



LG

Life's Good

OWNER'S MANUAL

LED TV


* LG LED TV applies LCD screen with LED backlights.

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

42LA6200	42LA6205
47LA6200	47LA6205
50LA6200	50LA6205
55LA6200	55LA6205
60LA6200	60LA6205


IMPORTANT SAFETY INSTRUCTIONS

Always comply with the following precautions to avoid dangerous situations and ensure peak performance of your product.





WARNING/CAUTION

**RISK OF ELECTRIC SHOCK
DO NOT OPEN**





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


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

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

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

 **WARNING**
If you ignore the warning message, you may be seriously injured or there is a possibility of accident or death.

 **CAUTION**
If you ignore the caution message, you may be slightly injured or the product may be damaged.

 **NOTE**
The note helps you understand and use the product safely. Please read the note carefully before using the product.

WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

Wash hands after handling.

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



- Do not use this apparatus near water.



- Clean only with a 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 (Can differ by country).



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



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



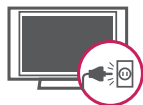
- Only use attachments/accessories specified by the manufacturer.



- Use only with a 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 lightning 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.



- Do not stick metal objects or any other conductive material into the power cord. Do not touch the end of the power cord while it is plugged in.
- Keep the packing anti-moisture material or vinyl packing out of the reach of children. Anti-moisture material is harmful if swallowed. If swallowed by mistake, force the patient to vomit and visit the nearest hospital. Additionally, vinyl packing can cause suffocation. Keep it out of the reach of children.

- **CAUTION** concerning the Power Cord (Can differ by country):
It is recommended that appliances be placed upon a dedicated circuit; that is, a single outlet circuit which powers only that appliance and has no additional outlets or branch circuits. Check the specification page of this owner's manual to be certain. Do not connect too many appliances to the same AC power outlet as this could result in fire or electric shock. Do not overload wall outlets. Overloaded wall outlets, loose or damaged wall outlets, extension cords, frayed power cords, or damaged or cracked wire insulation are dangerous. Any of these conditions could result in electric shock or fire. Periodically examine the cord of your appliance, and if its appearance indicates damage or deterioration, unplug it, discontinue use of the appliance, and have the cord replaced with an exact replacement part by an authorized service. Protect the power cord from physical or mechanical abuse, such as being twisted, kinked, pinched, closed in a door, or walked upon. Pay particular attention to plugs, wall outlets, and the point where the cord exits the appliance. Do not move the TV with the power cord plugged in. Do not use a damaged or loose power cord. Be sure do grasp the plug when unplugging the power cord. Do not pull on the power cord to unplug the TV.



- **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.



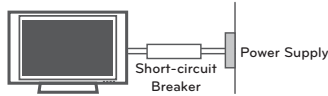
- Do not expose to dripping or splashing and do not place objects filled with liquids, such as vases, cups, etc. on or over the apparatus (e.g. on shelves above the unit).



- **Grounding**

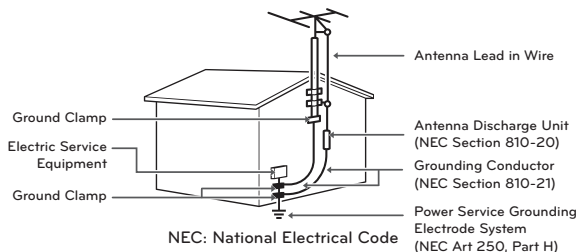
(Except for devices which are not grounded.)

Ensure that you connect the earth ground wire to prevent possible electric shock (i.e. a TV with a three-prong grounded AC plug must be connected to a three-prong grounded AC outlet). If grounding methods are not possible, have a qualified electrician install a separate circuit breaker. Do not try to ground the unit by connecting it to telephone wires, lightning rods, or gas pipes.



- As long as this unit is connected to the AC wall outlet, it is not disconnected from the AC power source even if the unit is turned off.
- 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.
- **Outdoor Antenna Grounding**
(Can differ by country):
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



- **Cleaning**

When cleaning, unplug the power cord and wipe 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 or put stress on the front panel of the TV.

- **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 while plugged. Do not install in excessively dusty places.

- If you smell smoke or other odors coming from the TV, unplug the power cord and contact an authorized service center.
- Keep the product away from direct sunlight.
- Never touch this apparatus or antenna during a thunder or lightning storm.
- When mounting a TV on the wall, make sure not to install the TV by hanging the 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 anything onto the screen.
- **Disconnecting the Main Power**
The power outlet used with this device must remain easily accessible.
- Store the accessories (battery, etc.) in a safe location out of the reach of children.
- This apparatus use batteries. In your community there might be regulations that require you to dispose of these batteries properly due to environmental considerations. Please contact your local authorities for disposal or recycling information.
- Do not dispose of batteries in a fire.
- Do not short circuit, disassemble or allow the batteries to overheat.

• 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.

• 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.

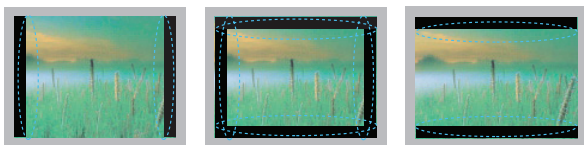
This generated sound does not affect the performance and reliability of the product.

• Take care not to touch the ventilation openings.

When watching the TV for a long period, the ventilation openings may become hot. This does not affect the performance of the product or cause defects in the product.

• 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 TV'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.

Preventing "Image burn" or "Burn-in" on your TV screen



- If a fixed image displays on the TV screen for a long period of time, it will be imprinted and become a permanent disfigurement on the screen. This is "image burn" or "burn-in" and not covered by the warranty.
- If the aspect ratio of the TV is set to 4:3 for a long period of time, image burn may occur on the letterboxed area of the screen.
- Avoid displaying a fixed image on the TV screen for a long period of time (2 or more hours for LCD, 1 or more hours for the Plasma TV) to prevent image burn.

For USA and Canada

FCC NOTICE

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 the receiver.
- Connect the equipment to an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

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

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

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.

Viewing 3D Imaging (For 3D models)

WARNING

Viewing Environment

- Viewing Time
 - When watching 3D content, take 5 - 15 minute breaks every hour. Viewing 3D content for a long period of time may cause headache, dizziness, fatigue or eye strain.

Those that have a photosensitive seizure or chronic illness

- Some users may experience a seizure or other abnormal symptoms when they are exposed to a flashing light or particular pattern from 3D Content.
- Do not watch 3D videos if you feel nausea, are pregnant and/ or have a chronic illness such as epilepsy, cardiac disorder, or blood pressure disease, etc.
- 3D Content are not recommended to those who suffer from stereo blindness or stereo anomaly. Double images or discomfort in viewing may be experienced.
- If you have strabismus (cross-eyed), amblyopia (weak eyesight) or astigmatism, you may have trouble sensing depth and easily feel fatigue due to double images. It is advised to take frequent breaks than the average adult.
- If your eyesight varies between your right and left eye, revise your eyesight prior to watching 3D Content.

Symptoms which require discontinuation or refraining from watching 3D contents

- Do not watch 3D Content when you feel fatigue from lack of sleep, overwork or drinking.
- When these symptoms are experienced, stop using/ watching 3D Content and get enough rest until the symptom subsides.
 - Consult your doctor when the symptoms persist. Symptoms may include headache, eyeball pain, dizziness, nausea, palpitation, blurriness, discomfort, double image, visual inconvenience or fatigue.

CAUTION

Viewing Environment

- Viewing Distance
 - Maintain a distance of at least twice the screen diagonal length when watching 3D Content. If you feel discomfort in viewing 3D Content, move further away from the TV.

Viewing Age

- Infants / Children
 - Usage/ Viewing 3D Content for children under the age of 5 are prohibited.
 - Children under the age of 10 may overreact and become overly excited because their vision is in development (for example: trying to touch the screen or trying to jump into it. Special monitoring and extra attention is required for children watching 3D Content.
 - Children have greater binocular disparity of 3D presentations than adults because the distance between the eyes is shorter than one of adults. Therefore they will perceive more stereoscopic depth compared to adults for the same 3D image.
- Teenagers
 - Teenagers under the age of 19 may be stimulated to light coming from 3D videos. Advise them not to watch 3D videos for a long time when they are tired.
- Elderly
 - The elderly may perceive less of a 3D effect than the youth. Do not sit closer to the TV than the recommended distance.

Cautions when using the 3D glasses

- Make sure to use LG 3D glasses. Otherwise, you may not be able to view 3D videos properly.
- Do not use 3D glasses instead of your normal glasses, sunglasses or protective goggles.
- Using modified 3D glasses may cause eye strain or image distortion.
- Do not keep your 3D glasses in extremely high or low temperatures. It will cause deformation.
- The 3D glasses are fragile and are easy to be scratched. Always use a soft, clean piece of cloth when wiping the lenses. Do not scratch the lenses of the 3D glasses with sharp objects or clean/wipe them with chemicals.

LICENSES

Supported licenses may differ by model. For more information about licenses, visit 'www.lg.com'.



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



The terms HDMI and HDMI High-Definition Multimedia Interface, and the HDMI logo are trademarks or registered trademarks of HDMI Licensing LLC in the United States and other countries.



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"



Manufactured under license under U.S. Patent Nos: 5,956,674; 5,974,380; 6,487,535 & other U.S. and worldwide patents issued & pending. DTS, the Symbol & DTS and the Symbol together are registered trademarks & DTS 2.0+Digital Out is a trademark of DTS, Inc. Product includes software. © DTS, Inc. All Rights Reserved.

ENGLISH

OPEN SOURCE SOFTWARE NOTICE

To obtain the source code under GPL, LGPL, MPL and other open source licenses, that is contained in this product, please visit 'http://opensource.lge.com'.

In addition to the source code, all referred license terms, warranty disclaimers and copyright notices are available for download.

LG Electronics will also provide open source code to you on CD-ROM for a charge covering the cost of performing such distribution (such as the cost of media, shipping and handling) upon email request to 'opensource@lge.com'. This offer is valid for three (3) years from the date on which you purchased the product.

TABLE OF CONTENTS

2 IMPORTANT SAFETY INSTRUCTIONS

6 Viewing 3D Imaging (For 3D models)

7 LICENSES

7 OPEN SOURCE SOFTWARE NOTICE

8 TABLE OF CONTENTS

9 INSTALLATION PROCEDURE

9 ASSEMBLING AND PREPARING

9 Unpacking
 11 Optional Extras
 12 Parts and Buttons
 13 Lifting and moving the TV
 14 Setting up the TV
 14 - Attaching the stand
 15 - Mounting on a table
 17 - Mounting on a wall
 17 - Tidying cables

18 MAKING CONNECTIONS

18 Connecting to an antenna or cable
 19 Connecting to a HD receiver, DVD Player, or VCR
 19 - HDMI Connection
 20 - DVI to HDMI Connection
 21 - Connecting to a mobile phone
 22 - Component Connection
 23 - Composite Connection
 24 Connecting to a PC
 24 - HDMI Connection or DVI to HDMI Connection
 26 Connecting to an Audio System
 26 - Digital Optical Audio Connection
 27 Connecting Headphones
 27 Connecting a USB Drive

28 REMOTE CONTROL

30 MAGIC REMOTE CONTROL FUNCTIONS

31 Registering Magic Remote Control
 31 How to use Magic Remote Control
 31 Precautions to Take when Using the Magic Remote Control

32 WATCHING TV

32 Turning the TV on for the first time

33 USING THE USER GUIDE

34 SPECIFICATIONS

37 EXTERNAL CONTROL DEVICE SETUP

38 MAINTENANCE

38 Cleaning Your TV
 38 - Screen, frame, cabinet and stand
 38 - Power cord

38 TROUBLESHOOTING

! NOTE

- Image shown may differ from your TV.
- Your TV's OSD (On Screen Display) may differ slightly from that shown in this manual.
- The available menus and options may differ from the input source or product model that you are using.
- New features may be added to this TV in the future.

INSTALLATION PROCEDURE

- 1 Open the package and make sure all the accessories are included.
- 2 Attach the stand to the TV set.
- 3 Connect an external device to the TV set.
- 4 Make sure the network connection is available.
You can use the TV network functions only when the network connection is made.

ASSEMBLING AND PREPARING

Unpacking

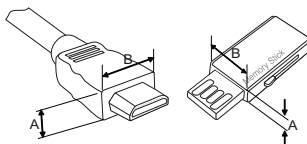
Check your product box for the following items. If there are any missing accessories, contact the local dealer where you purchased your product. The illustrations in this manual may differ from the actual product and item.

CAUTION

- Do not use any unapproved items to ensure the safety and product life span.
- Any damages or injuries by using unapproved items are not covered by the warranty.
- In case of some model, the thin film on screen is a part of TV, So don't take it off.

NOTE

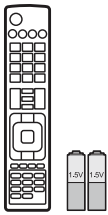
- The items supplied with your product may vary depending on the model.
- Product specifications or contents of this manual may be changed without prior notice due to upgrade of product functions.
- For an optimal connection, HDMI cables and USB devices should have bezels less than 10 mm (0.39 inches) thick and 18 mm (0.7 inches) width.
- Use an extension cable that supports USB 2.0 if the USB cable or USB memory stick does not fit into your TV's USB port.



*A ≤ 10 mm (0.39 inches)

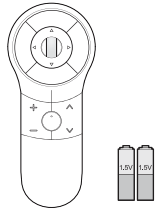
*B ≤ 18 mm (0.7 inches)

(For LA6200 series)

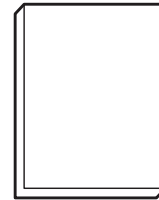


Remote Control, Batteries (AAA)
(See p. 28)

(For LA6205 series)



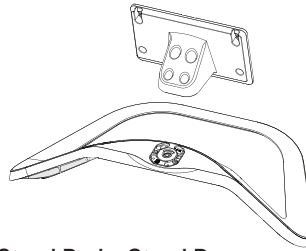
Magic Remote Control, Batteries (AA)
(See p. 30)



Owner's Manual



Power Cord



Stand Body, Stand Base
(See p. 14)



Stand Screws
8 EA, M4 x 14
(See p. 14)

(For 42/47/50LA6200,
42/47/50LA6205)



Desk-mount Cable
2 EA
(See p. 15)

(For 42LA6200, 42LA6205)



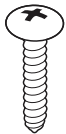
Bracket Screw
2 EA, M4 x 8
(See p. 15)

(For 47/50LA6200, 47/50LA6205)

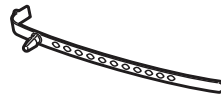


Bracket Screw
2 EA, P4 x 8
(See p. 15)

(For 42/47/50LA6200,
42/47/50LA6205)



Desk-mount Screw
2 EA
(See p. 15)



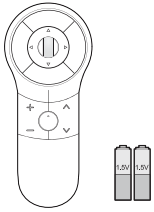
Cable Holder
(See p. 17)



Cinema 3D Glasses
The number of 3D glasses may differ depending on the model or country.

Optional Extras

Optional extras can be changed or modified for quality improvement without any notification. Contact your dealer for buying these items. These devices only work with certain models. The model name or design may be changed manufacturer’s circumstances or policies.



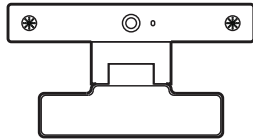
AN-MR400
Magic Remote



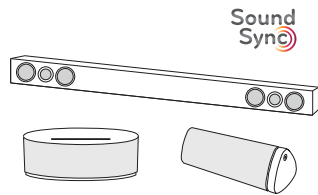
AG-F***
Cinema 3D Glasses. All glasses with the Cinema 3D logo are supported by the 3D TVs in this manual.



AG-FDP**
Dual Play Glasses. For playing head-to-head games. Converts most 2 player split-screen games to full screen.



AN-VC4**
Video Call Camera

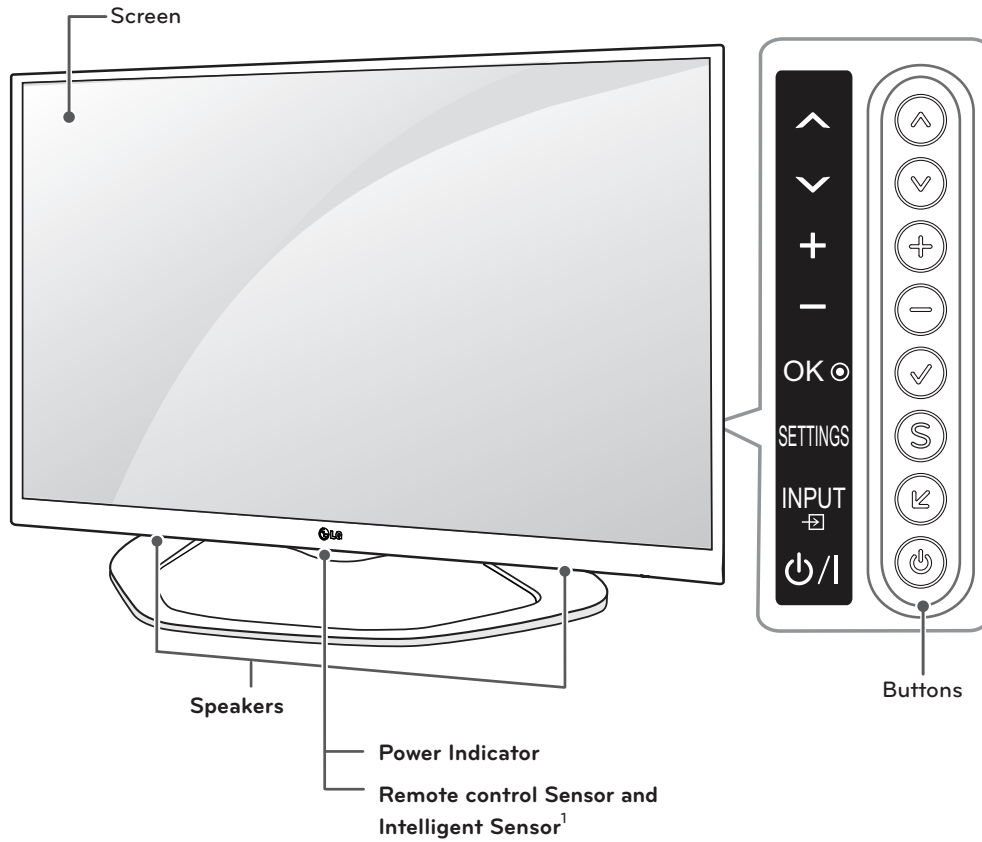


LG Audio Device



Tag On
Near Field Communication (NFC) tag.

Parts and Buttons



ENGLISH

Button	Description
▲ / ▼ (^ / v)	Scrolls through the saved channels.
⊕ / ⊖ (+ / -)	Adjusts the volume level.
✓ (OK ◉)	Selects the highlighted menu option or confirms an input.
S (SETTINGS)	Accesses the main menus, or saves your input and exits the menus.
↶ (INPUT ⇨)	Changes the input source.
⏻ (⏻ / I)	Turns the power on or off.

1 Intelligent Sensor - Adjusts the image quality and brightness based on the surrounding environment.

Lifting and moving the TV

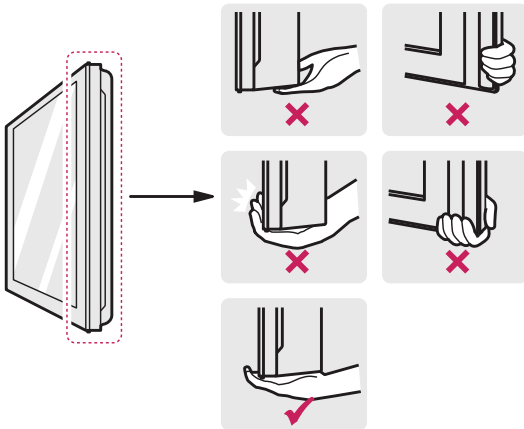
When moving or lifting the TV, read the following to prevent the TV from being scratched or damaged and for safe transportation regardless of its type and size.

CAUTION

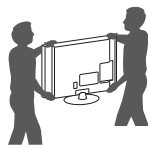
- Avoid touching the screen at all times, as this may result in damage to the screen.
- It is recommended to move the TV in the box or packing material that the TV originally came in.
- Before moving or lifting the TV, disconnect the power cord and all cables.
- When holding the TV, the screen should face away from you to avoid damage.



- Hold the top and bottom of the TV frame firmly. Make sure not to hold the transparent part, speaker, or speaker grill area.



- When transporting a large TV, there should be at least 2 people.
- When transporting the TV by hand, hold the TV as shown in the following illustration.



- When transporting the TV, do not expose the TV to jolts or excessive vibration.
- When transporting the TV, keep the TV upright, never turn the TV on its side or tilt towards the left or right.

Setting up the TV

The TV can be mounted to a wall or the stand can be attached if the TV will be positioned on an entertainment center or stand.

Attaching the stand

If you are not mounting the TV to a wall, use the following instructions to attach the stand.

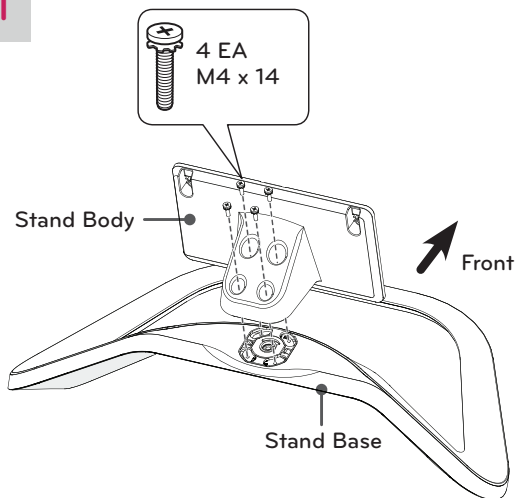
⚠ CAUTION

- When attaching the stand to the TV set, place the screen facing down on a cushioned table or flat surface to protect the screen from scratches.
- Make sure that the screws are fastened tightly. (If they are not fastened securely enough, the TV may tilt forward after being installed.)
- Do not tighten the screws with too much force; otherwise they may be damaged and come loose later.

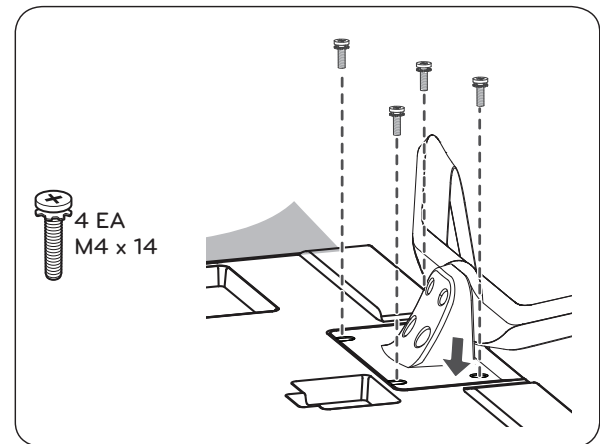
! NOTE

- Remove the stand before installing the TV on a wall mount by performing the stand attachment in reverse.

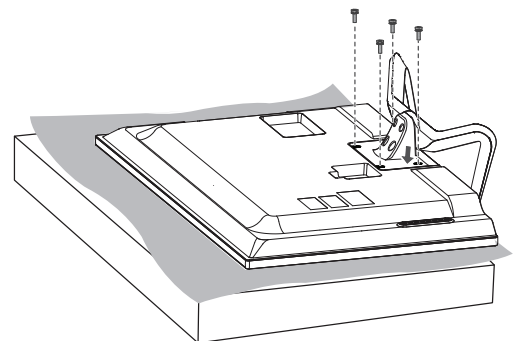
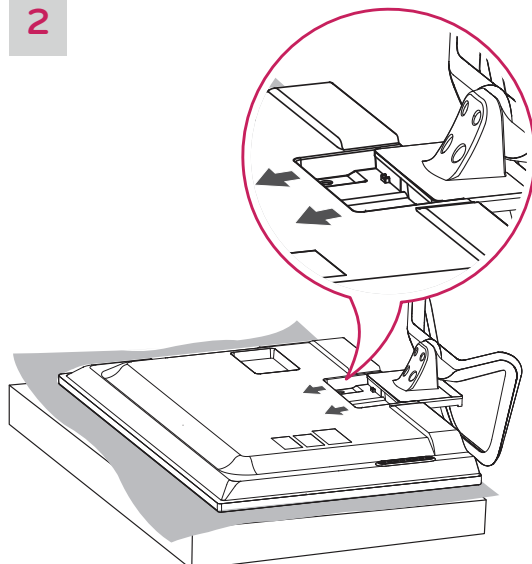
1



3

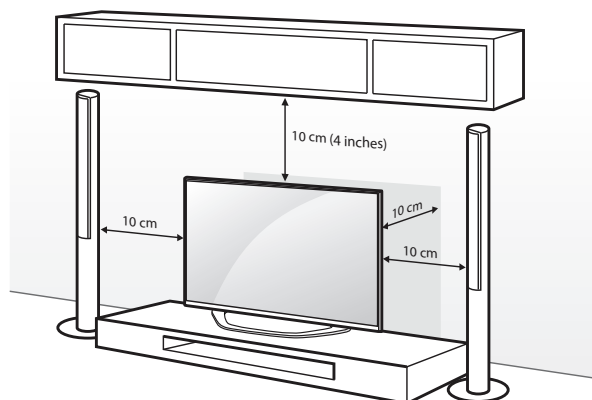


2



Mounting on a table

- Lift and tilt the TV into its upright position on a table.
 - Leave a 10 cm (4 inch) (minimum) space from the wall for proper ventilation.



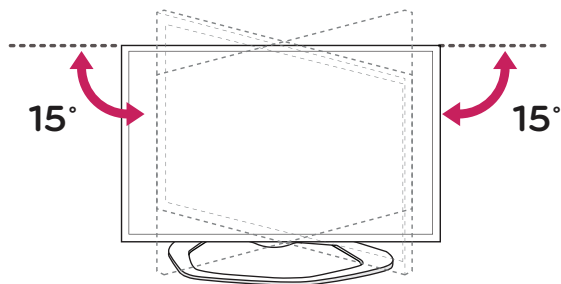
- Connect the power cord to a wall outlet.

CAUTION

- Do not place the TV near or on sources of heat, as this may result in fire or other damage.

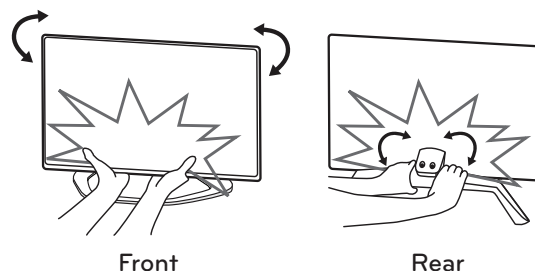
Adjusting the angle of the TV to suit view

Swivel 15 degrees to the left or right and adjust the angle of the TV to suit your view.



NOTE

- When adjusting the angle of the TV, watch out for your fingers.
 - Personal injury may occur if hands or fingers are pinched. If the product is tilted too much, it may fall, causing damage or injury.

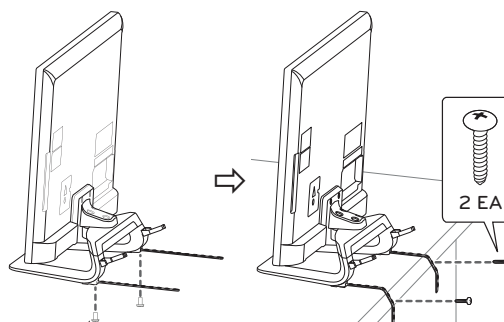


Securing the TV to a table

(For 42/47/50LA6200, 42/47/50LA6205)

Fix the TV to a table to prevent from tilting forward, damage, and potential injury.

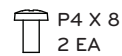
- Connect the Desk-mount Cables to the Stand Base using the Bracket Screws.
- Fix the Desk-mount Cables to a table using the Desk-mount Screws.
- Once the TV is fixed, move the table close to the wall. Children may go in, causing injuries.



(For 42LA****)



(For 47/50LA****)



WARNING

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

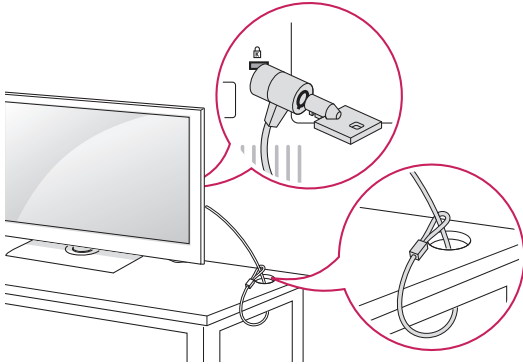
Using the Kensington security system (optional)

(Depending on model)

The Kensington security system connector is located at the rear of the TV.

For more information of installation and using, refer to the manual provided with the Kensington security system or visit <http://www.kensington.com>.

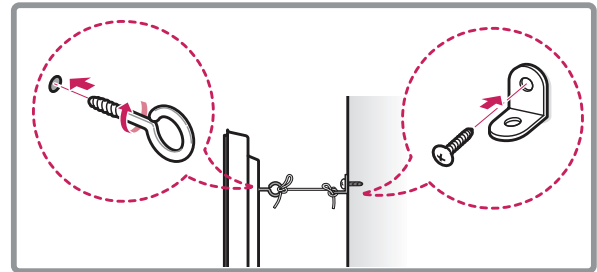
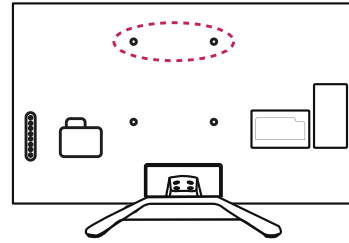
Connect the Kensington security system cable between the TV and a table.

**NOTE**

- The Kensington security system is optional. You can obtain additional accessories from your local dealer.

Securing the TV to a wall (optional)

(Depending on model)



- 1 Insert and tighten the eye-bolts, or TV brackets and bolts on the back of the TV.
- If there are bolts inserted at the eye-bolts position, remove the bolts first.
- 2 Mount the wall brackets with the bolts to the wall. Match the location of the wall bracket and the eye-bolts on the rear of the TV.
- 3 Connect the eye-bolts and wall brackets tightly with a sturdy rope. Make sure to keep the rope horizontal with the flat surface.

CAUTION

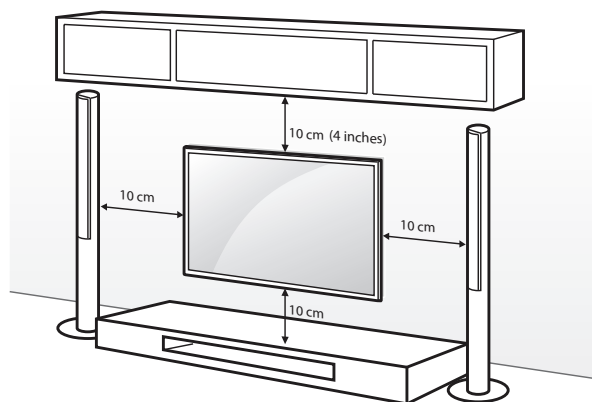
- Make sure that children do not climb on or hang on the TV.

NOTE

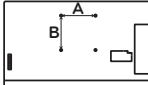
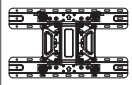
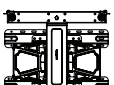
- Use a platform or cabinet that is strong and large enough to support the TV securely.
- Brackets, bolts and ropes are optional. You can obtain additional accessories from your local dealer.

