

LG SIGNATURE

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OLED TV

Safety and Reference

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

OLED88Z9PUA



www.lg.com

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Important Safety Instruction

- Read these instructions.
- Keep these instructions.
- Heed all warnings.
- Follow all instructions.
- Do not use this apparatus near water.
- Clean only with dry cloth.
- Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
- Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
- Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
- Only use attachments/accessories specified by the manufacturer.
- Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.



- Unplug this apparatus during 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.

By using this product, you agree that all disputes between you and LG arising out of or relating in any way to this product (including but not limited to warranty disputes) shall be resolved exclusively through binding arbitration on an individual basis. The terms of the arbitration agreement (including details on the procedure for resolving disputes) is available at www.lg.com/us/arbitration (USA) or www.lg.com/ca_en/arbitration (Canada).

Warning! Safety Instructions



CAUTION

RISK OF ELECTRIC SHOCK
DO NOT OPEN



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

 The symbol 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 symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the device.

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

- TO PREVENT THE SPREAD OF FIRE, KEEP CANDLES OR OTHER ITEMS WITH OPEN FLAMES AWAY FROM THIS PRODUCT AT ALL TIMES.
- **Do not place the TV and/or remote control in the following environments:**
 - Keep the product away from direct sunlight.
 - An area with high humidity such as a bathroom
 - Near any heat source such as stoves and other devices that produce heat.
 - Near kitchen counters or humidifiers where they can easily be exposed to steam or oil.
 - An area exposed to rain or wind.
 - 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).
 - Near flammable objects such as gasoline or candles, or expose the TV to direct air conditioning.
 - Do not install in excessively dusty places.

Otherwise, this may result in fire, electric shock, combustion/explosion, malfunction or product deformation.

• Ventilation

- Install your TV where there is proper ventilation. Do not install in a confined space such as a bookcase.
- Do not install the product on a carpet or cushion.
- Do not block or cover the product with cloth or other materials while unit is plugged in.
- Take care not to touch the ventilation openings. When watching the TV for a long period, the ventilation openings may become hot.
- 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 device.
- Do not move the TV whilst the Power cord is plugged in.
- Do not use a damaged or loosely fitting power cord.
- Be sure to grasp the plug when unplugging the power cord. Do not pull on the power cord to unplug the TV.
- Do not connect too many devices to the same AC power outlet as this could result in fire or electric shock.

• Disconnecting the Device from the Main Power

- The power plug is the disconnecting device. In case of an emergency, the power plug must remain readily accessible.
- Do not let your children climb or cling onto the TV. Otherwise, the TV may fall over, which may cause serious injury.

• Outdoor Antenna Grounding (Can differ by country):

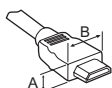
- If an outdoor antenna is installed, follow the precautions below. An outdoor antenna system should not be located in the vicinity of overhead power lines or other electric light or power circuits, or where it can come in contact with such power lines or circuits as death or serious injury can occur.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

- **Grounding** (Except for devices which are not grounded.)
 - TV with a three-prong grounded AC plug must be connected to a three-prong grounded AC outlet. Ensure that you connect the earth ground wire to prevent possible electric shock.
- Never touch this apparatus or antenna during a lightning storm. You may be electrocuted.
- Make sure the power cord is connected securely to the TV and wall socket if not secured damage to the Plug and socket may occur and in extreme cases a fire may break out.
- Do not insert metallic or inflammable objects into the product. If a foreign object is dropped into the product, unplug the power cord and contact the customer service.
- Do not touch the end of the power cord while it is plugged in. You may be electrocuted.
- **If any of the following occur, unplug the product immediately and contact your local customer service.**
 - The product has been damaged.
 - If water or another substance enters the product (like an AC adapter, power cord, or TV).
 - If you smell smoke or other odors coming from the TV
 - When lightning storms or when unused for long periods of time.

