

OWNER'S MANUAL LED LCD TV / LCD TV

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

LED LCD TV MODELS

19LE5300	32LE5300	42LE7300
22LE5300	37LE5300	47LE7300
26LE5300	42LE5300	55LE7300
22LE5500	47LE5300	42LE530C
26LE5500	55LE5300	47LE530C
		551 F530C

LCD TV MODELS

32LD420	32LD520	37LD450C	321 D452C
0222 .20	00	0.22.000	0222 .020
42LD420	42LD520	42LD450C	37LD452C
47LD420	47LD520	47LD450C	42LD452C
32LD450	55LD520	55LD520C	47LD452C
37LD450	42LD630	42LD451C	32LD452B
42LD450	47LD630	47LD451C	37LD452B
47LD450	55LD630	26LD352C	42LD452B
			47LD452B

P/NO : SAC34134204 (1111-REV16) www.lg.com

WARNING / CAUTION



WARNING / CAUTION RISK OF ELECTRIC SHOCK



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.

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.

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

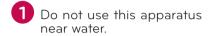
IMPORTANT SAFETY INSTRUCTIONS

Read these instructions.

Keep these instructions. Heed all warnings.



Follow all instructions.





2 Clean only with dry cloth.



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



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



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.



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



Only use attachments/accessories specified by the manufacturer.



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.



Unplug this apparatus during lighting storms or when unused for long periods of time.



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.



- Never touch this apparatus or antenna during a thunder or lighting storm.
- 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.
- Do not allow an impact shock or any objects to fall into the product, and do not drop onto the screen with something.
- 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 n ot connect too many appliances to the same AC power outlet as this could result in fire or electric shock.

Do not overload wall outlets. Overloaded wall outlets, loose or damaged wall outlets, extension cords, frayed power cords, or damaged or cracked wire insulation are dangerous. Any of these conditions could result in electric shock or fire. Periodically examine the cord of your appliance, and if its appearance indicates damage or deterioration, unplug it, discontinue use of the appliance, and have the cord replaced with an exact replacement part by an authorized servicer. Protect the power cord from physical or mechanical abuse, such as being twisted, kinked, pinched, closed in a door, or walked upon. Pay particular attention to plugs, wall outlets, and the point where the cord exits the appliance.

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



SAFETY INSTRUCTIONS

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.



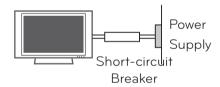
Do not expose to dripping or splashing and do not place objects filled with liquids, such as vases, cups, etc. on or over the apparatus (e.g. on shelves above the unit).



GROUNDING

Ensure that you connect the earth ground wire to prevent possible electric shock (i.e. a TV with a three-prong grounded AC plug must be connected to a three-prong grounded AC outlet). If grounding methods are not possible, have a qualified electrician install a separate circuit breaker.

Do not try to ground the unit by connecting it to telephone wires, lightening rods, or gas pipes.



18 DISCONNECTING DEVICE FROM MAINS

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

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.

20 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.

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.

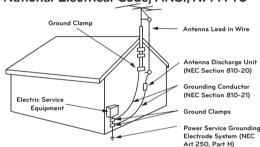
ANTENNAS Outdoor antenna grounding

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 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.

- Take care not to touch the ventilation openings. When watching the TV for a long period, the ventilation openings may become hot.
- If you smell smoke or other odors coming from the TV, unplug the power cord contact and authorized service center.
- Do not press strongly upon the panel with hand or sharp object such as nail, pencil or pen, or make a scratch on it.
- Reep the product away from direct sunlight.

28 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.

29 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.

For LED LCD TV/LCD TV

If the TV feels cold to the touch, there may be a small "flicker" when it is turned on. This is normal, there is nothing wrong with TV.

Some minute dot defects may be visible on the screen, appearing as tiny red, green, or blue spots. However, they have no adverse effect on the monitor's performance.

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

ON DISPOSAL

(Only Hg lamp used LCD TV)

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

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SOUND & LANGUAGE CONTROL

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FEATURE OF THIS TV

Some of these features are not available on all models.



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



AV Mode is three preset picture and audio settings. It allows the viewer to quickly switch between common settings. It includes Cinema, Sports, and Game Modes.



A unique invisible speaker system tuned by renowned audio expert, Mr. Mark Levinson. Speakers are embedded in strategic spots behind the front cabinet and use minute vibrations to turn the entire front bezel into the speaker system. The result s a clean, polished look, and enhanced audio by increasing the "sweet spot", giving a wider and richer sound field.



Automatically enhances and amplifies the sound of human voice frequency range to help keep dialogue audible when background noise swells.



Unlike other sensors which can only sense brightness of ambient light, LG's "Intelligent Sensor" uses 4,096 sensing steps to evaluate its surroundings. Using a sophisticated algorithm, the LG processes picture quality elements including brightness, contrast, color, sharpness and white balance. The result is a picture optimized for it's surroundings, more pleasing to watch and which can also save up to 50% in power consumption.



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



Displays HDTV programs in full $1920 \times 1080p$ resolution for a more detailed picture.



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



ABOUT DIVX VIDEO: DivX® is a digital video format created by DivX, LLC, a subsidiary of Rovi Corporation. This is an official DivX Certified® device that plays DivX video. Visit divx.com for more information and software tools to convert your files into DivX video.

ABOUT DIVX VIDEO-ON-DEMAND: This DivX Certified® device must be registered in order to play purchased DivX Video-on-Demand (VOD) movies. To obtain your registration code, locate the DivX VOD section in your device setup menu. Go to vod.divx.com for more information on how to complete your registration.

"DivX Certified® to play DivX® video up to HD 1080p, including premium content."

"DivX®, DivX Certified® and associated logos are trademarks of Rovi Corporation or its subsidiaries and are used under license."

"Covered by one or more of the following U.S. patents: 7,295,673; 7,460,668; 7,515,710; 7,519,274"



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
- 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.

hours for Plasma).







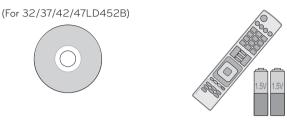
ACCESSORIES

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

The accessories included may differ from the images below.







Owner's Manual

CD Manual

EzSign TV Editor S/W & Manual

Remote Control, Batteries (AAA)

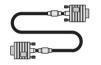
Not included with all models



Polishing Cloth

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

Option Extras



D-sub 15 pin Cable

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

19/22/26LE5300, 22/26LE5500





(For 26LE5300,











Screws for stand assembly (Refer to P.20, 22)

Cable Holder (Refer to p.31)

Ring spacers (Refer to p.29)

AC/DC Adapter

Power Cord

32/37/42/47LD450, 37/42/47LD450C, 42/47/55LD630, 42/47LD451C, 32/37/42/47LD452C, 32/37/42/47LD452B, 26LD352C

(For 32/37/42LD450, 37/42/LD450C, 42LD630, 42LD451C, 32/37/42LD452C, 32/37/42LD452B, 26LD352C)









(For 37/42/47LD450C, 32/37/42/47LD452C. 32/37/42/47LD452B, 26LD352C)



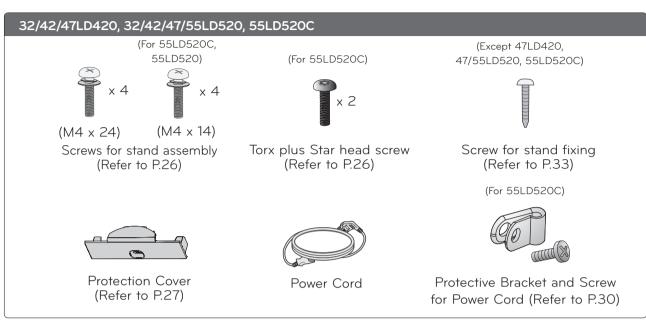
assembly (Refer to P.24)

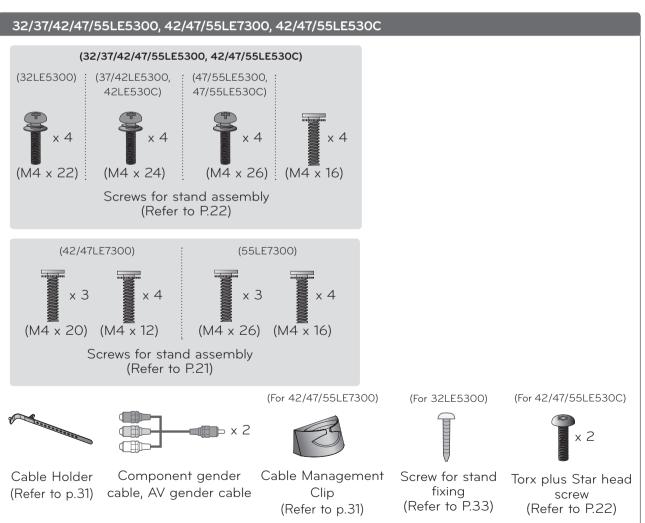
Screws for stand Screws for stand fixing (Refer to P.33)

Protection Cover (Refer to P.25)

Power Cord

Protective Bracket and Screw for Power Cord (Refer to P.30)



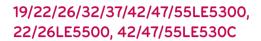


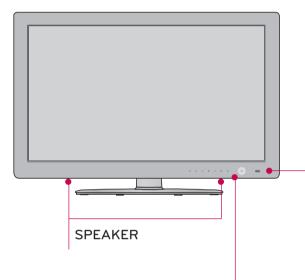
FRONT PANEL INFORMATION

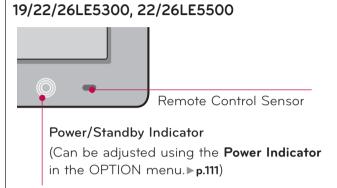
■ Image shown may differ from your TV.

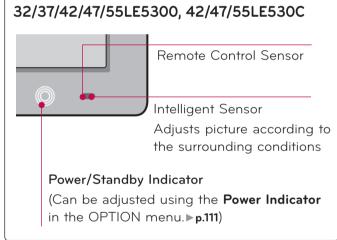


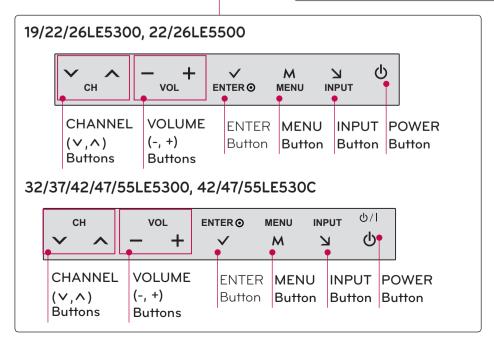
In case of some model, the thin film on screen is a part of TV, So don't take it off.





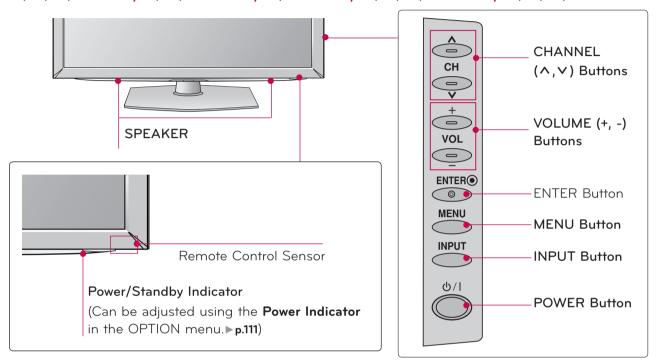




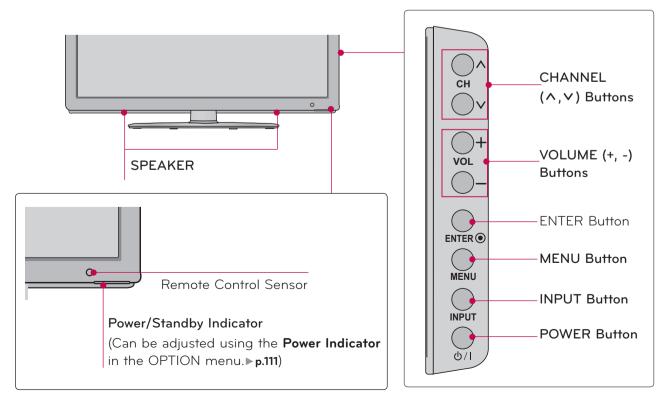


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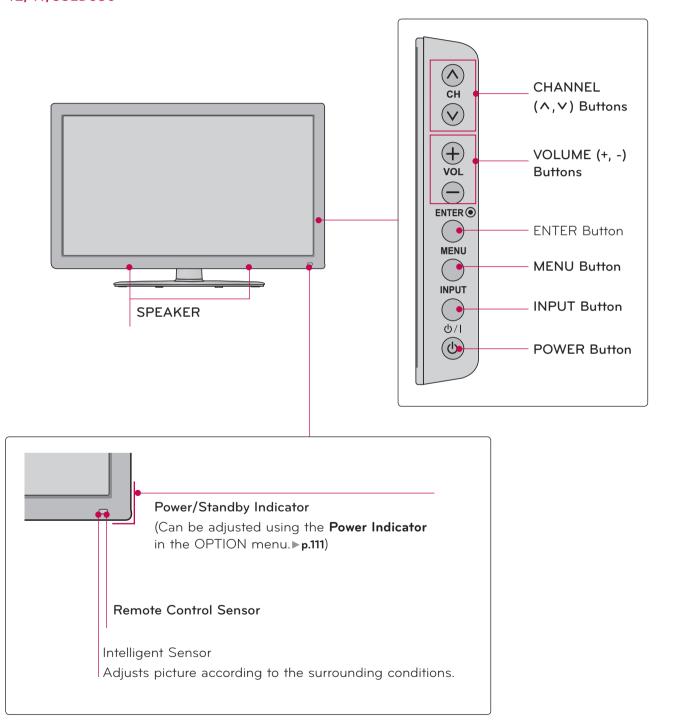
32/37/42/47LD450, 37/42/47LD450C, 42/47LD451C, 32/37/42/47LD452C, 32/37/42/47LD452B



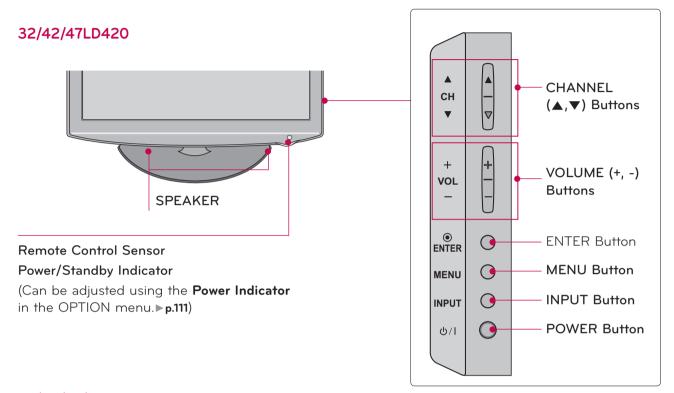
26LD352C



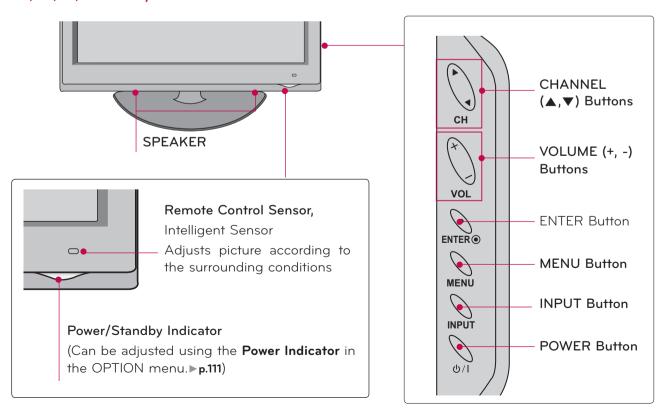
42/47/55LD630



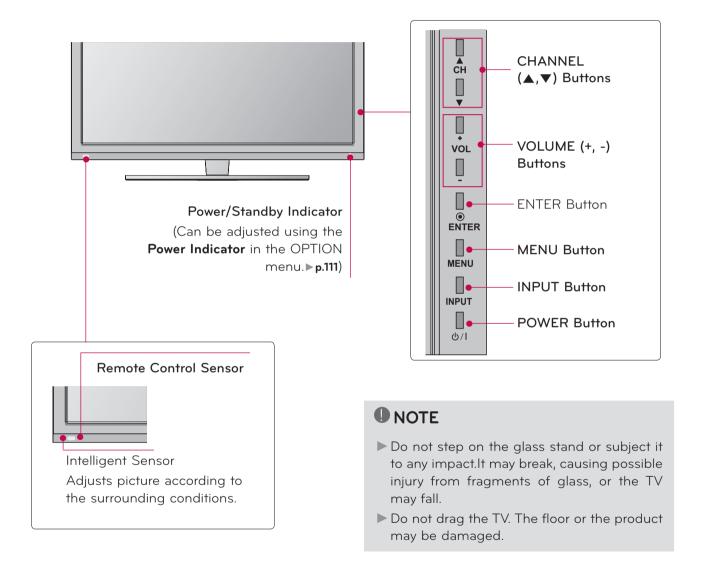
■ Image shown may differ from your TV.



32/42/47/55LD520, 55LD520C



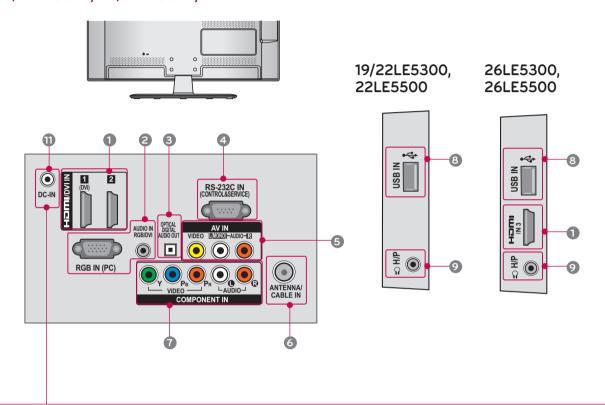
42/47/55LE7300



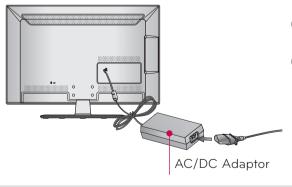
BACK PANEL INFORMATION

Image shown may differ from your TV.

19/22/26LE5300, 22/26LE5500,



Power Connection

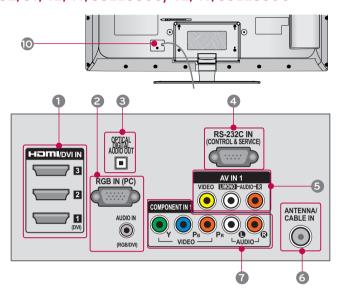


- 1 Connect the AC/DC adapter plug to the power input jack on the TV.
- 2 Connect the power cord to the AC/DC adapter first, then plug the power cord into the wall power outlet.

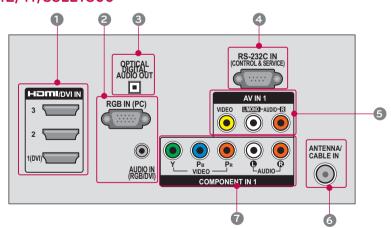
A CAUTION

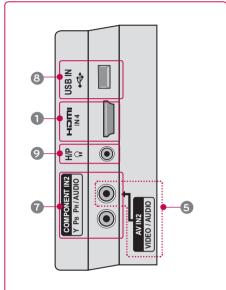
▶ Please be sure to connect the TV to the AC/DC power adapter before connecting the TV's power plug to a wall power outlet.

32/37/42/47/55LE5300, 42/47/55LE530C



42/47/55LE7300

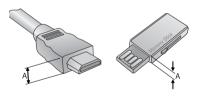




A CAUTION

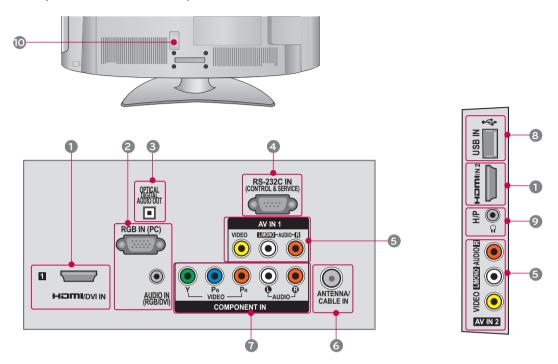
For HDMI IN 4 and USB IN

► For an optimal connection, HDMI cables and USB devices should have bezels less than 10 mm (0.39 inches) thick.

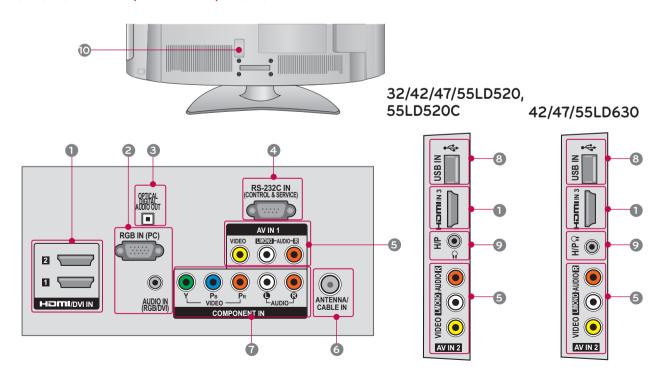


*A \leq 10 mm (0.39 inches)

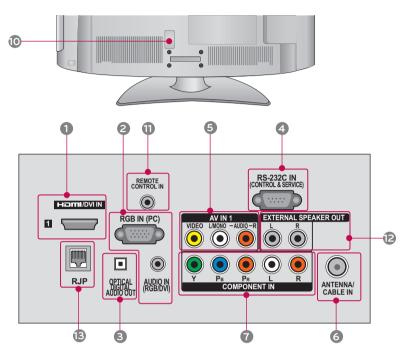
32/42/47LD420, 32/37/42/47LD450, 42/47LD451C

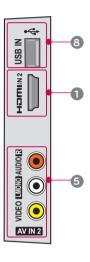


32/42/47/55LD520, 55LD520C, 42/47/55LD630



37/42/47LD450C, 32/37/42/47LD452C, 32/37/42/47LD452B, 26LD352C





1 HDMI/DVI IN, HDMI IN

Digital Connection.

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

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

RGB IN (PC)

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

AUDIO IN (RGB/DVI)

0.32 cm (1/8 inch) headphone jack for analog PC audio input.

3 OPTICAL DIGITAL AUDIO OUT

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

Note: In standby mode, this port doesn't work.

4 RS-232C IN (CONTROL & SERVICE)

Used by third party devices.

This port is used for service or Hotel mode.

S AV (Audio/Video) IN

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

6 ANTENNA/CABLE IN

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

@ COMPONENT IN

Analog Connection.

Supports HD.