Mounting on a wall

An optional wall mount can be used with your LG Television. Consult with your local dealer for a wall mount that supports the VESA standard used by your TV model. Carefully attach the wall mount bracket at the rear of the TV. Install the wall mount bracket on a solid wall perpendicular to the floor. If you are attaching the TV to other building materials, please contact qualified personnel to install the wall mount. Detailed instructions will be included with the wall mount. We recommend that you use an LG brand wall mount.



Make sure to use screws and wall mounts that meet the VESA standard. Standard dimensions for the wall mount kits are described in the following table.

Model	42LA6200 42LA6205	47/50/55/60LA6200 47/50/55/60LA6205
VESA (A x B)	200 x 200	400 x 400
		
Standard screw	M6	M6
Number of screws	4	4
Wall mount bracket (optional)	LSW230B 	LSW430B 

CAUTION

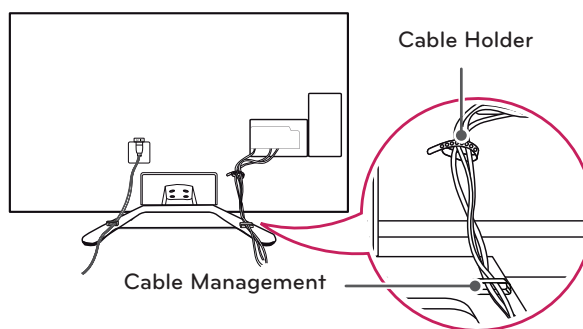
- Disconnect the power first, and then move or install the TV. Otherwise electric shock may occur.
- If you install the TV on a ceiling or slanted wall, it may fall and result in severe injury. Use an authorized LG wall mount and contact the local dealer or qualified personnel.
- Do not over tighten the screws as this may cause damage to the TV and void your warranty.
- Use the screws and wall mounts that meet the VESA standard. Any damages or injuries by misuse or using an improper accessory are not covered by the warranty.

NOTE

- Use the screws that are listed on the VESA standard screw specifications.
- The wall mount kit includes an installation manual and necessary parts.
- The wall mount bracket is optional. You can obtain additional accessories from your local dealer.
- The length of screws may differ depending on the wall mount. Make sure to use the proper length.
- For more information, refer to the manual supplied with the wall mount.

Tidying cables

- 1 Gather and bind the cables with the cable management.
- 2 Gather and bind the cables with the cable holder on the back of the TV.



CAUTION

- Do not move the TV by holding the cable holder and cable management, as the cable holders may break, and injuries and damage to the TV may occur.

MAKING CONNECTIONS

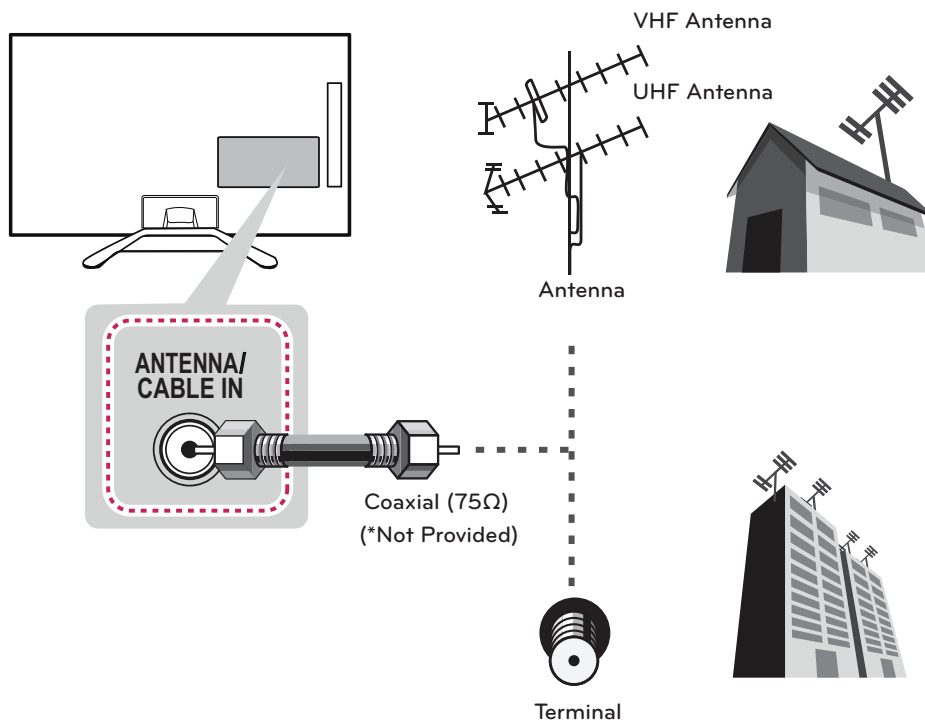
You can connect various external devices to the TV. Supported external devices are: HD receivers, DVD players, VCRs, audio systems, USB storage devices, PC, gaming devices, and other external devices. For more information on external device's connection, refer to the manual provided with each device.

NOTE

- If you record a TV program on a DVD recorder or VCR, make sure to connect the TV signal input cable to the TV through a DVD recorder or VCR. For more information of recording, refer to the manual provided with the connected device.
- The external device connections shown may differ slightly from illustrations in this manual.
- Connect external devices to the TV regardless of the order of the TV port.
- If you connect a gaming device to the TV, use the cable supplied with the gaming device.
- Refer to the external equipment's manual for operating instructions.

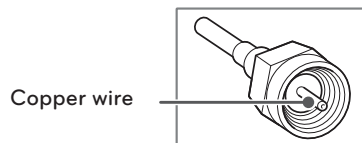
Connecting to an antenna or cable

Connect an antenna, cable, or cable box to watch TV while referring to the following. The illustrations may differ from the actual items and a RF cable is optional.



CAUTION

- Make sure not to bend the copper wire of the RF cable.



- Complete all connections between devices, and then connect the power cord to the power outlet to prevent damage to your TV.

NOTE

- Use a signal splitter to use more than 2 TVs.
- Visit '<http://lgknowledgebase.com>' for more information about the antenna and cable connection. Search for antenna.
- DTV Audio Supported Codec: MPEG, Dolby Digital.

Connecting to a HD receiver, DVD Player, or VCR

Connect a HD receiver, DVD Player, or VCR to the TV and select an appropriate input mode.

HDMI Connection

HDMI is the best way to connect a device.

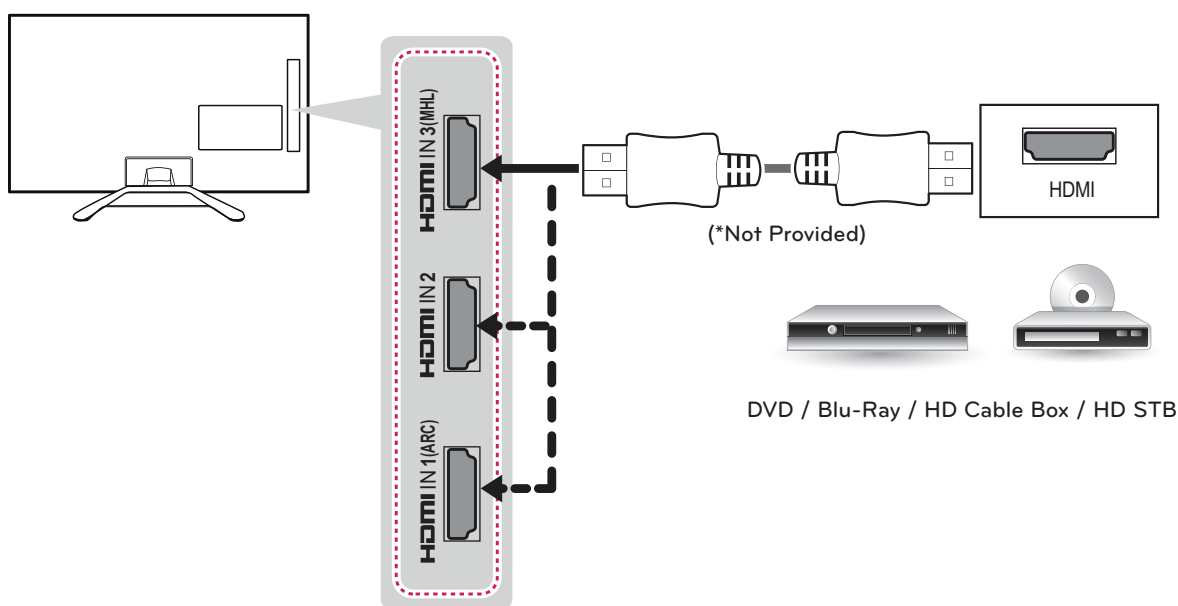
Transmits the digital video and audio signals from an external device to the TV. Connect the external device and the TV with the HDMI cable as shown in the following illustration.



NOTE

- Use the latest High Speed HDMI™ Cable that supports CEC (Customer Electronics Control) function.
- High Speed HDMI™ Cables are tested to carry an HD signal up to 1080p and higher.
- HDMI Audio Supported Format: Dolby Digital, PCM (Up to 192 KHz, 32k/44.1k/48k/88k/96k/176k/192k), DTS.

Choose any HDMI input port to connect.
It does not matter which port you use.



ARC (Audio Return Channel)

- When connected with a high-speed HDMI cable, digital audio can be sent to a compatible device without an additional optical audio cable.
- ARC is only supported on the HDMI input 1 (ARC) port. An external audio device that supports ARC should be connected to HDMI 1 if you wish to use ARC

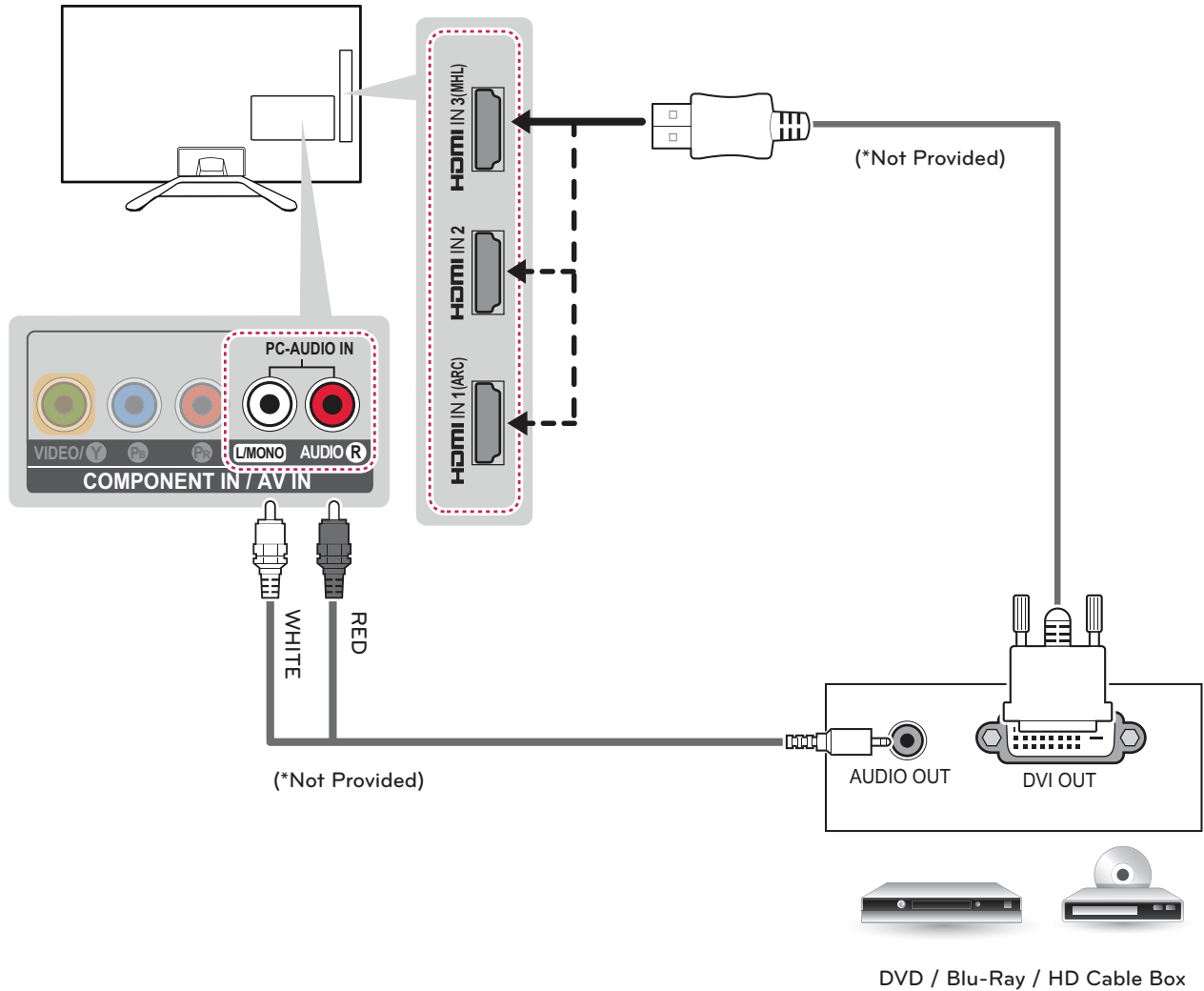
DVI to HDMI Connection

Transmits the digital video signal from an external device to the TV. Connect the external device and the TV with the DVI-HDMI cable as shown in the following illustration. To transmit an audio signal, connect an audio cable.

NOTE

- When using the HDMI/DVI cable, Single link is only supported.

Choose any HDMI input port to connect.
It does not matter which port you use.

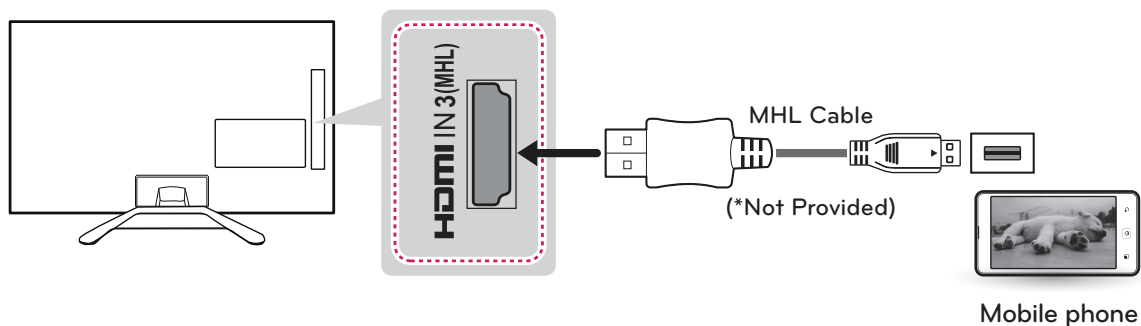


Connecting to a mobile phone

Mobile High-definition Link (MHL) is an interface for transmitting digital audiovisual signals from mobile phones to television sets.

! NOTE

- Connect the mobile phone to the HDMI IN 3 (MHL) port to view the phone screen on the TV.
- This only works for the MHL-enabled phone.
- With some MHL supporting mobile phones, you can use the TV remote to control the phone.
- An MHL passive cable is needed to connect the TV and a mobile phone.
- Remove the MHL cable from the TV when:
 - the MHL function is disabled.
 - your mobile device is fully charged in standby mode.

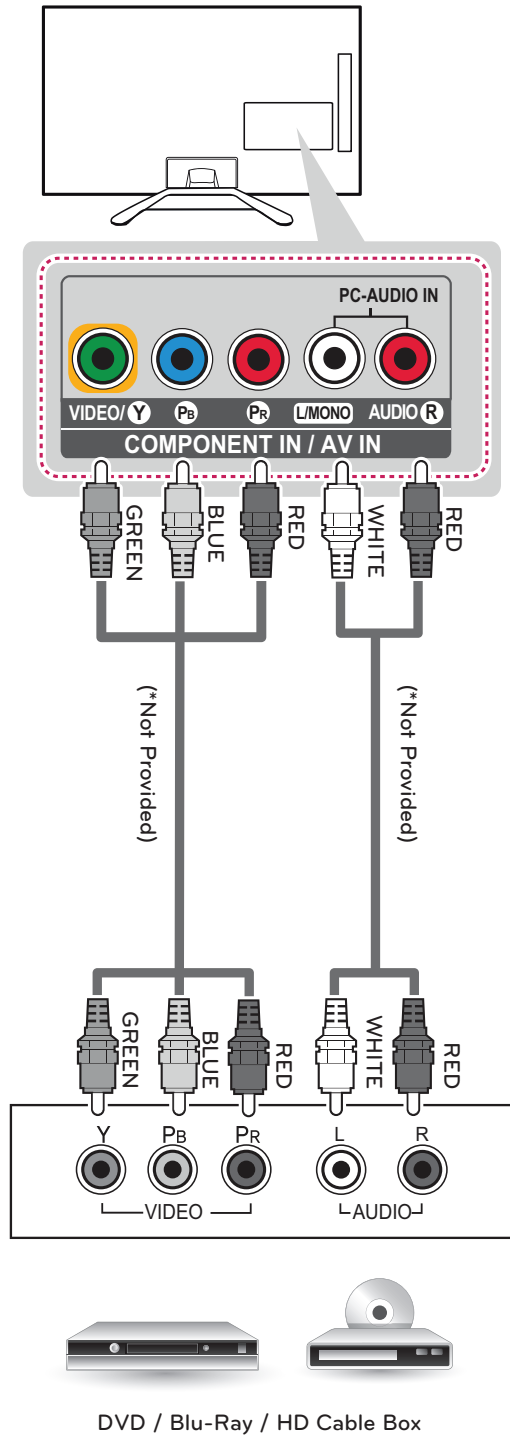


Component Connection

Transmits analog video and audio signals from an external device to the TV. Connect the external device and the TV with a component cable as shown in the following illustration.

! NOTE

- If cables are installed incorrectly, it could cause the image to display in black and white or with distorted color.
- **Check to ensure the cables are matched with the corresponding color connection.**



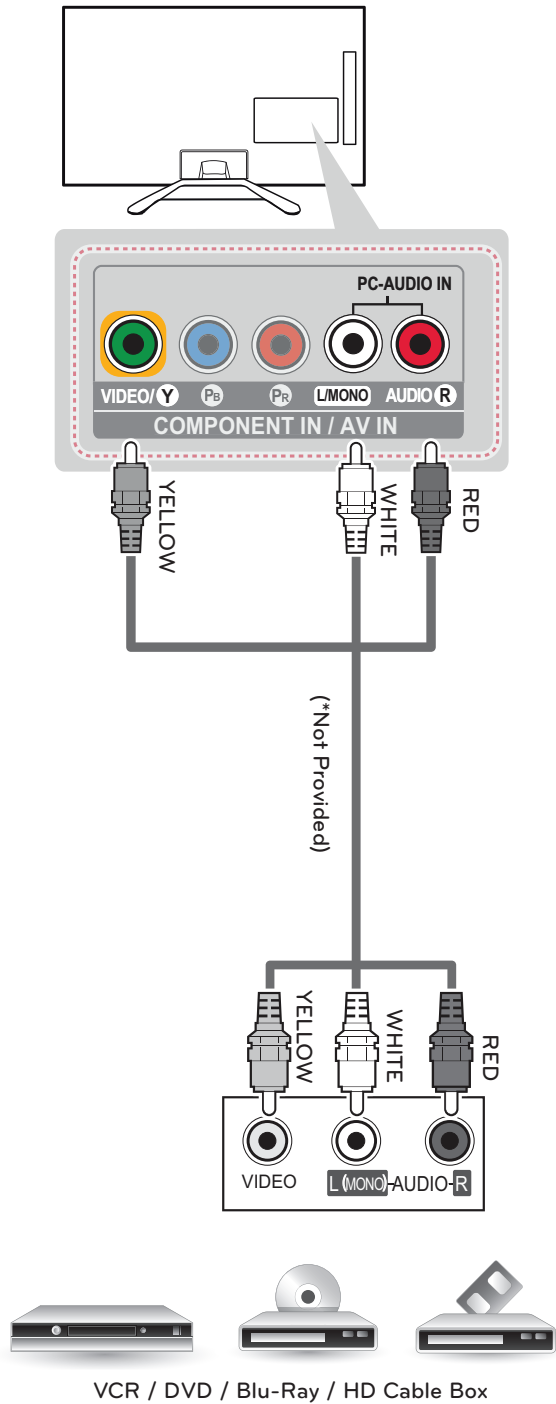
Composite Connection

Transmits analog video and audio signals from an external device to the TV. Connect the external device and the TV with the composite cable as shown in the following illustration.



NOTE

- If you have a mono VCR, connect the audio cable from the VCR to the AUDIO L/MONO jack of the TV.
- Check to ensure the cables are matched with the corresponding color connection.



Connecting to a PC

! NOTE

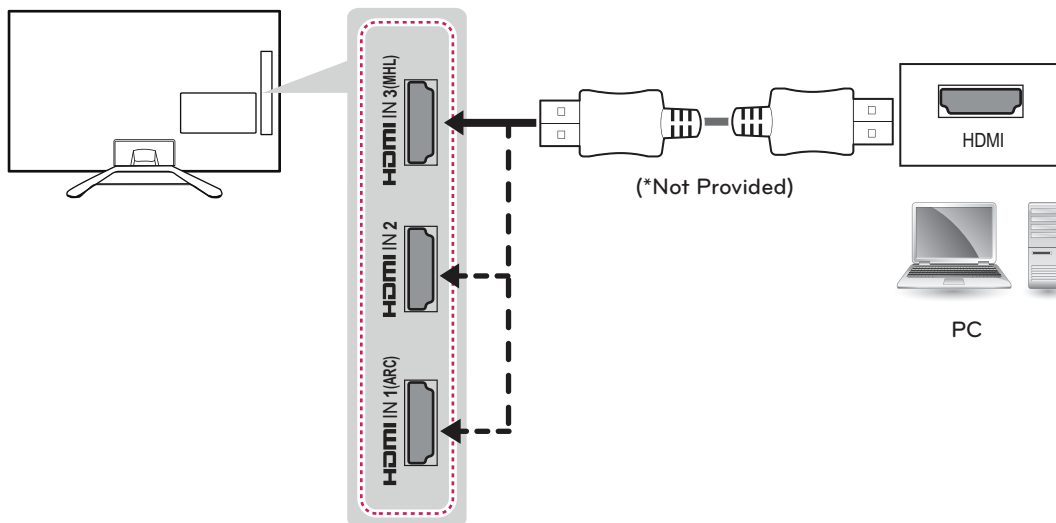
- It is recommended to use an HDMI connection for the best image quality.
- Depending on the graphics card, DOS mode video may not work if a HDMI to DVI Cable is in use.
- In PC mode, there may be noise associated with the resolution, vertical pattern, contrast or brightness. If noise is present, change 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.
- 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.
- If you are using DVI out from a PC, you have to connect analog audio separately. Refer to the instructions on the next page.
- When using the HDMI/DVI cable, Single link is only supported.

HDMI Connection or DVI to HDMI Connection

Choose method A or B to make connection.

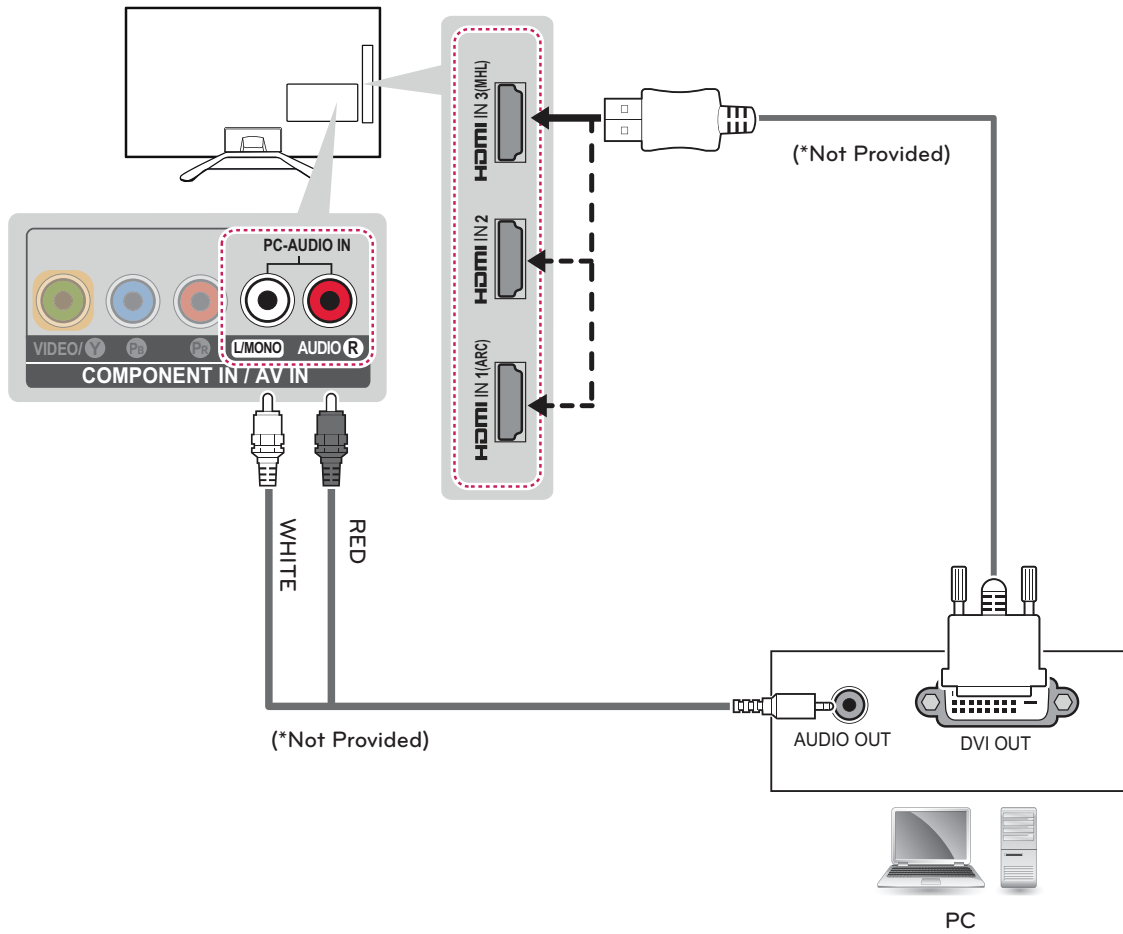
Method A: HDMI Connection

Choose any HDMI input port to connect.
It does not matter which port you use.



Method B: DVI to HDMI Connection

Choose any HDMI input port to connect.
It does not matter which port you use.



Connecting to an Audio System

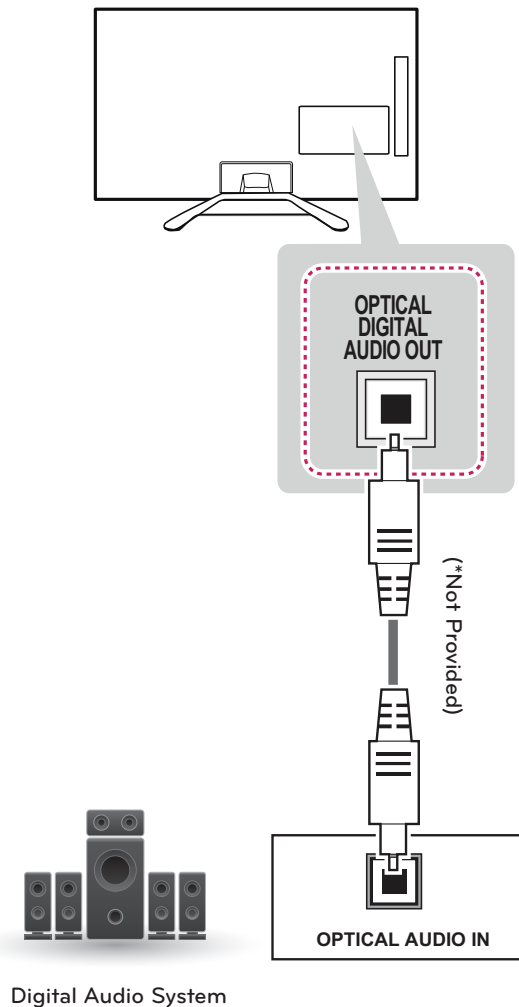
You may use an optional external audio system instead of the built-in speaker.

Digital Optical Audio Connection

Transmits a digital audio signal from the TV to an external device. Connect the external device and the TV with the optical audio cable as shown in the following illustration.

! **NOTE**

- 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.

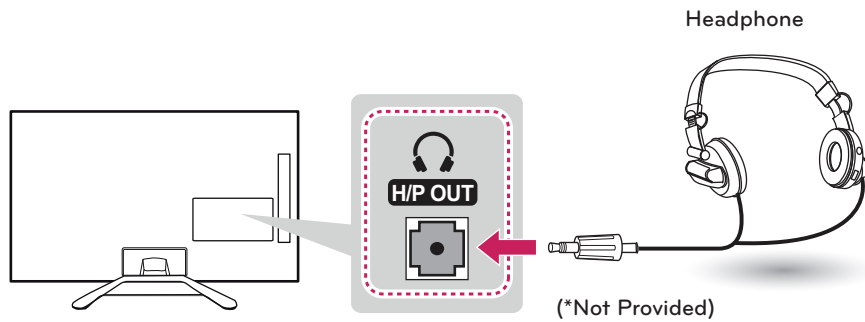


Connecting Headphones

You listen to the sound using headphones.

NOTE

- AUDIO menu options are disabled when headphones are connected.
- When changing AV MODE with headphones connected, the change is applied to video but not to audio.
- Optical Digital Audio Out is not available when headphones are connected.
- Headphone impedance: 16 Ω
- Max audio output: 10 mW to 15 mW
- Headphone jack size: 0.35 cm (0.13 inches)



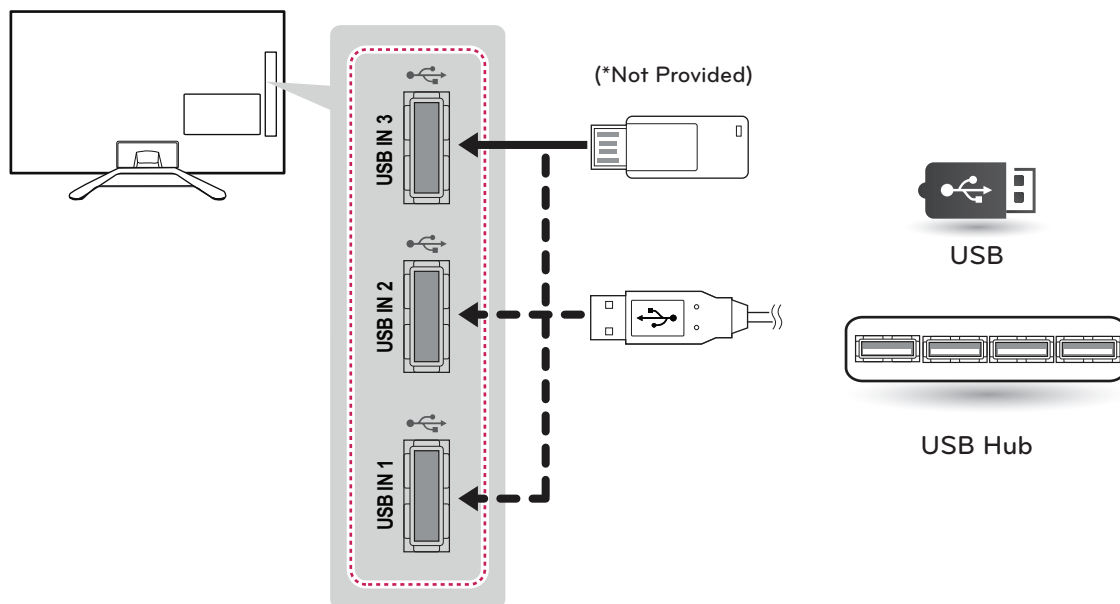
Connecting a USB Drive

Connect a USB storage device such as a USB flash thumbdrive, external hard drive, or a USB memory card reader to the TV and access the Smart Share menu to use various multimedia files.

