LG SIGNATURE

OLED TV Usage and Management

Model : OLED97M3*

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

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Warning! Safety instructions



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 this apparatus.

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 product 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 product to direct air conditioning.
 - Do not install in excessively dusty places.
 - On unsecured or high furniture, such as shelves or bookshelves.

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

- Ventilation
 - Install your product 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 product for a long period, the ventilation openings may become hot.

- Keep a distance of at least 10 cm away from other objects so that the vents of the Zero Connect Box are not blocked.
 - An increase in the internal temperature of the product may result in fire and product failure.
- 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 product 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 product.
- 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 product. Otherwise, the product 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.

- Never touch this apparatus or antenna during a lightning storm. You may be electrocuted.
- Make sure the power cord is connected securely to the product 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 product).
 - If you smell smoke or other odors coming from the product.
 - When lightning storms or when unused for long periods of time.

Even the product 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 product (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. Do not subject the adaptor to external shock. An impact could damage the adapter.
- To reduce the risk of fire or electrical shock, do not touch the product 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: Use the correct batteries for the product. 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 2 or more people to carry larger products. Do not press or put stress on the front panel of the product. 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.
- Do not hold the product screen, scratch the surface with a metal object, or apply impact to it.
 - The screen may break, resulting in personal injury or malfunction of the product.
- Do not push or kick the product.
- Do not place heavy objects on top of the product.
- Be careful if you have pets
- 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 product. Do not clean your product 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.

Note

Reading the User Guide

The user guide consists of a 'Quick User Guide,' enclosed with your TV purchase, and an 'Electronic User Guide,' stored as a programme on the TV.

Quick User Guide

Contains safety precautions that must be complied with when using the TV, component installation methods, and external device connection methods.

- You can also download or view the Quick User Guide on digital devices such as PCs and mobile phones. Search for the model name in the user guide search bar on the LG Electronics website.
- If you lose or damage the Quick User Guide, call the LG Electronics Customer Centre to request a replacement.

Electronic User Guide

To learn how to use various product features, press the remote control **Q.Settings button** ((**C**)) and see the Electronic User Guide stored on the TV.

 $\textcircled{O} \rightarrow [\textcircled{O}] \rightarrow [Support] \rightarrow [User Guide]$

- LG Electronics is not responsible for any damage to the product or injuries caused by using non-genuine LG products.
- TV components are subject to change without prior notice for performance upgrades. The model name or design may also be changed according to the circumstances or policies of the manufacturer.
- Images shown in this manual may differ from the actual product.

Separate Purchase

Magic Remote Control: A Magic remote control with smart features such as voice recognition and motion control

Stand (SR-M3DT97): A stand for placing the TV screen vertically on the floor

Wall mount: A wall mount for fixing the TV screen to the wall

External device connection cable: Cables for connecting external devices such as antennas to the TV

• To make separate purchases, contact the LG Electronics Customer Service Centre.

Before reading this manual

Understanding 60 GHz wireless

- Wireless TVs use 60 GHz radio waves to transmit high-quality video and audio wirelessly.
- The high bandwidth of 60 GHz frequencies is advantageous for large data transmission and has strong linearity but is greatly affected by obstacles.
- For the best TV viewing experience, the transmitting and receiving antennas should face each other, and there should be no obstacles in the transmission
 path.
- Transmission errors caused by obstacles are not malfunctions. Use the TV after properly installing it according to the recommended installation method.

Installing and Using

Examining the Appearance and Component Names of the Wireless TV (TV Screen + Zero Connect Box)

TV Screen



Zero Connect Box (WM23EA)

It is a device that wirelessly transmits video and audio signals to the TV screen by connecting an external antenna or set-top box.







Rear view

1 Wireless signal receiver & Power button

This part receives the video and audio signals sent by the Zero Connect Box. The power button is used to turn the TV screen on, switch to Always Ready mode, and pair with the Zero Connect Box.

② Sliding button

The transmission direction of the Zero Connect Box antenna can be adjusted within a range of 0 to 50° up or down.

