



OWNER'S MANUAL LED LCD TV

Please read this manual carefully before operating your set and retain it for future reference.

22LQ630H
26LQ630H
32LQ630H

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 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

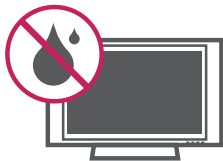
SAFETY INSTRUCTIONS

IMPORTANT SAFETY INSTRUCTIONS

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



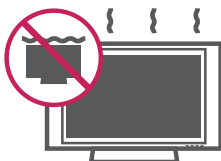
- 1** Do not use this apparatus near water.



- 2** Clean only with a 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.

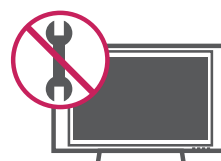


S3125A

- 9** Unplug this apparatus during lighting 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.

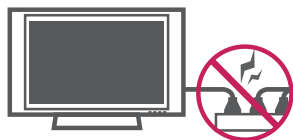
14 Keep the packing anti-moisture material or vinyl packing out of the reach of children. Anti-moisture material is harmful if swallowed. If swallowed by mistake, force the patient to vomit and visit the nearest hospital. Additionally, vinyl packing can cause suffocation. Keep it out of the reach of children.

15 **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 move 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.



16 Do not stick metal objects or any other conductive material into the power cord. Do not touch the end of the power cord while it is plugged in.

17 **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.

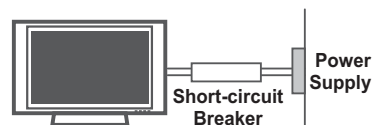


18 Do not expose to dripping or splashing and do not place objects filled with liquids, such as vases, cups, etc. on or over the apparatus (e.g. on shelves above the unit).



19 **GROUNDING**
(Except for devices which are not grounded.) 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.



20 **DISCONNECTING DEVICE FROM MAINS**
Mains plug is the disconnecting device. The plug must remain readily operable.

21 As long as this unit is connected to the AC wall outlet, it is not disconnected from the AC power source even if you turn off this unit by SWITCH.

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.

22 **ANTENNAS**

Outdoor antenna grounding

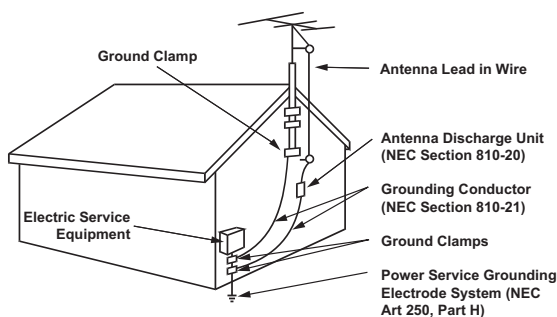
If an outdoor antenna is installed, follow the precautions below. An outdoor antenna system should not be located in the vicinity of overhead power lines or other electric light or power circuits, or where it can come in contact with such power lines or circuits as death or serious injury can occur.

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



NEC: National Electrical Code

23 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.

24 Moving

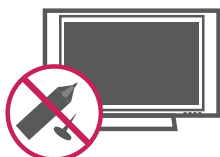
Make sure the product is turned off, unplugged and all cables have been removed. It may take 2 or more people to carry larger TVs. Do not press against or put stress on the front panel of the TV.

25 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.

26 If you smell smoke or other odors coming from the TV, unplug the power cord contact and authorized service center.

27 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.



28 Keep the product away from direct sunlight.

29 Dot Defect

The Plasma or LCD panel is a high technology product with resolution of two million to six million pixels. In a very few cases, you could see fine dots on the screen while you're viewing the TV. Those dots are deactivated pixels and do not affect the performance and reliability of the TV.

30 Generated Sound

"Cracking" noise: A cracking noise that occurs when watching or turning off the TV is generated by plastic thermal contraction due to temperature and humidity. This noise is common for products where thermal deformation is required.

Electrical circuit humming/panel buzzing: A low level noise is generated from a high-speed switching circuit, which supplies a large amount of current to operate a product. It varies depending on the product.

This generated sound does not affect the performance and reliability of the product.

31 Take care not to touch the ventilation openings. When watching the TV for a long period, the ventilation openings may become hot.

32 If the TV feels cold to the touch, there may be a small "flicker" when it is turned on. This is normal, there is nothing wrong with TV. Some minute dot defects may be visible on the screen, appearing as tiny red, green, or blue spots. However, they have no adverse effect on the monitor's performance.

Avoid touching the LCD screen or holding your finger(s) against it for long periods of time. Doing so may produce some temporary distortion effects on the screen.

ON DISPOSAL

(Only Hg lamp used LCD TV)

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

TABLE OF CONTENTS

2	IMPORTANT SAFETY INSTRUCTIONS	22	REMOTE CONTROL
6	LICENSES	24	GENERAL TROUBLESHOOTING
6	OPEN SOURCE SOFTWARE NOTICE	24	CAUTION FOR USING EZSIGN 2.0
7	TABLE OF CONTENTS	25	SPECIFICATIONS
8	INSTALLATION PROCEDURE	28	IR CODES
8	ASSEMBLING AND PREPARING	29	EXTERNAL CONTROL DEVICE SETUP
8	Unpacking	29	RS-232C Setup
11	Optional Extras (For LT560E, LS460E series)	29	Type of connector; D-Sub 9-Pin Male
12	Parts and buttons	30	RS-232C configurations
14	Setting up the TV	31	Communication Parameters
14	- Attaching the stand	31	Command reference list
17	- Mounting on a table	32	Transmission / Receiving protocol
18	- Mounting on a wall		
20	- Tidying cables		
21	- External speaker out		

FCC NOTICE

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- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the 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.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference and (2) this device must accept any interference received, including interference that may cause undesired operation of the device.

Any changes or modifications in construction of this device which are not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

CONTENTS

WARNING / CAUTION	2
SAFETY INSTRUCTIONS	3
FEATURES OF THIS TV	7

PREPARATION

Accessories	8
Front Panel Information	9
Back Panel Information	10
Cable Management	12
Desktop Pedestal Installation	13
Kensington Security System	13
VESA Wall Mounting	14
Antenna or Cable Connection	15

EXTERNAL EQUIPMENT SETUP

HD Receiver Setup	16
DVD Setup	18
VCR Setup	19
Other A/V Source Setup	21
Pillow Speaker Setup	22
PC Setup	23

WATCHING TV / CHANNEL CONTROL

Turning On TV	29
Channel Selection	29
Volume Adjustment	29
Initial Setting	30
On-Screen Menus Selection	32
Channel Setup	
- Auto Scan (Auto Tuning)	33
- Add / Delete Channel (Manual Tuning) ..	34
- Channel Editing	35
Channel Label	36
Input List	37

PICTURE CONTROL

Picture Size (Aspect Ratio) Control	38
Preset Picture Settings	40
Manual Picture Adjustment - User Mode	41
Picture Improvement Technology	42
Picture Reset	44
Demo Mode	45

SOUND & LANGUAGE CONTROL

Auto Volume Leveler (Auto Volume)	46
Clear Voice II	47
Balance	48
Preset Sound Settings (Sound Mode)	49
Sound Setting Adjustment - User Mode	50
Infinite Sound	51
TV Speakers On/Off Setup	52
Audio Reset	53
Stereo/SAP Broadcast Setup	54
Audio Language	55
On-Screen Menus Language Selection	56
Caption Mode	
- Analog Broadcasting System Captions ...	57
- Digital Broadcasting System Captions ...	58
- Caption Option	59

TIME SETTING

Clock Setting	
- Auto Clock Setup	60
- Manual Clock Setup	61
Auto On/Off Time Setting	62
Sleep Timer Setting	63
Auto Shut-Off Setting	63

PARENTAL CONTROL / RATINGS

Set Password & Lock System	64
Channel Blocking	67
Movie & TV Rating	68
Downloadable Rating	71
External Input Blocking	72

USB

Entry Modes	73
Movie List	75
Photo List	79
Music List	83

APPENDIX

Troubleshooting	86
Maintenance	88
Product Specifications	89
Open Source License	90

FEATURES OF THIS TV



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



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

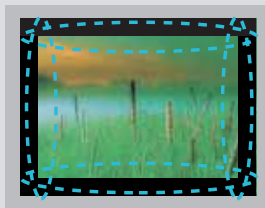
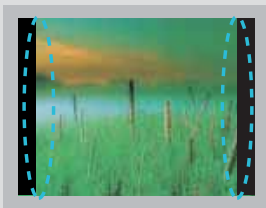


View videos and photos and listen to music on your TV through USB 2.0 ('videos' dependent on model).



IMPORTANT INFORMATION TO PREVENT "IMAGE BURN / BURN-IN" ON YOUR TV SCREEN

- When a fixed image (e.g. logos, screen menus, video game, and computer display) is displayed on the TV for an extended period, it can become permanently imprinted on the screen. This phenomenon is known as "image burn" or "burn-in." Image burn is not covered under the manufacturer's warranty.
- In order to prevent image burn, avoid displaying a fixed image on your TV screen for a prolonged period (2 or more hours for LCD, 1 or more hours for Plasma).
- Image burn can also occur on the letterboxed areas of your TV if you use the 4:3 aspect ratio setting for an extended period.

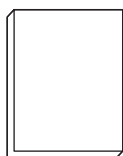


PREPARATION

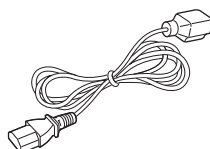
ACCESSORIES

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

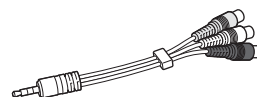
The accessories included may differ from the images below.



Quick Reference Guide

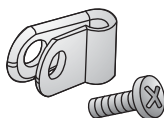


Power Cord



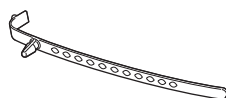
Composite gender cable

(For 26LQ630H)



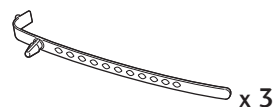
Protective bracket and
screw for power cord
(Refer to P.12)

(For 22/26LQ630H)



Cable holder
(Refer to P.12)

(For 32LQ630H)

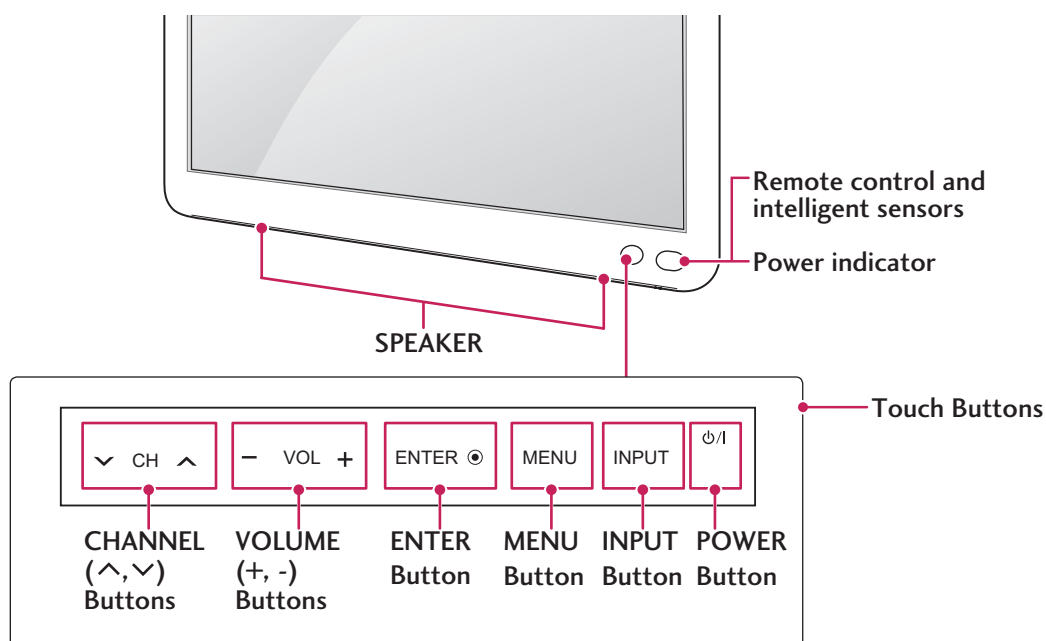


Cable holder
(Refer to P.12)

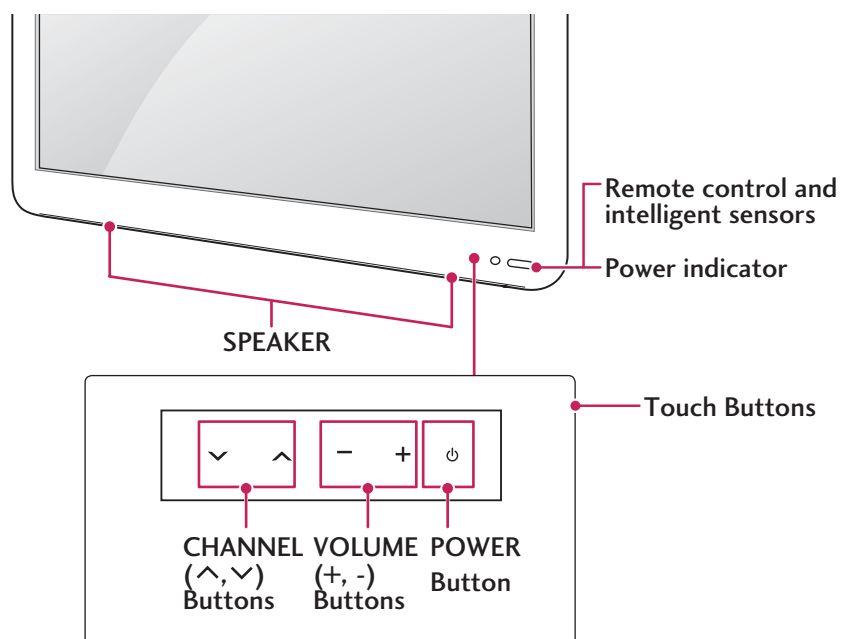
FRONT PANEL INFORMATION

- 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).

22LQ630H



26/32LQ630H

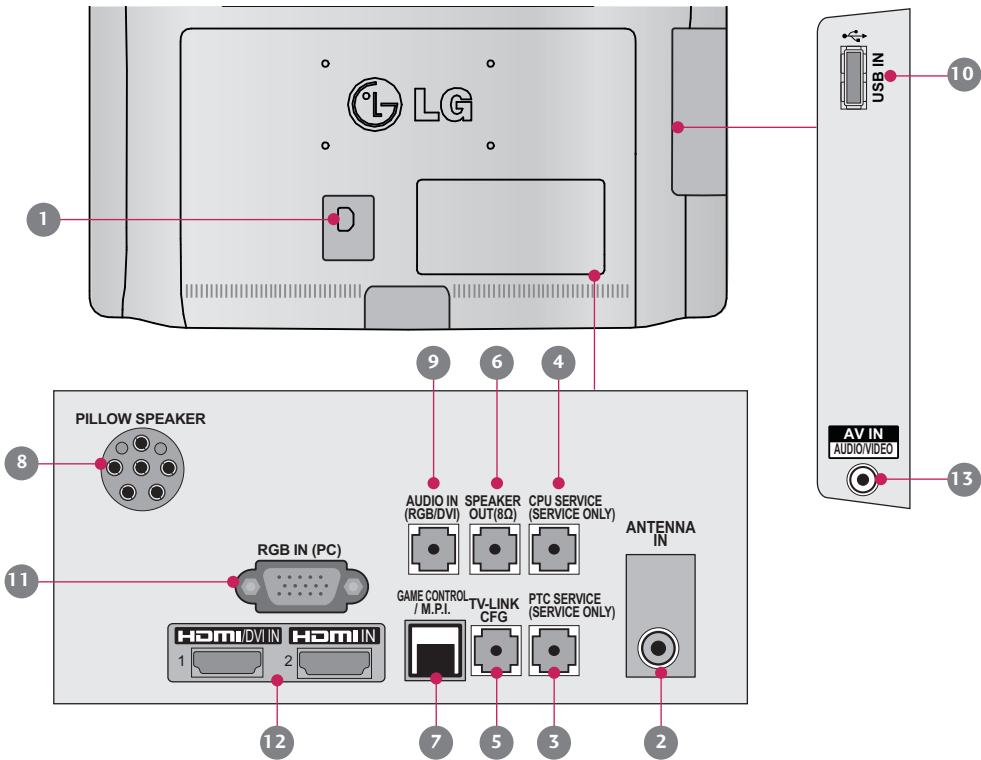


PREPARATION

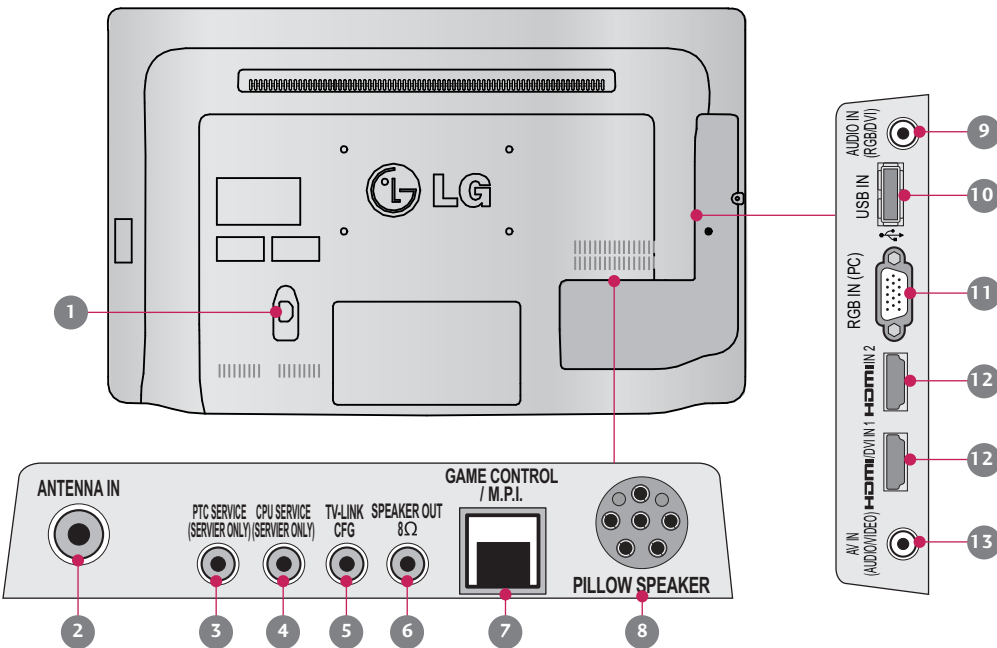
BACK PANEL INFORMATION

■ Image shown may differ from your TV.

22LQ630H



26/32LQ630H



1 Power Cord Socket

For operation with AC power.

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

2 ANTENNA IN

Connect over-the air signals to this jack.

3 PTC SERVICE (SERVICE ONLY)

Used for PTC software updates.

4 CPU SERVICE (SERVICE ONLY)

Used for CPU software updates.

5 TV - LINK CFG

Computer input for programming Free To Guest services.