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

USB INPUT

Used for viewing videos, photos and listening to MP3s.

HEADPHONE

0.32 cm (1/8 inch) headphone jack Impedance 16 Ω , Maximum audio out 15 mW

Power Cord Socket

For operation with AC power.

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

11 REMOTE CONTROL IN

For a wired remote control.

P EXTERNARL SPEAKER OUT

For use with external speakers.

® RJP

Connect this to an LG remote jack pack system.

STAND INSTRUCTIONS (For 19/22LE5300, 22LE5500)

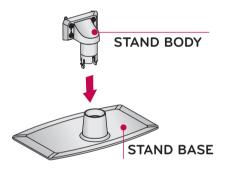
■ Image shown may differ from your TV.

INSTALLATION

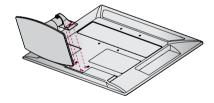
1 Carefully place the TV screen side down on a cushioned surface to protect the screen from damage.



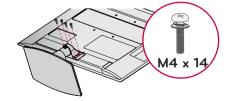
Assemble the parts of the STAND BODY with the STAND BASE of the TV.



3 Assemble the TV as shown.



4 Install the 4 screws into the holes shown.

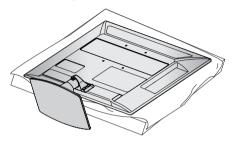


• NOTE

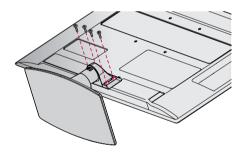
▶ When assembling the desk type stand, make sure the screws are fully tightened (If not tightened fully, the TV can tilt forward after the product installation). Do not over tighten.

DETACHMENT

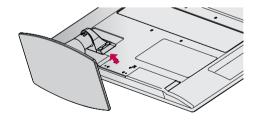
Carefully place the TV screen side down on a cushioned surface to protect the screen from damage.



2 Remove the screws from the TV.



3 Detach the stand from TV.



STAND INSTRUCTIONS (For 42/47/55LE7300)

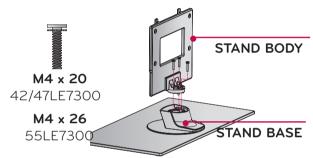
■ Image shown may differ from your TV.

INSTALLATION

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



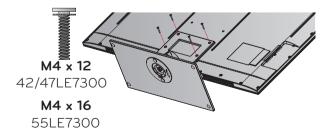
Assemble the parts of the STAND BODY with the STAND BASE of the TV.



3 Assemble the TV as shown.



4 Install the 4 screws into the holes shown.

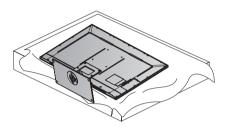


• NOTE

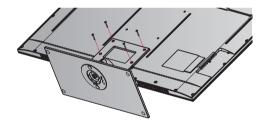
When assembling the desk type stand, make sure the screws are fully tightened (If not tightened fully, the TV can tilt forward after the product installation). Do not over tighten.

DETACHMENT

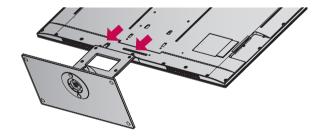
Carefully place the TV screen side down on a cushioned surface to protect the screen from damage.



Remove the screws from the TV.



3 Detach the stand from TV.



STAND INSTRUCTIONS

(For 26/32/37/42/47/55LE5300, 26LE5500, 42/47/55LE530C)

Image shown may differ from your TV.

INSTALLATION

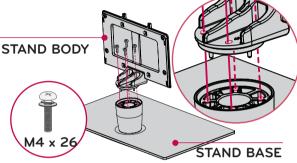
- 1 Carefully place the TV screen side down on a cushioned surface to protect the screen from damage.
- Assemble the parts of the STAND BODY with the STAND BASE of the TV.



26LE5300,



37/42LE5300, 42LE530C



47/55LE5300, 47/55LE530C

- 26LE5500 Assemble the TV as shown.
- Assemble the part of the STAND **REAR COVER** with the TV.

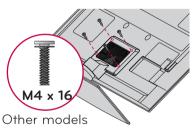


5 Install the 4 screws into the holes shown.

(For 42/47/55LE530C)

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





NOTE

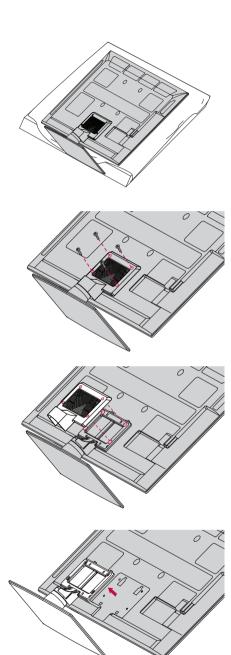
► When assembling the desk type stand, make sure the screws are fully tightened (If not tightened fully, the TV can tilt forward after the product installation). Do not over tighten.

DETACHMENT

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

3 Detach the STAND REAR COVER from TV.

4 Detach the stand from TV.



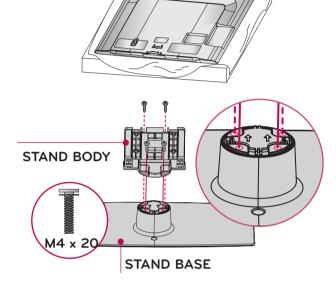
STAND INSTRUCTIONS

(For 32/37/42/47LD450, 37/42/47LD450C, 42/47/55LD630, 42/47LD451C, 32/37/42/47LD452C, 32/37/42/47LD452B, 26LD352C)

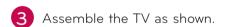
■ Image shown may differ from your TV.

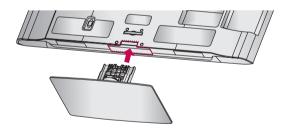
INSTALLATION

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

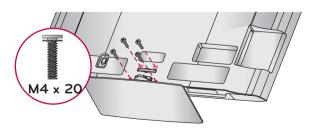


Assemble the parts of the STAND BODY with the STAND BASE of the TV.





4 Install the 4 screws into the holes shown.

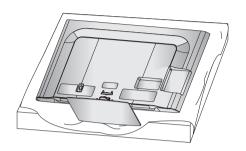


NOTE

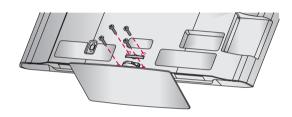
When assembling the desk type stand, make sure the screws are fully tightened (If not tightened fully, the TV can tilt forward after the product installation). Do not over tighten.

DETACHMENT

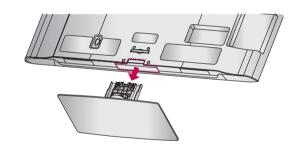
Carefully place the TV screen side down on a cushioned surface to protect the screen from damage.



2 Remove the screws from the TV.



3 Detach the stand from TV.

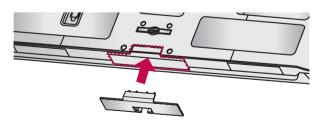


PROTECTION COVER

After removing the stand, install the included **PROTECTION COVER** over the hole for the stand.

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

When installing the wall mounting bracket, use the **PROTECTION COVER**.



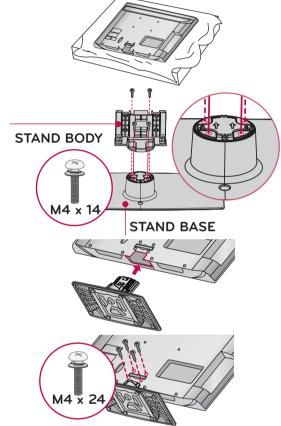
STAND INSTRUCTIONS

(For 32/42/47LD420, 32/42/47/55LD520, 55LD520C)

Image shown may differ from your TV.

INSTALLATION

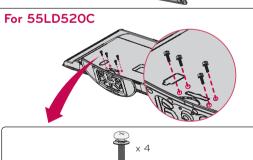
- Carefully place the TV screen side down on a cushioned surface to protect the screen from damage.
- (For 55LD520C, 55LD520)
 Assemble the parts of the STAND BODY with the STAND BASE of the TV.
- 3 Assemble the TV as shown.
- 4 Install the 4 screws into the holes shown.





► When assembling the desk type stand, make sure the screws are fully tightened (If not tightened fully, the TV can tilt forward after the product installation). Do not over tighten.

NOTE



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

or

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

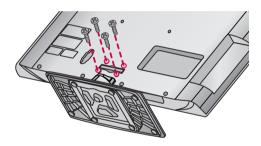
■ Image shown may differ from your TV.

DETACHMENT

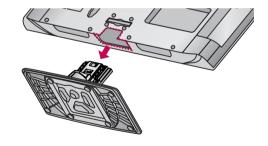
Carefully place the TV screen side down on a cushioned surface to protect the screen from damage.



2 Remove the screws from the TV.



3 Detach the stand from TV.

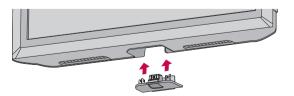


PROTECTION COVER

After removing the stand, install the included **PROTECTION COVER** over the hole for the stand.

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

When installing the wall mounting bracket, use the **PROTECTION COVER**.



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)
19LE5300, 22LE5300, 22LE5500, 26LE5300, 26LE5500	100 * 100	M4	4	LSW100B, LSW100BG
32LE5300, 32LD420, 32LD450, 32LD520, 32LD452C, 32LD452B, 26LD352C	200 * 100	M4	4	LSW100B, LSW100BG
37LE5300, 37LD450, 37LD450C, 37LD452C, 37LD452B, 42LE5300, 42LE530C, 42LE7300, 42LD450, 42LD450C, 42LD420, 42LD520, 42LD630, 42LD451C, 42LD452C, 42LD452B, 47LE5300, 47LE530C, 47LE7300, 47LD450, 47LD450C, 47LD420, 47LD451C, 47LD452C, 47LD452B	200 * 200	M6	4	LSW200B, LSW200BG
55LE5300, 55LE530C, 55LE7300, 55LD520, 55LD520C, 55LD630	400 * 400	M6	4	LSW400B, LSW400BG

• NOTE

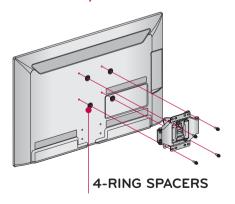
- Screw length needed depends on the wall mount used. For further information, refer to the instructions included with the mount.
- Standard dimensions for wall mount kits are shown in the table.
- ➤ When purchasing our wall mount kit, a detailed installation manual and all parts necessary for assembly are provided.
- Do not use screws longer than the standard dimension, as they may cause damage to the inside to the TV.
- ▶ For wall mounts that do not comply with the VESA standard screw specifications, the length of the screws may differ depending on their specifications.

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

A CAUTION

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

For 26LE5300, 26LE5500



Place the ring spacers on the set before installing the wall mounting bracket so that the inclination of the backside of the set can be adjusted perpendicularly.

CABLE MANAGEMENT

■ Image shown may differ from your TV.

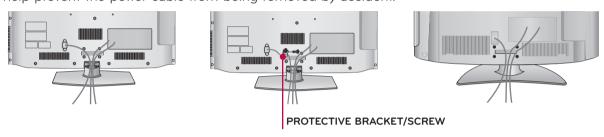
32/37/42/47LD450, 37/42/47LD450C, 32/42/47LD420, 32/42/47/55LD520, 55LD520C, 42/47/55LD630, 42/47LD451C, 32/37/42/47LD452C, 32/37/42/47LD452B, 26LD352C

Connect the cables as necessary.

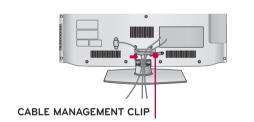
To connect additional equipment, see the **EXTERNAL EQUIPMENT SETUP** section.

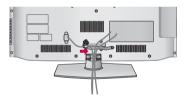
For 37/42/47LD450C, 55LD520C, 32/37/42/47LD452C, 32/37/42/47LD452B, 26LD352C:

Secure the power cord with the **PROTECTIVE BRACKET/SCREW** on the TV back cover. It will help prevent the power cable from being removed by accident.



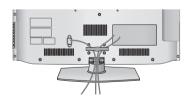
2 Open the CABLE MANAGEMENT CLIP as shown.

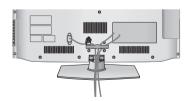


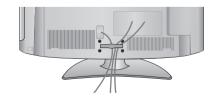




Put the cables inside the CABLE MANAGEMENT CLIP and snap it closed.

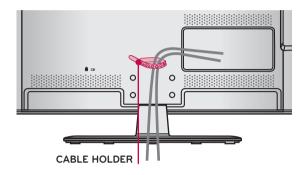






19/22/26LE5300, 22/26LE5500

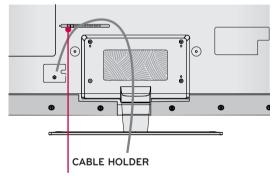
1 After connecting the cables as necessary, install the **CABLE HOLDER** as shown and bundle the cables.



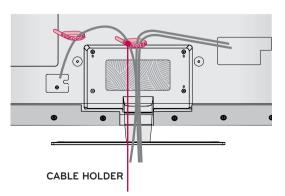
32/37/42/47/55LE5300, 42/47/55LE530C

Secure the power cord with the CABLE HOLDER on the TV back cover.

It will help prevent the power cable from being removed by accident.



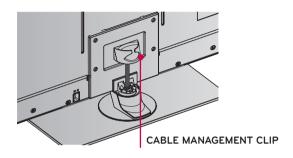
After connecting the cables as necessary, install the **CABLE HOLDER** as shown and bundle the cables.



42/47/55LE7300

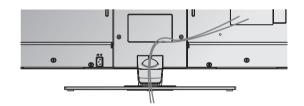
FOR DESK-TYPE STAND

Install the CABLE MANAGEMENT CLIP as shown.



Connect the cables as necessary.

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

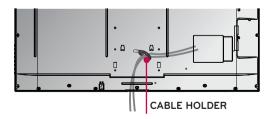


FOR WALL MOUNT

Connect the cables as necessary.

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

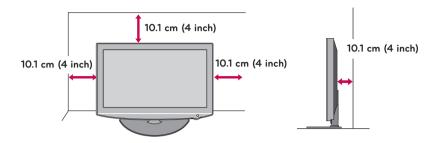
Install CABLE HOLDER as shown and bundle the cables.



DESKTOP PEDESTAL INSTALLATION

Image shown may differ from your TV.

For proper ventilation, allow a clearance of 10.1 cm (4 inch) on all four sides from the wall.

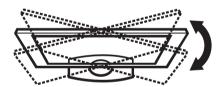


A CAUTION

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

SWIVEL STAND (Except 19/22LE5300, 22LE5500)

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

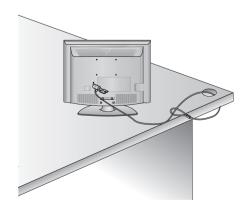


KENSINGTON SECURITY SYSTEM

- 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.

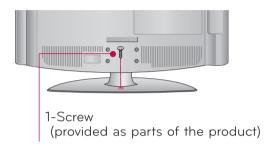


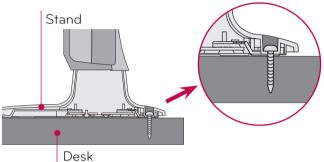
ATTACHING THE TV TO A DESK

(For 32/42LD420, 32/37/42LD450, 37/42LD450C, 32/42LD520, 42LD630, 32LE5300, 42LD451C, 32/37/42LD452C, 32/37/42LD452B, 26LD352C)

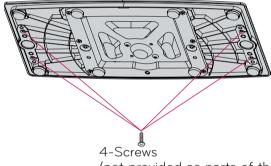
■ Image shown may differ from your TV.

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



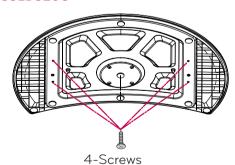






(not provided as parts of the product)

For 55LD520C



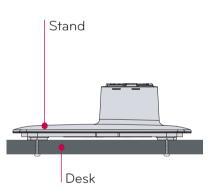
(not provided as parts of the product)

► Recommended screw size: M5 x L (*L: Table depth + 8~10 mm)

ex) Table depth: 15mm, Screw: M5 x 25



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

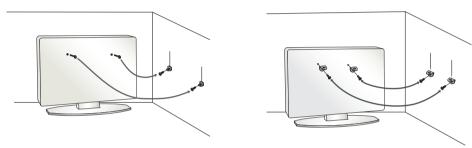


SECURING THE TV TO THE WALL TO PREVENT FALLING WHEN THE TV IS USED ON A STAND

- You should purchase necessary components to prevent the TV from tipping over (when not using a wall mount).
- Image shown may differ from your TV.

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

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



- Insert the eye-bolts (or TV brackets and bolts) to tighten the product to the wall as shown in the picture.
 - * If your product has the bolts in the eye-bolts position before inserting the eye-bolts, loosen the
 - * Insert the eye-bolts or TV brackets/bolts and tighten them securely in the upper holes.

 Secure the wall brackets with the bolts (sold separately) to the wall. Match the height of the bracket that is mounted on the wall to the holes in the product.

Ensure the eye-bolts or brackets are tightened securely.



Use a sturdy rope (sold separately) to tie the product. It is safer to tie the rope so it becomes horizontal between the wall and the product.

NOTE

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

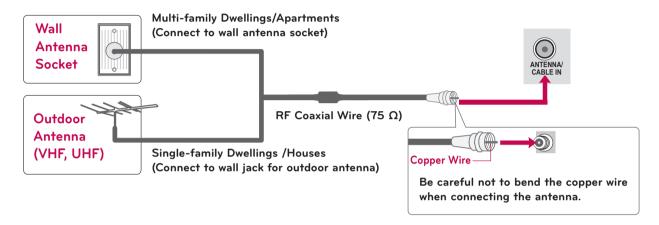
- To prevent damage do not connect to the power outlet until all connections are made between the devices.
- Image shown may differ from your TV.

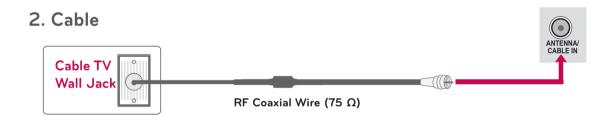
ANTENNA OR CABLE CONNECTION

1. Antenna (Analog or Digital)

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

For optimum picture quality, adjust antenna direction if needed.





- If the antenna needs to be split for two TV's, install a 2-Way Signal Splitter.
- For much more information about antennas visit our Knowledgebase at http://lgknowledgebase.com. Search for antenna.

EXTERNAL EQUIPMENT SETUP

- To prevent the equipment damage, never plug in any power cords until you have finished connecting all equipment.
- IThis part of EXTERNAL EQUIPMENT SETUP mainly use picture of for 26LE5300/26LE5500.

HD RECEIVER SETUP

This TV can receive digital over-the-air/digital cable signals without an external digital set-top box. However, if you do receive digital signals from a digital set-top box or other digital external device.

Component Connection

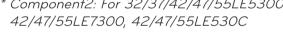
1. How to connect

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

2. How to use

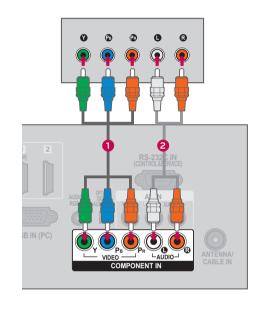
- Turn on the digital set-top box. (Refer to the owner's manual for the digital settop box operation.)
- Select the Component or Component1/2* input source on the TV using the INPUT button on the remote control.

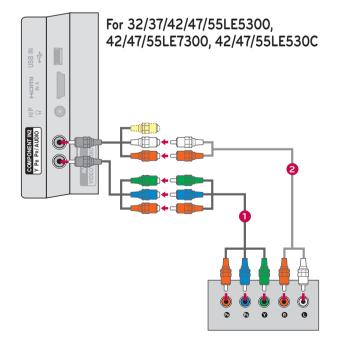
^{*} Component2: For 32/37/42/47/55LE5300,



Y, CB/PB, CR/PR

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





HDMI Connection

1. How to connect

- Connect the digital set-top box to **HDMI/DVI IN**1, 2, 3*, or 4** jack on the TV.
- No separate audio connection is necessary.

 HDMI supports both audio and video.

2. How to use

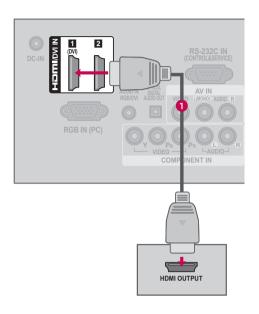
- Turn on the digital set-top box.
 (Refer to the owner's manual for the digital set-top box.)
- Select the HDMI1, HDMI2, HDMI3*, or HDMI4** input source on the TV using the INPUT button on the remote control.
- * HDMI3: For 26LE5300, 26LE5500, 32/42/47/55LD520, 55LD520C, 42/47/55LD630
- ** HDMI4: For 32/37/42/47/55LE5300, 42/47/55LE7300, 42/47/55LE530C

• NOTE

- ▶ 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.
- ► HDMI Audio Supported Format: Dolby Digital (32 kHz, 44.1 kHz, 48 kHz), Linear PCM (32 kHz, 44.1 kHz, 48 kHz)

HDMI-DTV

Resolution	Horizontal Frequency(kHz)	Vertical Frequency(Hz)
720x480p	31.47	59.94
	31.50	60.00
1280x720p	44.96	59.94
	45.00	60.00
1920x1080i	33.72	59.94
	33.75	60.00
	26.97	23.976
	27.00	24.00
1020,1000	33.71	29.97
1920x1080p	33.75	30.00
	67.432	59.94
	67.50	60.00



EXTERNAL EQUIPMENT SETUP

DVI to HDMI Connection

1. How to connect

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

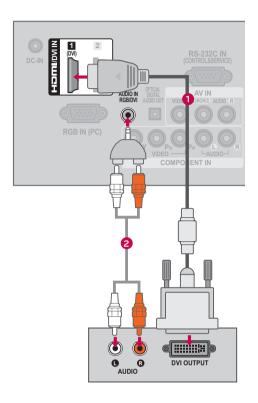
2. How to use

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

^{*} HDMI2: For 32/42/47/55LD520, 55LD520C, 42/47/55LD630



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



DVD SETUP

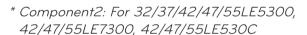
Component Connection

1. How to connect

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

2. How to use

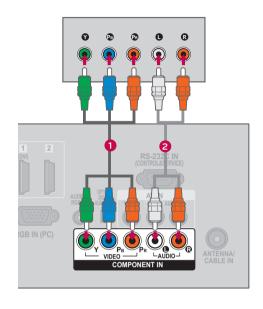
- Turn on the DVD player, insert a DVD.
- Select the Component or Component1/2* input source on the TV using the INPUT button on the remote control.
- Refer to the DVD player's manual for operating instructions.

