/20/20C, 50/60PG30

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

❗ NOTE

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

11

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.

4 inches

4 inches   4 inches   4 inches
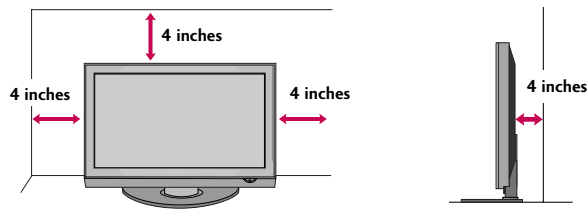
⚠ **CAUTION**   ▶ Ensure adequate ventilation by following the clearance recommendations.

SWIVEL STAND (Only 50/60PG30)

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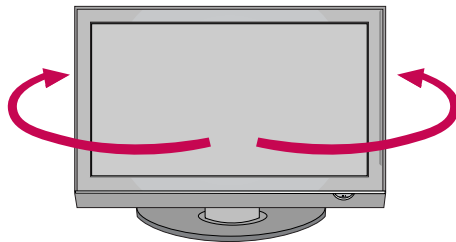
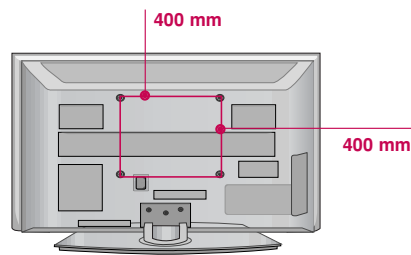# VESA WALL MOUNTING

This TV accepts VESA FDMI compliant mounts via the four screw holes on the back of the TV. These mounts are sold by third parties and not available from LG. Refer to the instructions included with the mount for more info.

400 mm

400 mm

ⓘ NOTE

▶ Screw length needed depends on the wall mount used. For further information, refer to the instructions included with the mount.

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.
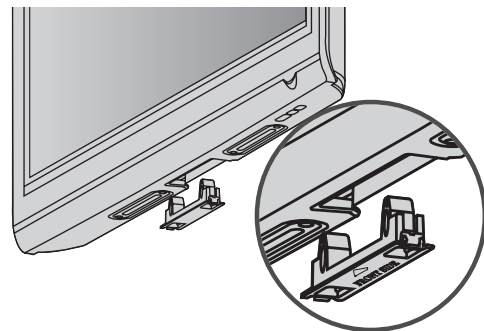
PREPARATION

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.
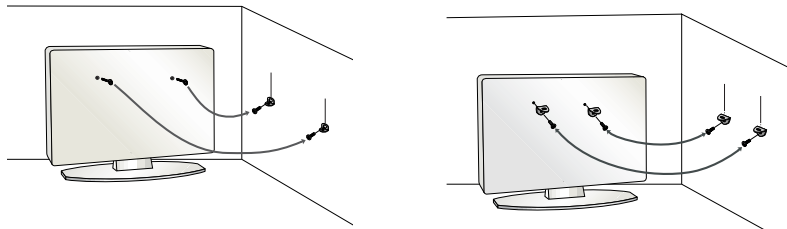
■ Insert the eye-bolts (or TV brackets and bolts) to tighten the product to the wall as shown in the picture.
  *If your product has the bolts in the eye-bolts position before inserting the eye-bolts, loosen the bolts.
  * Insert the eye-bolts or TV brackets/bolts and tighten them securely in the upper 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.
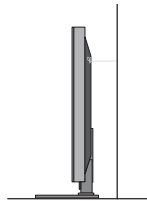
■ Use a sturdy rope (not provided as parts of the product, must purchase separately) to tie the product. It is safer to tie the rope so it becomes horizontal between the wall and the product.

> ❶ **NOTE**

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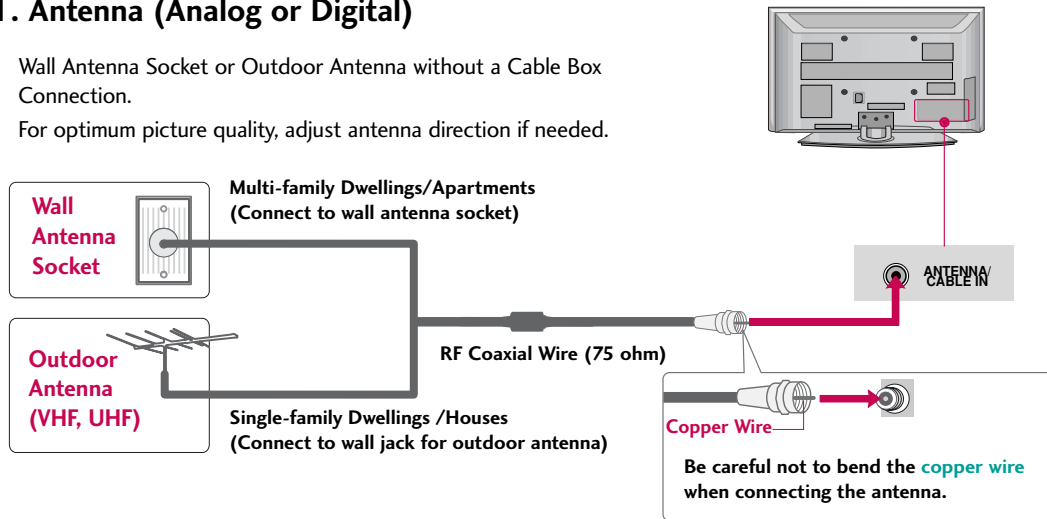▶ To use the TV safely, make sure that the height of the bracket on the wall and the one on the TV are the same.

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

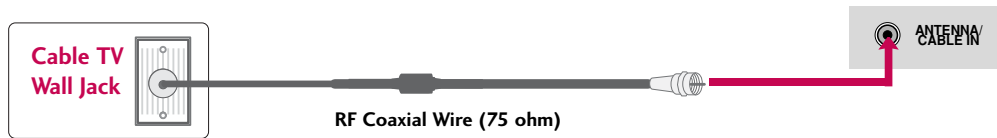# ANTENNA OR CABLE CONNECTION

1. Antenna (Analog or Digital)

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

For optimum picture quality, adjust antenna direction if needed.

Wall Antenna Socket

Multi-family Dwellings/Apartments (Connect to wall antenna socket)

Outdoor Antenna (VHF, UHF)

RF Coaxial Wire (75 ohm)

Single-family Dwellings /Houses (Connect to wall jack for outdoor antenna)

ANTENNA/ CABLE IN

Copper Wire

Be careful not to bend the copper wire when connecting the antenna.

2. Cable

Cable TV Wall Jack

ANTENNA/ CABLE IN

RF Coaxial Wire (75 ohm)

■ 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.

