



LCD TV OWNER'S MANUAL

32LG700H
37LG700H
42LG700H

Installer Reference for Commercial Mode
MPI/PPV Card Setup see page 19
Commercial Mode Setup see pages 87-104

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.



This product qualifies for ENERGY STAR in the "factory default (Home mode)" setting and this is the setting in which power savings will be achieved.

Changing the factory default picture setting or enabling other features will increase power consumption that could exceed the limits necessary to qualify for Energy Star rating.

P/NO : SAC30708043 (0810-REV00)

WARNING / CAUTION



WARNING / CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN



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



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



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

WARNING/CAUTION

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

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

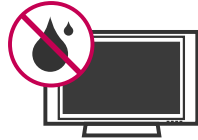
SAFETY INSTRUCTIONS

IMPORTANT SAFETY INSTRUCTIONS

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



- 1 Do not use this apparatus near water.



- 2 Clean only with dry cloth.



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



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



- 5 Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.



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



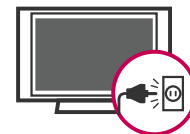
- 7 Only use attachments/accessories specified by the manufacturer.



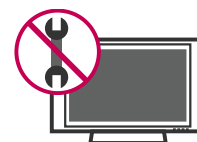
- 8 Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.



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



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



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

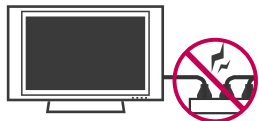
12 When mounting a TV on the wall, make sure not to install the TV by the hanging power and signal cables on the back of the TV.

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

14 **CAUTION** concerning the Power Cord :
It is recommend that appliances 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 connect too many appliances to the same AC power outlet as this could result in fire or electric shock.

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.

Do not make the TV with the power cord plugged in. Do not use a damaged or loose power cord. Be sure do grasp the plug when unplugging the power cord. Do not pull on the power cord to unplug the TV.



15 **WARNING** - To reduce the risk of fire or electrical shock, do not expose this product to rain, moisture or other liquids. Do not touch the TV with wet hands. Do not install this product near flammable objects such as gasoline or candles or expose the TV to direct air conditioning.



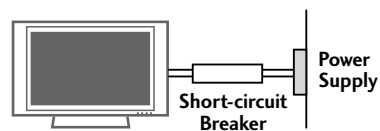
16 Do not expose to dripping or splashing and do not place objects filled with liquids, such as vases, cups, etc. on or over the apparatus (e.g. on shelves above the unit).



17 **GROUNDING**

Ensure that you connect the earth ground wire to prevent possible electric shock. (i.e. a TV with a three-prong grounded AC plug must be connected to a three-prong grounded AC outlet) 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.

19 Keep the product away from direct sunlight.

20 ANTENNAS

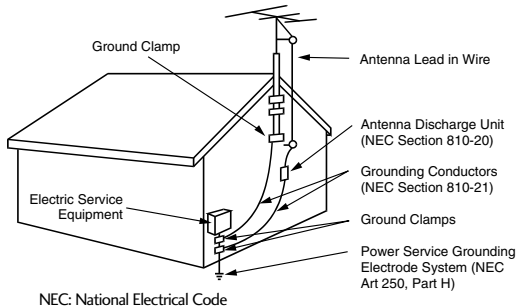
Outdoor antenna grounding

If an outdoor antenna is installed, follow the precautions below. An outdoor antenna system should not be located in the vicinity of overhead power lines or other electric light or power circuits, or where it can come in contact with such power lines or circuits as death or serious injury can occur.

Be sure the antenna system is grounded so as to provide some protection against voltage surges and built-up static charges.

Section 810 of the National Electrical Code (NEC) in the U.S.A. provides information with respect to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding conductors, location of antenna discharge unit, connection to grounding electrodes and requirements for the grounding electrode.

Antenna grounding according to the National Electrical Code, ANSI/NFPA 70



21 Cleaning

When cleaning, unplug the power cord and scrub gently with a soft cloth to prevent scratching. Do not spray water or other liquids directly on the TV as electric shock may occur. Do not clean with chemicals such as alcohol, thinners or benzene.

22 Moving

Make sure the product is turned off, unplugged and all cables have been removed. It may take 2 or more people to carry larger TVs. Do not press against or put stress on the front panel of the TV.

23 Ventilation

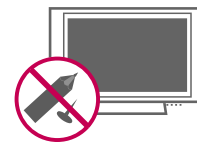
Install your TV where there is proper ventilation. Do not install in a confined space such as a bookcase. Do not cover the product with cloth or other materials (e.g.) plastic while plugged in. Do not install in excessively dusty places.

24

If you smell smoke or other odors coming from the TV or hear strange sounds, unplug the power cord contact an authorized service center.

25

Do not press strongly upon the panel with a hand or sharp object such as nail, pencil or pen, or make a scratch on it.



CONTENTS

WARNING / CAUTION	1
SAFETY INSTRUCTIONS	2
FEATURES OF THIS TV	7

PREPARATION

Accessories	8
Front Panel Information	9
Back Panel Information	10
Stand Instruction	12
Cable Management	13
Desktop Pedestal Installation	14
Swivel Stand	14
Attaching the TV to a desk	15
VESA Wall Mounting	16
Securing the TV to the wall to prevent falling When the TV is used on a stand	17
Antenna or Cable Connection	18
MPI Card Slot / PPV Card Installation	19

EXTERNAL EQUIPMENT SETUP

HD Receiver Setup	
- Component Connection	20
- HDMI Connection	21
- DVI to HDMI Connection	22
DVD Setup	
- Component Connection	23
- HDMI Connection	24
VCR Setup	
- Antenna Connection	25
- Composite (RCA) Connection	25
Other A/V Source Setup	26
PC Setup	
- VGA (D-Sub 15 pin) Connection	27
- DVI to HDMI Connection	28
- Screen Setup for PC mode	29
Audio Out Connection	33

WATCHING TV / CHANNEL CONTROL

Remote Control Functions	34
Turning On TV	36
Channel Selection	37
Volume Adjustment	37
On-Screen Menus Selection	38
Channel Setup	

- Auto Scan (Auto Tuning)	39
- Add / Delete Channel (Manual Tuning)	40
- Channel Editing	41
Channel Label	42
Input List	43

PICTURE CONTROL

Picture Size (Aspect Ratio) Control	44
Preset Picture Settings	
- Picture Mode - Preset	47
- Color Tone - Preset	48
Manual Picture Adjustment	
- Picture Mode - User Mode	49
Picture Improvement Technology	50
Advanced Control - Black (Darkness) Level	51
Eye Care	52
Advanced Control - Film Mode	53
Picture Reset	54

SOUND & LANGUAGE CONTROL

Auto Volume Leveler (Auto Volume)	55
Preset Sound Settings (Sound Mode)	56
Sound Setting Adjustment - User Mode	57
- SRS TruSurround XT	58
Clear Voice	59
Balance	60
TV Speakers On/Off Setup	61
Audio Reset	62
Stereo/SAP Broadcast Setup	63
Audio Language	64
On-Screen Menus Language Selection	65
Caption Mode	
- Analog Broadcasting System Captions	66
- Digital Broadcasting System Captions	67
- Caption Option	68

TIME SETTING

Clock Setting	
- Auto Clock Setup	69
- Manual Clock Setup	70
Auto On/Off Time Setting	71
Sleep Timer Setting	72
Auto Shut-off Setting	73

PARENTAL CONTROL / RATINGS

Set Password & Lock System	74
Channel Blocking	77
Movie & TV Rating	78
Downloadable Rating	81
External Input Blocking	82
Example Electronic Program Guide	83
Interactive TV Setup	84
PIP (Picture-In-Picture)	85

COMMERCIAL MODE SETUP

Installer Overview	87
Interactive TV Overview	88
Commercial Mode Setup for Master TV	89
TLL-1100A Cloning Connections/Learning Setup	90
LT2002 Cloning Connections/Learning Setup ..	91
LT2002 Cloning Learning Setup	92
Cloning Connections/Teaching Setup	93
Installer Menu	94
Reference: Detailed Instructions For Making A Master TV	100
Reference: Procedures for adding Channel Label Icons/Custom Channel Labels (2-5-4 + MENU Mode)	101
Reference: Clonable Menu Features	102
Reference: Power Saving Setup	103
TV Aux Input Configuration	103
TV Camport Auto Sense Operation	104

APPENDIX

Troubleshooting	105
Reference: LT2002 Cloning Procedure Troubleshooting	107
Troubleshooting Flow Chart	108
Commercial Mode Check	109
Glossary of Terms	110
Maintenance	111
Product Specifications	111
Programming the Remote Control	112
IR Codes	115

FEATURES OF THIS TV



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



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



USB port shall be used for software update by service personnel only.



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

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

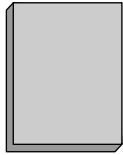
The fluorescent lamp used in this product contains a small amount of mercury. Do not dispose of this product with general household waste. Disposal of this product must be carried out in accordance to the regulations of your local authority.

PREPERATION

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.

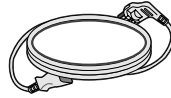
The accessories included may differ from the images below.