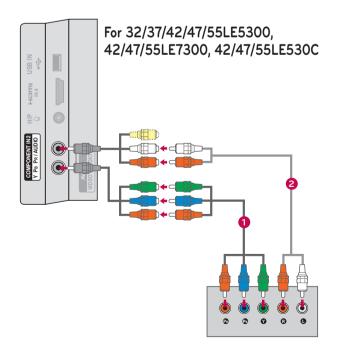




To get better picture quality, connect a DVD player to the component input ports as shown below.

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





EXTERNAL EQUIPMENT SETUP

Composite (RCA) Connection

1. How to connect



2. How to use

- Turn on the DVD player, insert a DVD.
- Select the AV or AV1/2* input source on the TV using the INPUT button on the remote control.
- Refer to the DVD player's manual for operating instructions.

HDMI Connection

1. How to connect

- Connect the HDMI output of the DVD to the HDMI/DVI IN 1, 2, 3*, or 4** jack on the TV.
- No separate audio connection is necessary.

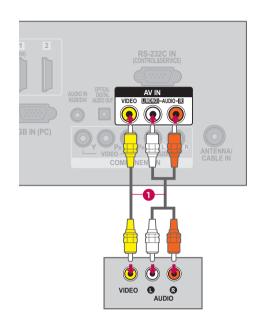
 HDMI supports both audio and video.

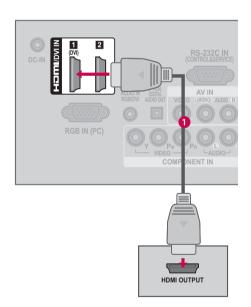
2. How to use

- Select the HDMI1, HDMI2, HDMI3*, or HDMI4** input source on the TV using the INPUT button on the remote control.
- Refer to the DVD player's manual for operating instructions.
- * HDMI3: For 26LE5300, 26LE5500, 32/42/47/55LD520, 55LD520C, 42/47/55LD630
- ** HDMI4: For 32/37/42/47/55LE5300, 42/47/55LE7300, 42/47/55LE530C

NOTE

- ▶ 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.
- ► HDMI Audio Supported Format: Dolby Digital (32 kHz, 44.1 kHz, 48 kHz), Linear PCM (32 kHz, 44.1 kHz, 48 kHz)





^{*} AV2: Except 19/22/26LE5300, 22/26LE5500

VCR SETUP

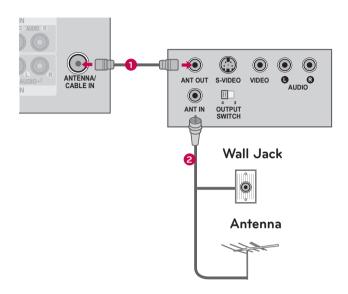
Antenna Connection

1. How to connect

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

2. How to use

- Set VCR output switch to 3 or 4 and then tune TV to the same channel number.
- Insert a video tape into the VCR and press PLAY on the VCR (Refer to the VCR owner's manual).



Composite (RCA) Connection

1. How to connect

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

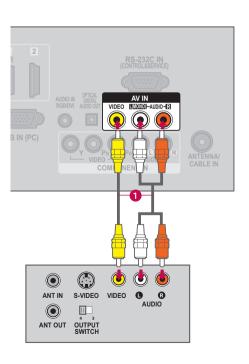
2. How to use

- Insert a video tape into the VCR and press PLAY on the VCR. (Refer to the VCR owner's manual.)
- Select the AV or AV1/2* input source on the TV using the INPUT button on the remote control.

* AV2: Except 19/22/26LE5300, 22/26LE5500

• NOTE

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



EXTERNAL EQUIPMENT SETUP

OTHER A/V SOURCE SETUP

1. How to connect



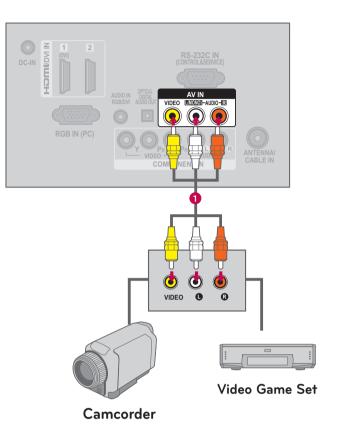
Connect the **AUDIO/VIDEO** jacks between TV and external equipment. Match the jack colors.

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

2. How to use

- Select the AV or AV1/2* input source on the TV using the INPUT button on the remote control.
- Operate the corresponding external equipment.

* AV2: Except 19/22/26LE5300, 22/26LE5500



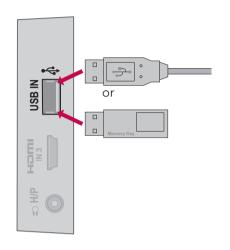
USB CONNECTION

1. How to connect

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

2. How to use

■ After connecting the **USB IN** jack, you use the USB function. (▶ p.78)



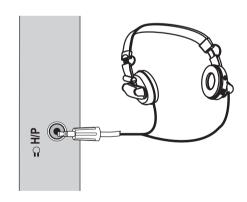
HEADPHONE SETUP

(Except 37/42/47LD450C, 32/37/42/47LD452C, 32/37/42/47LD452B, 26LD352C)

You can listen to the sound through the headphone.

1. How to connect

- Plug the headphone into the headphone socket.
- To adjust the headphone volume, press the **VOL +/-** button. If you press the **MUTE** button, the sound from the headphone is switched off.



NOTE

- AUDIO menu options are disabled when connecting a headphone.
- ▶ When changing AV MODE with a headphone connected, the change is applied to video but not to audio.
- ▶ Optical Digital Audio Out is not available when connecting a headphone.

EXTERNAL EQUIPMENT SETUP

AUDIO OUT CONNECTION

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

If you want to enjoy digital broadcasting through 5.1-channel speakers, connect the OPTICAL DIGITAL AUDIO OUT terminal on the back of TV to a Home Theater (or amp).

1. How to connect

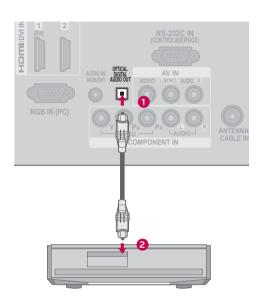
- 1 Connect one end of the optical cable to the TV port of **OPTICAL DIGITAL AUDIO OUT**.
- Connect the other end of the optical cable to the digital audio input on the audio equipment.
- Set the "TV Speaker option Off" in the AUDIO menu. (▶p.119). See the external audio equipment instruction manual for operation.

NOTE

When connecting with external audio equipment, such as amplifiers or speakers, you can turn the TV speakers off in the menu. (▶p.119)

A CAUTION

- ▶ Do not look into the optical output port. Looking at the laser beam may damage your vision.
- ➤ Audio with ACP (Audio Copy Protection) function may block digital audio output.



PC SETUP

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

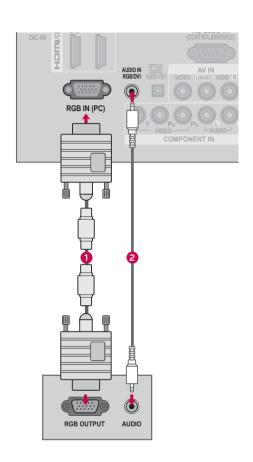
VGA (D-Sub 15 Pin) Connection

1. How to connect

- Connect the VGA output of the PC to the RGB IN (PC) jack on the TV.
- Connect 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.



EXTERNAL EQUIPMENT SETUP

DVI to HDMI Connection

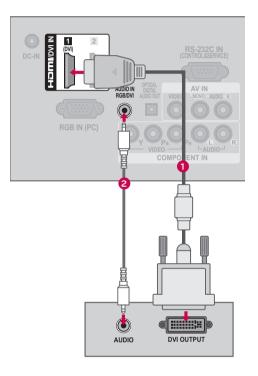
1. How to connect

- Connect the DVI output of the PC to the HDMI/DVI IN 1 or 2* jack on the TV.
- 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 HDMI1 or HDMI2* input source on the TV using the INPUT button on the remote control.

^{*} HDMI2: For 32/42/47/55LD520, 55LD520C, 42/47/55LD630



NOTE

- ► To get the best picture quality, adjust the PC graphics card to **1360 x 768** (19/22/26LE5300, 22/26LE5500, 32LD452C, 32LD452B, 26LD352C) or **1920 x 1080** (Other models).
- 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 may 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.
- ▶When selecting HDMI-PC, set the "Input Label PC" in the OPTION menu.

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	
1280x1024	63.981	60.02	·
1600x1200	75.00	60.00	
1920x1080 RGB-PC	66.587	59.934	
1920x1080 HDMI-PC	67.50	60.00	

Except 19/22/26LE5300, 22/26LE5500, 32LD452C, 32LD452B, 26LD352C

Except 32/37/42/47/55LE5300, 42/47/55LE7300, 42/47/55LE530C

EXTERNAL EQUIPMENT SETUP

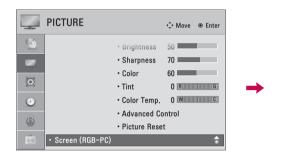
Screen Setup for PC mode

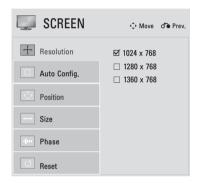
Selecting Resolution

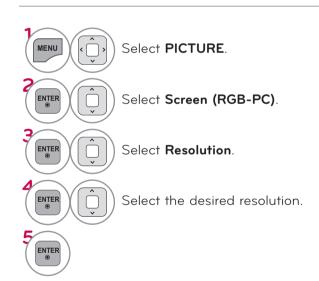
You can choose the resolution in RGB-PC mode.

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

You can choose this option only when the PC resolution is set to 1024X768, 1280X768 or 1360X768.

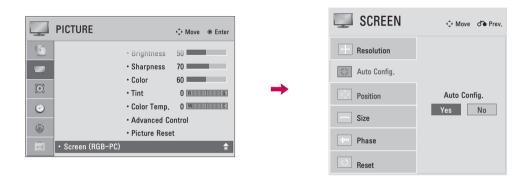


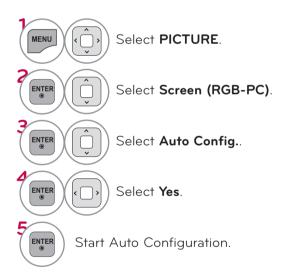




Auto Configure

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



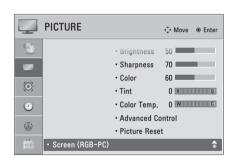


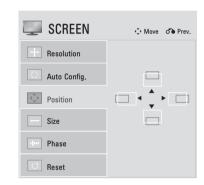
- If the position of the image is still not correct, try Auto adjustment again.
- If picture needs to be adjusted again after Auto adjustment in RGB-PC, you can adjust the Position, Size or Phase.

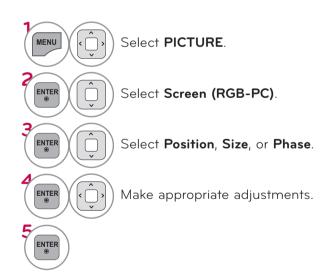
EXTERNAL EQUIPMENT SETUP

Adjustment for screen Position, Size, and Phase

If the picture is not clear after auto adjustment or if text is shaking, adjust the picture phase manually. This feature operates only in RGB-PC mode.





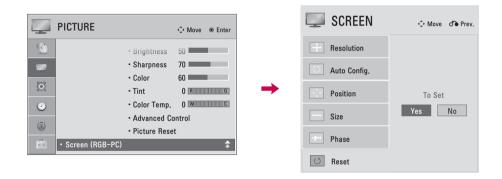


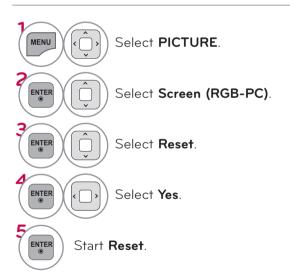
- **Position**: This function is to adjust picture to left/right and up/down as you prefer.
- Size: This function is to minimize any vertical bars or stripes visible on the screen background. And the horizontal screen size will also change.
- Phase: This function allows you to remove any horizontal noise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

Screen Reset (Reset to original initial values)

Returns Position, Size, and Phase to the default initial settings.

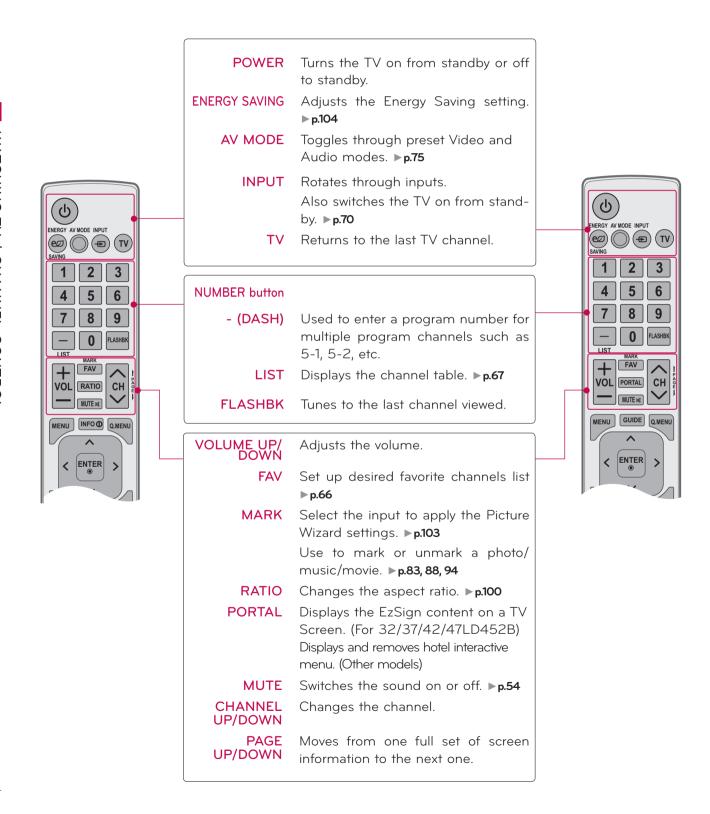
This feature operates only in RGB-PC mode.

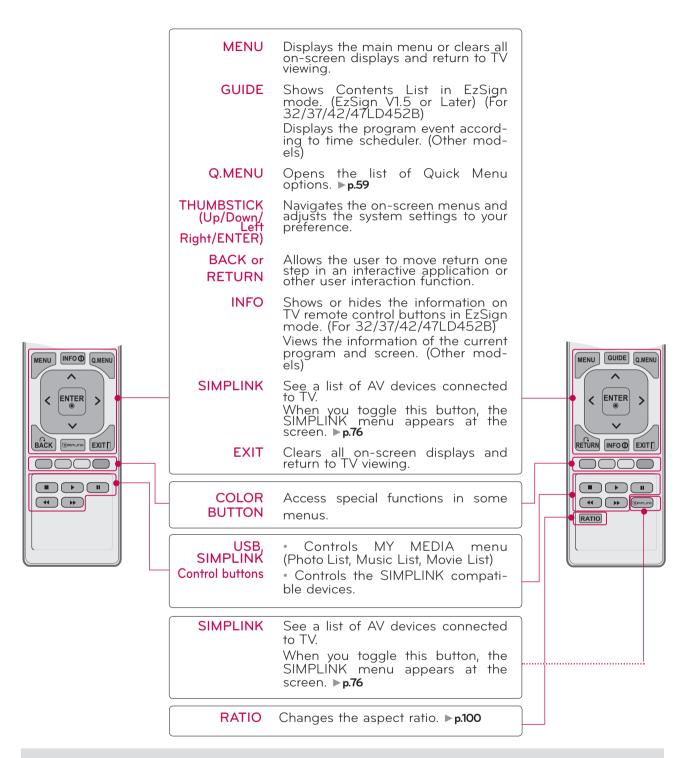




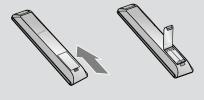
REMOTE CONTROL FUNCTIONS

When using the remote control, aim it at the remote control sensor on the TV. The remote control may differ from the images below.





Installing Batteries



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

TURNING ON THE TV

- 1 First, connect power cord correctly.
 - At this moment, the TV switches to standby mode.
 - In standby mode to turn TV on, press the \bigcirc / I, INPUT, CH (\land or \lor) button on the TV or press the \bigcirc , INPUT, CH (\land or \lor), Number (0-9) button on the remote control.
- Select the viewing source by using the **INPUT** button on the remote control.
- 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.
- ▶ If you do not complete the **Initial setting**, it will appear whenever the TV is switched on until the **Initial setting** procedure is completed.

CHANNEL SELECTION

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

VOLUME ADJUSTMENT

Adjust the volume to suit your personal preference.

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

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.

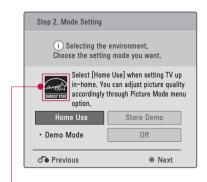
- Default selection is "**Home Use**". We recommend setting the TV to "**Home Use**" mode for the best picture in your home environment.
- **"Store Demo"** Mode is only intended for use in retail environments. Customers can adjust the "**Picture** menu **Picture mode"** manually while inspecting the TV, but the TV will automatically return to preset in-store mode after 5 minutes.
- "Store Demo" Mode is an optimal setting for displaying at stores. "Store Demo" mode initializes the TV to set the image quality:

Step 1. Selecting Language





Step 2. Mode setting



For 37/42/47/55LE5300, 42/47/55LE7300, 42/47/55LE530C



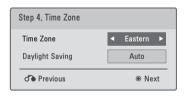
Step 3. Power Indicator (For LED LCD TV)





■ This function is disable in "Step2. Mode Setting - Store Demo".

Step 4. Time Zone





Step 5. Auto Tuning





ON-SCREEN MENUS SELECTION

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



Display each menu.



Select a menu item.

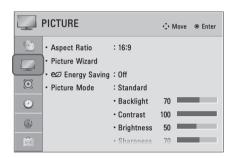






ENTER

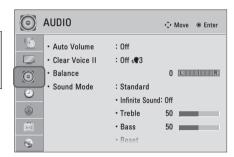
EXIT [



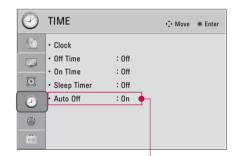
Accept the current selection.

Return to TV viewing.









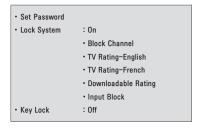
For 37/42/47LD450C, 55LD520C, 42/4755LE530C, 32/37/42/47LD452C, 32/37/42/47LD452B, 26LD352C

For USA

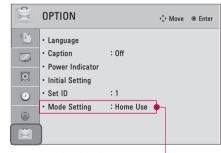




For Canada



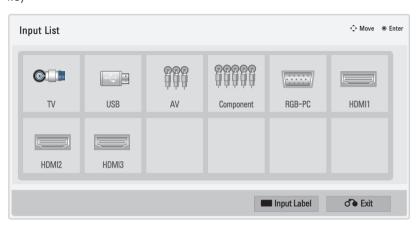




Except 32/37/42/47LD452B

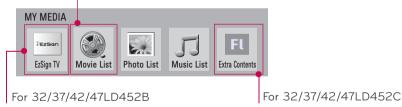
i.e)





Except 32/42/47LD420, 32/37/42/47LD450, 37/42/47LD450C, 32/42/47/55LD520, 55LD520C, 42/47/55LE530C, 42/47LD451C, 32/37/42/47LD452C, 32/37/42/47LD452B, 26LD352C





QUICK MENU

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



- Aspect Ratio: Selects your desired picture format.
- **♣ Picture Mode**: Selects the desired preset picture setting.
- **Sound Mode:** Selects the desired preset sound setting.
- (a) Multi Audio: Changes the audio language (Digital signal).
- (a) SAP: Selects MTS sound (Analog signal).
- **G**^zSleep Timer: Select the amount of time before your TV turns off automatically.
- CH Del/Add: Select channel you want to add or delete.
- **Caption**: Select on or off.
- **Ü-USB Device**: Select "Eject" in order to eject a USB device. If EzSign Content is running via USB, it may not work correctly after "USB Eject" has been selected. So please remove the attached USB Immediately after" USB Eject" has selected. (For 32/37/42/47LD452B)

 Select "Eject" in order to eject a USB device. (Other models)

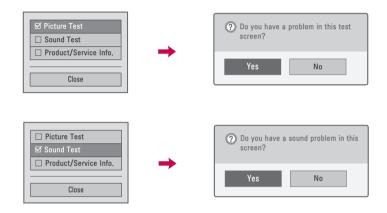


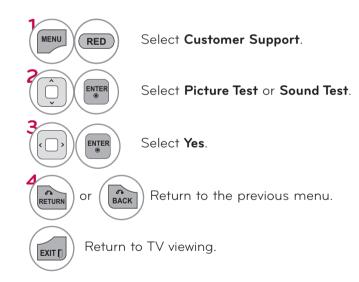


CUSTOMER SUPPORT

Picture Test / Sound Test

This function is a customer support function that can execute picture and sound tests.





Product/Service Info.

This function shows support and product information. Customer Service Center can differ by country.





Select Customer Support.



Select **Product/Service Info.**. You can check the various product/Service infomation based on your model.



or



Return to the previous menu.

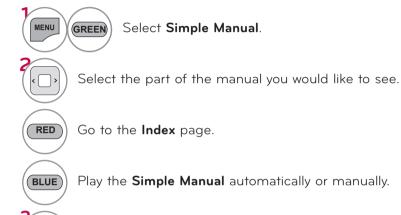


EXIT [

WATCHING TV / CHANNEL CONTROL

SIMPLE MANUAL (Except 32/37/42/47LD452C, 32/37/42/47LD452B)

You can easily and effectively access the TV information by viewing a simple manual on the TV. During the Simple Manual operation, audio will be muted.



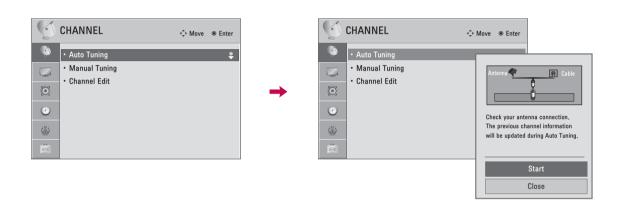
CHANNEL SETUP

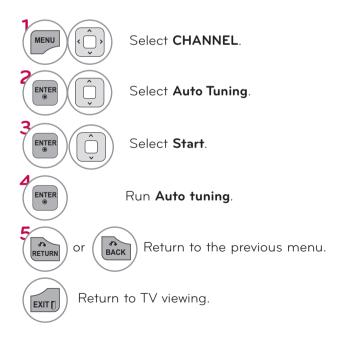
Auto Scan (Auto Tuning)

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.

Auto Tuning memorizes only the channels available at the time.



