



User Guide

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

Contents

Getting Started with LG webOS TV

Using the Home Feature of the LG webOS TV	5
Manage LG webOS TV Home	6
Watching Broadcast TV	6
Connecting to the Network	7
LG Membership	9
Managing Your LG Account	10
About User Guide	10

How to Operate TV

Learn More about Magic Remote	10
Pairing the Magic Remote	11
Re-registering the Magic Remote	11
Using the Remote Control Button	11
Using the Magic Remote	12
Using the Remote Control Button	13
Using the Magic Remote	14
Using TV features with Hands-free Voice Control	15
Using TV Functions through Speech	17
Using Speech to Text	18
Access voice recognition using Google Assistant	20
Access voice recognition using Amazon Alexa	20
To View More Features of the Remote Control	20
Automatically Setting the Universal Remote Control	21
Using Apps Quickly and Easily with QUICK ACCESS	22
Using SIMPLINK	23
Shortcuts to Accessibility	25
Using a USB Wired/Wireless Mouse	25
Using a USB Wired/Wireless Keyboard	25
Using a Gamepad	25
Connecting Bluetooth Input Devices	26

Enjoy Live TV

Using Live Menu	26
Viewing TV Guide	27
Viewing Programme Information	28
Using Live Playback (Real-time Playback)	29
Using the Recording Functions	30
Using the TV Scheduler	32

Managing Recordings	34
Playing Recordings	34
Watching Internet Programme	35
To Use Teletext	36
Special Teletext Function	37
To Set Teletext Language	38
CI Information	38
Learn More about HbbTV	39
To Use HbbTV	39

Apps and Content

Installing Apps	40
Content Recommendation	41
Content Search	41

Connecting External Devices

Using Home Dashboard	42
Connecting Home IoT Devices	44
Connecting Smart Devices	45
Connecting Smart Devices using NFC Tagging	46
To See the Mobile Device's Screen on the TV	47
Playing Sound from a Smart Device through the TV's Speakers	48
Connecting USB	49
Tips for Using a USB Storage Device	49
Using the Media Player	50
Viewing Photos	51
Playing Videos	51
Listening to Music	52
Watch content saved in your PC on the TV	53
To See the PC Screen on the TV	55

Making the Most of Smart TV

Making the Most of Art Gallery	56
Using the Web Browser	56
To use Magic Explorer	60
Using Sports Alert	60
Using the Live Plus Function	61

Settings

To Use Setting Function Quickly	61
---------------------------------------	----

Picture	62
Sound	72
AI Service	80
Programmes	85
Network	91
Devices	93
System	96
Accessibility	102
Support	105

Troubleshooting

Perform Check-up with the Quick Help	108
Troubleshooting Power/Remote Control Issues	109
Troubleshooting Screen Issues	110
Troubleshooting Sound Issues	113
Troubleshooting PC Connection Issues	114
Troubleshooting Movie Playback Issues	115
Troubleshooting Recording Issues	116
Troubleshooting Network Connection Issues	117
Troubleshooting LG Account Issues	119
Troubleshooting Contents Issues	119
Troubleshooting Internet Browser Issues	119

Being Aware of the Information

Supported photo file formats	120
Supported video file formats	121
Cautions for Video Playback	123
Supported music file formats	124
HDMI-DTV Supported Mode	125
HDMI-PC Supported Mode	128
License Information	131

Getting Started with LG webOS TV

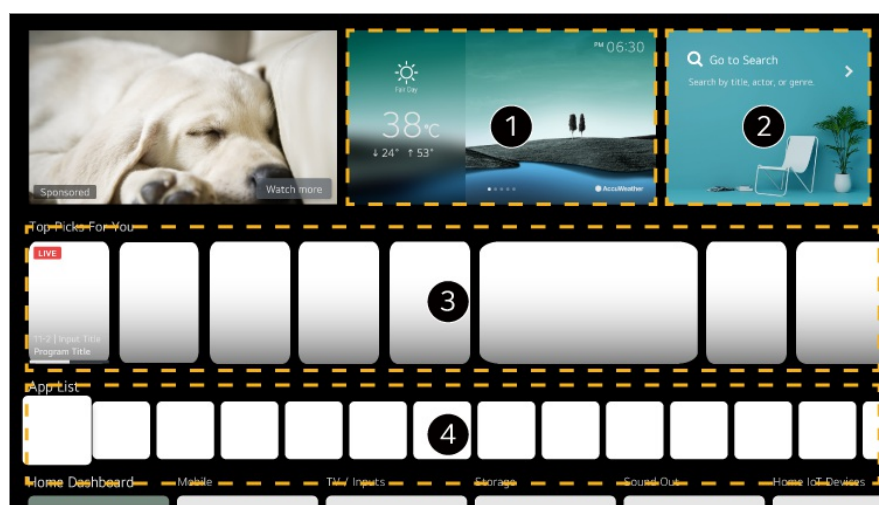
Using the Home Feature of the LG webOS TV

You can open the Home screen by pressing the  button on your remote control.

You can use more features by scrolling the **Wheel (OK)** button on the Magic Remote.

- When using a standard remote control, press the  button on the remote control.

You can open apps and content or use various features of the smart TV.



- 1 You can check weather information and useful TV features.

- 2 Launch **Search**.

To see the details, click the **Apps and Content** → **Content Search** in **User Guide**.

- 3 You can get recommendations from various channels and programmes.

If you are currently watching a programme, you can press the first item to return to that channel.

- You must log in to your LG account to get personalized content recommendations.
- You must connect to the network to use the recommendation feature.

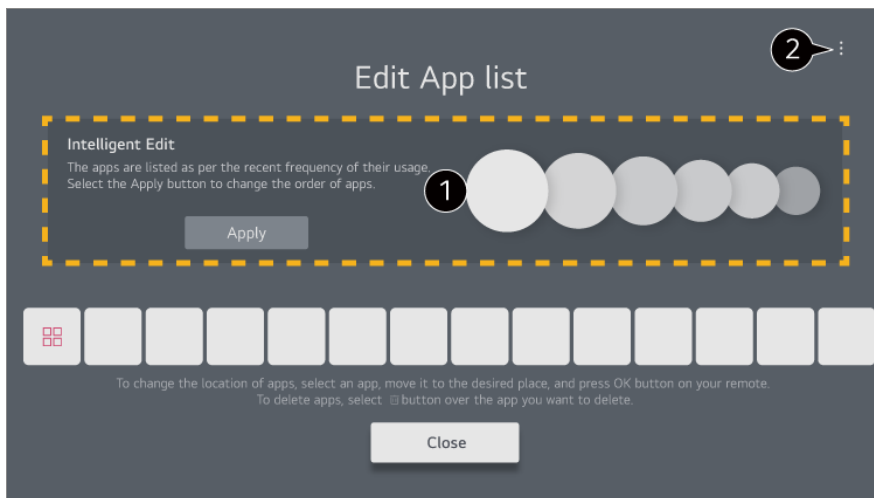
- 4 You can run, move, and delete the apps installed on your TV.

- **App List** and **Top Picks For You** are automatically shown on the screen each time the TV is turned on. To disable this feature, go to  →  → **General** → **System** → **Additional Settings** → **Home Settings** and set **Home Auto Launch** to **Off**.
- The availability of and access to Contents and Services in LGE Device are subject to change at any time without prior notice.
- Available features vary depending on the region or service.

Manage LG webOS TV Home

You can view a list of all apps installed on your TV, change their positions, or delete them.

