LG SIGNATURE

# LG SIGNATURE
## OLED TV

Safety and Reference

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

*MFL71700505*
(2007-REV00)

www.lg.com

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# 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.



This 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.



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

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.

- **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.

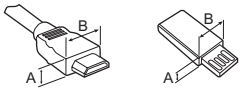
  Even the TV is turned off by remote control or button, AC power source is connected to the unit if not unplugged in.
- Do not use high voltage electrical equipment near the TV (e.g., a bug zapper). This may result in product malfunction.
- Do not attempt to modify this product in any way without written 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



- If the TV is turned on for the first time after it was shipped from the factory, initialization of the TV may take a few minutes.
- 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 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 thick and 18 mm 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
*B ≦ 18 mm

- 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
  - Ultra High Speed HDMI®/™ cable (3 m or less)

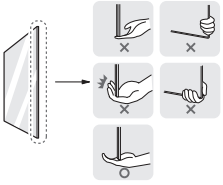
# Lifting and moving the TV

Please note the following advice to prevent the TV from being scratched or damaged and for safe transportation regardless of its type and size.

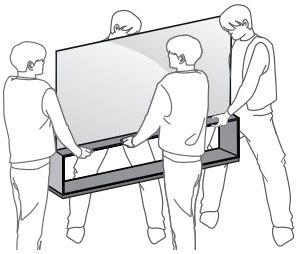
- It is recommended to move the TV in the box or packing material that the TV originally came in.
- Before moving or lifting the TV, disconnect the power cord and all cables.
- When holding the TV, the screen should face away from you to avoid damage.



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



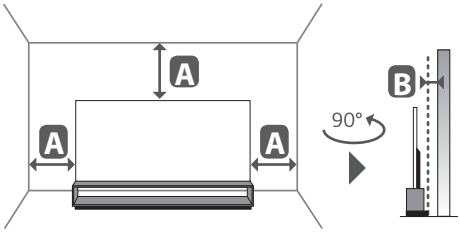
- When transporting a large TV, there should be at least 4 people.
- When transporting the TV by hand, hold the TV as shown in the following illustration.



- 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.
- Do not apply excessive pressure to cause flexing / bending of frame chassis as it may damage screen.
- 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.
- Please do not pile the stuff up or press strongly the speaker. This may result in product damage or degradation.

# Installation




10 cm ≦ A
2 cm ≦ B

- 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 product life span.
- Any damage or injuries caused by using unapproved items are not covered by the warranty.
- Make sure that the screws are inserted correctly and fastened securely. (If they are not fastened securely enough, the TV may tilt forward after being installed.) Do not use too much force and over tighten the screws; otherwise screw may be damaged and not tighten correctly.

# Connections

Connect various external devices to the TV and switch input modes to select an external device. For more information of 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 use more than one power plug at the same time, but be sure to use an outlet with a rated voltage and current.

## Antenna/Cable

Connect the TV to a wall antenna socket with an RF cable (75 Ω).

- Use a signal splitter to use more than 2 TVs.
- If the image quality is poor, install a signal amplifier properly to improve the image quality.
- If the image quality is poor with an antenna connected, try to realign the antenna in the correct direction.
- An antenna cable and converter are not supplied.
- For a location that is not supported with ULTRA HD broadcasting, this TV cannot receive ULTRA HD broadcasts directly.

## Satellite dish

Connect the TV to a satellite dish to a satellite socket with a satellite RF cable (75 Ω). (Depending on model)

## CI module

View the encrypted (pay) services in digital TV mode. (Depending on model)

- Check if the CI module is inserted into the PCMCIA card slot in the right direction. If the module is not inserted properly, this can cause damage to the TV and the PCMCIA card slot.
- If the TV does not display any video and audio when CI+ CAM is connected, please contact to the Terrestrial/Cable/Satellite Service Operator.

# 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. Some separate cable is not provided.

## HDMI

- When connecting the HDMI cable, the product and external devices should be turned off and unplugged.
- Supported HDMI Audio format : (Depending on model)
  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)

- ⚙ → ⋮ → [Picture] → [Additional Settings] → [HDMI Ultra HD Deep Colour]
  - 8K : Support 8K @ 50/60 Hz (4:2:0), 8K @ 24/25/30 Hz (4:4:4, 4:2:2, 4:2:0)
  - 4K : Support 4K @ 50/60 Hz (4:4:4, 4:2:2, 4:2:0), 4K @ 100/120 Hz (4:4:4, 4:2:2, 4:2:0)
  - Off : Support 4K @ 50/60 Hz (4:2:0)

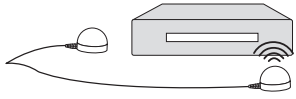
  If the device connected to Input Port also supports Ultra HD Deep Colour, your picture may be clearer. However, if the device doesn't support it, it may not work properly. In that case, change the TV's [HDMI Ultra HD Deep Colour] setting to off.