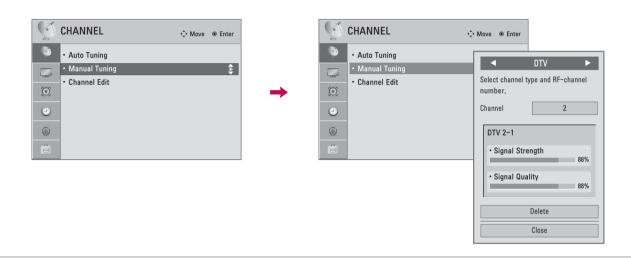


The TV will ask for a password if parental control has been activated (LOCK Menu). Use the password you set up in the LOCK Menu to allow a channel search.
 The maximum number of channels the TV can store is 1000.
 Found channels are grouped in the order of DTV, TV, Cable DTV and

Cable TV.

Add/Delete Channel (Manual Tuning)

When selecting DTV or Cable DTV input signal in **Manual Tuning**, you can view the on-screen signal strength monitor to see the quality of the signal being received.





- 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.
- The maximum number of channels the TV can store is 1000.

EXIT []

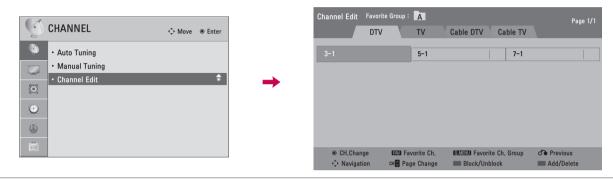
■ Keep pressing the ∧ button and use

the (or) buttons to move between DTV, TV, Cable DTV and Cable TV.

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 $CH \land V$ 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.





Select CHANNEL.



Select Channel Edit.



Select a channel.

Block or unblock the channel.



Add or delete a channel.



You can block/unblock channels even if you select "Lock system-Off" in the LOCK menu.



Switch to the chosen channel number.



Move the pages when the channel list is too long.



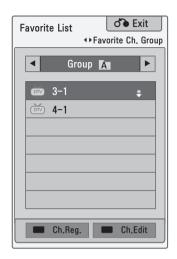
or

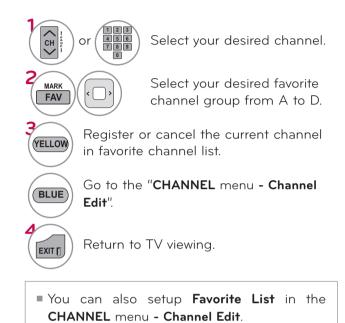
Return to the previous menu.



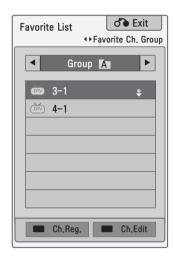
FAVORITE CHANNEL SETUP

Favorite Channels are a convenient feature that lets you quickly select channels of your choice without waiting for the TV to select all the in-between channels.





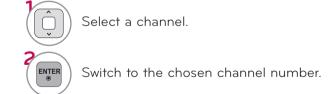
FAVORITE CHANNEL LIST



Displaying the favorite channel list



Selecting a channel in the favorite channel list



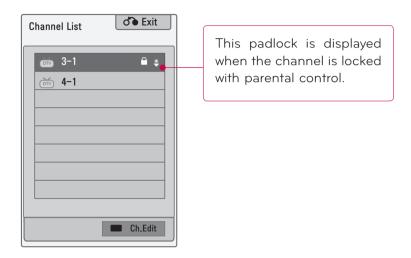
Paging through a favorite channel list





CHANNEL LIST

You can check which channels are stored in the memory by displaying the channel list.



Displaying Channel List



Display the Channel List.



Tune to the "CHANNEL menu - Channel Edit".

Selecting a channel in the channel list



Select a channel.



Switch to the chosen channel number.

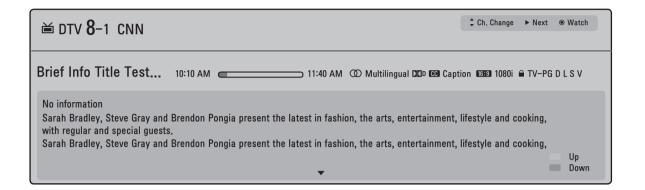
Paging through a channel list



Turn the pages.



CHANNEL INFORMATION (Except 32/37/42/47LD452B)



Displaying Channel Information



Show the current channel program Information on the screen.



Show a previous or next channel's program information



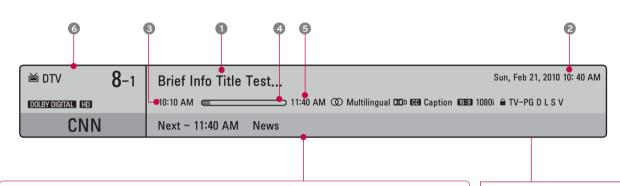
CHANNEL BRIEF INFORMATION (Except 32/37/42/47LD452B)

Brief Info shows the present screen information.



Shows the current channel's brief info screen.





- Multilingual: The program contains two or more audio services. Use the Q.MENU menu to select wanted Audio.
- Caption: The program contains one or more caption services.

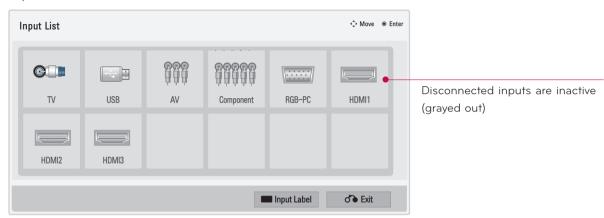
 Use the Q.MENU menu to select wanted Closed caption.
- **Dolby Digital**: The program contains a Dolby Digital audio signal in TV and HDMI input source.
- The original aspect ratio of the video is 4:3
- The original aspect ratio of the video is 16:9 (wide)
- 480i The video resolution is 720x480i
- 480p The video resolution is 720x480p
- 720p The video resolution is 1280x720p
- The video resolution is 1920x1080i
- 80p The video resolution is 1920x1080p
 - **V-Chip**: The program contains V-Chip information. Refer to the LOCK menu: A (Age), D (Dialogue), L (Language), S (Sex), V (Violence), FV (Fantasy Violence)

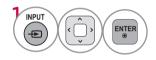
- Program title
- Day, Month, Year, Present time
- 3 Program start time
- Program progress bar
- 5 Program finish time
- 6 Banner information

INPUT LIST

Only these input signals which are connected to a TV can be activated and selected.

i.e)





Select the desired input source.

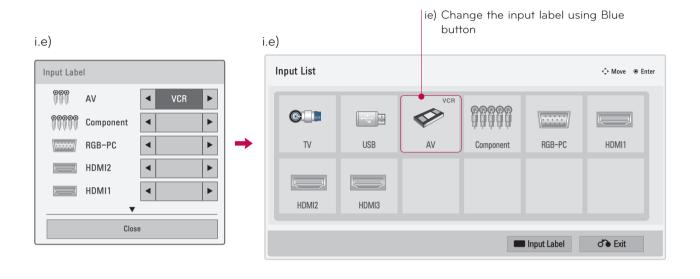
- When new external device is connected, this popup menu is displayed automatically.
 - If selecting **Yes**, you can select input source that you want to appreciate.
- But, when selecting "SIMPLINK On", popup menu for HDMI input will not be displayed.

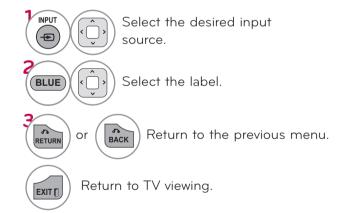


- TV: Select it to watch over-the-air, cable and digital cable broadcasts.
- **AV**: Select them to watch a VCR or other external equipment.
- Component: Select them to watch DVD or a Digital set-top box.
- RGB-PC: Select it to view PC input.
- HDMI: Select them to watch high definition devices.

INPUT LABEL

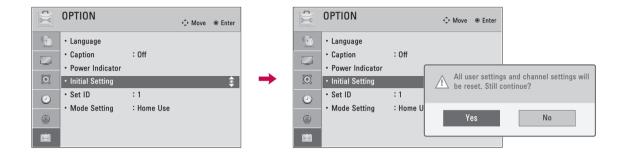
This indicates which device is connected to which input port.

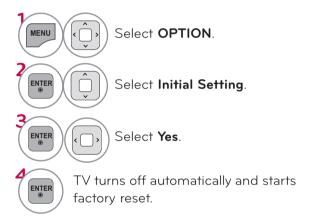




RESET TO FACTORY DEFAULT (INITIAL SETTING)

This function resets the TV to factory default and erases all stored channels.

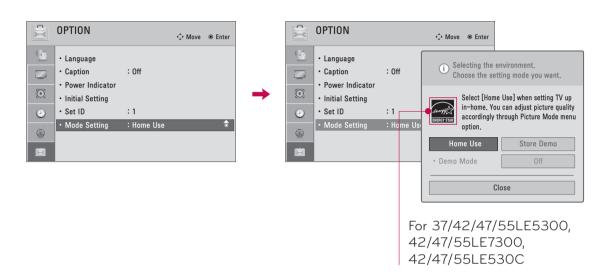


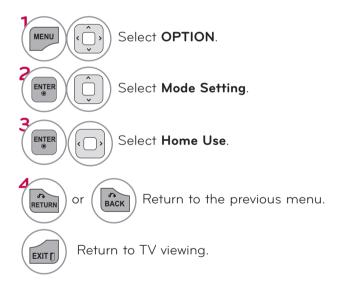


- When selecting "Lock System On" in the LOCK menu, the message to enter the password appears.
- If you forget your password, press "0-3-2-5" on the remote control.

MODE SETTING (Except 32/37/42/47LD452B)

Default selection is "Home Use". We recommend setting the TV to "Home Use" mode for the best picture in your home environment.



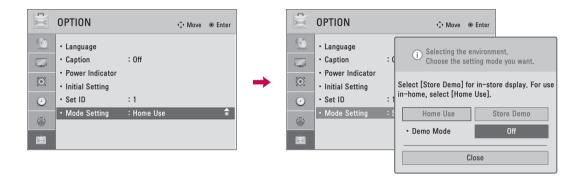


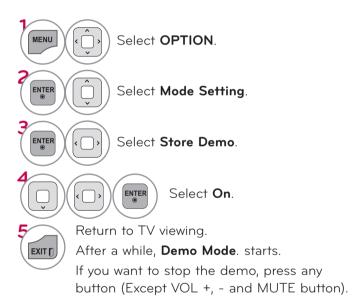
- "Store Demo" Mode is only intended for use in retail environments. Customers can adjust the "Picture menu Picture mode" manually while inspecting the TV, but the TV will automatically return to preset instore mode after 5 minutes.
- "Store Demo" Mode is an optimal setting for displaying at stores. "Store Demo" mode initializes the TV to set the image quality.

WATCHING TV / CHANNEL CONTROL

DEMO MODE (Except 32/37/42/47LD452B)

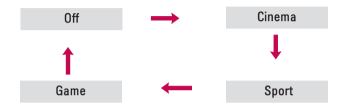
Displays a slide show to explain the various feature of this TV.





AV MODE

AV Mode toggles through preset Video and Audio settings.





Press the **AV MODE** button repeatedly to select the desired source.



- If you select "Cinema" in AV mode, Cinema will be selected both for "PICTURE menu Picture Mode" and "AUDIO menu Sound Mode" respectively.
- If you select "Off" in AV mode, the "Picture Mode" and "Sound Mode" return to previous selected value.
- Off: Disables the AV MODE.
- **Cinema**: Optimizes video and audio for watching movies.
- Sport: Optimizes video and audio for watching sports events.
- Game: Optimizes video and audio for playing games.

When playing a video game using PlayStation or Xbox, it is recommended to use the **Game** mode.

When in **Game** mode, functions related to picture quality will be optimized for playing games.

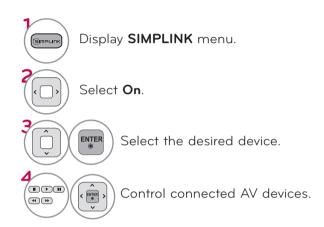
WATCHING TV / CHANNEL CONTROL

SIMPLINK

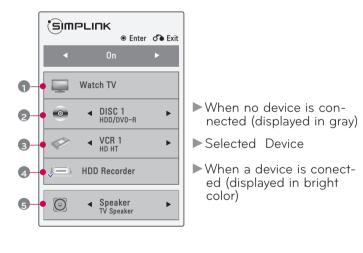
SIMPLINK allows you to control and play other AV devices connected with HDMI cable without additional cables and settings. This TV may work with devices with HDMI-CEC support, but only devices with the Simplink logo are fully supported.

SIMPLINK can be turned on and off in the user menus.





- TV viewing: Switch to the previous TV channel regardless of the current mode.
- ② DISC playback: Select and play discs. When multiple discs are available, the disc devices are conveniently displayed at the bottom of the screen.
- **3 VCR playback**: Control the connected VCR.
- 4 HDD Recordings playback: Control recordings stored in HDD.
- S Audio Out to Home Theater speaker/ Audio Out to TV: Select Home Theater speaker or TV speaker for Audio Out.



SIMPLINK Functions

- **Direct Play:** After connecting AV devices to the TV, you can directly control the devices and play media without additional settings.
- Select AV device: Enables you to select one of the AV devices connected to the TV.
- Disc playback: Control connected AV devices by pressing the ^ ∨⟨⟩, ENTER, ▶, ■, Ⅱ, ◀ and ▶ buttons.
- Power off all devices: When you power off the TV, all connected devices are turned off.
- Switch audio-out: Offers an easy way to switch audio-out.
- Sync Power on: When the equipment with Simplink function connected HDMI terminal starts to play, The TV will automatically turn on.

Note: To operate SIMPLINK, an HDMI cable over Version 1.3 with *CEC function should be used. (*CEC: Consumer Electronics Control).

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

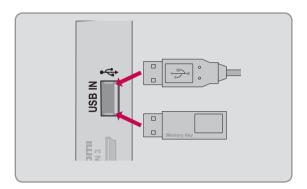
NOTE

- ► Connect the HDMI/DVI IN or HDMI IN terminal of the TV to the rear terminal (HDMI terminal) of the SIMPLINK device with the HDMI cable
- ▶ When you switch the Input source with the INPUT button on the remote control, the SIMPLINK device will stop.
- ▶ When you select a device with home theater functionality, the sound output automatically switches to the home theater speakers and the TV speakers are turned off.
- ▶ If a connected SIMPLINK home theater system doesn't play the audio from the TV, connect the DIGITAL AUDIO OUT terminal on the back of the TV to the DIGITAL AUDIO IN terminal on the back of the SIMPLINK device with an OPTICAL cable.

CONNECTION METHOD

USB Connection

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



Precautions when using the USB device

- ▶ Only a USB storage device is recognizable.
- Connecting a USB storage device through a USB hub is not supported.
- 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.
- ▶ 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.
- Donly use a USB storage device which has normal music files, image files, or movie files.
- ▶ Please use only a USB storage device which was formatted as a FAT 32 or NTFS file system provided with the Windows operating system. Others may not be recognized.
- Some USB storage devices require a power adapter. The power adapter must be connected in order to be seen by the TV.
- ▶ If a device is not recognized by the TV, try a different cable. Excessively long cables are not supported.
- Some USB storage devices may not be supported or operate properly.
- ▶ Please backup important files because data on USB device could be damaged. Data management is consumer's responsibility and as a result, the manufacturer does not cover data damage.
- 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.
- In case of USB storage devices formatted as NTFS, deletion is not supported.
- File alignment method of USB storage device is similar to Window XP and file names can be up to 100 English characters.
- ▶ The recommended capacity is 1TB or less for a USB external hard disk and 32 GB or less for USB memory.
- ▶ If a USB external hard disk with a "Energy Saving" function doesn't work, turn the hard disk off and on again to make it work properly. Refer to the user manual of the USB external hard disk.
- ▶USB storage devices below USB 2.0 are supported as well. But they may not work properly in the movie list.

ENTRY MODE

The My Media menu will open automatically when you insert a USB drive. My Media can also be accessed by choosing My Media in the user menu.

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

Except 32/42/47LD420, 32/37/42/47LD450, 37/42/47LD450C, 32/42/47/55LD520, 55LD520C, 42/47/55LE530C, 42/47LD451C, 32/37/42/47LD452C, 32/37/42/47LD452B, 26LD352C





For 32/37/42/47LD452C



Select MY MEDIA.



Select EzSign TV, Movie List, Photo List or Music List or Extra Contents.



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

When removing the USB device

Select the **USB Device** menu before removing the USB device.





MOVIE LIST

(Except 32/42/47LD420, 32/37/42/47LD450, 37/42/47LD450C, 32/42/47/55LD520, 55LD520C, 42/47/55LE530C, 42/47LD451C, 32/37/42/47LD452C, 32/37/42/47LD452B, 26LD352C)

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)

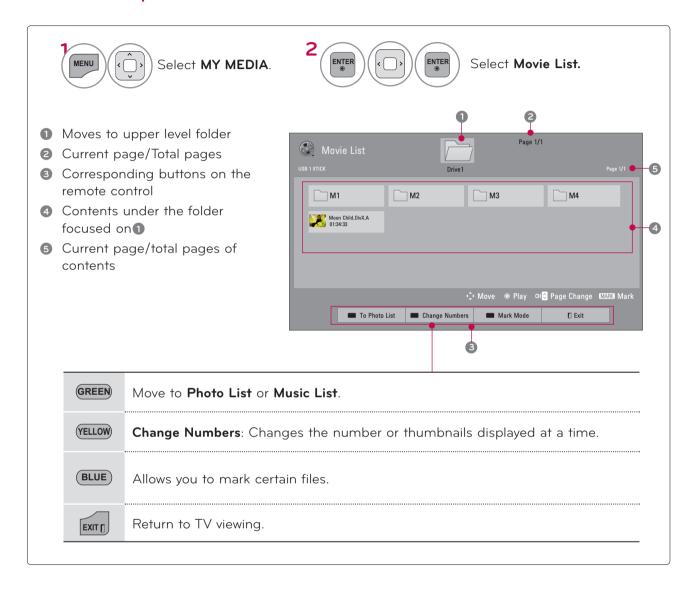
Precautions when playing the video files

- 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.

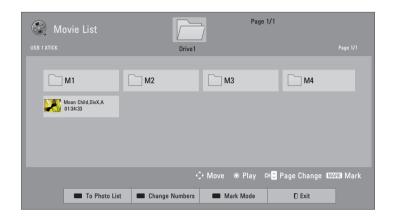
Supported Video Formats

File Extension name	Video Decoder	Audio Codec	Max Resolution
mpg, mpeg	MPEG1, MPEG2	MP2, MP3, Dolby Digital, LPCM	
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	1920 x 1080 @ 30p (Only Motion JPEG 640x480@30p)
Motion JPEG (avi, mp4, mkv)	JPEG	LPCM, ADPCM	
asf, wmv	VC1	WMA	
flv	Sorenson H.263, H264	MP3, AAC	

Screen Components



Movie Selection



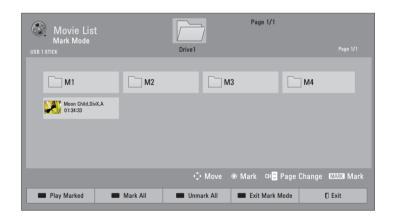






■ Use the CH (∧ ∨) button to navigate in the movie page.

Mark Mode





Select the target folder or drive.



Mark your desired movie file.

Play the marked movie file.

It displays the current movie status progress bar on the bottom of the screen.

When one or more movie files are marked, the marked movies will be played in sequence.

Using the Movie List Function







Show the **Option** menu.



Select **Set Video Play.**, **Set Video.**, or **Set Audio.**

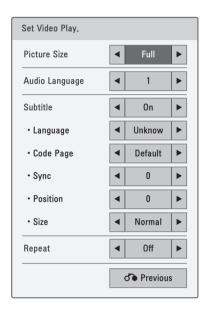
NOTE

- Option values changed in the Movie List does not affect Photo List and Music List
- Option values changed in Photo List and Music List are changed likewise in Photo List and Music List, but not in the Movie List
- When replaying a video file after stopping, you can play from where it stopped automatically.
- If you select "Yes" when playing the same file after the video file has been stopped, it will restart where it stopped previously.
- If continuous series files exist within the folder, the next file will automatically be played. But, this excludes cases when the Repeat function of Movie List Option is turned "On" (Refer to page 85) or when set as **Marked Play**.

Using the remote control

EXIT []	Return to TV viewing.
(4)	Select the required speed: x2, x4, x8, x16, x32 (backward/forward).
	Pauses the media player. If no buttons are pressed on the remote control for 10 minutes after pausing, the TV returns to the playback state.
II >	Displays a slow motion.
()	Move to a specific frame forward or backward while playing a video. A cursor indicating the position can be viewed on the screen. It may not work properly for some movie files.
•	Return to normal playback.
BACK OF RETURN	Hide the menu on screen. To see the menu again, press ENTER button to display.
ENERGY EXPLICATION OF THE PROPERTY OF THE PRO	Press the ENERGY SAVING button repeatedly to increase the brightness of your screen (Refer to p. 104).
AV MODE	Press the AV MODE button repeatedly to select the desired source (Refer to p. 75).

Set Video Play Menu Options





Select Picture Size, Audio Language, Subtitle, or Repeat.



Make appropriate adjustments.

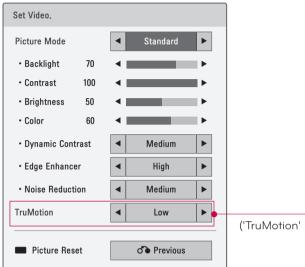
Code Page

Subtitle Language Group	Supported Language
Latin1	English, Spanish, French
Korean	English, Korean

- **Picture Size**: Selects your desired picture format for videos.
- Audio Language: Changes the Language Group of the audio for video files.
- Subtitle Language: The subtitles can be turned on or off. If there are two or more subtitles, you can select one of them.
- **Language**: Activated for SMI subtitles and can select the language within the subtitle.
- Code Page: Subtitle font selection. When set to default, same font as general menu will be used.
- **Sync**: When the video is not synchronized with the captions, it can be adjusted by 0.5 second.
- **Position**: Move the location of the subtitles.
- **Size**: Changes the subtitle font size.
- Repeat: Turn on/off repeat function of movie playback. When turned on, the file within the folder will be played back repeatedly.

* Image shown may differ from your TV.

Set Video Menu Options



('TruMotion' dependent on model)



Select Picture Mode or TruMotion.

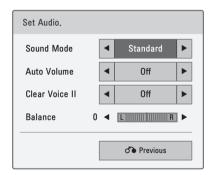


Make appropriate adjustments.



Reset picture settings to default.

Set Audio Menu Options





Select Sound Mode, Auto Volume, Clear Voice II or Balance.



Make appropriate adjustments.