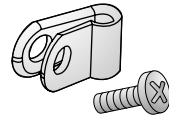
Owner's Manual



CD Manual



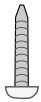
Power Cord



Protective Bracket and Bolt for Power Cord
(Refer to P.13)



Cable Holder
(Refer to P.13)



Ø4xL20
(Plastic Screw)

Screw for stand fixing
(Refer to P.15)



M4xL26
(Machine Screw) x 4

Bolts for stand assembly
(Refer to P.12)

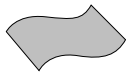


Ø4xL20
(Plastic Screw) x 4



M4xL22
(Machine Screw) x 2

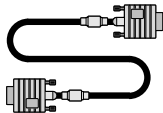
Torx plus
Star head screw
(Refer to P.12)



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 stains. Excessive pressure may cause scratches or discoloration.

Option Extras

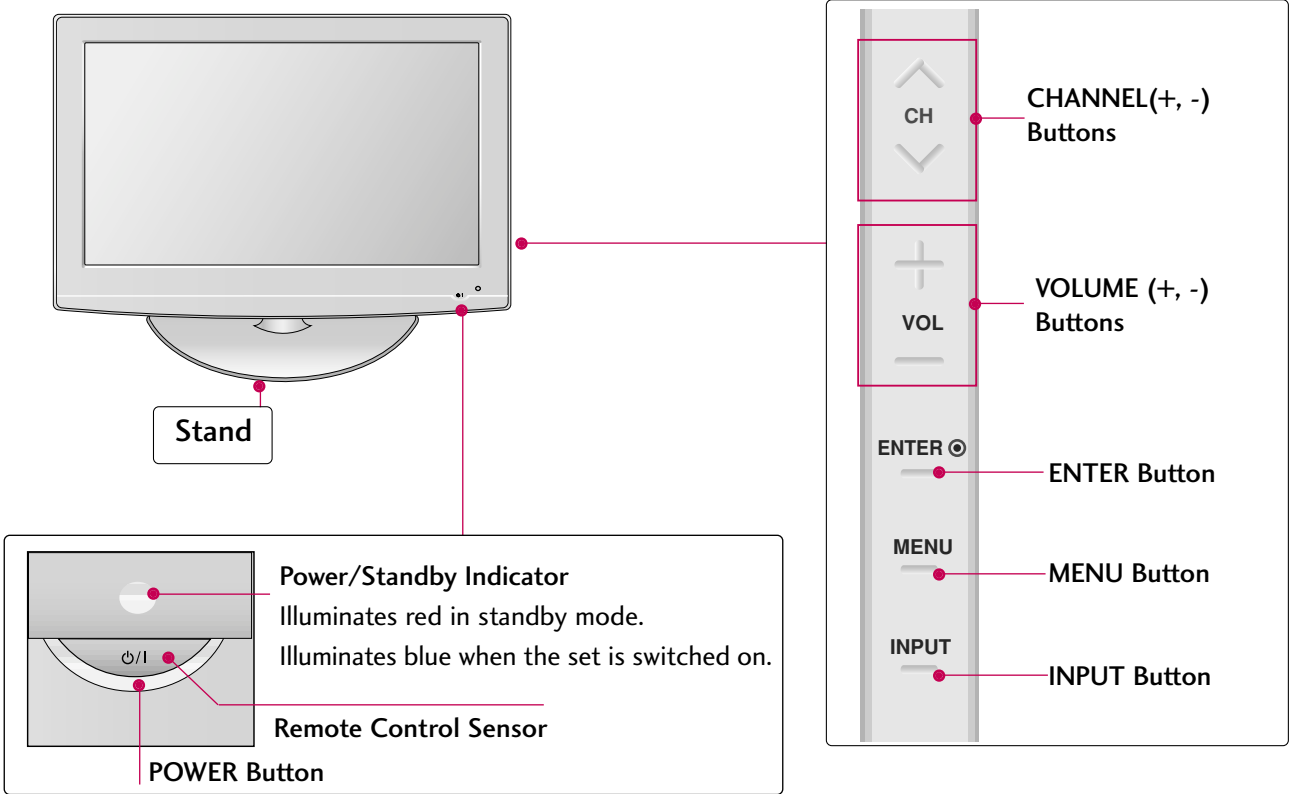


D-sub 15 pin Cable

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.

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).

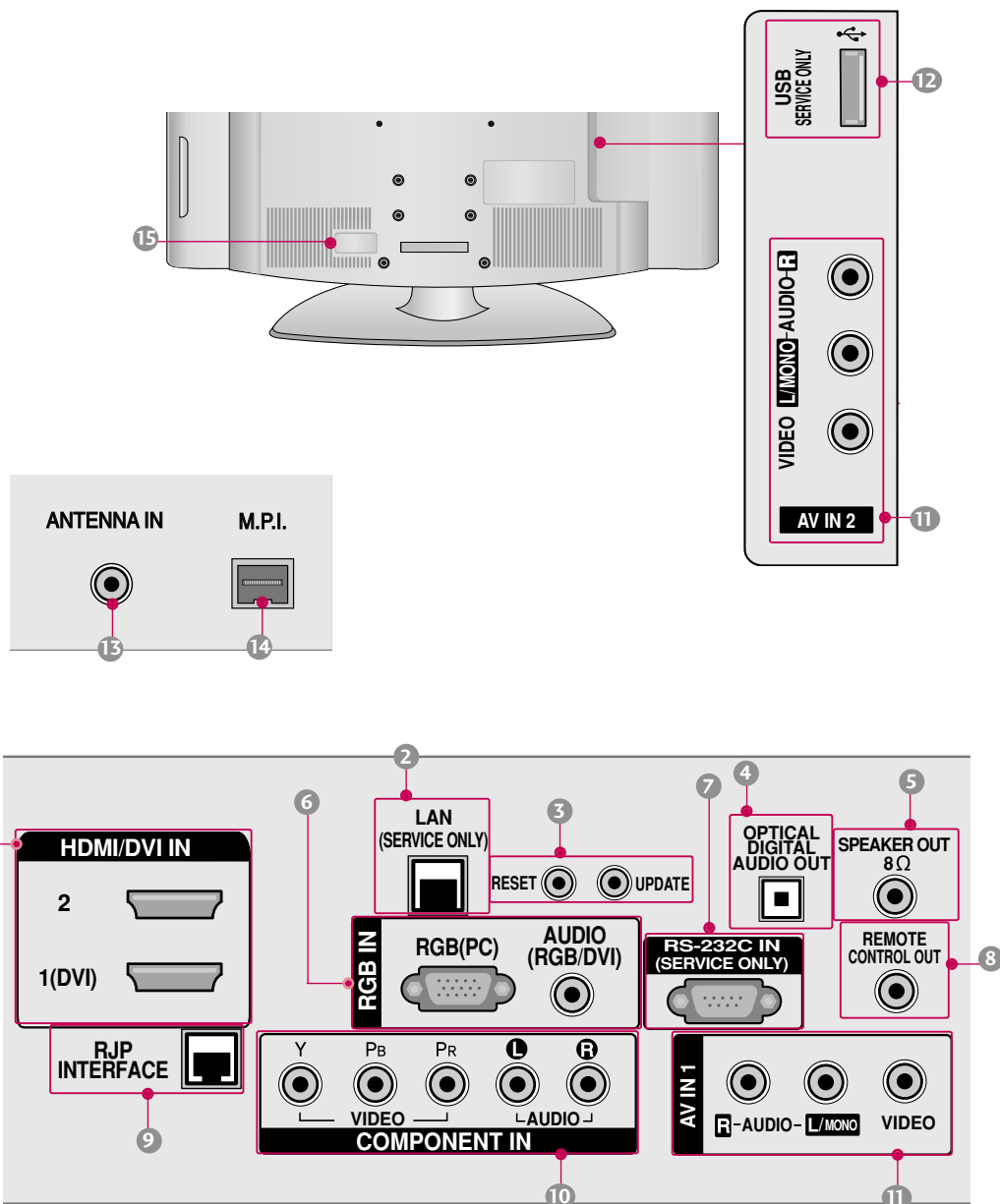


PREPARATION

BACK PANEL INFORMATION

■ Image shown may differ from your TV.

PREPARATION



- 1 HDMI/DVI IN**
Digital Connection. Supports HD video and Digital audio.
Accepts DVI video using an adapter or HDMI to DVI cable (not included)
- 2 LAN (SERVICE ONLY)**
Connect to control network.
- 3 UPDATE**
Software downloads and debug mode enable/disable.
RESET
Hardware reset to PTC microcontroller.
- 4 OPTICAL DIGITAL AUDIO OUT**
Digital audio output for use with amps and home theater systems.
Includes an optical connection.
Note: In standby mode, these ports do not work.
- 5 SPEAKER OUT 8Ω**
Connect to external speaker input.
- 6 RGB IN (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.
- 7 RS-232C IN (SERVICE ONLY)**
Used for software updates.
- 8 REMOTE CONTROL OUT**
IR output for controlling an auxiliary device.
- 9 RJP INTERFACE (REMOTE JACK PACK PORT)**
Connect to remote jack pack control output port.
- 10 COMPONENT IN**
Analog Connection.
Supports HD.
Uses a red, green, and blue cable for video & a red and white cable for audio.
- 11 AV (Audio/Video) IN**
Analog composite connection. Supports standard definition video only (480i).
Used for PC/DTV audio input jack.
- 12 USB SERVICE ONLY**
Used for software updates.
- 13 ANTENNA IN**
Connect over-the air signals to this jack.
- 14 M.P. I.**
- 15 Power Cord Socket**
For operation with AC power.
Caution: Never attempt to operate the TV on DC power.