Even the TV is turned off by remote control or button, AC power source is connected to the unit if not unplugged in.
- Do not use high voltage electrical equipment near the TV (e.g., a bug zapper). This may result in product malfunction.
- Do not attempt to modify this product in any way without written authorization from LG Electronics. Accidental fire or electric shock can occur. Contact your local customer service for service or repair. Unauthorized modification could void the user's authority to operate this product.
- Use only an authorized attachments / accessories approved by LG Electronics. Otherwise, this may result in fire, electric shock, malfunction, or product damage.
- Never disassemble the AC adapter or power cord. This may result in fire or electric shock.
- Handle the adapter carefully to avoid dropping or striking it. An impact could damage the adapter.
- To reduce the risk of fire or electrical shock, do not touch the TV with wet hands. If the power cord prongs are wet or covered with dust, dry the power plug completely or wipe dust off.
- **Batteries**
 - Store the accessories (battery, etc.) in a safe location out of the reach of children.
 - Do not short circuit, disassemble, or allow the batteries to overheat. Do not dispose of batteries in a fire. Batteries should not be exposed to excessive heat.
 - Caution: Risk of fire or explosion if the battery is replaced by an incorrect type.
- **Moving**
 - When moving, make sure the product is turned off, unplugged, and all cables have been removed. It may take 4 or more people to carry larger TVs. Do not press or put stress on the front panel of the TV. Otherwise, this may result in product damage, fire hazard or injury.
- Keep the packing anti-moisture material or vinyl packing out of the reach of children.
- Do not allow an impact shock, any objects to fall into the product, and do not drop anything onto the screen.
- 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. It may cause damage to screen.
- **Cleaning**
 - When cleaning, unplug the power cord and wipe gently with a soft/dry cloth. Do not spray water or other liquids directly on the TV. Do not clean your TV with chemicals including glass cleaner, any type of air freshener, insecticide, lubricants, wax (car, industrial), abrasive, thinner, benzene, alcohol etc., which can damage the product and/or its panel. Otherwise, this may result in electric shock or product damage.

Preparing

- When the TV is turned on for the first time after being shipped from the factory, initialization of the TV may take approximately one minute.
- 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.
- The device must be easily accessed to a location outlet near the access. Some devices are not made by turning on / off button, turning off the device and unplugging the power cord.
- The items supplied with your product may vary depending upon 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 flash drive does not fit into your TV's USB port.
- Use a certified cable with the HDMI logo attached. If you do not use a certified HDMI cable, the screen may not display or a connection error may occur.
- Recommended HDMI cable types (3 m (9.84 ft) or less)
 - Ultra High Speed HDMI®/™ cable



*A ≤ 10 mm (0.39 inches)

*B ≤ 18 mm (0.7 inches)

- Make sure to wring any excess water or cleaner from the cloth.
- Do not spray water or cleaner directly onto the TV screen.
- Make sure to spray just enough of water or cleaner onto a dry cloth to wipe the screen.

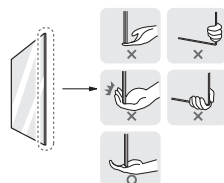
Lifting and moving the TV

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.

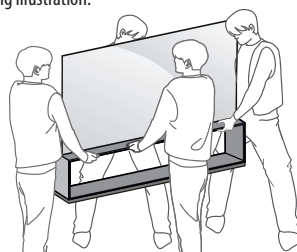
- It is recommended to move the TV in the box or packing material that the TV originally came in.
- Before moving or lifting the TV, disconnect the power cord and all cables.
- When holding the TV, the screen should face away from you to avoid damage.



- Make sure not to hold the transparent part, speaker, or speaker grill area.



- Use at least 4 people to move a large TV.
- When transporting the TV by hand, hold the TV as shown in the following illustration.

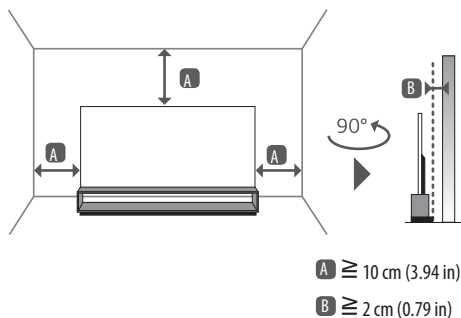


- When transporting the TV, do not expose the TV to jolts or excessive vibration.
- When transporting the TV, keep the TV upright; never turn the TV on its side or tilt towards the left or right.
- When handling the TV, be careful not to damage the protruding buttons.



- Avoid touching the screen at all times, as this may result in damage to the screen.
- Do not place the product on the floor with its front facing down without padding. Failure to do so may result in damage to the screen.
- Please do not pile stuff up on or press down strongly on the speaker. This may result in product damage or degradation.