PHOTO LIST

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

Supported photo file: *.JPG

- Baseline: 64 pixel (width) x 64 pixel (height) to 15360 pixel (width) x 8640 pixel (height)
- Progressive: 64 pixel (width) x 64 pixel (height) to 1920 pixel (width) x 1440 pixel (height)
- You can play JPEG files only.
- Non-supported files are displayed in the form of predefined icon.

Screen Components

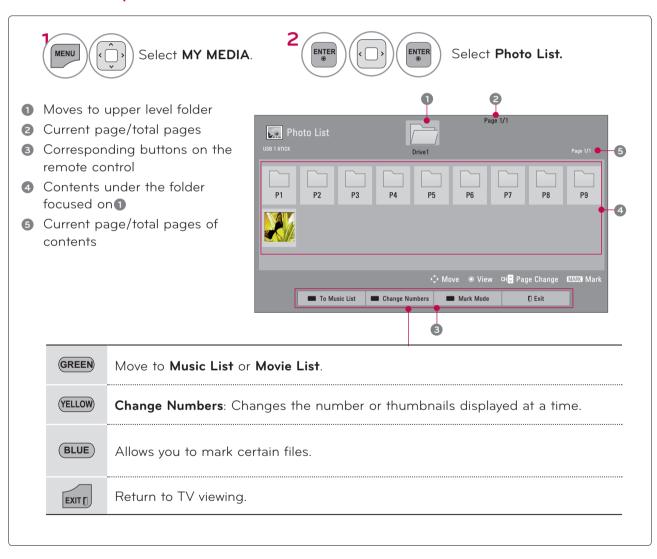


Photo Selection









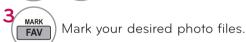
■ Use the CH (^ V) button to navigate in the photo page.

Mark Mode









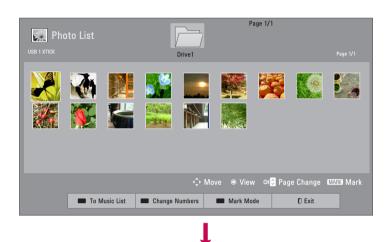




When one or more photos are marked, you can view individual photos or a slide show of the marked photos. If no photos are marked, you can view all photos individually or all photos in the folder in a slide show.

Full Screen Menu

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.



Select the target folder or drive.





Select the desired photos.



The selected photo is displayed in full size.

■ Use the CH (∧ ∨) button to navigate in the photo page.





Q (Zoom In), ۯ (Energy Saving), Option, or Hide.

Use <> button to select the previous or next photo.

- ▶ **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-Set Photo View. menu (Refer to p. 91).
 - You can adjust **Option** by using the **Q.MENU** button on the remote control.
- ▶ **BGM** (Background Music): Listen to music while viewing photos in full size.
 - Set the BGM device and album in Option-Set Photo View. menu (Refer to p. 91).
 - You can adjust **Option** by using the **Q.MENU** button on the remote control.
- ▶ ひ (Rotate): Rotate photos.
 - Rotates the photo 90°, 180°, 270°, 360° clockwise.
 - Photos cannot be rotated if its width is greater than the available supported resolution height.
- ▶ Q (Zoom In): View the photo by zoom in 2, 4 times by using Blue button.
- ▶ €Ø (Energy Saving): Increase the brightness of your screen by using ENERGY SAVING button.
- ▶ Option: Set values for Slide Speed and Music Album (Refer to p. 91).
 - You cannot change **Music Album** while BGM is playing.
 - ■You can only select the MP3 folder saved on the device that currently displays the photo.
- ▶ **Hide**: Hide the menu on the full-sized screen.
 - To see the menu again on the full-sized screen, press ENTER button to display.
- **Exit**: Move to the previous menu screen.

Using the Photo List Function





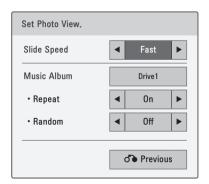


Select **Set Photo View.**, **Set Video.**, or **Set Audio.**

• NOTE

- Option values changed in Photo List do not affect Movie List and Music List.
- Option values changed in Photo List or Music List are changed likewise in Photo List and Music List, but not Movie List.

Set Photo View Menu Options





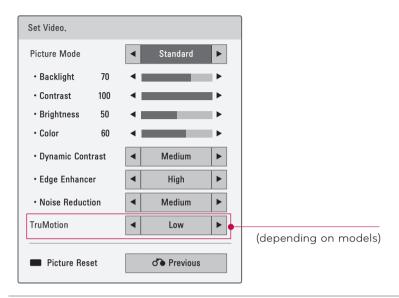
Select Slide Speed or Music Album.



Make appropriate adjustments.

* Image shown may differ from your TV.

Set Video Menu Options





Select Picture Mode or TruMotion.

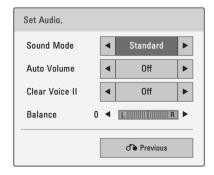


Make appropriate adjustments.



Initialize the adjusted picture value.

Set Audio Menu Options





Select Sound Mode, Auto Volume, Clear Voice II or Balance.



Make appropriate adjustments.

MUSIC LIST

This TV cannot play back copy-protected files.

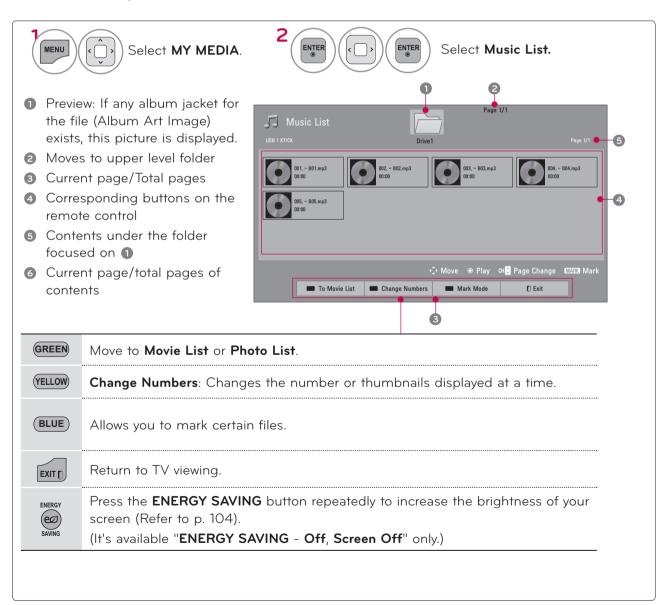
The On-Screen Display on your model may be slightly different.

MUSIC (*.MP3) supporting file

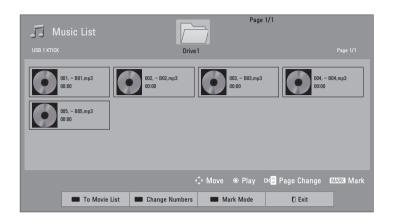
Bit rate 32 Kbps - 320 Kbps

- Sampling rate MPEG1 Layer3: 32 kHz, 44.1 kHz, 48 kHz
- Sampling rate MPEG2 Layer3: 16 kHz, 22.05 kHz, 24 kHz
- Sampling rate MPEG2.5 Layer3: 8 kHz, 11.025 kHz, 12 kHz

Screen Components

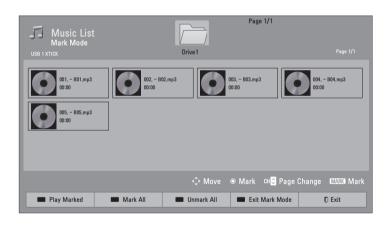


Music Selection



- Select the target folder or drive.
- Select the desired music file.
- Music files are played.
- Use the CH (∧ ∨) button to navigate in the music page.

Mark Mode



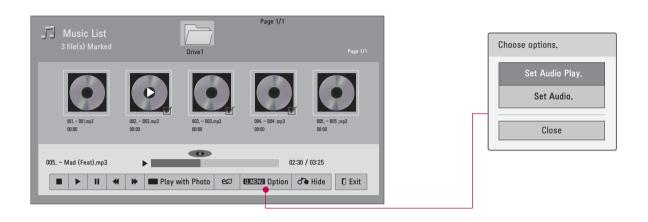
- Select the target folder or drive.
- Select the desired music file.
- Mark your desired music file.
- Play the marked music file.
- Play Marked: Play the selected songs. Once a song finishes playing, the next selected one will be played automatically.

 Mark All: Mark all songs in the folder.

 VELLOW Unmark All: Deselect all marked song.

 Exit the Mark Mode.
- When one or more music files are marked, the marked music files will be played in sequence.

Using the Music List Function







Select Set Audio Play. or Set Audio..

• NOTE

- Option values changed in Movie List does not affect Photo List and Music List.
- Option value changed in Photo List and Music List are changed likewise in Photo List and Music List excluding Movie List.
- You can listen to the music only within the device currently played.

Using the remote control

	Stop playback.
•	Return to normal playback.
	Paused playback.
(4)	Select the previous or next song.
GREEN	Play with Photo: Start playing the selected songs and then move to the Photo List.
ENERGY SAVING	Press the ENERGY SAVING button repeatedly to increase the brightness of your screen (Refer to p. 104). (It's available " ENERGY SAVING - Off , Screen Off " only.)
()	A cursor indicating the position can be played on the screen.
EXIT	Move to the previous menu screen.

Set Audio Play Menu Options



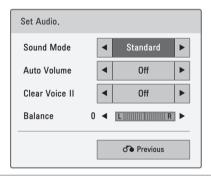


Select Repeat or Random.



Make appropriate adjustments.

Set Audio Menu Options





Select Sound Mode, Auto Volume, Clear Voice II or Balance.



Make appropriate adjustments.

If you don't press any buttons for a while, the play information box will float across the screen. This prevents screen pixel damage due to a fixed image remaining on the screen for a extended period of time.





- ► Music files with copy-protection will not play.
- ▶ Press ENTER or button to stop the screen saver.

EXTRA CONTENTS

- For 32/37/42/47LD452C

You can play application files on USB device.

Application files your device can be played by this unit.

The On Screen Display may be different from your TV. Images are an example to assist with the TV operation.

FLASH (*.SWF) / GEM supporting file

An SWF file complied with Flash Lite 3.0 or earlier (the 3.0 version is recommended)

- The Pro: Centric application is required, which starts automatically in the flash memory when the TV is turned on.
- The folder called /hcapfs/as/abs_service/ must exist in USB drive root directory.
- The file called xait.xml must exist in the /hcapfs/as/abs_service/ folder.
- If the above conditions are not met, the following error message is displayed when selecting the Extra Contents option: Failed to execute file in the USB. Please check the files in the USB.
- When the flash file does not run even if the above all conditions are met, refer to the Download Extra Contents of Installation Guide.
- GEM is composed of JAVA application.

Playing the application files







To stop playing the Application file

Remove the USB from the USB IN jack of the TV set.

• NOTE

▶ When playing the Application files(FLASH or GEM files), the buttons are controlled according to the settings of the Extra Contents option.

EZSIGN TV

- For 32/37/42/47LD452B

The EzSign TV function allows you to play and manage high-quality ad content that you create quickly and easily using the EzSign TV Editor.

For more information of using, refer to the EzSign TV Editor S/W & Manual.







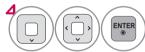




Select TV memory or USB.



Select EzSign TV.



■ The highlighted tab with the "√" symbol indicates the location of the file currently being played

TV memory

Play	Plays EzSign TV content in the memory.	
Delete	Deletes EzSign TV content from the memory. (Your TV restarts after the content is deleted.)	
Close	Closes the EzSign TV menu window.	
USB		
	Copies a file from the USB memory to the EzSign TV memory and plays it	

Copies a file from the USB memory to the EzSign TV memory and plays it. Copy to TV memory & (Once the file has been copied, it can be played even when it is removed from Plav the USB memory.) Play Plays a file directly from the USB memory without copying it to the EzSign TV memory. Close Closes the EzSign TV menu window.

Using the remote control

While the content is being played from a USB device or TV memory, you can press a TV remote control button to switch to an EzSign mode or TV mode or see the content information.

EXIT	The mode is switched from EzSign to TV mode. The playing content or content list disappears, and a regular TV broadcasting is displayed on the full screen.
POLTAL	The mode is switched from TV to EzSign mode. The screen stops regular TV broadcasting, and EzSign TV content is played.
GUIDE	Shows or hides the content list on a TV screen.
INFO	Shows or hides the information on TV remote control buttons on a TV screen.

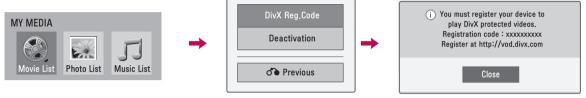
NOTE

- ▶ While loading EzSign TV content, your TV may function slower than normal.
 ▶ It is recommended that you copy files to the TV memory before playing them, as playing directly from the USB memory for an extended period of time may cause the device to overheat.
- In EzSign TV, some remote control keys may not work.
- In EzSign TV, some remote control keys may not work.
 In EzSign mode, the content is played. Only in this mode, you can see the information related to the EzSign contents (content screen, content list, TV remote button info, etc.)
 In TV mode, regular TV broadcasting is displayed on a full screen with no playback of the content. In this mode, you cannot see the content information using the Program Guide or information display key.

DIVX® VOD REGISTRATION

Except 32/42/47LD420, 32/37/42/47LD450, 37/42/47LD450C, 32/42/47/55LD520, 55LD520C, 42/47/55LE530C, 42/47LD451C, 32/37/42/47LD452C, 32/37/42/47LD452B, 26LD352C

In order to play purchased or rented DivX® VOD contents, you should register your device with 10 digit DivX registration code from your device at www.divx.com/vod.



Select **DivX Reg. Code**.

Display DivX Reg. Code.

Select Yes.





- When loading, some buttons may not work.
- If you use the DivX registration code of another device, the rented or purchased DivX file cannot be played. Therefore always use the DivX registration code assigned to this product.
- The video or audio of a file converted based on a standard other than the DivX codec standard may be corrupted or unable to be played.

DIVX® VOD DEREGISTRATION

Except 32/42/47LD420, 32/37/42/47LD450, 37/42/47LD450C, 32/42/47/55LD520, 55LD520C, 42/47/55LE530C, 42/47LD451C, 32/37/42/47LD452C, 32/37/42/47LD452B, 26LD352C

You should deregister your device with 8 digit DivX deregistration code from your device at www.divx. com/vod.

Once the deregistration is executed, you must register your device again to see DivX® VOD contents.

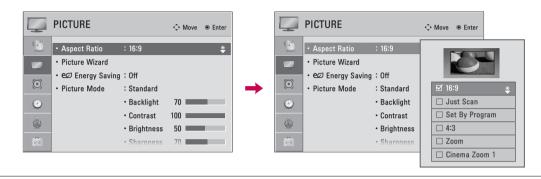




PICTURE CONTROL

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 Aspect Ratio.



Select the desired picture format.



or

Return to the previous menu.

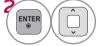


Return to TV viewing.

When adjusting **Zoom** or **Cinema Zoom** in Q.MENU



Select Aspect Ratio.



Select Zoom or Cinema Zoom.



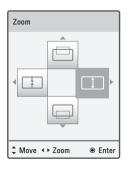
Adjust proportion of Zoom or Cinema Zoom. The Cinema Zoom adjustment range is 1-16.

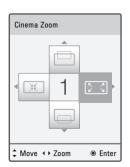


Move the image on the screen.



Press the RATIO button repeatedly to select the desired picture format.





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 in DTV/Cable DTV/Component/HDMI-DTV/DVI-DTV (720p/1080i/1080p) input source.



Set By Program

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

$$(4:3 \rightarrow 4:3)$$



 $(16:9 \rightarrow 16:9)$



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.



Cinema Zoom

Choose Cinema Zoom when you want to enlarge the picture in correct proportion.

This enlarges an image with cinemascope aspect ratio (2.35:1) without distortion.

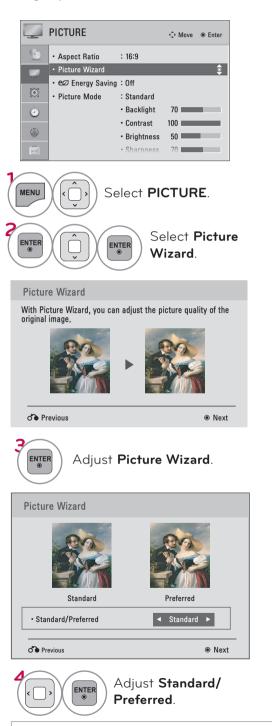
Note: When enlarging or reducing the picture, the image may become distorted.



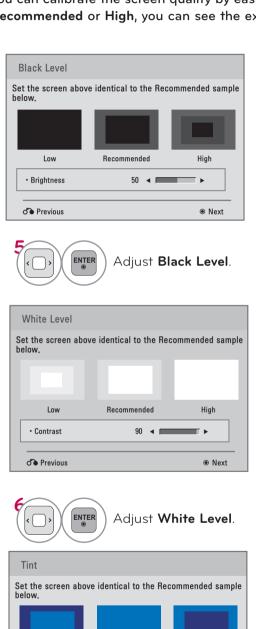
PICTURE CONTROL

PICTURE WIZARD

This feature lets you adjust the picture quality of the original image. Use this to calibrate the screen quality by adjusting the Black and White Level etc. You can calibrate the screen quality by easily following each step. When you adjust the image to **Low**, **Recommended** or **High**, you can see the example of the changes you made.



If you select Preferred, OSD (On Screen Display) differ from that shown in this manual.



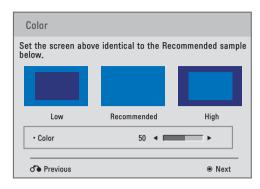
0 ◀ R I G ►

Adjust Tint.

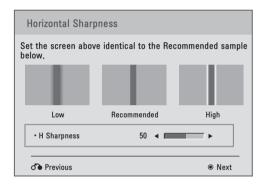
Next

• Tint

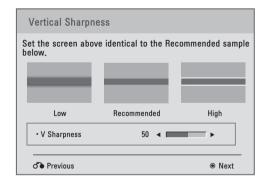
♂ Previous







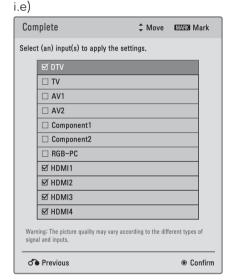


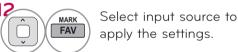




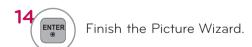












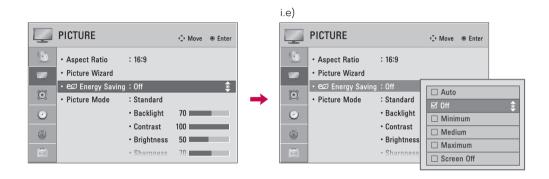
- If you stop the Picture Wizard before the final step, the changes will not be saved to the TV.
- Once the Picture Wizard sets the picture quality, Energy Saving is changed to Off automatically.
- To reset changes made by Picture Wizard, operate Picture Reset when Picture Mode is on Expert1.

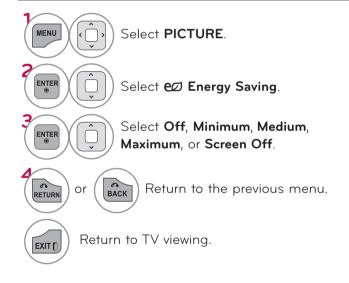
PICTURE CONTROL

eØ ENERGY SAVING

It reduces the TV's power consumption by lowering the backlight level.

You can increase the brightness of your screen by adjusting the **Energy Saving** level or by adjusting the **Picture Mode**.

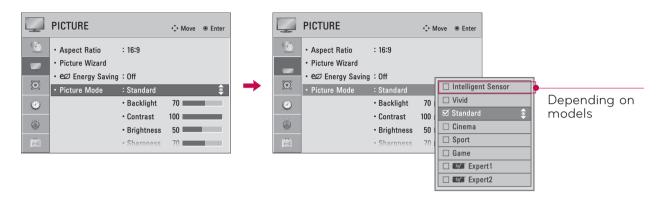


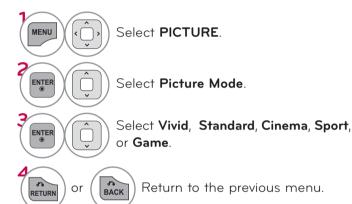


- When selecting Screen off, the screen will turn off after 3 seconds.
 If you adjust "Energy Saving-
- Maximum", Backlight feature will not work.
- Press the ENERGY SAVING button repeatedly to select the appropriate Energy Saving setup.

PRESET PICTURE SETTINGS (PICTURE MODE)

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





Return to TV viewing.

- Vivid, Standard, Cinema, Sport, and Game Settings are preset for the optimum picture quality at the factory.
- **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.
- **Expert**: This is the mode to adjust the video in detail for video quality expert and general user.
- You can also adjust Picture Mode in the Q.MENU.
- When selecting Intelligent Sensor, Energy Saving is changed to Auto automatically.
- When selecting Intelligent Sensor, it changes Backlight, contrast, brightness, sharpness, color and tint automatically.
- Intelligent Sensor: The most suitable picture is automatically adjusted according to the surrounding conditions.

PICTURE CONTROL

MANUAL PICTURE ADJUSTMENT - USER MODE

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

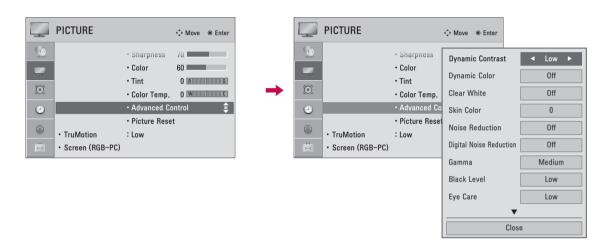




- Backlight: This function adjusts the brightness of the backlight behind the LCD screen. Adjusting the backlight is recommended when setting the brightness of the TV. When decreasing the backlight, the brightness of the black becomes darker without any loss in video signal and the power consumption is reduced.
- Contrast: Increase or decrease the gradient of the video signal. You may use Contrast when the bright part of the picture is saturated.
- Brightness: Adjusts the base level of the signal in the picture. You may use Brightness when the dark part of the picture is saturated.
- Sharpness: Adjusts the level of crispness in the edges between the light and dark areas of the picture. The lower the level, the softer the image.
- Color: Adjusts intensity of all colors.
- **Tint**: Adjusts the balance between red and green levels.
- Color Temp.: Set to warm to enhance hotter colors such as red, or set to cool to enhance cooler colors such as blue.

PICTURE IMPROVEMENT TECHNOLOGY (ADVANCED CONTROL)

Advanced Control allows you to adjust some of the advanced features of your LG display. To reset to the factory default after making adjustments to each input source, execute the **Picture Reset** function for each Picture Mode.