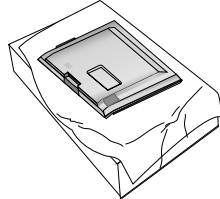
PREPARATION

STAND INSTRUCTION

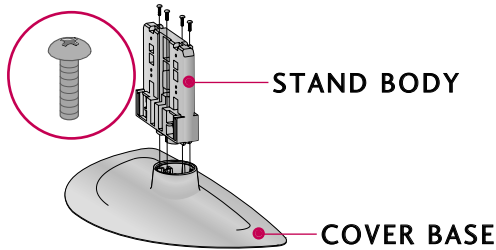
▪ Image shown may differ from your TV.

INSTALLATION

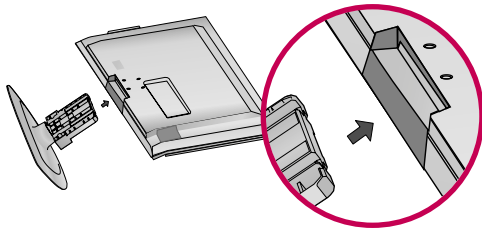
- 1 Carefully place the TV screen side down on a cushioned surface to protect the screen from damage.




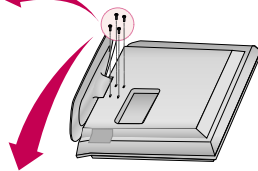
- 2 Assemble the parts of the **STAND BODY** with **COVER BASE** of the TV.





- 3 Insert the stand as shown.



- 4  x 4
Tighten the stand with the four screws (provided as parts of the TV).



or

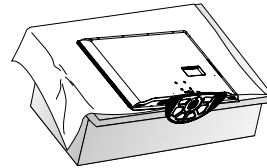
-  x 2  x 2 Tighten the two of these four screws and the two Torx plus star head screws (provided as parts of the TV) to secure the TV. Tighten the two Torx plus star head screws with a star head driver bit (not provided as parts of the TV).

NOTE

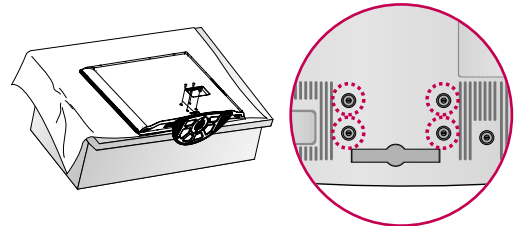
- ▶ Make sure the screws in the stand are fully tightened. (If not tightened fully, the product could tilt forward and fall). But do not over tighten, over-tightening can damage the threads on the screws.

DETACHMENT

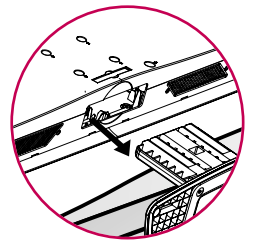
- 1 Carefully place the TV screen side down on a cushioned surface to protect the screen from damage.



- 2 Remove the four screws that hold the base on.



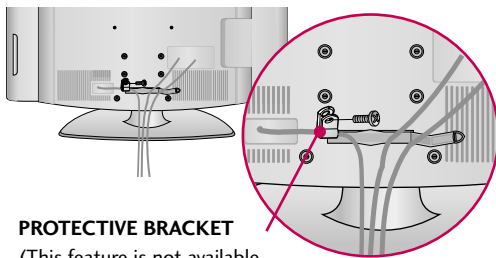
- 3 Detach the stand from TV.



CABLE MANAGEMENT

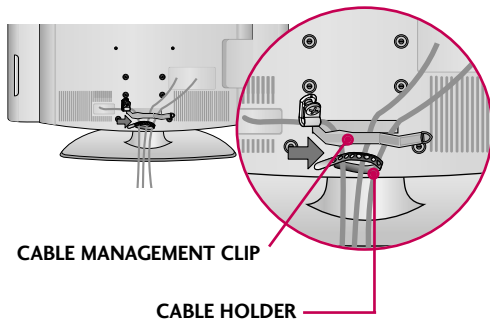
■ Image shown may differ from your TV.

- 1 Connect the cables as necessary. To connect additional equipment, see the **EXTERNAL EQUIPMENT SETUP** section. Secure the power cable with the **PROTECTIVE BRACKET** and the screw as shown. It will help prevent the power cable from being removed by accident.



PROTECTIVE BRACKET
(This feature is not available for all models.)

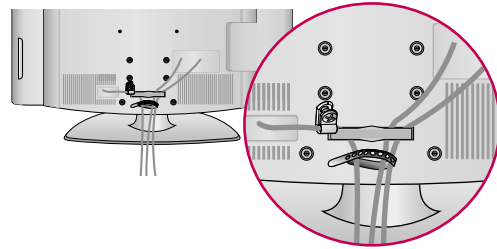
- 2 Install the **CABLE MANAGEMENT CLIP** as shown. If your TV has the **CABLE HOLDER**, install it as shown and bundle the cables.



CABLE MANAGEMENT CLIP

CABLE HOLDER

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



NOTE

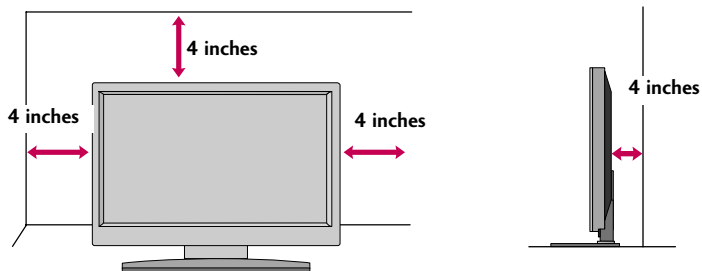
- ▶ Do not hold the **CABLE MANAGEMENT CLIP** when moving the TV.
- If the TV is dropped, you may be injured or the product may be broken.

PREPARATION

DESKTOP PEDESTAL INSTALLATION

- Image shown may differ from your TV.
- * This feature is not available for all models.

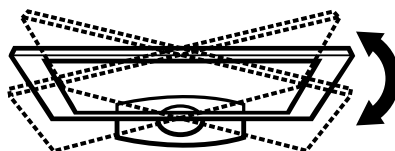
For proper ventilation, allow a clearance of 4 inches on all four sides.



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

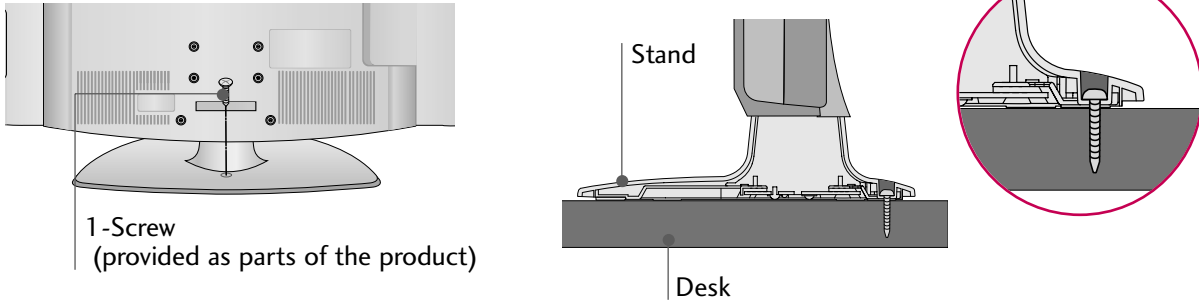
SWIVEL STAND

The TV can be conveniently swivelled on its stand 90° to the left or right to provide the optimum viewing angle.



ATTACHING THE TV TO A DESK

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. Use only the included screw.



⚠ 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 TV may cause injury.

PREPARATION

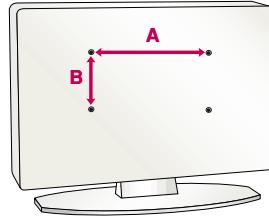
PREPARATION

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 (A * B)	Standard Screw	Quantity
LCD TV	32LG700H	200 * 100	M6	4
	37LG700H	200 * 200	M6	4
	42LG700H	200 * 200	M6	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 than 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 tighten the screws too much. It may damage the TV or allow the TV to fall and cause 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.

CAUTION

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

WARNING

- ▶ To prevent injury, this apparatus must be securely attached to the wall in accordance with the installation instructions.

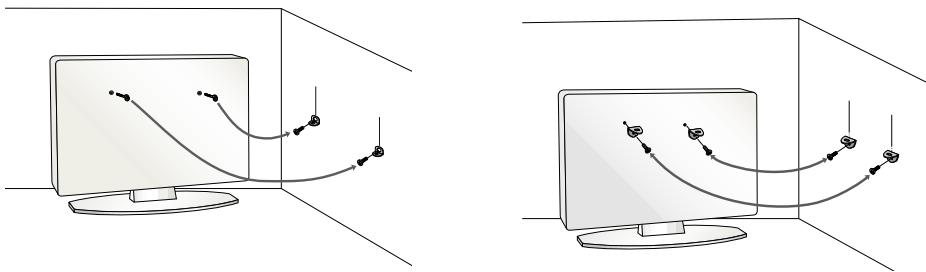
SECURING THE TV TO THE WALL TO PREVENT FALLING WHEN THE TV IS USED ON A STAND

- You should purchase necessary components to prevent TV from falling off of the stand.
- Image shown may differ from your TV.
- * This feature is not available for all models.