3 Dial

The wireless signal transmitter of the Zero Connect Box can be adjusted within a 90° range left or right.

④ Top LED

- Indicates the strength and status of the wireless signal.
- Blue (good), Green (normal), Yellow (weak), Red blinking (bad)

(5) Wireless signal transmitter

The part with the antenna that transmits video and audio to the TV screen. The antenna's transmission direction can be adjusted up, down, left, or right using the sliding button and the dial.

6 Front LED

Indicates the power or operation status of the Zero Connect Box.

⑦ Voice recognition unit

The part that recognises the user's voice. It may not function properly if this part is blocked or if commands are given from the side or back of the Zero Connect Box.

8 External connection terminal

You can connect the Zero Connect Box's power cord and external video/audio devices such as external antennas and set-top boxes.

9 Pairing button

The product comes pre-paired, but if the normal screen does not appear, you need to pair it again.

- To re-pair, press the pairing button on the back of the Zero Connect Box for 5 seconds. The top LED flashes white.
- If you press and hold the power button on the TV Screen for 5 seconds, the standby indicator of the screen's power unit flashes white. Once pairing is complete, the top LED on the Zero Connect Box changes to a colour indicating signal strength.

Installing the TV Screen

Installing as a stand

This method involves setting up the TV screen upright on the floor using a stand.

 Ensure a minimum distance of 30 cm between the TV screen and the ceiling, side walls, and the stand and the rear wall when installing.

Note

- If you pull the TV screen forward, it may fall and lead to damage or injury; therefore, ensure that it is secured to the wall.
- Install the screws on the back of the TV screen and the fixing hooks on the wall at the same level to prevent tilting. Then, use a sturdy strap to tie and secure the screws and fixing hook together. (Fixing hooks, screws, and straps are sold separately.)

A Warning

- Do not apply foreign substances (oils, lubricants, etc.) to the screw parts when assembling the product. Doing so may cause damage to the product.
- Ensure that all screws provided are used when assembling the stand, and check that they are tightened fully. Incorrect assembly may cause the TV to tilt or fall, resulting in damage.
- Tightening the screws with excessive force may cause them to come off due to abrasion of the screw joint.

≜ Caution

- Since the TV screen is heavy, at least two people should lift it vertically when unpacking or moving it.
- Do not move while holding the cable holder or cable organisation band.
 Doing so may damage parts or the TV screen, or may cause injury.
 (Depending on model)
- Do not forcibly tilt the TV screen. Doing so may cause it to fall and result in damage or injury.
- Take care to avoid getting your hands or fingers caught in the stand and injuring yourself.

Installing as a wall mount

This method involves installing the TV screen horizontally on the wall using a wall mount. Refer to the wall-mounting bracket guide provided separately for detailed information.

- To install the support, ensure that the wall is made of a material that can endure the weight of the TV Screen, such as concrete, natural stone, or masonry brick.
- Leave sufficient space around the product so that the ventilation vents of the TV screen are not blocked.

Note

- In the case of adhesive wall mounts, the TV screen may not adhere to the wall, depending on the condition of the wall.
- LG wall mount products are recommended. If you use a wall mount not provided by LG, ensure that it provides sufficient distance from the wall.
- When using a fixed wall mount, connect the cables before installing the TV screen.
- You can organise the TV screen power cord using the dedicated cable management.

≜ Caution

- When installing the TV screen, ensure that you wear work gloves. Installing with unprotected hands may result in injury.
- If you installed your TV screen with an adhesive wall mount, ensure that it is used only when adhered to the wall. The TV screen may wobble or tilt, causing damage.
- Do not install the wall mount in a place where it may come into contact with oil or oil vapour. Doing so may damage the TV screen.

Installing Zero Connect Box

1. Choosing the Installation Location

The Zero Connect Box can be installed in front, beside, below, or behind the TV screen. Follow the user guide for proper installation.