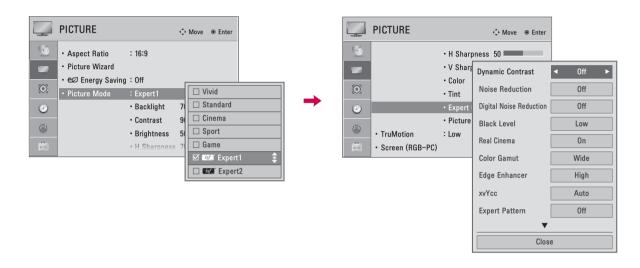




PICTURE CONTROL

EXPERT PICTURE CONTROL

Expert1 and **Expert2** provide even more advanced picture settings for users. Typical used by professionals for calibrating the TV.





*This feature is not available for all models.

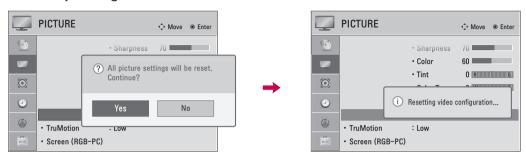
Dynamic Contrast	Adjusts the contrast to keep it at the best level according to the brightness of the screen. The picture is improved by making bright parts brighter and dark parts darker.
Dynamic Color	Adjusts screen colors so that they look livelier, richer and clearer. This feature enhances hue, saturation and luminance so that red, blue and green white look more vivid.
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	 You can adjust brightness of dark areas and middle gray level areas of the picture. Low: Make brighter and middle gray level areas of the picture brighter. Medium: Express original picture levels. High: Make dark and middle gray level areas of the picture darker.
Black Level	Low: The reflection of the screen gets darker. High: The reflection of the screen gets brighter. Set black level of the screen to proper level. This function is available in the following modes: AV (NTSC-M), HDMI or Component.
Clear White	■ Make the white area of screen brighter and more white.
Eye Care	 Adjust the brightness of the screen to prevent the screen from being too bright. Dims extremely bright pictures. This feature is enabled in "Picture Mode-Standard, Sports, Game".
Real Cinema	 Makes video clips recorded in film look more natural by eliminating judder effect. DVD and Blu-ray movies are filmed at 24 frames per second (fps). With LG Real Cinema, every frame is consistently processed 5 times in 1/24 of a second producing 120 fps with TruMotion or 2 times in 1/24 of a second producing 48 fps without TruMotion, thus totally eliminating the judder effect. This function can also work when TruMotion is off.
Color Gamut	Advanced Control Maximize the utilization of colors to increase color quality. Standard: Displays standard set of colors. Wide: Increase number of colors used.
	LED LCD TV/LCD TV: Expert Control Displays color domain of the signal. Standard: Displays standard set of colors. Wide: Increase number of colors used. EBU: Mode to display EBU standard color area. SMPTE: Mode to display SMPTE standard color area. BT709: Mode to display BT709 standard color area.

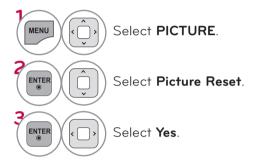
PICTURE CONTROL

Edge Enhancer	 Show clearer and distinctive yet natural edges in of the video. This function is enabled in "Picture Mode - Expert".
xvYCC	 This is 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.
Color Filter	This function filters specific colors in the video. You can use the RGB filter to set color saturation and hue accurately.
Expert Pattern	This is a pattern used for expert adjustment.This function is enabled in "Picture Mode - Expert" when you watch DTV.
Color Temperature	 Adjusts the overall color of the screen by changing the white baseline. a. Gamma: Select 1.9, 2.2, 2.4 b. Method: 2 Points Pattern: Inner, Outer Red/Green/Blue Contrast, Red/Green/Blue Brightness: The adjustment range is -50 - +50. c. Method: 10 Point IRE Pattern: Inner, Outer IRE (Institute of Radio Engineers) is the unit to display the size of the video signal and can be set among 10, 20, 30 - 100. You can adjust Red, Green or Blue according to each setting. Luminance: This function displays calculated luminance value for 2.2 gamma. You can input luminance value you want at 100 IRE, then the target luminance value for 2.2 gamma is displayed at every 10 steps from 10 IRE to 90 IRE. Red/Green/Blue: The adjustment range is -50 - +50. d. Apply to all inputs
Color Management System	 A tool used by the experts to make adjustments by using the test patterns, this does not affect other colors but can be used to selectively adjust the 6 color areas (Red/Green/Blue/Cyan/Mgt/Yellow). Color difference may not be distinctive even when you make the adjustments for the general video. Adjusts Red/Green/Blue/Yellow/Cyan/Magenta. Red/Green/Blue/Yellow/Cyan/Magenta Color: The adjustment range is -30 - +30. Red/Green/Blue/Yellow/Cyan/Magenta Tint: The adjustment range is -30 - +30. This feature is disabled in RGB-PC and HDMI-PC mode.

PICTURE RESET

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



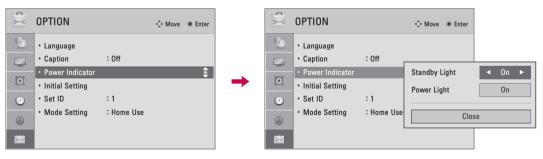




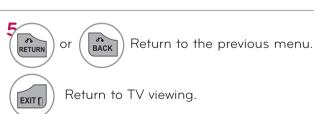


POWER INDICATOR

Adjust the power/standby indicator light on the front of the TV.







- Standby Light: Determines whether to set the indicator light on the front of the TV to On or Off in standby mode.
- Power Light: Determines whether to set the indicator light on the front of the TV to On or Off when the power turns on.

PICTURE CONTROL

TRUMOTION

- For 32/37/42/47/55LE5300, 42/47/55LE7300, 32/42/47/55LD520, 55LD520C, 42/47/55LD630, 42/47/55LE530C

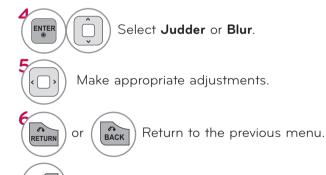
Advance video technology that provides clearer, smoother images, even during fast action scenes creating a more stable structure for a crisper picture.







Adjustment for TruMotion (Judder and Blur) with selecting User



Return to TV viewing.

EXIT [

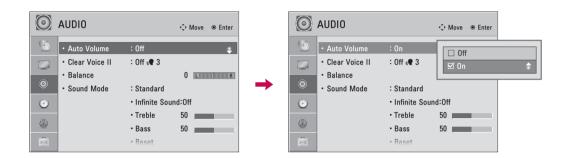
■ Off: Turn off TruMotion operation. Low: Provides smooth picture movement. Use this setting for standard ■ **High**: Provides smoother picture movement. ■ Judder: Adjusts noise of the screen. **Blur**: Adjusts after-image of the screen. ■ **TruMotion** works with all inputs except PC mode. ■ If you enable "**TruMotion**", noise may appear on the screen. If this occurs, set "TruMotion" to "Off". ■ If you select "Picture Mode-Game"

set "TruMotion" to "Off".

AUTO VOLUME

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

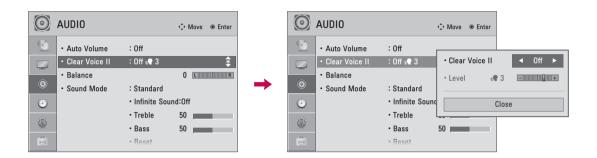
Because each broadcasting station has its own signal conditions, volume adjustment may be needed every time the channel is changed. This feature allows users to enjoy stable volume levels by making automatic adjustments for each program.





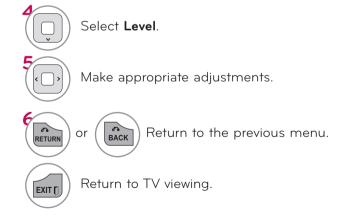
CLEAR VOICE II

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



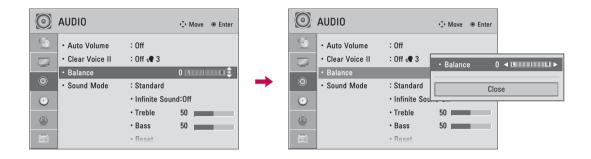


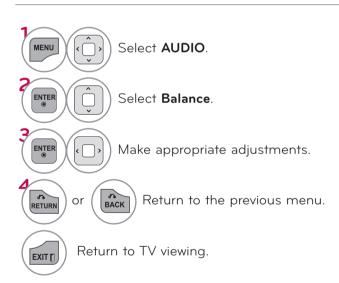
Adjustment for Clear Voice Level with selecting **On**



BALANCE

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

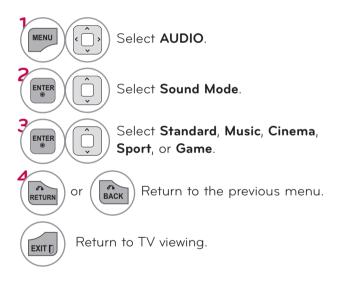




PRESET SOUND SETTINGS (SOUND MODE)

Sound Mode lets you enjoy the best sound without any special adjustment using factory presets.

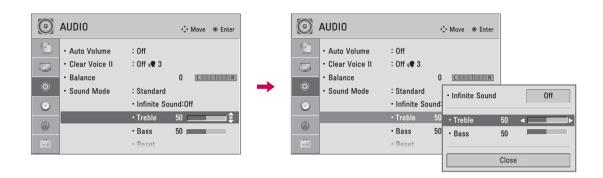


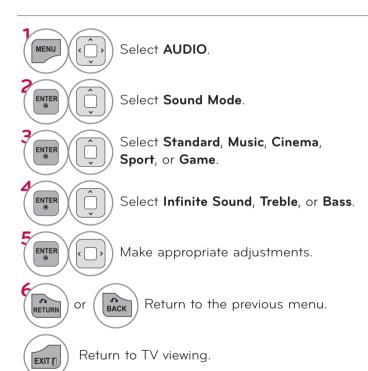


Standard, Music, Cinema, Sport, and Game are preset for optimum sound quality at the factory.
 You can also adjust Sound Mode in the Q.MENU.
 Standard: Offers standard-quality sound.
 Music: Optimizes sound for listening to music.
 Cinema: Optimizes sound for watching movies.
 Sport: Optimizes sound for watching sports events.
 Game: Optimizes sound for playing games.

SOUND SETTING ADJUSTMENT - USER MODE

Adjust the sound to suit your taste and room situations.

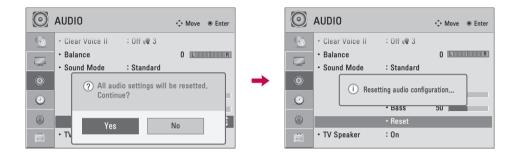


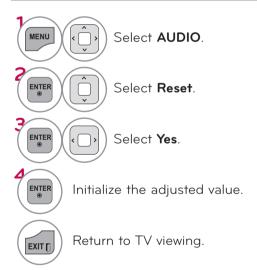


- If sound quality or volume is not at the level you want, it is recommended to use a separate home theater system or amp to cope with different user environments.
- If you select "Clear Voice II-On", the Infinite Sound feature will not operate
- Infinite Sound: Infinite Sound is a patented LG proprietary sound processing technology that strives immersive 5.1 surround sound with just two front speakers.

AUDIO RESET

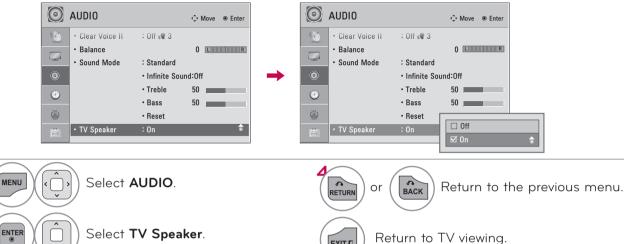
Settings of the selected Sound Mode return to the default factory settings.





TV SPEAKERS ON/OFF SETUP

If you wish to use an external Hi-Fi system, turn off the TV's internal speakers.



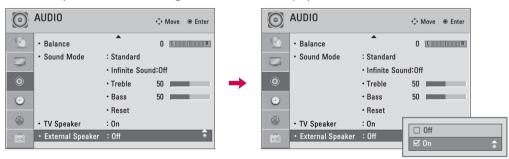
EXIT [



EXTERNAL SPEAKERS ON/OFF SETUP

(For 32/37/42/47LD450C, 32/37/47/47LD452C, 32/37/42/47LD452B, 26LD352C)

Turn the external speakers on if using external audio equipment.







STEREO/SAP BROADCAST SETUP

On analog signals, 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.



Analog TV

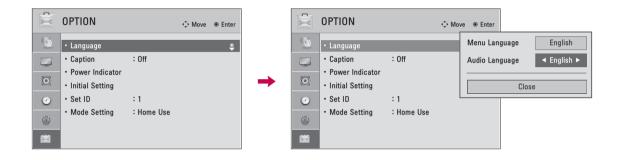


Digital TV



AUDIO LANGUAGE

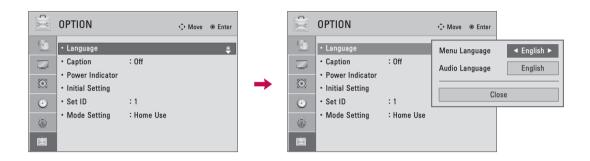
This feature operates only in DTV/Cable DTV mode.





ON-SCREEN MENUS LANGUAGE SELECTION

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

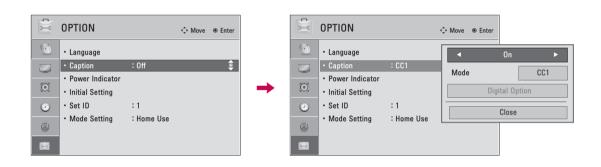




CAPTION MODE

Analog Broadcasting System Captions

Captions are provided to help the hearing impaired 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**.





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

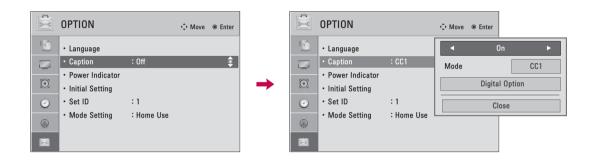
The term for the words that appear in a large black frame and almost cover the entire screen; usually messages provided by the broadcaster.

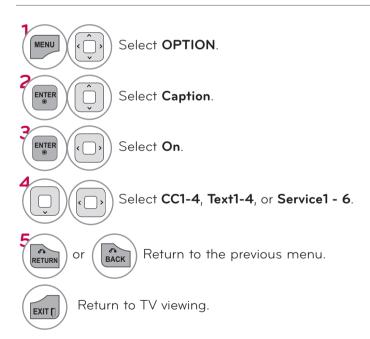
Digital Broadcasting System Captions

Choose the language you want the DTV/Cable 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.

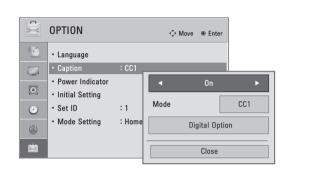


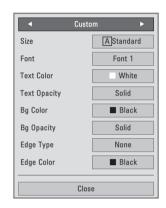


Caption Option

Customize the DTV/Cable DTV captions that appear on your screen.

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







Select **OPTION**.



Select Caption.



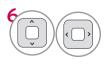
Select On.



Select Digital Option.



Select Custom.



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.



or



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 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

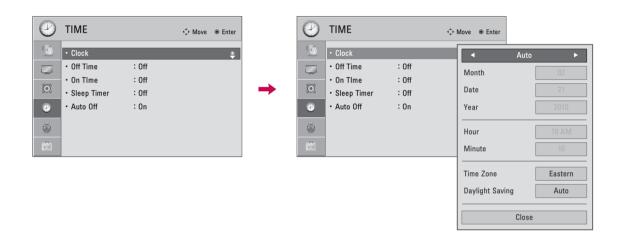
CLOCK SETTING

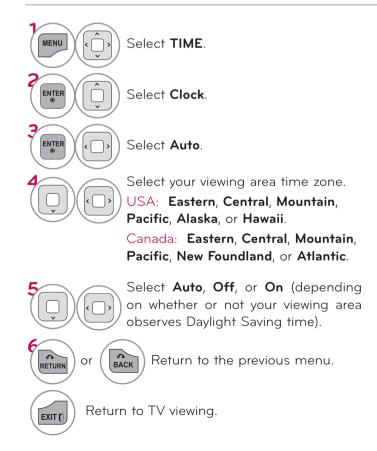
Auto Clock Setup

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.

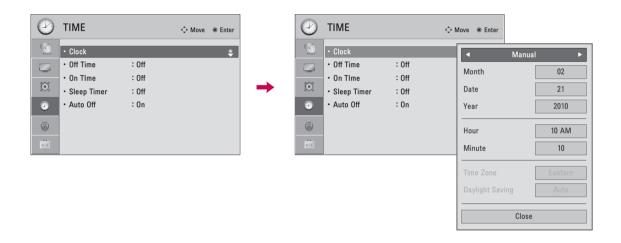
Set the clock manually if the current time is set incorrectly by the auto clock function.

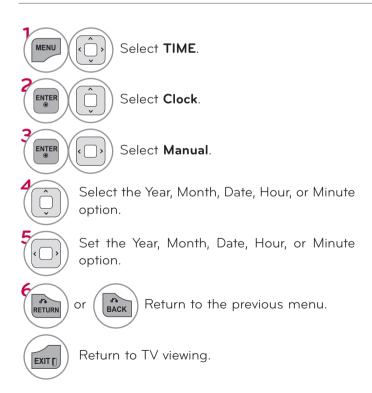




Manual Clock Setup

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





TIME SETTING

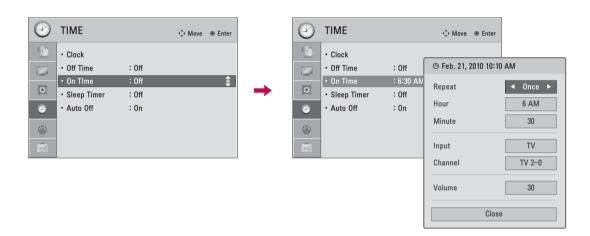
AUTO ON/OFF TIME SETTING

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

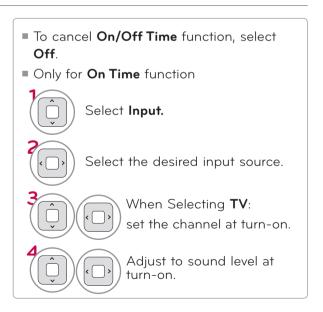
The Off Time function overrides the On Time function if they are both set to the same time.

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

If you do not press any button within 2 hours after the TV turns on with the **On Time** function, the TV will automatically revert to standby mode. (Except 42/47LD450C, 55LD520C, 42/47/55LE530C, 42/47LD452B, 26LD352C)



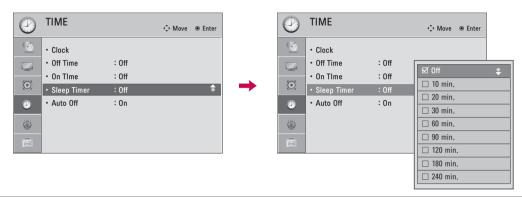




SLEEP TIMER SETTING

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

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









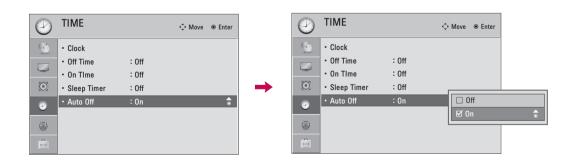


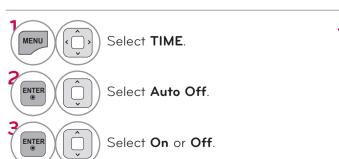


- To cancel the **Sleep Timer**, select **Off**.
- You can also adjust Sleep Timer in the Q.MENU.

AUTO SHUT-OFF SETTING

For 37/42/47LD450C, 55LD520C, 42/47LD451C, 32/37/42/47LD452C, 32/37/42/47LD452B, 26LD352C If set to on and there is no input signal, the TV turns off automatically after 15 minutes.







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-PG (Parental guidance suggested)
- TV-14 (Parents strongly cautioned)
- TV-MA (Mature audience only)
- ■TV-Y (All children)
- 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.





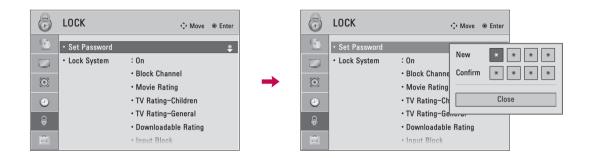


Input the password.

- Enter the password as requested.
- The TV is set up with the initial password "0-0-0-0".
- If you forget your password, press "0-3-2-5" on the remote control.

Set Password

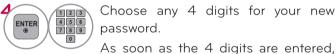
Change the password by inputting a new password twice.











re-enter the same 4 digits on the **Confirm**.

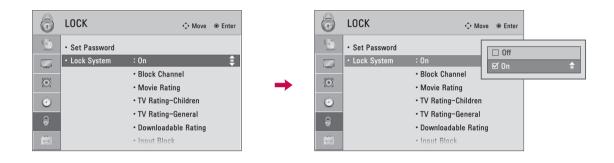


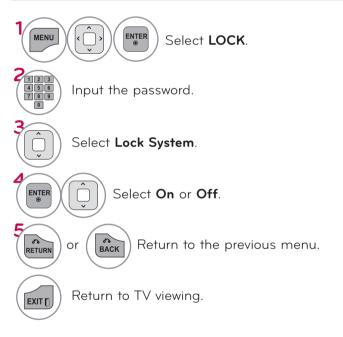
Return to TV viewing.

PARENTAL CONTROL / RATINGS

Lock System

Enables or disables the blocking scheme you set up previously.

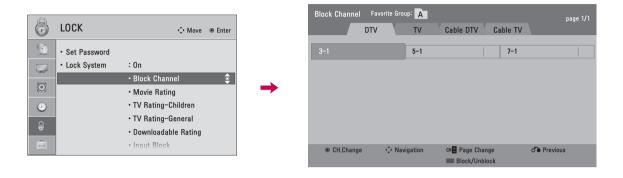




When you select **On**, the Lock System is enable.

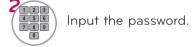
CHANNEL BLOCKING

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

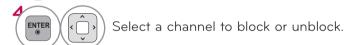


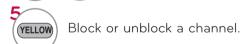


If a channel is locked, enter the password to unlock it temporarily.