NOTE

- Some USB Hubs may not work. If a USB device connected using a USB Hub is not detected, connect it to the USB port on the TV directly.

Choose any USB input port to connect.
It does not matter which port you use.



REMOTE CONTROL

The descriptions in this manual are based on the buttons on the remote control. Please read this manual carefully and use the TV correctly. To install batteries, open the battery cover, replace batteries (1.5 V AAA) matching the ⊕ and ⊖ ends to the label inside the compartment, and close the battery cover. To remove the batteries, perform the installation actions in reverse.



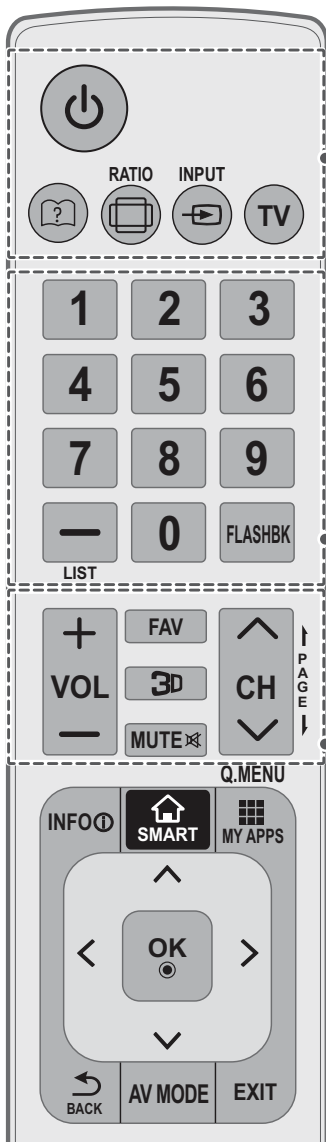
⚠ CAUTION

- Do not mix old and new batteries, as this may damage the remote control.

This remote uses infrared light. When in use, it should be pointed in the direction of the TV's remote sensor.

For LA6200 series

ENGLISH



⏻ (POWER)

Turns the TV on or off.

📖 (User Guide)

Sees user-guide.

📐 RATIO

Resizes an image.

📺 INPUT

Changes the input source. Turns the TV on if it is off.

TV

Returns to the last TV channel.

Number button

Enters numbers.

LIST

Accesses the saved channel list.

- (Dash)

Inserts a dash between numbers such as 2-1 and 2-2.

FLASHBK

Tunes to the last channel viewed.

+ VOL -

Adjusts the volume level.

FAV

Accesses your favorite channel list.

3D

Used for viewing 3D video.

MUTE

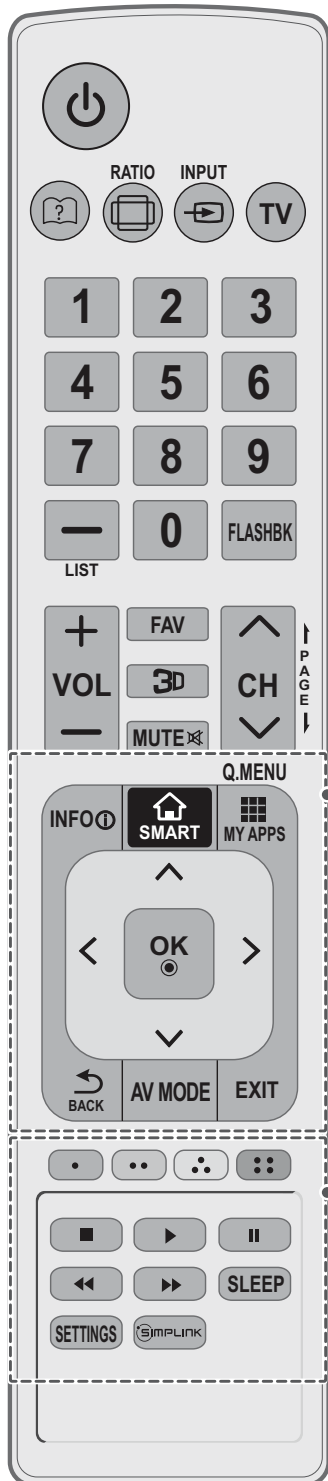
Mutes all sounds.

^ CH v

Scrolls through the saved channels.

↑ PAGE ↓

Moves to the previous or next screen.



INFO ⓘ

Shows information on the current program.

SMART 🏠

Accesses the Smart Home menu.

MY APPS

Shows the list of Apps.

●.MENU

Accesses the quick menu.

Navigation buttons (up/down/left/right)

Scrolls through menus or options.

OK Ⓞ

Selects menus or options and confirms your input.

↶ BACK

Returns to the previous level.

AV MODE

Selects an AV mode.

EXIT

Clears all on-screen displays and returns to TV viewing.

Color buttons

These access special functions in some menus.

(●) : Red, (●●) : Green, (●●●) : Yellow, (●●●●) : Blue

Control buttons (■, ▶, ||, ◀◀, ▶▶)

Controls the SIMPLINK compatible devices (USB, SIMPLINK).

SLEEP

Sets the sleep timer.

SETTINGS

Accesses the main menu.

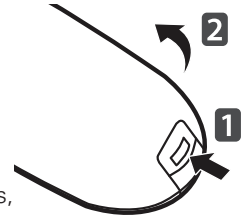
SIMPLINK

Accesses the AV devices connected to the TV;

Opens the SIMPLINK menu.

MAGIC REMOTE CONTROL FUNCTIONS

When the message "Magic remote control battery is low. Change the battery." is displayed, replace the battery. To install batteries, open the battery cover, replace batteries (1.5 V AA) matching ⊕ and ⊖ ends to the label inside the compartment, and close the battery cover. Be sure to point the remote control at the remote control sensor on the TV. To remove the batteries, perform the installation actions in reverse.

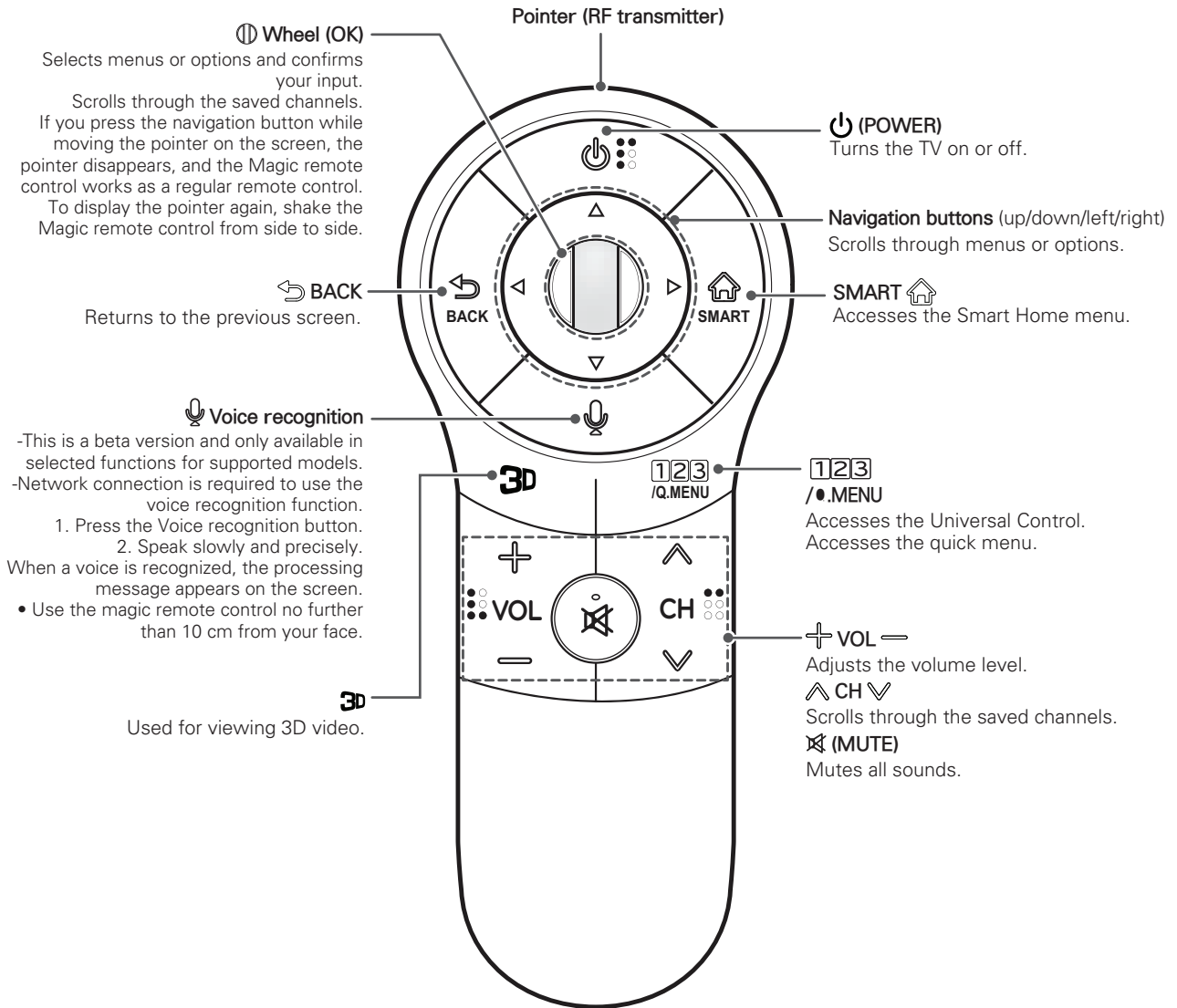


CAUTION

- Do not mix old and new batteries, as this may damage the remote control.

This remote uses infrared light. When in use, it should be pointed in the direction of the TV's remote sensor.


For LA6205 series





Registering Magic Remote Control

The Magic Remote Control operates by pairing with your TV.


How to register the Magic Remote Control

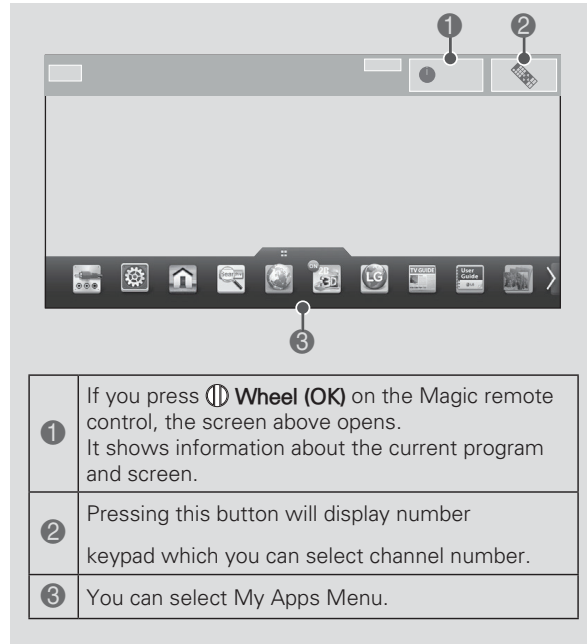
 (Wheel)	<p>To register automatically, turn the TV on and press the Wheel (OK). When registration is completed, the completion message appears on the screen.</p> <p>If registration fails, turn the TV off and back on, then press the Wheel (OK) to complete registration.</p>
---	---

How to Re-register the Magic Remote Control

 BACK  SMART	<p>1 Press and hold the BACK and SMART buttons together for 5 seconds to reset, then register it by following "How to register the Magic remote control" above.</p> <p>2 To re-register the Magic remote control, press and hold the BACK button for 5 seconds toward the TV.</p>
---	--

How to use Magic Remote Control

	<p>1 You can move the pointer by moving the remote up and down or left and right.</p> <ul style="list-style-type: none"> » If the pointer does not work properly, wait 10 seconds and then try again. <p>2 If the pointer disappears, move the remote control slightly to left or right. It will then automatically appear on the screen.</p> <ul style="list-style-type: none"> » If the pointer has not been used for a certain period of time, it will disappear.
---	--



Precautions to Take when Using the Magic Remote Control

- Use the Magic remote control within the maximum communication distance (10 m, 32.8ft). Using the remote control beyond this distance, or with an object obstructing it, may cause a communication failure.
- A communication failure may occur due to nearby devices. Electrical devices such as a microwave oven or wireless LAN product may cause interference, as these use the same bandwidth (2.4 GHz) as the Magic remote control.
- The Magic remote control may be damaged or may malfunction if it is dropped or receives a heavy impact.
- Take care not to bump into nearby furniture or other people when using the Magic remote control.
- Manufacturer and installer cannot provide service related to human safety as the applicable wireless device has possibility of electric wave interference.
- It is recommended that an Access Point (AP) be located more than 1 m (3.28 ft) away from the TV. If the AP is installed closer than 1 m (3.28 ft), the Magic remote control may not perform as expected due to frequency interference.

WATCHING TV

Turning the TV on for the first time

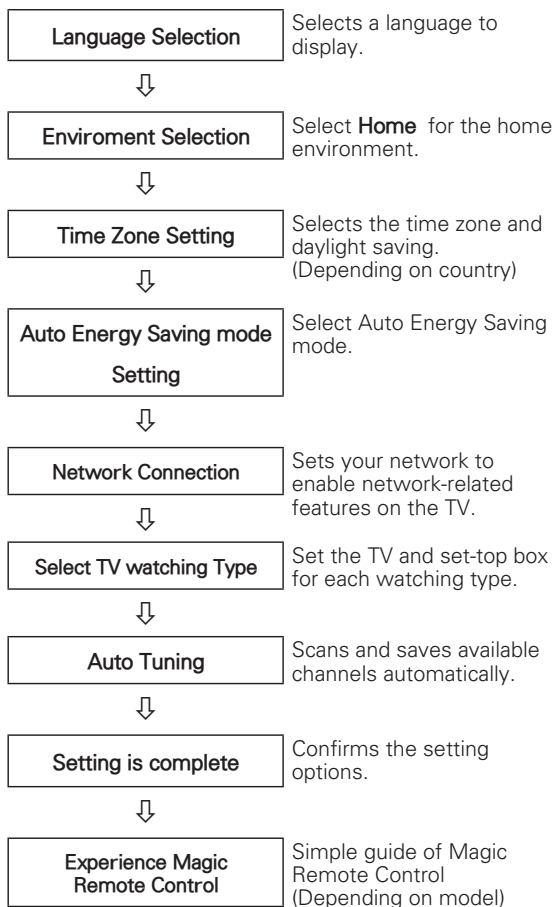
When you turn the TV on for the first time, the Initial setting screen appears. Select a language and customize the basic settings.

- 1 Connect the power cord to a power outlet.
- 2 In Standby mode, press the power button on the remote control to turn the TV on. The Initial setting screen appears if you turn the TV on for the first time.

NOTE

- You can also access **Initial Setting** by accessing **OPTION** in the main menu.

- 3 Follow the on-screen instructions to customize your TV settings according to your preferences.



NOTE

- Select **Home** when prompted. **Store** mode puts the TV in demo mode.
- If you select **Store**, the any customized settings will switch back to the default settings of **Store** in 5 minutes.
- The Standby light feature is disabled in Store Demo mode.

- 4 When the basic settings are complete, press the OK button.


NOTE

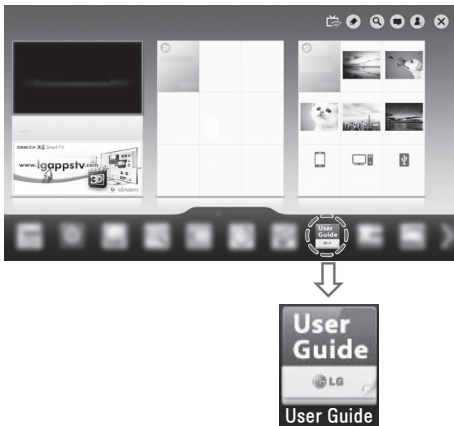
- If you do not complete the Initial setting, it will appear whenever the TV turns on.
- Disconnect the power cord from the power outlet when you do not use the TV for a long period of time.



- 5 To turn the TV off, press the power button on the remote control.



USING THE USER GUIDE

User Guide allows you to easily access detailed TV information.

- 1 Press **SMART**  button to access the Smart Home menu.
- 2 Select **User Guide** and press the **OK** button.



1	Shows the description of the selected menu. You can use  /  to move between pages.
2	Moves to the selected menu directly from the User Guide.

1	Shows the video you were watching.
2	Guide categories.
3	List of topics in the current category. You can use  /  button to move between pages.
4	An index of key words present in the User Guide.
5	Provides the detailed information on the functions of LG Smart TV when the Internet is connected. (It may not be available depending on the country/language.)

(Depending on country)

SPECIFICATIONS

Product specifications may be changed without prior notice due to upgrade of product functions.

Power requirement		AC 100 - 240 V ~ 50 / 60 Hz
Television System		NTSC-M, ATSC, 64 & 256 QAM
Program Coverage		VHF 2-13, UHF 14-69, CATV 1-135, DTV 2-69, CADTV 1-135
External Antenna Impedance		75 Ω
Environment condition	Operating Temperature	0 - 40 °C
	Operating Humidity	Less than 80 %
	Storage Temperature	-20 - 60 °C
	Storage Humidity	Less than 85 %

MODELS		42LA6200 (42LA6200-UA)
		42LA6205 (42LA6205-UA)
Dimensions (Width x Height x Depth)	With stand	964 x 631 x 294 (mm)
		37.9 x 24.8 x 11.5 (inch)
	Without stand	964 x 573 x 78 (mm)
		37.9 x 22.5 x 3.0 (inch)
Weight	With stand	11.8 Kg (26.0 lbs)
	Without stand	10.0 Kg (22.0 lbs)
Current Value / Power consumption		1.1 A / 110 W

MODELS		47LA6200 (47LA6200-UA)	50LA6200 (50LA6200-UA)
		47LA6205 (47LA6205-UA)	50LA6205 (50LA6205-UA)
Dimensions (Width x Height x Depth)	With stand	1,076 x 695 x 327 (mm)	1,131 x 725 x 327 (mm)
		42.3 x 27.3 x 12.8 (inch)	44.5 x 28.5 x 12.8 (inch)
	Without stand	1,076 x 637 x 79.4 (mm)	1,131 x 667 x 80.9 (mm)
		42.3 x 25.0 x 3.1 (inch)	44.5 x 26.2 x 3.1 (inch)
Weight	With stand	15.0 Kg (33.0 lbs)	17.0 Kg (37.4 lbs)
	Without stand	12.8 Kg (28.2 lbs)	14.5 Kg (31.9 lbs)
Current Value / Power consumption		1.3 A / 130 W	1.4 A / 140 W

MODELS		55LA6200 (55LA6200-UA)	60LA6200 (60LA6200-UA)
		55LA6205 (55LA6205-UA)	60LA6205 (60LA6205-UA)
Dimensions (Width x Height x Depth)	With stand	1,246 x 803 x 343 (mm)	1,355 x 865 x 343 (mm)
		49.0 x 31.6 x 13.5 (inch)	53.3 x 34.0 x 13.5 (inch)
	Without stand	1,246 x 732 x 77.2 (mm)	1,355 x 793 x 65.3 (mm)
		49.0 x 28.8 x 3.0 (inch)	53.3 x 31.2 x 2.5 (inch)
Weight	With stand	21.5 Kg (47.3 lbs)	25.9 Kg (57.0 lbs)
	Without stand	18.7 Kg (41.2 lbs)	23.1 Kg (50.9 lbs)
Current Value / Power consumption		1.6 A / 160 W	1.8 A / 180 W

HDMI (DTV) supported mode

Resolution	Horizontal Frequency (kHz)	Vertical Frequency (Hz)
720x480	31.469 31.50	59.94 60.00
1280x720	44.96 45.00	59.94 60.00
1920x1080	33.72 33.75 26.97 27.000 33.716 33.75 67.43 67.500	59.94 60.00 23.97 24.000 29.976 30.00 59.94 60

Component supported mode

Resolution	Horizontal Frequency (kHz)	Vertical Frequency (Hz)
720x480i	15.73 15.73	59.94 60.00
720x480p	31.47 31.50	59.94 60
1280x720p	44.96 45.00	59.94 60.00
1920x1080i	33.72 33.75	59.94 60.00
1920x1080p	26.97 27.00 33.71 33.75 67.432 67.500	23.976 24.00 29.97 30.00 59.94 60.00

Component port connecting information

Component ports on the TV	Y	PB	PR
	Y	PB	PR

Video output ports on DVD player	Y	PB	PR
	Y	B-Y	R-Y
	Y	Cb	Cr
	Y	Pb	Pr

HDMI (PC) supported mode

Resolution	Horizontal Frequency (kHz)	Vertical Frequency (Hz)
640x480	31.469	59.94
800x600	37.879	60.31
1024x768	48.363	60.00
1152x864	54.348	60.053
1360x768	47.712	60.015
1280x1024	63.981	60.020
1920x1080	67.5	60.00

Wireless LAN module (WN8122E1) specification

Standard	IEEE802.11a/b/g/n
Frequency Range	2400 to 2483.5 MHz
	5150 to 5250 MHz
	5725 to 5850 MHz
Output Power (Max.)	802.11a: 16.5 dBm
	802.11b: 16 dBm
	802.11g: 15.5 dBm
	802.11n - 2.4GHz: 15.5 dBm
	802.11n - 5GHz: 16.5 dBm

- Because band channel used by the country could be different, the user can not change or adjust the operating frequency and this product is set for the regional frequency table.
- Contains FCC ID: BEJWN8122E1
Contains IC: 2703H-WN8122E1

Bluetooth module (BM-LDS401) specification

(For LA6205 series)

Standard	Bluetooth Version 3.0
Frequency Range	2400 ~ 2483.5 MHz
Output Power (Max.)	10 dBm or lower

- Contains FCC ID: BEJLDS401
Contains IC: 2703H-LDS401

3D supported mode (For 3D TV)

- Video, which is input as below media contents is switched into the 3D screen automatically.

3D supported mode automatically				
Input	Signal	Horizontal Frequency (kHz)	Vertical Frequency (Hz)	Playable 3D video format
HDMI	1080p	54.00	24	F/P, L/A
		67.50	30	
		27.00	24	
		33.75	30	
		67.50	60	
	1080i	67.50	60	F/P, F/A
		33.75		S/S, T&B, S/S Full
	720p	90.00		F/P, L/A
		45.00		S/S, T&B, S/S Full
	480p	63.00		F/P, L/A
		31.50		T/B, S/S, S/S Full
USB	1080p	33.75	30	S/S, T&B, C/B, MPO(Photo)
DLNA				
Playable 3D video format				
DTV	Dual Stream			

S/S : Side by Side, S/S Full :Side by Side Full, S/S Half :Side by Side Half,
 T/B : Top & Bottom, F/P : Frame Packing, F/A : Field Alternative, L/A : Line Alternative, C/B : Checker Board
 R/I : Row Interleaving, C/I: Column Interleaving, F/S : Single Frame Sequential

3D supported mode manually		
Input	Signal	Playable 3D video format
TV	-	2D to 3D, S/S, T&B
ATV(CVBS)	-	
Component	-	
HDMI-PC	1080p	2D to 3D, S/S, T&B, C/B, R/I, C/I (60Hz : F/S)
	Others	2D to 3D, S/S, T&B
HDMI-DTV	Interlace	2D to 3D, S/S, T&B
	Progressive	2D to 3D, S/S, T&B, C/B, R/I, C/I (60Hz : F/S)
USB / DLNA (Movie)	704 x 480p (Over)	2D to 3D, S/S, T&B, C/B, R/I, C/I (60Hz : F/S)
	704 x 480i (Over)	2D to 3D, S/S, T&B
	704 x 480 (Under)	2D to 3D
USB / DLNA (Photo)	320 x 240 (Over)	2D to 3D, S/S, T&B
	320 x 240 (Under)	2D to 3D
Miracast™ / WiDi	1024 x 768p	2D to 3D, S/S, T&B
	1280 x 720p	
	1920 x 1080p	
	Others	2D to 3D

EXTERNAL CONTROL DEVICE SETUP

To obtain the external control device setup information, please visit 'www.lg.com'.

MAINTENANCE

Cleaning Your TV

Clean your TV regularly to keep it at peak performance and to extend the product lifespan.



CAUTION

- Make sure to turn the power off and disconnect the power cord and all other cables first.
- When the TV is left unattended or unused for a long time, disconnect the power cord from the wall outlet to prevent possible damage from lightning or power surges.

Screen, frame, cabinet and stand

To remove dust or light dirt, wipe the surface with a dry, clean, and soft cloth.

To remove major dirt, wipe the surface with a soft cloth dampened in clean water or a diluted mild detergent. Then wipe immediately with a dry cloth.



CAUTION

- Do not push, rub, or hit the surface with your fingernail or a sharp object, as this may result in scratches on the screen and image distortions.
- Do not use any chemicals, such as waxes, benzene, alcohol, thinners, insecticides, air fresheners, lubricants, as these may damage the screen's finish and cause discoloration.
- Do not spray liquid onto the surface. If water enters the TV, it may result in fire, electric shock, or malfunction.

Power cord

Remove the accumulated dust or dirt on the power cord regularly.

TROUBLESHOOTING

Problem	Solution
Cannot control the TV with the remote control.	<ul style="list-style-type: none"> • Check the remote control sensor on the product and try again. • Check if there is any obstacle between the product and the remote control. • Check if the batteries are still working and properly installed (+ to +, - to -).
No image display and no sound is produced.	<ul style="list-style-type: none"> • Check if the product is turned on. • Check if the power cord is connected to a wall outlet. • Check if there is a problem in the wall outlet by connecting other products.
The TV turns off suddenly.	<ul style="list-style-type: none"> • Check the power control settings. The power supply may be interrupted. • Check if the Auto sleep feature is activated in the Time settings. • If there is no signal while the TV is on, the TV will turn off automatically after 15 minutes of inactivity.

CHILD SAFETY:

It Makes A Difference How and Where You Use Your Flat Panel Display

Congratulations on your purchase! As you enjoy your new product, please keep these safety tips in mind:



THE ISSUE

- The home theater entertainment experience is a growing trend and larger flat panel displays are popular purchases. However, flat panel displays are not always supported on the proper stands or installed according to the manufacturer's recommendations.
- Flat panel displays that are inappropriately situated on dressers, bookcases, shelves, desks, speakers, chests or carts may fall over and cause injury.

THIS MANUFACTURER CARES!

- The consumer electronics industry is committed to making home entertainment enjoyable and safe.

TUNE INTO SAFETY

- One size does NOT fit all. Follow the manufacturer's recommendations for the safe installation and use of your flat panel display.
- Carefully read and understand all enclosed instructions for proper use of this product.
- Don't allow children to climb on or play with furniture and television sets.
- Don't allow place flat panel displays on furniture that can easily be used as steps, such as a chest of drawers.
- Remember that children can become excited while watching a program, especially on a "larger than life" flat panel display. Care should be taken to place or install the display where it cannot be pushed, pulled over, or knocked down.
- Care should be taken to route all cords and cables connected to the flat panel display so that they cannot be pulled or grabbed by curious children.



WALL MOUNTING: IF YOU DECIDE TO WALL MOUNT YOUR FLAT PANEL DISPLAY, ALWAYS:

- Use a mount that has been recommended by the display manufacturer and/or listed by an independent laboratory (such as UL, CSA, ETL).
- Follow all instructions supplied by the display and wall mount manufacturers.
- If you have any doubts about your ability to safely install your flat panel display, contact your retailer about professional installation.
- Make sure that the wall where you are mounting the display is appropriate. Some wall mounts are not designed to be mounted to walls with steel studs or old cinder block construction. If you are unsure, contact a professional installer.
- A minimum of two people are required for installation. Flat panel displays can be heavy.



LG Customer Information Center

For inquires or comments, visit www.lg.com or call;

1-800-243-0000 USA, Consumer User

1-888-865-3026 USA, Commercial User

1-888-542-2623 CANADA

Register your product Online!

www.lg.com

The model and serial number of the TV is located on the back and one side of the TV.

Record it below should you ever need service.

MODEL _____

SERIAL _____



This product qualifies for ENERGY STAR in the "factory default (Home Use)" setting.

Changing the factory default settings or enabling other features may increase power consumption that could exceed the limits necessary to qualify for ENERGY STAR.



OWNER'S MANUAL

EXTERNAL CONTROL DEVICE SETUP

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

KEY CODES

- This feature is not available for all models.

Code (Hexa)	Function	Note	Code (Hexa)	Function	Note
00	CH +, PR +	R/C Button	45	Q.Menu	R/C Button
01	CH -, PR -	R/C Button	4C	List, - (ATSC Only)	R/C Button
02	Volume +	R/C Button	53	List	R/C Button
03	Volume -	R/C Button	5B	Exit	R/C Button
06	> (Arrow Key / Right Key)	R/C Button	61	Blue	R/C Button
07	< (Arrow Key / Left Key)	R/C Button	63	Yellow	R/C Button
08	Power	R/C Button	71	Green	R/C Button
09	Mute	R/C Button	72	Red	R/C Button
0B	Input	R/C Button	79	Ratio / Aspect Ratio	R/C Button
0E	SLEEP	R/C Button	91	AD (Audio Description)	R/C Button
0F	TV, TV/RAD	R/C Button	7A	User Guide	R/C Button
10 - 19	Number Key 0 - 9	R/C Button	7C	Smart / Home	R/C Button
1A	Q.View / Flashback	R/C Button	7E	SIMPLINK	R/C Button
1E	FAV (Favorite Channel)	R/C Button	8E	▶▶ (Forward)	R/C Button
20	Text (Teletext)	R/C Button	8F	◀◀ (Rewind)	R/C Button
21	T. Opt (Teletext Option)	R/C Button	AA	Info	R/C Button
28	Return (BACK)	R/C Button	AB	Program Guide	R/C Button
30	AV (Audio / Video) Mode	R/C Button	B0	▶ (Play)	R/C Button
39	Caption/Subtitle	R/C Button	B1	■ (Stop / Live TV)	R/C Button
40	∧ (Arrow Key / Cursor Up)	R/C Button	BA	(Freeze / Slow Play / Pause)	R/C Button
41	∨ (Arrow Key / Cursor Down)	R/C Button	BD	● (REC)	R/C Button
42	My Apps	R/C Button	DC	3D	R/C Button
43	Menu / Settings	R/C Button	9F	App / *	R/C Button
44	OK / Enter	R/C Button			

- * Key code 4C (0x4C) is available on ATSC/ISDB models which use major/minor channel. (For South Korea, Japan, North America, Latin America except Colombia models)

EXTERNAL CONTROL DEVICE SETUP

- Image shown may differ from your TV.