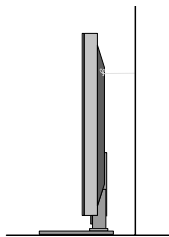
We recommend that you set the TV close to a wall so it cannot fall over if pushed backwards.

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 eye-bolts (or TV brackets and bolts) to attach 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 screws (sold 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 or cord (sold separately) to tie the product. It is safer to tie the rope so it becomes horizontal between the wall and the product (the less slack in the rope, the better).

! 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.

PREPARATION

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

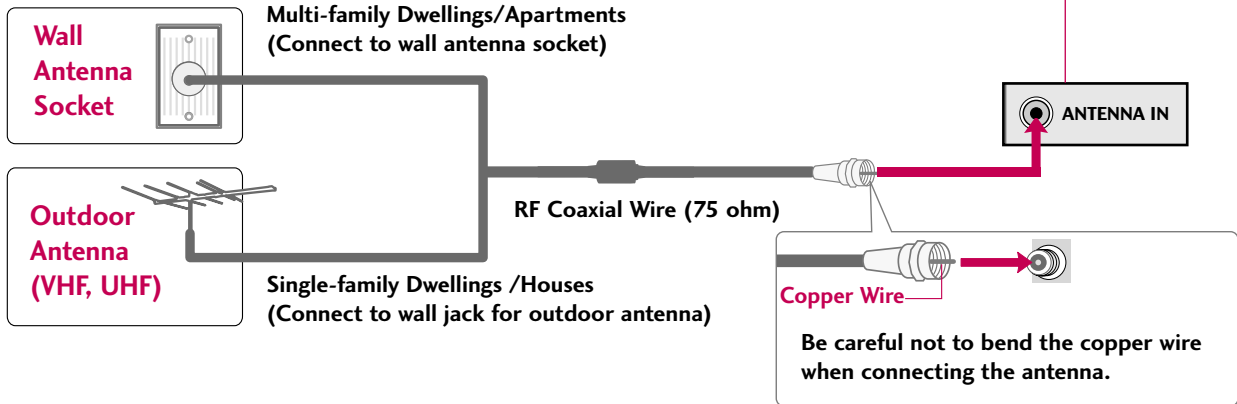
ANTENNA OR CABLE CONNECTION

PREPARATION

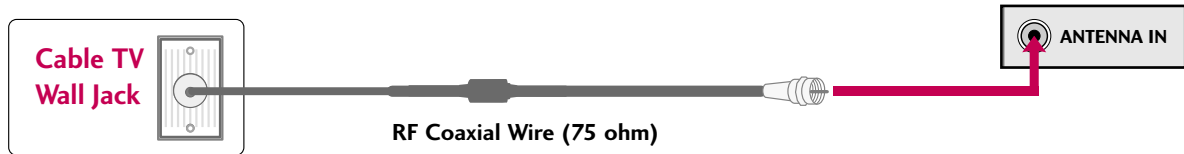
1. Antenna (Analog or Digital)

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

For optimum picture quality, adjust the direction if needed.



2. Cable



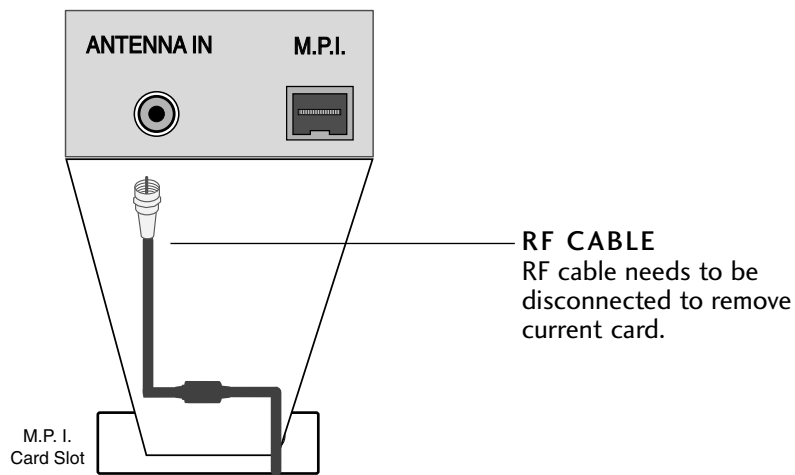
- To improve the picture quality in a poor signal area, please purchase a signal amplifier and install properly.
- If the antenna needs to be split for two TV's, install a 2-Way Signal Splitter.
- If the antenna is not installed properly, contact your dealer for assistance.

MPI CARD SLOT / PPV CARD INSTALLATION

The MPI card is equipped with an RF jack for antenna/cable signal source connection. The MPI card slot is also available for installing a PPV (Pay-Per-View) card.

MPI Card Removal / PPV Card Installation

1. Remove the two MPI card retainer screws.
2. Pull out current MPI card far enough so that the RF cable can be detached from the old card.
2. Detach RF cable.
3. Place new PPV card into slot and slide it in far enough to reconnect RF cable.
4. Insert card all the way into the slot making sure it is fully seated into back plane connector.
5. Replace the two card retainer screws.



EXTERNAL EQUIPMENT SETUP

- To prevent the equipment damage, never plug in any power cords until you have finished connecting all equipment.
- This part of EXTERNAL EQUIPMENT SETUP mainly uses the picture for 42LG700H model.

HD RECEIVER SETUP

This TV can receive Digital Over-the-air or 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, refer to the figure as shown below.

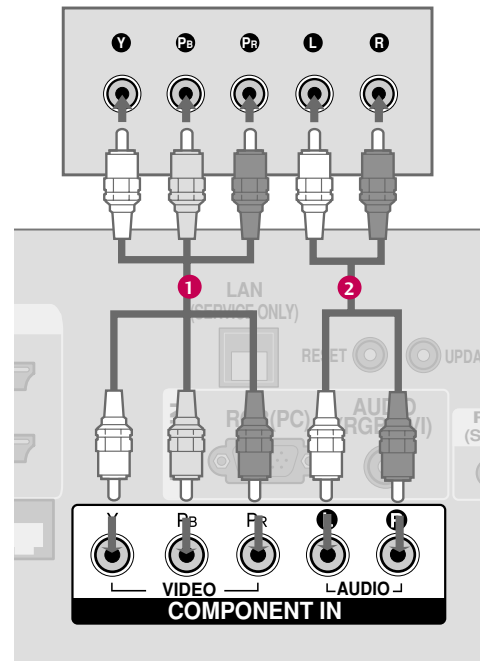
Component Connection

1. How to connect

- 1 Connect the video outputs (Y, PB, PR) of the digital set-top box to the **COMPONENT IN VIDEO** 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** 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.)
- Select **Component** input source using the **INPUT** button on the remote control.



Supported Resolutions

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

Y, CB/PB, CR/PR

Resolution	Horizontal Frequency(KHz)	Vertical Frequency(Hz)
720x480i	15.73	59.94
	15.73	60.00
720x480p	31.47	59.94
	31.47	60.00
1280x720p	44.96	59.94
	45.00	60.00
1920x1080i	33.72	59.94
	33.75	60.00

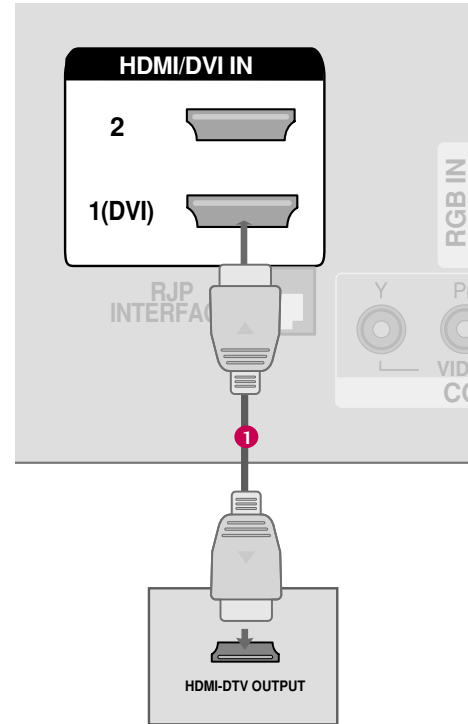
HDMI Connection

1. How to connect

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



HDMI-DTV

Resolution	Horizontal Frequency(KHz)	Vertical Frequency(Hz)
720x480p	31.47	59.94
	31.47	60.00
1280x720p	44.96	59.94
	45.00	60.00
1920x1080i	33.72	59.94
	33.75	60.00

EXTERNAL EQUIPMENT SETUP

DVI to HDMI Connection

1. How to connect

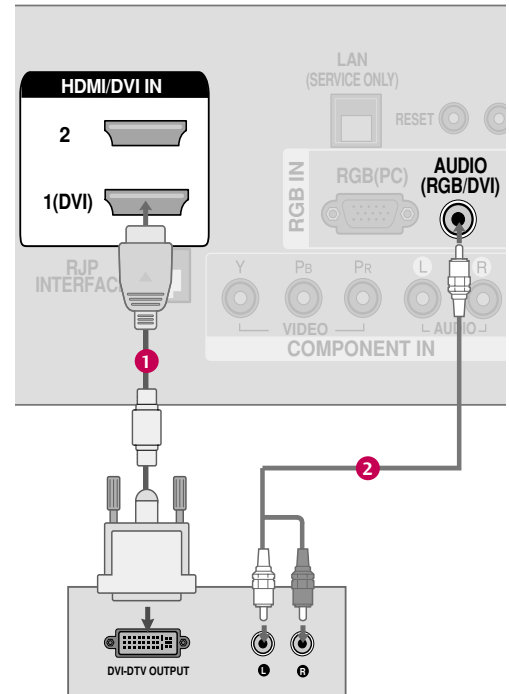
- 1 Connect the DVI output of the digital set-top box to the **HDMI/DVI IN** jack on the TV.
- 2 Connect the audio output of the digital set-top box to the **AUDIO (RGB/DVI)** jack on the TV.