Antenna

UHF

VHF

Signal Amplifier

ANTENNA/ CABLE IN
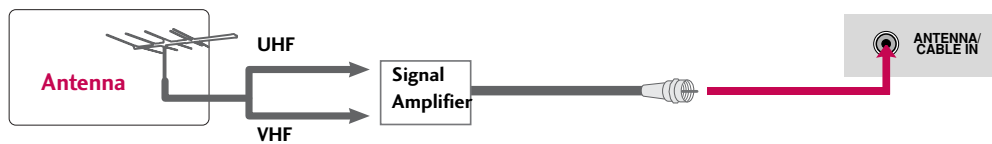
EXTERNAL EQUIPMENT SETUP

■ To prevent the equipment damage, never plug in any power cords until you have finished connecting all equipment.

HD RECEIVER SETUP

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

Component Connection

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 TV. 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 TV.
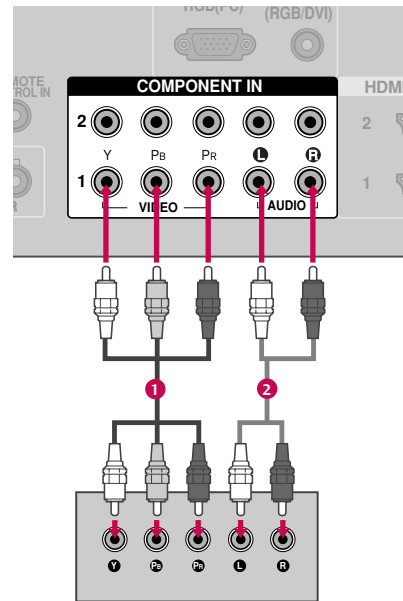
2. How to use

■ 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, C$_B$/P$_B$, C$_R$/P$_R$

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	27.00 33.75 67.43 67.50	24.00 30.00 59.94 60.00

HDMI Connection

1. How to connect

(1) Connect the digital set-top box to **HDMI/DVI IN1**, **2**, or **HDMI IN3** jack on the TV.

(2) No separate audio connection is necessary. HDMI supports both audio and video.
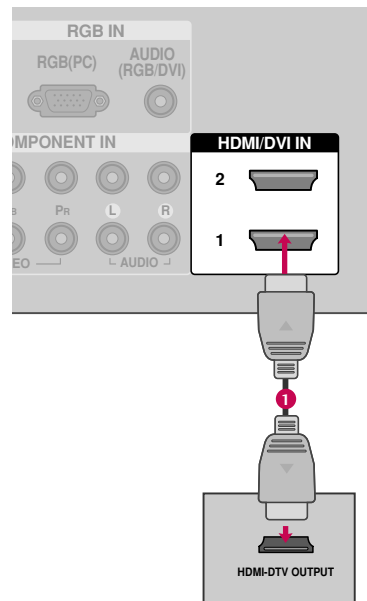
2. How to use

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

HDMI-DTV

Resolution	Horizontal Frequency(KHz)	Vertical Frequency(Hz)
720x480p	31.469	59.94
	31.50	60.00
1280x720p	44.96	59.94
	45.00	60.00
1920x1080i	33.72	59.94
	33.75	60.00
1920x1080p	27.00	24.00
	33.75	30.00
	67.43	59.94
	67.50	60.00

EXTERNAL EQUIPMENT SETUP

DVI to HDMI Connection
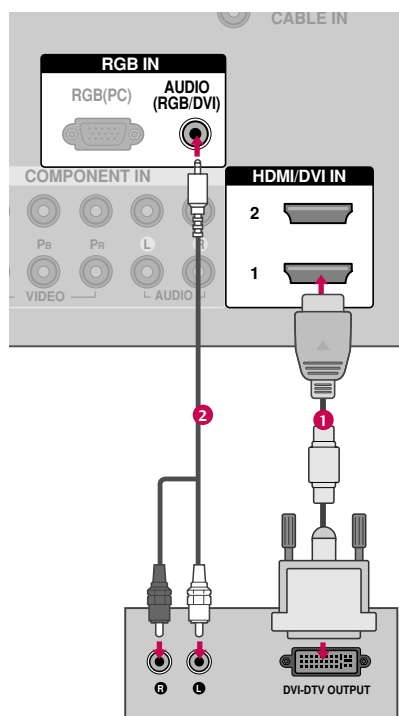
1. How to connect

1 Connect the DVI output of the digital set-top box to the **HDMI/DVI IN1**, **2**, or **HDMI IN3** jack on the TV.

2 Connect the audio output of the digital set-top box 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.)
- Select the **HDMI1**, **HDMI2**, or **HDMI3** 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.

DVD SETUP

Component Connection

1. How to connect

① Connect the video outputs (Y, P$_B$, P$_R$) of the DVD to the **COMPONENT IN VIDEO1** jacks on the TV.
Match the jack colors (Y = green, P$_B$ = blue, and P$_R$ = red).

② 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.
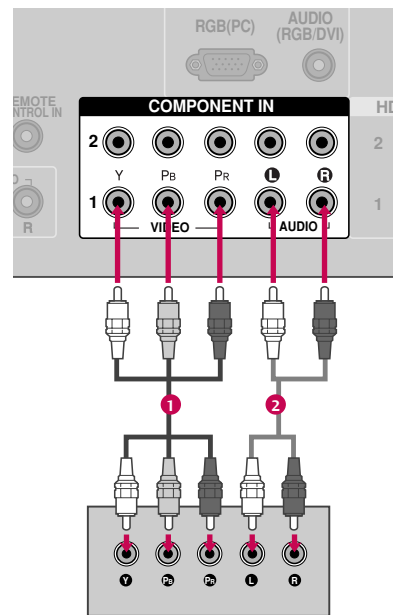
Component Input ports
To get better picture quality, connect a DVD player to the component input ports as shown below.

Component ports on the TV	Y	P$_B$	P$_R$

|	Y	P$_B$	P$_R$
Video output ports on DVD player	Y	B-Y	R-Y
	Y	Cb	Cr
	Y	Pb	Pr

EXTERNAL EQUIPMENT SETUP

S-Video Connection

1. How to connect

1 Connect the S-VIDEO output of the DVD to the **S-VIDEO** input on the TV.

2 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.
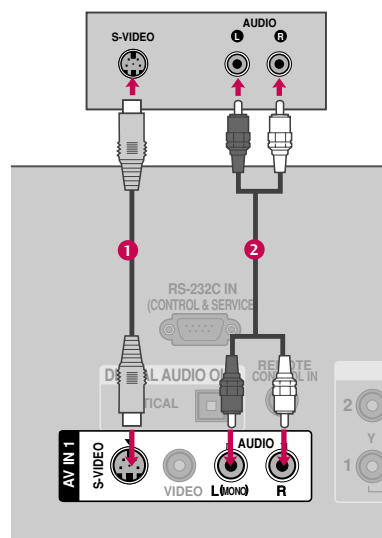
HDMI Connection

1. How to connect

1 Connect the HDMI output of the DVD to the **HDMI/DVI IN1**, **2**, or **HDMI IN3** jack on the TV.

2 No separate audio connection is necessary. HDMI supports both audio and video.

2. How to use

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

20
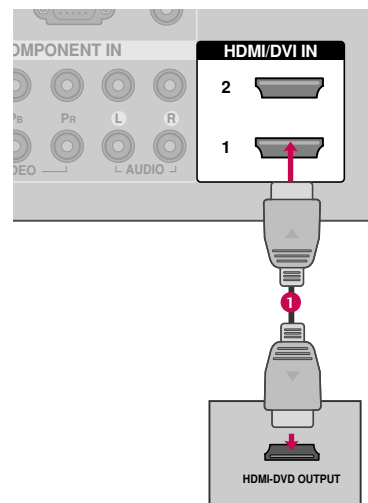
VCR SETUP

■ 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 TVs and is not covered by warranty.