Installation



- It is recommended to install the product on the floor.



- Do not apply foreign substances (oils, lubricants, etc.) to the screw parts when assembling the product. (Doing so may damage the product.)
- If you install the TV on a stand, you need to take actions to prevent the product from overturning. Otherwise, the product may fall over, which may cause injury.
- Do not use any unapproved items to ensure the safety and lifespan of the product.
- Any damages or injuries by using unapproved items are not covered by the warranty.
- 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 fasten the screws with excessive force otherwise they may strip and become loose.

Connections

You can connect various external devices to the TV. For more information on external device's connection, refer to the manual provided with each device.

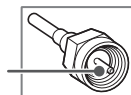
- Certain 8K input/decoding standards may not be supported. An additional device may be necessary to support certain 8K standards. Upscaled and enhanced 8K images will vary depending on the source content.
- The product label is attached under the external device connection terminal cover.
- Do not connect too many devices to the same AC outlet. Be sure the AC outlet has the correct rated voltage and current.

Antenna/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 an RF cable is optional.

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

Copper wire



- Complete all connections between devices, and then connect the power cord to the power outlet to prevent damage to your TV.
- Use a signal splitter to use 2 TVs or more.
- DTV Audio Supported Codec: MPEG, Dolby Digital
- This TV cannot receive ULTRA HD (3840 x 2160 pixels) broadcasts directly because the related standards have not been confirmed.

Other connections

Connect your TV to external devices. For the best picture and audio quality, connect the external device and the TV with the HDMI cable.

HDMI

- When connecting the HDMI cable, the product and external devices should be turned off and unplugged.
- Supported HDMI Audio format:
(Depending upon model)
DTS (44.1 kHz, 48 kHz, 88.2 kHz, 96 kHz),
DTS HD (44.1 kHz, 48 kHz, 88.2 kHz, 96 kHz, 176.4 kHz, 192 kHz),
True HD (48 kHz),
Dolby Digital / Dolby Digital Plus (32 kHz, 44.1 kHz, 48 kHz),
PCM (32 kHz, 44.1 kHz, 48 kHz, 96 kHz, 192 kHz)

(Only UHD models)

-  →  → [Picture] → [Additional Settings] → [HDMI ULTRA HD Deep Color]
 - 8K: Support 8K @ 60 Hz (4:2:0), 8K @ 30 Hz (4:4:4, 4:2:2, 4:2:0)
 - 4K: Support 4K @ 60 Hz (4:4:4, 4:2:2, 4:2:0)
 - Off: Support 4K @ 60 Hz 8 bit (4:2:0)
- If the device connected to Input Port also supports ULTRA HD Deep Color, your picture may be clearer. However, if the device doesn't support it, it may not work properly. In that case, change the TV's [HDMI ULTRA HD Deep Color] setting to off.

External Devices

Supported external devices are: Blu-ray player, HD receivers, DVD players, VCRs, audio systems, USB storage devices, PC, gaming devices, and other external devices.

- If you record a TV program on a Blu-ray/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 about recording, refer to the manual provided with the connected device.
- The external device connections shown may differ slightly from illustrations in a manual.
- Connect external devices to the TV regardless about 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.
- 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. Depending upon the graphics card, some resolution settings may not allow the image to be positioned on the screen properly.
- Some USB Hubs may not work. If a USB device connected through a USB Hub is not detected, connect it directly to the USB port on the TV.
- The TV may be capable of operating without a set-top-box from a multichannel video programming distributor (MVPD).
- When connecting via a wired LAN, it is recommended to use a CAT 7 cable.

Remote RS-232C setup

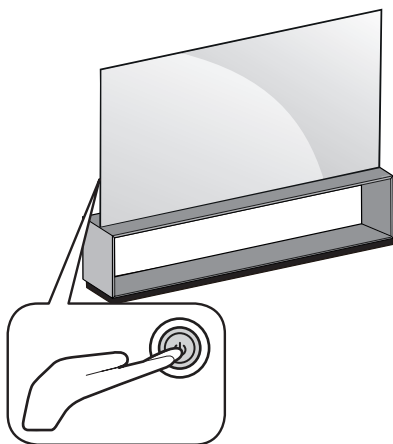
To obtain the RS-232C external control setup information, please visit www.lg.com. Download and read the manual, (Depending upon model).