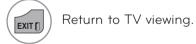












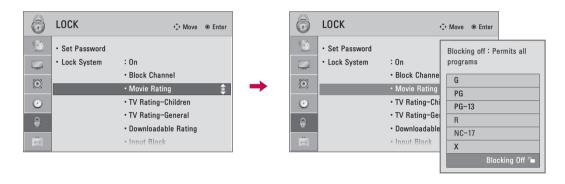
EXIT [

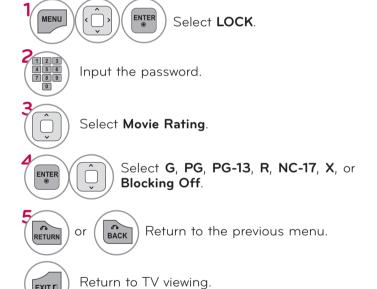
PARENTAL CONTROL / RATINGS

MOVIE & TV RATING

Movie Rating (MPAA)- For USA

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.

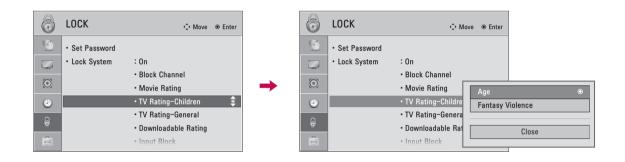


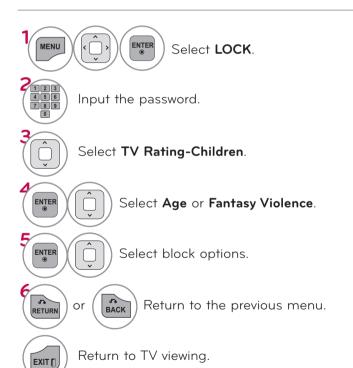


■ If Movie Rating, TV Rating-Children or TV Rating-General is locked, enter the password to unlock it temporarily. ■ **G** (General audience) ■ **PG** (Parental guidance suggested) ■ **PG-13** (Parents strongly cautioned) **R** (Restricted) ■ NC-17 (No one 17 and under admitted) X (Adult only) ■ **Blocking 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 - For USA

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.





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

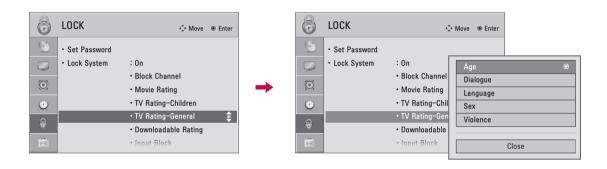
135

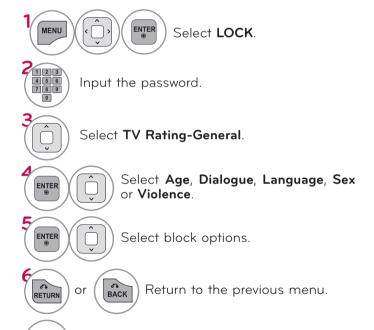
EXIT [

PARENTAL CONTROL / RATINGS

TV Rating General - For USA

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



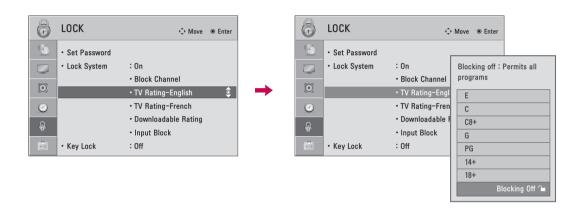


Return to TV viewing.

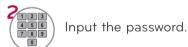
Age (applies to TV-G,TV-PG,TV-14,TV-MA).
Dialogue-sexual dialogue (applies to TV-PG,TV-14).
Language-adult language (applies to TV-PG, TV-14, TV-MA).
Sex-sexual situations (applies to TV-PG, TV-14, TV-MA).
Violence (applies to TV-PG, TV-14, TV-MA).

TV Rating English - For CANADA

Selecting Canadian English rating system.













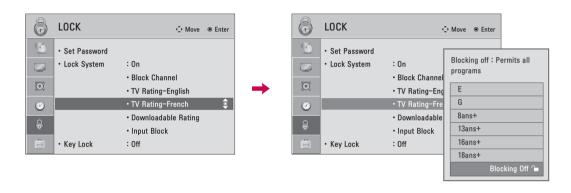


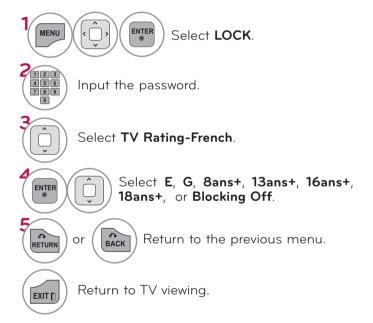
- If TV Rating-English or TV Rating-French is locked, enter the password to unlocked it temporarily.
 E (Exempt)
 C (Children)
 C8+ (Children eight years and older)
 G (General programming, suitable for all audiences)
 PG (Parental Guidance)
- 14+ (Viewers 14 years and older)
- 18+ (Adult programming)
- Blocking Off (Permits all programs)

PARENTAL CONTROL / RATINGS

TV Rating French - For CANADA

Selecting Canadian French rating system.



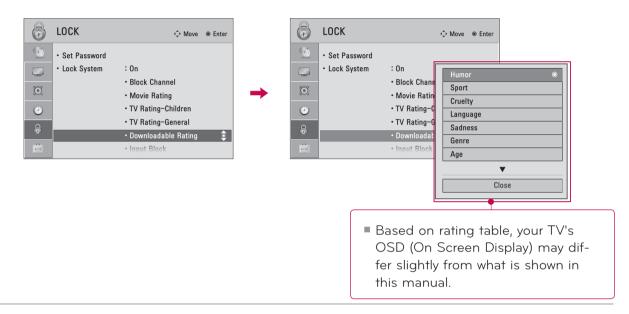


E (Exempt)
G (General)
8ans+ (General-Not convenient for little children)
13ans+ (Not convenient for children of 13 years and younger)
16ans+ (Not convenient for children of 16 years and younger)
18ans+ (This programs is only for adults)
Blocking Off (Permits all programs)

DOWNLOADABLE RATING

This function is available only for digital channels.

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







Input the password.



Select Downloadable Rating.



Select desired **Downloadable Rating** option.



Select desired option and block it.



or BACK

Return to the previous menu.



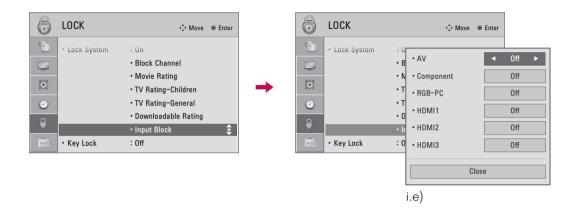
Return to TV viewing.

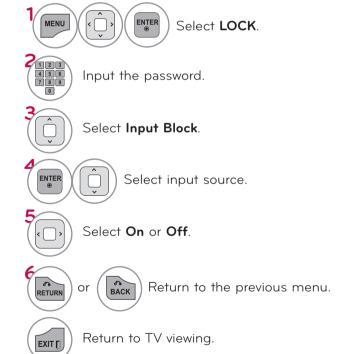
If a Downloadable rating is locked, enter the password to unlock it temporarily.

PARENTAL CONTROL / RATINGS

EXTERNAL INPUT BLOCKING

Enables you to block an input.

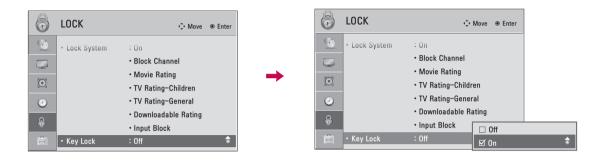


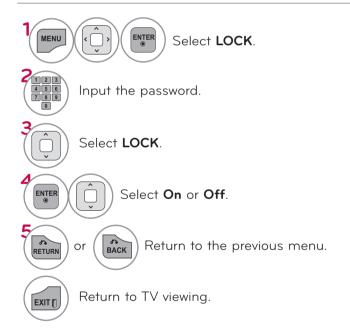


KEY LOCK

This feature can be used to prevent unauthorized viewing by locking out the front panel controls, so that it can only be used with the remote control.

This TV is programmed to remember which option it was last set to even if you turn the TV off.





pressed while viewing the TV.

APPENDIX

TROUBLESHOOTING

Abnormal Operation	
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.
TV turns off suddenly	 Is the sleep timer set? Check the power control settings. Power interrupted. If there is no signal, the TV turns off automatically in 15 minutes.

Video Problems	
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 pic- tures	■ Check antenna (Change the direction of the antenna).
No picture when con- necting 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.

Audio Problems	
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.

PC Mode Problems	
The signal is out of range	Adjust resolution, horizontal frequency, or vertical frequency on the PC.Check the input source.
Vertical bar or stripe on background & Horizontal Noise & Incorrect position	 Activate the Auto configure feature or adjust size, phase, or H/V position. (Option)
Screen color is unsta- ble or single color	Check the signal cable.Reinstall the PC video card.
When connecting the HDMI cable to the PC, there is no audio.	Check the manual for the video card in the PC to see if it supports HDMI audio and how to set it up properly.

APPENDIX

Movie List Problems	
The file does not appear on the Movie List.	■ Check whether the file extension is supported.
Message is displayed saying "This file is invalid" or the audio is working normally but the video is not working normally.	 Check whether the file is playing normally on a PC. (Check whether the file is damaged.) Check whether the resolution is supported. Check whether the video/audio codec is supported. Check whether the frame rate is supported.
Message is displayed saying "Unsupported Audio" or the video is working normally but the audio is not working normally.	 Check whether the file is playing normally on a PC. (Check whether the file is damaged.) Check whether the audio codec is supported. Check whether the bit rate is supported. Check whether the sample rate is supported.
Subtitle is not working.	 Check whether the file is playing normally on a PC. (Check whether the file is damaged.) Check whether the video file and subtitle file name are the same. Check whether the video file and subtitle file are located in the same folder. Check whether the subtitle file is supported. Check whether the language is supported. (When you open the subtitle file on a PC, you can check the language of the subtitle file.)

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

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

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

A 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		19LE5300 (19LE5300-UE)	22LE5300 (22LE5300-UE) 22LE5500 (22LE5500-UA)
(Width x Height	With stand	471.2 mm x 365.9 mm x 155.4 mm (18.5 inch x 14.4 inch x 6.1 inch)	542.9 mm x 407.1 mm x 155.4 mm (21.3 inch x 16.0 inch x 6.1 inch)
	Without stand	471.2 mm x 315.5 mm x 34.4 mm (18.5 inch x 12.4 inch x 1.3 inch)	542.9 mm x 357.6 mm x 34.4 mm (21.3 inch x 14.0 inch x 1.3 inch)
Weight	With stand	3.4 kg (7.4 lbs)	4.2 kg (9.2 lbs)
	Without stand	3.2 kg (7.0 lbs)	3.9 kg (8.5 lbs)

МС	DDELS	26LE5300 (26LE5300-UE) 26LE5500 (26LE5500-UA)
Dimensions With stand (Width x Height x Depth) Without stand	With stand	652.0 mm x 480.8 mm x 191.4 mm (25.6 inch x 18.9 inch x 7.5 inch)
	Without stand	652.0 mm x 420.3 mm x 34.4 mm (25.6 inch x 16.5 inch x 1.3 inch)
Weight	With stand	6.1 kg (13.4 lbs)
	Without stand	5.1 kg (11.2 lbs)

Power Requirement		19LE5300: 24V , 1.6A		
		22LE5300: 24V=== , 1.7 A		
		22LE5500: 24V=== , 1.7 A		
		26LE5300: 24V , 1.8 A		
		26LE5500: 24V === , 1.8 A		
Adapter (DC F	Power)	In: AC100-240 V ~ 50/60 Hz		
		Out: DC 24 V, 3.42 A		
Television Syst	em	NTSC-M, ATSC, 64 & 256 QAM		
Program Cove	rage	VHF 2-13, UHF 14-69, CATV 1-135, DTV 2-69, CADTV 1-135		
External Anten	ina Impedance	75 Ω		
Environment	Operating Temperature	0 °C to 40 °C (32 °F to 104 °F)		
condition	Operating Humidity	Less than 80 %		
	Storage Temperature	-20 °C to 60 °C (-4 °F to 140 °F)		
	Storage Humidity	Less than 85 %		

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

MODELS		32LE5300 (32LE5300-UC)	37LE5300 (37LE5300-UC)
Dimensions (Width x	With stand	784.6 mm x 558.1 mm x 221.0 mm (30.8 inch x 21.9 inch x 8.7 inch)	905.0 mm x 630.0 mm x 270.0 mm (35.6 inch x 24.8 inch x 10.6 inch)
Height x Depth)	Without stand	784.6 mm x 499.5 mm x 39.9 mm (30.8 inch x 19.6 inch x 1.5 inch)	905.0 mm x 568.0 mm x 39.9 mm (35.6 inch x 22.3 inch x 1.5 inch)
Weight	With stand	12.4 kg (27.3 lbs)	15.3 kg (33.7 lbs)
	Without stand	10.5 kg (23.1 lbs)	12.8 kg (28.2 lbs)
Current Value		1.3 A	1.4 A

MODELS		42LE5300 (42LE5300-UC) 42LE530C (42LE530C-UC)	47LE5300 (47LE5300-UC) 47LE530C (47LE530C-UC)
Dimensions (Width x	With stand	1016.0 mm x 692.0 mm x 270.0 mm (40.0 inch x 27.2 inch x 10.6 inch)	1126.6 mm x 757.9 mm x 284.4 mm (44.3 inch x 29.8 inch x 11.1 inch)
Height x Depth)	Without stand	1016.0 mm x 630.0 mm x 29.3 mm (40.0 inch x 24.8 inch x 1.1 inch)	1126.6 mm x 692.0 mm x 29.3 mm (44.3 inch x 27.2 inch x 1.1 inch)
Weight	With stand	19.2 kg (42.3 lbs)	22.6 kg (49.8 lbs)
	Without stand	16.7 kg (36.8 lbs)	19.6 kg (43.2 lbs)
Current Value		1.5 A	1.7 A

MODELS		55LE5300 (55LE5300-UC) 55LE530C (55LE530C-UC)
(Width x	With stand	1306.0 mm x 867.0 mm x 345.0 mm (51.4 inch x 34.1 inch x 13.5 inch)
	Without stand	1306.0 mm x 797.0 mm x 30.7 mm (51.4 inch x 31.3inch x 1.2 inch)
Weight	With stand	34.05 kg (75.0 lbs)
	Without stand	28.8 kg (63.4 lbs)
Current Value		2.0 A

Power Requirement		AC 120 V ~ 50 / 60 Hz	
i ower requirer	illeili	AC 120 V = 30 / 00 112	
Television Syste	em	NTSC-M, ATSC, 64 & 256 QAM	
Program Coverage		VHF 2-13, UHF 14-69, CATV 1-135, DTV 2-69, CADTV 1-135	
External Anten	na Impedance	75 Ω	
Environment	Operating Temperature	0 °C to 40 °C (32 °F to 104 °F)	
condition	Operating Humidity	Less than 80 %	
	Storage Temperature	-20 °C to 60 °C (-4 °F to 140 °F)	
	Storage Humidity	Less than 85 %	

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

М	ODELS	42LE7300 (42LE7300-UA)	47LE7300 (47LE7300-UA)		
Dimensions (Width x	With stand	1009.2 mm x 694.5 mm x 286.5 mm (39.7 inch x 27.3 inch x 11.2 inch)	1119.6 mm x 757.1 mm x 286.5 mm (44.0 inch x 29.8 inch x 11.2 inch)		
Height x Depth)	Without stand	1009.2 mm x 629.7 mm x 29.3 mm (39.7 inch x 24.7 inch x 1.1 inch)	1119.6 mm x 691.3 mm x 29.3 mm (44.0 inch x 27.2 inch x 1.1 inch)		
Weight	With stand	25.5 kg (56.2 lbs)	29.7 kg (65.4 lbs)		
	Without stand	21.0 kg (46.2 lbs)	25.2 kg (55.5 lbs)		
Current Value		1.3 A	1.5 A		
M	ODELS	55LE7300 (5	5LE7300-UA)		
Dimensions (Width x	With stand	1305.2 mm x 874.9 mm x 320.2 mm (51.3 inch x 34.4 inch x 12.6 inch)			
Height x Depth)	Without stand	1305.2 mm x 799.4 mm x 32.4 mm (51.3 inch x 31.4 inch x 1.2 inch)			
Weight	With stand	44.5 kg (98.1 lbs)			
	Without stand	37.1 kg (81.7 lbs)			
Current Value		1.8 A			
Power requirem	nent	AC 120 V ~ 50 / 60 Hz			
Television Syste	em	NTSC-M, ATSC, 64 & 256 QAM			
Program Cover	age	VHF 2-13, UHF 14-69, CATV 1-135, DTV 2-69, CADTV 1-135			
External Anten	na Impedance		75 Ω		
Environment	Operating Temperatur	o °C to 40 °C	0 °C to 40 °C (32 °F to 104 °F)		
condition	Operating Humidity	Less	Less than 80 %		
	Storage Temperature	-20 °C to 60	°C (-4 °F to 140 °F)		
	Storage Humidity	Less	Less than 85 %		

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

М	ODELS	26LD352C (26LD352C-UA)		
Dimensions (Width x	With stand	663.0 mm x 484.0 mm x 206.8 mm (26.1 inch x 19.0 inch x 8.1 inch)		
Height x Depth)	Without stand	663.0 mm x 423.0 mm x 79.9 mm (26.1 inch x 16.6 inch x 3.1 inch)		
Weight	With stand	7.3 kg (16.0 lbs)		
	Without stand	6.2 kg (13.6 lbs)		
Current Value		1.0 A		
Power requirem	nent	AC 100-240 V ~ 50 / 60 Hz		
Television Syste	em	NTSC-M, ATSC, 64 & 256 QAM		
Program Cover	age	VHF 2-13, UHF 14-69, CATV 1-135, DTV 2-69, CADTV 1-135		
External Anteni	na Impedance	75 Ω		
Environment	Operating Temperatu	o °C to 40 °C (32 °F to 104 °F)		
condition	Operating Humidity	Less than 80 %		
	Storage Temperature	-20 °C to 60 °C (-4 °F to 140 °F)		
	Storage Humidity	Less than 85 %		

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

MODEL		32LD420 (32LD420-UA)			
Dimensions (Width x	With stand		0 mm x 224.0 mm 9 inch x 8.8 inch)		
Height x Depth)	Without stand		0 mm x 79.9 mm 9 inch x 3.1 inch)		
Weight	With stand	10.8 kg (23.8 lbs)		
	Without stand	9.7 kg (21.3 lbs)			
Current Value		1.4	A		
МС	DDELS	42LD420 (42LD420-UA)	47LD420 (47LD420-UA)		
Dimensions (Width x	With stand	1028.0 mm x 715.4 mm x 297.0 mm (40.4 inch x 28.1 inch x 11.6 inch)	1140.6 mm x 784.8 mm x 337.4 mm (44.9 inch x 30.8 inch x 13.2 inch)		
Height x Depth)	Without stand	1028.0 mm x 658.6 mm x 87.8 mm (40.4 inch x 25.9 inch x 3.4 inch)	1140.6 mm x 722.9 mm x 99.0 mm (44.9 inch x 28.4 inch x 3.8 inch)		
Weight	With stand	16.6 kg (36.5 lbs)	21.6 kg (47.6 lbs)		
	Without stand	14.8 kg (32.6 lbs)	19.0 kg (41.8 lbs)		
Current Value		1.9 A	2.6 A		
MODELS		32LD450 (32LD450-UA) 32LD452C (32LD452C-UA) 32LD452B (32LD452B-UA)	37LD450 (37LD450-UA) 37LD450C (37LD450C-UA) 37LD452C (37LD452C-UA) 37LD452B (37LD452B-UA)		
Dimensions (Width x	With stand	799.0 mm x 555.0 mm x 207.0 mm (31.4 inch x 21.8 inch x 8.1 inch)	916.0 mm x 625.0 mm x 261.0 mm (36.0 inch x 24.6 inch x 10.2 inch)		
Height x Depth)	Without stand	799.0 mm x 506.0 mm x 73.5 mm (31.4 inch x 19.9 inch x 2.8 inch)	916.0 mm x 575.0 mm x 77.4 mm (36.0 inch x 22.6 inch x 3.0 inch)		
Weight	With stand 9.1 kg (20.0 lbs)		12.5 kg (27.5 lbs)		
	Without stand	8.1 kg (17.8 lbs)	10.8 kg (23.8 lbs)		
Current Value		1.2 A	1.6 A		
МС	DDELS	42LD450 (42LD450-UA) 42LD450C (42LD450C-UA) 42LD451C (42LD451C-UA) 42LD452C (42LD452C-UA) 42LD452B (42LD452B-UA)	47LD450 (47LD450-UA) 47LD450C (47LD450C-UA) 47LD451C (47LD451C-UA) 47LD452C (47LD452C-UA) 47LD452B (47LD452B-UA)		
Dimensions (Width x	With stand	023.0 mm x 685.0 mm x 261.0 mm (40.2 inch x 26.9 inch x 10.2 inch)	1136.0 mm x 757.0 mm x 270.0 mm (44.7 inch x 29.8 inch x 10.6 inch)		
Height x Depth)	Without stand	1023.0 mm x 635.0 mm x 76.6 mm (40.2 inch x 25.0 inch x 3.0 inch)	1136.0 mm x 698.0 mm x 76.5 mm (44.7 inch x 27.4 inch x 3.0 inch)		
Weight	With stand	15.1 kg (33.2 lbs)	19.5 kg (42.9 lbs)		
	Without stand	13.5 kg (29.7 lbs)	17.5 kg (38.5 lbs)		
Current Value		1.9 A	2.6 A		
Power requirem			O V ~ 50 / 60 Hz		
Television System			SC, 64 & 256 QAM		
Program Coverage External Antenna Impedance			V 1-135, DTV 2-69, CADTV 1-135		
Environment			75 Ω C (32 °F to 104 °F)		
condition	Operating Temperature Operating Humidity		C (32		
	Storage Temperature				
	Storage Humidity		-20 °C to 60 °C (-4 °F to 140 °F) Less than 85 %		