Antenna Connection

1. How to connect

① Connect the RF antenna out socket of the VCR to the **ANTENNA/CABLE IN** socket on the TV.

② Connect the antenna cable to the RF antenna in socket of the VCR.
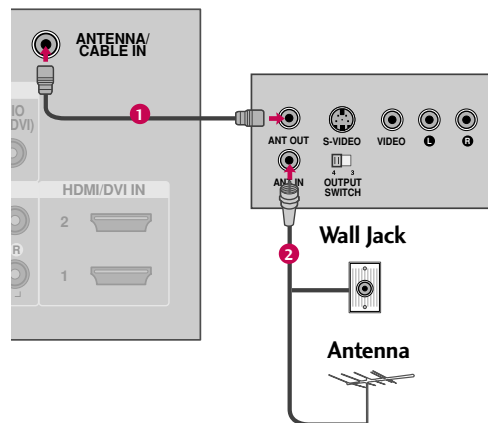
2. How to use

■ 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.)

EXTERNAL EQUIPMENT SETUP

Composite (RCA) Connection
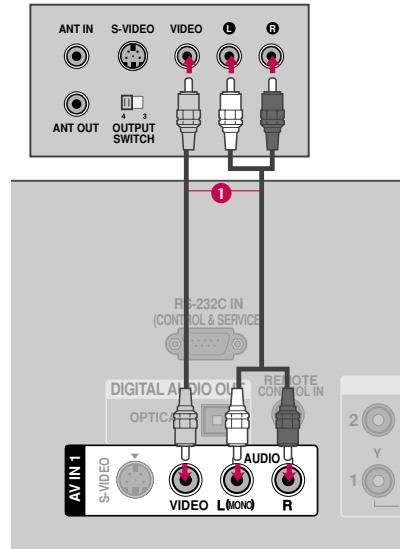
1. How to connect

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 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.

S-Video Connection

1. How to connect

1 Connect the S-VIDEO output of the VCR to the **S-VIDEO** input on the TV.

2 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.

> **! NOTE**
> ► S-Video provides better quality than composite. Use it when available.
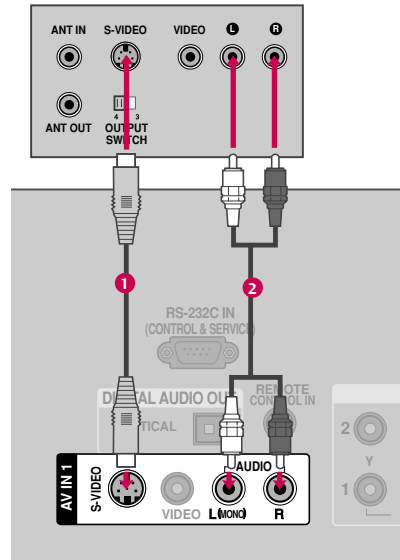
> **⚠ CAUTION**
> ► Do not connect to both Video and S-Video at the same time. In the event that you connect both Video and the S-Video cables, only the S-Video will work.

OTHER A/V SOURCE SETUP

Camcorder

Video Game Set

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 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.
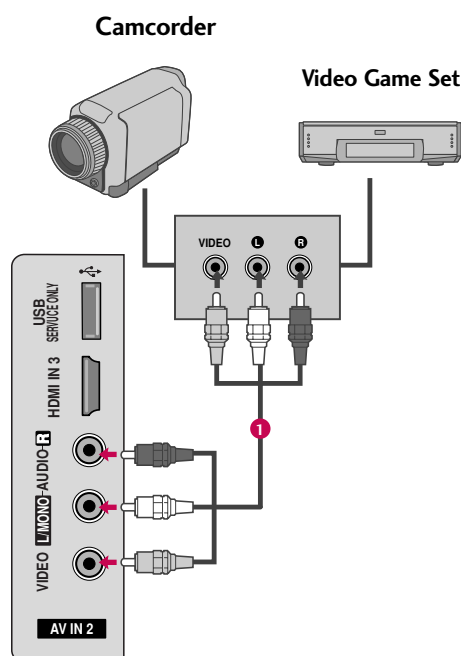
AUDIO OUT CONNECTION

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

1. How to connect

1 Connect one end of the optical cable to the TV's **OPTICAL** port of **DIGITAL AUDIO OUT**.

2 Connect the other end of the optical cable to the digital audio input on the audio equipment.

3 Set the "TV Speaker option - Off" in the AUDIO menu. (▶ **p.61**). See the external audio equipment instruction manual for operation.

> **① NOTE**
>
> ▶ When connecting with external audio equipments, such as amplifiers or speakers, you can turn the TV speakers off in the menu. (▶ **p.61**)

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

EXTERNAL EQIPMENT SETUP
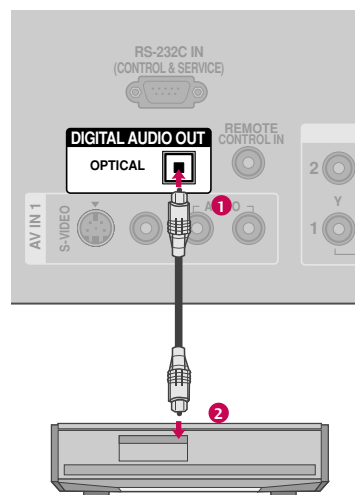
EXTERNAL EQUIPMENT SETUP

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

1. How to connect

1. Connect the VGA output of the PC to the **RGB (PC)** 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 PC and the TV.
- Select the **RGB-PC** input source on the TV using the **INPUT** button on the remote control.
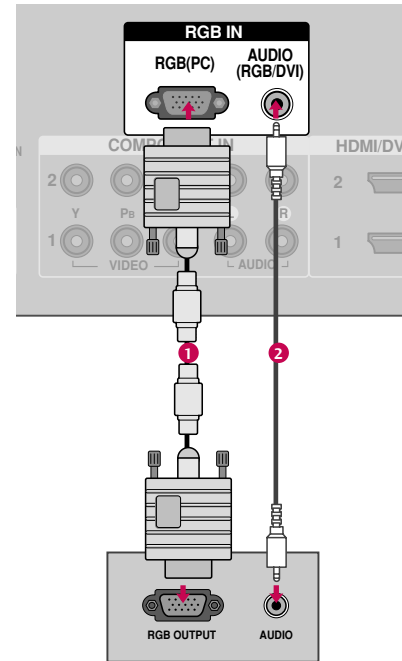
DVI to HDMI Connection