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 **HDMI** 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

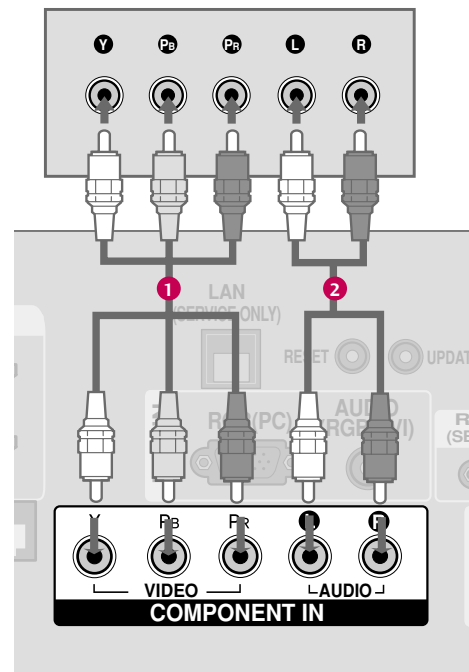
Component Connection

1. How to connect

- 1 Connect the video outputs (Y, PB, PR) of the DVD to the **COMPONENT IN VIDEO** jacks on the TV. Match the jack colors (Y = green, PB = blue, and PR = red).
-
- 2 Connect the audio outputs of the DVD to the **COMPONENT IN AUDIO** jacks on the TV.

2. How to use

- Turn on the DVD player, insert a DVD.
- Select the **Component** input source on the TV using the **INPUT** button on the remote control.
- 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
Video output ports on DVD player	Y	P _B	P _R
	Y	B-Y	R-Y
	Y	C _b	C _r
	Y	P _b	P _r

EXTERNAL EQUIPMENT SETUP

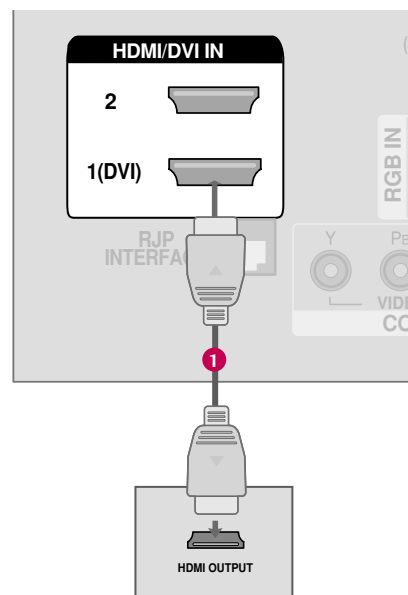
HDMI Connection

1. How to connect

- 1 Connect the HDMI output of the DVD to the **HDMI/DVI IN** jack on the TV.
- 2 No separate audio connection is necessary. HDMI supports both audio and video.

2. How to use

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



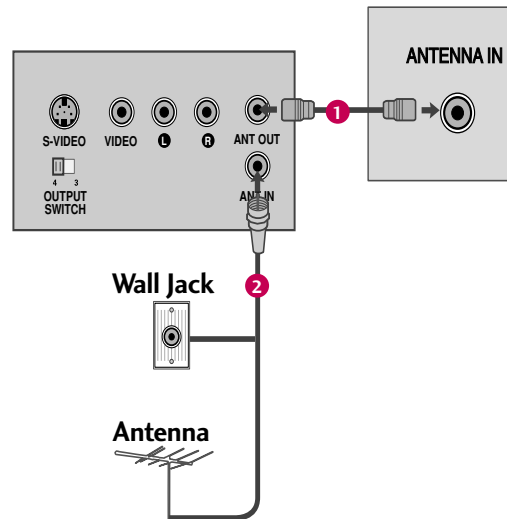
VCR SETUP

- To avoid picture noise (interference), leave an adequate distance between the VCR and TV.
- 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 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.)

Composite (RCA) Connection

1. How to connect

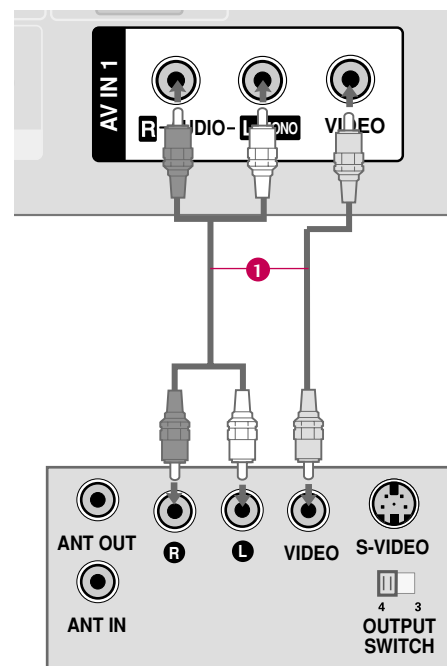
- 1 Connect the **AUDIO/VIDEO** jacks between TV and VCR. Match the jack colors (Video = yellow, Audio Left = white, and Audio Right = red)

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 (Except 22LG3DCH).

! NOTE

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



EXTERNAL EQUIPMENT SETUP

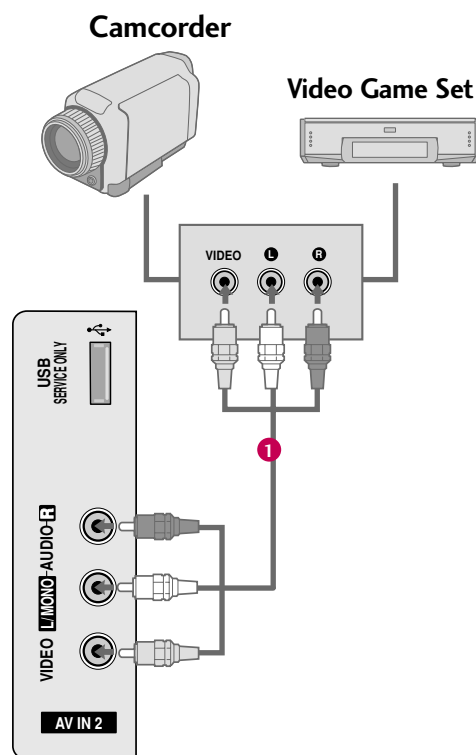
OTHER A/V SOURCE SETUP

1. How to connect

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

2. How to use

- Select 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

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.

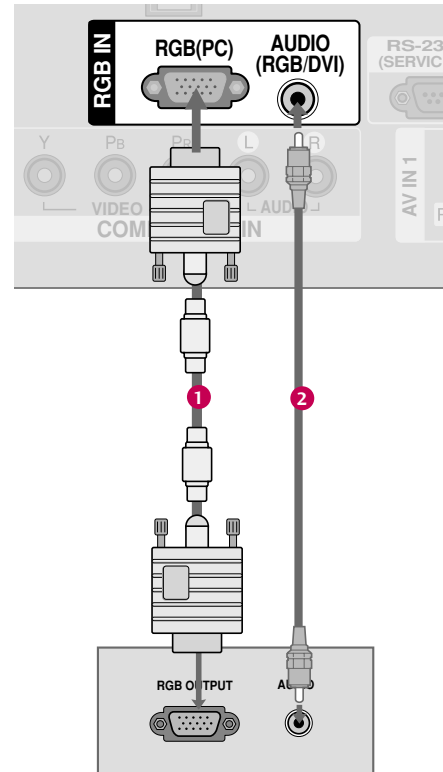
2. How to use

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

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

Resolution	Horizontal Frequency(KHz)	Vertical Frequency(Hz)
640x350	31.468	70.09
720x400	31.469	70.08
640x480	31.469	59.94
	37.861	72.80
	37.500	75.00
800x600	35.156	56.25
	37.879	60.31
	48.077	72.18
	46.875	75.00
1024x768	48.363	60.00
	56.476	70.06
	60.023	75.02
1280x768	47.776	59.870
	60.289	74.893
1360x768	47.712	60.015
1366x768	47.130	59.658
1280x1024	63.981	60.020
	79.976	75.025

* Only RGB-PC mode



NOTES

- ▶ To get the the best picture quality, adjust the PC graphics card to 1360x768.
- ▶ 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.
- ▶ Depending on the graphics card, some resolution settings may not allow the image to be positioned on the screen properly.