6 SPEAKER OUT (8Ω)

For use with external speakers.

7 GAME CONTROL

Input port for third party game Controllers.

M. P. I.

Allows VOD/PPV devices or set-top boxes to control the TV.

8 PILLOW SPEAKER

Used to connect to pillow speaker.

9 AUDIO IN (RGB/DVI)

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

10 USB IN

Used for viewing multimedia files.

11 RGB IN (PC)

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

12 HDMI/DVI IN

Digital Connection.

Supports HD video and Digital audio.

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

13 AV (Audio/Video) IN

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

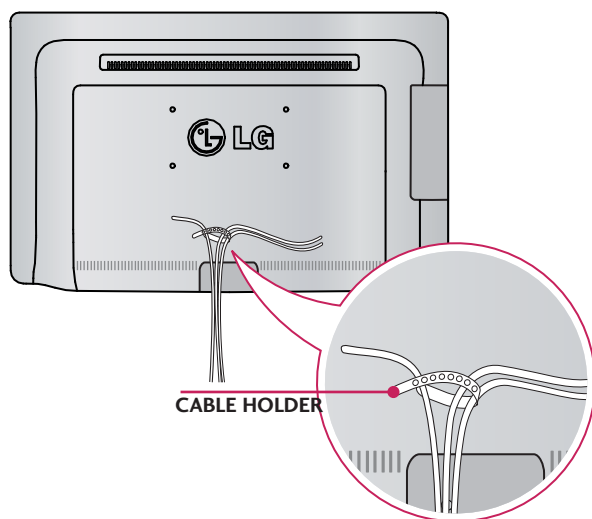
Used for PC/DTV audio input jack

PREPARATION

CABLE MANAGEMENT

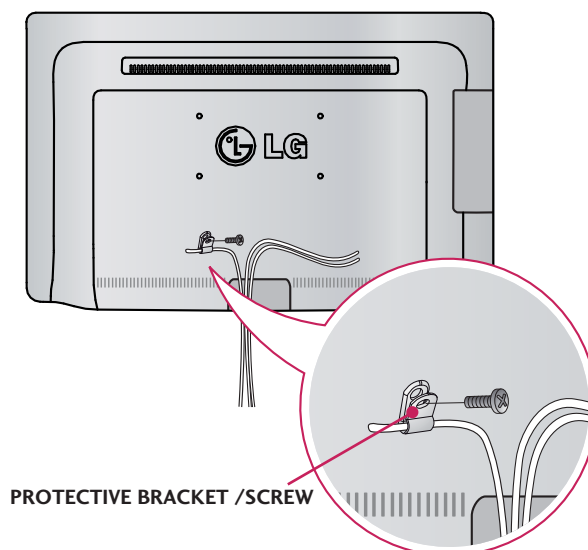
22/32LQ630H

- 1 Gather and bind the cables with the **CABLE HOLDER(S)** on the TV back cover.

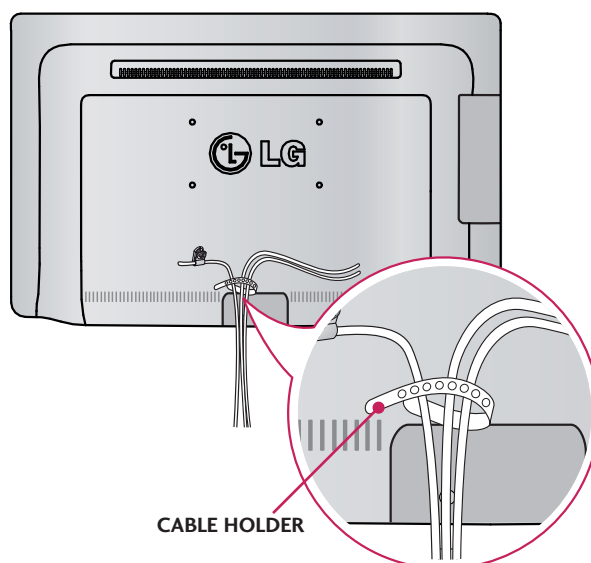


26LQ630H

- 1 Connect the cables as necessary.
To connect additional equipment, see the **EXTERNAL EQUIPMENT SETUP** section.
To help prevent the power cable from being removed by accident, secure the power cable with the included **PROTECTIVE BRACKET / SCREW**.



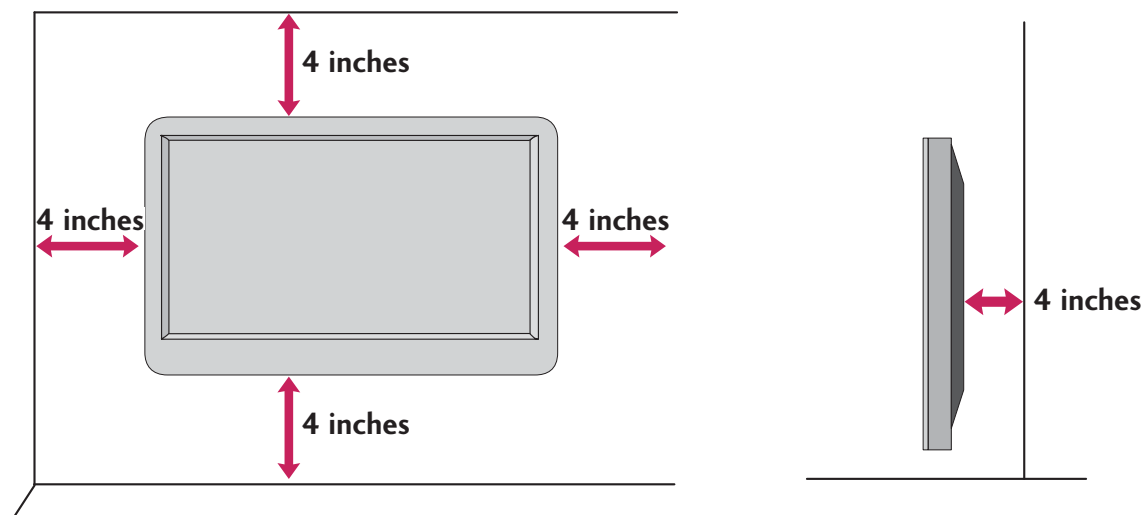
- 2 Gather and bind the cables with the **CABLE HOLDER(S)** on the TV back cover.



WALL MOUNT INSTALLATION

■ Image shown may differ from your TV.

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.

KENSINGTON SECURITY SYSTEM

■ This feature is not available for all models.

- The TV is equipped with a Kensington Security System connector on the back panel. Connect the Kensington Security System cable as shown below.
- For the detailed installation and use of the Kensington Security System, refer to the user's guide provided with the Kensington Security System.

For further information, contact <http://www.kensington.com>, the internet homepage of the Kensington company. Kensington sells security systems for expensive electronic equipment such as notebook PCs and LCD projectors.

ⓘ NOTE

- ▶ The Kensington Security System is an optional accessory.

PREPARATION

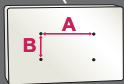
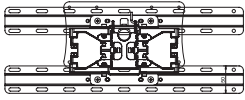
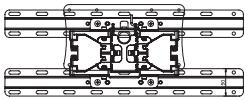
VESA WALL MOUNTING

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

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.

LG recommends that wall mounting be performed by a qualified professional installer.

Model	VESA (A * B) 	Standard Screw	Quantity	Wall Mounting Bracket (sold separately)
22LQ630H 26LQ630H	100 * 100	M4	4	 LSW100B, LSW100BG
32LQ630H	200 * 100	M4	4	 LSW100B, LSW100BG

! 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 of the TV.
- ▶ For wall mounts that do not comply with the VESA standard screw specifications, the length of the screws may differ depending on their specifications.
- ▶ Do not use screws that do not comply with the VESA standard screw specifications.
Do not use fasten the screws too strongly, this may damage the TV or cause the TV to a fall, leading to personal injury. LG is not liable for these kinds of accidents.
- ▶ LG is not liable for TV damage or personal injury when a non-VESA or non specified wall mount is used or the consumer fails to follow the TV installation instructions.

! CAUTION

- ▶ Do not install your wall mount kit while your TV is turned on. 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.

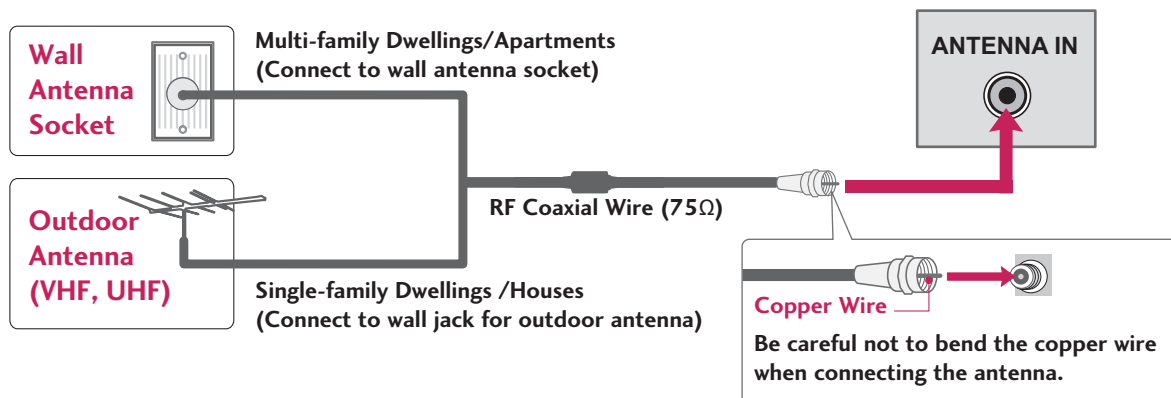
- To prevent damage, do not connect to the power outlet until all connections are made between the devices.

ANTENNA OR CABLE CONNECTION

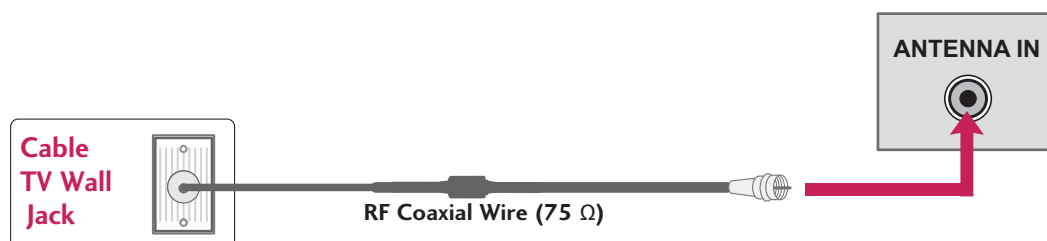
1. Antenna (Analog or Digital)

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

For optimum picture quality, adjust the direction if needed.



2. Cable



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

EXTERNAL EQUIPMENT SETUP

- To prevent the equipment damage, never plug in any power cords until you have finished connecting all equipment.
- This part of EXTERNAL EQUIPMENT SETUP mainly uses the picture for 22LQ630H 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.

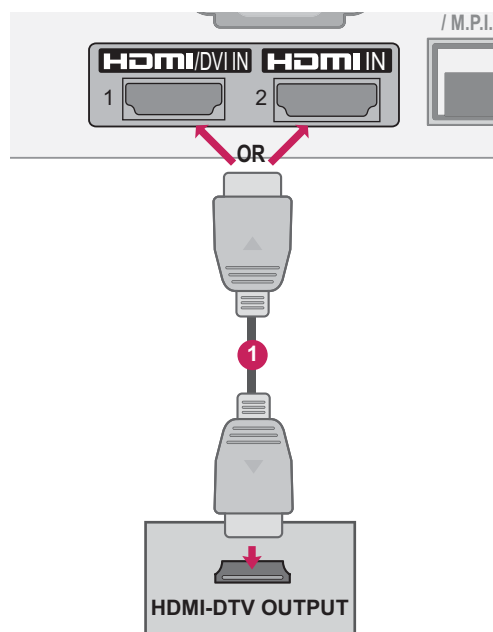
HDMI Connection

1. How to connect

- 1 Connect the digital set-top box to **HDMI/DVI IN 1** 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 1** or **HDMI 2** 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
1920x1080p	67.50	60.00
	67.432	59.939
	27.00	24.00
	26.97	23.976
	33.75	30.00
	33.71	29.97

DVI to HDMI Connection

1. How to connect

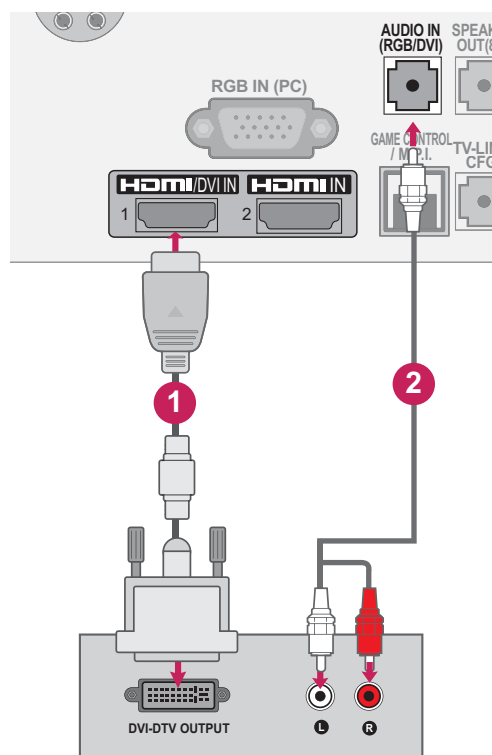
- 1 Connect the DVI output of the digital set-top box to the **HDMI/DVI IN 1** jack on the TV.
- 2 Connect the audio output of the digital set-top box to the **AUDIO IN(RGB/DVI)** or **AV IN AUDIO** jack on the TV.

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 1** input source on the TV using the **INPUT** button on the remote control.

! NOTE

- A DVI to HDMI cable or adapter is required for this connection. DVI doesn't support audio, so a separate audio connection is necessary.



EXTERNAL EQUIPMENT SETUP

DVD SETUP

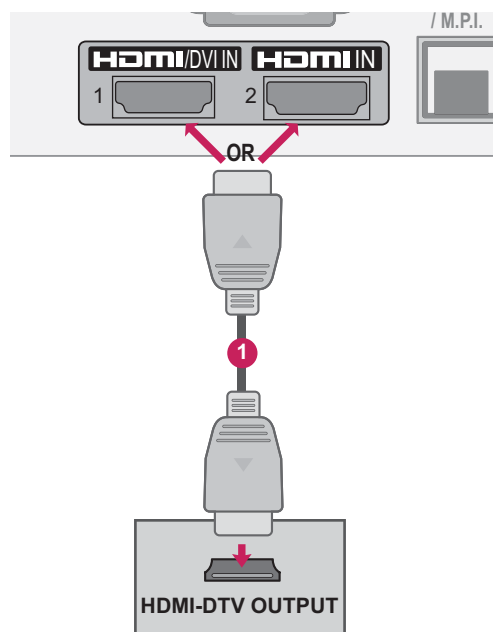
HDMI Connection

1. How to connect

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

2. How to use

- Select the **HDMI 1** or **HDMI 2** 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.

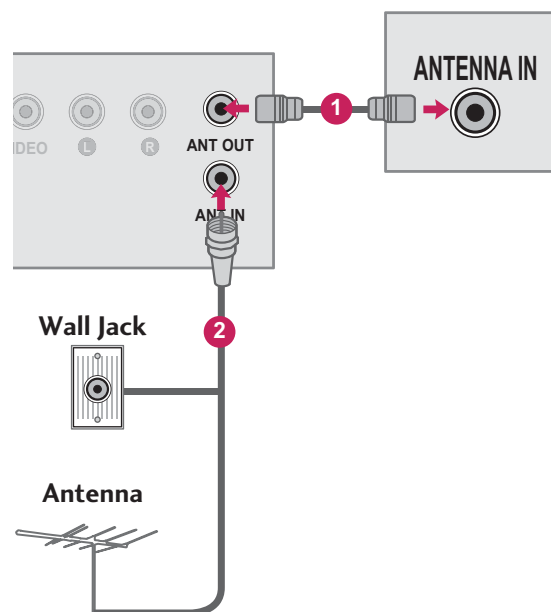
Antenna Connection

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.)



EXTERNAL EQUIPMENT SETUP

Composite (RCA) Connection

1. How to connect

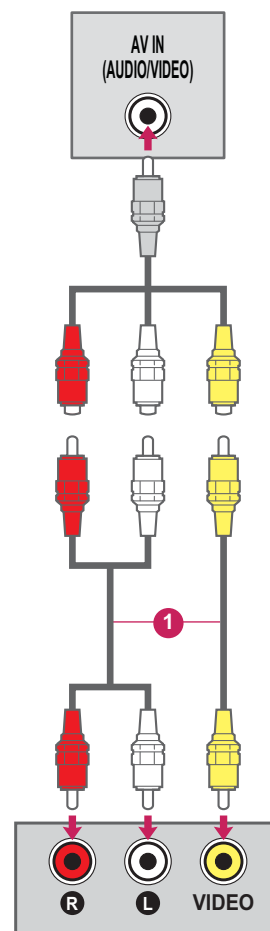
- 1 Connect the **AUDIO/VIDEO** jacks between TV and VCR. Match the jack colors (Video = yellow, Audio Left = white, and Audio Right = red).

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 **AV** input source on the TV using the **INPUT** button on the remote control.

! NOTE

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



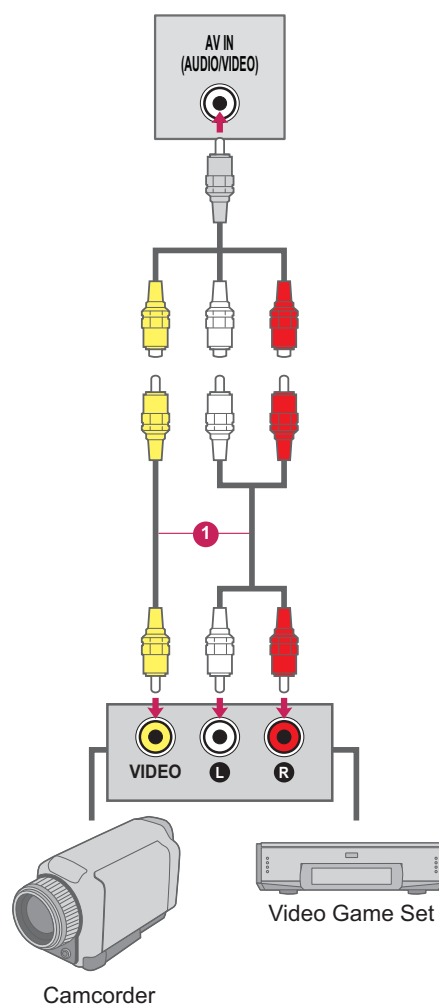
OTHER A/V SOURCE SETUP

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 **AV** input source on the TV using the **INPUT** button on the remote control.
- If connected to **AV IN** input, select the **AV** input source on the TV.
- Operate the corresponding external equipment.



EXTERNAL EQUIPMENT SETUP

PILLOW SPEAKER SETUP

- Connect a pillow speaker to the LCD TV/Monitor.