- Do not drop the product or let it fall over when connecting external devices. Otherwise, this may result in injury or damage to the product.
- When connecting external devices such as video game consoles, make sure the connecting cables are long enough. Otherwise, the product may fall over, which may cause injury or damage the product.

Using Button

You can simply operate the TV functions, using the button.



Basic functions

	Power On (Press) Power Off ¹ (Press and hold)
	Volume Control
	Channels Control

1 All running apps will close.

Adjusting the menu

When the TV is turned on, press the button one time. You can adjust the Menu items using the button.

	Turns the power off.
	Accesses the settings menu.
	Clears on-screen displays and returns to TV viewing.
	Changes the input source.

Using Magic 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.

When the message [Magic Remote battery is low. Please change the battery.] is displayed, replace the batteries.

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. Be sure to point the Magic remote toward the remote control sensor on the TV. To remove the batteries, perform the installation actions in reverse. This remote uses infrared light. When in use, it should be pointed in the direction of the TV's remote sensor.

(If you lose the supplied pin, you can use a pointed object instead.)



(Some buttons and services may not be provided depending upon models or regions.)

**** To use the button, press and hold for more than 1 second.**

(POWER) Turns the TV on or off.

(STB POWER) You can turn your set-top box on or off by adding the set-top box to the universal remote control for your TV.

(GUIDE) Displays the program event according to time scheduler.

Number buttons Enters numbers.

(QUICK HELP) Accesses the [QUICK HELP].

(DASH) Inserts a — between numbers such as 2-1 and 2-2.

(SAVED CHANNELS) Accesses the saved channels list.

(QUICK ACCESS) Edits QUICK ACCESS.

- QUICK ACCESS is a feature that allows you to enter a specified app or Live TV directly by pressing and holding the number buttons.

(MORE ACTIONS) Displays more remote control functions.

(SAP) (Secondary Audio Program) Feature can be enabled by pressing the key.

(VOLUME) Adjusts the volume level.

(MUTE) Mutes all sounds.

(ACCESSIBILITY) Accesses the [Accessibility] menu.

(CHANNELS) Scrolls through the saved channels.

(VOICE RECOGNITION) Network connection is required to use the voice recognition function.

Check for recommended content. (Some recommended services may not be available in some countries.)

(VOICE RECOGNITION) Speak while pressing and holding the button to use the voice recognition feature.

To achieve accurate recognition of your speech, you must pronounce words in a slow and accurate manner at an appropriate voice volume at a distance of about 10 cm (4 inches) away from the Magic Remote's microphone ().

(HOME) Accesses the Home menu.

(HISTORY) Shows the previous history.

(INPUT) Changes the input source.

(HOME DASHBOARD) Accesses the [HOME DASHBOARD].

(WHEEL/OK) Press the center of button to select a menu. You can change channels by using button.

- Do not move the wheel on the remote control right or left. This may cause the malfunction of the product.

up/down/left/right Press the up, down, left or right button to scroll the menu. If you press the up, down, left or right button while the pointer is in use, the pointer will disappear from the screen and Magic Remote will operate like a general remote control. To display the pointer on the screen again, shake Magic Remote to the left and right.

(BACK) Returns to the previous level.

(BACK) Clears on-screen displays and returns to last input viewing.

(Q. SETTINGS) Accesses the Quick Settings.

(Q. SETTINGS) Displays the [All Settings] menu.

(STREAMING SERVICE) Connects to the Video Streaming Service.

These access special functions in some menus.

Registering Magic Remote Control

How to register the Magic Remote Control

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

- 1 Put batteries into the Magic Remote and turn the TV on.
- 2 Point the Magic Remote at your TV and press the  **Wheel (OK)** on the remote control.

* If the TV fails to register the Magic Remote, try again after turning the TV off and back on.

How to deregister the Magic Remote Control

Press the  (**BACK**) and  (**HOME**) buttons at the same time, for five seconds, to unpair the Magic Remote with your TV.

* Pressing and holding the  (**Q. Settings**) and  (**HOME**) buttons will let you cancel and re-register Magic Remote at the same time.