- Do not place obstacles between the TV Screen and Zero Connect Box.
 Doing so may interfere with wireless signal transmission and voice recognition functions.
- Install the Zero Connect Box lower than the wireless signal receiver of the TV screen.
- The transmission range of the Zero Connect Box varies depending on the direction in which it faces the TV screen. Refer to the figure below and install it within the appropriate distance.



Note

- Do not install two wireless TVs or Zero Connect Boxes in the same room. They may interfere with one another.
- Do not place electronic devices or objects on top of the Zero Connect Box. Doing so may cause interference in transmission, resulting in screen display failure.
- When using a sound bar, ensure that it does not obstruct the wireless signal receiver of the TV screen.

2. Adjusting the Reception Direction (Left/ Right & Up/Down)

• Dial

If the front LED of the Zero Connect Box is not facing the TV screen wireless signal receiver, you can adjust the wireless signal transmission direction of the Zero Connect Box from 0° to 90° left and right by turning the dial.



Sliding button

If the wireless signal transmission direction of the Zero Connect Box is not toward the wireless signal receiver of the TV screen, you can adjust the wireless signal transmission direction from 0° to 50° up and down by adjusting the sliding button.



3. Checking Wireless Signal Strength

After completing the basic placement and settings, turn on the TV and check the signal strength through the colour of the top LED of the Zero Connect Box. The colours are blue (good), green (moderate), yellow (weak), and red (disconnected).



Note

- If the top LED turns red, check for obstacles in the transmission path and ensure that the product is installed properly in the correct location.
- If the top LED is yellow or green, use the dial and sliding button to verify that the reception direction of the Zero Connect Box is correctly set.
- The screen may not display after cleaning or moving the product as the installation environment may have changed. Check the colour of the top LED of the Zero Connect Box and adjust accordingly.

Recommended installation methods

When Installing in a Straight Line in Front of the TV Screen

- 1. Before turning on the TV, ensure that the front LED of the Zero Connect Box is facing the **wireless signal receiver of the TV screen**.
- If the front LED is not facing the wireless signal receiver of the TV screen, turn the dial on the top of the Zero Connect Box left or right to adjust the direction of the sliding button to face the wireless signal receiver.
- 3. Adjust the sliding button on the Zero Connect Box towards the top LED.
 - Once the dial and sliding button adjustments are completed, the signal transmission and reception path should be in the green direction shown in the figure.
- 4. After turning on the TV, check if the top LED colour of the Zero Connect Box is blue.
 - If the LED is not blue, adjust the dial and sliding button further to optimise the signal condition.
 - · Ensure that there are no obstacles in the antenna transmission path.
 - Install the Zero Connect Box within 10 m of the TV screen. (provided that there are no obstacles in the way.)
 - It is recommended that the frontal installation angle between the Zero Connect Box and the TV Screen be within 45° left and right. Refer to the diagonal/side installation image if the angle is over 45°.



When Installing Diagonally in Front of the TV Screen

- Before turning on the TV, ensure that the front LED of the Zero Connect Box is facing the wireless signal receiver of the TV screen.
- If the front LED is not facing the wireless signal receiver of the TV screen, turn the dial on the top of the Zero Connect Box left or right to adjust the direction of the sliding button to face the wireless signal receiver.
- 3. Adjust the sliding button on the Zero Connect Box towards the top LED.
 - Once the dial and sliding button adjustments are completed, the signal transmission and reception path should be in the green direction shown in the figure.
- 4. After turning on the TV, check if the top LED colour of the Zero Connect Box is blue.
 - If the LED is not blue, adjust the dial and sliding button further to optimise the signal condition.
 - Ensure that there are no obstacles in the antenna transmission path.
 - Install the Zero Connect Box within 5 m of the TV screen. (provided that there are no obstacles in the way.)