1. How to connect

- 1 Connect the **PILLOW SPEAKER** output jack on the back of the TV.
- 2 Connect an accessory pillow speaker or wired remote control unit to this 6-pin jack.
- 3 Select **PILLOW SPEAKER** on the rear panel of the TV.

Use a pillow speaker that is a UL recognized pendant control bearing the warning:

“Risk of fire if used in oxygen enriched atmosphere.
Keep pendant control away from oxygen equipment.”

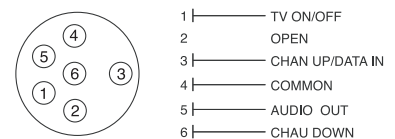
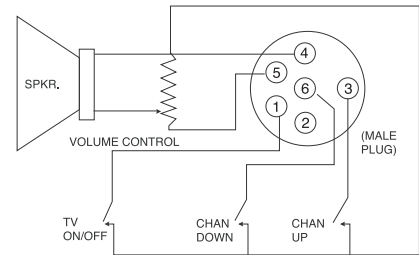
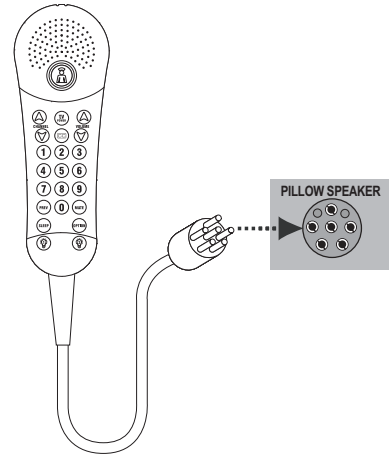
Controlling the TV with Serial Data

The TV is capable of being controlled by a single-wire, serial data signal. This is a LG patented technology and is being implemented by certain brands of “smart” pillow speakers.

Pillow Speaker Interface

This connector furnishes three control lines and an audio output. A patient-pendant remote control, or entertainment audio and nurse call system may be connected here. All lines are isolated from the AC power line and earth ground. (Optoisolators isolate the control lines, and a transformer isolates the audio. There are no relays or inductive components in the control lines.)

pin No.	Purpose
1	External TV On/Off switch.
2	(Not used.)
3	External Channel Up switch or Data in.
4	Common connection for control, data, and audio output. Impedance to earth ground is a 10-meg resistor in parallel with a 1100 pf capacitor.
5	Isolated audio output. Nominal 14-ohm source impedance with short circuit protection. Intended for a pillow speaker with a low-impedance pad-type volume control.
6	External Channel Down switch.



Controlling the TV with Mechanical Switches

Pin 4 (common) is momentarily connected to pin 1, 3, or 6 via push-action switches to control On/Off and Channel Up/Down.

These pins are at +13 volts DC (when measured from pin 4) with the switches open.

Current draw is 8 mA when a switch is closed.

(This operation is identical to previous LG models using the 5-Wire Interface except that only +7 volts DC was supplied and current draw was only 2.5 mA.)

PC SETUP

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

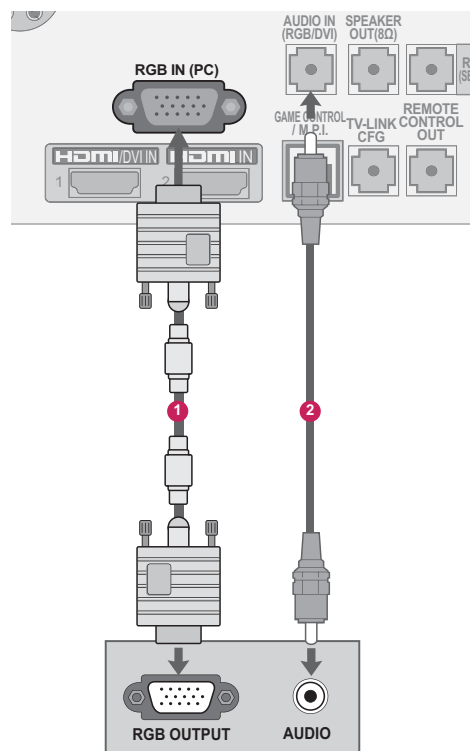
VGA (D-Sub 15-pin) Connection

1. How to connect

- 1 Connect the VGA output of the PC to the **RGB IN (PC)** jack on the TV.
- 2 Connect the PC audio output to the **AUDIO IN (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.



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
800x600	37.879	60.31
1024x768	48.363	60.00
1280x768	47.776	59.87
1360x768	47.712	60.015

! NOTE

- ▶ 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

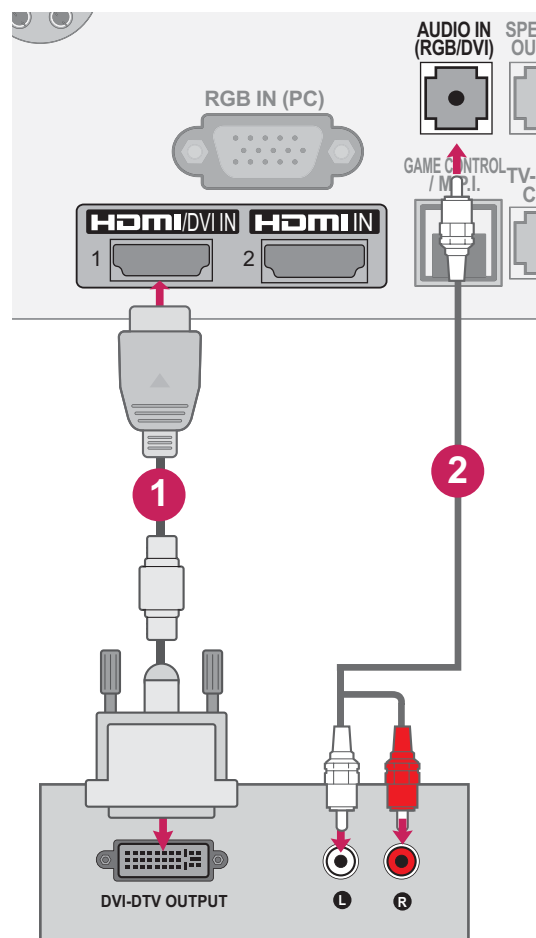
DVI to HDMI Connection

1. How to connect

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

2. How to use

- Turn on the PC and the TV.
- Select the **HDMI 1** input source on the TV using the **INPUT** button on the remote control.

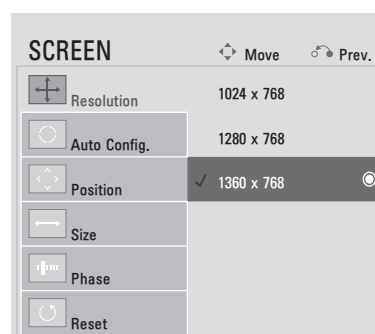
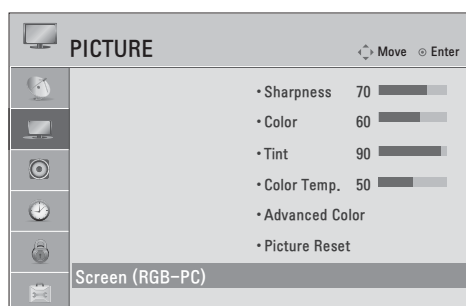


Screen Setup for PC mode

Selecting Resolution

You can choose the resolution in RGB-PC mode.

The **Position**, **Phase**, and **Size** can also be adjusted.

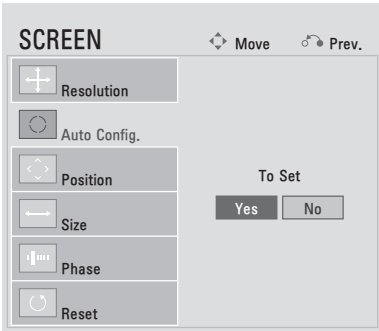
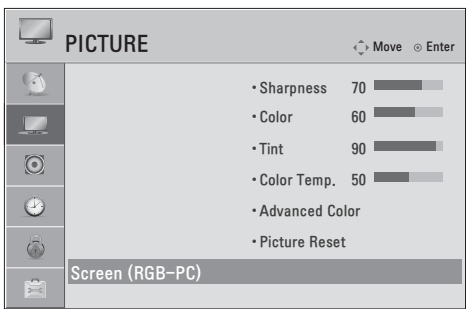


- 1   Select **PICTURE**.
- 2   Select **Screen (RGB-PC)**.
- 3   Select **Resolution**.
- 4   Select the desired resolution.
- 5 

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**.
- 

- 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.



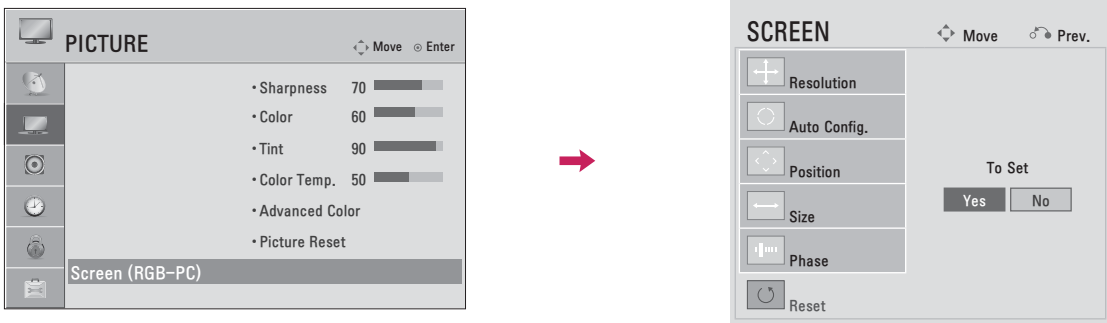
- 1 Select **PICTURE**.
- 2 Select **Screen (RGB-PC)**.
- 3 Select **Position, Size, or Phase**.
- 4 Make appropriate adjustments.
- 5

- **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.



- 1   Select **PICTURE**.
- 2   Select **Screen (RGB-PC)**.
- 3   Select **Reset**.
- 4   Select **Yes**.
- 5 

WATCHING TV / CHANNEL CONTROL

TURNING ON THE TV

- 1 First, connect the 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.
- 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.

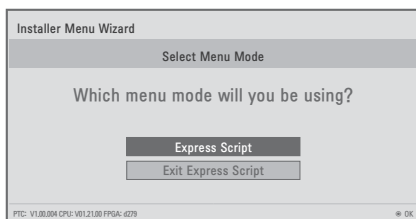
- 1 Press the **VOL** (**+** or **-**) button to adjust the volume.
- 2 If you want to switch the sound off, press the **MUTE** button.
- 3 You can cancel the Mute function by pressing the **MUTE** or **VOL** (**+** or **-**) button.

WATCHING TV / CHANNEL CONTROL

INITIAL SETTING

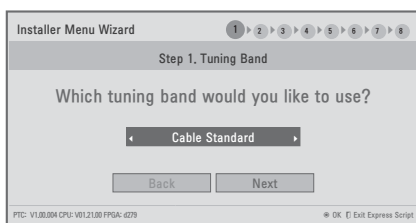
This Function guides the user to easily set the essential items for viewing the TV for the first time when purchasing the TV. It will be displayed on the screen when turning the TV on for the first time. It can also be activated from the user menus.

Selecting Menu Mode



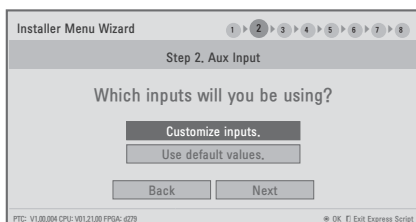
- 1  Select the **Express Script**.

Step 1. Tuning Band



- 2  Select the desired **Tuning Band**.
3  Select **Next**.

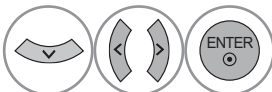
Step 2. Aux Input



- 4  Select **Customize Inputs**.
5  Select the input you want to enable or disable.

Step 3. Audio Source



- 6  Select the desired **Audio Source**.
7  Select **Next**.

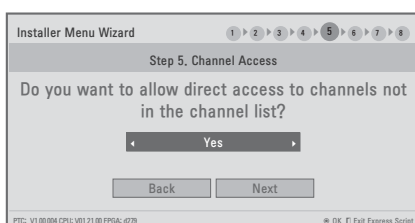
Step 4. Pillow Speaker



8 Select **Pillow Speaker Code**.

9 Select **Next**.

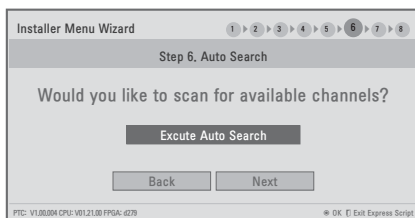
Step 5. Channel Access



10 Select **Yes or No**.

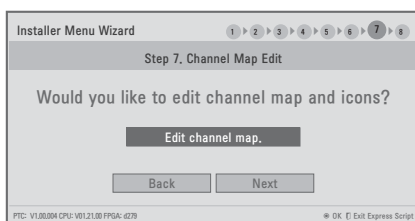
11 Select **Next**.

Step 6. Auto Search



12 Select **Excute Auto Search** to start the channel search.

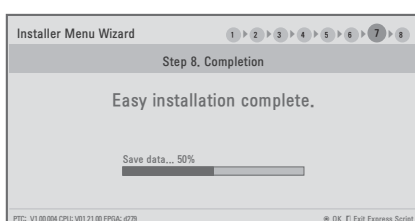
Step 7. Channel Map Edit



13 Select **Edit channel map**.

14 Make appropriate adjustments.

Step 8. Completion

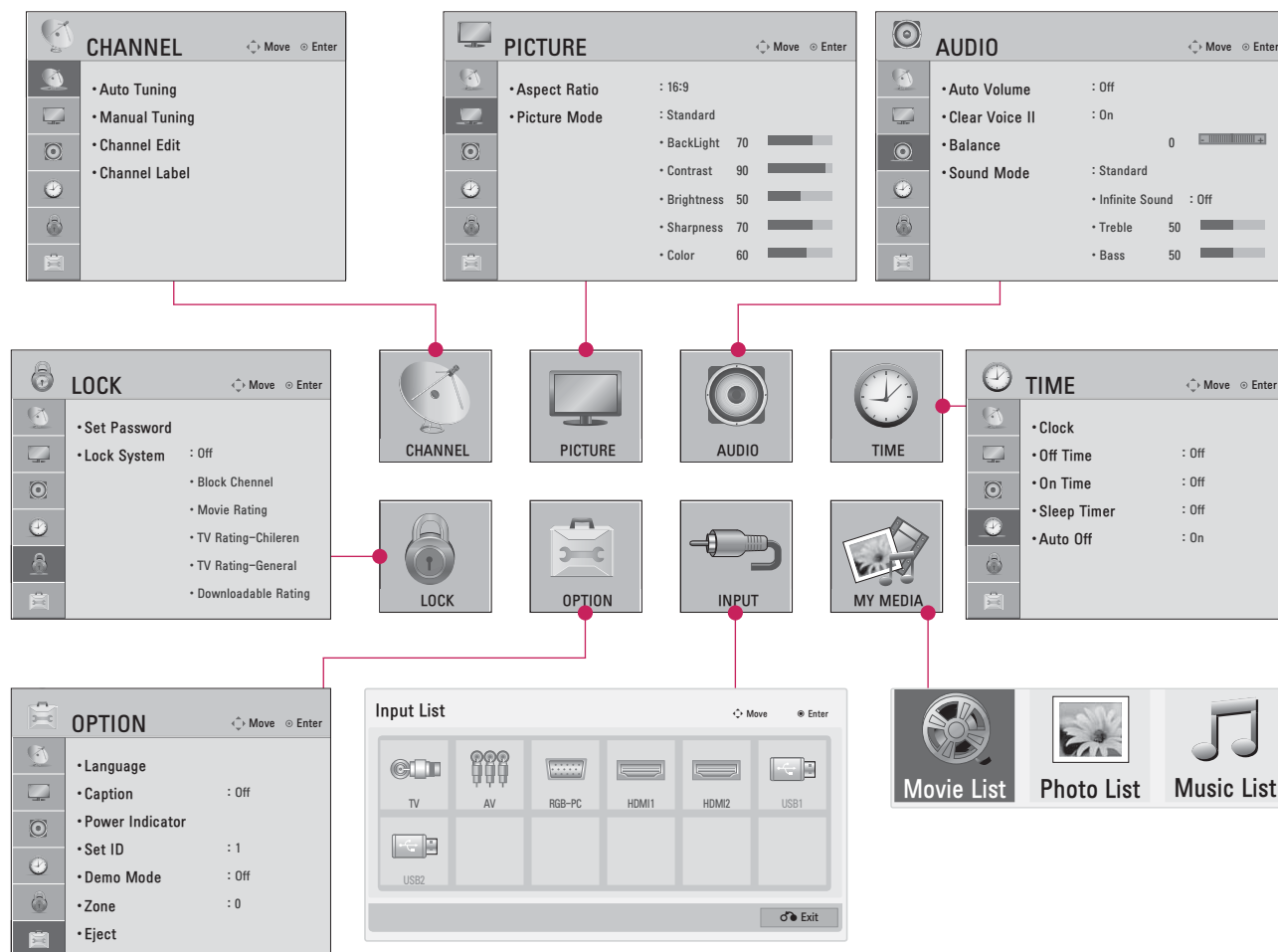


Select **Next**.

WATCHING TV / CHANNEL CONTROL

ON-SCREEN MENUS SELECTION

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



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

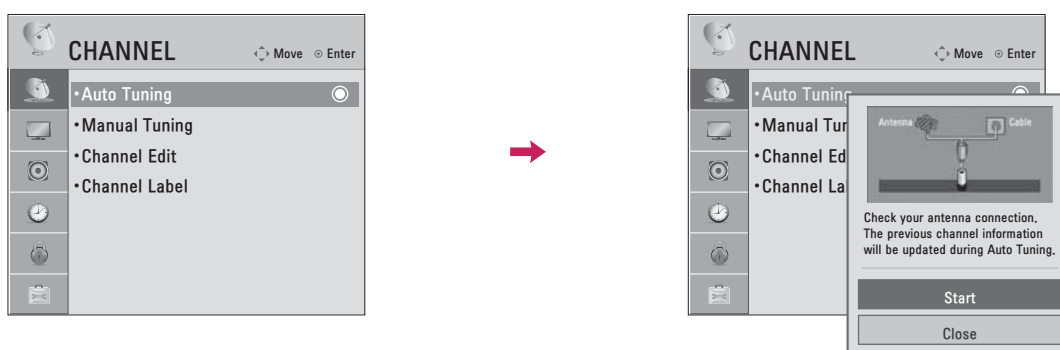
CHANNEL SETUP

Auto Scan (Auto Tuning)

Automatically finds all channels available through antenna or cable inputs, and stores them in memory on the channel list.

Run this function if you change your residence or move the TV. Also, make sure to run this function with the antenna connected during TV broadcasting hours.

Auto Tuning memorizes only the channels available at the time.