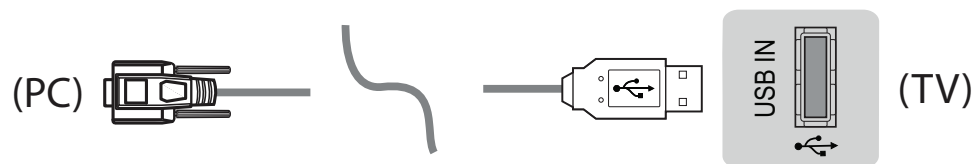
Connect the USB to Serial converter/RS-232C input jack to an external control device (such as a computer or an A/V control system) to control the product's functions externally.

Note: The type of control port on the TV can be different between model series.

- * Please be advised that not all models support this type of connectivity.
- * Cable is not provided.

USB to Serial converter with USB Cable

USB Type

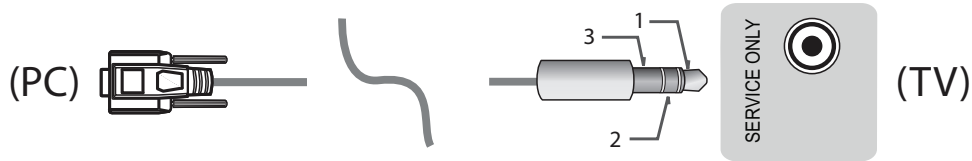


- LGTV supports PL2303 chip-based (Vendor ID : 0x0557, Product ID : 0x2008) USB to serial converter which is not made nor provided by LG.
- It can be purchased from computer stores that carry accessories for IT support professionals.

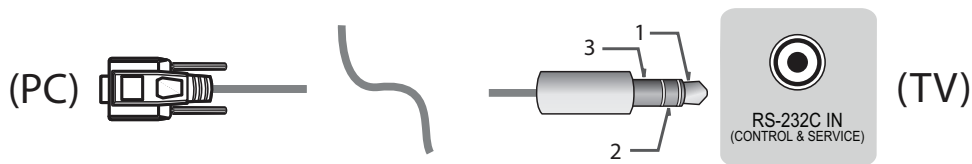
RS-232C with RS-232C Cable (Legacy)

Phone jack Type

- You need to purchase the phone-jack to RS-232 cable required for the connection between the PC and the TV, which is specified in the manual.
- * For other models, connect to the USB port.

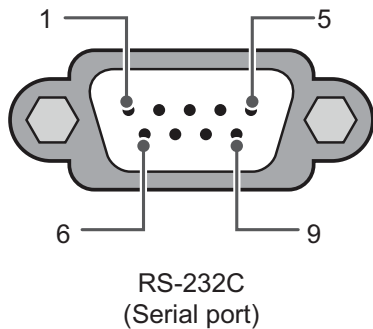


- This connection can only be used for the following models: 55/47/39LN5450-UA, 55/50/47/42LN5400-UA, 42/39/32LN5300-UA, and 37/32LN530B-UA.



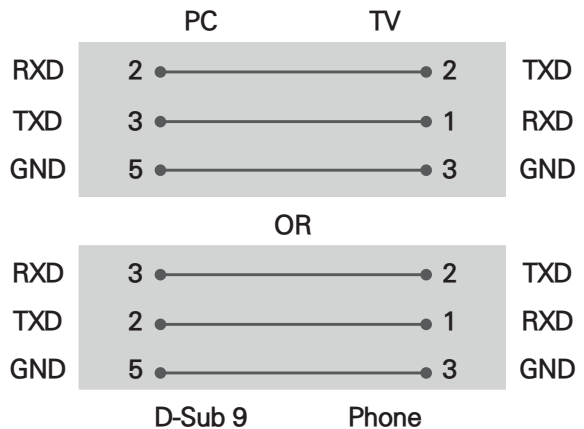
- This connection can only be used for the following models: 42/50PN4500-UA, 50/60PN5300-UF, 50/60PN6500-UA, and 60PN6550-UA.

Customer Computer



RS-232C configurations

3-Wire Configurations(Not standard)



Set ID

For Set ID number, see "Real Data Mapping" on p.6

- Press **SETTINGS** to access the main menus.
- Press the Navigation buttons to scroll to **OPTION** and press **OK**.
- Press the Navigation buttons to scroll to **SET ID** and press **OK**.
- Scroll left or right to select a set ID number and select **CLOSE**. The adjustment range is 1-99.
- When you are finished, press **EXIT**.

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.

Command reference list

(Depending on model)

	COMMAND1	COMMAND2	DATA (Hexadecimal)		COMMAND1	COMMAND2	DATA (Hexadecimal)
01. Power off	k	a	00	13. Balance	k	t	00 to 64
02. Aspect Ratio	k	c	(p.7)	14. Color (Colour) Temperature	x	u	00 to 64
03. Screen Mute	k	d	(p.7)	15. ISM Method (Only Plasma TV)	j	p	(p.8)
04. Volume Mute	k	e	00 to 01	16. Energy Saving	j	q	00 to 05
05. Volume Control	k	f	00 to 64	17. Tune Command	m	a	(p.8)
06. Contrast	k	g	00 to 64	18. Channel (Programme) Add/Del(Skip)	m	b	00 to 01
07. Brightness	k	h	00 to 64	19. Key	m	c	Key Codes
08. Color/ Colour	k	i	00 to 64	20. Control Back Light, Control Panel Light	m	g	00 to 64
09. Tint	k	j	00 to 64	21. Input select (Main)	x	b	(p.10)
10. Sharpness	k	k	00 to 32	22. 3D (Only 3D models)	x	t	(p.11)
11. OSD Select	k	l	00 to 01	23. Extended 3D (Only 3D models)	x	v	(p.11)
12. Remote Control Lock Mode	k	m	00 to 01				

* Note: During USB operations such as DivX or EMF, all commands except Power(ka) and Key(mc) are not executed and treated as NG.

Transmission / Receiving Protocol

Transmission

[Command1][Command2][][Set ID][][Data][Cr]

[Command 1] : First command to control the TV. (j, k, m or x)

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

[Set ID] : You can adjust the [Set ID] to choose desired monitor ID number in option menu.
Adjustment range in TV is 1 to 99. If [Set ID] value is selected to '0', every connected set can be controlled.
* [Set ID] is indicated as decimal (1 to 99) on menu and as Hexadecimal (0x00 to 0x63) on transmission/receiving protocol.

[DATA] : To transmit command data (hexadecimal). Transmit 'FF' data to read status of command.

[Cr] : Carriage Return - ASCII code '0x0D'

[] : Space - ASCII code '0x20'

OK Acknowledgement

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

* The set 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.

Error Acknowledgement

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

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

Data 00: Illegal Code

Real data mapping (Hexadecimal → Decimal)

* When you enter the [data] in hexadecimal, refer to following conversion table.

* Channel Tune (ma) Command uses two-byte hexadecimal value([data]) to select channel number.

00 : Step 0	32 : Step 50 (Set ID 50)	FE : Step 254
01 : Step 1 (Set ID 1)	33 : Step 51 (Set ID 51)	FF : Step 255
...
0A : Step 10 (Set ID 10)	63 : Step 99 (Set ID 99)	01 00 : Step 256
...
0F : Step 15 (Set ID 15)	C7 : Step 199	27 0E : Step 9998
10 : Step 16 (Set ID 16)	C8 : Step 200	27 0F : Step 9999
...

* Commands may work differently depending on model and signal.

01. Power (Command: k a)

- ▶ To control Power Off of the set.

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

Data 00 : Power Off

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

- ▶ To Show Power On. (Works TV is On Only)

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

Ack [a][][Set ID][][OK][01][x]

* Similarly, if other functions transmit 'FF' data based on this format, Acknowledgement feedback presents status about each function.

02. Aspect Ratio (Command: k c) (Main Picture Size)

- ▶ To adjust the screen format. (Main picture format)
You can also adjust the screen format using the Aspect Ratio in the Q.MENU. or PICTURE menu.

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

Data 01 : Normal screen (4:3)	07 : 14:9 (Europe, Colombia, Mid-East, Asia except South Korea and Japan)
02 : Wide screen (16:9)	09 : * Just Scan
04 : Zoom	0B : Full Wide
05 : Zoom 2 (Latin America except Colombia Only)	(Europe, Colombia, Mid- East, Asia except South Korea and Japan)
06 : Set by Program/ Original	10 to 1F : Cinema Zoom 1 to 16

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

- * Using the PC input, you select either 16:9 or 4:3 screen aspect ratio.
- * In DTV/HDMI/Component mode (high-definition), Just Scan is available.
- * Full wide mode may work differently based on model and is supported for DTV fully, and ATV, AV partially.

03. 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 mute off
01 : Screen mute on (Picture off)
10 : Video mute on

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

* In case of video mute on only, TV will display On Screen Display(OSD). But, in case of Screen mute on, TV will not display OSD.

04. 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)
01 : Volume mute off (Volume on)

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

05. 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 to Max : 64

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

06. 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 to Max : 64

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

07. 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 to Max : 64

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

08. Color/Colour (Command: k i)

- ▶ To adjust the screen Color(Colour).
You can also adjust colour in the PICTURE menu.

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

Data Min : 00 to Max : 64

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

09. Tint (Command: k j)

- ▶ To adjust the screen tint.
You can also adjust tint in the PICTURE menu.

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

Data Red : 00 to Green : 64

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

10. Sharpness (Command: k k)

- ▶ To adjust the screen sharpness.
You can also adjust sharpness in the PICTURE menu.

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

Data Min : 00 to Max : 32

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

11. OSD Select (Command: k l)

- ▶ To select OSD (On Screen Display) on/off when controlling remotely.

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

Data 01 : OSD off 01 : OSD on

Ack [l][][Set ID][][OK/NG][Data][x]

12. Remote control lock mode (Command: k m)

- ▶ To lock the front panel controls on the monitor and remote control.

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

Data 01 : Lock off 01 : Lock on

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

- * If you are not using the remote control, use this mode.
When main power is off & on (plug-off and plug-in, after 20 - 30 seconds), external control lock is released.
- * In the standby mode (DC off by off timer or 'ka', 'mc' command), and if key lock is on, TV will not turn on by power on key of IR & Local Key.

13. 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 to Max : 64

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

14. Color(Colour) Temperature (Command: x u)

- ▶ To adjust colour temperature. You can also adjust Color(Colour) Temperature in the PICTURE menu.

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

Data Min : 00 to Max : 64

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

15. ISM Method (Command: j p) (Only Plasma TV)

- ▶ To control the ISM method. You can also adjust ISM Method in OPTION menu.

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

Data Min : 02: Orbiter

08: Normal

20: Color(Colour) Wash

Ack [p][][Set ID][][OK/NG][Data][x]

16. Energy Saving (Command: j q)

- ▶ To reduce the power consumption of the TV. You can also adjust Energy Saving in PICTURE menu.

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

Data

00 : Off

01 : Minimum

02 : Medium

03 : Maximum

04 : Auto

05 : Screen off

* (Depending on model)

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

17. Tune Command (Command: m a)

- * This command may work differently depending on model and signal.
- For Europe, Mid-East, Colombia, Asia except South Korea and Japan, Model
 - ▶ Select channel to following physical number.

Transmission [m][a][][Set ID][][Data 00][][Data 01][][Data 02][Cr]

* Analogue Terrestrial/Cable

[Data 00][Data 01] Channel Data

Data 00 : High byte channel data

Data 01 : Low byte channel data

- 00 00 ~ 00 C7 (Decimal : 0 ~ 199)

Data 02 : Input Source (Analogue)

- 00 : Terrestrial TV (ATV)

- 80 : Cable TV (CATV)

* Digital Terrestrial/Cable/Satellite

[Data 00][Data 01]: Channel Data

Data 00 : High Channel data

Data 01 : Low Channel data

- 00 00 ~ 27 0F (Decimal: 0 ~ 9999)

Data 02 : Input Source (Digital)

- 10 : Terrestrial TV (DTV)

- 20 : Terrestrial Radio (Radio)

- 40 : Satellite TV (SDTV)

- 50 : Satellite Radio (S-Radio)

- 90 : Cable TV (CADTV)

- a0 : Cable Radio (CA-Radio)

* Tune Command Examples:

1. Tune to the analogue terrestrial (PAL) Channel 10.

Set ID = All = 00

Data 00 & 01 = Channel Data is 10 = 00 0a

Data 02 = Analogue Terrestrial TV = 00

Result = **ma 00 00 0a 00**

2. Tune to the digital terrestrial (DVB-T) Channel 01.

Set ID = All = 00

Data 00 & 01 = Channel Data is 1 = 00 01

Data 02 = Digital Terrestrial TV = 10

Result = **ma 00 00 01 10**

3. Tune to the satellite (DVB-S) Channel 1000.

Set ID = All = 00

Data 00 & 01 = Channel Data is 1000 = 03 E8

Data 02 = Digital Satellite TV = 40

Result = **ma 00 03 E8 40**

Ack [a][][Set ID][][OK][Data 00][Data 01]

[Data 02][x][a][][Set ID][][NG][Data 00][x]

- For South Korea, North/Latin America except Colombia Model

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

Transmission [m][a][][0][][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 from the Major / Minor number, the Physical number is not required when sending a command in Digital.

* Analogue Terrestrial/Cable

Data 00 : Physical Channel Number

- Terrestrial (ATV) : 02~45 (Decimal: 2 ~ 69)

- Cable (CATV) : 01, 0E~7D (Decimal : 1, 14~125)

[Data 01 ~ 04]: Major/Minor Channel Number

Data 01 & 02: xx (Don't care)

Data 03 & 04: xx (Don't care)

Data 05: Input Source (Analogue)

- 00 : Terrestrial TV (ATV)

- 01 : Cable TV (CATV)

* Digital Terrestrial/Cable

Data 00 : xx (Don't care)

[Data 01][Data 02]: Major Channel Number

Data 01 : High byte Channel Data

Data 02 : Low byte Channel Data

- 00 01 ~ 27 0F (Decimal: 1 ~ 9999)

[Data 03][Data 04]: Minor Channel Number

Data 03 : High byte Channel Data

Data 04 : Low byte Channel Data

Data 05 : Input Source (Digital)

- 02 : Terrestrial TV (DTV) – Use Physical Channel Number

- 06 : Cable TV (CADTV) – Use Physical Channel Number

- 22 : Terrestrial TV (DTV) – Don't Use Physical Channel Number

- 26 : Cable TV (CADTV) - Don't Use Physical Channel Number

- 46 : Cable TV (CADTV) – Use Major Channel Number Only (One Part Channel)

Two bytes are available for each major and minor channel data, but usually the low byte is used alone (high byte is 0).

* Tune Command Examples:

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

Set ID = All = 00

Data 00 = Channel Data is 35 = 23

Data 01 & 02 = No Major = 00 00

Data 03 & 04 = No Minor = 00 00

Data 05 = Analogue Cable TV = 01

Total = **ma 00 23 00 00 00 01**

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

Set ID = All = 00

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 = Digital Terrestrial TV = 22

Total = **ma 00 00 00 1E 00 03 22**

Ack [a][][Set ID][][OK][Data 00][Data 01]

[Data 02][Data 03][Data 04][Data 05]

[x][a][][Set ID][][NG][Data 00][x]

- For Japan Model

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

Transmission [m][a][][0][][Data00][][Data01]

[][Data02][][Data03][][Data04][][Data05][Cr]

* Digital Terrestrial/Satellite

Data 00: xx (Don't care)

[Data 01][Data 02]: Major Channel Number
 Data 01: High byte Channel Data
 Data 02: Low byte Channel Data
 - 00 01 ~ 27 0F (Decimal: 1 ~ 9999)

[Data 03][Data 04]: Minor/Branch Channel Number
 (Don't care in Satellite)
 Data 03: High byte Channel Data
 Data 04: Low byte Channel Data

Data 05 : Input Source (Digital/Satellite for Japan)
 - 02 : Terrestrial TV (DTV)
 - 07 : BS (Broadcasting Satellite)
 - 08 : CS1 (Communication Satellite 1)
 - 09 : CS2 (Communication Satellite 2)

* Tune Command Examples:

1. Tune to the digital terrestrial (ISDB-T) channel 17-1.
 Set ID = All = 00
 Data 00 = Don't know Physical = 00
 Data 01 & 02 = Major is 17 = 00 11
 Data 03 & 04 = Minor/Branch is 1 = 00 01
 Data 05 = Digital Terrestrial TV = 02
 Total = **ma 00 00 00 11 00 01 02**

2. Tune to the BS (ISDB-BS) channel 30.
 Set ID = All = 00
 Data 00 = Don't know Physical = 00
 Data 01 & 02 = Major is 30 = 00 1E
 Data 03 & 04 = Don't Care = 00 00
 Data 05 = Digital BS TV = 07
 Total = **ma 00 00 00 1E 00 00 07**

* This feature is varied based on the model.

```
Ack [a][ ][Set ID][ ][OK][Data 00][Data 01]
[Data 02][Data 03][Data 04][Data 05]
[x][a][ ][Set ID][ ][NG][Data 00][x]
```

18. Channel(Programme) Add/Del(Skip)
 (Command: m b)

► To skip current channel(programme) for next time.

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

Data 00 : Del(ATSC,ISDB)/Skip(DVB) 01 : Add

```
Ack [b][ ][Set ID][ ][OK/NG][Data][x]
```

* Set the saved channel status to del(ATSC, ISDB)/skip(DVB) or add.

19. Key (Command: m c)

► To send IR remote key code.

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

Data Key code - p.2.

```
Ack [c][ ][Set ID][ ][OK/NG][Data][x]
```

20. Control Back Light (Command: m g)

• For LCD TV / LED TV
 ► To control the back light.

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

Data Min : 00 to Max : 64

```
Ack [g][ ][Set ID][ ][OK/NG][Data][x]
```

Control Panel Light (Command: m g)

• For Plasma TV
 ► To control the panel light.

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

Data Min : 00 to Max : 64

```
Ack [g][ ][Set ID][ ][OK/NG][Data][x]
```

21. Input select (Command: x b)
 (Main Picture Input)

► To select input source for main picture.

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

Data

00 : DTV	01 : CADTV
02 : Satellite DTV	10 : ATV
	ISDB-BS (Japan)
03 : ISDB-CS1 (Japan)	
04 : ISDB-CS2 (Japan)	
11 : CATV	

20 : AV or AV1	21 : AV2
----------------	----------

40 : Component1	41 : Component2
-----------------	-----------------

90 : HDMI1	91 : HDMI2
92 : HDMI3	93 : HDMI4

```
Ack [b][ ][Set ID][ ][OK/NG][Data][x]
```

* This function depends on model and signal.

22. 3D(Command: x t) (only 3D models)

(Depending on model)

- ▶ To change 3D mode for TV.

```
Transmission [x][t][ ][Set ID][ ][Data 00][ ][Data 01]
[ ][Data 02][ ][Data 03][Cr]
```

Data Structure

[Data 00] 00 : 3D On

01 : 3D Off

02 : 3D to 2D

03 : 2D to 3D

[Data 01] 00 : Top and Bottom

01 : Side by Side

02 : Check Board

03 : Frame Sequential

04 : Column interleaving

05 : Row interleaving

[Data 02] 00 : Right to Left

01 : Left to Right

[Data 03] 3D Effect(3D Depth): Min : 00 - Max : 14
(*transmit by Hexadecimal code)

- * If [Data 00] is 00 (3D On), [Data 03] has no meaning.
- * If [Data 00] is 01 (3D off) or 02 (3D to 2D), [Data 01], [Data 02] and [Data 03] have no meaning.
- * If [Data 00] is 03(2D to 3D), [Data 01] and [Data 02] have no meaning.
- * All 3D pattern options ([Data 01]) may not be available according to broadcasting/video signal.

[Data 00]	[Data 01]	[Data 02]	[Data 03]
00	O	O	X
01	X	X	X
02	X	X	X
03	X	X	O

X : don't care

```
Ack [t][ ][Set ID][ ][OK][Data00][Data01][Data02]
[Data03][x]
[t][ ][Set ID][ ][NG][Data00][x]
```

23. Extended 3D(Command: x v) (only 3D models)
(Depending on model)

- ▶ To change 3D option for TV.

```
Transmission [x][v][ ][Set ID][ ][Data 00][ ]
[Data 01][Cr]
```

[Data 00] 3D option

00 : 3D Picture Correction

01 : 3D Depth (3D Mode is Manual Only)

02 : 3D Viewpoint

06 : 3D Color Correction

07 : 3D Sound Zooming

08 : Normal Image View

09 : 3D Mode (Genre)

[Data 01] It has own range for each 3D option
determined by [Data 00].

1) When [Data 00] is 00

00 : Right to Left

01 : Left to Right

2) When [Data 00] is 01, 02

Data Min: 0 - Max: 14 (*transmit by Hexadecimal
code)Data value range(0 - 20) converts Viewpoint range
(-10 - +10) automatically (Depending on model)

3) When [Data 00] is 06, 07, 08

00 : Off

01 : On

4) When [Data 00] is 09

00 : Standard

01 : Sport

02 : Cinema

03 : Extreme

04 : Manual

```
Ack [v][ ][Set ID][ ][OK][Data00][Data01][x]
[v][ ][Set ID][ ][NG][Data00][x]
```



* Image shown may differ from your TV.

* Image shown on a PC or mobile phone may vary depending on the Operating System (OS).

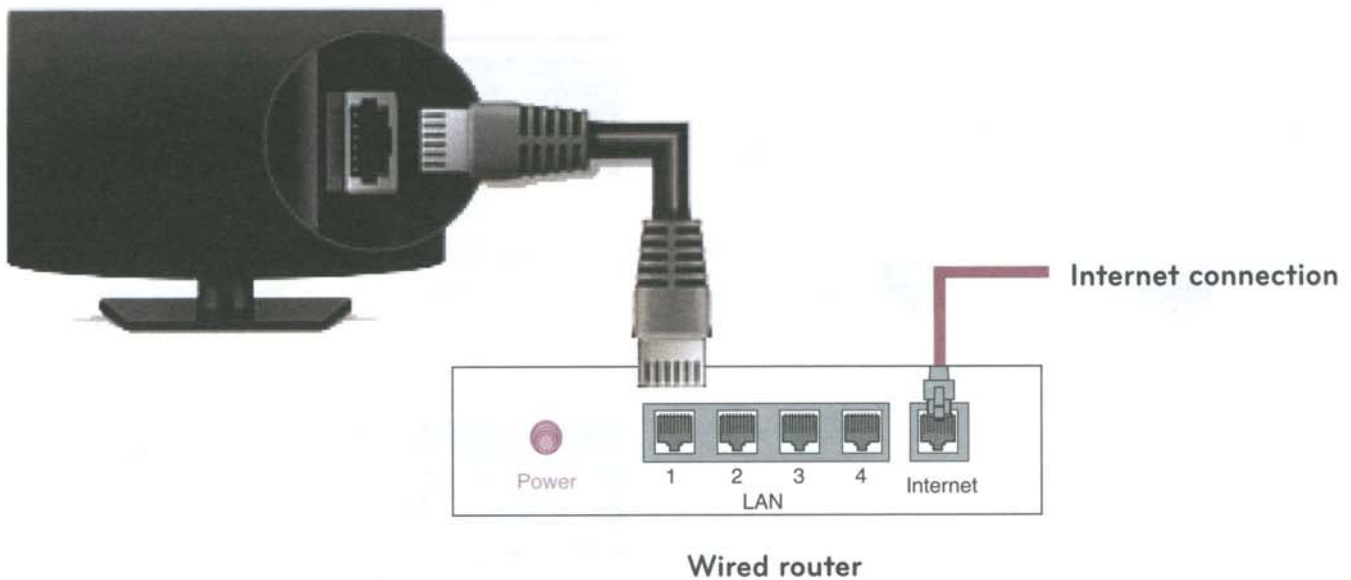
Wireless Network Connection



or



Wired Network Connection



NETWORK SETTING

ENGLISH

Premium Apps are pre-installed on the TV. These may vary by country.

- 1 Press the **SMART**  button to access the Home menu. Select **Settings** and press **Wheel(OK)**.

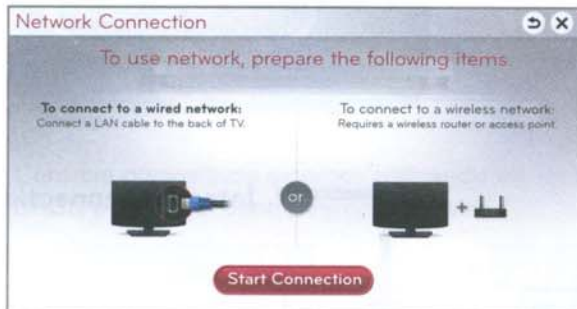


Settings

- 2 Select the **NETWORK**  **Network Connection** menu.



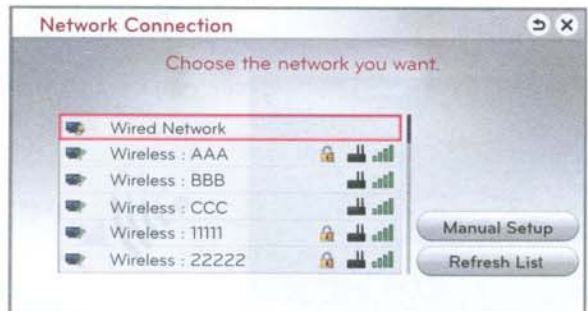
- 3 Select the **Start Connection**.




- 4 The device automatically tries to connect to the network available (wired network first).



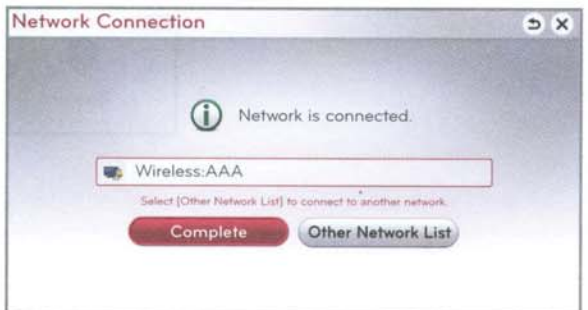
If you select **Cancel** or it fails to connect to the network, the network list available is displayed. Choose the network you wish to use.



For wireless AP(Router) that have the  symbol, you need to enter the security key.



- 5 The connected network is displayed. Select **Complete** to confirm the network connection. If you select the **Other Network List**, the available network list is displayed again.

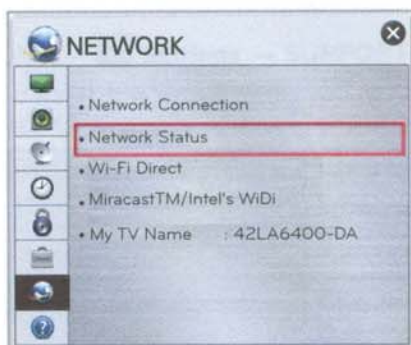


Troubleshooting Network Problems

- 1 Press the **SMART**  button to access the Smart Home menu. Select **Settings** and press **Wheel(OK)**.



- 2 Select the **NETWORK** → **Network Status** menu.



Follow the instructions below that correlate to your network status.

Check the TV or the AP(Router).



When an ✓ appears on TV, but an X on Gateway.

- 1 Check the connection status of the TV, AP(Router) and cable modem.
- 2 Power off and power on the TV, AP(Router) and cable modem.
- 3 If you are using a static IP, enter the IP directly.
- 4 Contact internet companies or AP(Router) companies.
 - Additional points to check when using a wireless connection
 - 1 Check the password for the wireless connection in the AP(Router) settings window.
 - 2 Change the AP(Router) SSID (network name) or the wireless channel.

Check the AP(Router) or consult your Internet service provider.



When an ✓ appears on TV and Gateway, but an X on DNS.

- 1 Unplug the power cord of the AP(Router), cable modem and try to connect after 5 seconds.
- 2 Initialize(Reset) the AP(Router) or cable modem.
- 3 Contact internet companies or AP(Router) companies.



When an ✓ appears on TV, Gateway and DNS, but an X on Internet.

- 1 Unplug the power cord of the AP(Router), cable modem and try to connect after 5 seconds.
- 2 Initialize(Reset) the AP(Router) or cable modem.
- 3 Check that the MAC address of the TV/AP(Router) is registered with your Internet service provider. (The MAC address displayed on the right pane of the network status window should be registered with your Internet service provider.)
- 4 Check the AP(Router) manufacturer's website to make sure your router has the latest firmware version installed.

SmartShare PC SW Installation & Setting

ENGLISH

Install the **SmartShare PC SW(DLNA)** and **SmartShare PC SW(MediaLink)** program on your PC.

- 1 Go to **www.lg.com**. Then, select your region.
- 2 Select **SUPPORT**. Then, search for your model.
- 3 Select **Drivers & Software** or **SOFTWARE UPDATE**. Then, select **SmartShare PC SW(DLNA)**
- 4 You can run the program when installation is complete.



NOTE

- DLNA service is only available if TV and other devices are connected via a single AP(Router).

DLNA Connection to Smartphone

- 1 Check that Wi-Fi is enabled on your smartphone. To use DLNA, both devices must be on the same local network.
- 2 Install/run the app for sharing content on your smartphone (It's called SmartShare on LG phones).
- 3 Enable your smartphone to share content files with other devices.
- 4 Select the file type you want to play (movie, audio or photo).
- 5 Select a movie, music or photo file to play on the TV.
- 6 Add the selected file to the playlist.
- 7 Select a TV model name on which to play the files. (The TV model name is on a label on the side of the TV and in the customer support menu.)
- 8 Play the media file to view and enjoy it on your TV.

Updating the TV Firmware

HOME →  Settings → SUPPORT → Software Update

By default, the TV will notify you of new software updates. You can use the Software Update menu to manually check for available updates.

Software Update	Set it to On . When an updated file is detected, the file is downloaded automatically.
Automatic Update Mode	If an update is available, the update automatically starts without prompting.
Check Update Version	Checks the latest update version installed. When a new update is available, the download process can be performed manually.

Tag On

(Depending on model)



Tag On

Tag On is a data transmission technology that can be used on smartphones with NFC (Near Field Communication). Simply by tapping your smartphone to a Tag On sticker, you can share content between your smartphone and TV.

- To connect your smartphone to the TV using Tag On, they must be connected on the same Wi-Fi network or **Miracast™/Intel's WiDi** of the smart TV is set to **On**.
 - Do not attach the sticker to a metal part of the TV. Otherwise, your smartphone cannot recognize the Tag On sticker.
 - Do not crumple or fold the Tag On sticker. Otherwise, the Tag On is not recognized.
 - To purchase a Tag On sticker, please contact the LG Electronics Service Center.
 - This function is supported only on a smartphone with Android 4.0 (ICS) or later.

Wi-Fi Direct Setting

ENGLISH

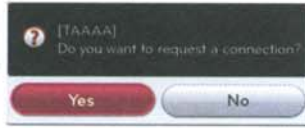
HOME →  Settings → NETWORK → Wi-Fi Direct


If a local network is not available, you can connect a portable device directly to the TV using Wi-Fi Direct. With Smart Share, you can share files or screens of devices connected to **Wi-Fi Direct**.

[Device Screen]



[TV Screen]



- 1 If **Wi-Fi Direct** is set to **On**, a list of available devices appears.
 - » To use **Wi-Fi Direct**, go to  **Settings** → **NETWORK** and set **Wi-Fi Direct**(**a**) to **On**.
- 2 When you are prompted to request connection, select **Yes**. **Wi-Fi Direct** is now connected to your TV.

*If you are not using **Wi-Fi Direct** to minimize the interference between Wi-Fi devices, it is recommended to set **Wi-Fi Direct**(**a**) to **Off**. You can only use devices that support **Wi-Fi Direct**.

Miracast™ Setting

Miracast allows a portable device to securely send video and sound to the TV wirelessly.