- It is recommended that an Access Point (AP) be located more than 0.2 m (0.65 ft) away from the TV. If the AP is installed closer than 0.2 m (0.65 ft), the Magic Remote control may not perform as expected due to frequency interference.
- Do not mix new batteries with old batteries. This may cause the batteries to overheat and leak.
- Failure to match the correct polarities of the battery may cause the battery to burst or leak, resulting in fire, personal injury, or ambient pollution.
- This apparatus uses 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.
- Batteries inside or inside the product shall not be exposed to excessive heat such as sunshine, fire or the like.

User Guide

For more information about this TV, read the User Guide embedded in the product.

- To open the User Guide:  →  → [General] → [About This TV] → [User Guide]

Troubleshooting

Cannot control the TV with the remote control.

- Check if anything such as tape has been placed over the receiver.
- Check if there is any obstacle between the product and the remote control.
- Replace the batteries with new fresh ones.

No image display and no sound is produced.

- 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.

- Check the power control settings. The power supply may be interrupted.
- Check if the auto-off function is activated in the settings menu.
- If there is no signal while the TV is on, the TV will turn off automatically after 15 minutes of inactivity.

Abnormal Display

- 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 screen or holding your finger(s) against it for long periods of time. Doing so may produce some temporary distortion effects on the screen.
- This panel is an advanced product that contains millions of 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 upon the product. This generated sound does not affect the performance and reliability of the product.



- Make sure to wring any excess water or cleaner from the cloth.
- Do not spray water or cleaner directly onto the TV screen.
- Make sure to spray just enough of water or cleaner onto a dry cloth to wipe the screen.
- To clean the top of the Companion Box (AV box), spray a soft cloth with water. Then, wipe the surface so that the product does not come in direct contact with water. Next, wipe it again so that no moisture remains.

Specifications

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

Estimated yearly energy consumption indicated on the FTC label is measured in accordance with the Test Procedures for Television Sets (USA only).

The actual energy consumption depends on the usage environment (The content watched, TV settings, etc.).

Broadcasting Specifications	
Television system	ATSC, NTSC-M, 64 & 256 QAM
Program coverage	VHF 2-13, UHF 14-69, DTV 2-69, CATV 1-135, CADTV 1-135
External antenna impedance	75 Ω

Wireless module(LGSBWAC92)Specifications	
Wireless LAN (IEEE 802.11a/b/g/n/ac)	
Frequency range	Output power(Max.)
2400 to 2483.5 MHz	18 dBm
5150 to 5725 MHz	18 dBm
5725 to 5850 MHz	18 dBm
Bluetooth	
Frequency range	Output power(Max.)
2400 to 2483.5 MHz	8 dBm
As band channels can vary per country, the user cannot change or adjust the operating frequency. This product is configured for the regional frequency table. For consideration of the user, this device should be installed and operated with a minimum distance of 20 cm (7.8 inches) between the device and the body. FCC ID: BEJLGSBWAC92 / IC: 2703H-LGSBWAC92	

Environment condition	
Operating Temperature	0 °C to 40 °C (32 °F to 104 °F)
Operating Humidity	Less than 80 %
Storage Temperature	-20 °C to 60 °C (-4 °F to 140 °F)
Storage Humidity	Less than 85 %

Open Source Software Notice Information

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 a period of three years after our last shipment of this product. This offer is valid to anyone in receipt of this information.

Licenses



Important Information for Preventing Image Retention

OLED is a self-emissive technology, which brings many significant benefits to image quality and performance. As with any self-emitting display, it is possible for users of OLED TVs to experience temporary image retention under certain conditions, such as when displaying a static image on the screen for a long time. LG OLED TVs incorporate dedicated functions that protect the screen from possible image retention.

If a static image persists on screen, screen brightness is automatically reduced in specific areas of, or across the entire screen. Once the static image disappears, screen brightness will automatically return to its prior setting. This is not a product malfunction.

Examples of Images that may Cause Image Retention

- Still images or fixed images containing certain information that are displayed uninterrupted on the screen, such as channel numbers, station logos, program titles, news or movie subtitles, and headlines.
- Fixed menu or icons for video game consoles or broadcasting set-top boxes.
- Black bars shown on the left, right, top, or bottom of the screen, such as in images with a 4:3 or 21:9 ratio.