When Installing Beside the TV Screen

- Before turning on the TV, ensure that the front LED of the Zero Connect Box is facing the wireless signal receiver of the TV screen.
- If the front LED is not facing the wireless signal receiver of the TV screen, turn the dial on the top of the Zero Connect Box left or right to adjust the direction of the sliding button to face the wireless signal receiver.
 - If the front LED of the Zero Connect Box faces the viewing direction, turn the dial left or right until it is at a 90° angle.
- 3. Adjust the sliding button on the Zero Connect Box to the centre.
- Once the dial and sliding button adjustments are completed, the signal transmission and reception path should be in the green direction shown in the figure.
- 4. After turning on the TV, check if the top LED colour of the Zero Connect Box is blue.
 - If the LED is not blue, adjust the dial and sliding button further to optimise the signal condition.
 - Ensure that there are no obstacles in the antenna transmission path.
 - Install the Zero Connect Box within 3 m of the TV screen. (provided that there are no obstacles in the way.)
 - When using a floor stand, you need to adjust the position as wireless interference may occur due to the structure of the stand. (Adjust the position so that the stand does not cover the wireless transmitter of the Zero Connect Box.)

When Installing Below the TV Screen

- Before turning on the TV, ensure that the front LED of the Zero Connect Box is aimed at the viewer facing the TV screen.
- If the front LED of the Zero Connect Box is not facing the viewer in front of the TV Screen, turn the dial on the top of the box left or right to adjust the direction of the sliding button with the viewer.
- 3. Adjust the sliding button on the Zero Connect Box in the **opposite direction of the top LED**.
 - Once the dial and sliding button adjustments are completed, the signal transmission and reception path should be in the green direction shown in the figure.
- 4. After turning on the TV, check if the top LED colour of the Zero Connect Box is blue.
 - If the LED is not blue, adjust the dial and sliding button further to optimise the signal condition.
 - Ensure that there are no obstacles in the antenna transmission path.
 - Install the Zero Connect Box within 3 m of the TV screen. (provided that there are no obstacles in the way.)





When Installing Behind the TV Screen

- Place the Zero Connect Box lower than the wireless receiver of the TV screen.
- 2. Before turning on the TV, ensure that the front LED of the Zero Connect Box is facing the wireless signal receiver of the TV screen.
- If the front LED is not facing the wireless signal receiver of the TV screen, turn the dial on the top of the Zero Connect Box left or right to adjust the direction of the sliding button to face the wireless signal receiver.
- 4. Adjust the sliding button on the Zero Connect Box in the **opposite direction of the top LED**.
 - Once the dial and sliding button adjustments are completed, the signal transmission and reception path should be in the green direction shown in the figure.
- 5. After turning on the TV, check if the top LED colour of the Zero Connect Box is blue.
 - If the LED is not blue, adjust the dial and sliding button further to optimise the signal condition.
 - Ensure that there are no obstacles in the antenna transmission path.
 - Install the Zero Connect Box within 1 m of the TV screen. (provided that there are no obstacles in the way.)
 - Position the Zero Connect Box between the legs of the floor stand so it is not obstructed.

Connecting External Terminals

You can connect external devices such as cables, HDMI, and set-top boxes to the TV. Press the **Input button** (^{CC}) on the remote control, select [Home Hub], and find the device you wish to connect from the menu displayed on the screen.

- When used with an external device using a 60 GHz frequency, the screen may fail to display due to mutual interference.
- Set the appropriate resolution and frequency for the connected device. Failure to do so may cause straining of the eyes.
- The detailed installation method may vary depending on the TV model.

Installing Antenna/Cable

- Insert the coaxial cable that transmits audio/video signals into the antenna/cable input terminal or antenna input terminal on the back of the Zero Connect Box.
- Be careful not to bend the copper wire when connecting the coaxial cable.
- Use a signal amplifier if the signal is weak.
- When using one antenna for two or more TVs, use a signal splitter.

Note

 Do not apply oil or lubricant to the screws used during installation. Doing so may cause the TV to malfunction.



Satellite dish

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

HDMI

- Use an HDMI certified cable (less than 3 m) with the HDMI logo (high-Speed HDMI®/^m cable).
- Turn off the power of the TV and all connected devices, and unplug them from the socket before connecting the HDMI cable.
- Connecting a device that supports the HDMI Ultra HD Deep Colour feature to the TV will provide a clearer image. If you connect a device that does not support this feature and enable the feature, it may not work properly. If problems arise, change the settings.