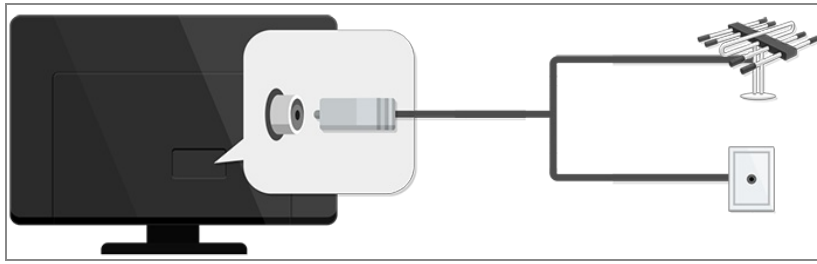
- 01 Select the app you want to edit, and then press and hold the **Wheel (OK)** button on the remote control to enter the **Edit App list** mode.
Alternatively, you can press the **Edit App list** button located at the end of the **App List**.
 - 02 Move to the desired position and press the **Wheel (OK)** button to change the position of the app.
To delete an app, select the  icon above the app.
 - You can also move apps with the   buttons on your remote control.
 - 03 After editing is complete, click **Close** at the bottom of the screen to exit the Edit App mode.
- Default TV apps cannot be deleted.



- ① The apps will be automatically arranged according to their frequency of use.
- ② **Reset App Order** : Resets the order of items in the app list.
Delete Usage Data : It resets the content view history and the app usage history. If you reset them, it takes some time to receive recommendations for contents again.
User Guide : Move to the **User Guide** app.

Watching Broadcast TV

- 01 Connect the broadcast antenna to the TV.



02 Launch  →  → **General** → **Programmes** → **Programme Tuning (Programme Tuning & Settings)** → **Auto Tuning**.

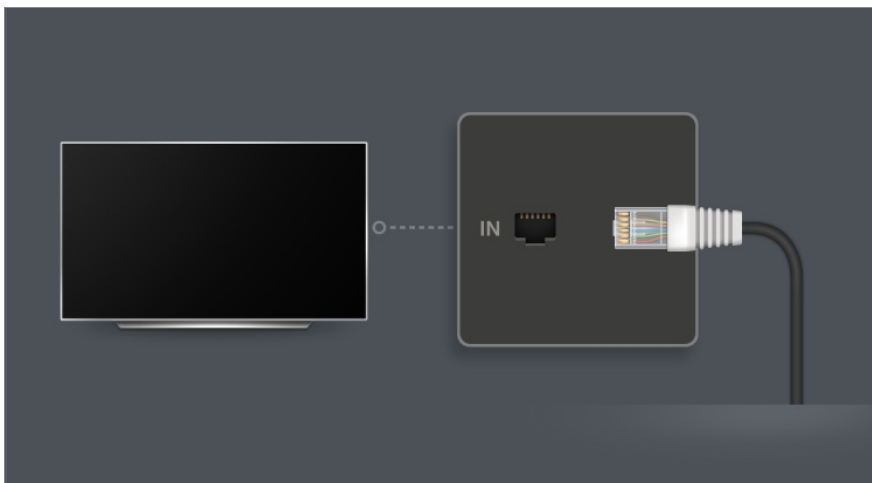
Finds and adds only programmes being broadcast.

- You can also connect a piece of equipment that can receive broadcasting such as a set-top box instead of the antenna.
Launch  →  → **General** → **Devices** → **External Devices** → **Universal Control Settings**.
- To solve a problem related to this function, refer to the **Troubleshooting** section of **User Guide**.

Connecting to the Network

If you configure settings for the network, you can use various services such as online contents and applications.

Setting a Wired Network



01 Connect the LAN port of the TV and the router using a LAN cable.
The router should be connected to the Internet beforehand.

- If the router supports DHCP, the TV is automatically connected to the network when you connect the TV to the network with a LAN cable.

If the Network Is Not Automatically Connected

- 02 Press the  button on the remote control.
- 03 Select  → **General** → **Network** → **Wired Connection (Ethernet)**.
To see the details, click the **Settings** → **Network** → **Wired Connection (Ethernet)** in **User Guide**.

Setting a Wireless Network



- 01 Turn on the power of the router connected to the Internet.
- 02 Press the  button on the remote control.
- 03 Select  → **General** → **Network** → **Wi-Fi Connection**.
- 04 When the network search is complete, the list of networks available for connection is shown.
- 05 Select a network to connect.
If your wireless LAN router is password protected, enter the password configured for the router.
To see the details, click the **Settings** → **Network** → **Wi-Fi Connection** in **User Guide**.

Network Setting Warnings

- Use standard LAN cable (connect to Cat7 or higher with RJ45 connector, 10 Base-T, or 100 Base TX LAN port).
- Resetting the router may cause network connection problems. In this case, the router will operate normally if you turn it off and disconnect the TV, and then reconnect and turn it on.
- LG Electronics is not responsible for network connectivity or operation failure due to problems such as equipment failure or disconnected lines.

- The network connection may not work properly because of network settings or the Internet service provider.
- DSL service must use a DSL modem; and cable service must use a cable modem. Since only a limited number of network connections may be available, TV network setting may not be used depending on the contract with Internet service provider. (If the contract does not allow more than one device per line, only the already-connected PC may be used.)
- A wireless network can experience interference from other devices that use the 2.4 GHz frequency (wireless phone, Bluetooth device, or microwave oven). Although interference can also happen when using the 5 GHz frequency, it is less likely to occur.
- The wireless environment can make wireless network service run slowly.
- Using several wireless devices at the same time can slow your network.
- The access point device must support wireless connections and wireless connection feature must be enabled on the device to have AP (access point) connection. Contact the service provider for availability of wireless connections on the access point.
- Check SSID and security settings of the AP. Refer to the appropriate documentation for SSID and security settings of the AP.
- Invalid settings of network devices (wired/wireless line sharer, hub) can cause the TV to operate slowly or not operate properly. Install the devices correctly according to the appropriate manual and network.
- The connection method may differ depending on the AP manufacturer.
- To solve a problem related to this function, refer to the **Troubleshooting** section of **User Guide**.

LG Membership

You can receive customised recommendations and utilise various app services with your **LG Account**.

In **LG Account**, you can sign up for LG membership with an email address.

Alternatively, you can create and log in to an LG membership using the ID and password of an external service account.

- 01 Select  →  → **General** → **System** → **LG Account**.
- 02 Choose one from the three options, **Sign in with the LG ThinQ App**/**Sign in with the Web Browser**/**Sign in with the TV remote**, and sign up for LG membership.
- 03 Agree to the User Agreements and enter the information required to sign up.
 - Required information may vary depending on the country.
- 04 A verification link will be sent to the email address you entered when you signed up. Please complete email verification within the validity period.
- 05 Once your email address is verified, you can log in with your credentials.

- This feature may not be available in some countries.
- Age restrictions may apply for signing up.
- To solve a problem related to this function, refer to the **Troubleshooting** section of **User Guide**.

Managing Your LG Account

You can view or edit your information of the account currently logged in.
You can change your password or edit your account information.

- 01 Press the  button on the remote control.
- 02 Go to  → **General** → **System** → **LG Account** to log in.

About User Guide

For information on each feature of the LG webOS TV, consult the **User Guide** available on the TV.

You can go directly to a feature or the relevant settings by clicking **Try Now** on a screen that provides a description of the feature in the **User Guide**.

Text colour in this User Guide is used to indicate the following:

-  Red : the names of the remote control buttons.
-  Yellow : the buttons and the text to be displayed on the TV screen.
-  Green : the names of the TV input connectors.
- The images and information in the **User Guide** may differ depending on the model and operating environment.
- Product specifications may be changed without prior notice due to upgrade of product functions.

How to Operate TV

Learn More about Magic Remote

You can select the functions you want easily and conveniently by moving and clicking the cursor on the TV screen, just as you would use a mouse on a computer screen.