1. How to connect

1. Connect the DVI output of the PC to the **HDMI/DVI IN 1, 2**, or **HDMI IN3** 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 PC and the TV.
- Select the **HDMI1**, **HDMI2** or **HDMI3** input source on the TV using the **INPUT** button on the remote control.
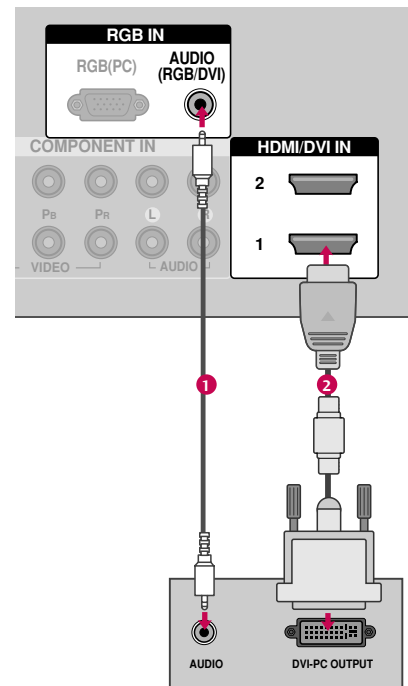
EXTERNAL EQUIPMENT SETUP

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

For 26/32/37/42LG30

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

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

> ❶ **NOTE**
> ► Depending on graphic card and signal status, there can be some shaking to find best picture in a little time.

Screen Setup for PC mode

Selecting Resolution

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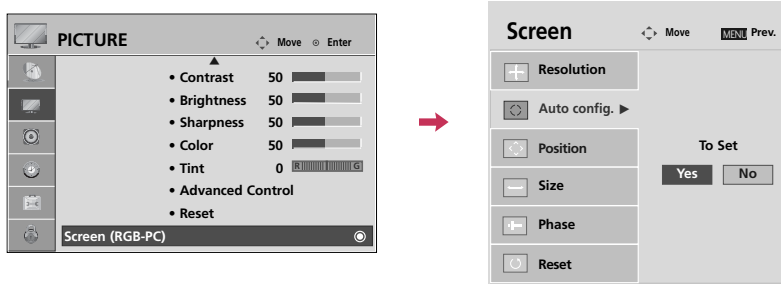The *Position, Phase*, and *Size* can also be adjusted.**

PICTURE		Move ⊙ Enter
• Contrast	50	
• Brightness	50	
• Sharpness	50	
• Color	50	
• Tint	0	R G
• Advanced Control		
• Reset		
Screen (RGB-PC)		◉

Screen	Move	MENU Prev.
Resolution ►	✓	1024 x 768
		1280 x 768
Auto config.		1360 x 768
Position		
Size		
Phase		
Reset		

1 MENU   Select **PICTURE**.
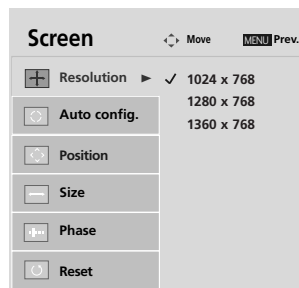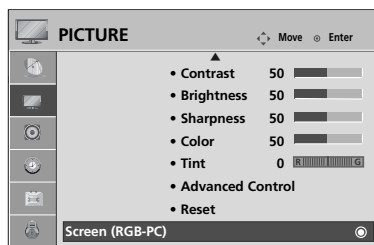
2 ENTER   Select **Screen (RGB-PC)**.

3 ENTER   Select **Resolution**.

4 ENTER   Select the desired resolution.

5 ENTER

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.

PICTURE	Move ⊙ Enter
	▲
• Contrast	50
• Brightness	50
• Sharpness	50
• Color	50
• Tint	0 R◄▏▏▏▏▏▏▏▏▏▏▏▏►G
• Advanced Control	
• Reset	
Screen (RGB-PC)	◉

Screen	↔ Move MENU Prev.
⊞ Resolution	
◇ Auto config. ▶	
⊡ Position	To Set
▭ Size	Yes No
⊞ Phase	
⟳ Reset	

1 MENU ⌃⌄ Select **PICTURE**.

2 ENTER ⊙ ⌃⌄ Select **Screen (RGB-PC)**.

3 ENTER ⊙ ⌃⌄ Select **Auto config.**.

4 ENTER ⊙ ‹ › Select **Yes**.

5 ENTER ⊙ Start Auto Configuration.

• 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**.

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## 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.
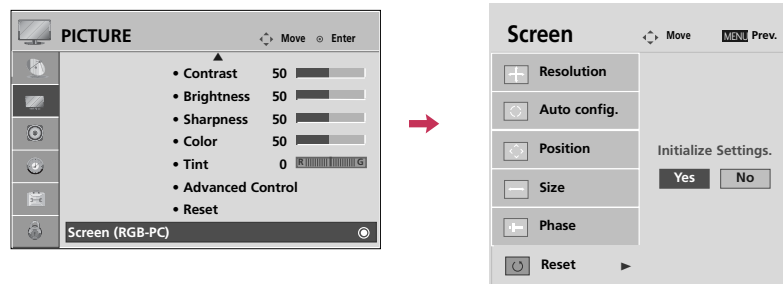
This feature operates only in RGB-PC mode.

PICTURE	◇ Move ⊙ Enter
• Contrast	50
• Brightness	50
• Sharpness	50
• Color	50
• Tint	0
• Advanced Control	
• Reset	
Screen (RGB-PC)	

Screen	◇ Move MENU Prev.
Resolution	
Auto config.	
Position ►	
Size	
Phase	
Reset	
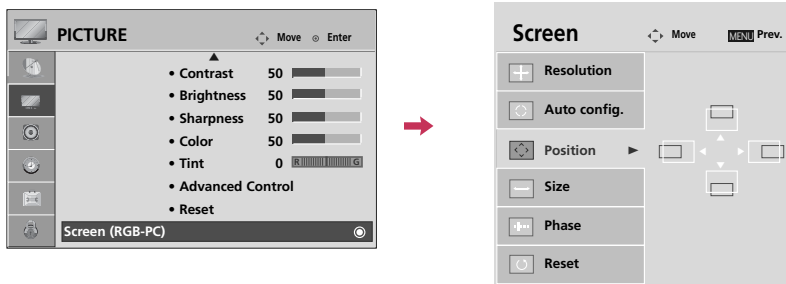
1 MENU — Select **PICTURE**.

2 ENTER — Select **Screen (RGB-PC)**.

3 ENTER — Select **Position**, **Size**, or **Phase**.

4 ENTER — Make appropriate adjustments.

5 ENTER

■ **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. The **Size** adjustment range is **-30 ~ 30**.

■ **Phase**: This function allows you to remove any horizontal noise and clear or sharpen the image of characters. The **Phase** adjustment range is **-32 ~ 31**.

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.