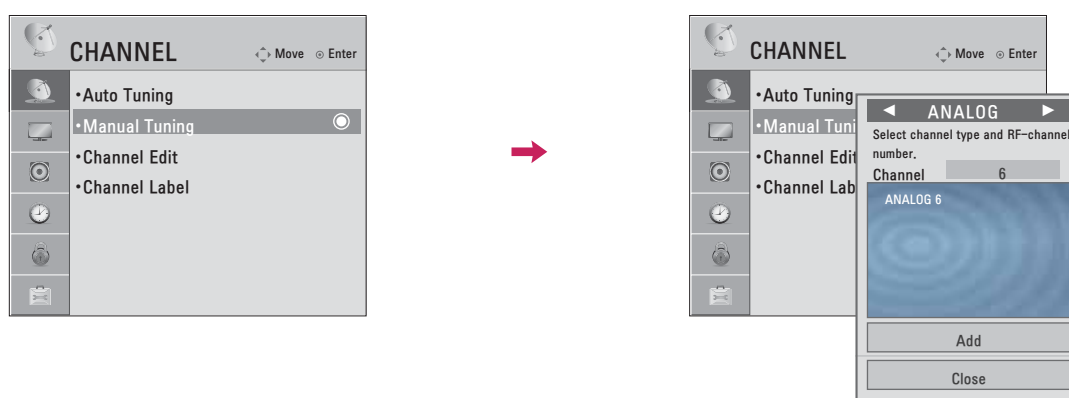
- 1   Select **CHANNEL**.
- 2   Select **Auto Tuning**.
- 3   Select **Yes**.
- 4  Run **Auto tuning**.
- 5  Return to the previous menu.
-  Return to TV viewing.

- The TV will ask for a password if parental control has been activated (LOCK Menu). Use the password you set up in the LOCK Menu to allow a channel search.
- When setting the Auto tuning or Manual tuning, the number of maximum channel you can store is 700. It is subject to change depending on the broadcasting signal environment.
- Automatically finds all channels available through antenna or cable inputs, and stores them in memory on the channel list.

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.



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

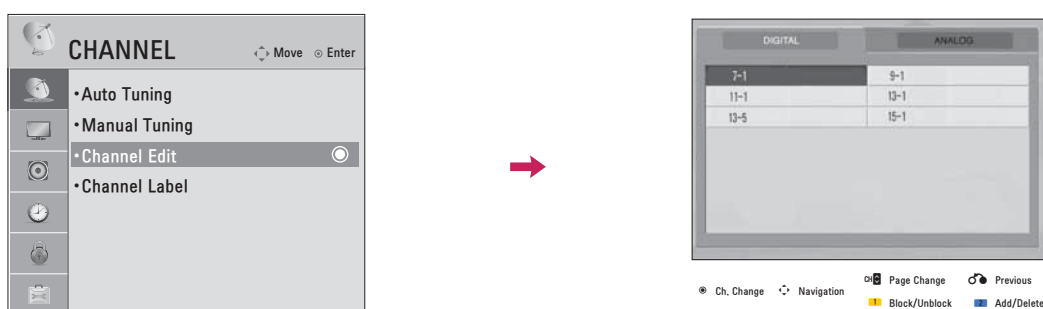
- The TV will ask for a password if parental control has been activated (**LOCK** Menu). Use the password you set up in the **LOCK** Menu to allow a channel search.
- When setting the Auto tuning or Manual tuning, the number of maximum channels you can store is 700. It is subject to change depending on the broadcasting signal environment.

Channel Editing

The channels in the Channel Edit List are displayed in black and the channels deleted from the Channel Edit List are displayed in blue.

When a channel number is deleted, it means that you will be unable to select it using **CH** $\wedge$ $\vee$ button during TV viewing.

If you wish to select the deleted channel, directly enter the channel number with the **NUMBER** buttons or select it in the **Channel Edit** menu.



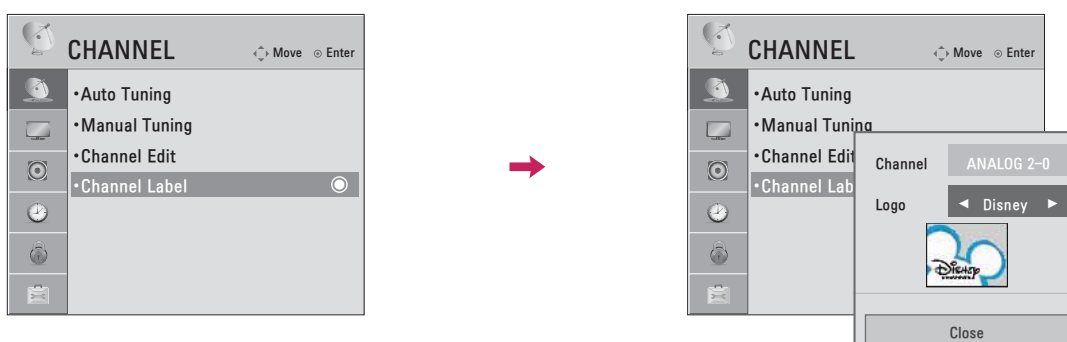
- 1   Select **CHANNEL**.
- 2   Select **Channel Edit**.
- 3   Select a channel.
- 4  Select channel you want to add or delete.
- 5  Return to the previous menu.
-  Return to TV viewing.

WATCHING TV / CHANNEL CONTROL

CHANNEL LABEL

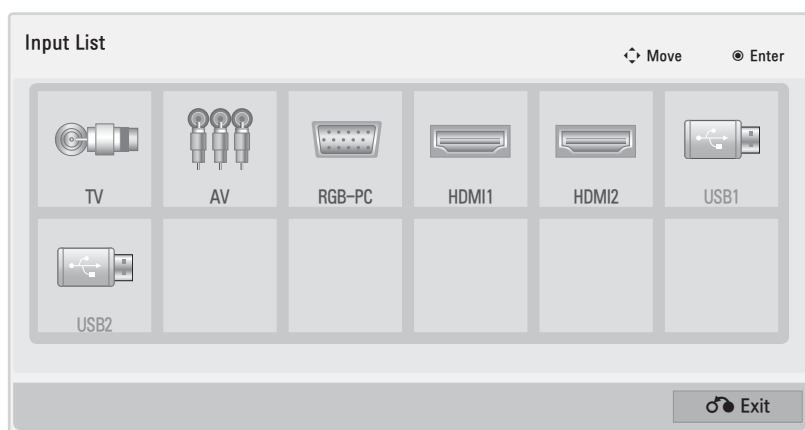
Choose preset labels for your channels.

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.

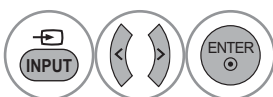


- 1   Select **CHANNEL**.
- 2   Select **Channel Edit**.
- 3   Select a channel.
- 4  Select a channel to set logo.
- 5   Select the appropriate logo for the channel.
- 6  Return to the previous menu.
-  Return to TV viewing.

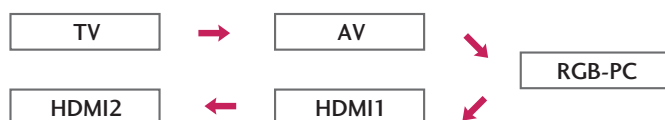
INPUT LIST



1



Select the desired input source.

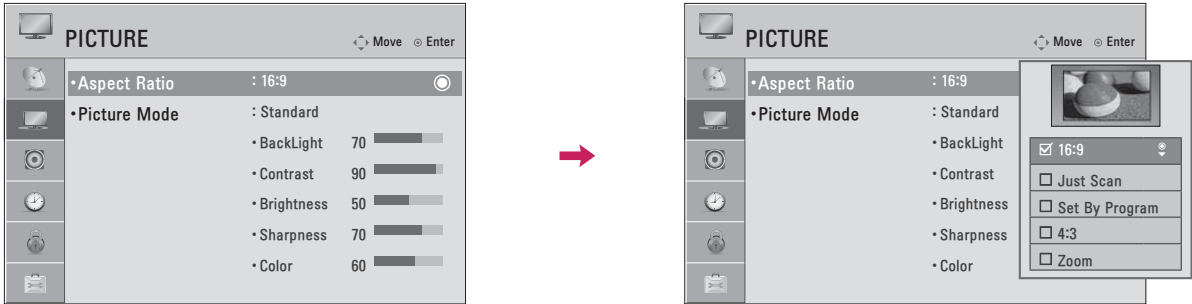


- **TV:** Select it to watch over-the-air, cable and digital cable broadcasts.
- **AV:** Select them to watch a VCR or other external equipment.
- **RGB-PC:** Select it to view PC input.
- **HDMI1-2:** Select them to watch high definition devices.

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. You can select a different aspect ratio depending on input source (analog broadcasting, digital broadcasting, aux).



-   Select **PICTURE**.
-   Select **Aspect Ratio**.
-   Select the desired picture format.
-  Return to the previous menu.
-  Return to TV viewing.

16:9

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

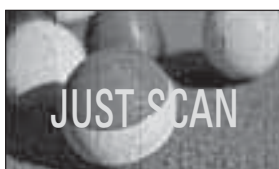


Just Scan

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.



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.



Zoom

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

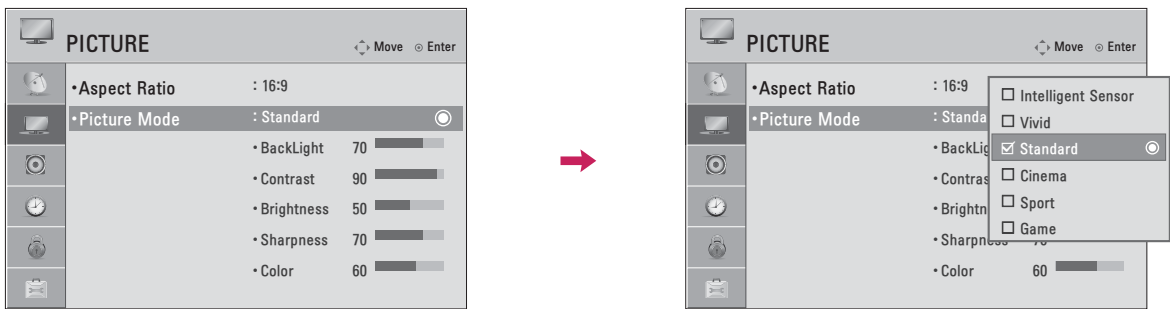


PICTURE CONTROL

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



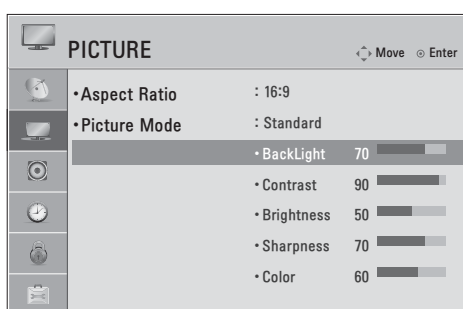
Return to the previous menu.
- 

Return to TV viewing.

- When selecting **Intelligent Sensor** is changed to **Auto** automatically.
- When selecting **Intelligent Sensor**, it is changed contrast, brightness, sharpness, color and tint automatically.
- **Vivid, Standard, Natural, Cinema, Sport, and Game** Settings are preset for the optimum picture quality at the factory and are adjustable.
- **Intelligent Sensor**: The most suitable picture is automatically adjusted according to the surrounding conditions.
- **Vivid**: This is the mode to maximize the effect of the video in the retail store. Strengthen the contrast, brightness, color and sharpness for vivid picture.
- **Standard**: This is the mode to realize optimum viewing condition for the general user.
- **Cinema**: This mode optimizes video for watching movies.
- **Sport**: This is the video mode to emphasize dynamic video and primary color (e.g, white, uniform, grass, sky blue etc.) by realizing the optimal screen for sports.
- **Game**: This is the mode to realize fast response speed in a fast gaming screen.

MANUAL PICTURE ADJUSTMENT - USER MODE

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



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

PICTURE CONTROL

PICTURE IMPROVEMENT TECHNOLOGY

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

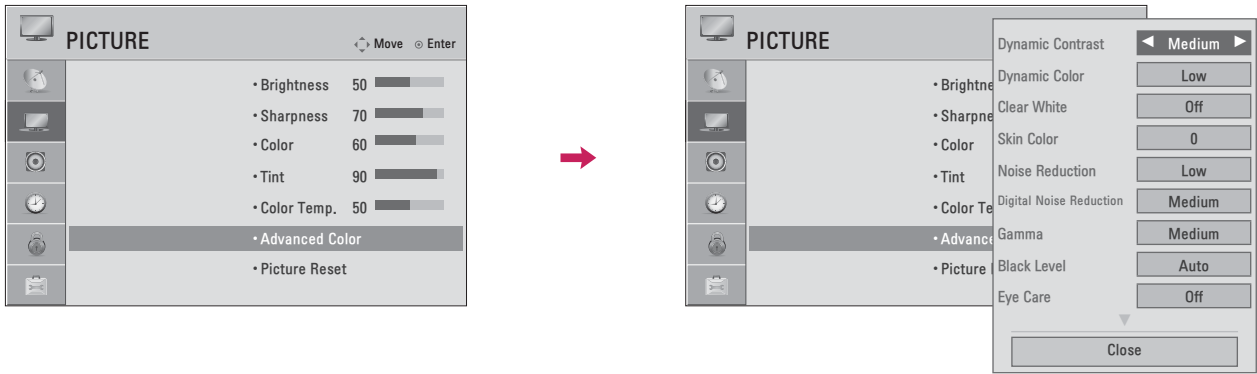
Dynamic Color: Adjusts the color of the reflection automatically to reproduce as close as possible natural colors.

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.

Color Gamut: Maximize the utilization of color to increase color quality.

Edge Enhancer: Show clearer and distinctive yet natural edges in of the video. This function is enabled in "Picture Mode - Cinema".



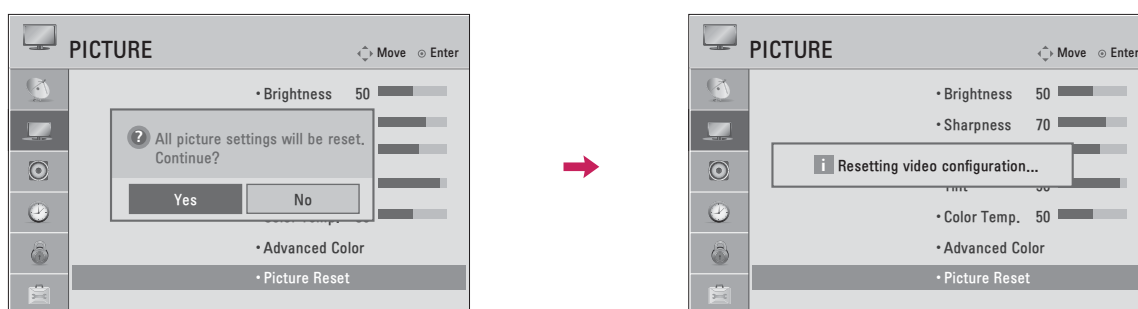
-   Select **PICTURE**.
-   Select **Advanced Control**.
-   Select your desired options.
-  Make appropriate adjustments.
-  Return to the previous menu.
-  Return to TV viewing.

Dynamic Contrast	■ Adjusts the contrast to keep it at the best level according to the brightness of the screen. The picture is improved by making bright parts brighter and dark parts darker.
Dynamic Color	■ Adjusts screen colors so that they look livelier, richer and clearer. This feature enhances hue, saturation and luminance so that red, blue, green and white look more vivid.
Clear White	■ Make the white area of screen brighter and more white.
Skin Color	■ It detects the skin area of video and adjusts it to express a natural skin color.
Noise Reduction	■ Reduces screen noise without compromising video quality.
Digital Noise Reduction	■ Removes noise caused by compressing video.
Gamma	Low : Make dark and middle gray level area of the picture brighter. Medium: Express original picture levels. High: Make dark and middle gray level area of the picture darker. ■ You can adjust brightness of dark area and middle gray level area of the picture.
Black Level	Low: The reflection of the screen gets darker. High: The reflection of the screen gets brighter. Auto: Realizing the black level of the screen and set it to High or Low automatically. ■ Set black level of the screen to proper level. ■ This function enables to select 'Low' or 'High' in the following mode: AV (NTSC-M), HDMI or Component. Otherwise, 'Black level' is set to 'Auto'.
Eye Care	■ Adjust the brightness of the screen to prevent the screen from being too bright. Dims extremely bright pictures.
Real Cinema	■ Makes video clips recorded in film look more natural by eliminating judder effect.
Color Gamut	■ Maximize the utilization of colors to increase color quality. Standard: Displays standard set of colors. Wide: Increase number of colors used.
xvYCC	■ This produces richer colors. ■ This feature represents rich color as much as conventional video signal. ■ This function is enabled in "Picture Mode - Cinema, Expert" when a xvYCC signal is inputted through HDMI.

PICTURE CONTROL

PICTURE RESET

Settings of the selected picture modes return to the default factory settings.



- 1   Select **PICTURE**.
- 2   Select **Picture Reset**.
- 3   Select **Yes**.
- 4  Initialize the adjusted value.
- 5  Return to TV viewing.

DEMO MODE

Displays a slide show to explain the various features of this TV.



- 1   Select **OPTION**.
- 2   Select **Demo Mode**.
- 3   Select **On** to show the various feature of the TV.

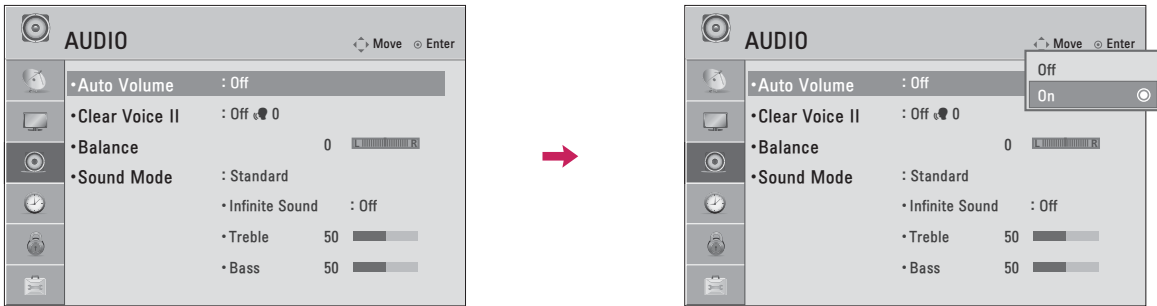
- 4  Return to TV viewing.
After a while, **Demo Mode** starts.
If you want to stop the demo, press any button(Except VOL +, - and MUTE button).

SOUND & LANGUAGE CONTROL

AUTO VOLUME LEVELER (AUTO VOLUME)

Auto Volume makes sure that the volume level remains consistent whether you are watching a commercial or a regular TV program.