[Device Screen]



- 1 Miracast should be set to 'ON' on your mobile device And TV. Go to the Network settings to set the Miracast.
- 2 When your TV or portable device is detected, select the device.

WiDi (Wireless Display) Setting

Intel's WiDi (Wireless Display) technology enables easy and fast connection without wires or internet network for mirrored and dual monitor display on your TV. You can sit back and experience your favorite movies, videos, photos, online shows and more in full HD on your TV with great image clarity and sound.

NOTE

- When you connect the TV and laptop, you should set up TV mode for "Live TV" and "external input". If not, your computer cannot detect LG Smart TV.

- Intel's WiDi is set to On. Connect your laptop to AP(Router). (Without AP, it is possible to use this function; it is recommended to connect to AP.) Your laptop runs the Intel WiDi program.
- It detects LG Smart TVs available, which supports WiDi. In the list, select the TV you want and click Connect. Enter the number **(a)** shown on the screen into the input field **(b)** on your laptop and then click Continue. (4-digit number: under WiDi 3.1.29, 8-digit number: above WiDi 3.5)



[TV Screen]



[Notebook Screen]

- The TV screen appears on the laptop screen. The wireless environment may affect the screen display. If the connection is poor, the Intel WiDi connection may be lost.
- LG TVs do not need to register.
 - TV sound setting for **Digital Sound Out** is set to **PCM**.
 - For more information on Intel WiDi, visit '<http://intel.com/go/widi>'.
 - On the **Intel's WiDi**, WiDi device is not searched. Close the **Intel's WiDi**, then search WiDi.
 - You can control your PC using the Magic Remote Control.
 - Intel's WiDi laptop is not appeared in the Miracast /WiDi menu in TV network menu.

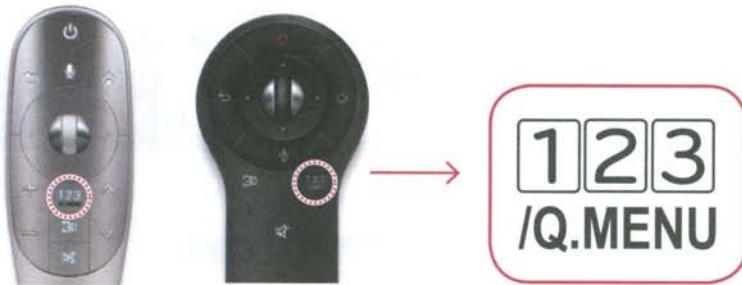
On-Screen Remote

ENGLISH

To use the Universal Control function (It may not be available depending on the country/model.)

With the Magic Remote Control, you can easily control your set-top box, Blu-ray player, home theater system, and Sound Bar.

- 1 Check if the device is connected to the TV.
- 2 After pressing the '123 /Q.MENU' button on the Magic Remote Control, select the device you want to control in the Change Device tab. The Screen Remote that can control the device appears.



- 3 You can control external devices using the Screen Remote on the screen. (This may not work with the '123 /Q.MENU' button for some models.)



- » **a** : Change Device tab
- » **b** : Device control buttons
- » **c** : Expand the ScreenRemote
- » **d** : Exits the Screen Remote
- » **e** : Moves the position of the ScreenRemote to left or right

- 4 Control external devices using the navigation keys, wheel (OK), or BACK button on the Magic Remote Control.



Please call LG Customer Service if you experience any problems.

IMPORTANT INFORMATION

Use this information to replace one shown in page 6 of your Owner's Manual

Cautions when using the 3D glasses

- Make sure to use LG 3D glasses. Otherwise, you may not be able to view 3D videos properly.
- Do not use the 3D glasses instead of your normal glasses, sunglasses or protective goggles.
- Using modified 3D glasses may cause eye strain or image distortion.
- Do not keep your 3D glasses in extremely high or low temperatures. It will cause deformation.
- The 3D glasses are fragile and are easy to scratched. Use a soft, clean piece of cloth when wiping the lenses. Do not scratch the lenses of the 3D glasses with sharp objects or clean/wipe them with chemicals.

(0113)

Please direct all service-related questions or comments to www.lgusa.com/support or call 1.800.243.0000

CMF01
LG Electronics



First-Class postage required. Post Office will not deliver without proper postage.



PO BOX 174355
DENVER CO, 80217-4355



**PROTECT YOUR INVESTMENT
DON'T FORGET TO REGISTER!**

online at www.lgusa.com/register **OR** Fill out and return this card

Registering is important, quick and easy!

Thank you for purchasing an LG product! We hope you are enjoying your new product and look forward to sharing some insider tips and tricks with you soon. Registering your LG product is simple and also serves as a verification of ownership if your product is stolen or lost.

In addition, you'll receive the following benefits and many more:

- Helpful emails on how to make the most of your product
- Reminders about product downloads and firmware
- More efficient warranty service
- Exclusive information on new products and innovations
- Special offers and promotions

Welcome to the LG family!

Please seal with tape. Do not staple.



PROTECT YOUR INVESTMENT DON'T FORGET TO REGISTER!

online at www.lgusa.com/register **OR** Fill out and return this card
within the next 10 days

1. Mr. Mrs. Ms. Miss

First name

Initial

Last name

Street

Apt

City

State / Province

ZIP / Postal Code

Email address

2. Telephone number

() - .

4. Model number

3. Date of purchase

/ /

Month

Day

Year

5. Serial number

6. Name of store where purchased



**LG Electronics, Inc.
LCD Television Limited Warranty - USA**

Your LG LCD Television will be repaired or replaced, at LG's option, if it proves to be defective in material or workmanship under normal use, during the warranty period ("Warranty Period") listed below, effective from the date ("Date of Purchase") of original consumer purchase of the product. This warranty is good only to the original purchaser of the product and effective only when used in the United States, excluding U.S. Territories.

WARRANTY PERIOD	HOW SERVICE IS HANDLED
<p>LABOR: One Year from the Date of Purchase.</p> <p>PARTS: One Year from the Date of Purchase.</p> <p>Replacement Units and Repair Parts may be new or factory remanufactured.</p> <p>Replacement Units and Repair Parts are warranted for the remaining portion of the original unit's warranty period.</p>	<p>Please retain dealer's dated bill of sale or delivery ticket as evidence of the Date of Purchase for proof of warranty, and submit a copy of the bill of sale to the service person at the time warranty service is provided.</p> <p>CONSUMER USER Please Call 1-800-243-0000 (24 hours a day, 365 days per year) for instructions on getting the defective unit repaired or replaced. Visit our website at: http://www.lgservice.com</p> <p>COMMERCIAL USER Please Call (888) 865-3026 (Staffed during these times Mon. - Fri. 8:00AM ~ 5:00PM Central Standard Time) for instructions on getting the defective unit repaired or replaced. Visit our website at: http://www.lgcommercial.com</p>

THIS WARRANTY IS IN LIEU OF ANY OTHER WARRANTY, EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION, ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. TO THE EXTENT ANY IMPLIED WARRANTY IS REQUIRED BY LAW, IT IS LIMITED IN DURATION TO THE EXPRESS WARRANTY PERIOD ABOVE. NEITHER THE MANUFACTURER NOR ITS U.S. DISTRIBUTOR SHALL BE LIABLE FOR ANY INCIDENTAL, CONSEQUENTIAL, INDIRECT, SPECIAL, OR PUNITIVE DAMAGES OF ANY NATURE, INCLUDING WITHOUT LIMITATION, LOST PROFITS, LOST OR CORRUPTED PROGRAMMING OR DATA, OR ANY OTHER DAMAGE WHETHER BASED IN CONTRACT, TORT, OR OTHERWISE. Some states do not allow the exclusion or limitation of incidental or consequential damages or limitations on how long an implied warranty lasts, so the above exclusion or limitation may not apply to you. This warranty gives you specific legal rights and you may also have other rights that vary from state to state.

THIS LIMITED WARRANTY DOES NOT APPLY TO:

<ul style="list-style-type: none"> ● damage caused in shipping or transit ● service required as a result of improper installation, including incorrect or insufficient AC supply (please consult the owner's manual for power supply requirements). ● installation or repair of antenna systems, cable converters, cable company supplied equipment, or other components in a video system ● set-up or adjustment on consumer controls, or damage caused by improper adjustments ● damage caused by other system components ● any unit that has been modified or incorporated into any other product ● replacement of batteries on the remote control. 	<ul style="list-style-type: none"> ● damage (including cosmetic damage), failure, loss or personal injury due to misuse, abuse, negligence, improper maintenance or storage, or to acts of nature or other causes beyond our control. (Causes beyond our control include but are not limited to lightning strike, power surges, power outages and water damage.) ● image burn-in ● repair or replacement of warranted parts by other than an LGE authorized service centers. ● units purchased or serviced outside of the U.S.A. ● product where the original factory serial numbers have been removed, defaced or changed in any way. ● product sold and labeled as "as is, where is" or similar disclaimer.
---	---

The cost of repair or replacement under these excluded circumstances shall be borne by the consumer.

CUSTOMER INTERACTIVE CENTER NUMBERS

<p>To obtain Customer Assistance, Product Information, or Dealer or Authorized Service Center location:</p>	<p>CONSUMER USER Please call 1-800-243-0000 (24 hours a day, 365 days per year) and select the appropriate option from the menu. Or visit our website at: http://www.lgservice.com</p> <p>COMMERCIAL USER Please call (888) 865-3026 (Staffed during these times Mon. - Fri. 8:00AM ~ 5:00PM Central standard time) and select the appropriate option from the menu. Or visit our website at: http://www.lgcommercial.com</p>
--	--

CONCERNING PIXEL FUNCTIONALITY: An LCD Television contains hundreds of thousands of individual pixels. LCD displays typically contain a small number of pixels that do not function normally. Your display has been inspected and is in compliance with manufacturer's specifications, indicating that any pixel defects do not effect the operation or use of your display.

BEFORE CALLING FOR SERVICE:

Please have your product model number, serial number, and the date of purchase available.
Under some circumstances you may be asked to provide a reserve deposit to the LGE Service Center, using a credit card number as surety for advanced shipment. Your credit card will not be charged if you return the defective unit within 10 working days.
If a replacement unit is received, please use the carton and packaging from that unit in returning the defective unit to the LGE Service Center.
Parts and service in accordance with the LGE warranty is our responsibility and will be provided without charge. Other service requirements will be at the owner's expense. If you have problems in obtaining satisfactory warranty service, write or call the LGE Customer Interactive Service.
To assure proper credit and avoid unnecessary charges, you must obtain a Return Authorization before returning any product to the Factory Service Center. Contact the Customer Interactive Center for details.

Service for your LGE Television is provided through LG Electronics Alabama, Inc., the authorized LGE Service Center for the United States.

TO CONTACT LG ELECTRONICS BY MAIL:

LGE Customer Interactive Center
P. O. Box 240007
201 James Record Road
Huntsville, Alabama 35824
ATTN: CIC

LGE LCD Televisions are marketed and distributed in the United States by:
LG Electronics U.S.A., Inc., 1000 Sylvan Avenue, Englewood Cliffs, NJ 07632



User Guide

This is a 「User Guide」 installed on the TV.

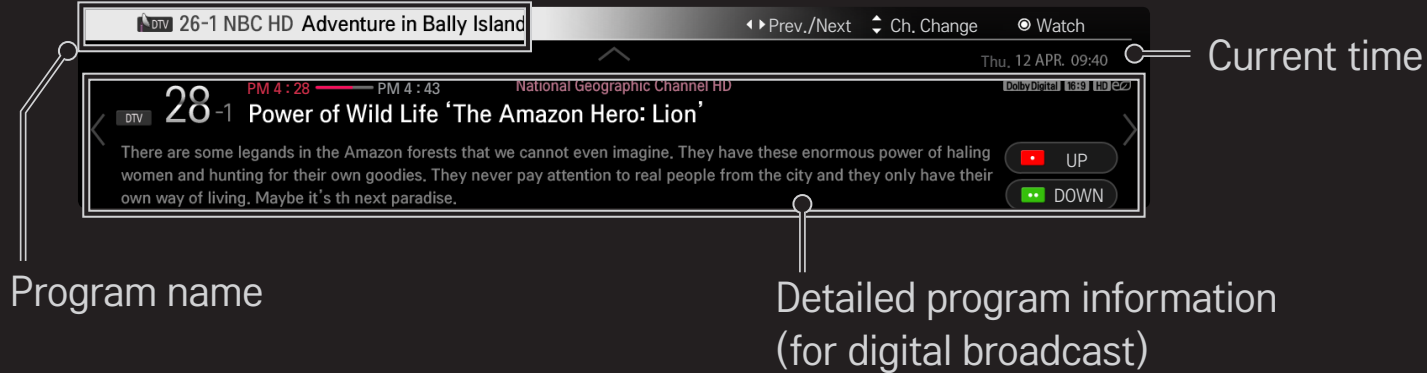
The contents of this guide are subject to change without prior notice for quality improvement.

☐ To view program information

Displays information about the current program and/or current time, etc.

- 1 Move the pointer of the Magic remote control to the top of the TV screen.
- 2 Click the activated channel banner area.
- 3 The program details will be displayed at the bottom of the TV screen.

✎ Image shown may differ from your TV.



☐ To set favorite channels

SMART  ⇒ Settings → CHANNEL → Channel Edit

- 1 Move to the desired channel on **Wheel(OK)** button. Channel is selected.
- 2 Press **Set as Favorite**.
- 3 Select the desired favorite channel group.
- 4 Select **Enter**. Favorite is set.

☐ To use Favorite

SMART  ⇒ Ch. List

Channel list will appear. Select the desired preset favorite channel from Favorite List A to D.

☐ To set Auto Tuning

SMART  ⇒ Settings → CHANNEL → Auto Tuning

Automatically tunes the channels.

- ✎ Channels are not registered properly unless the antenna/cable is connected correctly.
- ✎ Auto Tuning only sets channels that are currently broadcasting.
- ✎ If Lock System is turned on, a pop-up window will appear asking for password.

❑ To set channels manually

SMART  ⇒ Settings → CHANNEL → Manual Tuning

Adjusts channels manually and saves the results.

For digital broadcasting, signal strength, etc. can be checked.

☐ To edit channels


SMART  ⇒ Settings → CHANNEL → Channel Edit

Edits the saved channels.

Set as favorite, block/unblock and Add/Delete etc. the selected channel.

SMART ⇒ Settings → PICTURE → Aspect Ratio

Selects the screen aspect ratio.

16:9	Resizes the image ratio to fit a 16:9 screen.
Just Scan	Displays high-quality image without loss.  In DTV/HDMI/Component (over 720p) mode, Just Scan is available.
Set by Program	Depending on the input signal, screen aspect ratio changes to 4:3 or 16:9.
4:3	Resizes the image ratio to fit 4:3 screen.
Zoom	Resizes the image to fit the screen width. The top and bottom parts of the image may be cut off.
Cinema Zoom	Formats an image to the cinemascope ratio (2.35:1) and zooms in on the ratio.

- ✎ While viewing an external device, these cases may result in image burn:
 - a video with stationary caption (such as network name)
 - 4 : 3 aspect ratio mode for an extended period

Take caution when using these functions.

- ✎ Available picture size may differ depending on the input signal.
- ✎ The screen aspect ratios on HDMI-PC input are available in 4:3 and 16:9 only.
- ✎ [For models supporting 2160p] When a 2160p signal is input or your PC resolution is set to 3840 x 2160, the **Aspect Ratio** is set to **Just Scan**.

SMART ⇒ Settings → PICTURE → Energy Saving

Reduces power consumption by adjusting screen brightness.

Auto	TV sensor detects the ambient lighting and automatically adjusts the screen brightness.
Off	Turns off the Energy Saving mode.
Minimum/ Medium/ Maximum	Applies the pre-set Energy Saving mode.
Screen Off	Screen is turned off and only sound is played. Press any button on the remote control to turn the screen back on.

SMART => Quick Menu → AV Mode

Views the TV with the best picture / audio optimized for different AV modes.

Off	Views with the value set at the picture / sound menu.
Cinema	Optimizes picture and audio settings for movies.
Game	Optimizes picture and audio settings for games.

❑ To adjust pictures with Picture Wizard

SMART  ⇒ **Settings** → **PICTURE** → **Picture Wizard II**

Use the remote control and follow the instructions of the Picture Wizard to calibrate and adjust for optimum picture quality without expensive pattern devices or help from a specialist.

Follow the instructions to obtain the optimum picture quality.

☐ To select Picture Mode


SMART  ⇒ Settings → PICTURE → Picture Mode

Selects the picture mode optimized for the viewing environment or the program.

Vivid	Heightens contrast, brightness and sharpness to display vivid images.
Standard	Displays images in standard levels of contrast, brightness and sharpness.
Cinema / Game	Displays the optimum picture for movie, game.
Eco	The Energy Saver feature changes settings on the TV to reduce power consumption.



Menu for adjusting picture quality that allows experts and amateurs to enjoy the best TV viewing. This menu is ISF-certified and provided for picture tuning experts. (ISF logo can only be used on ISF-certified TV units.)
ISFccc : Imaging Science Foundation Certified Calibration Control

- ✎ Depending on the input signal, the available range of picture modes may differ.
- ✎  Expert mode is for picture tuning professionals to control and fine-tune using a specific image. For normal images, the effects may not be dramatic.

☐ To fine-tune picture mode

SMART  ⇒ Settings → PICTURE → Picture Mode → Backlight / Contrast / Brightness / Sharpness / Color / Tint / Color Temp.

First select a Picture Mode of your choice.

Backlight	Adjusts the display brightness by varying the brightness of the LCD panel.
Contrast	Adjusts the difference between bright and dark regions of the screen.
Brightness	Adjusts the overall screen brightness.
Sharpness	Adjusts the sharpness of the borders between bright and dark.

Color	Adjusts the colors on the screen darker or lighter.
Tint	Adjusts the red/green color balance.
Color Temp.	Adjusts the overall tone of colors to warm or cool.

- ✎ Depending on the input signal or other picture settings, the range of detailed items for adjustment may differ.

❑ To set advanced control

SMART  ⇒ **Settings** → **PICTURE** → **Picture Mode** → **Advanced control/Expert Control**


Calibrates the screen for each picture mode or adjusts picture settings for a special screen.

First select a **Picture Mode** of your choice.

Dynamic Contrast	Adjusts the contrast to the optimal level according to the brightness of the image.
Dynamic Color	Adjusts colors for more natural-looking colors.

Preferred Color	Skin Color : Skin color spectrum can be separately set to implement the skin color as defined by the user.
	Grass Color : Natural color spectrum (meadows, hills, etc.) can be separately set.
	Sky Color : Sky color is set separately.
Super Resolution	Provides a crystal-clear picture by improving the details in areas where the picture is blurry or unclear.
Gamma	Sets the gradation curve according to the output of the picture signal in relation to the input signal.
Colour Gamut	Selects the range of colors that can be expressed.
Edge Enhancer	Shows clearer and distinctive yet natural edges of the video.
xvYCC	[Depending on model] Expresses richer colors.

Color Filter	Filters a specific color spectrum in RGB colours to fine-tune colour saturation and hue accurately.
Expert Pattern	Patterns used for expert adjustment.
White Balance	Adjusts the overall tone of the screen as desired. In Expert mode, detailed fine-tuning can be set via the Method / Pattern etc.
Color Management System	This is a function used by experts when they adjust colors using a test pattern of six colours (Red / Green / Blue / Cyan / Magenta / Yellow) without affecting other color areas. For normal images, adjustments may not result in noticeable color changes.


 Depending on input signal or other picture settings, the range of detailed items for adjustment may differ.


❑ To set additional picture options

SMART  ⇒ Settings → PICTURE → Picture Mode → Picture Option

Adjusts detailed setting for images.

Noise Reduction	Reduces screen noise in the video.
MPEG Noise Reduction	Reduces noise caused by compressing digital video.
Black Level	Adjusts the brightness or darkness of the screen to suit the black level of the picture input using the degree of darkness (black level) of the screen.
Real Cinema	Optimizes the screen for movie viewing.

Eye Care	[Depending on model] Adjusts screen brightness to prevent eye glare.
Motion Eye Care	[Depending on model] Saves power consumption by adjusting the brightness corresponding to the movement of the image on the screen.  It does not work while watching 3D images.

-  Depending on input signal or other picture settings, the range of detailed items for adjustment may differ.

❑ To reset Picture Mode

SMART  ⇒ Settings → PICTURE → Picture Mode → Picture Reset

Resets values customized by the user.

Each picture mode is reset. Select the picture mode you wish to reset.

❏ To use Sound Mode

SMART  ⇒ Settings → SOUND → Sound Mode

Optimizes TV audio to the selected sound mode.

Standard	Suitable for all types of video
Music/Cinema/ Sport/Game	[Depending on model] Sets audio optimized for a specific genre.
User Setting	Adjusts the volume to the desired level using the User EQ.

❑ To fine-tune the volume

SMART  ⇒ Settings → SOUND → Sound Mode → User EQ

Sets Sound Mode at User Setting first.

100 Hz / 300 Hz / 1 kHz /
3 kHz / 10 kHz

Sets EQ by manually adjusting sound bands.

Reset

Resets previously changed equalizer value.

❏ To use Smart Sound Mode

SMART  ⇒ **Settings** → **SOUND** → **Smart Sound Mode**

Provides optimized sound adjusted for each content type.

- ✎ If the Smart Sound Mode function is enabled, Sound Mode, Virtual Surround Plus and Clear Voice II are automatically adjusted.

❑ To use Virtual Surround sound

SMART  ⇒ **Settings** → **SOUND** → **Virtual Surround plus**

LG's proprietary audio processing technology allows 5.1ch-like surround sound from two speakers.

 If **Clear Voice II** is set to **ON**, **Virtual Surround plus** will not be chosen.

❑ To use Clear Voice II function

SMART  ⇒ **Settings** → **SOUND** → **Clear Voice II**

Boosts voice clarity.

❑ To set Volume Mode

SMART  ⇒ Settings → SOUND → Volume Mode

Sets various modes for volume control.

Auto Volume	Sets <i>Auto Volume</i> to <i>On</i> . When clicking through different programs, the volume is automatically adjusted to the same level.
Volume Control	Using a single volume curve may result in an inaudible or loud sound depending on the environment. Adjusts volume levels depending on the time of day (day/night).

❑ To synchronize audio and video

SMART  ⇒ **Settings** → **SOUND** → **AV Sync. Adjust**

Synchronizes video and audio directly when they do not match.

If you set **AV Sync. Adjust** to **ON**, you can adjust the sound output (TV speakers or SPDIF) to match the video.

TV Speaker


Adjusts the synchronization of the sound from the TV's internal speakers.

Moving the slider to the left will add a delay to the sound output. Moving the slider to the right will add a delay to the video output.

External Speaker

Adjusts how the sound is synced from external speakers, such as an external speaker connected to the digital audio output port, LG audio device and headphone.

Moving the slider to the left will add a delay to the sound output. Moving the slider to the right will add a delay to the video output.

 LG audio device is supported only for models with the optical digital port.

Bypass

Outputs broadcasting signals or the audio of an external device without audio delay. Audio may be output before video as it takes time to process video input into the TV.

❑ To use Sound Option Setting

SMART  ⇒ Settings → SOUND → Sound Option Setting

❑ Analogue Out

[Depending on model]

Allows the user to select the Headphone or External Speaker (Audio Out) menu depending on the device connected.

❑ Balance

Adjusts left/right audio balance.

□ Sound Optimizer

Allows optimized sound for custom TV installation.

Normal	General sound mode.
Wall Mount Type	Optimizes sound for a wall-mounted TV.
Stand Type	Optimizes sound for a stand-mounted TV.

❑ To use the TV's speakers

SMART 🏠 ⇒ **Settings** → **SOUND** → **Sound Out** → **TV Speaker**

Sound is output through the TV speaker.

❑ To use External Speakers


SMART 🏠 ⇒ **Settings** → **SOUND** → **Sound Out** → **External Speaker**
(Optical/HDMI ARC)

[Only available for models with an optical or HDMI (ARC) port]

Sound is output through the speaker connected to the optical port.

👉 SimpLink is supported.

□ To use ARC mode

SMART  ⇒ **Settings** → **SOUND** → **Sound Out** → **External Speaker (Optical/HDMI ARC)** → **ARC Mode**


External audio devices can be connected via a High-Speed HDMI® cable without an extra optical audio cable to output SPDIF. It interfaces with SimpLink.

For an external device that supports ARC (Audio Return Channel), connect it to the **HDMI(ARC)** port.

Off	Even when the connected ARC-supported external audio device is turned on, audio output is not automatically processed through the external audio device's speakers.
On	If an ARC-supported external audio device is turned on, audio output is automatically processed through the external audio device's speakers. For SimpLink help, refer to 「User Guide → To use input device」.

- ✎ Only use ports that are labeled ARC when connecting to external devices.
- ✎ Use a high-speed HDMI® cable when connecting to external devices.
- ✎ Use of a third-party device with an ARC function may cause malfunctions.

❑ To use Digital Sound Out

SMART  ⇒ Settings → SOUND → Sound Out → External Speaker(Optical/HDMI ARC) → Digital Sound Out


Sets up Digital Sound Output.

Item	Sound Input	Digital Sound output
Auto	MPEG	PCM
	Dolby Digital	Dolby Digital
	Dolby Digital Plus	Dolby Digital
	HE-AAC	Dolby Digital
PCM	All	PCM

❑ To connect and use an LG audio device

LG audio device allows you to enjoy rich powerful sound.


❑ Wired Connection

SMART  ⇒ **Settings** → **SOUND** → **Sound Out** → **LG Sound Sync (Optical)**

Connect an LG audio device with the  logo to the optical digital audio output port.

 Only available on models with an optical digital port.

❑ Wireless Connection

SMART  ⇒ **Settings** → **SOUND** → **Sound Out** → **LG Sound Sync (Wireless)**


An LG audio device with the  logo can be connected wirelessly.

- ✎ You can use the TV remote control to adjust the volume of the connected device.
- ✎ When wirelessly connecting, attach the dongle and connect it if the model needs the Magic Remote Control dongle. To purchase a Magic Remote Control dongle, please visit LGtvmall.com
- ✎ For a wireless connection, if the device fails to connect. Check the device power and make sure the LG Audio device is set up properly.




- ✎ When you select **LG Sound Sync (Wireless)**, devices available for connection are searched and one of searched devices is automatically connected. When a device is connected, its name is shown.
- ✎ If two or more devices are detected, the first detected device is connected first. To view more detected devices to connect, press the Show More button.
- ✎ When **LG Sound Sync (Wireless)** is active and you turn on the TV, it will search and try to connect the device which recently connected.

❑ To use Analog Out/Headphone

[Depending on model]

SMART  ⇒ **Settings** → **SOUND** → **Sound Out** → **Analog Out/Headphone**

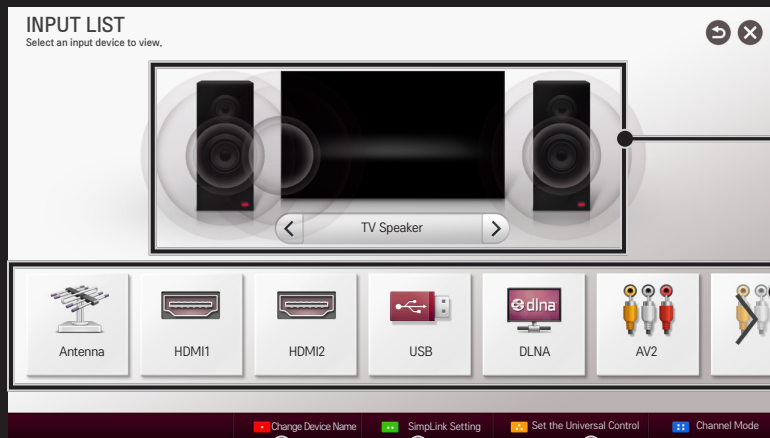
Select Headphone or External Speaker (Audio Out) depending on the device connected to the analog out port.

-  The available menu may vary depending on whether you select Headphone or External Speaker (Audio Out) in the Sound Option Setting > Analog Out.
-  Some models may only support the Headphone function.
-  If you connect headphones while the TV is powered on, it automatically detects the headphones and direct sound through them.

☐ To select an external input

SMART  ⇒ Input List

Selects external input.



Selects speaker.

Selects input.

Sets the Channel Mode.
[Depending on country]



Sets OSS.
[Depending on country]


Allows you to edit the
device label.

Sets SimpLink.

❑ Using SimpLink

SimpLink allows users to control and manage multiple multimedia devices using the TV remote control and SimpLink menu.

- 1 Connect the TV's **HDMI IN** terminal with the SimpLink device's HDMI output terminal using an HDMI cable. For home theater units with SimpLink support, connect the HDMI ports and then use an optical cable to connect the Optical Digital Audio Out from the TV to the Optical Digital Audio In of the SimpLink device.
- 2 Select **SMART**  ⇒ SimpLink. The SimpLink menu window appears.
- 3 Select **Set SimpLink** in the SimpLink menu window. The SimpLink setup window appears.
- 4 Set **SimpLink** to **On** in the SimpLink setup window.
- 5 Close the SimpLink setup window.
- 6 Select the device to control from **SMART**  ⇒ SimpLink.

- ✎ This function works only on devices with the SimpLink logo (). Make sure that the external device has a SimpLink logo.
- ✎ To use the SimpLink function, use a high-speed HDMI® cable (with CEC, or Consumer Electronics Control feature added) and No. 13 pin connected for information exchange between devices.
- ✎ Turn on or select the media of a device with home theater features to see the speaker switch to **External Speaker**.
- ✎ Connect with an Optical cable (sold separately) to use an **External Speaker**.
- ✎ Switching to external input causes devices operating with SimpLink to stop.
- ✎ Use of a third-party device with HDMI-CEC features may cause malfunctions.
- ✎ An optical cable connection is supported only for models with the optical digital port.

□ Explanation of SimpLink features

Direct Play	Play the multimedia device on the TV instantly without extra steps.
Select multimedia device.	Select the desired device through the SimpLink menu and instantly control it from the TV screen.
Disc playback	Manage the multimedia device with the TV remote control.
Power off all devices	Turning the TV off with Auto Power function On in SimpLink setting will turn the power off on all SimpLink-connected devices.

Sync Power on

If the Auto Power function is set to On in the SimpLink settings, turning on a SimpLink device will turn the TV on.

Speaker

Selects speaker on the home theater unit or TV.

☐ To use Sleep Timer

SMART  ⇒ **Settings** → **TIME** → **Sleep Timer**

Turns off the TV after a prescribed number of minutes.

To cancel the **Sleep Timer**, select **Off**.

☐ To set current time

SMART  ⇒ Settings → TIME → Clock

Checks or changes the time while watching TV.



Auto	Synchronizes the TV clock to the digital time information sent by the TV station.
Manual	Sets the time and date manually if the auto setup does not correspond to the current time.

❑ To set the TV to turn on and off automatically

SMART  ⇒ Settings → TIME → On Time/Off Time

Sets On/Off time.

Select Off on Repeat to discontinue On Time/Off Time.

-  To use On Time/Off Time, set the current time correctly.
-  Even when the On Time function is on, the TV will turn off automatically in 120 minutes when no button is pressed within that time.

☐ To set password

SMART  ⇒ Settings → LOCK → Set Password

Sets or changes TV password.

 The initial password is set as 「0000」.

☐ To lock system

SMART  ⇒ Settings → LOCK → Lock System

Permits only specific programs by blocking channels or external input.

Select the Lock System to On.