PICTURE	Move ⊙ Enter
• Contrast	50
• Brightness	50
• Sharpness	50
• Color	50
• Tint	0
• Advanced Control	
• Reset	
Screen (RGB-PC)	

Screen	Move MENU Prev.
Resolution	
Auto config.	
Position	Initialize Settings.
Size	Yes No
Phase	
Reset ►	

1 MENU Select **PICTURE**.

2 ENTER Select **Screen (RGB-PC)**.

3 ENTER Select **Reset**.

4 ENTER Select **Yes**.

5 ENTER

WATCHING TV / CHANNEL CONTROL

REMOTE CONTROL FUNCTIONS

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

RATIO Change the aspect ratio.▶ **p.44**

SLEEP Select the amount of time before your TV turns off automatically.▶ **p.72**

PICTURE Selects the factory preset picture depend on the viewing environment. ▶ **p.46**

SOUND Selects the factory preset sound for type of program. ▶ **p.58**

POWER Turns your TV on or off.

Q.MENU Select the desired quick menu source. ▶ **p.33**

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. ▶ **p.38**

NUMBER button
— (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.

VCR/DVD,
SIMPLINK
Control buttons
∘ Control video cassette recorders or DVD players.
∘ Control the SIMPLINK compatible devices.

30
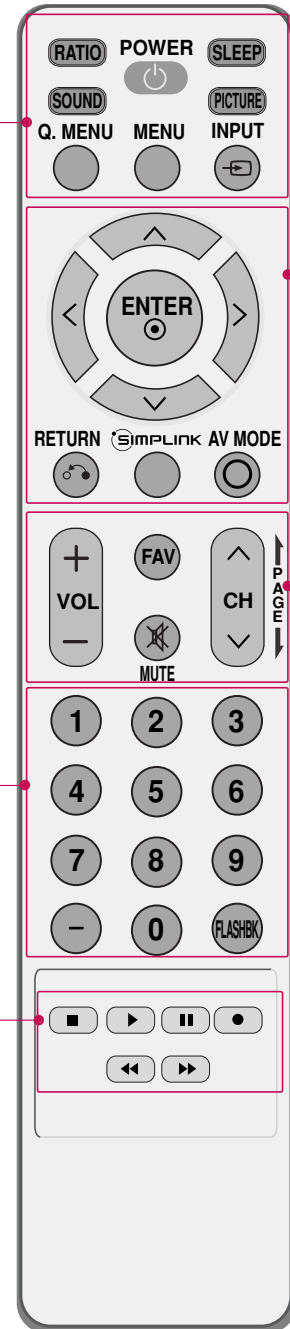
THUMBSTICK (Up/Down/Left Right/ENTER)	Navigate the on-screen menus and adjust the system settings to your preference.
RETURN	Allows the user to move return one step in an interactive application or other user interaction function.
SIMPLINK	See a list of AV devices connected to TV. When you toggle this button, the SIMPLINK menu appears at the screen. ▶ **p.42**
AV MODE	It helps you select and set images and sounds when connecting AV devices. ▶ **p.40**

VOLUME UP /DOWN	Increase/decrease the sound level.
FAV	Scroll through the programmed Favorite channels. ▶ **p.33**
MUTE	Switch the sound on or off. ▶ **p.32**
CHANNEL UP/DOWN	Select available channels.
PAGE UP/DOWN	Move from one full set of screen information to the next one.

Installing Batteries
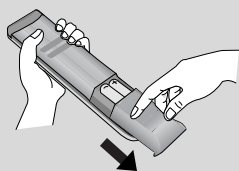
- Open the battery compartment cover on the back side and install the batteries matching correct polarity (+with +,-with -).

- Install two 1.5V AAA batteries. Don't mix old or used batteries with new ones.

- Close cover.

WATCHING TV / CHANNEL CONTROL

TURNING ON TV

1 First, connect power cord correctly.
At this moment, the TV switches to standby mode.
  - In standby mode to turn TV on, press the ⏻/I , **INPUT**, **CH (▲** or **▼)** button on the TV or press the **POWER**, **INPUT**, **CH(** ∧ or ∨ **)**, **Number (0~9)** button on the remote control.

2 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.

3 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

1 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.

3 You can cancel the Mute function by pressing the **MUTE** or **VOL (+** or **-)** button.

QUICK MENU

Your TV's OSD (On Screen Display) may differ slightly from what is shown in this manual.
Q.Menu (Quick Menu) is a menu of features which users might use frequently.

■ **Aspect Ratio**: Selects your desired picture format.
■ **Power Saving**: Adjusts screen brightness to reduce the power consumption of the TV.
■ **Clear Voice**: By differentiating the human sound range from others, it helps make human voices sound better.
■ **Picture Mode**: Selects the factory preset picture depend on the viewing environment.
■ **Sound Mode**: Selects the factory preset sound for type of program.

■ **Caption**: Select on or off.
■ **Multi Audio**: Changes the audio language (Digital signal).
  SAP: Selects MTS sound (Analog signal).
■ **Sleep Timer**: Select the amount of time before your TV turns off automatically.
■ **Del/Add/Fav**: Select channel you want to add/delete or add the channel to the Favorite List.

Q.Menu

Aspect Ratio	◄ 16:9 ►
Power Saving	3
Clear Voice	Off
Picture Mode	Vivid
Sound Mode	Standard
Caption	Off
Multi Audio	English
Sleep Timer	Off
Del/Add/Fav	Add

Close

1 Q. MENU   Display each menu.

2   Make appropriate adjustments.

3 Q. MENU   Return to TV viewing.

ON-SCREEN MENUS SELECTION

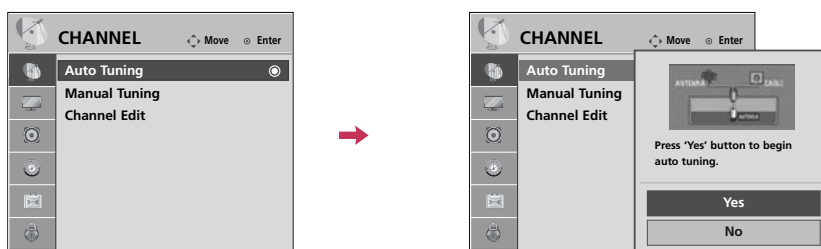Your TV's OSD (On Screen Display) may differ slightly from that shown in this manual.

CHANNEL	◁▷ Move ⊚ Enter
Auto Tuning	
Manual Tuning	
Channel Edit	

PICTURE	◁▷ Move ⊚ Enter
Aspect Ratio : 16:9	
Picture Mode : Standard	
• Contrast	90
• Brightness	50
• Sharpness	60
• Color	60
• Tint	0 R☐☐☐☐☐☐G
• Advanced Control	▼

AUDIO	◁▷ Move ⊚ Enter
Auto Volume : Off	
Clear Voice : On	
Balance	0 L☐☐☐☐☐☐R
Sound Mode : Standard	
• SRS TruSurround XT: Off	
• Treble	50
• Bass	50
• Reset	▼

TIME	◁▷ Move ⊚ Enter
Clock : Feb/21/2008/ 2:10 AM	
Off Time : Off	
On Time : Off	
Sleep Timer : Off	
Auto Sleep : Off	

CHANNEL PICTURE AUDIO

TIME OPTION LOCK

OPTION	◁▷ Move ⊚ Enter
Language	: English
Input Label	
SIMPLINK	: On
Key Lock	: Off
Caption	: Off
ISM Method	: Normal
Power Saving	: Level 0
Set ID	: 1