- You can purchase the Magic Remote separately if it is not provided.

Pairing the Magic Remote

You must pair the Magic Remote with the LG webOS TV to use it.

Pair the Magic Remote prior to use as follows:

- 01 Turn on the TV. After about 20 seconds, point the remote toward the TV and then press the **Wheel (OK)**.
 - 02 The remote control will automatically be registered, and the pairing completion message is displayed on the TV screen.
- If the Magic Remote failed to register, turn the TV off and back on, and then try to register again.

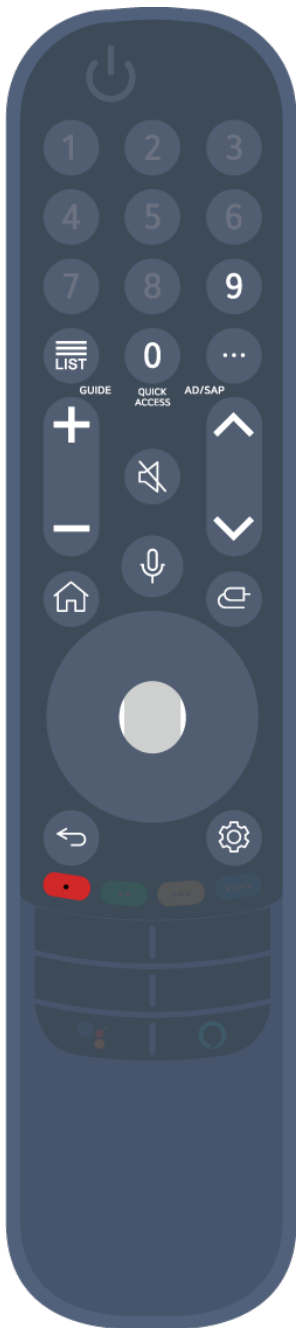
Re-registering the Magic Remote

If the Magic Remote's pointer does not appear on the TV, you must re-register it.

- 01 Hold the remote control towards the TV and press the  and  buttons at the same time for more than 5 seconds until instructions appear.
- 02 The previously registered remote control is deregistered and then registered again.

Using the Remote Control Button

Briefly press or press and hold remote control button to access various functions.



For buttons with #, please long-press (hold for more than a second).

- **9 #** : Launch **Quick Help**.
- **LIST** : Checking the saved programmes.
LIST # : Launch **Guide**.
- **0 #** : The **QUICK ACCESS** edit screen appears.
- **...** : It displays the additional buttons on the remote control.
... # : Audibly describes the contents of the screen.
- **+ -** : It adjusts the volume level.
- **[Mute]** : Select to turn off the sound from the TV.
[Mute] # : Enter the **Accessibility** menu.
- **^ v** : You can change the programme.
- **[Voice]** : Check out the recommended contents. (Recommendation service may not be available depending on the countries you are in.)
Push and hold the button while speaking to use the voice recognition function.
- **[Home]** : Displays the Home menu.
[Home] # : Launches the last used app.
- **[Source]** : Selects an input source.
[Source] # : Entering into the **Home Dashboard**.
- **[Previous]** : Move to the previous step.
[Previous] # : Closes the menu.
- **[Settings]** : Enters the Quick Settings menu.
[Settings] # : Enters the All Settings menu.
- **[Record]** # : Launch **Record**. (Some models may not be supported.)

Using the Magic Remote

- 01 If you shake the Magic Remote left and right or turn its wheel while pointing it at the TV, a pointer will appear on the TV screen.
If you move the remote control to the direction you want, the pointer follows the movement.
- 02 Move the pointer to the location you want and press the **Wheel (OK)** button to execute the function.
- 03 If the pointer has not been used for a certain period of time, it will disappear. When the pointer disappears from the screen, shake the Magic Remote right and left. It will

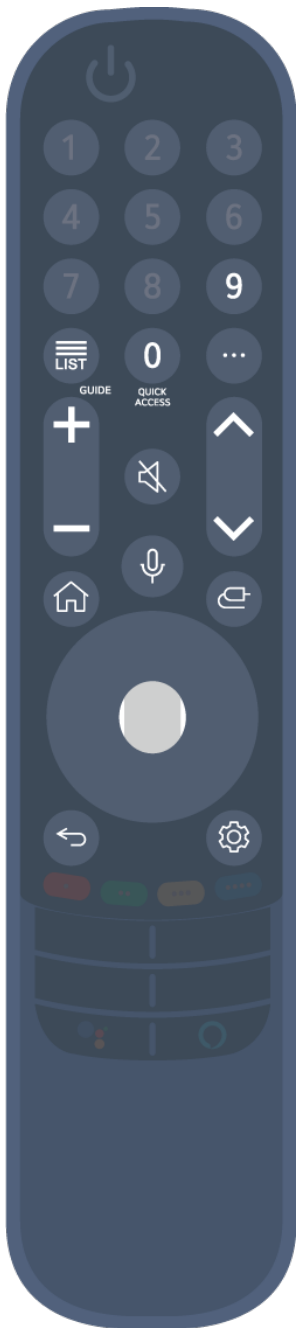
then re-appear.

The pointer will disappear if you press the up, down, left or right buttons, and the remote will work as a conventional remote.

- If the pointer is not responding smoothly, you can reset the pointer by moving it to the edge of the screen.
- Use the remote control within the specified range (within 10 metres). The device may not function properly when outside the working distance or when an obstacle blocks the line of sight.
- Depending on the peripherals (wireless router, microwave oven, etc.), communication failures may occur.
- Impacts can cause the Magic Remote to malfunction.
- Take care not to bump into nearby furniture, electronic equipment or other people when using the Magic Remote.
- For details on configuring the pointer of the Magic Remote, see [User Guide](#) → [Settings](#) → [System](#) → [Pointer Options](#).

Using the Remote Control Button

Briefly press or press and hold remote control button to access various functions.



For buttons with #, please long-press (hold for more than a second).

- **9 #** : Launch **Quick Help**.
- **LIST** : Checking the saved programmes.
LIST # : Launch **Guide**.
- **0 #** : The **QUICK ACCESS** edit screen appears.
- **...** : It displays the additional buttons on the remote control.
- **+ -** : It adjusts the volume level.
- : Select to turn off the sound from the TV.
- # : Enter the **Accessibility** menu.
- **^ v** : You can change the programme.
- : Check out the recommended contents. (Recommendation service may not be available depending on the countries you are in.)
Push and hold the button while speaking to use the voice recognition function.
- : Displays the Home menu.
 # : Launches the last used app.
- : Selects an input source.
 # : Entering into the **Home Dashboard**.
- : Move to the previous step.
 # : Closes the menu.
- : Enters the Quick Settings menu.
 # : Enters the All Settings menu.

Using the Magic Remote

- 01 If you shake the Magic Remote left and right or turn its wheel while pointing it at the TV, a pointer will appear on the TV screen.
If you move the remote control to the direction you want, the pointer follows the movement.
- 02 Move the pointer to the location you want and press the **Wheel (OK)** button to execute the function.
- 03 If the pointer has not been used for a certain period of time, it will disappear. When the pointer disappears from the screen, shake the Magic Remote right and left. It will

then re-appear.