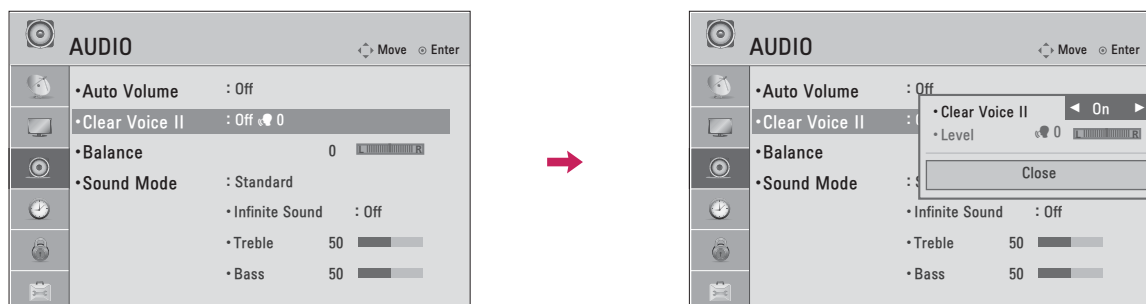
Because each broadcasting station has its own signal conditions, volume adjustment may be needed every time the channel is changed. This feature allows users to enjoy stable volume levels by making automatic adjustments for each program.



-   Select **AUDIO**.
-   Select **Auto Volume**.
-   Select **On** or **Off**.
-  Return to the previous menu.
-  Return to TV viewing.

CLEAR VOICE II

By differentiating the human sound range from others, it improves the sound quality of voices.



- 1   Select **AUDIO**.
- 2   Select **Clear Voice II**.
- 3   Select **On** or **Off**.

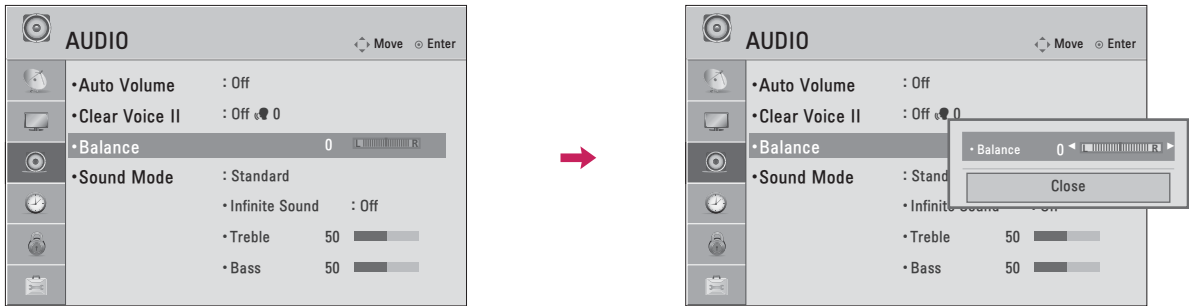
Adjustment for Clear Voice II Level With selecting **On**

- 4   Select **Level**.
- 5   Make appropriate adjustments.
- 6  Return to the previous menu.
-  Return to TV viewing.

SOUND & LANGUAGE CONTROL

BALANCE

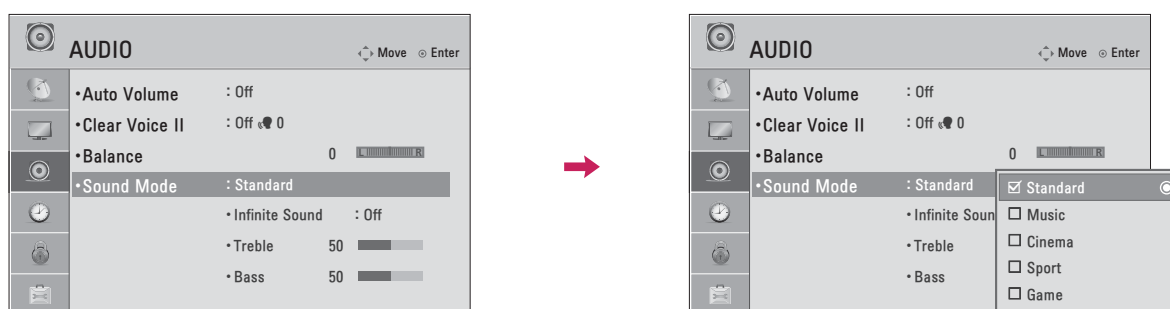
Adjust the left/right sound of speaker to suit your taste and room situations.



- 1   Select **AUDIO**.
- 2   Select **Balance**.
- 3   Make appropriate adjustments.
- 4  Return to the previous menu.
-  Return to TV viewing.

PRESET SOUND SETTINGS (SOUND MODE)

Sound Mode lets you enjoy the best sound without any special adjustment as the TV sets the appropriate sound options based on the program content.



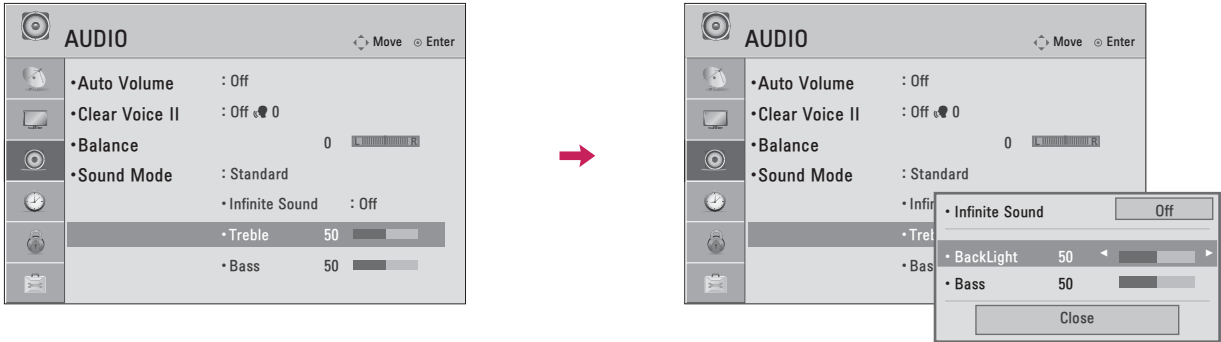
- 1   Select **AUDIO**.
- 2   Select **Sound Mode**.
- 3   Select **Standard, Music, Cinema, Sport, or Game**.
- 4  Return to the previous menu.
-  Return to TV viewing.

- **Standard, Music, Cinema, Sport, and Game** are preset for optimum sound quality at the factory.
- **Standard:** Offers standard-quality sound.
- **Music:** Optimizes sound for listening to music.
- **Cinema:** Optimizes sound for watching movies.
- **Sport:** Optimizes sound for watching sports events.
- **Game:** Optimizes sound for playing games.

SOUND & LANGUAGE CONTROL

SOUND SETTING ADJUSTMENT - USER MODE

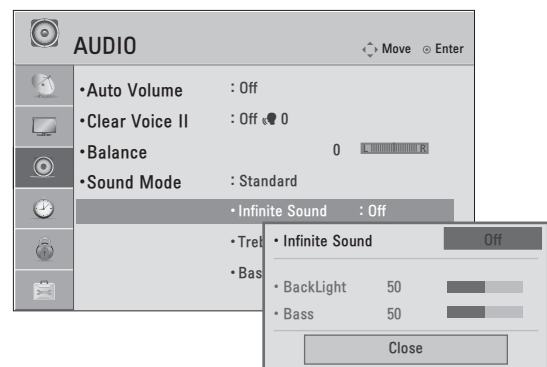
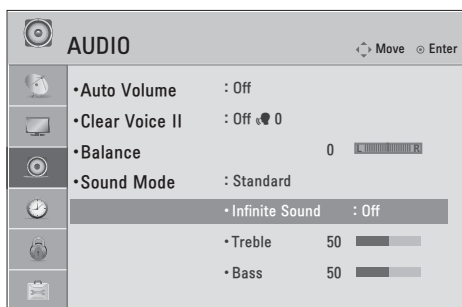
Adjust the sound to suit your taste and room situations.



-   Select **AUDIO**.
-   Select **Sound Mode**.
-   Select **Standard**, **Music**, **Cinema**, **Sport**, or **Game**.
-   Select **Treble** or **Bass**.
-   Make appropriate adjustments.
-  Return to the previous menu.
-  Return to TV viewing.

INFINITE SOUND

Select this option to sound realistic.



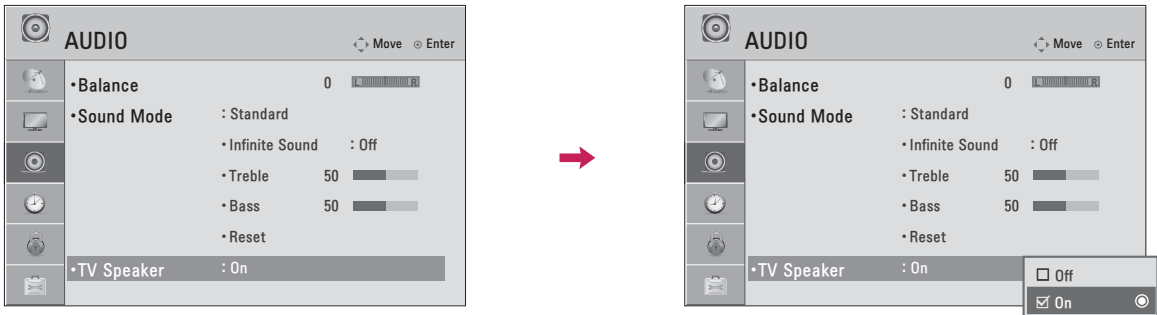
- 1   Select **AUDIO**.
- 2   Select **Infinite Sound**.
- 3   Select **On** or **Off**.
- 4  Return to the previous menu.
-  Return to TV viewing.

- If sound quality or volume is not at the level you want, it is recommended to use a separate home theater system or amp to cope with different user environments.
- If you select “**Clear Voice II - On**”, **Infinite Sound** feature will not operate.
- **Infinite Sound**: Infinite Sound is a patented LG technology that solves the problem of playing 5.1 multichannel content over two speakers.

SOUND & LANGUAGE CONTROL

TV SPEAKERS ON/OFF SETUP

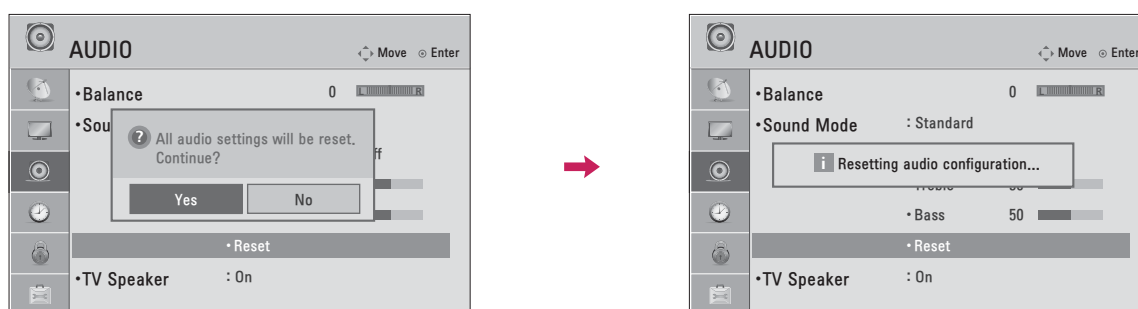
Turn the TV speakers off if using external audio equipment. (Except Pillow Speaker, Speaker out 8×)
In **AV**, **Component**, **RGB** and **HDMI** with HDMI to DVI cable, the TV speaker can be operational even when there is no video signal.
If you wish to use an external Hi-Fi system or a Infinite System, turn off the TV's internal speakers.



- 1   Select **AUDIO**.
- 2   Select **TV Speaker**.
- 3   Select **On** or **Off**.
- 4  Return to the previous menu.
-  Return to TV viewing.

AUDIO RESET

Settings of the selected Sound Mode return to the default factory settings.

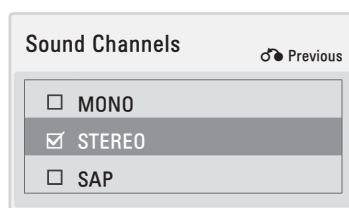


- 1   Select **AUDIO**.
- 2   Select **Reset**.
- 3  Initialize the adjusted value.
- 4  Return to TV viewing.

SOUND & LANGUAGE CONTROL

STEREO/SAP BROADCAST SETUP

For Analog only: This TV can receive MTS stereo programs and any SAP (Secondary Audio Program) that accompanies the stereo program if the station transmits an additional sound signal. Mono sound is automatically used if the broadcast is only in Mono.



1



Each time you press the **SAP** button,
Analog: **Mono**, **Stereo**, or **SAP** appear in turn.

Digital: **English**, **Spanish**

■ If other languages available on the digital
signal, select them with the **SAP** button.

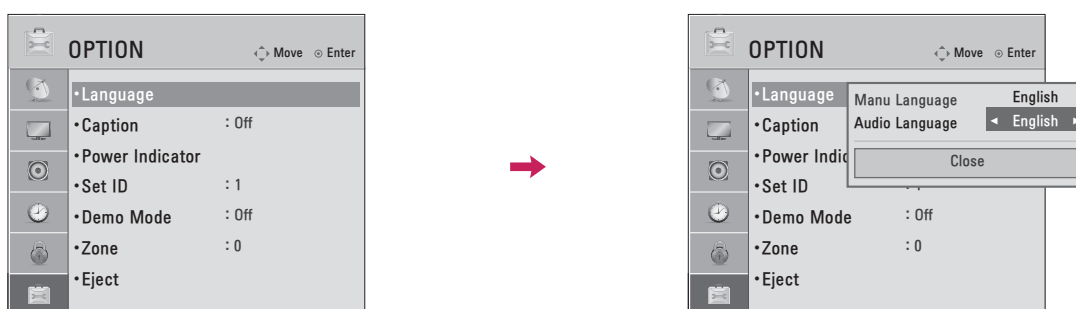
2



Return to TV viewing.

AUDIO LANGUAGE

Other languages may be available if a digital signal is provided by the broadcasting station.
This feature operates only in DTV mode.

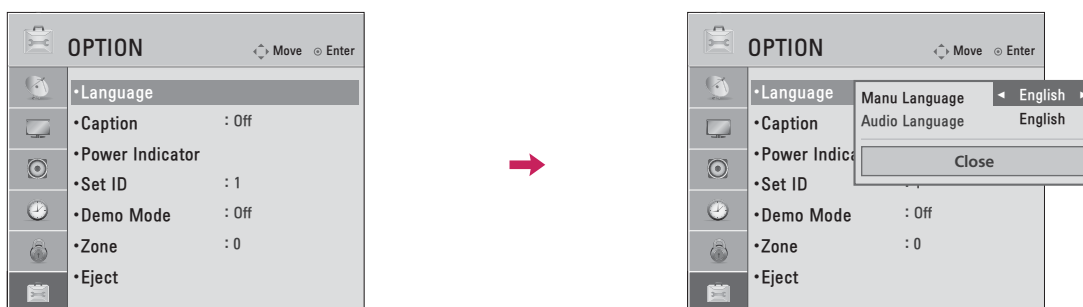


- 1   Select **OPTION**.
- 2   Select **Audio Language**.
- 3   Select your desired language.
- 4  Return to the previous menu.
-  Return to TV viewing.

SOUND & LANGUAGE CONTROL

ON-SCREEN MENUS LANGUAGE SELECTION

The menus can be shown on the screen in the selected language.



- 1   Select **OPTION**.
- 2   Select **Menu Language**.
- 3   Select your desired language.
From this point on, the on-screen menus will be shown in the selected language.
- 4  Return to the previous menu.
-  Return to TV viewing.

CAPTION MODE

Caption must be provided to help people with hearing loss watch TV.
This feature operates only in TV, AV1-2 mode.

1

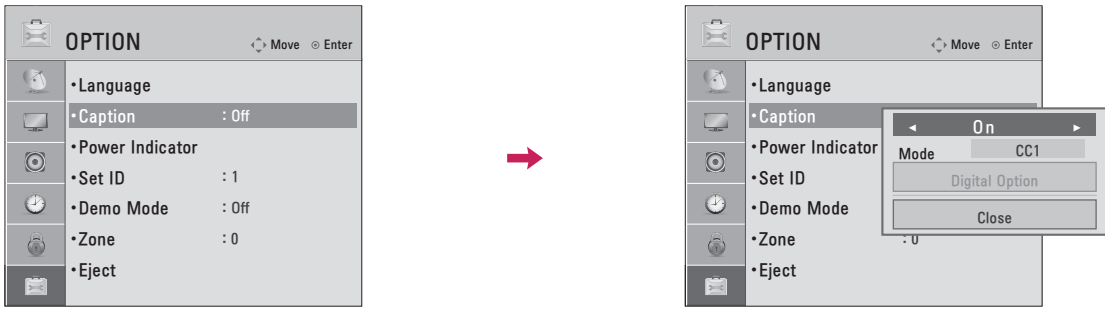


Select Caption **On** or **Off**.

■ When selecting **Off**, Sub-menus for Analog, DTV, and Digital Option become disabled.

Analog Broadcasting System Captions

Captions provided to help people with hearing loss watch TV. Select a caption mode for displaying captioning information if provided on a program. Analog caption displays information at any position on the screen and is usually the program's dialog. Caption/Text, if provided by the broadcaster, would be available for both digital and analog channels on the Antenna/Cable. This TV is programmed to memorize the caption/text mode which was last set when you turned the power off. This function is only available when **Caption Mode** is set **On**.



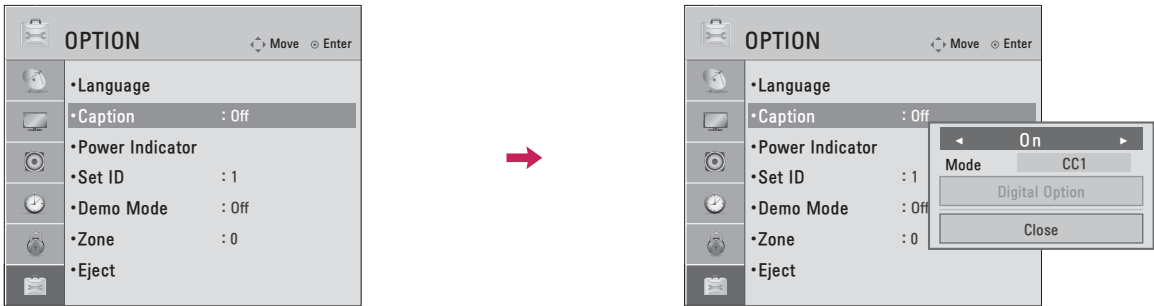
- 1
- 
- 
- Select **OPTION**.
- 2
- 
- 
- Select **Caption**.
- 3
- 
- 
- Select **On**.
- 4
- 
- 
- Select **CC1-4** or **Text1-4**.
- 5
- 
- Return to the previous menu.
- 
- Return to TV viewing.

- **CAPTION**
- The term for the words that scroll across the bottom of the TV screen; usually the audio portion of the program provided for the hearing impaired.
- **TEXT**
- The term for the words that appear in a large black frame and almost cover the entire screen; usually messages provided by the broadcaster.