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

MODELS			32LD520 (32LD520-UA)	42LD520 (42LD520-UA)		
Dimensions (Width x	With stand		.0 mm x 585.6 mm x 210.9 mm 2.0 inch x 23.0 inch x 8.3 inch)	1052.2 mm x 720.1 mm x 270.6 mm (41.4 inch x 28.3 inch x 10.6 inch)		
Height x Depth)	VVithout stand		5.0 mm x 529.6 mm x 82.0 mm 2.0 inch x 20.8 inch x 3.2 inch)	1052.2 mm x 657.3 mm x 90.8 mm (41.4 inch x 25.8 inch x 3.5 inch)		
Weight	With stand		12.6 kg (27.7 lbs)	19.0 kg (41.8 lbs)		
	Without stand		11.4 kg (25.1 lbs)	17.2 kg (37.9 lbs)		
Current Value			1.5 A	1.9 A		
M	ODELS		47LD520 (47LD520-UA)	55LD520 (55LD520-UA), 55LD520C (55LD520C-UA)		
Dimensions (Width x	With stand		3.4 mm x 791.4 mm x 319.0 mm 16.1 inch x 31.1 inch x 12.5 inch)	1357.0 mm x 901.0 mm x 423.0 mm (53.4 inch x 35.4 inch x 16.6 inch)		
Height x Depth)	Without stand		3.4 mm x 723.4 mm x 100.8 mm 6.1 inch x 28.4 inch x 3.9 inch)	1357.0 mm x 835.4 mm x 109.6 mm (53.4 inch x 32.8 inch x 4.3 inch)		
Weight	With stand		23.6 kg (52.0 lbs)	36.4 kg (80.2 lbs)		
	Without stand		20.8 kg (45.8 lbs)	32.9 kg (72.5 lbs)		
Current Value			2.5 A	3.4 A		
MODELS			42LD630 (42LD630-UC)	47LD630 (47LD630-UC)		
Dimensions (Width x	(Width x				4.0 mm x 685.0 mm x 261.0 mm 0.3 inch x 26.9 inch x 10.2 inch)	1137.0 mm x 758.0 mm x 270.0 mm (44.7 inch x 29.8 inch x 10.6 inch)
Height x Depth)	Without stand		4.0 mm x 621.0 mm x 76.8 mm 0.3 inch x 24.4 inch x 3.0 inch)	1137.0 mm x 685.0 mm x 76.8 mm (44.7 inch x 26.9 inch x 3.0 inch)		
Weight	With stand		15.5 kg (34.1 lbs)	20.3 kg (44.7 lbs)		
	Without stand		13.9 kg (30.6 lbs)	18.3 kg (40.3 lbs)		
Current Value			2.1 A	2.5 A		
М	ODELS		55LD630 (5	5LD630-UC)		
Dimensions (Width x	With stand		1329.0 mm x 872.0 mm x 330.0 mm (52.3 inch x 34.3 inch x 12.9 inch)			
Height x Depth)	Without stand		1329.0 mm x 796. (52.3 inch x 31.3	.0 mm x 96.5 mm 3 inch x 3.7 inch)		
Weight	With stand		33.0 kg	(72.7 lbs)		
	Without stand		29.8 kg ((65.6 lbs)		
Current Value			3.4 A			
Power requirem	Power requirement		AC 100-240 V ~ 50 / 60 Hz			
Television System			NTSC-M, ATSC, 64 & 256 QAM			
Program Cover	age		VHF 2-13, UHF 14-69, CAT	V 1-135, DTV 2-69, CADTV 1-135		
External Antenr				75 Ω		
Environment	Operating Temperatu	re	0 °C to 40 °C	C (32 °F to 104 °F)		
condition	Operating Humidity			than 80 %		
	Storage Temperature		-20 °C to 60 °C (-4 °F to 140 °F)			
	Storage Humidity		Less	than 85 %		

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

IR CODE

Code (Hexa)	Function	Note	Code (Hexa)	Function	Note
00	CH ^	Remote Control Button	OC	POTAL	Remote Control Button
01	CH V	Remote Control Button	AB	GUIDE	Remote Control Button
02	VOL +	Remote Control Button	ВО	•	Remote Control Button
03	VOL -	Remote Control Button	B1		Remote Control Button
06	>	Remote Control Button	ВА	II	Remote Control Button
07	<	Remote Control Button	D6	TV	Discrete IR Code
08	Ф	Remote Control Button			(TV Input Selection)
		(Power On/Off)	C4	POWER ON	Discrete IR Code
09	MUTE	Remote Control Button			(Only Power On)
ОВ	INPUT	Remote Control Button	C5	POWER OFF	Discrete IR Code
OF	TV	Remote Control Button			(Only Power Off)
10-19	Number 0-9	Remote Control Button	5A	AV or AV1	Discrete IR Code
1A	FLASHBK	Remote Control Button			(AV1 Input Selection)
1E	FAV/MARK	Remote Control Button	DO	AV2	Discrete IR Code
28	BACK or RETURN	Remote Control Button			(AV2 Input Selection)
30	AV MODE	Remote Control Button	BF	COMPONENT	Discrete IR Code
40	^	Remote Control Button			(Component Input Selection)
41	v	Remote Control Button	D5	RGB-PC	Discrete IR Code
43	MENU	Remote Control Button			(RGB-PC Input Selection)
44	ENTER	Remote Control Button	CE	HDMI1	Discrete IR Code
45	Q.MENU	Remote Control Button			(HDMI1 Input Selection)
4C	- (Dash)/LIST	Remote Control Button	CC	HDMI2	Discrete IR Code
5B	EXIT	Remote Control Button			(HDMI2 Input Selection)
79	RATIO	Remote Control Button	E9	HDMI3	Discrete IR Code
7E	SIMPLINK	Remote Control Button			(HDMI3 Input Selection)
8E	*	Remote Control Button	DA	HDMI4	Discrete IR Code
8F	«	Remote Control Button			(HDMI4 Input Selection)
95	ENERGY SAVING	Remote Control Button	76	Ratio 4:3	Discrete IR Code
AA	INFO	Remote Control Button			(Only 4:3 Mode)
61 C3	BLUE	Remote Control Button	77	Ratio 16:9	Discrete IR Code
63 C2	YELLOW	Remote Control Button			(Only 16:9 Mode)
71 CO	GREEN	Remote Control Button	AF	Ratio Zoom	Discrete IR Code
72 C1	RED	Remote Control Button			(Only Zoom Mode)

For 32/37/42/47LD452C, 32/37/42/47LD452B

[■] Use this feature depending on your models.

APPFNDIX

EXTERNAL CONTROL THROUGH RS-232C

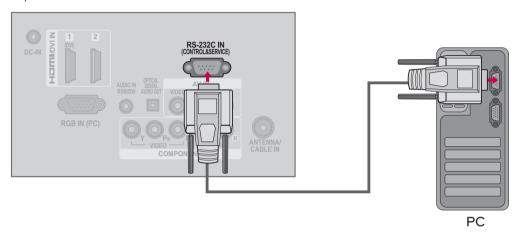
The RS-232C port allows you connect the RS-232C input jack to an external control device (such as a computer or an A/V control system) to control the TV's functions externally.

■ Note: RS-232C on this unit is intended to be used with third party RS-232C control hardware and software.

The instructions below are provided to help with programming software or to test functionality using telenet software.

RS-232C Setup

i.e)



Type of Connector; D-Sub 9-Pin Male

No.	Pin Name
1	No connection
2	RXD (Receive data)
3	TXD (Transmit data)
4	DTR (DTE side ready)
5	GND
6	DSR (DCE side ready)
7	RTS (Ready to send)
8	CTS (Clear to send)
9	No Connection

Communication Parameters

■ Baud rate: 9600 bps (UART)

■ Data length: 8 bits

■ Parity : None ■ Stop bit : 1 bit

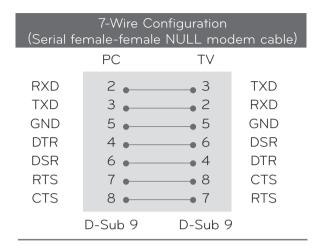
■ Communication code : ASCII code

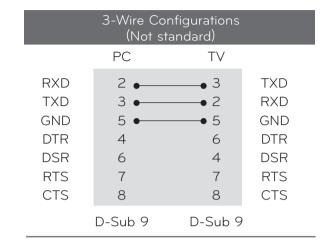
■ Use a crossed (reverse) cable.

NOTE

This product has command echo back in the RS-232C Command.

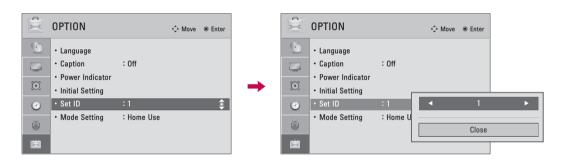
RS-232C Configurations

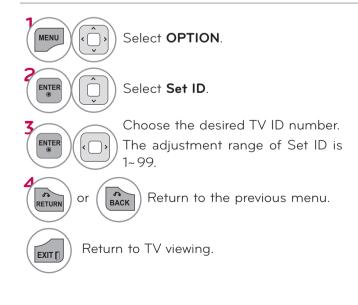


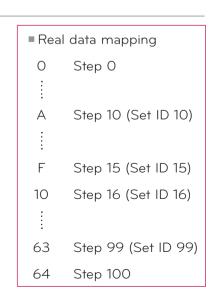


Set ID

Use this function to specify a TV ID number. Refer to 'Real Data Mapping'.







Command Reference List

	COMMAND1	COMMAND2	DATA (Hexadecimal)
01. Power	k	а	00 - 01
02. Input Select	X	b	▶ P.155
03. Aspect Ratio	k	С	▶ P.155
04. Screen Mute	k	d	00 - 01
05. Volume Mute	k	е	00 - 01
06. Volume Control	k	f	00 - 64
07. Contrast	k	g	00 - 64
08. Brightness	k	h	00 - 64
09. Color	k	i	00 - 64
10. Tint	k	j	00 - 64
11. Sharpness	k	k	00 - 64
12. OSD Select	k	1	00 - 01
13. Remote Control Lock Mode	k	m	00 - 01
14. Treble	k	r	00 - 64
15. Bass	k	S	00 - 64
16. Balance	k	†	00 - 64
17. Color Temperature	X	u	00 - 64
18. Energy Saving	j	q	▶ P.156
19. Auto Configuration	j	u	▶ P.156
21. Channel Add/ Del	m	b	00 - 01
22. Key	m	С	▶ P.157
23. Backlight	m	g	00 - 64

	COMMAND1	COMMAND2	DATAOO (Hexadecimal)	DATA01 (Hexadecimal)
20. Channel Tuning	m a		physical program high	major program low
	DATA02 (Hexadecimal)	DATAO3 (Hexadecimal)	DATAO4 (Hexadecimal)	DATA05 (Hexadecimal)
	major low	minor high	minor low	attribute

Transmission / Receiving Protocol

Transmission

 $[{\sf Command1}][{\sf Command2}][\ \][{\sf Set\ ID}][\ \][{\sf Data}][{\sf Cr}]$

[Command 1] : First command to control the set. (j, k, m or x) $% \left(\frac{1}{2}\right) =\frac{1}{2}\left(\frac{1}{2}\right) \left(\frac{1}{$

[Command 2] : Second command to control the set.

[Set ID]: You can adjust the set ID to choose desired TV ID number in Setup menu. Adjustment range is 1-99. When selecting Set ID 'O', every connected the TV is controlled. Set ID is indicated as decimal (1-99) on menu and as Hexa decimal (0x0 - 0x63) on transmission /receiving protocol

[DATA]: To transmit the command data.

Transmit the 'FF' data to read status of command.

[Cr] : Carriage Return

ASCII code '0x0D'

[]: ASCII code 'space (0x20)'

 $\ensuremath{^*}$ In this model, TV will not send the status during the standby mode.

OK Acknowledgement

[Command2][][Set ID][][OK][Data][x]

The TV transmits ACK (acknowledgement) based on this format when receiving normal data. At this time, if the data is data read mode, it indicates present status data. If the data is data write mode, it returns the data of the PC computer.

- * In this model, TV will not send the status during the standby mode.
- * Data Format

[Command 2]: Use as command.

[Set ID] : Use the small character, if set ID is 10, it will send the '0', 'a'.

[DATA] : Use the small character, if data is 0 x ab, it will send the 'a', 'b'.

[OK]: Use the large character.

Error Acknowledgemen

[Command2][][Set ID][][NG][Data][x]

The TV transmits ACK (acknowledgement) based on this format when receiving abnormal data from non-viable functions or communication errors.

Data1: Illegal Code

Data2: Not supported function

Data3: Wait more time

- * In this model, TV will not send the status during the standby mode.
- * Data Format

[Command 2] : Use as command.

[Set ID]: Use the small character, if set ID is 10, it will send the 'O.' 'a.'

[DATA] : Use the small character, if data is 0 x ab, it will send the 'a', 'b'.

[NG]: Use the large character

01. Power (Command: k a)

To control Power On/Off of the TV.

Transmission [k][a][][Set ID][][Data][Cr]

Data 00: Power Off Data 01: Power On

Acknowledgement [a][][Set ID][][OK/NG][Data][x]

- * In a like manner, if other functions transmit 'FF' data based on this format, Acknowledgement data feedback presents status about each function.
- * Note: In this model, TV will send the Acknowledge after power on processing completion.

There might be a time delay between command and acknowledge.

02. Input Select (Command: x b)

To select input source for TV.

Transmission [x][b][][Set ID][][Data][Cr]

Data 00: DTV (Antenna) Data 01: DTV (Cable)

Data 10: Analog (Antenna) Data 11: Analog (Cable)

Data 20: AV or AV1 Data 21: AV 2
Data 40: Component or Component1

Data 41: Component2

Data 60: RGB-PC Data 90: HDMI1
Data 91: HDMI2 Data 92: HDMI3

Data 93: HDMI4

Acknowledgement [b][][Set ID][][OK/NG][Data][x]

03. Aspect Ratio (Command: k c)

To adjust the screen format.

Transmission [k][c][][Set ID][][Data][Cr]

Data 01: 4:3 Data 09: Just scan

Data 02: 16:9 Data 10: Cinema Zoom1

Data 04: Zoom

Data 06: Set by program Data 1F: Cinema Zoom16

Acknowledgement [c][][Set ID][][OK/NG][Data][x]

04. Screen Mute (Command: k d)

To select screen mute on/off.

Transmission [k][d][][Set ID][][Data][Cr]

Data 00: Screen mute off (Picture on), Video-out Mute off

Data 01: Screen mute on (Picture off)

Data 10: Video-out Mute on

Acknowledgement [d][][Set ID][][OK/NG][Data][x]

* In case of Video-out Mute on only, TV will display On Screen Display (OSD). But, in case of screen mute on, TV will not display On Screen Display (OSD).

05. Volume Mute (Command: k e)

To control volume mute on/off.

You can also adjust mute using the MUTE button on remote control.

Transmission [k][e][][Set ID][][Data][Cr]

Data 00: Volume mute on (Volume off)

Data 01: Volume mute off (Volume on)

Acknowledgement [e][][Set ID][][OK/NG][Data][x]

06. Volume Control (Command: k f)

To adjust volume.

You can also adjust volume with the volume buttons on remote control.

Transmission [k][f][][Set ID][][Data][Cr]

Data Min: 00 - Max: 64 (*transmit by Hexadecimal code) *Refer to 'Real data mapping'.

Acknowledgement [f][][Set ID][][OK/NG][Data][x]

07. Contrast (Command: k g)

To adjust screen contrast.

You can also adjust contrast in the PICTURE menu.

Transmission [k][g][][Set ID][][Data][Cr]

Data Min: 00 - Max: 64 (*transmit by Hexadecimal code) *Refer to 'Real data mapping'.

Acknowledgement [g][][Set ID][][OK/NG][Data][x]

08. Brightness (Command: k h)

To adjust screen brightness.

You can also adjust brightness in the PICTURE menu.

Transmission [k][h][][Set ID][][Data][Cr]

Data Min: 00 - Max: 64 (*transmit by Hexadecimal code) *Refer to 'Real data mapping'.

Acknowledgement [h][][Set ID][][OK/NG][Data][x]

09. Color (Command: k i)

To adjust screen color.

You can also adjust color in the PICTURE menu.

Transmission [k][i][][Set ID][][Data][Cr]

Data Min: 00 - Max: 64 (*transmit by Hexadecimal code) *Refer to 'Real data mapping'.

Acknowledgement [i][][Set ID][][OK/NG][Data][x]

10. Tint (Command: k j)

To adjust screen tint.

You can also adjust tint in the PICTURE menu.

Transmission [k][j][][Set ID][][Data][Cr]

Data Red: 00 - Green: 64 (*transmit by Hexadecimal code) *Refer to 'Real data mapping'.

Acknowledgement [j][][Set ID][][OK/NG][Data][x]

^{*} Use the feature depending on your model.

11. Sharpness (Command: k k)

To adjust screen sharpness.

You can also adjust sharpness in the Picture menu.

Transmission [k][k][][Set ID][][Data][Cr]

Data Min: 00 - Max: 64 (*transmit by Hexadecimal code) *Refer to 'Real data mapping'.

Acknowledgement [k][][Set ID][][OK/NG][Data][x]

12. OSD Select (Command: k I)

To select OSD (On Screen Display) on/off.

Transmission [k][I][][Set ID][][Data][Cr]

Data 00: OSD off Data 01: OSD on

Acknowledgement [I][][Set ID][][OK/NG][Data][x]

13. Remote Control Lock Mode (Command: k m)

To lock the remote control and the front panel controls on the set.

Transmission [k][m][][Set ID][][Data][Cr]

Data 00: Lock off Data 01: Lock on

Acknowledgement [m][][Set ID][][OK/NG][Data][x]

If you're not using the remote control and front panel controls on the TV, use this mode. When main power is on/off, remote control lock is released.

If Key Lock is on in the standby mode, TV will not turn on by POWER button of remote control and on the TV .

14. Treble (Command: k r)

To adjust treble.

You can also adjust treble in the Audio menu.

$\label{transmission} \begin{tabular}{ll} Transmission [k][r][&][Set ID][&][Data][Cr] \end{tabular}$

Data Min: 00 - Max: 64 (*transmit by Hexadecimal code) *Refer to 'Real data mapping'.

Acknowledgement [r][][Set ID][][OK/NG][Data][x]

15. Bass (Command: k s)

To adjust bass.

You can also adjust bass in the Audio menu.

Transmission [k][s][][Set ID][][Data][Cr]

Data Min: 00 - Max: 64 (*transmit by Hexadecimal code)

*Refer to 'Real data mapping'.

Acknowledgement [s][][Set ID][][OK/NG][Data][x]

16. Balance (Command: k t)

To adjust balance.

You can also adjust balance in the Audio menu.

Transmission [k][t][][Set ID][][Data][Cr]

Data Min: 00 - Max: 64 (*transmit by Hexadecimal code) *Refer to 'Real data mapping'.

Acknowledgement [t][][Set ID][][OK/NG][Data][x]

17. Color Temperature (Command: x u)

To adjust color temperature.

You can also adjust color temperature in the Picture menu.

Transmission [x][u][][Set ID][][Data][Cr]

Data Min: 00 - Max: 64 (*transmit by Hexadecimal code)

*Refer to 'Real data mapping'.

Acknowledgement [u][][Set ID][][OK/NG][Data][x]

18. Energy Saving (Command: j q)

To control the energy saving function.

Transmission [j][q][][Set ID][][Data][Cr]

Data 00: Energy saving - off

01: Energy saving - Minimum

02: Energy saving - Medium

03: Energy saving - Maximum

04: Energy saving - Auto (depending on model)

05: Energy saving - Screen off

Acknowledgement [q][][Set ID][][OK/NG][Data][x]

19. Auto Configuration (Command: j u)

To adjust picture position and minimize image shaking automatically. Auto configuration only works in RGB-PC mode.

Transmission [j][u][][Set ID][][Data][Cr]

Data 01: To set

Acknowledgement [u][][Set ID][][OK/NG][Data][x]

20. Channel Tuning (Command: m a)

To tune channel to following physical/major/minor number.

Transmission [m][a][][Set ID][][Data00][][Data01] [][Data02][][Data03][][Data04][][Data05][Cr]

Digital channels have a Physical, Major, and Minor channel number. The Physical number is the actual digital channel number, the Major is the number that the channel should be mapped to, and the Minor is the sub-channel. Since the ATSC tuner automatically maps the channel to the Major number, the Physical number is not required when sending a command.

Data 00: Physical Channel Number

NTSC air: 02 - 45, NTSC cable: 01, 0E - 7D ATSC air: 01 - 45, ATSC cable: 01 - 87

Data 01 & 02: Major Channel Number

Data 01: High byte Data 02: Low byte

Two bytes are available for the Major and Minor, normally only the second byte is used.

Data 03 & 04: Minor Channel Number

Not needed for NTSC.

Data5:

):	7 Main/Sub Picture	6 Two/One Part Channel	5 Using Physical Channel	4 Reserved	3	2	1	0	Step
	0 Main	O Two	0 Use	×	0	0	0	0	NTSC Air
	1 Sub	1 One	1 No Use	×	0	0	0	1	NTSC Cable
				×	0	0	1	0	ATSC Air
				×	0	0	1	1	ATSC Cable_std
				×	0	1	0	0	ATSC Cable_hrc
				×	0	1	0	1	ATSC Cable_irc
				×	0	1	1	0	ATSC cable_auto
				×	0	1	1	1	Reserved
				×	×	×	×	×	
				×	1	1	1	1	Reserved

The table above lists the binary code which must be converted to Hexadecimal before sending. For example: The binary code to tune the sub source to an NTSC cable channel is "1000 0001", which translates to "81" in Hex.

- * 7th bit: For which source do you want to change the channel.
- * 6th bit: Use a two part or one part channel. Most cases just use O since it's ignored when using NTSC.
- * 5th bit: Use 0 with NTSC since it can only use the physical channel number. Normally use 1 for ATSC since most times it doesn't matter what the physical number is
- * 4th bit: Set to 0.
- * 3-0 bits: Choose signal type.

*Tune Command Examples:

1. Tune to the analog (NTSC) cable channel 35.

Data 00 = Physical of 35 = 23

Data 01 & 02 = No Major = 00 00

Data 03 & 04 = No Minor = 00 00

Data 05 = 0000 0001 in binary = 01

Total = ma 00 23 00 00 00 00 01

2. Tune to the digital (ATSC) local channel 30-3.

Data 00 = Don't know Physical = 00

Data 01 & 02 = Major is 30 = 00 1E

Data 03 & 04 = Minor is 3 = 00 03

Data $05 = 0010 \ 0010$ in binary = 22

Total = ma 00 00 00 1E 00 03 22

21. Channel Add/Del (Command: m b)

To add and delete the channels.

Transmission [m][b][][Set ID][][Data][Cr]

Data 00: Channel Delete Data 01: Channel Add

Acknowledgement [b][][Set ID][][OK/NG][Data][x]

22. Key (Command: m c)

To send IR remote control code.

Transmission [m][c][][Set ID][][Data][Cr]

See page 151.

Acknowledgement [c][][Set ID][][OK/NG][Data][x]

When TV is in the standby mode, TV will turn on by POWER button of remote control only.

23. Backlight (Command: m g)

To adjust screen backlight.

Transmission [m][g][][Set ID][][Data][Cr]

Data Min:00 ~ Max:64 (*transmit by Hexadecimal code)

*Refer to 'Real data mapping'.

Acknowledgement [g][][Set ID][][OK/NG][Data][x]

APPFNDIX

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Version 1.1

version i

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