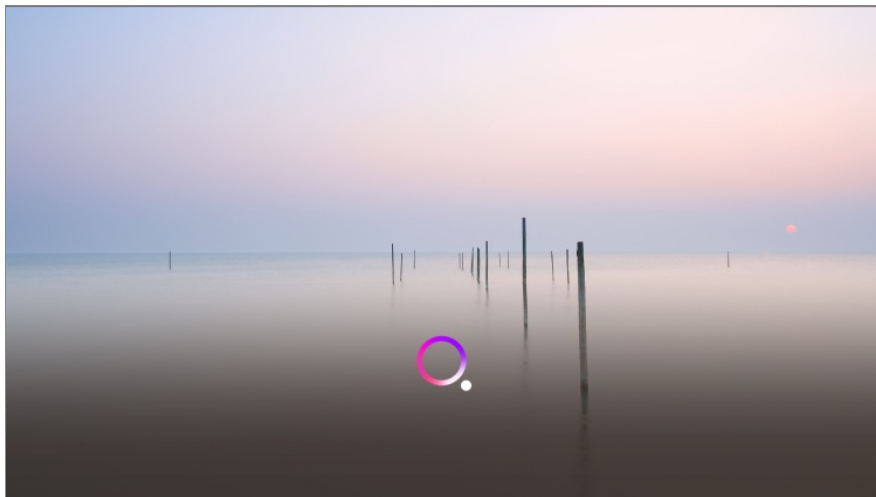
The pointer will disappear if you press the up, down, left or right buttons, and the remote will work as a conventional remote.

- If the pointer is not responding smoothly, you can reset the pointer by moving it to the edge of the screen.
- Use the remote control within the specified range (within 10 metres). The device may not function properly when outside the working distance or when an obstacle blocks the line of sight.
- Depending on the peripherals (wireless router, microwave oven, etc.), communication failures may occur.
- Impacts can cause the Magic Remote to malfunction.
- Take care not to bump into nearby furniture, electronic equipment or other people when using the Magic Remote.
- For details on configuring the pointer of the Magic Remote, see [User Guide](#) → [Settings](#) → [System](#) → [Pointer Options](#).

Using TV features with Hands-free Voice Control

You can use various features of the TV with Hands-free Voice Control.

- 01 Say “Hi LG” within the watching distance from your TV.
- 02 The speech recognition screen appears.



- 03 Say the feature you want.
Example) Find something to watch/Programme number OO/Turn up the volume/Turn on OOO/How is the weather today?/Voice Recognition Help, etc.

Turning on the TV with Hands-free Voice Control

- 01 If you say "Hi LG" to the TV, you will hear a notification sound from the TV.
- 02 Say "Turn on the TV" after hearing the sound.
However, when the TV is off, speech recognition is not supported other than when you say "Turn on the TV".
- Hands-free Voice Control wake-up words can be changed in  →  → **General** → **AI Service** → **Voice Recognition Settings** → **Set Wake-up word for Hands-free Voice Control**. (The operation may be limited depending on the country and language settings.)
 - If Hands-free Voice Control does not work, set **Use Hands-free Voice Control** to **On** in  →  → **General** → **AI Service** → **Voice Recognition Settings**.
 - The feature to turn on the TV with Hands-free Voice Control will only work if the  →  → **General** → **Devices** → **TV** → **Quick Start+** is set to **On**.
 - Even if the **Quick Start+** feature is on, in some exceptions, the feature to turn on TV with Hands-free Voice Control may not be supported.
 - If a software update is in progress
 - When set to the store mode
 - If the TV has not been turned on for more than 96 hours

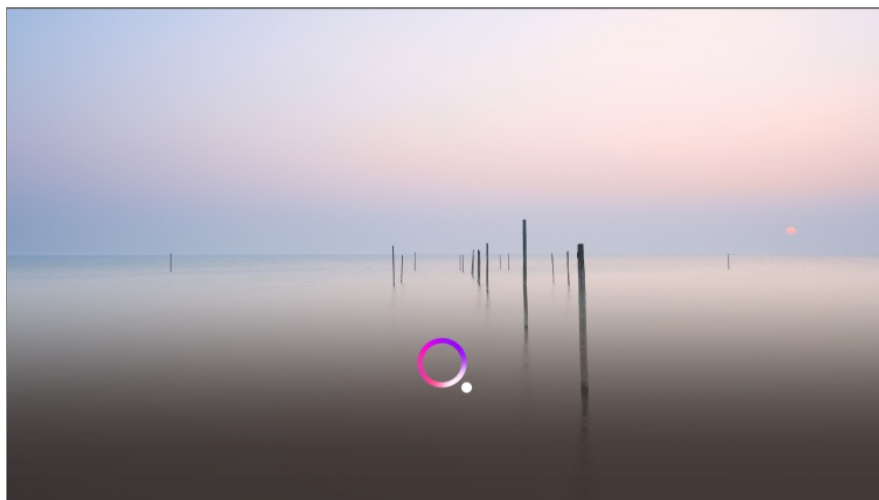
Precautions When Using Hands-free Voice Control

- Some models do not support this function.
- The operation may be limited depending on the country and language settings.
- This function is only available when the TV is connected to the Internet.
- When updating the TV, the existing functions or operations you have used may change.
- The Hands-free Voice Control function enables the TV body to recognise the user's voice. For smooth operation, use this function within 3 m of the TV.
- Depending on the situation, symbols, numbers and special characters may not be recognised.
- It may be affected by the environment, such as voice tone or volume, unclear pronunciation, and ambient noise.
- When you use an external speaker connected to the TV, the sound output from such an external speaker can be recognised as noise. It is recommended to use the voice recognition function with Magic Remote.
- If the Hands-free Voice Control function works when not intended, try lowering the sensitivity by going to  →  → **General** → **AI Service** → **Voice Recognition Settings** → **Set Sensitivity**.
- For speech recognition features using a remote control, see **How to Operate TV** → **Using TV Functions through Speech** in **User Guide**.

Using TV Functions through Speech

You can easily and quickly access the TV's various functions through speech recognition.

- 01 Press and hold the  button on the remote control and speak out the function you want to launch or the keyword you want to use for your search.
- 02 Once you release the  button after your speech input, the corresponding function is launched.



- Some models may not be supported.
- Your **Location** must correspond to the language for exact search results. Some functions may not be available if your location settings and language settings are different.
- You can change the language in  →  → **General** → **System** → **Language** → **Menu Language**.
- The languages available for voice recognition features may be changed in accordance with Service Operation Policy.
- Details of service may vary by model.
- Please note that AI Service may be changed, removed or terminated, without notice, by LGE or its third party providers.
- You can change the voice-related settings or see which features are available to be used with the voice in  →  → **General** → **AI Service** → **Voice Recognition Settings/Voice Recognition Help**.

Cautions for Speech Recognition

- Voice recognition requires a Magic Remote, which may not be supported by certain models.
- To use all speech recognition features, you need to set your programmes, region, etc. Otherwise, you cannot use some features.

- You must have a network connection to use the speech recognition feature.
- If you have a network connection, you need to accept the terms and conditions to use speech recognition.
- To control the set top box connected to the TV with the voice recognition feature, go to  → **General** → **Devices** → **External Devices** → **Universal Control Settings** to set up a universal remote control.
- It is recommended to point Magic Remote toward the set top box after the voice input.
- The rate of speech recognition may vary depending on the characteristics of the user (voice volume, pronunciation, accent, and talking speed) and the surroundings (noise and TV volume).
- 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.
- If your speech is not recognised properly, speech recognition may operate differently than you originally intended.

Using Speech to Text

You can enter text in text fields using the speech recognition function.

Select the  button on the keyboard screen to switch to speech input mode.