Block Channel

Blocks the channels that contain inappropriate contents for children. The channels can be selected but the screen is blank and the audio is muted.

To watch a locked channel, enter the password.

Movie Rating

[Depending on model]

Blocks the movies that are only broadcasted on the TV and contain inappropriate contents, based on the Motion Picture Association of America (MPAA) rating.

- G : (General audiences) All ages admitted
- PG : (Parental guidance suggested) Some material may not be suitable for children
- PG-13 : (Parents strongly cautioned) Some material may be inappropriate for children under 13
- R : (Restricted) Under 17 requires accompanying parent or adult guardian
- NC-17 : No one 17 and under admitted.
- X : Adults only

TV Rating– Children

[Depending on model]

Blocks the children's TV programs that parents do not want their children to watch. To block other TV programs, you should set the TV Rating–General feature.

- Age : TV–Y (All children, including children from ages 2–6), TV–Y7 (Directed to older children, suitable for children age 6 and above)
- Fantasy Violence : TY–Y7 (Directed to older children – Fantasy violence, suitable for children age 6 and above, containing more intense or combative fantasy violence)

TV Rating– General

Blocks the TV programs that you want based on the ratings by using the Parental Control Function (V-Chip).

- ✎ The V-Chip electronically reads TV program ratings and allows parents to block program that are unsuitable for children.
- Age : TV-G (General audience, suitable for all ages)
TV-PG (Parental guidance suggested, containing material that are unsuitable for younger children)
TV-14 (Parents strongly cautioned, containing material that are unsuitable for children age 14 and under)
TV-MA (Mature audience only, unsuitable for children age under 17)
- Dialog : (suggestive dialogue) TV-PG or TV-14
- Language : (coarse language)TV-PG, TV-14, or TV-MA
- Sex : (sexual situation) TV-PG, TV-14, or TV-MA
- Violence : TV-PG, TV-14, or TV-MA

Downloadable Rating	[In Digital mode Only] This function operates only when TV has received Region5 Rating data. The name of the rating option may differ.
Input Block	Block the input sources.
Application Lock	Lock the Application.

☐ To set password

SMART  ⇒ Settings → LOCK → Set Password

Sets or changes TV password.

 The initial password is set as 「0000」.

☐ To lock system

SMART  ⇒ **Settings** → **LOCK** → **Lock System**

Permits only specific programs by blocking channels or external input.

Select the **Lock System** to **On**.

Block Channel

Blocks the channels that contain inappropriate contents for children. The channels can be selected but the screen is blank and the audio is muted.

To watch a locked channel, enter the password.

TV Rating–
English

[Depending on model]

Selecting Canadian English rating system.

- 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

TV Rating– French

[Depending on model]


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	[In Digital mode Only] This function operates only when TV has received Region5 Rating data. The name of the rating option may differ.
Input Block	Block the input sources.
Application Lock	Lock the Application.

SMART ⇒ Settings → OPTION → Language

Selects Menu Language and Audio Language displayed on the screen.

Menu Language	Selects a screen menu language.
Audio Language	[In Digital Mode Only] Selects the desired language when watching digital broadcasting containing several audio languages.
Voice Recognition Language	Select the language to make voice search.  Only the voice search adopted model can support this setting.

SMART ⇒ Settings → OPTION → Caption

View subtitles when the TV station provides subtitled programming. Program subtitles work only on digital/analog broadcasts or external input.

Change **Caption** to **On** and select caption setting.

CC 1-4 (Closed Captioning) / Text 1-4 Text 1-4

Displays the audio portion of a TV program as text on the TV screen. CC1 is the most common mode in use.

Mode

Field 1 data channels: two Captions (CC1, CC2), two Text (T1, T2).

Field 2 data channels: two Captions (CC3, CC4), two Text (T3, T4).

Service 1-6

This is only available for the digital broadcasting system.

Digital
Option

Set up the size and color of the subtitles on **Digital Option**. Please select **Set by Program** or **Custom**.

Select **Custom** to adjust minute options such as the subtitles' size and color.



❑ To register the Magic Remote Control

To use the Magic Remote Control, register it with your TV first.

Register Magic Remote Control as follows:

- 1 Turn on the TV and wait for about 10 seconds and then press **Wheel(OK)** button while pointing the remote control at the TV.
 - 2 The remote control is automatically registered and a registration completion message appears on the TV screen.
- ✎ If you failed to register the Magic Remote Control, turn off the TV and try again.


❑ To re-register the Magic Remote Control

- 1 Press the **SMART**  and **BACK** buttons at the same time for about 5 seconds.
 - 2 Press the **Wheel (OK)** button towards the TV to re-register the Magic Remote Control.
- ✎ Press the **SMART**  button and **BACK** button at the same time, for five seconds, to reset the Magic Remote Control.
 - ✎ Press the **BACK** button while pointing the remote control at the TV for five seconds to reset and re-register it.

❑ To set the pointer of the Magic Remote Control

SMART  ⇒ Settings → OPTION → Pointer

Sets the speed and shape of the pointer that appears on the TV screen.

Speed	Sets the moving speed of the pointer.
Shape	Chooses from different shapes of the pointer.
Size	Chooses the size of the pointer.
Alignment	<p>Set it to On. If there is any misalignment between the pointer and the actual direction the remote control indicates, move the Magic Remote Control left and right to realign. The pointer will automatically realign to the center, making it easier to control.</p> <p> If it is set to Off, the Alignment function will not work even when you move the Magic Remote Control left and right.</p>

- ✎ If the pointer has not been used for a certain period of time, it will disappear. When the pointer disappears from the screen, shake the Magic Remote Control to the right and left. Then, it appears again.
- ✎ If you press the navigation button while moving the pointer on the screen, the pointer disappears, and the Magic remote control works as a regular remote control.
- ✎ Use within an effective distance of 33 ft. (10 meters). Using the Remote Control from greater distances or when obstructions block the sight line may cause malfunctions.

- ✎ Electronic devices nearby may cause communication interference. Devices such as microwave oven and wireless LAN use the same frequency range (2.4 GHz) as the Magic Remote Control, which may interfere with the remote control.
- ✎ The Magic Remote Control may be broken if dropped or damaged in any other way.
- ✎ Do not drop or subject the Magic Remote Control to heavy impacts.

☐ To use the pattern gesture function

Press the **Wheel(OK)** button with the normal video screen on and draw a pattern toward the screen.



Previous channel: Moves back to the previous channel.




Recent list: Shows channels recently watched.

123

Shows channel lists which be related to pattern. Choose the channel.

It recognizes 0~9 and – (dash)

 It may not work when certain windows are open.

❑ To set Power Indicator

SMART  ⇒ Settings → OPTION → Standby Light

[Depending on model]

Turns the standby light in the front panel of the TV on/off.

❑ To adjust the front LG Logo Light

SMART  ⇒ Settings → OPTION → LG Logo Light

[Depending on model]


You can adjust the LED brightness of the LG logo at the bottom of the TV.

Brightness

You can set the brightness of LG Logo Light to Off/Low/Medium/High when the TV power is off.

When TV is on

You can set the off time of **LG Logo Light** when the TV power is on.

- **Off right now** : The light is turned off as the TV power is on.
 - **Off after 10 min** : The light is turned off after 10 minutes when the TV power is on.
-  The initial brightness is set to **Low** when the TV power is on.

☐ To change TV mode

SMART  ⇒ **Settings** → **OPTION** → **Mode Setting**

Selects Home Use or Store Demo.

For use at home, select Home Use.



Store Demo is a mode used for store display.

❑ To return to initial settings

SMART  ⇒ **Settings** → **OPTION** → **Initial Setting**

Deletes all optional settings and returns to initial default mode.


Once initialization is complete, the TV will turn off and on by itself.

-  If **Lock System** is activated, a pop-up password prompt will appear.
-  Do not turn off the power during initialization.

☐ To set ZIP Code

SMART  ⇒ **Settings** → **OPTION** → **ZIP Code**

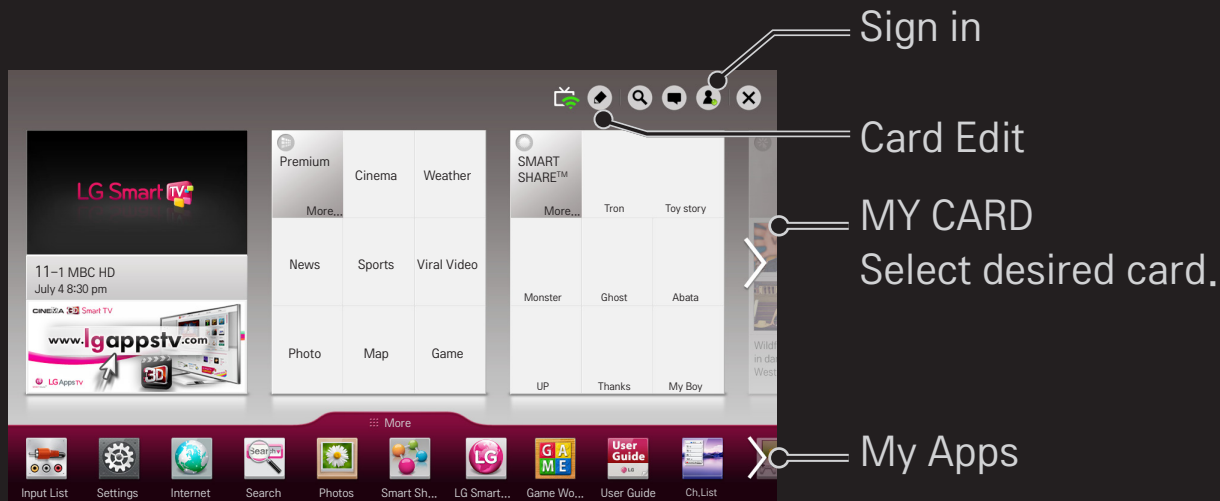
This function sets your area as the ZIP Code.

 You can check the information of area when network is connected.

□ Using the Home Screen

Press **SMART**  button on the remote control.

Thanks to the Smart TV's design, users have convenient access to a wealth of Content and applications via the easy-to-use menu arranged by themes (Live TV, Card, My Apps).



☐ To use and edit MY CARD

SMART  ⇒ MY CARD

To enable you to easily check and access a wide variety of content and functions, the main functions are grouped into categories and displayed on cards.

By selecting the card name, you can go to that category page.

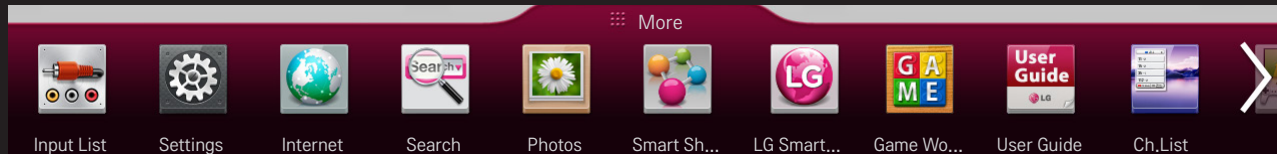
Select **Edit** at the top of the home screen to switch the position of the cards or create your own card. (You cannot edit the **Live** and **Premium** cards.)

☐ To use My Apps

SMART  ⇒ More

Select **More** at the bottom of the home screen.

Select **More** to check apps pre-installed apps and apps you have downloaded.



Select the desired app to run.

☐ To edit items in My Apps

SMART 🏠 ⇒ More → My Apps → Edit

On the My Apps page, select Edit at the top of the screen to move or delete apps. Please note that system apps can be moved, but cannot be deleted.

✎ On models equipped with the Magic Remote Control, you can move apps or delete them by selecting and then dragging them.




A wireless or wired network connection is necessary to use the Smart TV features.

Once the network connection is established, Premium Content, LG Smart World, DLNA, and more are available.

❑ Network connection by one-click

It's easy to connect to a wired/wireless network.

Select **SMART**  ⇒ **Settings** → **NETWORK** → **Network Connection** to be automatically connected to an available network. Refer to prompts on the TV.

❑ To connect network through Set Expert

SMART  ⇒ **Settings** → **NETWORK** → **Network Connection**

Used in special circumstances such as in offices (For example, when a static IP is needed).

- 1 Select a network connection either through **Wired** or **Wireless**.
- 2 When connecting via Wi-Fi, use the one of the following network connection methods.

AP List	Connects the network by selecting a network from the AP (Access Point) List.
Enter the SSID	Connects by typing in the name of wireless AP.

WPS-PBC

Connects easily by pressing the button of a wireless access point supporting PBC.

WPS-PIN

Connects easily by typing in the PIN from the admin page of the desired wireless AP.

❑ To use Wi-Fi direct function

SMART  ⇒ Settings → NETWORK → Wi-Fi direct

Wi-Fi Direct is a function that allows your TV to connect with a Wi-Fi Direct device without going through a router or gateway. With SmartShare™, you can watch the files stored on a device connected via Wi-Fi Direct.

- 1 Set Wi-Fi direct to On. (If you do not use it, please change it to Off.)
- 2 Enable the Wi-Fi Direct settings on the device that you want to connect to.
- 3 A list of devices that can be connected to the TV is displayed.
- 4 Select a device to connect.
- 5 Select Yes, when the connection request message appears.
- 6 If the device that you want to connect to accepts the request, Wi-Fi direct is connected.

❑ To use the Miracast™/Intel's WiDi function

SMART  ⇒ **Settings** → **NETWORK** → **Miracast™/Intel's WiDi**

You can view the screen of a device with Miracast™ and Intel's WiDi technologies on your TV.

- 1 Set **Miracast™/Intel's WiDi** to **On**. (If you do plan on using either of these features, please change it to **Off**.)
- 2 Enable the **Miracast™** or **Intel's WiDi** settings on the device that you want to connect to.
- 3 A list of devices that can be connected to the TV is displayed.
- 4 Select a device to connect.
- 5 Select **Yes**, when the connection request message appears.
- 6 If the device that you want to connect accepts the request, **Miracast™/Intel's WiDi** is connected.

- ✎ Some models may only support Intel's WiDi.
- ✎ When Wi-Fi Direct is set to Off, if you set Miracast™/Intel's WiDi to On, Wi-Fi Direct is automatically set to On.
- ✎ When you set the Miracast™/Intel's WiDi function to Off, Wi-Fi Direct returns to the previous setting.
- ✎ You may not connect your TV to a non-LG Electronics device even when it is detected.
- ✎ It is recommended you to connect a device to a 5GHz router.
- ✎ The response rate may vary depending on the user's environment.
- ✎ For more information on the device you want to connect to, refer to its owner's manual.

❑ Network Setting Warnings

- ✎ Use standard LAN cable (connect to Cat5 or higher with RJ45 connector, 10 Base-T, or 100 Base TX LAN port).
- ✎ Resetting the modem may fix some network connection problems. Turn the power OFF, disconnect and reconnect it, and then turn the power on to solve the problem.
- ✎ LG Electronics is not responsible for any network connection problems or any faults, malfunctions, or errors caused by network connection.
- ✎ The network connection may not work properly because of network settings or the Internet service provider.

- ✎ DSL service must use a DSL modem; and cable service must use a cable modem. Since only a limited number of network connections may be available, TV network setting may not be used depending on the contract with Internet service provider. (If the contract does not allow more than one device per line, only the already-connected PC may be used.)
- ✎ A wireless network can experience interference from other devices that use the 2.4 GHz frequency (wireless phone, Bluetooth device, or microwave oven). Although interference can also happen when using the 5 GHz frequency, it is less likely to occur.
- ✎ The wireless environment can make wireless network service run slowly.
- ✎ Failure to turn off all local home networks may cause excessive traffic on some devices.

- ✎ The access point device must support wireless connections and wireless connection feature must be enabled on the device to have AP (access point) connection. Contact the service provider for availability of wireless connections on the access point.
- ✎ Check SSID and security settings of the AP. Refer to the appropriate documentation for SSID and security settings of the AP.
- ✎ Invalid settings of network devices (wired/wireless line sharer, hub) can cause the TV to operate slowly or not operate properly. Install the devices correctly according to the appropriate manual and network.
- ✎ The connection method may differ depending on the AP manufacturer.

❑ What is Tag On?


Tag On is a data transmission technology that can be used on smartphones with NFC (Near Field Communication). Simply by tapping your smartphone to a Tag On sticker, you can share content between your smartphone and TV.


To connect your smartphone to the TV using Tag On, they must be connected on the same Wi-Fi network. Tag On also supports direct connections like WiFi Direct, Miracast, and WiDi.

- ✎ Do not attach the sticker to a metal part of the TV. Otherwise, your smartphone cannot recognize the Tag On sticker.
- ✎ Do not crumple or fold the Tag On sticker. Otherwise, the Tag On is not recognized
- ✎ To purchase a Tag On sticker, please visit your local retailer.
- ✎ This function is supported only on a smartphone with Android 4.0 (ICS) or later.

❑ To start Tag On for the first time

To connect your smartphone to the TV using NFC, install the Tag On app on the smartphone and complete the authentication process.



- 1 Make sure that the smart TV is on the same network as your smartphone. If Wi-Fi cannot be enabled, go to SMART  ⇒ Settings → Network → Miracast™/Intel's WiDi and set to On.
- 2 Enable the smartphone's NFC function and set to Read/Write and P2P Mode.
For more information on enabling NFC and setting the mode, refer to the owner's manual of your smartphone.
- 3 Tap your smartphone to a Tag On sticker.
Make sure to follow the instructions on the smartphone screen and install the Tag On app and LG TV Remote app.

- 4 Tap the smartphone to the Tag On sticker again.
 - 5 Enter the pairing key displayed on the smart TV into the smartphone.
When two or more TVs are detected, the pairing key is displayed only after the TV you want to connect to is selected in the device list.
 - 6 When the connection is made properly, you can use Tag On.
-  The information of the connected TV is saved in the Tag On sticker. You can change or reset the information in the Settings menu of the smartphone Tag On app.

❑ To use Tag On

Follow the steps below to share content on your NFC-enabled smartphone.

- 1 Tap the NFC-enabled smartphone to a Tag On sticker.
- 2 The Tag On app starts running on the smartphone to connect to the smart TV.
 - To use a Wi-Fi network, make sure that the smart TV is on the same network as your smartphone.
 - If the smart TV and the smartphone are not on the same network, use Wi-Fi Direct.

-  If the Tag On app is not installed, the installation page appears automatically.
-  For more information on how to share content between your smartphone and TV, refer to the Tag On app's help. Click to run the Tag On app on your smartphone and select the Settings menu to view the help.

❑ To connect a USB storage device

Connect a USB storage device (external hard drive or USB memory) to the USB port of TV to enjoy multimedia files stored on the USB device.

To remove a USB storage device, choose the **Quick Menu → USB Device** to disconnect the device. Wait for the message that the USB has been removed before taking it out physically. If detached early, an error may occur on the TV or USB storage device.

✎ After selecting to remove USB device, it is impossible to read the USB storage device. Remove USB storage device and reconnect it.

❑ Caution when using USB storage device

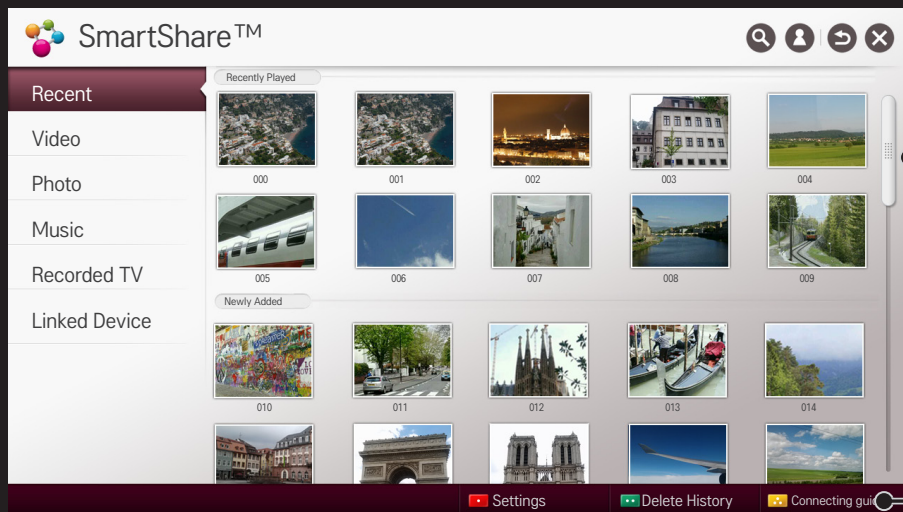
- ✎ If a USB storage device has a built-in auto recognition program or uses its own driver, it may not work.
- ✎ Some USB storage devices may not work or work improperly.
- ✎ If you use a USB extension cable, the USB device may not be recognized or may not work properly.
- ✎ Only use USB storage devices formatted with FAT32 or NTFS File System provided by Windows.
- ✎ For external USB hard drives, it is recommended to only use devices rated at 5V and less than 500mA current.
- ✎ It is recommended to use a USB hub or hard disk drive with power supplied. (If the power supplied is not enough, the USB storage device may not be detected properly.)

- ✎ It is recommended to use USB Memory Sticks with 32 GB or less and USB hard drives with 2 TB or less.
- ✎ For USB hard drives with energy-saving features, turn off and turn on again if it does not work properly. For more information, refer to the user manual of USB HDD.
- ✎ Data on a USB storage device can be damaged so be sure to back up important files in a separate storage device. Data maintenance is the user's responsibility and the manufacturer is not responsible for any data loss.

□ To use SmartShare™

SMART  ⇒ SmartShare™

Playback photo/music/video files on the TV from a USB device or home network (DLNA).

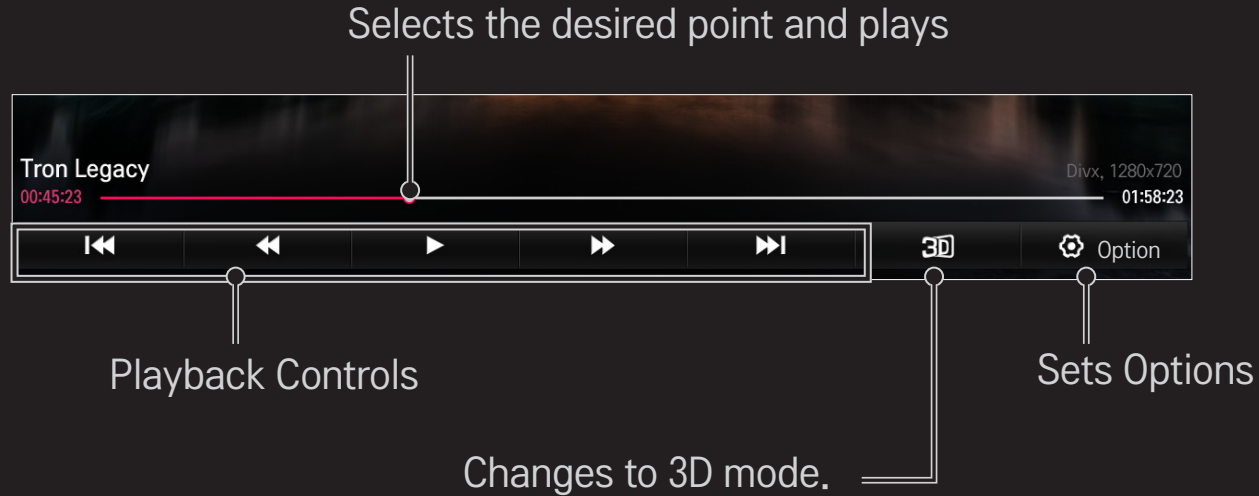


Displays photo/music/video files from all of the devices connected to the TV.

Shows how to connect PCs, Smartphones, and USB drives.

❑ To control video playback

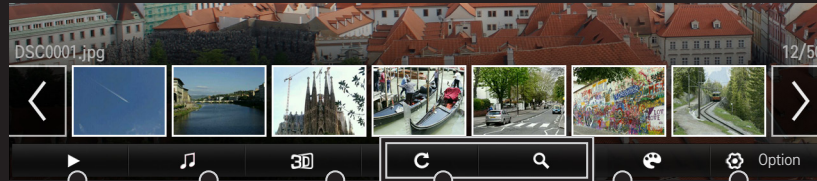
Controls playback and sets options while viewing videos.



☐ To control photo view

Controls playback and sets options while viewing pictures in full screen.

- ✎ For 3D pictures, the **Slide Show Effect** does not work even when the **Slideshow** function is enabled.



Displays photos as a
slideshow.

Plays background music.

Changes to 3D mode.

Sets options.

Sets the filter.
[Depending on model]

Rotates or enlarges the picture.

❑ To control music playback

Controls playback and sets options while playing music.



Plays

Sets the repeat/random function.

Selects the desired point and plays

Sets options

Listens to music with the video turned off.

- ✎ You can control playback using the ◀◀ , ▶ and ▶▶ keys on a standard remote control.
- ✎ If you use the USB device, time information will be not shown on screen.

□ To set SmartShare™ related functions

SMART  ⇒ SmartShare™ → Settings

Changes settings related to SmartShare™ content play.

□ Advanced Setting



My TV Name	Changes the name that appears when searching for the TV from other devices.
Network Status	Checks the network connection.
Wi-Fi direct	Allows use of wireless connection functions such as Wi-Fi direct and WiDi.
Auto Play on Receive	Accepts/Rejects Content transferred from other devices.

DivX(R) VOD

Registers or releases DivX.

Checks DivX Registration Code for playing DivX-protected videos. Register at <http://vod.divx.com>.

Uses Registration Code to rent or purchase movies at www.divx.com/vod.

-  When using the DivX Registration Code of another device, the rented/purchased DivX file cannot be played. Use only the DivX Registration Code granted to this device.
-  Converted files not conforming to DivX Codec Standard may produce abnormal images and sound.

□ Delete History

To delete contents history, press Delete History button below. Use the contents at Contents Type and Linked device menu.

❑ SmartShare™ supporting file

Maximum data transfer rate :

20 Mbps (Mega bit per second)

External supported subtitle formats :

*.smi, *.srt, *.sub (MicroDVD, SubViewer 1.0/2.0),

*.ass, *.ssa, *.txt (TMPlayer), *.psb (PowerDivX), *.dcs (DLP Cinema)

Internal supported subtitle formats :

XSUB (Supports internal subtitles generated from DivX6)

□ Video Supported Codec

Maximum: 1920 x 1080 @30p

Extension	Codec	
.asf	Video	VC-1 Advanced Profile, VC-1 Simple and Main Profile
.wmv	Audio	WMA Standard, WMA 9 Professional
.divx	Video	DivX3.11, DivX4, DivX5, DivX6, XViD, H.264/AVC, Motion Jpeg, MPEG-4 Part 2
.avi	Audio	MPEG-1 Layer I, II, MPEG-1 Layer III (MP3), Dolby Digital, Dolby Digital Plus, LPCM, ADPCM, DTS
.mp4	Video	H.264/AVC, MPEG-4 Part 2
.m4v	Audio	AAC , MPEG-1 Layer III (MP3)
.mov		

Extension	Codec	
.3gp	Video	H.264/AVC, MPEG-4 Part 2
.3g2	Audio	AAC, AMR-NB, AMR-WB
.mkv	Video	H.264/AVC
	Audio	HE-AAC, Dolby Digital
.ts	Video	H.264/AVC, MPEG-2, VC-1
.trp	Audio	MPEG-1 Layer I, II, MPEG-1 Layer III (MP3)
.tp		Dolby Digital, Dolby Digital Plus, AAC
.vob	Video	MPEG-1, MPEG-2
	Audio	Dolby Digital, MPEG-1 Layer I, II, DVD-LPCM
.mpg	Video	MPEG-1, MPEG-2
.mpeg	Audio	MPEG-1 Layer I, II, MPEG-1 Layer III(MP3), AAC

□ Available music file

File type	Item	Info
mp3	Bit rate	32 Kbps - 320 Kbps
	Sample freq.	16 kHz - 48 kHz
	Support	MPEG1, MPEG2, Layer2, Layer3

□ Available photo file

File type	Item	Profile
2D (jpeg, jpg, jpe)	JPEG	Minimum: 64 x 64 Maximum: Normal Type: 15360 (W) x 8640 (H) Progressive Type: 1920 (W) x 1440 (H)
3D(jps)	JPS	Minimum: 64 x 64 Maximum: Normal Type: 15360 (W) x 8640 (H)
3D(mpo)	MPO	4:3 size 3648 x 2736 2592 x 1944 2048 x 1536 3:2 size 3648 x 2432

❏ Caution for playing video

- ✎ Some subtitles created by users may not work properly.
- ✎ The video and subtitle files should be placed in the same folder. In this case, you must assign the same names for the video and subtitle files for proper display.
- ✎ We do not support any stream that contains GMC (Global Motion Compensation) or Qpel (Quarterpel Motion Estimation).
- ✎ Only H.264/AVC profile level 4.1 and lower is supported.
- ✎ The file size limit is dependent on the encoding environment.
- ✎ Only Window Media Audio V2 and above is supported.
- ✎ AAC Main Profile is not supported.

- ✎ Video files created by some encoders may not be played back.
- ✎ Video files in formats other than the ones specified here may not be played back.
- ✎ Playback of video files stored on a USB device that does not support High Speed, may not work properly.
- ✎ The TV supports DTS audio codec when the USB/HDMI video file playback.

DLNA stands for Digital Living Network Alliance, which allows users to access video/music/photo files stored on a PC or server and enjoy them on the TV via home networking.

❑ To connect a DLNA–authenticated Smartphone

TV and the smartphone should be on the same network.

- 1 Enable Wi-Fi on the smartphone.
- 2 Install/run a DLNA app to share content on the smartphone (It's called SmartShare on LG phones).
- 3 Run "Share my mobile phone Content".
- 4 Select the kind of Content (video/music/photo) to play.
- 5 Select the video, music, or photo file to play on the TV.
- 6 Select Add to Play List.
- 7 Select TV model name on the device to replay content. (TV model name is on the label of the device.)
- 8 Press Play ► to enjoy the selected file on the TV.


❑ To connect a DLNA DMR (Digital Media Renderer)

With the Windows 7 or Windows 8 PC operating system or DLNA-certified device (e.g. mobile phone), music/videos/photos may be played on the TV without installing a separate program.

- 1 Configure the TV and PC on the same network. Configure the Windows 7 or Windows 8 PC on the network.
- 2 To play a music/video/photo file, right-click on the file and use the Remote Playback or PlayTo Windows 7 or Windows 8 feature.
For playback on devices like a mobile phone, refer to the model's user guide.
- 3 Content will be played on only one device even if more than one TV or device is connected. Play speed can vary depending on network speed.

❑ To connect a DLNA DMP (Digital Media Player)

With a PC having SmartShare PC Software, music/video/photo files may be played on the TV via home networking.

- 1 Configure the TV and the PC on the same network. The TV and each device should be connected through a single access point to enable DLNA service.
 - 2 Install the SmartShare PC Software from the web site onto a PC. Before installation, close all running programs including firewall and Anti-Virus programs.
 - 3 The sever should be running in order to watch shared files on your TV.
- ✎ For the website information, go to SMART  ⇒ Settings → SUPPORT → Product/Service Info.
 - ✎ For how to use the SmartShare PC software, refer to the software help.

□ If a DLNA malfunction occurs

- ✎ If a DLNA feature does not work properly, check network settings.
- ✎ A 5-GHz access point is needed to view 1080p videos via DLNA. A 2.4-GHz access point may cause frequent buffering or other problems.
- ✎ DLNA may not work properly on a wireless network. It is recommended to use a wired connection.
- ✎ Multi audio and internal subtitles are not supported in DLNA mode.
- ✎ If more than one TV is connected to a single server in DLNA mode, the content may not play depending on server performance.
- ✎ Subtitles may not be supported depending on DLNA device.
- ✎ The DLNA feature may not work properly in all network environments.