EXTERNAL EQUIPMENT SETUP

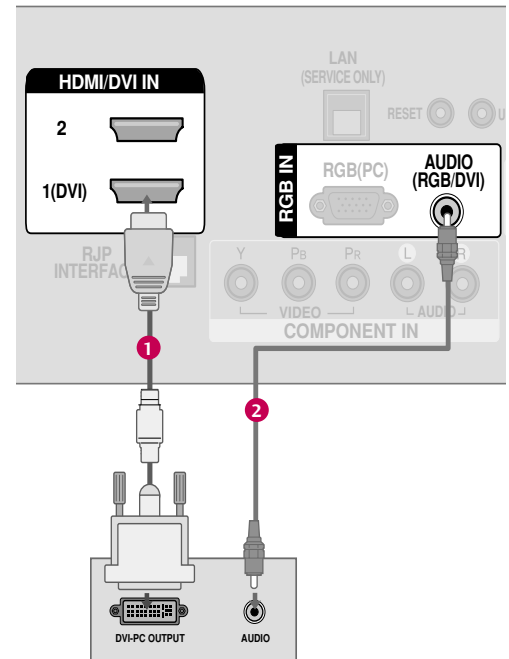
DVI to HDMI Connection

1. How to connect

- 1 Connect the DVI output of the PC to the **HDMI/DVI IN** 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 **HDMI** input source on the TV using the **INPUT** button on the remote control.












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.

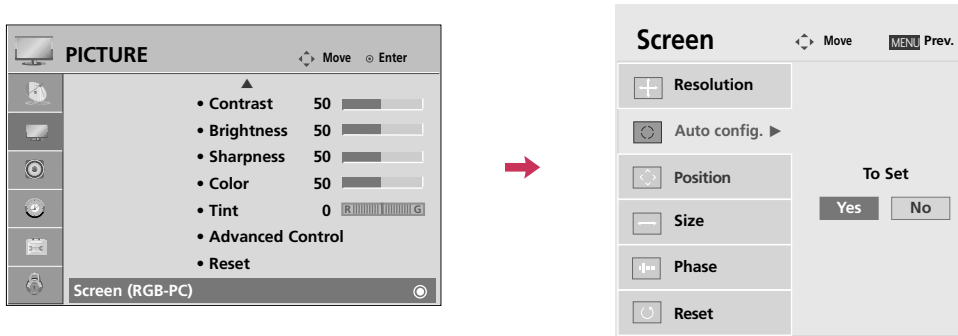


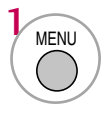
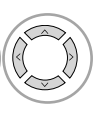



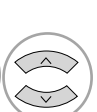



- 1   Select **PICTURE**.
- 2   Select **Screen (RGB-PC)**.
- 3   Select **Resolution**.
- 4   Select the desired resolution.
- 5 

EXTERNAL EQUIPMENT SETUP

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.



-   Select **PICTURE**.
-   Select **Screen (RGB-PC)**.
-   Select **Auto config.**
-   Select **Yes**.
-  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**.

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.



- 1   Select **PICTURE**.
- 2   Select **Screen (RGB-PC)**.
- 3   Select **Position, Size, or Phase**.
- 4   Make appropriate adjustments.
- 5 

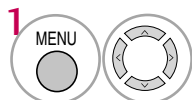
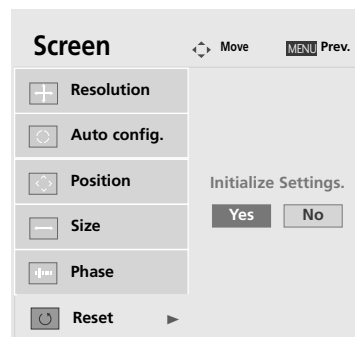
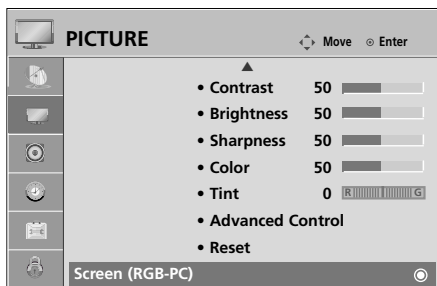
- **Position:** This function is to adjust picture to left/right and up/down as you prefer.
- **Size:** This function is to minimize any vertical bars or stripes visible on the screen background. And the horizontal screen size will also change.
- **Phase:** This function allows you to remove any horizontal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

EXTERNAL EQUIPMENT SETUP

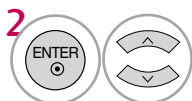
Screen Reset (Reset to original factory values)

Returns **Position**, **Size**, and **Phase** to the default factory settings.

This feature operates only in RGB-PC mode.



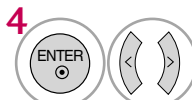
Select **PICTURE**.



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



Select **Reset**.



Select **Yes**.



AUDIO OUT CONNECTION

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

Digital

1. How to connect

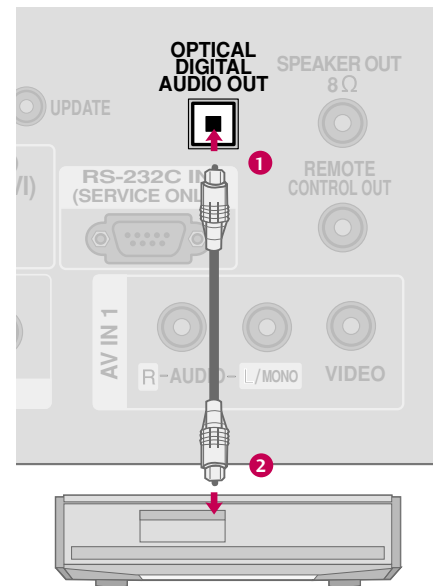
- 1 Connect one end of the optical or coaxial cable to the TV's **OPTICAL** port of **DIGITAL AUDIO OUT**.
- 2 Connect the other end of the optical or coaxial cable to the digital audio input on the audio equipment.
- 3 Set the "TV Speaker option - Off" in the AUDIO menu. (▶ p.93). See the external audio 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.61)

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

TV/STB/DVD/VCR Select the remote's operating mode: TV, STB, DVD, or VCR.

GUIDE Displays and removes electronic channel guide.

PORTAL Displays and removes hotel interactive menu.

INFO Display information at the top of the screen.

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

— (DASH) Used to enter a program number for multiple program channels such as 2-1, 2-2, etc.

FLASH BACK Tune to the last channel viewed.

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

PIP Switches the sub picture Double Window or off mode.

RATIO Change the aspect ratio. ► p.44

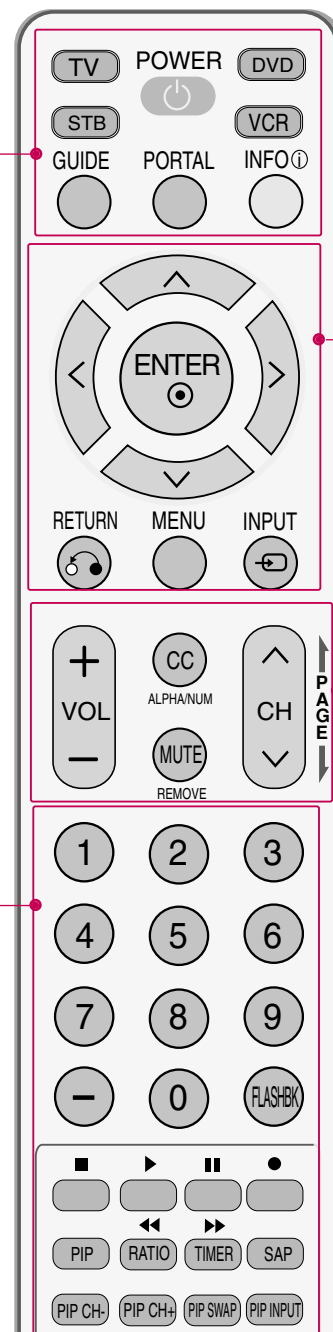
TIMER Select the amount of time before your TV turns off automatically. ► p.72

- SAP** • Analog mode: Selects MTS sound (Mono, Stereo, or a SAP) ► p.63
- DTV mode: Changes the audio language.

PIP CH +/- Changes the PIP channel.

PIP SWAP Exchange the main/sub images.

PIP INPUT Select the connected input source for the sub-picture.



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

RETURN Clears all on-screen displays and returns to TV viewing from any menu.

MENU Displays the main menu.

INPUT External input modes rotate in regular sequence: TV, AV1-2, Component, RGB-PC, HDMI1 and HDMI2.

VOLUME UP/DOWN Increase/decrease the sound level.