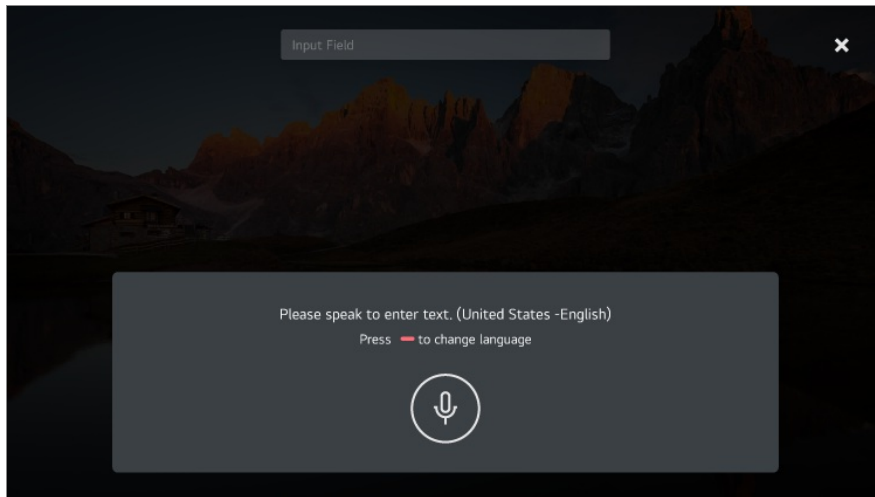
- Some models may not be supported.

01 Move the Magic Remote pointer in the text box to open the virtual keyboard.

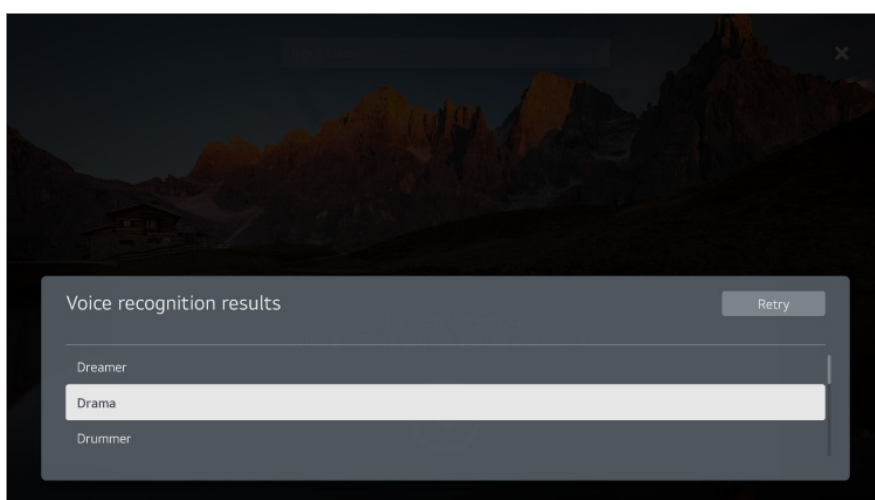


02 Press the  button on the virtual keyboard.

03 After the voice recognition information window opens as shown below, speak into the microphone on the remote control slowly and clearly.



- 04 If there are words similar to that which you spoke out loud, you may see a list of multiple results as shown below. If you do not get the results you want, press **RETRY** to try again. Select a result and it will be displayed on the text box.



Cautions When Using Speech to Text

- Check the network connection before using the Speech to Text function.
- You can change the language in  →  → **General** → **System** → **Language** → **Menu**

Language. To temporarily switch to another speech recognition language, press the  button in the voice recognition information display window.

- You can only use this function to agree to voice recognition terms.
- The Speech to Text rate may vary depending on the user's characteristics (voice, pronunciation, intonation and speed) and the environment (noise and TV volume).
- To improve the accuracy of Speech to Text, you must speak clearly and loudly about 10 cm from the Magic Remote microphone.
- Voice recognition is unavailable in any password input field and the address bar of your **Web Browser** (excludes general search).

Access voice recognition using Google Assistant

- 01 Press and hold the  button on the remote control and speak out the function you want to launch or the keyword you want to use for your search.
 - 02 Once you release the  button after your speech input, the corresponding function is launched.
- Press the  button on the remote control to access the settings and help information for Google Assistant.
 - Different services may run in countries where Google Assistant is not supported.
 - Service operation and supported countries may change in accordance with Google's policies.

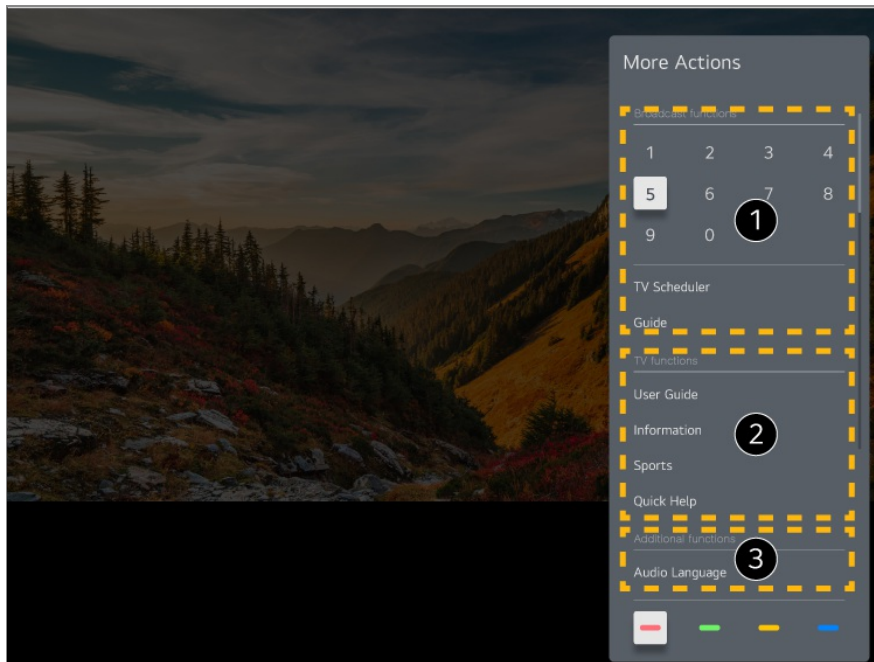
Access voice recognition using Amazon Alexa

- 01 Press and hold the  button on the remote control and speak out the function you want to launch or the keyword you want to use for your search.
 - 02 Once you release the  button after your speech input, the corresponding function is launched.
- Press the  button on the remote control to access the settings and help information for Amazon Alexa.
 - Different services may run in countries where Amazon Alexa is not supported.
 - Service operation and supported countries may change in accordance with Amazon's policies.

To View More Features of the Remote Control

You can control more features or external devices connected to your TV by using the buttons displayed on your TV screen.

- 01 Press the **•••** button on the remote control.
- 02 Using the remote control, select your desired button on **More Actions** displayed on your TV screen.



- ① These features can be used when you watch a live broadcast.
 - ② These TV features are available now.
 - ③ Additional features can be set when you watch a live broadcast.
- Available features may vary depending on the broadcast signal.
 - The types of buttons appearing on the **More Actions** vary, depending on the region and the type of connected device.

Automatically Setting the Universal Remote Control

When you set up the universal remote control, you can control the peripherals (Blu-ray/DVD player, home theater, set-top box, etc.) with the Magic Remote rather than using their dedicated remote controls.

Connect the devices to be set to the TV's **HDMI IN**, and turn the power of the device on. The TV will recognise the connected device to automatically set the universal remote control without manual setting.

- After setting the universal remote control, you may need to do some additional user

settings.

- It may take several seconds to complete the settings for the universal remote control.
- In some models, you can set the universal remote control only after converting to an input of a connected device.
- Depending on the connected device, the automatic setting feature for universal remote control (automatic device connection) may not be supported.

Manually Setting the Universal Remote Control

If the universal remote control has not been set automatically, you can set it up manually.