SOUND & LANGUAGE CONTROL

Digital Broadcasting System Captions

Choose the language you want the DTV Captions to appear in.
Other Languages can be chosen for digital sources only if they are included on the program.
This function in only available when **Caption Mode** is set **On**.

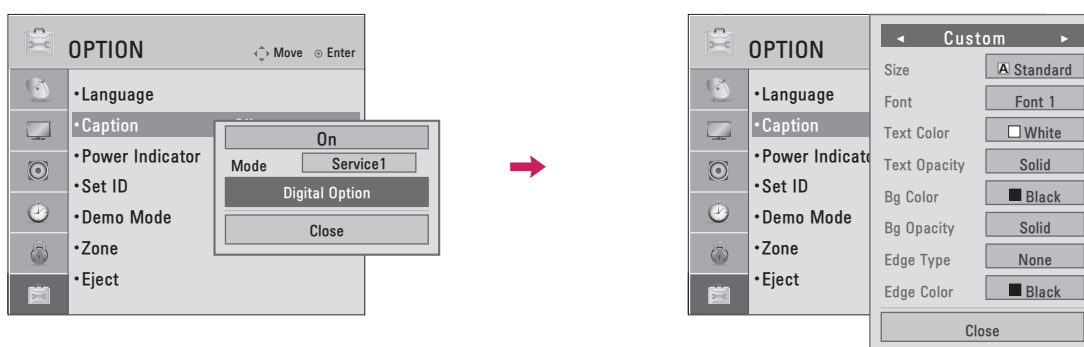


-   Select **OPTION**.
-   Select **Caption**.
-   Select **On**.
-   Select **CC1-4, Text1-4, or Service1-6**.
-  Return to the previous menu.
-  Return to TV viewing.

Caption Option

Customize the DTV captions that appear on your screen.

This function is only available when Caption Mode is set On.



1   Select **OPTION**.

2   Select **Caption**.

3   Select **On**.

4   Select **Digital Option**.

5   Select **Custom**.

6   Customize the **Size**, **Font**, etc., to your preference.
A preview icon is provided at the bottom of the screen,
use it to see the caption language.

7  Return to the previous menu.

 Return to TV viewing.

- **Size:** Set the word size.
- **Font:** Select a typeface for the text.
- **Text Color:** Choose a color for the text.
- **Text Opacity:** Specify the opacity for the text color.
- **Bg (Background) Color:** Select a background color.
- **Bg (Background) Opacity:** Select the opacity for the background color.
- **Edge Type:** Select an edge type.
- **Edge Color:** Select a color for the edges.

TIME SETTING

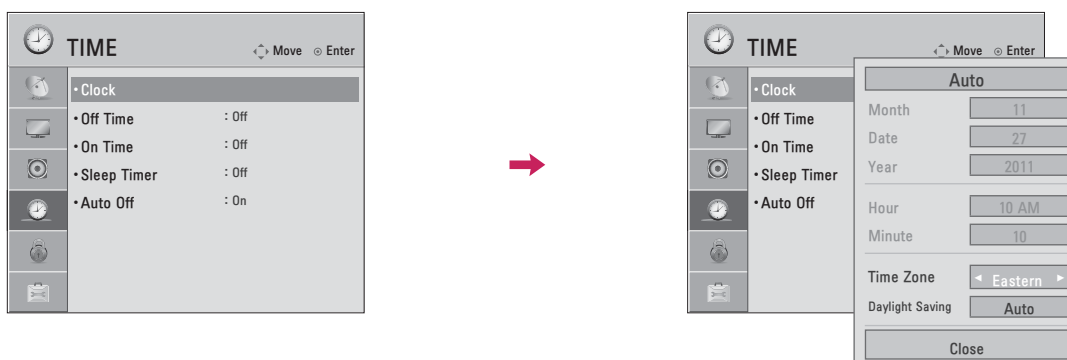
CLOCK SETTING

Auto Clock Setup

The time is set automatically from a digital channel signal.

The digital channel signal includes information for the current time provided by the broadcasting station.

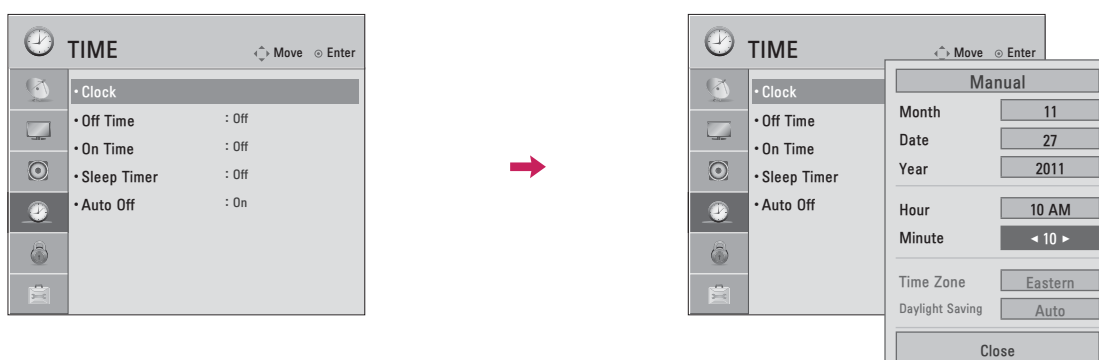
Set the clock manually if the current time is set incorrectly by the auto clock function.



- 1   Select **TIME**.
- 2   Select **Clock**.
- 3   Select **Auto**.
- 4   Select your viewing area time zone.
: **Eastern, Central, Mountain, Pacific, Alaska, or Hawaii.**
- 5   Select **Auto, Off, or On**
(depending on whether or not your viewing area observes Daylight Saving time).
- 6  Return to the previous menu.
-  Return to TV viewing.

Manual Clock Setup

If the current time setting is wrong, set the clock manually.



- 1   Select **TIME**.
- 2   Select **Clock**.
- 3   Select **Manual**.
- 4  Select the **Year, Month, Date, Hour, or Minutes** option.
- 5  Set the **Year, Month, Date, Hour, or Minutes** option.
- 6  Return to the previous menu.
-  Return to TV viewing.

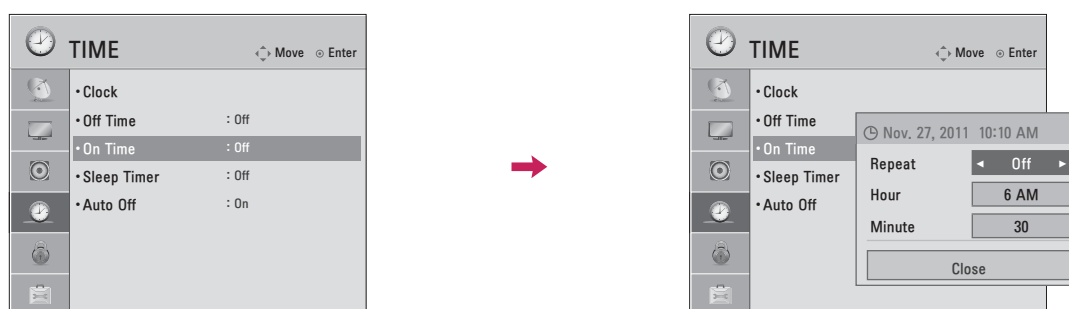
TIME SETTING

AUTO ON/OFF TIME SETTING

This function operates only if the current time has been set.

The **Off Time** function overrides the **On Time** function if they are both set to the same time.

The TV must be in standby mode for the **On Time** to work.



- 1   Select **TIME**.
- 2   Select **Off Time** or **On Time**.
- 3   Select **Repeat**.
- 4  Select **Off**, **Once**, **Daily**, **Mon.~Fri.**, **Mon.~Sat.**, **Sat.~Sun.**, or **Sun..**.
- 5   Select and set **Hour** or **Minute**.
- 6  Return to the previous menu.
-  Return to TV viewing.

SLEEP TIMER SETTING

The Sleep Timer turns the TV off at the preset time.

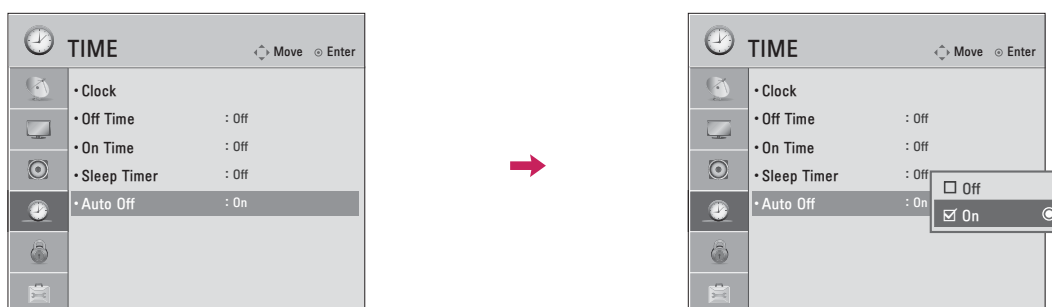
Note that this setting is cleared when the TV is turned off.

- 1  Press the **TIMER** button repeatedly to select the number of minutes.
Sleep timer options: **Off, 10, 20, 30, 60, 90, 120, 180, and 240** minutes.
- 2  Return to TV viewing.

■ You can also adjust **Sleep Timer** in the **TIME** menu.

AUTO SHUT-OFF SETTING

If set to on and there is no input signal, the TV turns off automatically after 15 minutes.



- 1   Select **TIME**.
- 2   Select **Auto Off**.
- 3   Select **On** or **Off**.
- 4  Return to the previous menu.
-  Return to TV viewing.

PARENTAL CONTROL / RATINGS

Parental Control can be used to block specific channels, ratings and other viewing sources.

The Parental Control Function (V-Chip) is used to block program viewing based on the ratings sent by the broadcasting station. The default setting is to allow all programs to be viewed. Viewing can be blocked by choosing the type of the program and the categories. It is also possible to block all program viewing for a time period. To use this function, the following must be done :

1. Set ratings and categories to be blocked.
2. Specify a password
3. Enable the lock

V-Chip rating and categories

Rating guidelines are provided by broadcasting stations. Most television programs and television movies can be blocked by TV Rating and/or Individual Categories. Movies that have been shown at the theaters or direct-to-video movies use the Movie Rating System (MPAA) only.

Ratings for Television programs including made-for-TV movies :

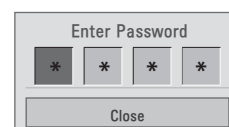
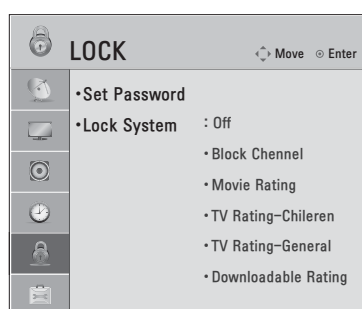
- | | |
|---------------------------------------|----------------------------------|
| ■ TV-G (General audience) | ■ TV-MA (Mature audience only) |
| ■ TV-PG (Parental guidance suggested) | ■ TV-Y (All children) |
| ■ TV-14 (Parents strongly cautioned) | ■ TV-Y7 (Children 7 years older) |

SET PASSWORD & LOCK SYSTEM

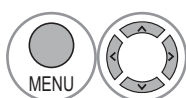
Setting up Your Password

Set up blocking schemes to block specific channels, ratings, and external viewing sources.

A password is required to gain access to this menu.



1



Select **LOCK**.

2



Input the password.

- Enter the password as requested.
- The TV is set up with the initial password "0-0-0-0".

Lock System

Enables or disables the blocking scheme you set up previously.



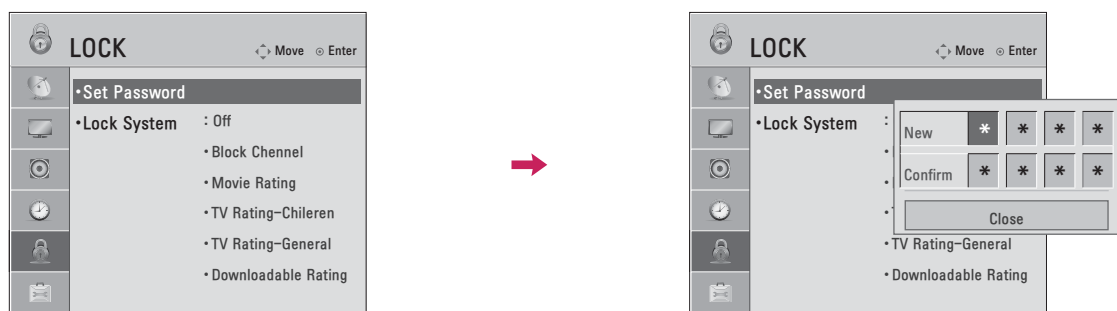
- 1   Select **LOCK**.
- 2   Input the password.
- 3   Select **Lock System**.
- 4   Select **On** or **Off**.
- 5  Return to the previous menu.
-  Return to TV viewing.

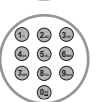
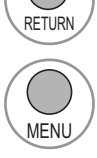
■ When you select **On**, the Lock System is enable.

PARENTAL CONTROL / RATINGS

Set Password

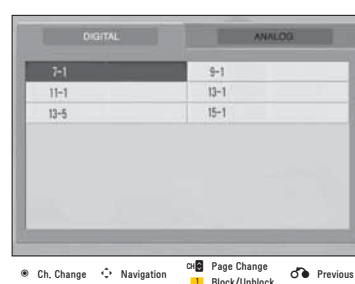
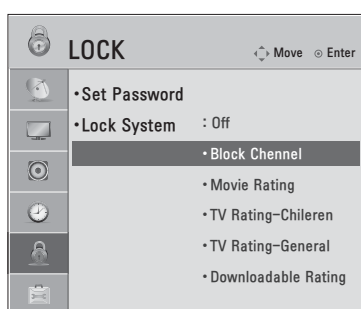
Change the password by inputting a new password twice.



-   Select **LOCK**.
-   Input the password.
-  Select **Set Password**.
-   Choose any 4 digits for your **new** password.
As soon as the 4 digits are entered, re-enter the same 4 digits on the **Confirm**.
-  Return to the previous menu.
-  Return to TV viewing.

CHANNEL BLOCKING

Blocks any channels that you do not want to watch or that you do not want your children to watch.



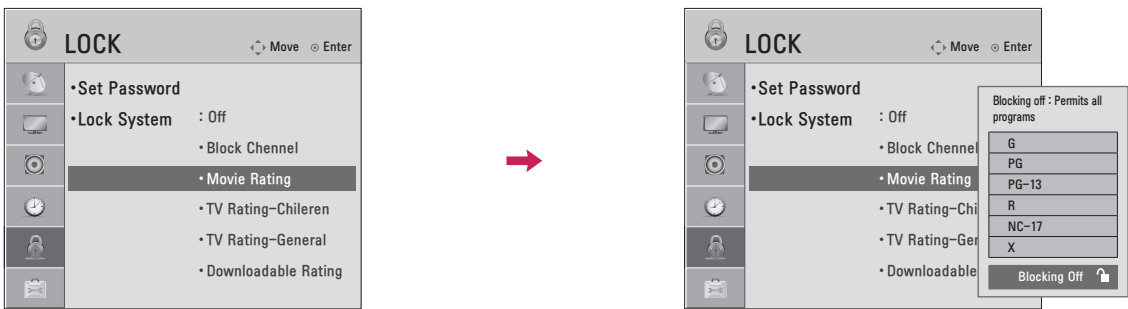
- 1   Select **LOCK**.
- 2   Input the password.
- 3  Select **Block Channel**.
- 4   Select a channel to block or unblock.
- 5  Block or unblock a channel.
- 6  Return to the previous menu.
-  Return to TV viewing.

PARENTAL CONTROL / RATINGS

MOVIE & TV RATING

Movie Rating (MPAA)

Blocks movies according to the movie ratings limits specified, so children cannot view certain movies. You can set the ratings limit by blocking out all the movies with the ratings above a specified level. Keep in mind that the movie ratings limit only applies to movies shown on TV, not TV programs, such as soap operas.

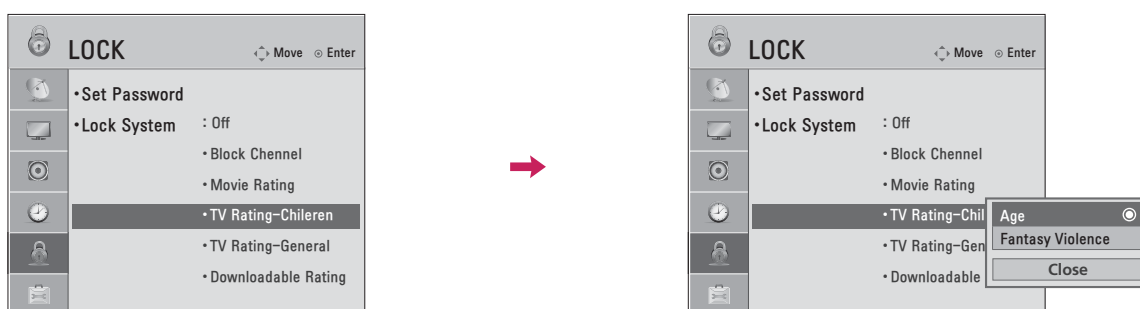


-   Select **LOCK**.
-   Input the password.
-  Select **Movie Rating**.
-   Select **G, PG, PG-13, R, NC-17, X,** or **Blocking Off**.
-  Return to the previous menu.
-  Return to TV viewing.

- **G** (General audience)
- **PG** (Parental guidance suggested)
- **PG-13** (Parents strongly cautioned)
- **R** (Restricted)
- **NC-17** (No one 17 and under admitted)
- **X** (Adult only)
- **Blocking Off** (Permits all programs)
- If you set PG-13: G and PG movies will be available, PG-13, R, NC-17 and X will be blocked.

TV Rating Children

Prevents children from watching certain children's TV programs, according to the ratings limit set. The children rating does not apply to other TV programs. Unless you block certain TV programs intended for mature audiences in the TV Rating - sub menu, your children can view those programs.



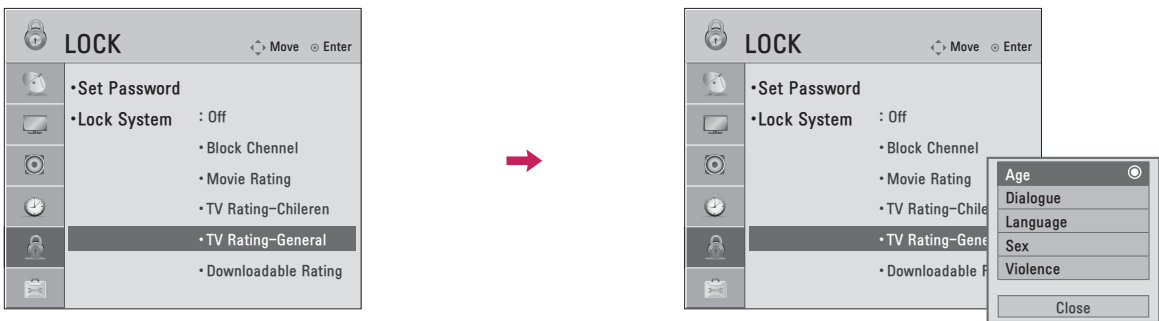
- 1   Select **LOCK**.
- 2   Input the password.
- 3  Select **TV Rating-Children**.
- 4   Select **Age** or **Fantasy Violence**.
- 5   Select block options.
- 6  Return to the previous menu.
-  Return to TV viewing.