## USB

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.

## IR Blaster

- Control the set-top box (cable/satellite/IP/OTT), Blu-ray/DVD player, soundbar, game consoles, etc., using the IR Blaster.
  - Connect the IR Blaster cable to the TV's IR Blaster port.
  - Place both ends (one or two) of the IR Blaster in front of the external device as shown in the picture below.
  - Use universal control settings to control the device.
    Go to ⚙ → ⋮ → [Connection] → [Device Connection Settings] → [Universal Control Settings].
  - Secure the IR Blaster with the 3M tape provided.



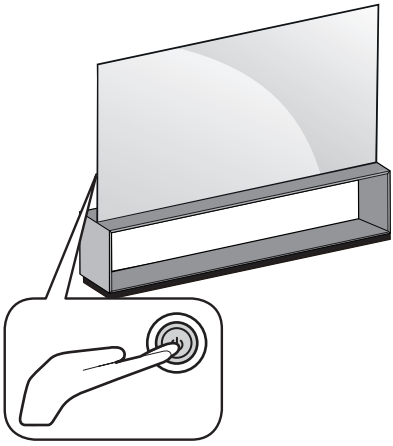
## External Devices

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

- The external device connection may differ from the model.
- Connect external devices to the TV regardless of the order of the TV port.
- 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 of recording, refer to the manual provided with the connected device.
- Refer to the external equipment's manual for operating instructions.
- If you connect a gaming device to the TV, use the cable supplied with the gaming device.
- 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.
- In PC mode, some resolution settings may not work properly depending on the graphics card.
- If ULTRA HD content is played on your PC, video or audio may become disrupted intermittently depending on your PC's performance.
- When connecting via a wired LAN, it is recommended to use a CAT 7 cable. (Only when **LAN** port is provided.)

# Using Button

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



## Basic functions

| | |
|---|---|
|  | Power On (Press)<br>Power Off [1] (Press and hold) |
|  | Volume Control |
|  | Programmes Control |

1 All running apps will close, and any recording in progress will stop. (Depending on country)

## 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 Remote Control

(Depending on model)
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 replace 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. Make sure to point the remote control toward the remote control sensor on the TV.




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

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

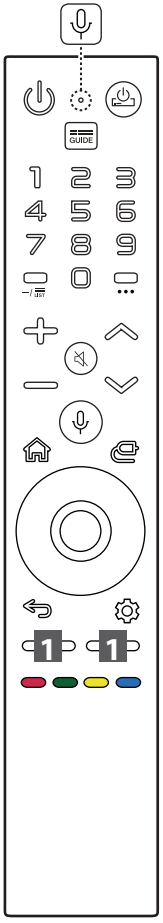
**(POWER)** Turns the TV on or off.
**TV/RAD** Selects Radio, TV and DTV programme.
**(SEARCH)** Check for recommended content. (Some recommended services may not be available in some countries.)
Search for content such as TV programmes, movies and other videos, or perform a web search by entering text in the search bar.
**SUBTITLE** Recalls your preferred subtitle in digital mode.
**(Q. Settings)** Accesses the Quick Settings.
**(INPUT)** Changes the input source.
**Number buttons** Enters numbers.
9** Accesses the [Quick Help].
**LIST** Accesses the saved programmes list.
**(MORE ACTIONS)** Displays more remote control functions.
**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.

Adjusts the volume level.
**FAV** Accesses your favorite channel list.
**GUIDE** Shows programme guide.
**(MUTE)** Mutes all sounds.
** **(MUTE)** Accesses the [Accessibility] menu.
Scrolls through the saved programmes.
**Streaming Service buttons** Connects to the Video Streaming Service.

**(HOME)** Accesses Home menu.
**(HOME)** Shows the previous history.
**SLEEP** Set the sleep timer.
**BACK** Returns to the previous level.
**EXIT** Clears on-screen displays and returns to TV viewing.
**Navigation buttons (up/down/left/right)** Scrolls through menus or options.
**(OK)** Selects menus or options and confirms your input.
**TEXT, T.OPT (Teletext buttons)** These buttons are used for teletext.
**(Energy Saving)** Adjusts the brightness of the screen to reduce energy.
**(Control buttons)** Control buttons for media contents.
, , , These access special functions in some menus.

# Using Magic Remote Control

(Depending on model)
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 battery.
To replace 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.
(If you lose the supplied pin, you can use a pointed object instead.)




(Some buttons and services may not be provided depending on 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 Shows programme guide.
**Number buttons** Enters numbers.
9** Accesses the [Quick Help].
**— (DASH)** Inserts a — between numbers such as 2-1 and 2-2.
LIST Accesses the saved programmes list.
0** 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.
• • •** **(MORE ACTIONS)** Audio descriptions function will be enabled.
+ — Adjusts the volume level.
**(MUTE)** Mutes all sounds.
** **(MUTE)** Accesses the [Accessibility] menu.
∧ ∨ Scrolls through the saved programmes.
**(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 away from the Magic Remote's microphone().