LOCK	◁▷ Move ⊚ Enter
Lock System	: Off
Set Password	
Block Channel	
Movie Rating	
TV Rating-Children	
TV Rating-General	
Downloadable Rating	
Input Block	

Lock System : Off
Set Password
Block Channel
TV Rating-English
TV Rating-French
Downloadable Rating
Input Block

For USA   **For Canada**

1 MENU Display each menu.

2 ENTER Select a menu item.

3 ENTER Enter to the pop up menu.

4 MENU Return to TV viewing.

CHANNEL SETUP

Auto Scan (Auto Tuning)

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

CHANNEL	⟨⟩ Move ⊙ Enter
Auto Tuning	◉
Manual Tuning	
Channel Edit	

➡

CHANNEL	⟨⟩ Move ⊙ Enter
Auto Tuning	
Manual Tuning	
Channel Edit	

ANTENNA / CABLE

Press 'Yes' button to begin auto tuning.

| Yes |
| No |

1 MENU ⌃⌄ Select **CHANNEL**.

2 ENTER ⊙ ⌃⌄ Select **Auto Tuning**.

3 ENTER ⊙ ⌃⌄ Select **Yes**.

4 ENTER ⊙ Run **Auto tuning**.

5 RETURN Return to the previous menu.

MENU Return to TV viewing.

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

Add/Delete Channel (Manual Tuning)

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

CHANNEL	◁▷ Move	⊙ Enter
Auto Tuning		
Manual Tuning		◉
Channel Edit		

CHANNEL	◁▷ Move	⊙ Enter
Auto Tuning		
Manual Tuning		
Channel Edit		

◄ **DTV** ►

Select channel type and RF-channel number.

Channel   2

DTV 2-0

Bad   Normal   Good

Delete

Close
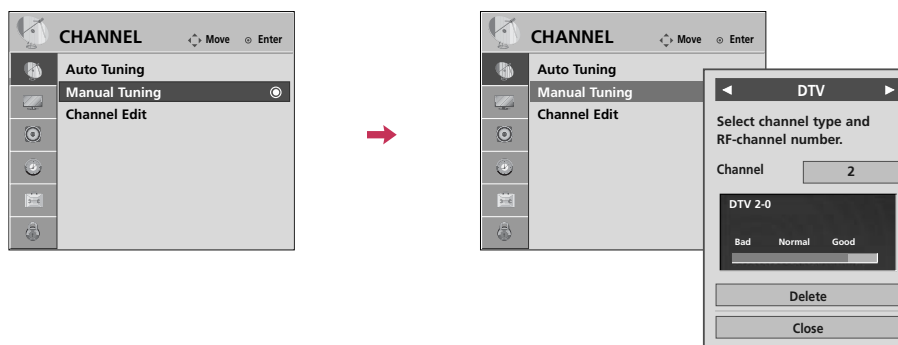
1 MENU   Select **CHANNEL**.

2 ENTER   Select **Manual Tuning**.

3 ENTER   Select **DTV**, **TV**, **CADTV**, or **CATV**.

4   Select channel you want to add or delete.

5 ENTER   Select **Add** or **Delete**.

6 RETURN   Return to the previous menu.

MENU   Return to TV viewing.

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

CHANNEL SETUP

Channel Editing

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

A custom list can be created by toggling each channel on or off with ENTER button. The channels in the Custom List are displayed in black and the channels deleted from the Custom List are displayed in gray.

Once a channel is highlighted you can add or delete the channel by referring to the small window at the top-right corner of the screen.

CHANNEL	◁▷ Move ⊙ Enter
Auto Tuning	
Manual Tuning	
Channel Edit	◉

7-1		DTV	TV	CA3EV	CATV
		7-1	9-1	9-5	11-1
		13-1	13-2	13-3	13-4
		13-5	15-1	15-2	15-3
		15-4	80-2	100-156	100-167
		120-112	129-123	130-134	130-145
		131-11			

◉ Add/Delete   ◁▷ Move   CH ◇ Move Page   MENU Previous   RETURN Exit

1 MENU — Select **CHANNEL**.

2 ENTER — Select **Channel Edit**.

3 ENTER — Select a channel.

4 ENTER — Select channel you want to add or delete.

5 MENU — Return to the previous menu.

RETURN — Return to TV viewing.

INPUT LIST

Only these input signals which are connected to a TV can be activated and selected.
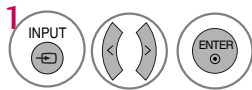
1 INPUT ⊕   〈 〉   ENTER ⊙   Select the desired input source.

TV → AV1 → AV2 → Component1 → Component2

HDMI3 ← HDMI2 ← HDMI1 ← RGB-PC

↑ (TV)   ↓ (Component2 to RGB-PC)
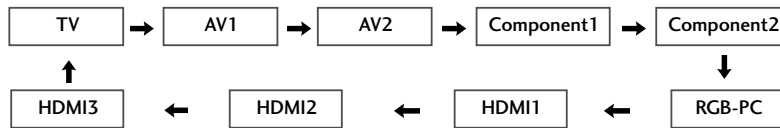
- **TV**: Select it to watch over-the-air, cable and digital cable broadcasts.
- **AV 1-2**: Select them to watch a VCR or other external equipment.
- **Component 1-2**: Select them to watch DVD or a Digital set-top box.
- **RGB-PC**: Select it to view PC input.
- **HDMI1-3**: Select them to watch high definition devices.

Disconnected input is inactivated.

TV   AV1   AV2   Component1   Component2

Q.MENU Input Label   RETURN Exit

Select a desired input source (except **TV**). Then, you can select your desired Input Label with using Q.MENU button. ▶ **p.39**

INPUT LABEL

You can set a label for each input source when it's not in use.

	OPTION	⬧ Move ⊙ Enter
	Language	: English
	Input Label	⦿
	SIMPLINK	: On
	Key Lock	: Off
	Caption	: Off
	ISM Method	: Normal
	Power Saving	: Level 0
	Set ID	: 1

➡

	OPTION	⬧ Move ⊙ Enter
	Language	: English
	Input Label	
	SIMPLINK	:
	Key Lock	:
	Caption	:
	ISM Method	:
	Power Saving	:
	Set ID	:

AV1	◄ ►
AV2	
Component1	
Component2	
RGB-PC	
HDMI1	
HDMI2	
HDMI3	
Close	
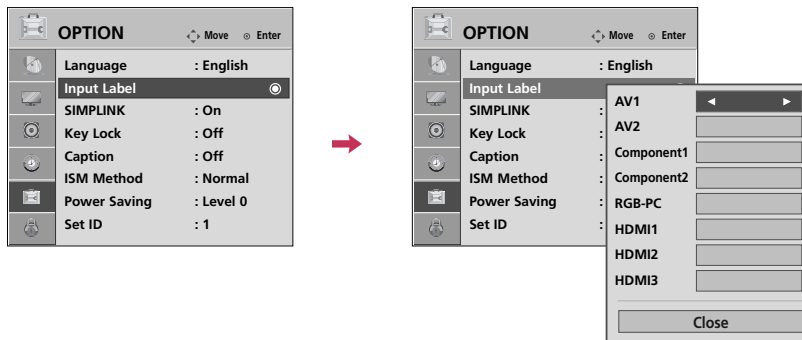
With using OPTION menu

1 MENU — Select **OPTION**.

2 ENTER ⊙ — Select **Input Label**.

3 ENTER ⊙ — Select the source.

4 ‹ › — Select the label.