Note

- HDMI audio support formats may vary depending on the TV model.
- HDMI devices should have bezels less than 10 mm thick and 18 mm width.

USB / USB Hub

If the USB hub connected to the TV does not recognise USB devices, connect the USB directly to the TV terminal.

Note

- If the shapes of the TV terminal and the USB device do not match, use an extension cable that supports USB 2.0.
- USB devices should have bezels less than 10 mm thick and 18 mm width.

IR Blaster

This is an infrared transmitter that allows smoother control of devices such as set-top boxes, Blu-ray players, DVD players, sound bars, and gaming consoles.

- If the Zero Connect Box is installed in a location other than the bottom
 of the TV, external devices may not be controlled smoothly with the TV
 remote control; therefore, connecting an IR blaster is recommended.
- · Controlling the IR blaster requires an integrated remote control setting.
- Secure both ends of the IR blaster to the front (receiver) of the external device remote control using the tape provided.

Wired LAN

- When connecting to a wired LAN, use a CAT 7 cable with high-speed Internet transmission. (Only when LAN port is provided.)
- TV audio can be transmitted to the sound bar (external audio device). When transmitting via wired methods (optical digital, HDMI ARC), connect to the rear external terminal of the Zero Connect Box, and when transmitting wirelessly (LG soundbar supporting the WOWCAST feature), use the WOWCAST feature. (Depending on country)

Using the TV

Using the power button

Press the **power button** ((b)) located on the bottom of the TV briefly to turn the screen on and hold it to turn off all functions and the screen.

- Only use the power button when the TV screen and the Zero Connect Box are connected.
- The shape and location of the power button may vary depending on the TV model.
- When you turn on the power for the first time after purchasing the product, it may take about 1 minute for the screen to turn on due to initialisation.

Using hands-free voice control

- To use hands-free voice control, ensure that the front LED of the Zero Connect Box is facing the user, and turn the dial left or right so that the sliding button points towards the wireless receiver of the TV screen.
- Press the remote control Q.Settings button ((3)) to turn on hands-free voice control. The feature settings path may vary depending on the TV model.

 $() \rightarrow [] \rightarrow [General] \rightarrow [Al Service] \rightarrow [Voice Recognition Settings] \rightarrow [Hands-free Voice Control]$

Protecting the OLED TV Screen

- Unlike general LED/LCD TVs, OLED TVs can display perfect black and produce clear images without light blurring.
- Due to the characteristics of OLED materials that provide high-resolution display, image retention may occur or persist, leaving an afterimage on the screen.
- Image retention is a common phenomenon in all OLED panels. Using the recommended viewing mode can minimise image retention.
- Avoid displaying images that are likely to cause image retention, and follow the recommendations.

Images that are likely to cause image retention

- Screen with black areas on one or more sides on the top, bottom, left or right
- · Images whose aspect ratio is 4:3 or 21:9.
- Screens with images fixed for a long time, such as channel numbers, broadcast station logos, game console icons, or set-top box menus
- Other static screens or screens that repeat the same scene

Recommendations for Minimising Image Retention

- When watching TV for extended periods, press the remote control **Q.Settings button** (③) and configure the screen as follows.
 - 1. $(\bigcirc \rightarrow [\textcircled{}]) \rightarrow [Picture] \rightarrow [Select Mode] \rightarrow [Auto Power Save]$
 - 2. [Advanced Settings] \rightarrow [Brightness] \rightarrow [OLED Pixel Brightness] \rightarrow Adjusting to Low
 - 3. $(\textcircled{3}) \rightarrow [(\textcircled{3})] \rightarrow [General] \rightarrow [OLED Care] \rightarrow [OLED Panel Care] \rightarrow [Adjust Logo Brightness] \rightarrow [High]$
- If there are black areas on one or more of the top, bottom, left, or right sides of the screen, press the remote control Q.Settings button (()) to remove the black areas before watching.
- $(\bigcirc \rightarrow (\bigcirc)) \rightarrow (Picture] \rightarrow (Aspect Ratio) \rightarrow (User Selection) \rightarrow (Vertical Zoom) or [4-Way Zoom]$
- Turn off the menu for setting up external devices such as set-top boxes so that it is not displayed on the screen for a prolonged period.