Recommended Measures for Preventing Image Retention

- Avoid watching a video displaying an image as listed above for extended periods of time.
- Adjust your TV settings as below when turning on a video exhibiting an image as listed above for extended periods of time.
 - [Picture] → [Picture Mode Settings] → [Picture Mode] → [APS]
 - [Picture] → [Picture Mode Settings] → [OLED LIGHT] → Adjust to lower value
 - [Picture] → [Additional Settings] → [OLED Panel Settings] → [Logo Luminance Adjustment] → [High]
- Turn off the menu bar of an external device, such as a set-top box, to prevent long-term display of the menu bar of such device. (Please refer to the manual of the applicable external device for instructions.)
- Adjust the settings as below when watching a video constantly showing black bars on the left, right, top or bottom, in order to remove the black bars.
 - [Picture] → [Aspect Ratio Settings] → [Aspect Ratio] → [Vertical Zoom] or [All-Direction Zoom]

Information on Functions Supporting Image Quality in Relation to Temporary Image Retention

- LG OLED TVs provide a feature called Pixel Refresher, which helps to prevent temporary image retention.
- When the accumulated television viewing time reaches 2,000 hours or more (this is equivalent to watching TV for five hours a day over the course of a year), Pixel Refresher will be automatically activated once your TV is turned off. When turning off your TV, a notice will appear on the screen informing the activation of Pixel Refresher. This feature will run for 1.5 hour while your TV is turned off. A horizontal line may appear at the top or bottom of the screen when the process is almost finished.
- You may also manually activate Pixel Refresher via the TV menu:
  →  → [Picture] → [Additional Settings] → [OLED Panel Settings] → [Pixel Refresher].
- Whenever you watch your TV for more than four cumulative hours, Pixel Refresher will be automatically activated for a few minutes once your TV is turned off. (Note: Pixel Refresher will not be activated if the power cord of your TV is not plugged in or the main power is off.)

Regulatory

FCC NOTICE

(For USA)

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. 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.

FCC Radio Frequency Interference Requirements (for UNII devices)

(For USA)

High power radars are allocated as primary users of the 5.25 to 5.35 GHz and 5.65 to 5.85 GHz bands. These radar stations can cause interference with and/or damage this device. This device cannot be co-located with any other transmitter.

FCC RF Radiation Exposure Statement

(For USA)

(For having wireless function (WLAN, Bluetooth,...))

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. This equipment should be installed and operated with minimum distance 20 cm (7.8 inches) between the antenna and your body. Users must follow the specific operating instructions for satisfying RF exposure compliance.

Industry Canada Statement

(For Canada)

(For having wireless function (WLAN, Bluetooth,...))

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

- (1) This device may not cause interference.
- (2) This device must accept any interference, including interference that may cause undesired operation of the device.

IC Radiation Exposure Statement

(For Canada)

(For having wireless function (WLAN, Bluetooth,...))

This equipment complies with IC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20 cm (7.8 inches) between the antenna & your body.

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.

RSS-247 Requirement

(For Canada)

(For product having the wireless function using 5 GHz frequency bands)

- (1) The device for operation in the band 5150–5250 MHz is only for indoor use to reduce the potential for harmful interference to co-channel mobile satellite systems;
- (2) For devices with detachable antenna(s), the maximum antenna gain permitted for devices in the bands 5250–5350 MHz and 5470–5725 MHz shall be such that the equipment still complies with the e.i.r.p. limit;
- (3) For devices with detachable antenna(s), the maximum antenna gain permitted for devices in the band 5725–5850 MHz shall be such that the equipment still complies with the e.i.r.p. limits as appropriate; and
- (4) (For devices operating in the band 5250–5350 MHz having an e.i.r.p. greater than 200 mW) Antenna type(s), antenna models(s), and worst-case tilt angle(s) necessary to remain compliant with the e.i.r.p. elevation mask requirement set forth in section 6.2.2.3 of RSS-247 shall be clearly indicated.

Users should also be advised that high-power radars are allocated as primary users (i.e. priority users) of the bands 5250–5350 MHz and 5650–5850 MHz and that these radars could cause interference and/or damage to LE-LAN devices.

NOTE TO CABLE/TV INSTALLER

(For USA and Canada)

This reminder is provided to call the CATV system installer's attention to Article 820-40 of the National Electric Code (U.S.A.). The code provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of the cable entry as practical.