- **Age** (applies to TV-Y, TV-Y7)
- **Fantasy Violence** (applies to TV-Y7)

PARENTAL CONTROL / RATINGS

TV Rating General

Based on the ratings, blocks certain TV programs that you and your family do not want to view.



- 1



Select **LOCK**.
- 2



Input the password.
- 3



Select **TV Rating-General**.
- 4



Select **Age, Dialogue, Language, Sex or Violence**.
- 5



Select block options.
- 6



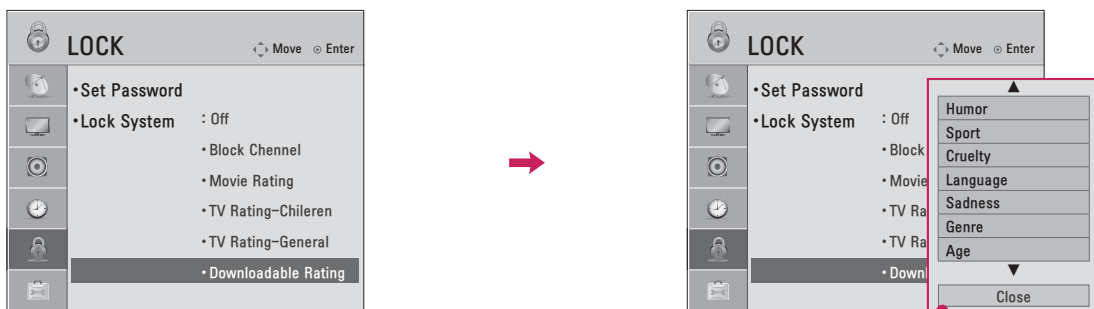
Return to the previous menu.
- 

Return to TV viewing.

- **Age**
(applies to TV-G,TV-PG,TV-14,TV-MA).
- **Dialogue** - sexual dialogue
(applies to TV-PG,TV-14).
- **Language** - adult language
(applies to TV-PG, TV-14, TV-MA).
- **Sex** - sexual situations
(applies to TV-PG, TV-14, TV-MA).
- **Violence**
(applies to TV-PG, TV-14, TV-MA).

DOWNLOADABLE RATING

This function operates only when TV has received Region5 Rating data.



■ Based on rating table, your TV's OSD (On Screen Display) may differ slightly from what is shown in this manual.

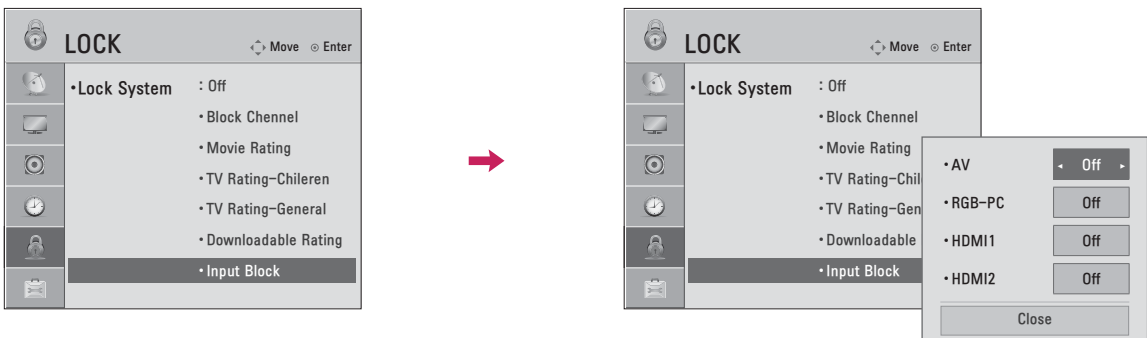
- 1   Select **LOCK**.
- 2   Input the password.
- 3  Select **Downloadable Rating**.
- 4   Select desired Downloadable Rating option.
- 5    Select desired option and block it.
- 6  Return to the previous menu.
-  Return to TV viewing.

■ If a Downloadable rating is locked, enter the password to unlock it temporarily.

PARENTAL CONTROL / RATINGS

EXTERNAL INPUT BLOCKING

Enables you to block an input.



-   Select **LOCK**.
-   Input the password.
-  Select **Input Block**.
-   Select input source.
-  Select **On** or **Off**.
-  Return to the previous menu.
-  Return to TV viewing.

USB

■ Image shown may differ from your TV.

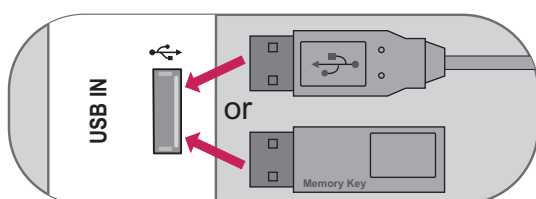
ENTRY MODES

When you connect a USB device, this pop-up menu is displayed automatically.

When the Pop-Up menu does not appear, you can select Photo List or Music List on Extra contents.

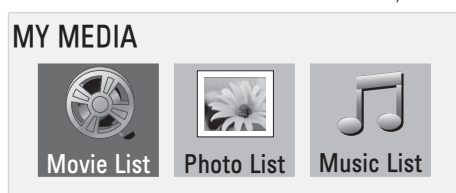
On a USB device, you can not add a new folder or delete an existing folder.

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



■ This TV can view JPG image files, HD DivX files or play MP3 audio files.

- 2   Select **Movie List**, **Photo List** or **Music List**.



- 3 

TV Rating General

- 1   Select **OPTION**.
- 2   Select **Eject**.
- 3 
- 4  Return to the previous menu.
-  Return to TV viewing.

Precautions with USB devices.

- ▶ Only a USB storage device is recognizable.
- ▶ If the USB storage device is connected through a USB hub, the device is not recognizable.
- ▶ A USB storage device using an automatic recognition program may not be recognized.
- ▶ A USB storage device which uses its own driver may not be recognized.
- ▶ The recognition speed of a USB storage device may depend on each device.
- ▶ In case of a card reader, up to four memory cards are concurrently recognizable.
- ▶ Please do not turn off the TV or unplug the USB device when the connected USB storage device is working. When such device is suddenly separated or unplugged, the stored files or the USB storage device may be damaged.
- ▶ Only use a USB storage device which has normal music, image or movie files.
- ▶ Please connect power to a USB storage device (over 0.4A) which requires an external power supply. If not, the device may not be recognized.
- ▶ Please connect a USB storage device with cable is offered by USB maker. If connected with cable is not offered by USB maker or an excessively long cable, the device may not be recognized.
- ▶ Some USB storage devices may not be supported or operate properly.
- ▶ File alignment method of USB storage device is similar to Window XP and filename can recognize up to 100 English characters.
- ▶ Please backup important files because data on the USB device may be damaged. Data management is the consumer's responsibility and as a result, the manufacturer does not cover data damage.
- ▶ Please use only a USB storage device which was formatted as a FAT32, NTFS file system provided with the Windows operating system. In case of a storage device formatted as a different utility programme which is not supported by Windows, it may not be recognized.
- ▶ Data in a USB storage device cannot be deleted in the NTFS file system.
- ▶ If your USB memory device has multiple partitions, or if you use a USB multi-card reader, you can use up to 4 partitions or USB memory devices.
- ▶ The recommended capacity is 1 TB or less for a USB external hard disk and 32GB or less for USB memory.
- ▶ Any device with more than the recommended capacity may not work properly.
- ▶ When using a USB HDD via the USB extension cable, connect a support electric power source.

MOVIE LIST

The movie list is activated once a USB drive is detected. It is used when playing movie files on the TV. It displays all of the video files it recognizes.

The On-Screen Display on your model may be slightly different.

Supported movie file

- Resolution: under 1920 pixel (width) x 1080 pixel (height)
- Frame Rate: under 30 frame/sec (1920x1080), under 60 frame/sec (1280x720)
- Max bitrate of playable video file: 20 Mbps (Mega bit per second)
- Bit rate : within 32 kbps to 320 kbps (MP3)
- Supported external subtitle format: *.smi/*.srt/*.sub (MicroDVD, Subviewer1.0/2.0)/*.ass/*.ssa/*.txt (TMPlayer)/*.psb (PowerDivX)
- Supported Internal subtitle format: only, XSUB (It is the subtitle format used in DivX6 files)

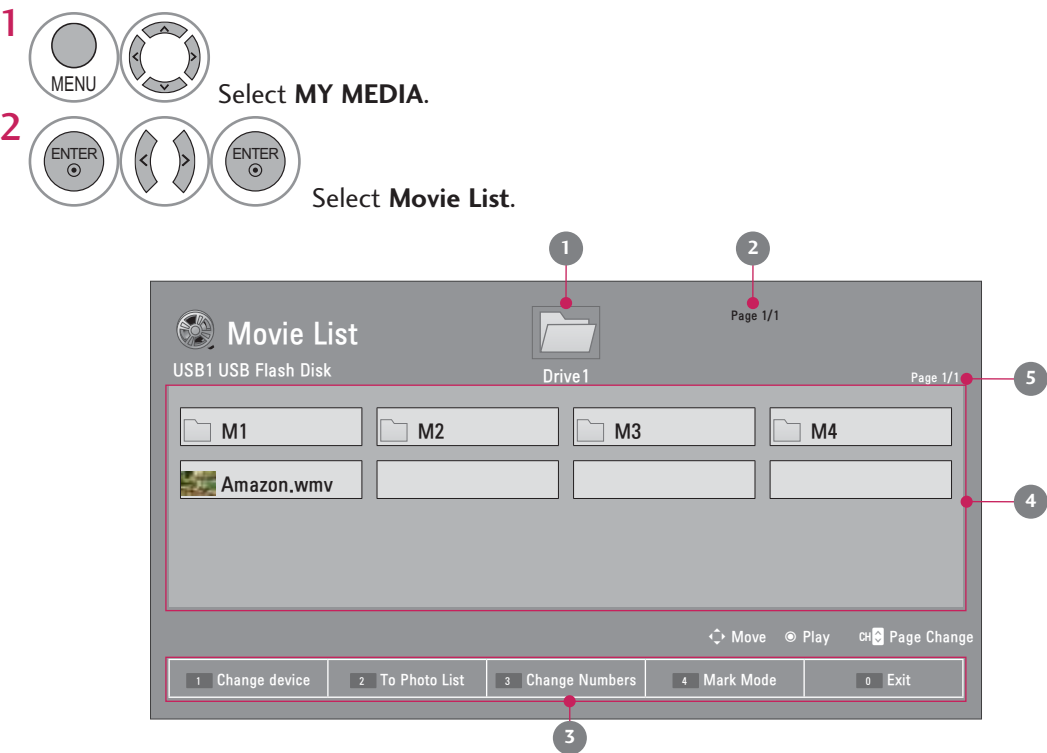
Precautions when playing the video files

- ▶ Some user-created subtitles may not work properly.
- ▶ Some special characters are not supported in subtitles.
- ▶ HTML tags are not supported in subtitles.
- ▶ Time information in an external subtitle file should be arranged in ascending order to be played.
- ▶ The screen may suffer temporary interruptions (image stoppage, faster playback, etc.) when the audio language is changed.
- ▶ A damaged video file may not be played correctly, or some functions may not be usable.
- ▶ Video files produced with some encoders may not be played correctly.
- ▶ If the video and audio structure of recorded file is not interleaved, the file not playback properly.
- ▶ Video with resolution higher than maximum resolution supported for each frame, cannot be guaranteed for smooth playback.
- ▶ Video files other than the specified types and formats may not work properly.
- ▶ The movie file encoded by the GMC (Global Motion Compensation) is not supported.
- ▶ Only 250 Korean characters, 500 letters and 500 numbers are supported for each line of the subtitle.
- ▶ Only 10000 sync blocks are supported within the subtitle file.
- ▶ We do not guarantee smooth playback of profiles encoded level 4.1 or higher in H.264/AVC.
- ▶ DTS Audio codec is not supported.
- ▶ A video file more than 30GB in file size is not supported for playback. The file size limit is dependent on the encoding environment.
- ▶ Playing a video via a USB connection that doesn't support high speed may not work properly.
- ▶ USB storage devices below USB 2.0 are supported as well. But they may not work properly in the movie list.
- ▶ The video file and its subtitle file must be located in the same folder.
At this time, a video file name and its subtitle file name must be identical for it to be displayed.
- ▶ When you are watching a movie via the Movie List function, you can adjust the picture with the ENERGY SAVING and AV MODE button on the remote control. User setup for each picture mode is not supported.

Supported Video Formats

File Extension name	Video Decoder	Audio Codec	Max Resolution
mpg, mpeg	MPEG1, MPEG2	MP2, MP3, Dolby Digital, LPCM	1920 x 1080 @ 30p (Only Motion JPEG 640x480@30p)
dat	MPEG1	MP2	
ts, trp, tp	MPEG2, H.264, AVS, VC1	MP2, MP3, Dolby Digital, AAC, HE-AAC	
vob	MPEG1, 2	MP2, MP3, Dolby Digital, LPCM	
mp4, mov	MPEG4, DivX 3.11, DivX 4.12, DivX 5.x, DivX 6, Xvid 1.00, Xvid 1.01, Xvid 1.02, Xvid 1.03, Xvid 1.10-beta1/2H.264	AAC, HE-AAC, MP3	
mkv	H.264, MPEG-1,2,4	MP2, MP3, Dolby Digital, AAC HE-AAC, LPCM	
divx, avi	MPEG2, MPEG4, DivX 3.11, DivX 4, DivX 5, DivX 6, Xvid 1.00, Xvid 1.01, Xvid 1.02, Xvid 1.03, Xvid 1.10-beta1/2H.264	MP2, MP3, Dolby Digital, LPCM, ADPCM, AAC, HE-AAC	
Motion JPEG (avi, mp4, mkv)	JPEG	LPCM, ADPCM	
asf, wmv	VC1	WMA	
flv	Sorenson H.263, H264	MP3, AAC	

Screen Components

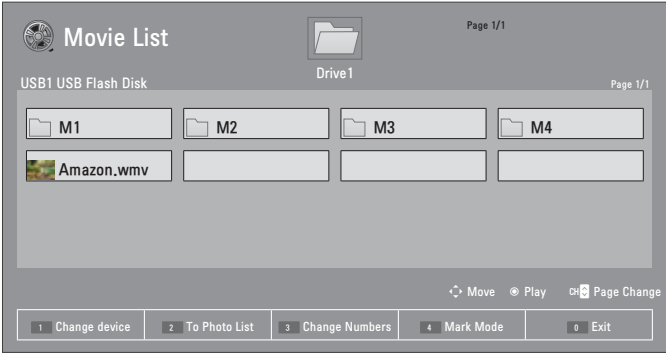


- 1 Moves to upper level folder
- 2 Current page/Total pages
- 3 Corresponding buttons on the remote control
- 4 Contents under the folder focused on 1
- 5 Current page/total pages of contents

1	TBD
2	Move to Photo List or Music List .
3	Changes the number or thumbnails displayed at a time.
4	Allows you to mark certain files.
0	Return to the previous menu.

MY MEDIA

Movie Selection



1

Select the target folder or drive.

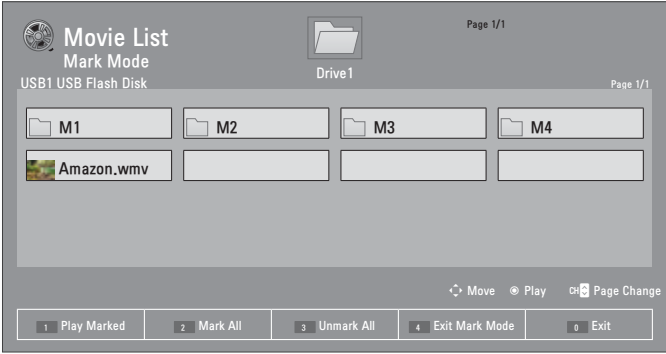
2

Select the desired movie title.

3

Play the movie file.

Mark Mode



1

Select the target folder or drive.

2

Select the desired movie title.

3

Mark your desired movie file.

4

Play the marked movie file.

1	Play the first selected file. Once a movie finishes playing, the next selected one will be played automatically.
2	Mark all files in the folder.
3	Deselect all marked files.
4	Exit the Mark Mode.

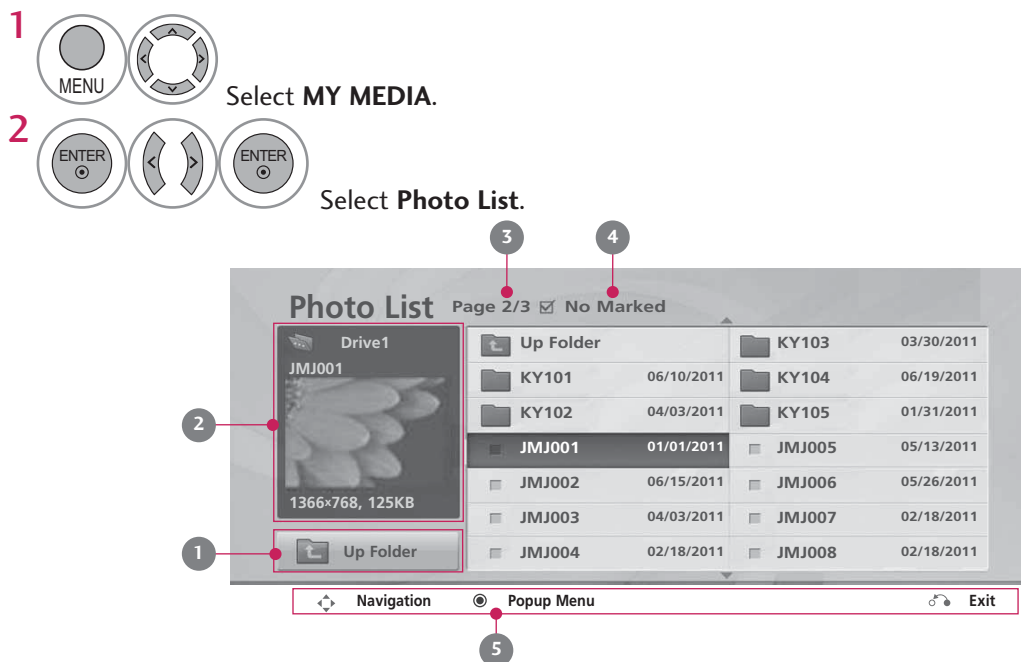
PHOTO LIST

This TV only supports picture in JPEG(.jpg) format.
The On-Screen Display on your model may be slightly different.