- ✎ The DLNA feature cannot be used with some access points that do not support multicasting. For more information, refer to access point manual or consult with the manufacturer.
- ✎ Supported file types may differ depending on the DLNA server environment, even for the file types supported by TV.
- ✎ Too many sub-folders and files included in one folder may cause a malfunction.
- ✎ Information about the file from DLNA server may not be displayed correctly.
- ✎ SmartShare PC Software is recommended when watching video subtitles from a DLNA server.
- ✎ To add a subtitle file later, turn off the shared folder and reset.
- ✎ DRM files located in SmartShare PC Software server are not played.

❑ To use Premium

SMART 🏠 ⇒ Premium

This service gives you easy access to a wide variety of content, such as video, news and UCC (User Created Content), at any time, as long as you are connected to a network. For Premium content, specialized country-specific services are offered that take into account regional content, in addition to globally provided content.

The image shows a screenshot of the LG Smart TV Premium interface. The interface is displayed on a screen with a green grass background and a blue sky with a hot air balloon. At the top, there is a 'PREMIUM' header. Below the header, there are two banners for 'www.lgappstv.com'. The main content area consists of a grid of ten content categories: WEB, Movie, Map, SNS, Play, NEWS, Comic, Entertainment, Information, and TV. At the bottom, there is a red bar with 'Add to My Apps' and a green bar with 'Option'. Callouts point to various features: 'Sign in' (top right), 'Search' (top right), 'Add to My Apps' (bottom right), 'Sets options' (bottom right), and 'Premium Content Select desired Content.' (left side).

Premium Content Select desired Content.

Sign in

Search

Add to My Apps

Sets options

❑ To use paid Content

Some Premium Content is provided as for–fee services. To purchase for–fee services, use either LG Electronics' proprietary billing system or that of each content provider.

Before using the LG billing system, you will need to sign up for membership and register payment information on TV or the website (www.lgappstv.com) .

You can sign up for membership on the login screen on your TV or our website. You can then log into both the TV and the website with one ID.

- 1 Click **Sign In** button in upper right corner of Home screen to sign in.
- 2 Move to the desired Premium service.
(For some premium services, separate sign-in is required after signing up for the premium service.)
- 3 After checking the content's pricing and service information, click the **Purchase** button. (There may be limitations on the available period and number of times depending on content.)
- 4 Once the purchasing process is completed, view the paid content by clicking the **Buy** button.
- 5 Select your ID on upper menu of Home screen and check history of purchases from **My Page** → **Payment inquiry**. It is also available on **My Page** → **Purchase History** of web site (www.lgappstv.com).

❑ To reset Premium

SMART  ⇒ Premium → Option → Initialization of Premium

Premium list, Premium information, country setting, and user sign-in information will be reset. When an error occurs during Premium update, reset will fix the problem.

- ✎ Content on offer by service providers are subject to change to enhance their service quality or deletion without any prior notice. Refer to the web site of each content provider for questions, troubleshooting, or latest information about Content. LG Electronics does not take any legal responsibility for content services and related information including discontinuation of service by the service provider.
- ✎ The quality of Premium service may be affected by Internet connections. For any questions related to Internet speed or any other service problems, contact the Internet service provider.
- ✎ For best service quality, subscribe to an Internet service of 4.0 Mbps (1.5 Mbps or faster). Contact the ISP (Internet service provider) for any problems related to Internet speed.
- ✎ Content providers may make available content that is unsuitable for minors. Parental discretion advised.

☐ To use LG Smart World

SMART  ⇒ LG Smart World

LG Smart World is a TV application service available through Smart TV Service. You can download and enjoy many different apps (for fee or free) including education, entertainment, life and news.

Sign in.

When you sign in, ID is displayed.

When you select the ID, you can select **My Page** and **Sign Out**.




Select the app to install.



❑ To sign up with LG Smart World

SMART ⇒ Sign In

Sign up is required to download and run apps.

- 1 Select **Sign Up** and agree to Legal Notice.
 - 2 Enter ID and password.
 - 3 In Confirm Password box, enter password again.
 - 4 Select **OK** to complete sign-up process.
-  You can sign up for membership on either your TV or the website (www.lgappstv.com).
 -  After signing up for membership, log into your TV and our website with the same ID.
 -  You can sign in up to five TVs with a single ID.

❑ To install app on TV

SMART ⇒ LG Smart World

- 1 Click the **Sign In** button at the top of the home screen to log in.
- 2 Select the **LG Smart World** card.
- 3 Select an app you want from the list.
- 4 Check the details of the app, then select the **Install** or **Buy** button.
- 5 Check that you have the functions or TV accessories required to install the app, then select the **OK** button.
- 6 For paid apps, payment and purchase authentication is required.
- 7 Select **Run** once installation is complete to run the app immediately.
If you do not want to run immediately, select **Close**. If you want to run the app later, select **My Apps** to check the list of apps installed on TV.

- ✎ You can purchase apps from PC or TV but you must use the TV to install and run them.
- ✎ If you have insufficient storage space on the TV, you can download apps to a USB storage device connected to the TV's USB Apps port. Apps stored on a USB device are available to run/delete/move via the **My Apps** screen.
- ✎ A USB Memory Stick containing apps cannot be used for other data. (For USB Apps Only)

☐ To manage my information

SMART  ⇒ LG Smart World

- 1 Sign in.
- 2 Select the currently signed-in ID at the top of the screen.
- 3 Select **My Page**.
- 4 Manages by examining Member Information, My Purchased Apps List and TV Installed Apps List.

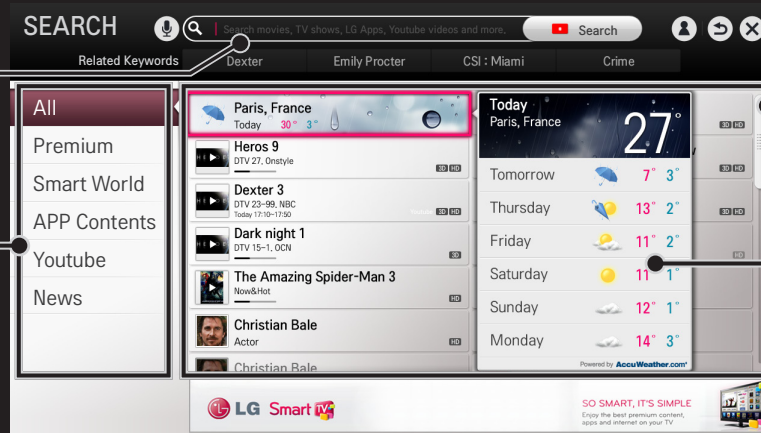
My Information	Shows basic information about the ID currently signed in. To change your member information, please visit www.lgappstv.com on your PC.
Payment Inquiry	Views Payment History with the ID you have signed in.
Purchased Apps	Views My Purchased Apps List with the ID you have signed in. You can delete/re-install the purchased apps.

SMART ⇒ Search

You can search apps and contents using the Search function of the LG Smart TV. When you enter keywords using the input device, such as the remote control, you can find apps from LG Smart World and some contents of the Premium service. Links are also provided to go for web search. If you are using SmartShare™, you can also search the contents of SmartShare™. The Search categories and content types vary depending on the country and will be kept updating.

Enters search terms.

Category of search results





Search results



Detailed information about the search item

❑ To use the voice recognition function



❑ Using this function through search

- 1 Go to **SMART**  ⇒ **Search**. Select the voice recognition icon () on the left of the text field.
- 2 Speak slowly and clearly after the voice recognition window appears. After the voice recognition is completed, the Similar List window pops up. If the pop-up window does not have the results you want, press **Retry** to try again. Select the most similar result, then it will be displayed in the text field. Press the Search button to get the result you want.


□ Using this function in the Internet (Web browser)




- 1 Go to **SMART**  ⇒ **Internet**. Move the Magic Remote Control pointer in the text field on a website to open the virtual keyboard.
- 2 Select the voice recognition icon () on the left of the text field on the virtual keyboard.
- 3 Speak slowly and clearly after the voice recognition window appears.
- 4 After the voice recognition is completed, the Similar List window pops up. If the pop-up window does not have the results you want, press **Retry** to try again. Select the most similar result, then it will be displayed on the text field. Press the Search button on the website to get the result you want.

□ Using this function in the Social Center

- 1 Go to **SMART**  ⇒ Social Center.
- 2 Log in with your LG Smart TV (www.lgappstv.com) ID.
- 3 Select the social network site you want and log in with your site ID.
- 4 Select the voice recognition icon () on the left of the text field.
- 5 Speak slowly and clearly after the voice recognition window appears.
- 6 If your voice is recognized, press the **Share** button on the right to input the text in the social network service.

If it is not recognized, try again or you can edit the recognized text by opening the virtual keyboard with the Magic Remote Control pointer.

-  While the recognized result is in the text field, if you retry the voice recognition function, the previous result will be replaced with the new one.

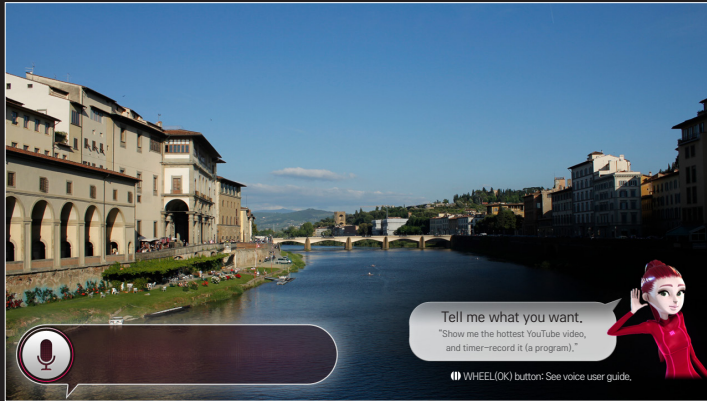
- ✎ You can use Voice Search when you press the **Voice recognition**() on the Magic remote control even if QWERTY keyboard is shown on your screen.
- ✎ Check the network connection before using the voice recognition function.
- ✎ When speaking, hold the remote within 10cm of your mouth.
- ✎ The voice recognition may fail if you speak too fast or too slowly.
- ✎ The recognition rate may vary depending on the user's characteristics (voice, pronunciation, intonation, and speed) and the environment (noise and TV volume).
- ✎ To change the voice recognition language, go to **SMART**  ⇒ Settings → **OPTION** → Language → Voice Recognition Language.
- ✎ You can turn the avatar On/Off in **SMART**  ⇒ Settings → **OPTION** → See Avatar.

[This function may not be available on some models.]

❑ What is Voice Mate?



Voice Mate allows you to search desirable programs and content with your voice and adjust the TV.

- 1 Press the **Voice recognition** (🎤) button on the Magic Remote Control.
- 2 When the Voice Display bar (🎤) is activated on the left of the screen, say what you want to watch.



- 3 Press the **Wheel (OK)** button with the Voice Search standby to see the supported language in the voice guide.

❑ How to Use Voice Mate?


- ✎ To use all the functions and services of Voice Mate, you need to set Smart Wizard and Time. Set up the network, region, auto tuning, and universal remote control through the Smart Wizard.
- ✎ In order to use Voice Mate, you must set up the network, time, region, and tuning.
- ✎ Set the language of your country to use Voice Mate.
- ✎ You can change the language for Voice Search in SMART  ⇒ Settings → OPTION → Language → Voice Recognition Language.
- ✎ You can turn the avatar On/Off in SMART  ⇒ Settings → OPTION → See Avatar.

- ✎ It is recommended you to point the universal remote control towards the set-top box when you use Voice Mate with it.
- ✎ When speaking a command, hold the remote within 10cm of your face.
- ✎ The voice search may fail when you speak too fast or too slow.
- ✎ The recognition rate of Voice Mate may vary depending on the user's characteristics (voice, pronunciation, intonation and speed) and the environment (noise and TV volume).
- ✎ If your voice is not recognized properly, Voice Mate may function regardless of your intention.

❑ What are other functions of Voice Mate?

You can access various TV features using Voice Mate.

Channel	You can tune TV channels and search channel information. Example: “What time is American Idol on?”
Recommendation and Search	You can recommend and search TV programs and content files. Example: “Look up American Idol”
Information and Internet	You can also search other information such as today’s weather. Example: “How’s the weather today?”

 Available functions may vary depending on the country.

 For more supported examples, see the voice user guide.

❑ What is On Now?

[This function may not be applied some countries.]

On Now allows you to select and watch recommended programs currently available on your TV. The **Favorite** function allows you to select and watch recommended content related to the program you are watching.

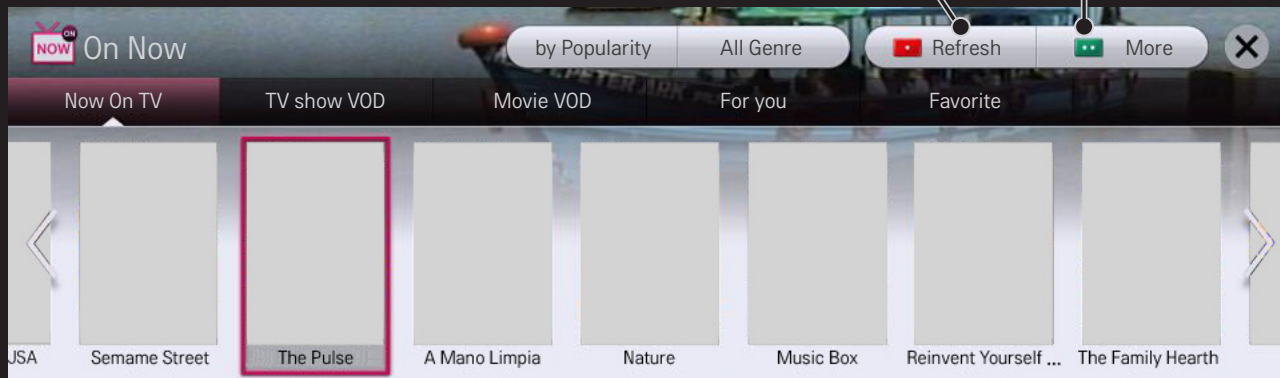
☐ To use On Now

☐ To see in Half View

SMART 🏠 ⇒ On Now

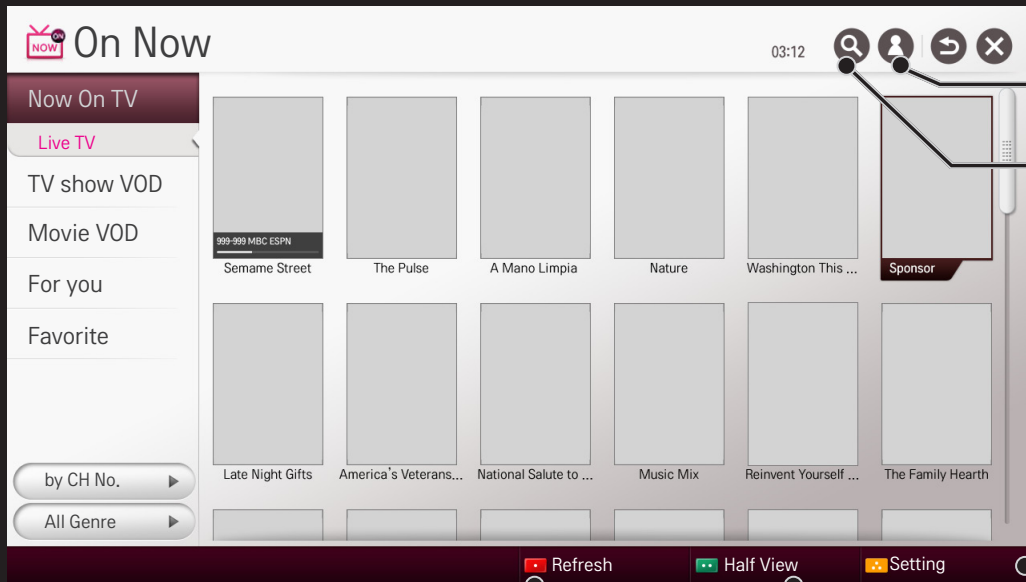
Refreshes all list items and moves to the beginning of the screen simultaneously.

Moves to Full View.



□ To see in Full View

SMART  ⇒ MY CARD → On Now



Sign in

Find

Sets the options.

Refreshes all the list items and moves the screen up simultaneously.

Move to Half View.




- ✎ For TV channels, you need to complete **Auto Tuning** to use this service properly.
- ✎ If you move to a different region, you need to set the region to your current location in order to use this service.
- ✎ The digital EPG (Electronic Program Guide) information which the TV receives may be different from the programs on the On Now TV list which uses an external EPG (Electronic Program Guide).
- ✎ You can control a connected set-top box tuner with the Magic Remote Control.
- ✎ An internet connection is required to use On Now.
- ✎ The channels in the On Now TV list are provided from the cable broadcasting service provider. If the provider changes them without notice, the actual TV channels may differ.

- ✎ The channel names of analog cable broadcasting on the On Now TV list are provided from an external EPG (Electronic Program Guide), so each name refers a cable broadcasting service provider but may not match.
- ✎ The program thumbnail image on the On Now TV list is the representative image of the program, and it may be different from the image of the actual TV program schedule.
- ✎ If the channel information on the On Now TV list is different from the actual TV channel or set-top box channel, set the set-top box and channel menu in the On Now Settings.

☐ To use Live Plus

SMART  ⇒ **Settings** → **OPTION** → **Live Plus**

Live Plus is a service that provides various information on the program you watch in a pop-up format.

-  Press the **OK** button in the first pop-up while watching a program to use **Live Plus**.
-  **Live Plus** is available only with the LG remote control.
-  Information only some some programs and broadcasting companies provide this service.

SMART ⇒ Internet (Web browser)

You can type in a URL manually or visit a Web site from the Favorites list.

Type in Web addresses here.

Add the current page to favorites.

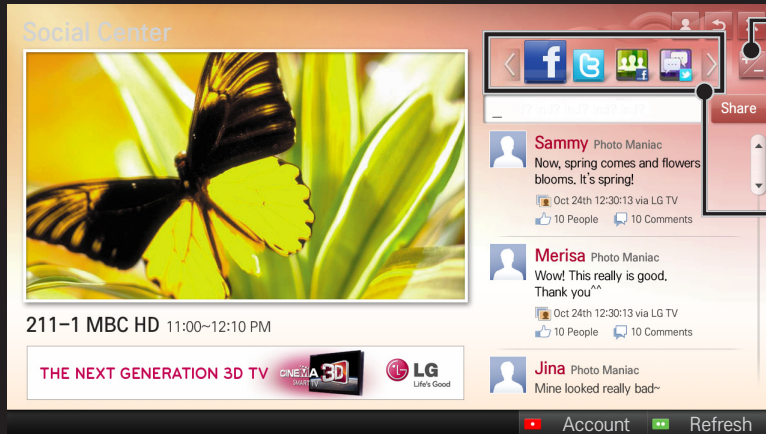
Open a new tab.



- ✎ The Internet (Web browser) supports up to Flash 11 but does not support platform-dependent technology like ActiveX.
- ✎ The Internet (Web browser) only works with pre-installed plug-ins.
- ✎ The Internet (Web browser) only replays the following media file formats:
JPEG / PNG / GIF
- ✎ The Internet (Web browser) is forcibly closed when memory is insufficient.
- ✎ For the Internet (Web browser) , fonts installed on the TV are used and may not be displayed normally depending on the content played.
- ✎ The Internet (Web browser) does not support file and font download.
- ✎ The Internet (Web browser) is made for a TV so it may function differently from PC browsers.
- ✎ The Internet (Web browser) is a TV browser and may not work properly when playing some content files.

SMART ⇒ Social Center

LG Smart TV provides the Social Center app that allows you to communicate via social network services (SNS) such as Facebook and Twitter while watching TV. Using Social Center, you can communicate with friends while watching TV and view comments and pictures posted by your social networking friends at a glance.



You can edit the Social Center tab.

Select a tap such as Facebook / Twitter / Activity / Talk to communicate via social network services (SNS).


- 1 You can sign in with your LG TV account. If you are not a member yet, please sign up first.
- 2 Select a tab from **Facebook**, **Twitter**, **Activity** or **Talk**. Some functions are connected with other SNS, so you may need the SNS account to sign into the service.
- 3 Now, you can view content and post comments while watching TV. **Social Center** allows you to write comments while using LG Smart TV services connected with Facebook or Twitter and to view the comments on the Web or mobile device.

Facebook / Twitter	You can communicate via SNS such as Facebook and Twitter while watching TV.
Activity	With your Facebook account, you can easily see LG Smart TV's great content recommended by other users. Click a recommended program/show to move to the corresponding 3D World, K-pop, or LG app.
Talk	You can see what other twitter users think about the shows currently on.
Connected with smartphone	The functions of Social Center, such as Activity and Talk are connected with the LG TV Remote app on the smartphone to help control of content and make your TV viewing experience better.

- ✎ You can use an Android smartphone as a keyboard when using SNS.
Download the **LG TV Remote** app from the Google Play App Store.
- ✎ Social Center functions are subject to change due to software updates.



❑ To start a video call (Skype)

You can make a video call to a Skype contact using the Smart TV camera.

- 1 Connect the TV to a network.
- 2 Prepare the Smart TV camera for use. If your Smart TV is not equipped with a camera, install an LG video call camera (sold separately). (For more information, please refer to the installation manual or owner's manual of the camera.)
- 3 Go to **SMART**  ⇒ Premium → Skype.
- 4 First, sign in to your Skype account.
If you do not have a Skype account, create a Skype account by referring to the next page.

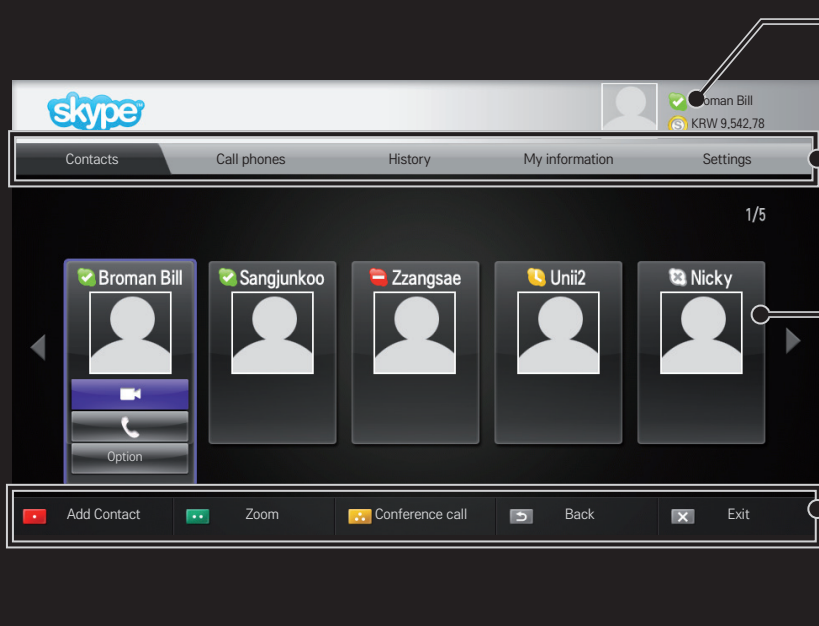
❑ To create a Skype account

To make a video call using Skype, you need a Skype account.

- 1 Go to **SMART**  ⇒ Premium → Skype and select Create account at the bottom.
 - 2 Read the terms and conditions and select Agree.
 - 3 Enter your Full name, Skype name, and Password. To confirm the password, enter the password again in the Repeat password field, and select Continue.
 - 4 Enter the E-mail, set the Country, and select Confirm.
-  If the Skype name you entered is already in use, you need to provide another one.

☐ To use Skype

When you sign in to Skype, you can use the call service of Skype.



The image shows a screenshot of the Skype desktop application interface. At the top, the Skype logo is on the left, and the user's profile information is on the right, including a profile picture, a green checkmark, the name "Broman Bill", and a balance of "KRW 9,542.78". Below this is a navigation bar with tabs: "Contacts", "Call phones", "History", "My information", and "Settings". The "Contacts" tab is selected, showing a list of five contacts: "Broman Bill", "Sangjunkoo", "Zzangsae", "Unii2", and "Nicky". Each contact has a profile picture and a status indicator. The "Broman Bill" contact has a video call icon and a "Call" icon. Below the contact list is a control bar with buttons: "Add Contact", "Zoom", "Conference call", "Back", and "Exit".

Information of the signed in account

Call/Settings tab





1/5

Skype screen

Control buttons


Each screen shows the functions that can be controlled on it.

□ Call/Settings tab

Contacts	<p>When you select a Skype contact, you can make  (Video Call) or  (Voice Call).</p> <p>You can add or delete a new contact.</p> <p> If there are more than 500 contacts, the list's performance and stability may be affected.</p>
Call phones	<p>You can make a call by pressing dial numbers.</p> <p> To use the Call phones function, you must purchase Skype credit. For more details, visit the website of Skype (www.skype.com).</p>
History	<p>You can check All calls sent or received and Voice messages/Contact requests received.</p>


My Information

Once you have signed in, you can set [My status](#), [Change picture](#), [My profile](#), or [View account](#).

 The maximum number of photos that can be saved using snapshot is limited.

Settings

Once you have signed in, you can set [Notification settings](#), [Call forwarding](#), [Privacy settings](#), [Video settings](#), or [Change password](#).

 It takes several minutes until the changes become effective.

❑ To make a voice call

❑ To make a video call

In **Contacts**, select a contact you want to call and select  (Video Call).

❑ To make a voice call

In **Contacts**, select a contact you want to call and select  (Voice Call).

 You can perform call-related functions such as adding a contact during a call.

❑ To answer a call

When a call is received while watching TV, a message appears at the bottom right of the screen.

You can answer a *video call/voice call* or *Decline* it.

- ✎ You cannot use input devices such as keyboard while using Skype.
- ✎ Video calls cannot be made to a Mac with Skype 2.8 or earlier.
- ✎ Available content is subject to change by the content provider. For more information on the content service, please visit the website of your content provider.
- ✎ The software update screen will automatically appear when an update is available.




No emergency calls

Skype is not a replacement for your ordinary telephone and cannot be used for emergency calling.




Sign up is required to use LG Smart World.

Free apps are available immediately after signing up, but you need to register your payment method in order to use paid apps.

You can sign up and register payment methods on the TV or on our website (www.lgappstv.com).


Problem	Solution
When entering menu, the "Initializing" message always appears.	<ul style="list-style-type: none">• The "Initializing" message shows you how long it takes to reboot the microprocessor and hardware, set up network communications, and communications with SDP (device authentication and basic information download). It takes about 20 seconds and this is a normal process.
There is no content shown on the Premium card.	<ul style="list-style-type: none">• Content may not be shown after changing the country setting on Smart TV. Change to desired country in SMART  ⇒ Settings → OPTION → Service Country Setting

Problem	Solution
<p>While using internet features, there is a blank space on some Web pages.</p>	<ul style="list-style-type: none">• The internet of the TV supports up to Flash 11 and may not replay any file format other than the following : JPEG, PNG, GIF
<p>Internet (Web Browser) closes automatically when visiting website.</p>	<ul style="list-style-type: none">• If memory is insufficient because of large volume of image information in the web page, internet may be forced to close.
<p>I already signed up on TV. Do I need to sign up again at web site (www.lgappstv.com)?</p>	<ul style="list-style-type: none">• If you sign up on your TV, no additional sign-up on the LG website (www.lgappstv.com) is required. After signing up on TV, you can sign into the website by using the same ID and password and entering the additional information to complete the email verification process.

Problem	Solution
Can each family member use a different ID with a single TV?	<ul style="list-style-type: none">• It is possible to register and use more than one ID on one TV.• To check the ID registered with TV from SMART  ⇒ Sign in → ID List.• You can check the list of apps purchased by each ID. However, you can see all apps installed by each ID in SMART  ⇒ Sign in → My Page.
What should I do if I forget my ID?	<ul style="list-style-type: none">• After signing up on a PC, use “Forgot ID?” feature on web site (www.lgappstv.com) when needed.• After signing up on TV, check it from SMART  ⇒ Sign in → Find ID.

Problem	Solution
I purchased an app from the LG TV Apps Web site. How can I use it on TV?	<ul style="list-style-type: none">• To check purchased apps from the TV, sign in and open the Purchased Apps menu. Select the ID at the top of Home and check the app in My Page → Purchased Apps.
Can I see history of my purchased apps?	<ul style="list-style-type: none">• Select the ID at the top of Home and check the app in My Page → Purchased Apps.• Sign in to website (www.lgappstv.com) and then select My Page → Purchase History.

Problem	Solution
I deleted a paid app. Do I have to purchase again to download it?	<ul style="list-style-type: none">• If a purchased app is accidentally deleted, you can download and reinstall it without having to buy it again, as long as it is still in service. Select the ID at the top of Home and re-download apps in My Page → Purchased Apps . (Previously owned apps may not be re-downloaded or run depending on the software version.)
Can I use apps from LG Smart TV's LG Smart World on both a TV and a PC?	<ul style="list-style-type: none">• Please check if the TV model supports LG Smart World.• The apps provided from LG Smart TV's LG Smart World can only be used on an LG Smart TV.• Apps may be purchased from the website (www.lgappstv.com) but cannot be used on a PC or Mac. Use care when purchasing.

Problem	Solution
How can I check the ID currently signed in on the TV?	<ul style="list-style-type: none">• Select the ID at the top of Home and check the currently signed-in ID in My Page → My Information.
I installed an app on the TV. Where can I check the installed app?	<ul style="list-style-type: none">• Select SMART  ⇒ My Apps. All paid and free apps installed on TV are displayed.
There is a difference between the app size shown on the screen and the actual app size installed on TV.	<ul style="list-style-type: none">• The app size shown in the screen includes the additional space needed for installing apps so it may be different from actually installed app size.

Problem	Solution
<p>I forgot my password on the TV. What should I do?</p>	<ul style="list-style-type: none">• If you only provide the ID and password when signing up on your TV, you cannot recover your password when it is lost. Create a new ID and sign up with the ID.• If you provide other information than the ID and password when signing up on your TV or the LG website (www.lgappstv.com), you can recover your password on the website.

Problem	Solution
Do I have to enter payment information to purchase paid apps?	<ul style="list-style-type: none">• To purchase paid apps, you should have a credit card registered on the LG Smart World website (www.lgappstv.com) or have an account credit. If you do not want your credit card details to be saved, you may add a credit to your account before buying an app. Charging credit is only available on our website, and you cannot purchase paid apps if your credit card details are not registered or you don't have enough credit.
Can I cancel an app that I have purchased?	<ul style="list-style-type: none">• As a member you cannot demand refund just because you changed your mind after purchase.• If there is a defect in the product or a problem of using the product, which does not caused by your fault, you can ask for a refund. However, the valid reason for refund must be provided.

Problem	Solution
I signed up on my TV, but I cannot purchase paid apps.	<ul style="list-style-type: none"><li data-bbox="594 135 1670 464">• To purchase paid apps, you need to have a credit card registered with the website (www.lgappstv.com). Also, you can have place a credit on your account ahead of time. You cannot purchase paid apps if your credit card details are not registered with us or you don't have enough credit.
Should I only use an email address for my ID?	<ul style="list-style-type: none"><li data-bbox="594 492 1670 595">• For new sign-up members, the ID format has changed from a combination of alphanumeric to your email address.<li data-bbox="594 606 1670 709">• You can only use an email address for your ID when signing up.