Note

- OLED TVs automatically lower screen brightness when a fixed image is received for an extended period and restore brightness once the fixed image is gone.
- This is one of the features of the TV for minimising image retention and is not a malfunction.

Running Pixel Cleaning

OLED TVs are equipped with a pixel cleaning feature that detects screen conditions on its own to prevent retention.

- Pixel cleaning automatically calculates the optimal execution time based on cumulative viewing time and runs automatically when you turn off the TV.
- Horizontal lines may appear at the top and bottom of the screen during pixel cleaning.
- The pixel cleaning feature works when the TV is connected to the power cord and main power.
- Pixel cleaning can also be run manually by pressing the remote control Q.Settings button (^(C)).
- () → () → [General] → [OLED Care] → [OLED Panel Care] → [Pixel Cleaning]

Troubleshooting

- If you notice any of the problems below while using the product, please check again. It may not be a fault.
- Before contacting the LG Electronics Service Centre, press the 🛞 button on the remote control three times in TV/HDMI input mode to check the product model name and serial number. You will be able to receive faster assistance.

Power and Screen	
The product does not turn on.	 » Is the power cord plugged in properly? Check if the power cord is plugged properly into the product and socket. » Is there a problem with the socket? Plug the power plug of another device into the socket where the product was plugged in to check if the socket is functioning properly.
The product turns off suddenly.	 » Is the sleep timer set? (③) → [(③)] → [General] → [System] → [Time & Timer] → [Timers] → Set [Sleep Timer] / [Power Off Time] to [Off] / [Off]. » Check if the external devices are working together. Stop using the external devices you are using together and check if the TV is working normally. » Did the auto-off feature work? This product is equipped with an auto-off function that automatically turns off the power if the remote control is not used for 15 minutes without an input signal.
Dots on the screen.	 » Do you see white dots, bright dots, dark dots, or flickering dots on the screen? This product is an advanced product containing millions of pixels. You may see flickering dots of about 1/1,000,000 (1 PPM). These are not considered product defects or malfunctions. White Dots: dots that appear bright, Bright Dots: dots that appear brighter than normal image Dark Dots: dots which part of a letter or an object is invisible or blurry Flickering Dots: Dots that flicker

7ero	Connect	Box	Connection
Leiv	connect	DUA	connection

A power connection image appears on the screen.	» Is the Zero Connect Box connected properly? Ensure that the Zero Connect Box power cord is plugged firmly into the socket.	
A Zero Connect Box connection image appears on the screen.	 » Are there any objects interfering with the wireless signal transmission? Clear any objects between the TV screen and the Zero Connect Box. » Is the wireless signal from the Zero Connect Box properly oriented? Adjust the dial and sliding box on top of the Zero Connect Box according to the recommended installation method for each location of the Zero Connect Box. 	

Hands-free Voice Control				
Voice recognition is not working well.	 » Is the Hands-free Voice Control feature turned on? 			

Motion Detection				
Motion Detection In Always Ready mode, the motion sensor activates unnecessarily or fails to activate. (Depending on model)	 » Is the motion sensor clean? The motion sensor is located at the bottom centre of the TV screen and may not function properly if covered with foreign substances. Wipe it clean with a soft cloth. » Is the surrounding area too bright or too dark? Maintain a suitable brightness level in the area where the product is installed. » Is there an object interfering with the motion sensor detection? Clear any objects in front of the TV screen. » Is the motion sensor too sensitive or insensitive? The motion sensor too sensitive or insensitive? 			
	The motion sensor can activate when detecting changes in lighting, movements of pets, robot vacuum cleaners, and other objects as they are recognised as motions. $\bigcirc \rightarrow [] \rightarrow [General] \rightarrow [Always Ready] \rightarrow Select [Enable the function], turn off the screen, and then stop using the motion sensor or adjust its sensitivity in [Always Ready Settings].$			