5 RETURN — Return to the previous menu.

MENU — Return to TV viewing.

With using INPUT button

1 INPUT — Select the source.

2 Q. MENU — Select the label.

3 RETURN — Return to the previous menu.

MENU — Return to TV viewing.

WATCHING TV / CHANNEL CONTROL

AV MODE

You can select the optimal images and sounds.

Off	→	Cinema
↑		↓
Game	←	Sport
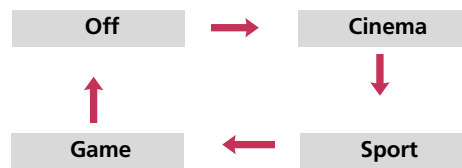
1 AV MODE   Press the **AV MODE** button repeatedly to select the desired source.

2 RETURN   Return to TV viewing.

- If you select "**Cinema**" in AV mode, **Cinema** will be selected both for "PIC-TURE menu - Picture Mode" and "AUDIO menu - Sound Mode" respectively.

- If you select "**Off**" in AV mode, the "**Picture Mode**" and "**Sound Mode**" return to previous selected value.

SIMPLINK

This function operates only with devices with the 〔SIMPLINK〕 logo.

If connected other brand device with the 〔SIMPLINK〕 logo, it may not work.

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

To start using SIMPLINK, turn it on in the user menus.

OPTION	◦ Move ⊙ Enter
Language	: English
Input Label	
SIMPLINK	**: On** ⊚
Key Lock	: Off
Caption	: Off
ISM Method	: Normal
Power Saving	: Level 0
Set ID	: 1

OPTION	◦ Move ⊙ Enter	
Language	: English	
Input Label		
SIMPLINK	**: On**	Off
Key Lock	: Off	On ⊚
Caption	: Off	
ISM Method	: Normal	
Power Saving	: Level 0	
Set ID	: 1	

1 MENU

Select **OPTION**.

2 ENTER

Select **SIMPLINK**.

3 ENTER
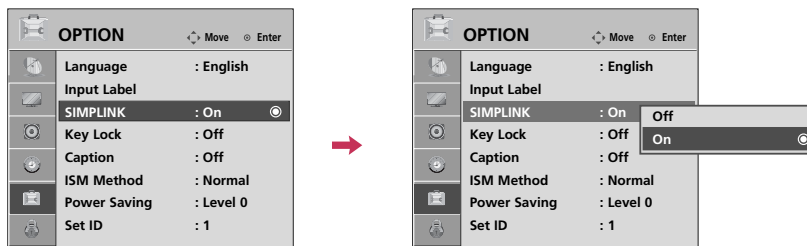
Select **On** or **Off**.

4 RETURN

Return to the previous menu.

MENU

Return to TV viewing.

❗ NOTE

▶ Connect the HDMI/DVI IN or HDMI IN terminal of the TV to the rear terminal (HDMI terminal) of the SIM-PLINK device with the HDMI cable.

▶ When you switch the Input source with the INPUT button on the remote control, the SIMPLINK device will stop.

▶ When you select a device with home theater functionality, the sound output automatically switches to the home theater speakers.

▶ If a connected SIMPLINK home theater system doesn't play the audio from the TV, connect the DIGITAL AUDIO OUT terminal on the back of the TV to the DIGITAL AUDIO IN terminal on the back of the SIM-PLINK device with an OPTICAL cable.
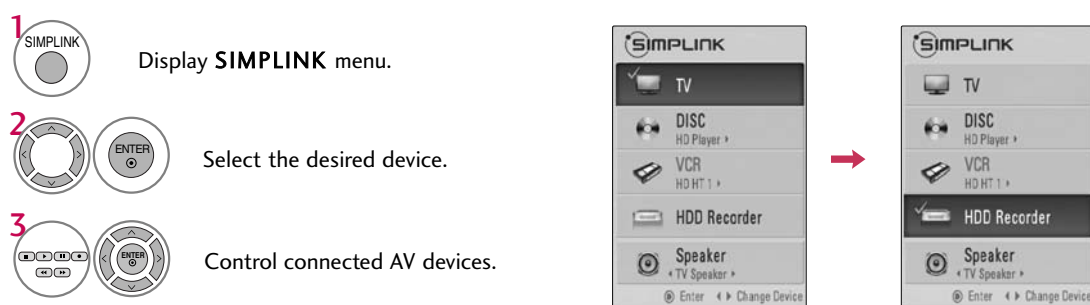
SIMPLINK Functions

■ **Direct Play:** After connecting AV devices to the TV, you can directly control the devices and play media without additional settings.

■ **Select AV device:** Enables you to select one of the AV devices connected to TV.

■ **Disc playback:** Control connected AV devices by pressing the ∧ ∨ < >, ENTER, ▶, ■, I I, ◀◀ and ▶▶ buttons.

■ **Power off all devices:** When you power off the TV, all connected devices are turned off.

■ **Switch audio-out:** Offers an easy way to switch audio-out.

■ **Sync Power on:** When you play the connected AV device, TV will automatically turn on.

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

Note: To operate SIMPLINK, an HDMI cable over Version 1.2 with *CEC function should be used. (*CEC: Consumer Electronics Control).

1 SIMPLINK   Display **SIMPLINK** menu.

2 ENTER   Select the desired device.

3 ENTER   Control connected AV devices.

SIMPLINK Menu

1 TV viewing: Switch to the previous TV channel regardless of the current mode.

2 DISC playback: Select and play discs. When multiple discs are available, the titles of discs are conveniently displayed at the bottom of the screen.

3 VCR playback: Control the connected VCR.

4 HDD Recordings playback: Control recordings stored in HDD.

5 Audio Out to Home Theater speaker/Audio Out to TV: Select Home Theater speaker or TV speaker for Audio Out.

▶ When no device is connected (displayed in gray)

▶ Selected Device

▶ When a device is connected (displayed in bright color)

PICTURE CONTROL

PICTURE SIZE (ASPECT RATIO) CONTROL

This feature lets you choose the way an analog picture with a 4:3 aspect ratio is displayed on your TV.
■ RGB-PC input source use 4:3 or 16:9 aspect ratio.