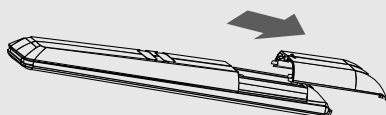
CC Select a closed caption. ► p.66

MUTE Switch the sound on or off. ► p.37

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  button on the TV or press the **POWER** 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**(\wedge or \vee) or **NUMBER** buttons to select a channel number.
-

VOLUME ADJUSTMENT

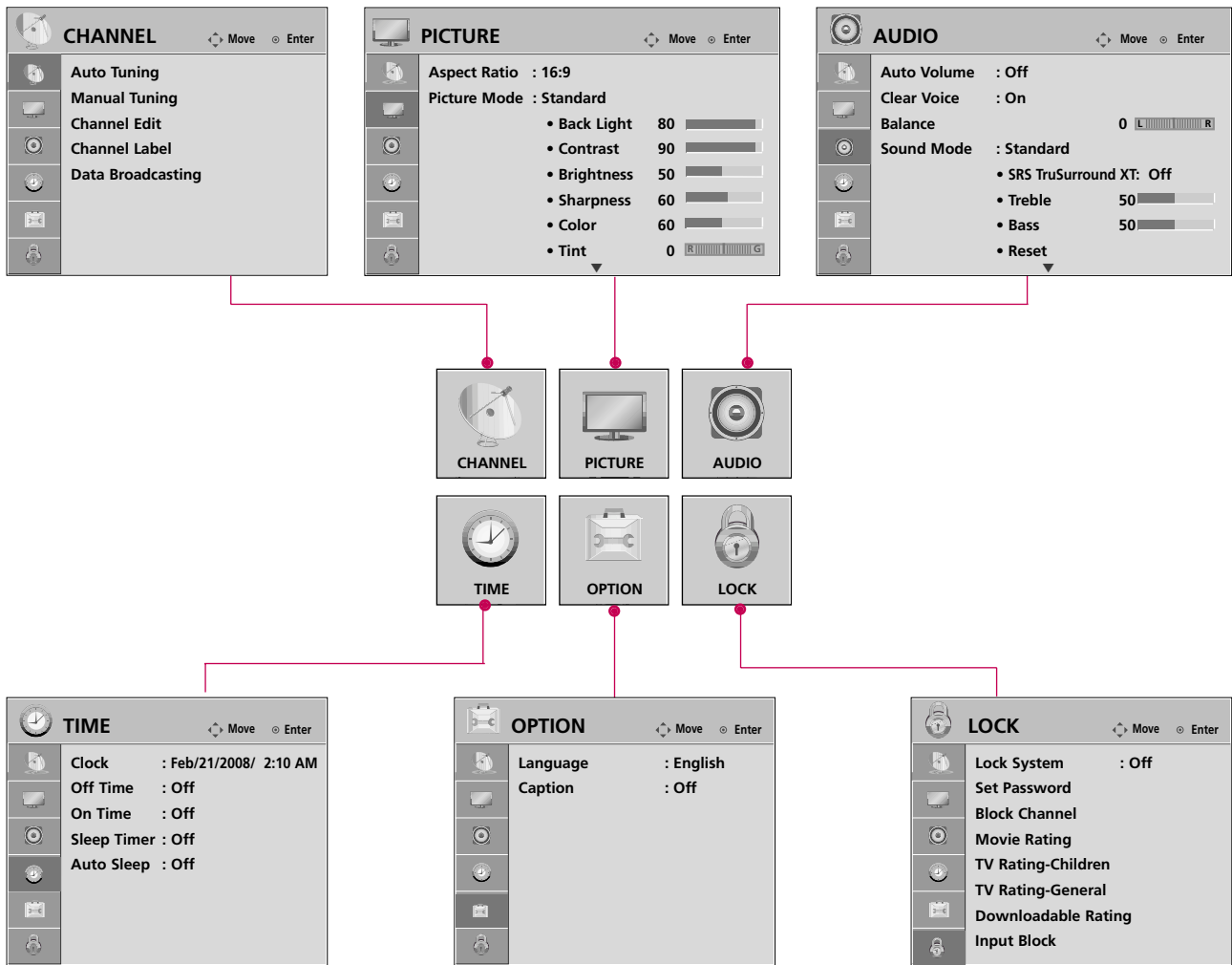
Adjust the volume to suit your personal preference.

- 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.
-







WATCHING TV / CHANNEL CONTROL

ON-SCREEN MENUS SELECTION

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



WATCHING TV / CHANNEL CONTROL

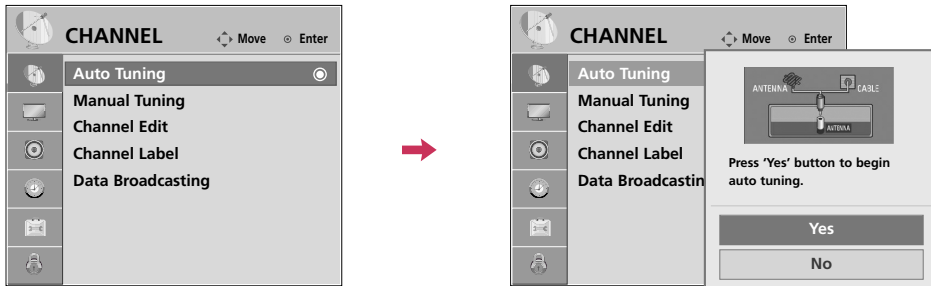
-   Display each menu.
-   Select a menu item.
-  Enter to the pop up menu.
-  Return to TV viewing.

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.





1   Select **CHANNEL**.

2   Select **Auto Tuning**.

3   Select **Yes**.

4  Run **Auto tuning**.

5  Return to the previous menu.

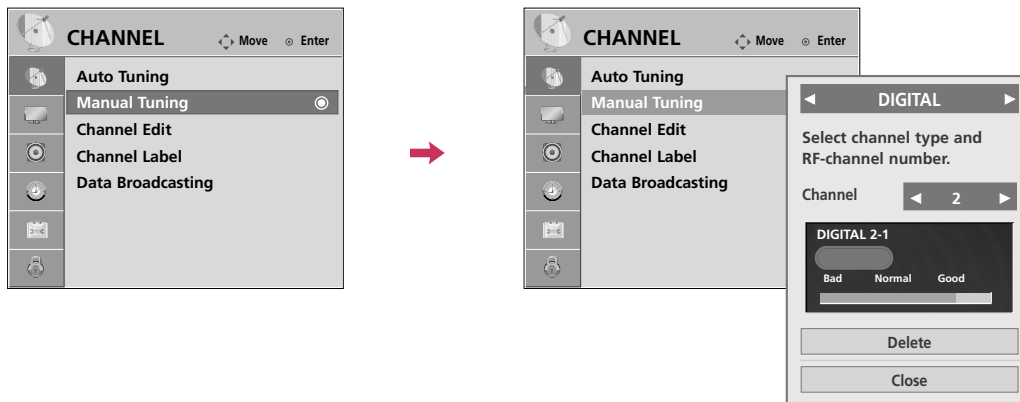
 Return to TV viewing.













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

WATCHING TV / CHANNEL CONTROL

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.



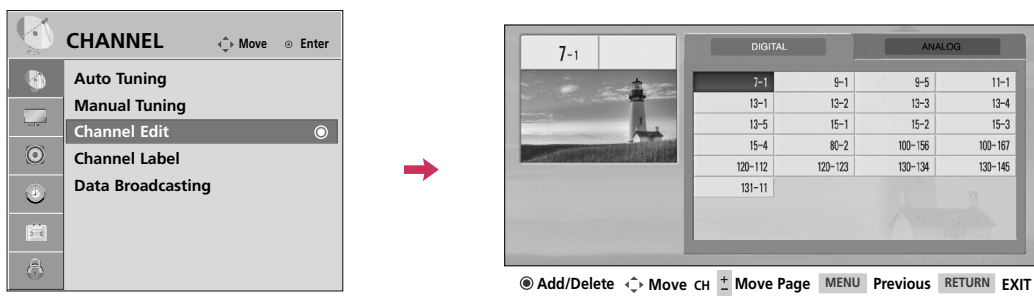
-   Select **CHANNEL**.
-   Select **Manual Tuning**.
-   Select **DIGITAL** or **ANALOG**.
-   Select channel you want to add or delete.
-   Select **Add** or **Delete**.
-  Return to the previous menu.
-  Return to TV viewing.










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

Channel Editing

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.



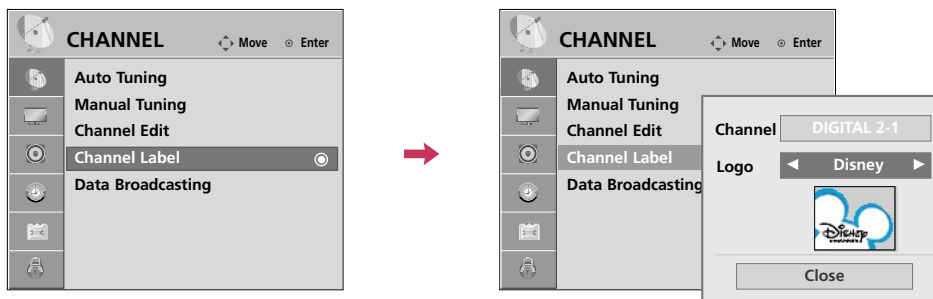
- 1   Select **CHANNEL**.
 - 2   Select **Channel Edit**.
 - 3   Select a channel.
 - 4  Select channel you want to add or delete.
 - 5  Return to the previous menu.
-  Return to TV viewing.