Noise				
There is noise coming from the	» Do you hear a "ticking" sound?			
product.	This is the sound of the plastic deforming due to temperature and humidity. It is a common phenomenon i plastic products like furniture and cars; therefore, it is not a cause for concern.			
	» Is the noise related to electricity?			
	The sound is caused by the high-speed switching circuit that supplies current to the product, and it does no affect the functionality of the product.			
	» Do you hear the fan noise from the Zero Connect Box?			
	This is a normal sound created to dissipate heat generated inside the product.			
	* LG Electronics manages product production with strict standards, and noise below a certain level is not considered a product defect or malfunction.			

Magic Remote Control				
The remote control is not working.	 » Is there a connection problem with the product? Press and hold the			

Other

If any of the following issues occur, turn off the product, unplug the power plug from the socket and contact the LG Electronics Service Centre for inspection. Do not repair the product yourself.

- If the product fails to display images or produce sound, even when the power is turned on
- If the product continues to display images or produce sound, even when the power is turned off
- If there is smoke or a burning smell coming from the product
- If water or a foreign substance gets into the product
- If the screen image appears to be cut off
- If the product makes repetitive sounds, such as a "buzzing" or "cracking" noise
- If there is any other problem or malfunction with the product

Product information

		Digital TV		DVB-T/T2, DVB-C, DVB-S/S2
	Television system	Analogue TV		PAL B/B, PAL B/G, PAL D/K, PAL-I, SECAM B/G, SECAM D/K, NTSC-M
	Programme coverage		DVB-S/S2	950 ~ 2,150 MHz
			DVB-C	46 ~ 890 MHz
Broadcasting Specifications (Depending on country)		Digital TV	DVB-T/T2	VHF III : 174 ~ 230 MHz UHF IV : 470 ~ 606 MHz UHF V : 606 ~ 862 MHz S Band II : 230 ~ 300 MHz S Band III : 300 ~ 470 MHz
		Analogue TV		46 ~ 862 MHz
	Maximum number of storable programmes	DVB-S/S2		6,000
		DVB-C DVB-T/T2 Analogue TV		3,000
	External antenna impedance	75 Ω		75 Ω
	CI Module (W x H x D)	100.0 mm x 55.0 mm x 5.0 mm		5.0 mm x 5.0 mm
	Operating Temperature /	0 °C to 40 °C /		
Environment Condition	Operating Humidity	Less than 80 %		han 80 %
	Storage Temperature /	-20 °C to 60 °C /		to 60 °C /
	Storage Humidity	Less than 85 %		han 85 %
Conditions for Wall Mount Installation	Tilt Angle	0° - 15° (This specification applies only to products with an adjustable wall mount angle.)		
Wireless Reception Conditions	Distance	3 -	10 m (Only under co	nditions with no obstacles)
Power requirement		AC 200-240 V~ 50/60 Hz		

• 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 that is contained in this product, under GPL, LGPL, MPL, and other open source licenses that have the obligation to disclose source code, and to access all referred license terms, copyright notices and other relevant documents please visit https://opensource.lge.com.

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 to anyone in receipt of this information for a period of three years after our last shipment of this product.

Licenses



HIGH-DEFINITION MULTIMEDIA INTERFACE



(Magic Remote supported models only)