- 01 Select  →  → **General** → **Devices** → **External Devices** → **Universal Control Settings**.
 - 02 Select the type of the device you want to set.
 - 03 Complete the settings for the universal remote control according to the guidance on the screen.
You can change or cancel the universal remote control settings.
- This feature can only be used with the Magic Remote.
 - You can purchase the Magic Remote separately if it is not provided.
 - Some models may not be supported.
 - When changing settings on a device, make sure it is powered on first.
 - To set up a universal remote control with the latest information, connect to the network and accept the User Agreements.
 - The manual setting feature for universal remote control is not supported for a game console.
 - Some buttons may not work depending on the model of the external device.
 - Point the Magic Remote at the device you want to control. Make sure that there are no objects in front of the device to ensure that the remote control signal is well received.

Using Apps Quickly and Easily with **QUICK ACCESS**

Press and hold a number button on the remote control to open an app or to activate an external input registered to the button.

Setting **QUICK ACCESS**

- 01 Launch the app or select the programme or input you wish to assign.

02 Press and hold the number button (**1~8**) you want to register.

No. **9** is fixed to **Quick Help**.

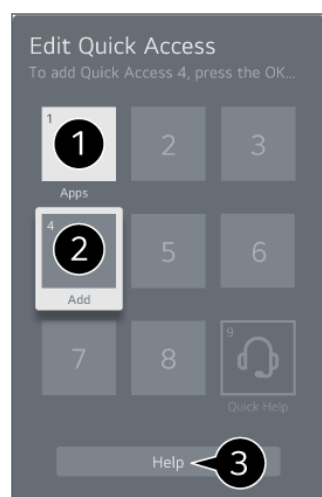
03 When the registration pop-up window appears, select **Yes**.

- If you press and hold a number button that has already been registered, the registered function will be performed.
- To see the items that can be registered, select a number that has not been registered in the **QUICK ACCESS** edit mode.
- If you are in a mode where **QUICK ACCESS** cannot run, no action will be performed.
- If you delete a registered app, **QUICK ACCESS** will be deregistered as well.

Checking and Editing **QUICK ACCESS**

Press and hold the **0** button on the remote control.

The **QUICK ACCESS** edit screen appears.



- ① Selecting a number that has already been registered allows deregistering it.
- ② When you select a number that has not been registered, items that can be registered will be shown.
 - An item that has been registered to a different number is indicated with a check mark.
- ③ You can view a brief instruction for this function.

Using **SIMPLINK**

With a single remote control, you can easily manage various devices such as a soundbar or set-top box connected to a TV with HDMI.

- Up to three devices can be connected and used simultaneously.

- 01 Connect the SIMPLINK HDMI Output port to the TV **HDMI IN** port with an HDMI cable.
 - 02 Press the  button on the remote control.
 - 03 Select  → **General** → **Devices** → **HDMI Settings**.
 - 04 Set **SIMPLINK (HDMI-CEC)** to **On**.
 - 05 Turn on the connected device. When the TV automatically connects to the device, the input will change.
If the device is not automatically connected to the TV, click the Input button.
- This feature works only with devices with the  logo. Check for the SIMPLINK logo on the external device.
Use of any product other than those specified may cause problems during operation.
 - To use SIMPLINK, you need to use a high-speed HDMI[®] cable with CEC (Consumer Electronics Control) function. The High-Speed HDMI[®] cable has the pin 13 for enabling information exchange between devices.
 - If you want to output sound to the external audio equipment connected through the HDMI cable, set **SIMPLINK (HDMI-CEC)** to **On**.

Supported SIMPLINK Functions

Instant Play

When you start a multimedia device, you can immediately watch content from the device on the TV without having to control anything.

Controlling devices with the TV remote control

Enables the user to control multimedia devices with the TV remote control to watch content.

- The menu of the multimedia device can be operated with the arrow keys on the remote control.

Main Power Off

Turning off the TV will also turn off the devices connected through SIMPLINK.

- This feature is only available in certain devices.

Main Power On

Turning on a SIMPLINK device will also turn on the TV.

- Some models may not be supported.

Shortcuts to **Accessibility**

You may go directly to **Accessibility** without entering the Advanced Settings menu.

Press and hold the  button on your remote control.

You can set **High Contrast**, **Grayscale**, **Invert Colours**, etc.

Using a USB Wired/Wireless Mouse

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

- The right button and the special buttons on the mouse do not work.
- When using a wireless USB mouse, the connection can be lost or slowed, depending on the distance between the TV and mouse and the wireless environment.

Using a USB Wired/Wireless Keyboard

Connect your keyboard to the USB port. You can enter text with the connected keyboard device.

- It is not possible to enter text on some screens.
- It is recommended that you use a product that has been tested for compatibility with LG TVs.
LOGITECH K360, LOGITECH K400, LOGITECH K750, LG Electronics MKS-1200
- You can change the input language by pressing the language switch key or the right Alt key, And also can change by pressing the Ctrl key and the Space key at same time.
- When using a wireless USB keyboard, the connection can be lost or slowed, depending on the distance between the TV and keyboard and the wireless environment.
- To enter text in the text field, use the on-screen keyboard on your TV screen or a USB keyboard.

Using a Gamepad

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

- It is recommended that you use a gamepad that has been tested for compatibility with LG TVs.
PS Dual Shock4 ver.1 & ver.2, MICROSOFT Xbox 360 Controller (cable), NVIDIA Shield Controller, LOGITECH F310, LOGITECH F510, LOGITECH F710, LOGITECH Rumblepad

2, LOGITECH Cordless Rumblepad 2, LOGITECH Dual Action Gamepad, SONY Playstation(R)3 Controller

Connecting Bluetooth Input Devices

You can connect and use devices such as a Bluetooth-enabled keyboard, mouse, or a gamepad with your TV.

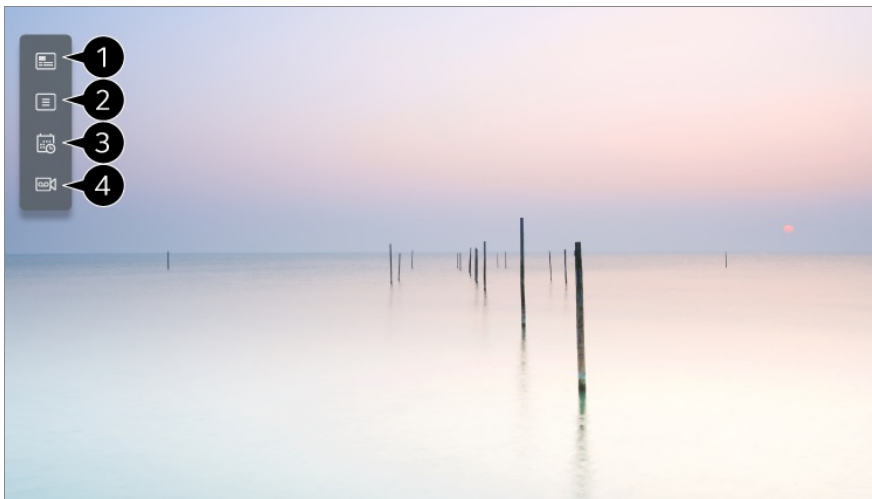
To see the details, click the **Settings** → **Devices** → **External Devices** → **Connect Bluetooth Controller** in **User Guide**.

Enjoy Live TV

Using Live Menu

You can use the relevant features with ease when watching TV broadcasts.

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



- ❶ **Guide** : You can view programmes and the schedule of each programmes.
To see the details, click the **Enjoy Live TV** → **Viewing Guide** in **User Guide**.
- ❷ **Programmes** : View a list of broadcast content that is currently being broadcast.
- ❸ **TV Scheduler** : You can enter the time and date of a programme to schedule watching or recording it at the set time.
To see the details, click the **Enjoy Live TV** → **Using TV Scheduler** in **User Guide**.
- ❹ **Recordings** : You can check the recordings stored in the storage device and play the

recordings.