Supported photo file: *.JPG

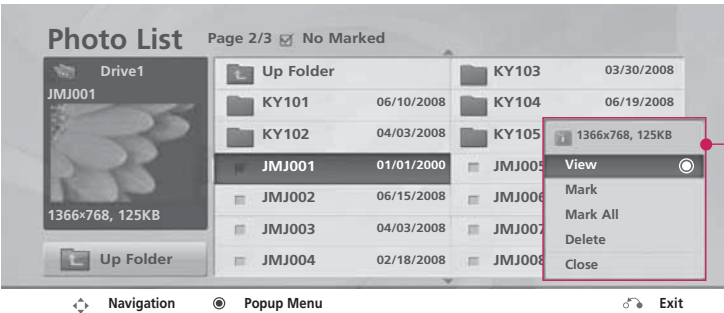
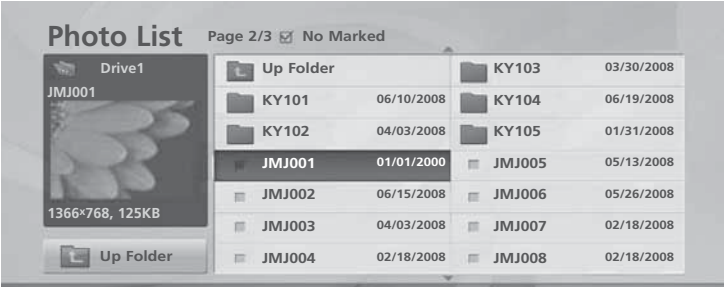
- You can view JPG files only.
- Only baseline scan is supported among JPG.
- Supported JPG size: 64 pixel (width) x 64 pixel (height) to 15360 pixel (width) x 8640 pixel (height)

Screen Components

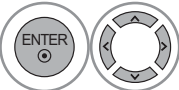


- 1 Moves to upper level folder
- 2 Preview: Displays the thumbnail/folder name of the photo in the selected folder
- 3 Current page/Total pages
- 4 Total number of marked photos
- 5 Corresponding buttons on the remote control

Photo Selection and Pop-up Menu



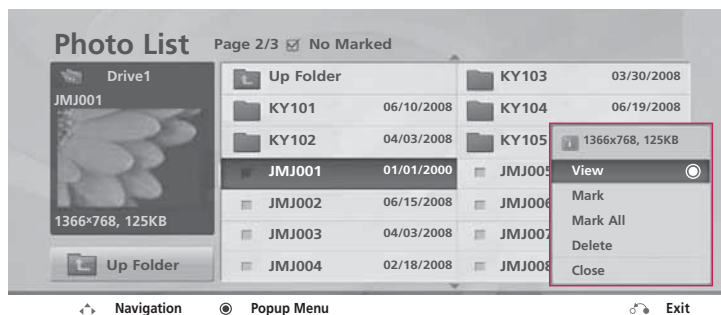
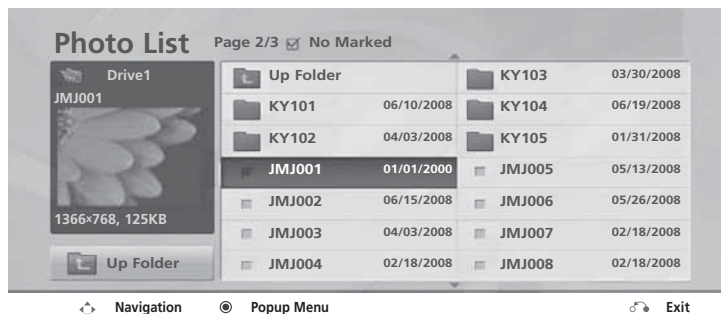
- When you select a file (not folder), this Pop-Up menu is displayed.
- ▶ **View:** Display the selected item.
 - ▶ **Mark:** Use to mark a photo.
 - ▶ **Unmark:** Use to unmark a photo.
 - ▶ **Mark All:** Mark all photos on the screen.
 - ▶ **Unmark All:** Deselect all marked photos.
 - ▶ **Delete or Delete Marked**
: Delete the selected photo item.
 - ▶ **Close:** Close the pop-up menu.

- 1  Select the target folder or drive.
- 2  Select the desired photos.
- 3  Show the Pop-up menu.
- 4  Select the desired Popup menu.

■ When one or more photos are marked, you can view individual photos or a slide show of the marked photos. If no photos are marked, you can view all photos individually or all photos in the folder in a slide show.

Full Screen Menu

You can change the Photo List view so that it fills the screen. More operations are available in full screen mode.

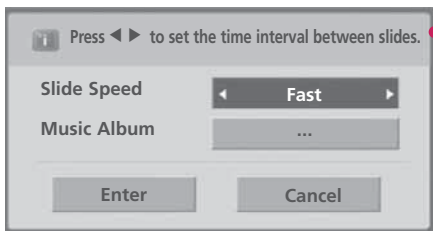


The aspect ratio of a photo may change the size of the photo displayed on the screen in full size. Press the **RETURN** button to move to the previous menu screen.

- 1  Select the target folder or drive.
- 2   Select the desired photos.
- 3  Show the Pop-up menu.
- 4  Select **View**.
- 5  The selected photo is displayed in full size.

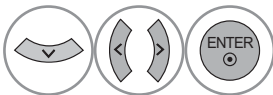
■ Use the **CH** ^ v button to navigate in the photo page.

MY MEDIA



- ▶ **Slideshow:** Selected photos are displayed during the slide show. If no photo is selected, all photos in the current folder are displayed during slide show.
 - Set the time interval of the slide show in **Option**.
- ▶ **BGM:** Listen to music while viewing photos in full size.
 - Set the BGM device and album in **Option**.
- ▶ **⤿ (Rotate):** Rotate photos.
 - Rotates the photo 90°, 180°, 270°, 360° clockwise.
- ▶ **Delete:** Delete photos.
- ▶ **Option:** Set values for **Slide Speed** and **Music Album**.
 - Use ^ v < > button and **ENTER** button to set values. Then go to **Enter** and press **ENTER** to save the settings.
 - You cannot change **Music Album** while BGM is playing.
- ▶ **Hide:** Hide the menu on the full-sized screen.
 - To see the menu again on the full-sized screen, press **ENTER** button to display.

6



Select the **Slideshow**, **BGM**, **⤿ (Rotate)**, **Delete**, **Option**, or **Hide**.

- Use < > button to select the previous or next photo.
- Use ^ v < > button to select and control the menu on the full-sized screen.

MUSIC LIST

You can use the Music List menu to play MP3 files from a USB storage device.

This TV cannot play back copy-protected files.

The On-Screen Display on your model may be slightly different.

Supported music file: *.MP3

Bit rate range 32 Kbps - 320 Kbps

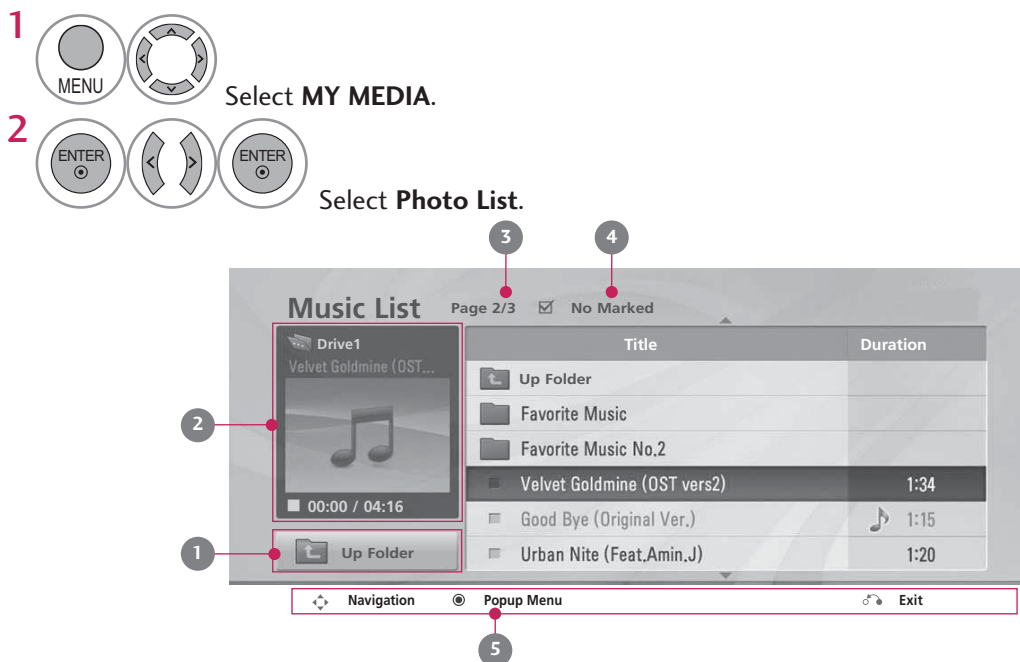
• Sampling rate (Sampling Frequency)

MPEG1 layer 3: 32 kHz, 44.1 kHz, 48 kHz

MPEG2 layer 3: 16 kHz, 22.05 kHz, 24 kHz

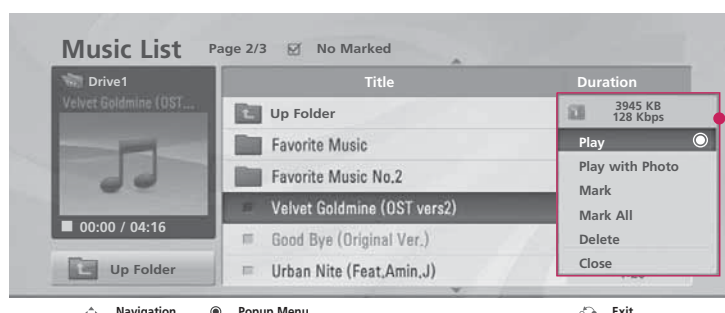
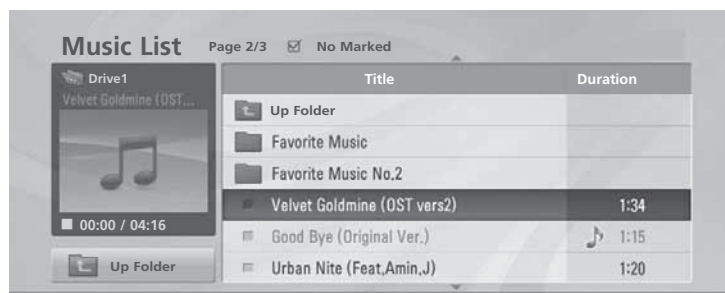
MPEG2.5 layer 3: 8 kHz, 11.025 kHz, 12 kHz

Screen Components



- 1 Moves to upper level folder
- 2 Preview: If a supported picture of the album jacket is in the file, it will be displayed here.
- 3 Current page/Total pages
- 4 Total number of marked files
- 5 Corresponding buttons on the remote control

Music Selection and Pop-up Menu



- ▶ **Play** (During stop): Play the selected file. Once a song finishes playing, the next selected one will be played. When there are no selected files to play, the next one in the current folder will be played. If you go to a different folder and press the **ENTER** button, the current song in playback will stop.
- ▶ **Play Marked**: Play the selected files. Once a file finishes playing, the next selected one will be played automatically.
- ▶ **Stop Play** (During playback): Stop the playing files.
- ▶ **Play with Photo**: Start playing the selected files and then move to the Photo List.
- ▶ **Mark**: Use to mark a file.
- ▶ **Unmark**: Use to unmark a file.
- ▶ **Mark All**: Mark all files in the folder.
- ▶ **Unmark All**: Deselect all marked files.
- ▶ **Delete** or **Delete Marked**: Delete the selected files.
- ▶ **Close**: Close the pop-up menu.

- 1 Select the target folder or drive.
- 2 Select the desired musics.
- 3 Show the Pop-up menu.
- 4 Select the desired Pop-up menu.
- 5 Return to TV viewing.

- Use the **CH** ^ v button to navigate in the music page.
- If no music is marked, all the music in the folder will be played in sequence. When one or more music files are marked, the marked music files will be played in sequence. If you want to listen to only one song repeatedly, just mark that one file and play.

- The play information box (as shown below) will automatically move across the screen when there is no user input to prevent a fixed image remaining on the screen for a extended period of time.



! NOTE

- ▶ When music is playing,  is displayed in front of the music play time.
- ▶ A damaged or corrupted music file that does not play displays 00:00 as the play time.
- ▶ Files downloaded from a paid service with copyright protection are not supported and will not play.
- ▶ Press **ENTER**, **■**, or **RETURN** button to stop the screen saver.

APPENDIX

TROUBLESHOOTING

The operation does not work normally.

The remote control doesn't work	■ Check to see if there is any object between the product and the remote control causing obstruction. Ensure you are pointing the remote control directly at the TV. ■ Ensure that the batteries are installed with correct polarity (+ to +, - to -). ■ Ensure that the correct remote operating mode is set: TV, VCR etc. ■ Install new batteries. *This feature is not available for all models.
Power is suddenly turned off	■ Is the sleep timer set? ■ Check the power control settings. Power interrupted.

The video does not work.

No picture & No sound	■ Check whether the product is turned on. ■ Try another channel. The problem may be with the broadcast. ■ Is the power cord inserted into wall power outlet? ■ Check your antenna direction and/or location. ■ Test the wall power outlet, plug another product's power cord into the outlet where the product's power cord was plugged in.
Picture appears slowly after switching on	■ This is normal, the image is muted during the product startup process. Please contact your service center, if the picture has not appeared after five minutes.
No or poor color or poor picture	■ Adjust Color in menu option. ■ Keep a sufficient distance between the product and the VCR. ■ Try another channel. The problem may be with the broadcast. ■ Are the video cables installed properly? ■ Activate any function to restore the brightness of the picture.
Horizontal/vertical bars or picture shaking	■ Check for local interference such as an electrical appliance or power tool.
Poor reception on some channels	■ Station or cable product experiencing problems, tune to another station. ■ Station signal is weak, reorient antenna to receive weaker station. ■ Check for sources of possible interference.
Lines or streaks in pictures	■ Check antenna (Change the direction of the antenna).
No picture when connecting HDMI	■ If an HDMI cable doesn't support High Speed HDMI, it can cause flickers or no screen display. In this case use the latest cables that support High Speed HDMI.

The audio does not work.

Picture OK but No sound	■ Press the VOL or VOLUME button. ■ Sound muted? Press the MUTE button. ■ Try another channel. The problem may be with the broadcast. ■ Are the audio cables installed properly?
No output from one of the speakers	■ Adjust Balance in menu option.
Unusual sound from inside the product	■ A change in ambient humidity or temperature may result in an unusual noise when the product is turned on or off and does not indicate a fault with the product.
No sound when connecting HDMI/USB	■ Check High Speed HDMI cable. ■ Check USB cable over version 2.0. ■ Use normal MP3 file. *This feature is not available for all models.

There is a problem in PC mode. (Only PC mode applied)

The signal is out of range	■ Adjust resolution, horizontal frequency, or vertical frequency. ■ Check the input source.
Vertical bar or stripe on background & Horizontal Noise & Incorrect position	■ Work the Auto configure or adjust clock, phase, or H/V position. (Option)
Screen color is unstable or single color	■ Check the signal cable. ■ Reinstall the PC video card.

APPENDIX

MAINTENANCE

Early malfunctions can be prevented. Careful and regular cleaning can extend the amount of time you can enjoy your new TV.

Caution: Be sure to turn the power off and unplug the power cord before you begin any cleaning.

Cleaning the Screen

1 Here's a great way to keep the dust off your screen for a while. Wet a soft cloth in a mixture of lukewarm water and a little fabric softener or dish washing detergent. Wring the cloth until it's almost dry, and then use it to wipe the screen.

2 Make sure the excess water is off the screen, and then let it air-dry before you turn on your TV.

WARNING

► Do not use window/glass cleaner or anything with ammonia to clean the screen.

Cleaning the Cabinet

- To remove dirt or dust, wipe the cabinet with a soft, dry, lint-free cloth.
- Please be sure not to use a wet cloth.

Extended Absence

CAUTION

► If you expect to leave your TV dormant for a long time (such as a vacation), it's a good idea to unplug the power cord to protect against possible damage from lightning or power surges.

PRODUCT SPECIFICATIONS

MODELS		22LQ630H (22LQ630H-UA)
Dimensions (Width x Height x Depth)		526.0 mm x 352.0 mm x 54.1 mm 20.7 inch x 13.8 inch x 2.1 inch
Weight		3.62 kg / 7.9 lbs
Current Value / Power Consumption		0.45 A / 45 W
MODELS		26LQ630H (26LQ630H-UA)
Dimensions (Width x Height x Depth)		659.0 mm x 427.8 mm x 59.0 mm 25.9 inch x 16.8 inch x 2.3 inch
Weight		5.55 kg / 13.6 lbs
Current Value / Power Consumption		0.6 A / 60 W
MODELS		32LQ630H (32LQ630H-UA)
Dimensions (Width x Height x Depth)		787.4 mm x 501.5 mm x 61.5 mm 31.0 inch x 19.7 inch x 2.4 inch
Weight		9.05 kg / 19.9 lbs
Current Value / Power Consumption		0.7 A / 70 W
Power requirement Television System Program Coverage External Antenna Impedance		AC120V ~ 50/60Hz NTSC-M, VSB, 64 & 256 QAM VHF 2-13, UHF 14-69, CATV 1-135, DTV 2-69, CADTV 1-135 75 Ω
Environment condition	Operating Temperature Operating Humidity	0 fl 40°C (32 fl 104°F) Less than 80%
	Storage Temperature Storage Humidity	-20 fl 60°C (-4 fl 140°F) Less than 85%

■ The specifications shown above may be changed without prior notice for quality improvement.

APPENDIX

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Version 2, June 1991

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Version 2.1, February 1999

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If distribution of object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place satisfies the requirement to distribute the source code, even though third parties are not compelled to copy the source along with the object code.

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Version 1.1

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B. Any new file that contains any part of the original code or previous modifications.

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1.10.1. "Patent claims" means any patent claim(s), now owned or hereafter acquired, including without limitation, method, process, and apparatus claims, in any patent licensable by grantor.

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You must duplicate the notice in exhibit A in each file of the source code. If it is not possible to put such notice in a particular source code file due to its structure, then You must include such notice in a location (such as a relevant directory) where a user would be likely to look for such a notice. If You created one or more modification(s), you may add your name as a contributor to the notice described in exhibit A. you must also duplicate this license in any documentation for the source code where You describe recipients' rights or ownership rights relating to covered code. You may choose to offer, and to charge a fee for, warranty, support, indemnity or liability obligations to one or more recipients of covered code. However, you may do so only on your own behalf, and not on behalf of the Initial developer or any contributor. You must make it absolutely clear than any such warranty, support, indemnity or liability obligation is offered by you alone, and You hereby agree to indemnify the Initial developer and every contributor for any liability incurred by the Initial developer or such contributor as a result of warranty, support, indemnity or liability terms you offer.

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APPENDIX

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NOTE: The text of this exhibit A may differ slightly from the text of the notices in the source code files of the original code. You should use the text of this exhibit A rather than the text found in the original code/source code for Your modifications.



The model and serial number of the TV is located on the back and/or on one side of the TV. Record these numbers below should you ever need service.

MODEL _____

SERIAL _____

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1-888-865-3026	USA, Commercial User
1-888-542-2623	CANADA

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