Using Magic Remote Control

ሁ	Power Turns the TV on or off.	Wicrophone	٩	STB Power You can turn your set-top box on
LIST	Accesses the saved programmes list.			or off by adding the set-top box to the universal remote control for your TV.
	Number buttons Enters numbers.	U : P		More Actions Displays more remote control
9**	Accesses the [Quick Help].			functions.
0**	Accesses the [Edit Quick Access]. - [Edit Quick Access] is a feature that allows you	123		More Actions Audio descriptions function will be enabled.
	to enter a specified app or Live TV directly by pressing and holding the number buttons.	456	×	Programme buttons Scrolls through the saved programmes.
GUIDE	Accesses the [Guide].		e	Input Changes the input source.
	Accesses the saved programmes list.		e"	Input Accesses the [Home Hub].
4 1	Volume buttons Adjusts the volume level.		۲	up/down/left/right Press the up, down, left or right button to scroll the menu. If you press
$(\label{eq:states})$	Mute Mutes all sounds.			the up, down, left or right button while the
(K)**	Mute Accesses the [Accessibility] menu.			pointer is in use, the pointer will disappear from the screen and Magic Remote will operate like
٩	Voice recognition Network connection is required to use the voice recognition function.			a general remote control. To display the pointer on the screen again, shake Magic Remote to the left and right.
	recommended services may not be available in some countries.)	(\bigcirc)	0	Wheel (OK) Press the centre of \bigcirc button to select a menu. You can change programmes by
**	Voice recognition Speak while pressing and holding the button to use the voice recognition feature.			 using U button. Do not move the wheel on the remote control right or left. This may cause the malfunction
â	Home Accesses the Home menu.			of the product.
ô"	Home Launches the last used apps.			You can run the [Magic Explorer] feature when
<u>م</u>	Back Returns to the previous level.			the pointer colour is changed to purple. If
***	Back The screen displayed on the TV is closed and the home menu appears.			watching a programme, press and hold down the pointer onto the video. When using [TV Guide], [Settinge] [Spectral land as [Art Collogi] areas
	These access special functions in some menus.			and hold down on the text.
	Red button Rups the record function		¢	Q. Settings Accesses the Quick Settings.
	Various convices button Connects to various		¢	Q. Settings Displays the All Settings menu.
	services such as streaming and voice search.		•	

The descriptions in this manual are based on the buttons on the remote control. Please read this manual carefully and use the TV correctly. (Some buttons and services may not be provided depending on models or regions.)

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 (a) (Home) and (b) (Q. Settings) buttons for more than 5 seconds to disconnect and re-register the Magic Remote at the same time.

\mathbb{A}

 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.

Using Always Ready

(Depending on model)

You can operate the TV and connect to Bluetooth with direct voice recognition while the power is off.

- * ∅ → [𝔅] → [General] → [Always Ready], setting [Enable the function] to on.
- * Pressing the button while watching TV switches the screen to [Always Ready] that is turned on, and pressing the button once more turns the screen to [Always Ready] that is turned off.
- * Press the () Wheel (OK) button to display the wallpaper when the screen is in [Always Ready] that is turned off, and press the () button to watch TV.

🔊 Note

- Using Always Ready may increase energy consumption.
- For models with motion sensors, such as M3, if you set screen on with the motion sensor, the TV will turn on by recognising the motion.
- For more information about the feature, refer to the $\bigcirc \rightarrow [\bigcirc] \rightarrow [$ Support $] \rightarrow [$ User Guide $] \rightarrow [$ Troubleshooting $] \rightarrow [$ Learn More About Always Ready].

Connecting Smart Devices using NFC Tagging

NFC is technology that uses Near Field Communication (13.56 MHz), allowing you to conveniently send and receive information without separate settings. By bringing a smart device near the NFC-enabled remote control, you can install the LG ThinQ app and connect the device to the TV.

- Turn on NFC in the smart device's settings. To use NFC with Android devices, set the NFC option to enable 'read/write tags' in the smart device's settings. The NFC settings may vary depending on the device.
- 2. Bring the smart device near the 💽 (NFC) on the remote control. The required distance for NFC tagging is about 1 cm.
- 3. Follow the instructions to install the LG ThinQ app on your smart device.
- Retagging the smart device to the remote control allows you to conveniently access various features on the connected TV through the LG ThinQ app.

🕏 Note

- This feature is available for NFC-enabled smart devices only.
- This feature is only available if the remote control has an NFC logo.

Specifications

Specifications (PM23GN)			
	Frequency range	Output Power (Max.)	
Bluetooth	2,400 to 2,483.5 MHz	8 dBm	
NFC	13.553 to 13.567 MHz	-9.95 dBuA/m @ 10 m	

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.