WARNING!

Never place a television set in an unstable location. A television set may fall, causing serious personal injury or death. Many injuries, particularly to children, can be avoided by taking simple precautions such as:

- Using cabinets or stands recommended by the manufacturer of the television set.
- Only using furniture that can safely support the television set.
- Ensuring the television set is not overhanging the edge of the supporting furniture.
- Not placing the television set on tall furniture (for example, cupboards or bookcases) without anchoring both the furniture and the television set to a suitable support.
- Not placing the television set on cloth or other materials that may be located between the television set and supporting furniture.
- Educating children about the dangers of climbing on furniture to reach the television set or its controls.

If your existing television set is being retained and relocated, the same considerations as above should be applied.

Symbols

	Refers to alternating current (AC).
	Refers to direct current (DC).
	Refers to class II equipment.
	Refers to stand-by.
	Refers to "ON" (power).
	Refers to dangerous voltage.

LG Take-back & Recycling Policy

(For USA)

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 take-back & recycling service voluntarily in some regions. LG Electronics evaluates products' recyclability at the design step selectively, with the goal of improving recyclability where practicable. Through these activities, LG Electronics seeks to contribute to conserving natural resources and protecting the environment. For more information, please visit our global site at <http://www.lg.com/recycling>

CHILD SAFETY:

PROPER TELEVISION PLACEMENT MATTERS

THE CONSUMER TECHNOLOGY INDUSTRY CARES

Manufacturers, retailers and the rest of the consumer technology industry are committed to making products safe and enjoyable. As you enjoy your television, please note that all televisions – new and old- must be supported on proper stands or installed according to the manufacturer's recommendations. Televisions that are inappropriately situated on dressers, bookcases, shelves, desks, speakers, chests, carts, etc., may fall over, resulting in injury.



TUNE IN TO SAFETY

- **NEVER** allow children to climb on or play on the television or the furniture on which the television is placed.
- **NEVER** place the television on furniture that can easily be used as steps, such as a chest of drawers.
- **ALWAYS** follow the manufacturer's recommendations for the safe installation of your television.
- **ALWAYS** read and follow all instructions for proper use of your television.
- **ALWAYS** install the television where it cannot be pushed, pulled over or knocked down.
- **ALWAYS** route cords and cables connected to the television so that they cannot be tripped over, pulled or grabbed.



WALL OR CEILING MOUNT YOUR TELEVISION

- **ALWAYS** contact your retailer about professional installation if you have any doubts about your ability to safely mount your television.
- **ALWAYS** use a mount that has been recommended by the television manufacturer and has a safety certification by a Nationally Recognized Testing Laboratory (NRTL).
- **ALWAYS** follow all instructions supplied by the television and mount manufacturers.
- **ALWAYS** make sure that the wall or ceiling where you are mounting the television is appropriate. Use proper anchoring systems for different wall or ceiling types (e.g. wood, concrete, metal, etc.). If you are unsure, contact a professional installer.
- Televisions can be heavy. A minimum of two people is required for a wall or ceiling mount installation.



MOVING AN OLDER TELEVISION TO A NEW PLACE IN YOUR HOME

- **REMEMBER** Special care should be made in the placement of older CRT/flat-panel televisions. Many new television buyers move their older CRT/flat-panel televisions into a secondary room after the purchase of a flat-panel television.
- **NEVER** place your older CRT/flat-panel television on a dresser where children may be tempted to use the drawers to climb.
- **ALWAYS** place your older CRT/flat-panel television on furniture that is sturdy and appropriate for its size and weight.
- **ALWAYS** make sure your older CRT/flat-panel television does not hang over the edge of your furniture.

LG SIGNATURE

Supplier's Declaration of Conformity

Trade Name	LG
Responsible Party	LG Electronics USA, Inc.
Address	111 Sylvan Avenue, North Building, Englewood Cliffs, NJ 07632
E-mail	lg.environmental@lge.com

LG Customer Information Center

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

1-800-984-6306	USA
1-888-542-2623	CANADA

Register your product Online!

www.lg.com

The model and serial numbers of the Product are located on the back and on one side of the Product. Record them below in case you ever need service.

Model _____

Serial No. _____