**(HOME)** Accesses the Home menu.
**(HOME)** Shows the previous history.
**(INPUT)** Changes the input source.
**(INPUT)** Accesses the [Home Dashboard].
**Wheel (OK)** Press the center of button to select a menu. You can change programmes 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 buttons** Connects to the Video Streaming Service.
, , , These access special functions in some menus.
Runs the record function.

# 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.

* Press and hold the **(Q. Settings)** and **(HOME)** button for more than 5 seconds to disconnect and re-register the Magic Remote at the same time.

- It is recommended that an Access Point (AP) be located more than 0.2 m away from the TV. If the AP is installed closer than 0.2 m, 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 ⚙ → ⋮ → [Support] → [User Guide]

# Troubleshooting

Cannot control the TV with the remote control.

- 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.

- 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 on the settings related time.
- If there is no signal while the TV is on, the TV will turn off automatically after 15 minutes of inactivity.

When connecting to the PC (HDMI), no signal is detected.

- Turn the TV off/on using the remote control.
- Reconnect the HDMI cable.
- Restart the PC with the TV on.

**Abnormal Display**

- If the product feels cold to the touch, there may be a small "flicker" when it is turned on. This is normal, there is nothing wrong with product.
- This panel is an advanced product that contains millions of pixels. You may see tiny black dots and/or brightly coloured dots (white, red, blue or green) at a size of 1 ppm on the panel. This does not indicate a malfunction and does not affect the performance and reliability of the product. This phenomenon also occurs in third-party products and is not subject to exchange or refund.
- You may find different brightness and colour of the panel depending on your viewing position(left/right/top/down). This phenomenon occurs due to the characteristic of the panel. It is not related with the product performance, and it is not malfunction.

**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.

⚠
- 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.

# Specifications



| Broadcasting Specifications | | | | |
|---|---|---|---|---|
| | Digital TV (Depending on country) | | | Analogue TV (Depending on country) |
| Television system | DVB-T/T2<br>DVB-C<br>DVB-S/S2 | | | PAL B/B, PAL B/G, PAL D/K, PAL-I, SECAM B/G, SECAM D/K, NTSC-M |
| Program coverage | DVB-S/S2[1] | DVB-C[1] | DVB-T/T2[1] | 46 ~ 862 MHz |
| | 950 ~ 2150 MHz | 46 ~ 890 MHz | VHF III : 174 ~ 230 MHz<br>UHF IV : 470 ~ 606 MHz<br>UHF V : 606 ~ 862 MHz<br>S Band II : 230 ~ 300 MHz<br>S Band III : 300 ~ 470 MHz | |
| Maximum number of storable programmes | 6,000 | 3,000 | | |
| External antenna impedance | 75 Ω | | | |
| CI Module (W x H x D) | 100.0 mm x 55.0 mm x 5.0 mm | | | |

1 Only DVB-T2/C/S2 support model only.

| Wireless module(LGSBWAC92)Specifications | |
|---|---|
| Wireless LAN (IEEE 802.11a/b/g/n/ac) | |
| Frequency range | Output power(Max.) |
| 2400 to 2483.5 MHz<br>5150 to 5725 MHz<br>5725 to 5850 MHz | 18 dBm<br>18 dBm<br>12 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.<br>For consideration of the user, this device should be installed and operated with a minimum distance of 20 cm between the device and the body.<br>* IEEE 802.11ac is not available in all countries. | |

| Environment condition | |
|---|---|
| **Operating Temperature** | 0 °C to 40 °C |
| **Operating Humidity** | Less than 80 % |
| **Storage Temperature** | -20 °C to 60 °C |
| **Storage Humidity** | Less than 85 % |

- For information of the power supply and power consumption, refer to the label attached to the product.
  - The typical power consumption is measured in accordance with IEC 62087 or each country's energy regulations.
    * On some models, the label is inside the external device connection terminal cover.
    * Depending on the model or country, the typical power consumption may not be on label.

# 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*.
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# Licenses

HDMI™
HIGH-DEFINITION MULTIMEDIA INTERFACE

HEVC Advance™
Covered by Patents at patentlist.hevcadvance.com

POWERED BY
QuickSet
(Magic Remote supported models only)

# 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] → [Eco]
  - ⚙ → ⋮ → [Picture] → [Picture Mode Settings] → [OLED LIGHT] → Adjust to lower value
  - ⚙ → ⋮ → [Picture] → [OLED Screen Saver] → [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 [4-Way 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 hours 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] → [OLED Screen Saver] → [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.)

LG SIGNATURE

The model and serial number 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. _____