> **🛈 NOTE**
>
> ▶ If a fixed image is displayed on the screen for a long time, the image could become imprinted on the screen and remain visible.
>
> This phenomenon is common to all manufacturers and is not covered by warranty. Although, after watching video that did not fill the screen, any after-image from the black bars will normally dissipate after a few minutes.

```
Q.Menu

□ Aspect Ratio      ◄  16:9  ►
⚡ Power Saving          3
◻ Clear Voice          Off
👁 Picture Mode        Vivid
♫ Sound Mode        Standard
▭ Caption             Off
((◎)) Multi Audio      English
🕐 Sleep Timer          Off
CH Del/Add/Fav         Add

         Close
```

Set By Program → 4:3 → 16:9

Just Scan ← Zoom2 ← Zoom1

(Set By Program ← Just Scan ; 16:9 → Zoom1)
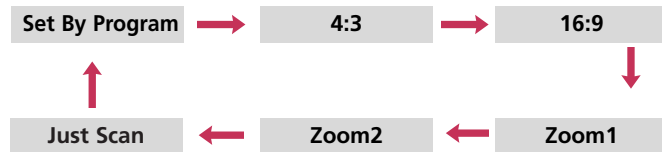
1
RATIO
Select the desired picture format.

2
RETURN
Return to TV viewing.

Set by program

Selects the proper picture proportion to match the source's image.

(4:3 ➝ 4:3)

(16:9 ➝ 16:9)

4:3

Choose 4:3 when you want to view a picture with an original 4:3 aspect ratio.

16:9

Adjust the picture horizontally, in a linear proportion to fill the entire screen.

Zoom 1

Choose Zoom 1 when you want to view the picture without any alteration. However, the top and bottom portions of the picture will be cropped.
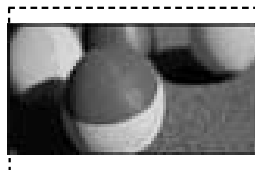
Zoom 2

Choose Zoom 2 when you want the picture to be altered, both vertically extended and cropped. The picture taking a halfway trade off between alteration and screen coverage.
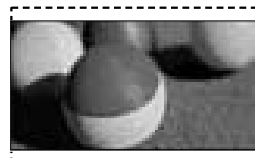
Just Scan

Following selection will lead to you view the picture of best quality without loss of original picture in high resolution image.

Notes: If there are noise in original picture, you can see the noise at the edge.

Just Scan operates only in DTV/CADTV/Component/HDMI-DTV/DVI-DTV (720p/1080i/1080p) input source.

PRESET PICTURE SETTINGS

Picture Mode - Preset

There are factory presets for picture settings available in the user menus. You can use a preset, change each setting manually.
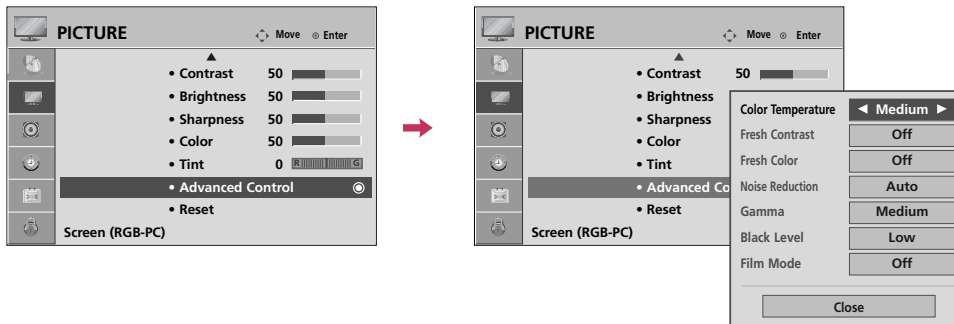
Q.Menu

⊟	Aspect Ratio	16:9
☼	Power Saving	3
◁	Clear Voice	Off
⊙	Picture Mode	◄ Vivid ►
♫	Sound Mode	Standard
☐	Caption	Off
((○))	Multi Audio	English
�	Sleep Timer	Off
CH	Del/Add/Fav	Add

Close

Vivid → Standard → Cinema
↑ ↓
Expert2
↑
Expert1 ← Game ← Sport
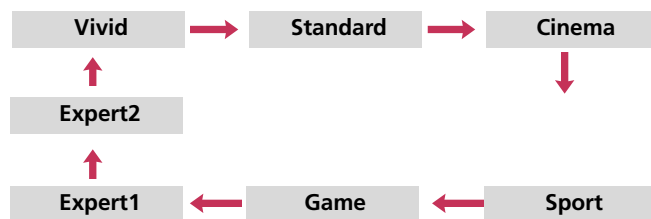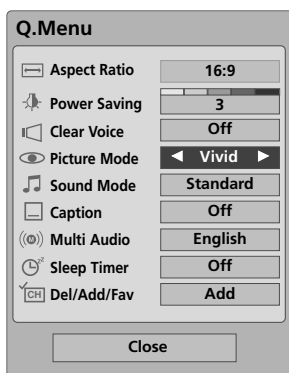
1
PICTURE Select **Vivid**, **Standard**, **Cinema**, **Sport**, **Game**, **Expert1**, or **Expert2**.

2
RETURN Return to TV viewing.

■ **Vivid**, **Standard**, **Cinema**, **Sport**, **Game**, **Expert1**, or **Expert2** Settings are preset for the optimum picture quality at the factory and are not adjustable.

Color Tone - Preset

Choose one of three automatic color adjustments. Set to warm to enhance hotter colors such as red, or set to cool to see less intense colors with more blue.

PICTURE	Move ⊙ Enter	
	▲	
	• Contrast	50
	• Brightness	50
	• Sharpness	50
	• Color	50
	• Tint	0 R‖G
	• Advanced Control	⊙
	• Reset	
Screen (RGB-PC)		

➡

PICTURE	Move ⊙ Enter	
	▲	
	• Contrast	50
	• Brightness	
	• Sharpness	
	• Color	
	• Tint	
	• Advanced Co	
	• Reset	
Screen (RGB-PC)		

Color Temperature	◄ Medium ►
Fresh Contrast	Off
Fresh Color	Off
Noise Reduction	Auto
Gamma	Medium
Black Level	Low
Film Mode	Off
Close	

1 MENU · · · Select **PICTURE**.

2 ENTER · · · Select **Advanced Control**.

3 ENTER · · · Select **Color Temperature**.

4 · · · Select **Cool**, **Medium**, or **Warm**.

5 RETURN Return to the previous menu.

MENU Return to TV viewing.

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MANUAL PICTURE ADJUSTMENT

Picture Mode - User Mode

Adjust the picture appearance to suit your preference and viewing situations.

PICTURE ◇ Move ◉ Enter

Aspect Ratio : 16:9
Picture Mode : Standard
　　• Contrast　　90
　　• Brightness　50
　　• Sharpness　 60
　　• Color　　　 60
　　• Tint　　　　 0 R | | | | | | | | G
　　• Advanced Control

• Contrast　　80 ◀　　　　▶
　　　　　　　　　　　◉ Enter

1 MENU	Select **PICTURE**.
2 ENTER	Select **Picture Mode**.
3 ENTER	Select **Vivid**, **Standard**, **Cinema**, **Sport**, or **Game**.
4 ENTER	Select **Contrast**, **Brightness**, **Sharpness**, **Color**, or **Tint**.
5 ENTER	Make appropriate adjustments.
6 RETURN	Return to the previous menu.
MENU	Return to TV viewing.