WATCHING TV / CHANNEL CONTROL

CHANNEL LABEL

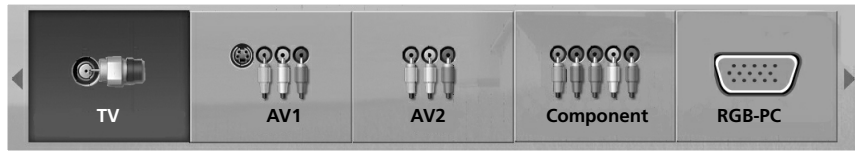
Choose preset labels for your channels.

If a channel label is provided on the signal from the broadcasting station, the TV displays a short name for a channel even if you didn't preset a label for the channel.

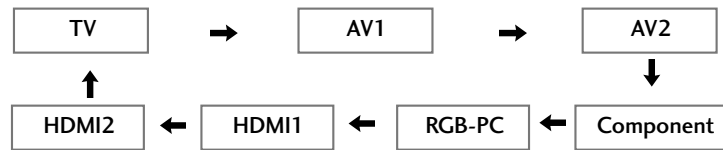


-   Select **CHANNEL**.
-   Select **Channel Label**.
-   Select Channel.
-  Select a channel to set logo.
-   Select the appropriate logo for the channel.
-  Return to the previous menu.
-  Return to TV viewing.

INPUT LIST



Select the desired input source.



- **TV:** Select it to watch over-the-air, cable and digital cable broadcasts.
- **AV1-2:** Select them to watch a VCR or other external equipment.
- **Component:** Select them to watch DVD or a Digital set-top box.
- **RGB-PC:** Select it to view PC input.
- **HDMI1-2:** Select them to watch high definition devices.

PICTURE CONTROL

PICTURE SIZE (ASPECT RATIO) CONTROL

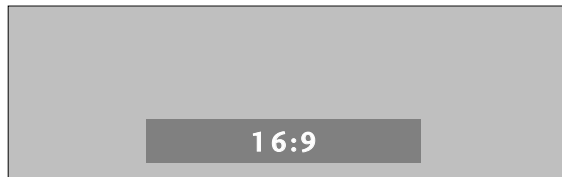
This feature lets you choose the way an analog picture with a 4:3 aspect ratio is displayed on your TV.

- 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 rare on LCDs, but is possible when the image is on the screen for a very long time. This phenomenon is common to all manufacturers and is not covered by warranty. When watching video that does not fill the screen, any after-image from the black bars will normally dissipate after a few minutes.



Press the **RATIO** button repeatedly to select the picture options : **Set By Program, 4:3, 16:9, Zoom1, Zoom2, Just Scan.**



Return to TV viewing.

- You can also adjust **Aspect Ratio** in the **PICTURE** menu.

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

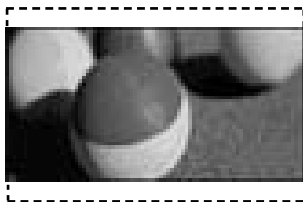
Adjust the picture horizontally, in a linear proportion to fill the entire screen.



PICTURE CONTROL

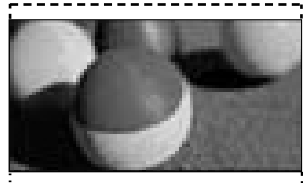
Zoom 1

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

Normally the edges of video signals are cropped 1-2%. Just Scan turns off this cropping and shows the complete video.

Notes: If there is noise on the edges of the original signal, it will be visible when Just Scan is activated.

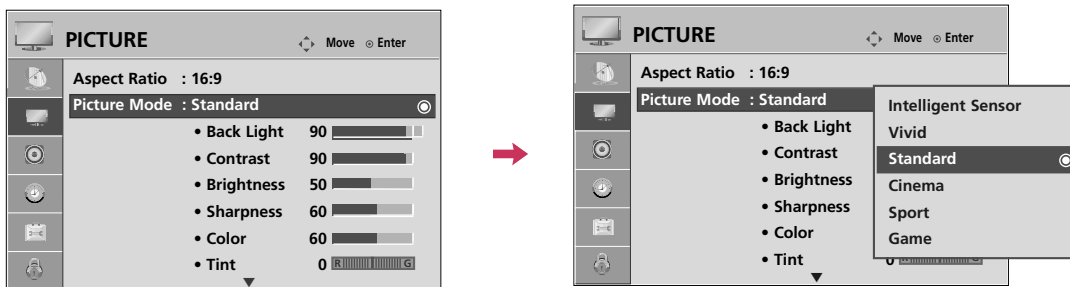
Just Scan operates only with DTV/CADTV/HDMI-DTV/DVI-DTV (720p/1080i/1080p), Component(720p/1080i) input sources.











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.



- 1   Select **PICTURE**.
- 2   Select **Picture Mode**.
- 3   Select **Intelligent Sensor, Vivid, Standard, Cinema, Sport or Game**.
- 4  Return to the previous menu.
-  Return to TV viewing.

- When selecting **Intelligent Sensor**, the most suitable picture is automatically adjusted according to the surrounding conditions.
- **Vivid, Standard, Cinema, Sport, and Game** Settings are preset for the optimum picture quality at the factory and are not adjustable.











PICTURE CONTROL

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.



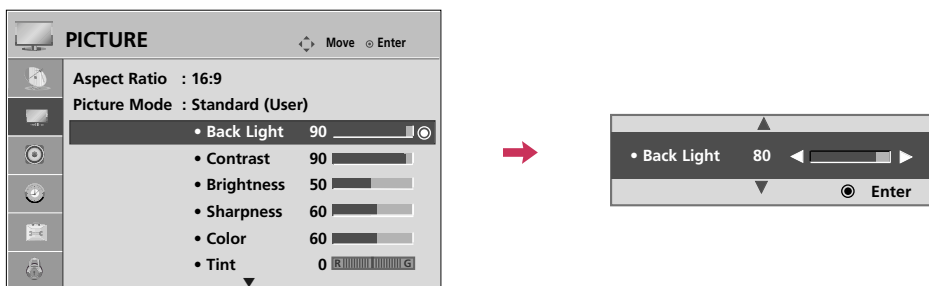
PICTURE CONTROL













- 1   Select **PICTURE**.
- 2   Select **Advanced Control**.
- 3   Select **Color Temperature**.
- 4   Select **Cool, Medium, or Warm**.
- 5  Return to the previous menu.
-  Return to TV viewing.

MANUAL PICTURE ADJUSTMENT

Picture Mode - User Mode

Adjust the picture appearance to suit your preference and viewing situations.
This feature is disabled in "Picture Mode-Intelligent Sensor".



-   Select **PICTURE**.
-   Select **Picture Mode**.
-   Select **Vivid, Standard, Cinema, Sport or Game**.
-   Select **Back Light, Contrast, Brightness, Sharpness, Color, or Tint**.
-   Make appropriate adjustments.
-  Return to the previous menu.
-  Return to TV viewing.

PICTURE CONTROL

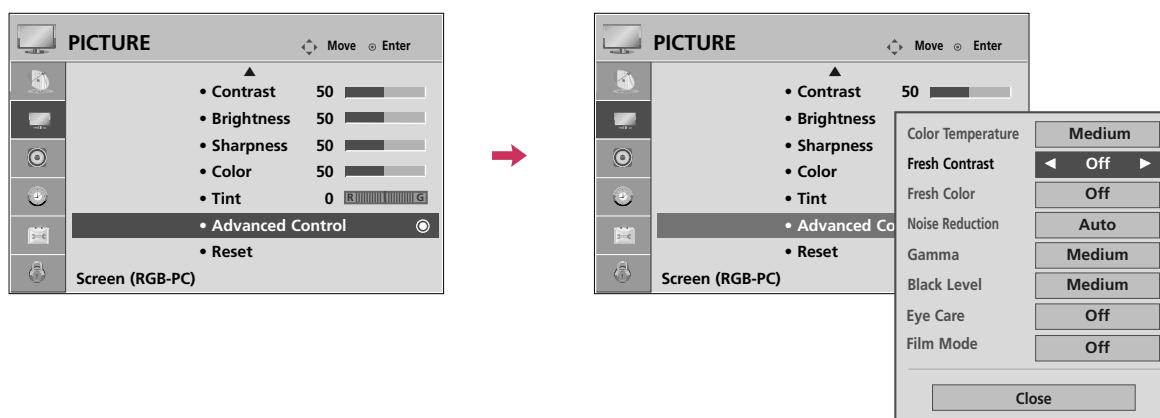
PICTURE IMPROVEMENT TECHNOLOGY










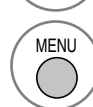
Fresh Contrast: Optimizes the contrast automatically according to the brightness of the reflection.

Fresh Color: Adjusts the color of the reflection automatically to reproduce as close as possible natural colors.

Noise Reduction: Removes interference up to the point where it does not damage the original picture.

Gamma: High gamma values display whitish images and low gamma values display high contrast images.



-   Select **PICTURE**.
-   Select **Advanced Control**.
-   Select **Fresh Contrast, Fresh Color, Noise Reduction, or Gamma**.
-   Select your desired options.
-  Return to the previous menu.
-  Return to TV viewing.