To see the details, click the **Enjoy Live TV → Playing Recorded TV Programs** in **User Guide**.

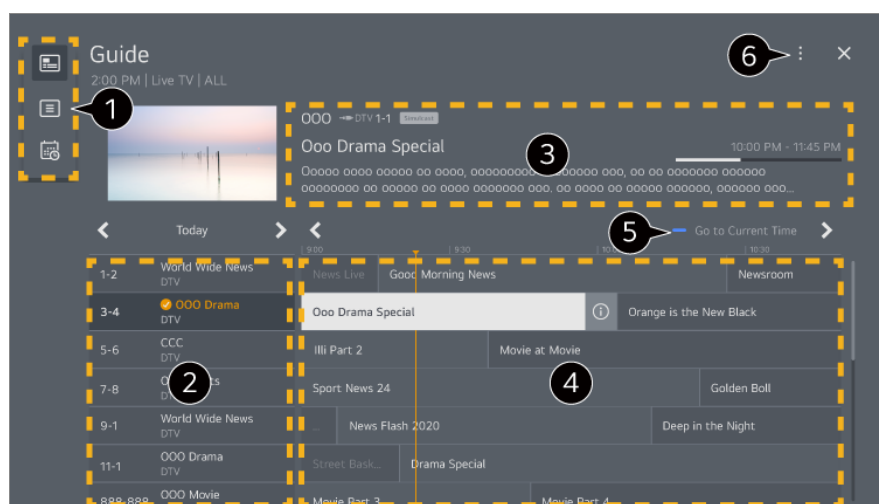
- The menu appears only if an external storage device is connected and the recorded video can be viewed.
- The programmes displayed in Programme List are a configuration of programmes provided by the broadcast service provider. Therefore, if the broadcast service provider has changed its programme configuration without notice, the programmes displayed in Programme List may differ from the actual TV programmes.
- Because programme information displayed in programme List includes information provided by external Electronic Programme Guide (EPG) providers, it may differ from the actual TV programmes.
- You must complete the settings of the network, region, and auto-programme to receive normal live broadcast service.
- The configurable items differ depending on model.

Viewing TV Guide

You can view programmes and the schedule of each programmes.

01 Run **Live TV** by pressing .

02 Press the **...** button on the remote control and select **Guide**.



- 1 Select each area to access the corresponding feature.
- 2 You can view information on the programme and broadcaster.
- 3 You can view information about the programme you are currently watching as well as the focused programme information.
- 4 Select the  button or the title of the desired programme. You can view more information on the programme and perform **Watch/Record** (only available on certain models) or

Reminder/Scheduled Recording (only available on certain models), etc.

⑤ You will be taken to the programme list for the current date and time.

⑥ **Programme Manager** : Launch **Programme Manager**.

Programme Row : You can change the size of the programme list to adjust the number of programmes displayed on the screen.

Filters : Sets the filter.

Mini TV : You can turn on/off Mini TV.

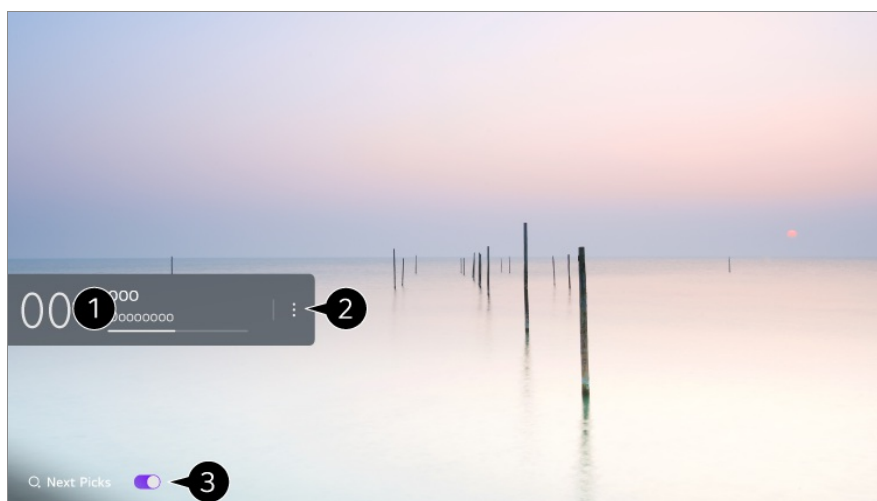
User Guide : Move to the **User Guide** app.

- Programme information is not displayed for programmes with no provided broadcast information.
- Some models may not be supported.
- The configurable items differ depending on model.

Viewing Programme Information

During watch the Live broadcast, press the **Wheel (OK)** button. The Programme Banner appears.

You can move the banner's position by pressing the **...** button on the remote control and selecting **Change Banner Location**.



① It displays the information about the programme you are watching. Select a programme banner to enter the detailed information pop-up to see the detailed programme information or run additional features related to the banner.

You can view broadcast information about other programmes using the **▲/▼** buttons.

You can view broadcast information about the programme you are currently watching using the **◀/▶** buttons.

- The features can be controlled only within the detailed information pop-up.

2 Launch **More Actions**.

For more information, see **How to Operate TV → To View More Features of the Remote Control** in **User Guide**.

3 You can get recommendations for what to watch next by setting **Next Picks** to **On**.

- This feature may not be available in some countries.
- Available features may vary depending on the broadcast signal.

Using Live Playback (Real-time Playback)

It is a function you can use to temporarily save the programme you are currently watching to a USB HDD, so you can play back any scenes you might miss while watching TV. This function allows you to continue watching from where you were previously if you go out for a while.

01 Input the USB HDD in the USB port.

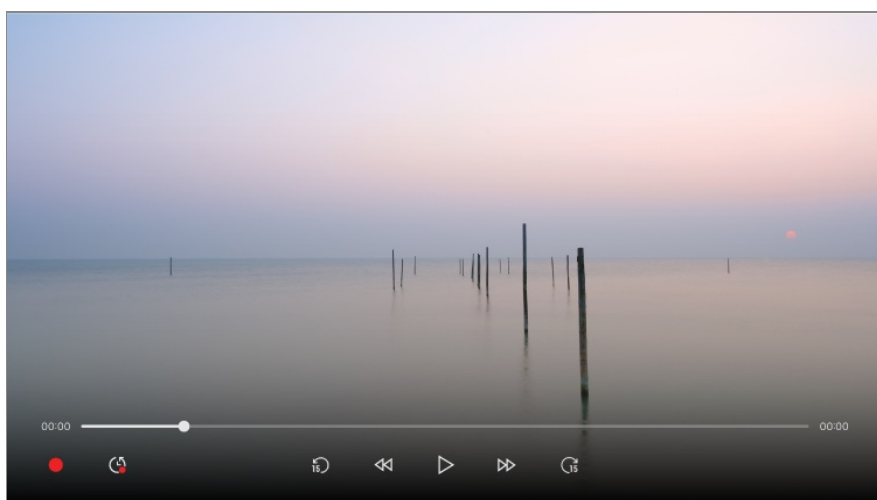
02 Press the **...** button on the remote control and select **Live Playback**.

03 The **Live Playback** setting confirmation screen appears.

Complete the settings and press the **OK** button.

04 During watch the live broadcast, select a point on the progress bar which you want by the pointer. You can also press the **◀/▶** buttons on your remote control to use this feature.

Select a previous point than the current point on the progress bar.



- The Live Playback function can be used only for broadcast programmes you view through the antenna input terminal. However, you cannot use this option while listening to a radio programme.
- Select a device to be used with Live Playback when two or more USB HDDs are connected to the TV.