Problem	Solution
Do I need to change my ID format to the email address?	<ul style="list-style-type: none">• For new sign-up members, the ID format has changed from a combination of numbers and letters to using an email address.• If you are already a member, you can still use your existing ID or change it to an email address.
What is the LG account?	<ul style="list-style-type: none">• The LG account allows you to sign into all of the LG Smart services with a single ID and password. You can use the following services with your LG account: LG Smart TV, LG Cloud, LG Smart World (excluding some countries), LG Smart ThinQ, and LG Smart air conditioning, etc.• Additional information may be required depending on the service.


❑ To set the service country

SMART  ⇒ **Settings** → **OPTION** → **Service Country Setting**

You can change the country setting of your Smart TV.

The Premium service and LG Smart World that are available for the country you selected will be provided.

Auto Setting	A service country is automatically set for your Smart TV.
Manual Setting	A service country can be set manually for your Smart TV.

 If a network is disconnected while setting the service country, it may not be set properly.

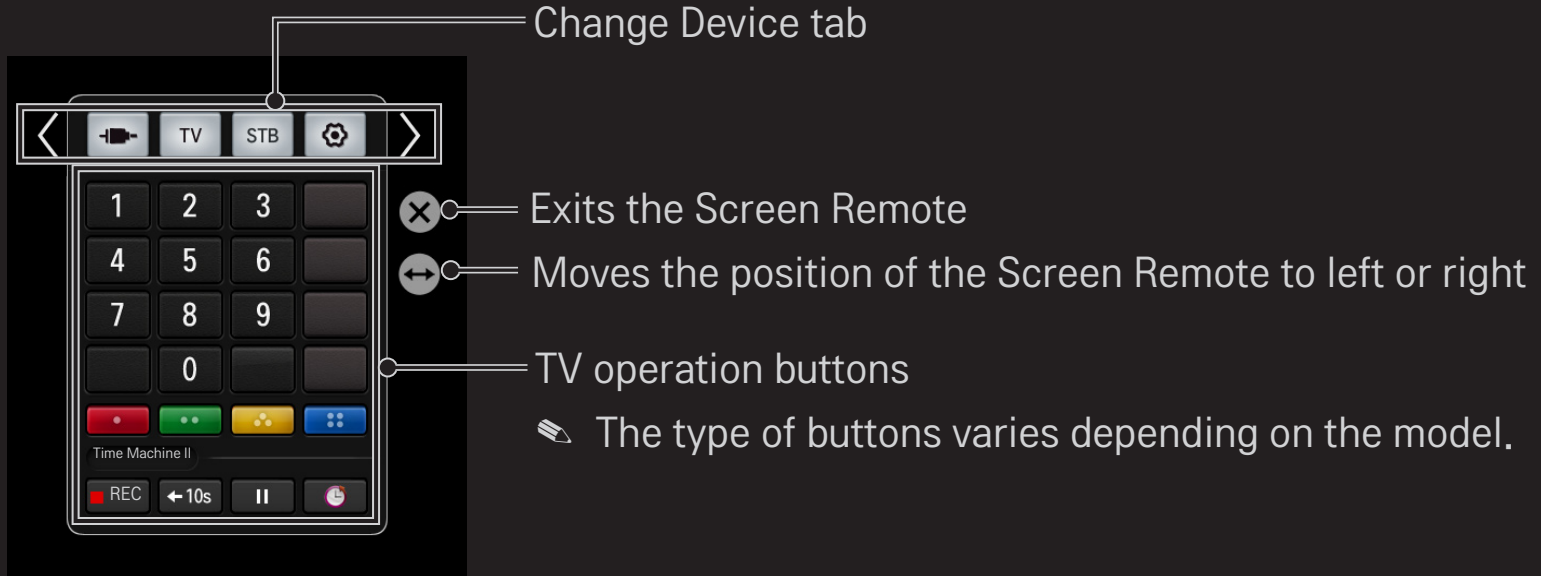
❑ To use Screen Remote

Press the **123** button on the Magic Remote Control.

Use the Magic Remote Control to select buttons on the Screen Remote displayed on the screen.

□ To use Screen Remote

- ✎ The type of buttons on the Screen Remote varies depending on the region or the type of connected device.
- ✎ Image shown may differ from your TV.



❑ To control a device connected to the TV using the Screen Remote

You can control a device connected via SimpLink or MHL using the Screen Remote.



- 1 Check if the device is connected to the TV.
 - 2 After pressing the **123** button on the Magic Remote Control, select the device you want to control in the Change Device tab. The Screen Remote that can control the device appears.
- ✎ This may not work with the **123** button for some models.
 - ✎ For more information about SimpLink or MHL connection, please refer to the connection section of "Owner's Manual" provided with the TV.

❑ To use the Universal Control function



[For Magic Remote Control only]



[This function may not be applied some countries.]

With the Magic Remote Control, you can control a set-top box, Blue-ray player, home theater system, etc.

- 1 Connect the device you wish to control to the TV.
- 2 After pressing the **123** button on the Magic Remote Control, select the icon of a device you want in the Change Device tab.
If the device you wish to control is not listed, press the  on the tab, and select the external device you want. Once the setup is complete, the name of the selected device is displayed in the Change Device tab.
- 3 When you select a device in the Change Device tab, the Screen Remote that can control the device appears on the screen. To see more control buttons, select  at the bottom of the Screen Remote.

□ To change or clear the Universal Control settings

- 1 After pressing the **123** button on the Magic Remote Control, select the  (TV/input selection) button.
 - 2 Select **Change Settings** or **Cancel Settings** at the bottom of the device to be changed.
-  When **Change Setting**, check if the power of the device to be changed is turned on.

- ✎ You can set one device per type.
- ✎ With the Screen Remote, you can only control the devices of a brand or manufacturer that you can select in the setup screen.
- ✎ If you connect to a network before setting the universal remote control, update for the latest manufacturer list is available.
- ✎ Some buttons may not work depending on the external device model.
- ✎ Place the device near the TV for seamless operation.
- ✎ If the device is in a drawer, open the drawer.
- ✎ Go to **SMART**  ⇒ **Universal Control** or **SMART**  ⇒ **INPUT LIST** → **Universal Control Settings** and add, delete, or change a device

❑ To view 3D images

3D imaging is a technology that utilizes the slight difference in left/right eyes to make the images on TV appear just like real-life 3-dimensional space.

- 1 Play a 3D-image title or tune to a 3D channel.
 - 2 Put on 3D glasses.
 - 3 Press the **3D** button to activate 3D.
 - 4 When finished viewing 3D images, press the **3D** button on the remote control to end 3D image viewing.
- ✎ Depending on the input signal, available 3D type may differ.

❑ To adjust details of 3D images


SMART  ⇒ Settings → PICTURE → 3D Settings

Adjusts various aspects of 3D imaging.

3D Mode

Provides the appropriate 3D depth.

- **3D Depth** : Adjust 3D depth between the foreground object(s) and the background.
- **3D Viewpoint** : 3D image can be made closer or farther from user.

3D Sound Zooming	Provides 3D-optimized sound.
3D Pattern Recognition	This will activate and deactivate 3D mode automatically based on the input.
Normal Image View	This will down-convert a 3D signal to 2D.
3D Color Correction	Corrects the color of 3D images.  Depending on model, the 3D Color Correction may not be available.
3D Image Correction	Switches the left/right images of 3D video.

❑ Caution when viewing 3D images

- ✎ When viewing 3D images, it is recommended that the viewer maintain a distance of at least twice the screen's diagonal length.
- ✎ 3D images may not be viewed correctly with shutter-type glasses that require recharging.
- ✎ If a future 3D broadcasting format that is not supported by this TV becomes the standard, an additional device such as a set-top box may be required.

❑ Warning when using 3D glasses

- ✎ Do not use the 3D glasses as a replacement for your own corrective glasses, sunglasses, or protective goggles. Improper use of 3D glasses may cause eye injuries.
- ✎ Do not store 3D glasses in extreme conditions. Exposure to excessively high or low temperatures may deform the lenses. Do not use deformed glasses.
- ✎ Do not apply pressure to or subject 3D glasses to any impact. Subjecting 3D glasses to rough handling may cause a defect.
- ✎ The lenses on 3D glasses (with polarizing film) are vulnerable to scratches. Use only a clean and soft cloth for cleaning. Dirty cloth may scratch the polarizing film.
- ✎ Scratching the lens surface of the 3D glasses with sharp objects or cleaning with chemicals may distort 3D images.



□ What is Motion Recognition?



You can control the TV simply by gesturing for the camera.

You can use the Motion Recognition function to turn the TV off, change the channel, or control the volume.




❑ To use the Motion Recognition function

- 1 Prepare the Smart TV camera for use. If your Smart TV is not equipped with a camera, install an LG video call camera (sold separately). (For more information, please refer to the installation manual or owner's manual of the camera.)
- 2 The camera is activated 20 to 30 seconds after the TV is switched on.
- 3 Go to **SMART**  ⇒ **Settings** → **OPTION** and check if **Motion Recognition** is set to **On**.
- 4 Stare at the camera while the TV is on and hold your hand up close to your face. The motion recognition controller appears on the TV screen. (You can check the motion recognition range of the camera in **SMART**  ⇒ **Settings** → **OPTION** → **Camera Setting Help**.)

- 5 Move your hand left, right, up or down to select a function. Close and open your fist to start the function.
 - 6 If you lower your hand out of the range of motion recognition, the controller disappears from the screen.
-  If you clench your fist for more than one second, the selected function is performed repeatedly until you open your hand.
 -  If you are watching TV using a set-top box, install an IR blaster (AN-BL100, sold separately) to control the volume and the channel of the set-top box using Motion Recognition.

- ✎ Motion Recognition may not work properly if:
- The room is either too bright or too dark. (Optimal ambient brightness: 50 lux - 600 lux)
 - There is a bright light behind you.
 - You are wearing a hat.
 - You are too far away or too close to the camera (Ideal distance: 1.5 m - 4.5 m).
 - Your fingers cannot be detected by the camera because you are wearing gloves or a bandage.
 - You moved your arm forward or your hand is not close enough to your face.
 - Your skin color is similar to the background color.
 - The background is striped.

✎ A gesture may not be recognized in the following cases.

- If Motion Recognition is set to Off in SMART  => Settings → OPTION,
: Set it to On.
- If any other menu than the motion recognition controller is displayed on the TV screen,
: Make it disappear.
- (For built-in camera) If the camera is not lifted up,
: Make sure to lift-up the camera.

- ✎ If more than one hand is detected by the camera, it works with the first detected hand only. To use another hand to operate the controller, lower your hand down to clear the controller from the screen and then raise your hand up again.
- ✎ If you hold your hand up with it spread out or gripped, the camera may not detect your hand. Make sure that you raise your hand with all five fingers clearly displayed.
- ✎ Be careful not to move your hand too fast or make too big motion. Move your hand slowly near your face.
- ✎ If **Motion Recognition** does not work properly, lower your hand and then lift it up again.
- ✎ If you open your hand at an angle, the camera might mistake this as a fist and perform the selected function.

❑ What is Dual Play mode?




When playing a 2 player head-to-head game with a game console, such as Playstation, XBox and Wii, users used to play the game with the screen divided top and bottom or side by side.

With Dual Play mode, each player can enjoy the game with a full screen.

To play in Dual Play mode, the Dual Play glasses (type A and B) are required.

If your model does not include the Dual Play glasses, please purchase them separately.

❑ Starting Dual Play

- 1 Connect your game console to your TV.
 - 2 Select **SMART**  ⇒ **More** → **Dual Play**. The Dual Play mode starts.
 - 3 Put on the Dual Play glasses to enjoy the game.
 - 4 Dual Play mode turns off when you select **SMART**  ⇒ **More** → **Dual Play** while it is on.
-  Select the **Screen split mode** (Side by Side / Top & Bottom) that the game supports.
- If the selected **Screen split mode** is not supported by the game you want to play, then Dual Play mode is not available.

- ✎ The game should support the Screen split mode to be played in Dual Play mode.
- ✎ If the screen does not look clear enough with the Dual Play glasses on, players can change the glasses with each other. You should choose proper glasses according to the operation type of Dual Play.
- ✎ To set up the game menu, turn off the Dual Play mode.
- ✎ Certain images may appear to be overlapped during playing game. It is recommended to play a game facing the centre of the screen.
- ✎ When the game console has a low resolution, the picture quality may not be good in Dual Play mode.
- ✎ The picture on the screen is only in 2D in Dual Play mode.

❑ Cautions When Using Dual Play Glasses

- ✎ Please note that Dual Play glasses are different from regular 3D glasses. There is the mark "Dual Play" written on the Dual Play glasses.
- ✎ Do not use Dual Play glasses as ordinary glasses, sunglasses or protective goggles. If you do so, this may cause injury.
- ✎ Do not store Dual Play glasses in very hot or very cold conditions. If you do, this may cause them to become distorted. Do not use distorted glasses.

- ✎ Do not drop Dual Play glasses or allow them to come into contact with other objects. This can result in damage to the product.
- ✎ The lenses of Dual Play glasses (polarizing film) are easily scratched. Use a soft clean cloth when cleaning them. Foreign particles on the cloth may cause scratches.
- ✎ Do not scratch the surface of the Dual Play glasses' lenses with sharp objects or wipe them with chemicals. If the lenses get scratched, images may not look normal when viewing Dual Play.


❑ Dual Play Supported Modes

Input	Signal	Resolution	Horizontal Frequency (KHz)	Vertical Frequency (Hz)
Composite	480i	720x480	15.73	60
Component	480i	720x480	15.73	60
	480p	720x480	31.50	60
HDMI/ Component	720p	1280 x 720	45	60
	1080i	1920 x 1080	33.75	60
	1080p	1920 x 1080	67.50	60
			27	24
			33.75	30

- ✎ Some models may not support Composite/Component input.
- ✎ Supported Dual Play Formats: Side by Side / Top & Bottom

You can download the LG TV Remote app from Google Play Store or Apple App Store and control a TV that is on the same network as your smartphone.

- Now you can enjoy your favourite TV shows on your smartphone. (Some models only)
- You can easily enter your account information to log in.
- You can add your favourite channels on your smartphone.
- You can use the functions such as PREMIUM, MY Apps, SmartShare™, and Social Centre directly on your smartphone.
- The text input function is supported, so you can enter text easily. (Text cannot be entered on some screens.)
- Select the app's touch pad to control the cursor in the same way the pointer of the Magic Remote Control works.
- You can control the game app of the TV by selecting the Game Pad in the LG TV Remote app.

- Keypad will allow you to control some set-top box and media devices. (Some models with specified conditions only.)
 - You can set the TV to the power-saving mode while watching TV on your smartphone.
 - You can capture the screen you are watching and share it through social network services such as Twitter and Facebook.
-  The supported functions may vary depending on the TV or the version of the LG TV Remote app.

❑ To use a USB wired/wireless mouse

Connect your mouse to a USB port on the TV. Use the mouse to move the pointer on the TV screen and select the menu you want.

Mouse	Magic Remote Control
Left Button	OK Button on Magic Remote Control
Wheel Button	Wheel Button on Magic Remote Control

- ✎ The right mouse button and any special buttons will not work with the TV.
- ✎ The usability of a wireless USB mouse and keyboard may be affected by Radio Frequency environment and the distance.

❑ To use a USB wired/wireless keyboard

Connect your keyboard to a USB port on the TV. You can enter text with the keyboard when using the search function and the Web browser.

- ✎ Text cannot be entered on some screens.
- ✎ It is recommended to use a product which has been tested for compatibility with LG TVs.
LOGITECH K200, LOGITECH K400, MICROSOFT Comfort Curve 2000, MICROSOFT MS800, and LG Electronics ST-800
- ✎ You can change the input language by pressing the language switch key (or the right Alt key) on your keyboard.

❑ To use a gamepad

Connect your gamepad to the USB port on the TV if the game requires a gamepad.

✎ It is recommended to use an authorized gamepad which is tested for compatibility with LG TVs.

Logitech F310, Logitech F510, Logitech F710, Logitech Rumblepad 2, and Microsoft Xbox 360 Controller (wired)

SMART ⇒ Settings → SUPPORT → Software Update

Uses Software Update to check and obtain the latest version.

It is also possible to check manually for available updates.

Software Update	Set it to On . If an update is available, a prompt will appear to perform the update.
Automatic update mode	If an update is available, the update automatically starts without prompting.
Check Update Version	Checks the version installed and when an update is available, the download process can be performed manually.

- ✎ When the update starts, the update progress window appears for a short time and disappears.
- ✎ The latest version can be obtained via digital broadcast signals or internet connections.
- ✎ Changing the channel while downloading the software via digital broadcast signal interrupts the download process. Returning to the initial channel allows downloading to resume.
- ✎ If software is not updated, certain functions may not work properly.

If the following symptoms occur, please recheck the system. It may not be a failure.

❑ General

Problem	Solution
Cannot view certain channels.	<ul style="list-style-type: none">• Adjust the location or orientation of the antenna.• Save the desired channels on Auto Tuning or Channel Edit.
After turning on the TV, there is a delay before full images appear.	<ul style="list-style-type: none">• It is not a problem because this process was intended to clean up the image noises that may occur when turning on the TV.

☐ Pictures

SMART  ⇒ **Settings** → **SUPPORT** → **Picture Test**

Check if the image signal output is normal by beginning with Picture Test.

If there is no problem with the test image, check external device connections or broadcast signals.

Problem	Solution
Images from previous channel or other channels linger or the screen shows annoying lines.	<ul style="list-style-type: none">• Try adjusting the antenna to the direction of the TV station or refer to the manual for proper way to connect the antenna.

Problem	Solution
Vibrating horizontal/vertical lines and fishnet patterns appear momentarily.	<ul style="list-style-type: none">• Such a problem may happen when there is strong electronic interference. Turn off other electronic devices such as mobile phones, power tools and other small electrical appliances.
The screen display freezes or does not work properly in digital broadcast.	<ul style="list-style-type: none">• It may happen when the signals are weak or the reception unstable. Adjust the antenna's orientation or cable connections.• If the signal strength or quality is low on Manual Tuning, call the TV station or administration office for checkup.
Digital broadcast is not on even though the cable is connected.	<ul style="list-style-type: none">• Check with cable operator regarding the subscription and/or signal. (Depending on the subscription, digital broadcasting may not be supported.)

Problem	Solution
Image is not on or not clear when connected to HDMI.	<ul style="list-style-type: none"><li data-bbox="642 135 1649 291">• Check the HDMI® cable specifications. Use only HDMI® cable. Other cables may cause images to fade in and out or not be displayed properly.<li data-bbox="642 306 1649 462">• Verify that all cable connections are securely connected. When connections are not secure, images may not be properly displayed.
Does not work when USB storage device is connected.	<ul style="list-style-type: none"><li data-bbox="642 495 1624 593">• Verify that the USB device and cable is version 2.0 or higher.

□ Sound

SMART  ⇒ **Settings** → **SUPPORT** → **Sound Test**

Try Sound Test first to verify that sound signal output is normal.

When the test sound is normal, check external device connections or broadcast signals.

Problem	Solution
Screen display is on but no sound.	<ul style="list-style-type: none">• Check other TV channels.• Make sure the TV Speaker is set to On.
For analog broadcast, stereo is not clear or sound comes from one speaker only.	<ul style="list-style-type: none">• In a poor reception area (areas with weak or unstable signal) or if multi audio is not stable, select Mono on Multi Audio.• Adjust the Balance with the Navigation button.

Problem	Solution
TV sound is not in sync with the lips or the sound breaks up occasionally.	<ul style="list-style-type: none">• If it happens on a certain TV channel, it may be caused by problems with an individual station's broadcast signal. Check with the TV station or local cable operator.
Whenever changing the channel, the volume is different.	<ul style="list-style-type: none">• Depending on the channel, there can be differences in volume.• Please set Auto Volume to On.

Problem	Solution
<p>On certain channels, sound does not come out or only the background music plays. (If it is a program created for overseas)</p>	<ul style="list-style-type: none">• On Language, set Language → Audio Language as the desired language. Even if the language on Multi Audio is changed, once the power is turned off or the channel is changed, the default settings will be reset.
<p>There is no sound when connected to HDMI/USB.</p>	<ul style="list-style-type: none">• Verify that the HDMI® cable is high speed.• Check if the USB device and cable is version 2.0 or higher.• Use only regular music (*.mp3) files.

❑ PC connection problem

Problem	Solution
The screen display is not on after connecting to the computer.	<ul style="list-style-type: none">• Verify that the computer and the TV are securely connected.• Turn the TV off and back on using the remote control.• Restart the PC with the TV on.• Check if the resolution is correctly set for PC input.• To use the TV as a secondary monitor, check if the connected desktop or laptop supports dual monitor displays.• Reconnect the HDMI cable.
There is no sound after connecting the computer with the HDMI cable.	<ul style="list-style-type: none">• Check with the video card manufacturer to ensure it supports HDMI voice output. (Video cards manufactured in DVI format require connection of a separate sound cable.)

Problem

When connected to the computer, the display is partially cut off or shifts to one side.

Solution


- Set up the resolution supporting PC input. (If it does not work, please reboot the computer.)


❑ Trouble with replaying movies in My Media.

Problem	Solution
Files on the Movie List are not displayed.	<ul style="list-style-type: none">• Check if the file on the USB storage device can be read on a computer.• Check that the file extension is supported.
"This file is invalid." The above error message appears or the image display is not normal even though the sound is okay.	<ul style="list-style-type: none">• Verify that the file replays normally on the video player in the computer. (Check for damaged files.)• Check if the resolution is supported by the computer.• Verify that the video/audio codec is supported.• Verify that the frame rate is one that is supported.

Problem	Solution
<p data-bbox="95 163 488 209">"Unsupported Audio."</p> <p data-bbox="95 221 590 433">The above error message appears or the sound is not normal even though the image display is okay.</p>	<ul data-bbox="611 136 1653 462" style="list-style-type: none"><li data-bbox="611 136 1653 236">• Verify that the file replays normally on the video player in the computer. (Check for damaged files.)<li data-bbox="611 250 1653 350">• Check that the audio codec is supported by the computer.<li data-bbox="611 364 1653 410">• Verify that the bit rate is supported.<li data-bbox="611 424 1653 462">• Verify that the sample rate is supported.

Problem	Solution
Subtitle is not displayed.	<ul style="list-style-type: none">• Verify that the file replays normally on the video player in the computer. (Check for damaged files.)• Check if the video file shares the same name with the subtitle file.• Verify that the video and subtitle files are placed in the same folder.• Verify that the subtitle file format is supported.• Verify that the subtitle language is supported. (Open the subtitle files in Notepad to check for the language.)

 Image shown may differ from your TV.

 For information on requesting service, refer to the TV's menu.

SMART  ⇒ Settings → SUPPORT → Product/Service Info.

Federal Communications Commission (FCC) Statement

You are cautioned that changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

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 into 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.

Indoor use only

FCC Caution: for indoor use only, use outdoors or in other modes not covered by this manual may violate the FCC regulation and violate the user authority to use the product. Specially, within the 5.15-5.25 GHz band, U-NII device is restricted to indoor operations to reduce any potential for harmful interference to co-channel MSS operations.

FCC RF Radiation Exposure Statement

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

❑ Industry Canada Statement

This device complies with RSS-210 of the Industry Canada Rules. Operation is subject to the following two conditions:

- 1 this device may not cause interference and
- 2 this device must accept any interference, including interference that may cause undesired operation of the device

❑ Avis d'Industrie Canada

Cet appareil est conforme à la norme CNR-210 des règlements d'Industrie Canada. Son fonctionnement est sujet aux deux conditions suivantes :

- 1 Cet appareil ne doit pas provoquer d'interférences et
- 2 Cet appareil doit accepter toutes les interférences, y compris celles pouvant entraîner son dysfonctionnement.

☐ IC Radiation Exposure Statement

This equipment complies with IC radiation exposure limits set forth for an uncontrolled environment.

NOTE: THE MANUFACTURER IS NOT RESPONSIBLE FOR ANY RADIO OR TV INTERFERENCE CAUSED BY UNAUTHORIZED MODIFICATIONS TO THIS EQUIPMENT. SUCH MODIFICATIONS COULD VOID THE USER'S AUTHORITY TO OPERATE THE EQUIPMENT.

☐ Avis d'Industrie Canada sur l'exposition aux rayonnements

Cet appareil est conforme aux limites d'exposition aux rayonnements d'Industrie Canada pour un environnement non contrôlé.

REMARQUE : LE FABRICANT N'EST PAS RESPONSABLE DES INTERFÉRENCES RADIOÉLECTRIQUES CAUSÉES PAR DES MODIFICATIONS NON AUTORISÉES APPORTÉES À CET APPAREIL. DE TELLES MODIFICATIONS POURRAIENT ANNULER L'AUTORISATION ACCORDÉE À L'UTILISATEUR DE FAIRE FONCTIONNER L'APPAREIL.

☐ COFETEL(Para México)

La operación de este equipo está sujeta a las siguientes dos condiciones:

- (1) es posible que este equipo o dispositivo no cause interferencia perjudicial y
- (2) este equipo o dispositivo debe aceptar cualquier interferencia, incluyendo la que pueda causar su operación no deseada.

LG Recycling Policy

LG Electronics offers a customized e-waste take-back & recycling service that meets local needs and requirements in the countries where e-waste regulations are in place, and also provides product and packaging take-back & recycling service voluntarily in some countries. LG Electronics evaluates products' recyclability at the design step using LG's recyclability evaluation tool, with the goal of improving recyclability where practicable. Through these activities, LG seeks to contribute to conserving natural resources and protecting the environment.

For more information about the LG Recycling Policy, please visit our global site at <http://www.lg.com/global/sustainability/environment/take-back-recycling>



**LG Electronics, Inc.
LCD Television Limited Warranty - USA**

Your LG LCD Television will be repaired or replaced, at LG's option, if it proves to be defective in material or workmanship under normal use, during the warranty period ("Warranty Period") listed below, effective from the date ("Date of Purchase") of original consumer purchase of the product. This warranty is good only to the original purchaser of the product and effective only when used in the United States, excluding U.S. Territories.

WARRANTY PERIOD	HOW SERVICE IS HANDLED
<p>LABOR: One Year from the Date of Purchase.</p> <p>PARTS: One Year from the Date of Purchase.</p> <p>Replacement Units and Repair Parts may be new or factory remanufactured.</p> <p>Replacement Units and Repair Parts are warranted for the remaining portion of the original unit's warranty period.</p>	<p>Please retain dealer's dated bill of sale or delivery ticket as evidence of the Date of Purchase for proof of warranty, and submit a copy of the bill of sale to the service person at the time warranty service is provided.</p> <p>CONSUMER USER Please Call 1-800-243-0000 (24 hours a day, 365 days per year) for instructions on getting the defective unit repaired or replaced. Visit our website at: http://www.lgservice.com</p> <p>COMMERCIAL USER Please Call (888) 865-3026 (Staffed during these times Mon. - Fri. 8:00AM ~ 5:00PM Central Standard Time) for instructions on getting the defective unit repaired or replaced. Visit our website at: http://www.lgcommercial.com</p>

THIS WARRANTY IS IN LIEU OF ANY OTHER WARRANTY, EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION, ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. TO THE EXTENT ANY IMPLIED WARRANTY IS REQUIRED BY LAW, IT IS LIMITED IN DURATION TO THE EXPRESS WARRANTY PERIOD ABOVE. NEITHER THE MANUFACTURER NOR ITS U.S. DISTRIBUTOR SHALL BE LIABLE FOR ANY INCIDENTAL, CONSEQUENTIAL, INDIRECT, SPECIAL, OR PUNITIVE DAMAGES OF ANY NATURE, INCLUDING WITHOUT LIMITATION, LOST PROFITS, LOST OR CORRUPTED PROGRAMMING OR DATA, OR ANY OTHER DAMAGE WHETHER BASED IN CONTRACT, TORT, OR OTHERWISE. Some states do not allow the exclusion or limitation of incidental or consequential damages or limitations on how long an implied warranty lasts, so the above exclusion or limitation may not apply to you. This warranty gives you specific legal rights and you may also have other rights that vary from state to state.

THIS LIMITED WARRANTY DOES NOT APPLY TO:

<ul style="list-style-type: none"> • damage caused in shipping or transit • service required as a result of improper installation, including incorrect or insufficient AC supply (please consult the owner's manual for power supply requirements). • installation or repair of antenna systems, cable converters, cable company supplied equipment, or other components in a video system • set-up or adjustment on consumer controls, or damage caused by improper adjustments • damage caused by other system components • any unit that has been modified or incorporated into any other product • replacement of batteries on the remote control. 	<ul style="list-style-type: none"> • damage (including cosmetic damage), failure, loss or personal injury due to misuse, abuse, negligence, improper maintenance or storage, or to acts of nature or other causes beyond our control. (Causes beyond our control include but are not limited to lightning strike, power surges, power outages and water damage.) • image burn-in • repair or replacement of warranted parts by other than an LGE authorized service centers. • units purchased or serviced outside of the U.S.A. • product where the original factory serial numbers have been removed, defaced or changed in any way. • product sold and labeled as "as is, where is" or similar disclaimer.
---	---

The cost of repair or replacement under these excluded circumstances shall be borne by the consumer.

CUSTOMER INTERACTIVE CENTER NUMBERS

<p>To obtain Customer Assistance, Product Information, or Dealer or Authorized Service Center location:</p>	<p>CONSUMER USER Please call 1-800-243-0000 (24 hours a day, 365 days per year) and select the appropriate option from the menu. Or visit our website at: http://www.lgservice.com</p> <p>COMMERCIAL USER Please call (888) 865-3026 (Staffed during these times Mon. - Fri. 8:00AM ~ 5:00PM Central standard time) and select the appropriate option from the menu. Or visit our website at: http://www.lgcommercial.com</p>
--	--

CONCERNING PIXEL FUNCTIONALITY: An LCD Television contains hundreds of thousands of individual pixels. LCD displays typically contain a small number of pixels that do not function normally. Your display has been inspected and is in compliance with manufacturer's specifications, indicating that any pixel defects do not effect the operation or use of your display.

BEFORE CALLING FOR SERVICE:

Please have your product model number, serial number, and the date of purchase available.

Under some circumstances you may be asked to provide a reserve deposit to the LGE Service Center, using a credit card number as surety for advanced shipment. Your credit card will not be charged if you return the defective unit within 10 working days.

If a replacement unit is received, please use the carton and packaging from that unit in returning the defective unit to the LGE Service Center.

Parts and service in accordance with the LGE warranty is our responsibility and will be provided without charge. Other service requirements will be at the owner's expense. If you have problems in obtaining satisfactory warranty service, write or call the LGE Customer Interactive Service.

To assure proper credit and avoid unnecessary charges, you must obtain a Return Authorization before returning any product to the Factory Service Center. Contact the Customer Interactive Center for details.

Service for your LGE Television is provided through LG Electronics Alabama, Inc., the authorized LGE Service Center for the United States.

TO CONTACT LG ELECTRONICS BY MAIL:

LGE Customer Interactive Center
P. O. Box 240007
201 James Record Road
Huntsville, Alabama 35824
ATTN: CIC

LGE LCD Televisions are marketed and distributed in the United States by:
LG Electronics U.S.A., Inc., 1000 Sylvan Avenue, Englewood Cliffs, NJ 07632