- You cannot use a USB stick. Connect a USB HDD with 80 GB or more of total storage.
- If there is not enough remaining space in the USB HDD device, Live Playback may not work properly. To use Live Playback function, you need the USB HDD which has at least 2.3 GB.
- With the Live Playback function, you can play a programme back for up to two hours depending on remaining USB HDD capacity. This time may vary depending on your region.
- The videos saved in Live Playback mode are deleted if you turn off the TV without recording them.
- Changing between programmes during Live Playback will delete the data of the previous programme.
- Some models may not be supported.

Using the Recording Functions

You can record a television programme or a radio programme using the LG webOS TV recording feature.

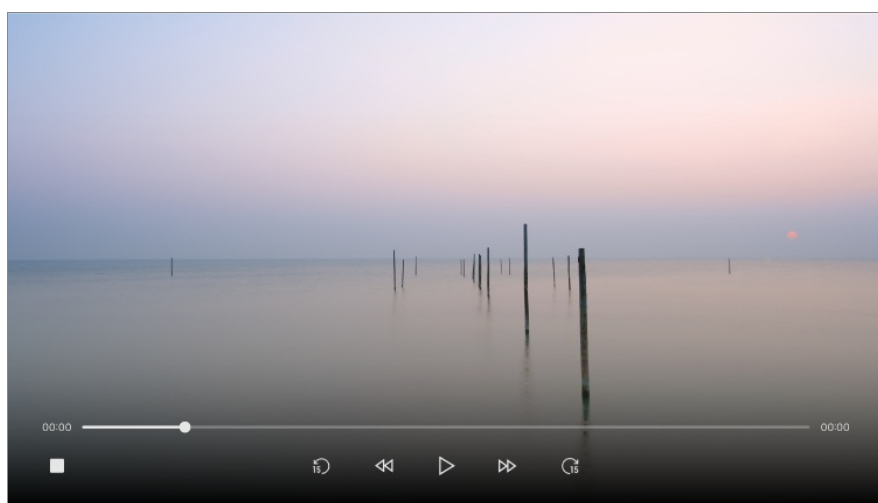
Using Instant Recording

01 Connect a USB HDD or USB stick to a USB port.

It is recommended that you record to a USB HDD.

02 Press the **...** button on the remote control and select **Record**.

- To end the recording, press the **...** button on the remote control during recording and select **Record**.



Matters That Require Attention of Recording

- While recording, press the **Wheel (OK)** button to display information about the recording.

The **Wheel (OK)** button operation may vary depending on the country.

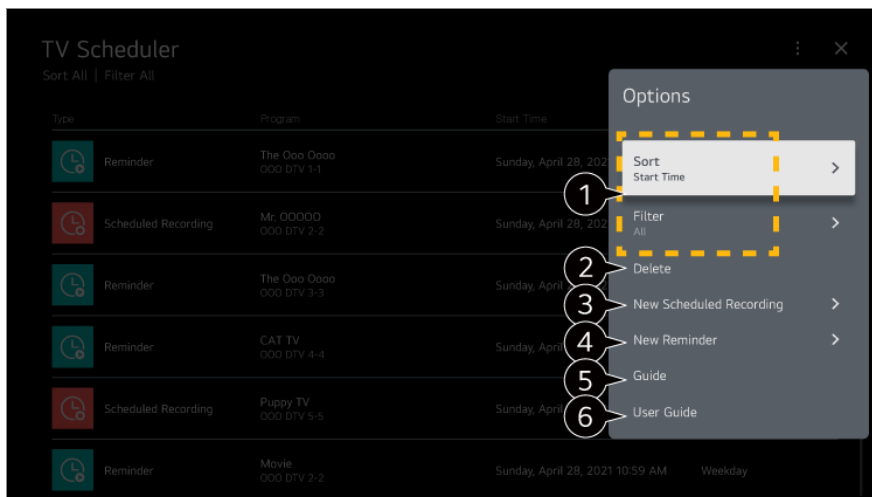
- The duration of the recording can be set before the recording starts.
 - If multiple USB storage devices are connected, the last recorded storage device is selected automatically.
 - The available capacity of the USB HDD partition must be at least 1 GB.
 - There must be at least 4 GB of partition size on USB stick.
 - The recordable time may vary depending on the capacity of your USB storage device.
 - Upon the initial attempt to record to the USB memory, the TV will perform a performance test. Start recording after the test has been completed normally.
 - Because of the content protection technology used, the recorded video cannot be played on PCs or other TV models. Also, the video cannot be played if the TV's video circuit is replaced.
 - Do not remove the USB cable while recording.
 - If you force your TV to power off while recording, the recorded content may not be saved. Ideally, you should stop the recording and check that the programme has been recorded before turning the TV off.
 - Recording quality depends on the performance of the USB storage device.
 - If a USB storage device is faulty, recording may not be completed properly.
 - The USB storage device may not work or function properly when a USB hub or extension cable is used.
 - Recording may be interrupted if the remaining storage capacity is insufficient. Use of a storage device with sufficient space for recording is recommended.
 - During recording, you can watch the other programmes or use the other functions. However, you can only use the programme you are recording and free programmes while recording a scrambled programme.
(Some models may not be supported.)
- You cannot change programme modes while recording.
 - When connected to one satellite signal :
If you start recording a programme while watching another programme in a different mode, the programme will change to the programme being recorded.
 - When connected to two satellite signals :
Even if you start recording a programme while watching another programme in a different mode, the programme will not change to the programme being recorded.
- The configurable items differ depending on model.
 - Some functions may not be available while recording is in progress.
 - Analog broadcast recording feature is only available to some models.
 - Only broadcast programmes you view through the antenna input terminal can be recorded.
 - Bluetooth and the USB port may not work properly when recording with a USB storage device.

- Recordings that are less than 10 seconds long will not be saved.
- You can save up to 600 pieces of content on a single partition.
- Some models may not be supported.

Using the TV Scheduler

You can enter the time and date of a programme to schedule watching or recording it at the set time.

- 01 Run **Live TV** by pressing .
- 02 Press the **...** button on the remote control and select **TV Scheduler**.
The **TV Scheduler** screen will be displayed.
- 03 You can apply various settings by pressing the  button on the top right corner.



- ① You can change the alignment order or apply the filter.
- ② You can set the Delete Mode.
- ③ You can set the New Scheduled Recording.
- ④ You can set the New Reminder.
- ⑤ Launch **Guide**.
- ⑥ Launch **User Guide**.

Programme Scheduling

You can select a show to schedule it for watching or recording.

- 01 Run **Live TV** by pressing .
- 02 Press the **...** button on the remote control and select **Guide**.

03 Select the programme you want.

If you want to record a live broadcast, click the **Record** or **Watch** button.

In case of an upcoming programme, click the **Scheduled Recording** or **Reminder** button.

- **Record/Scheduled Recording** may not be supported on some models.
- Scheduled recording does not guarantee exact recording time of the programme because the programme will be record as the information of broadcaster.
- Applies to Digital broadcasting.

Manual Scheduling

You can select the date, time and programme to watch or record the programmes.

01 Run **Live TV** by pressing .

02 Press the **...** button on the remote control and select **TV Scheduler**.

03 Press  to select **New Scheduled Recording** or **New Reminder**.

04 Select **CREATE MANUALLY**.

05 Set the date, time, and programme to record or watch.

- The length of the scheduled recording should be at least 1 minute.

Recording a Series

The series recording function is used to automatically record every episode of the programme that you choose.

If a programme is a series, you can record the series with **Scheduled Recording** in **Guide** or with **Record** when watching TV.

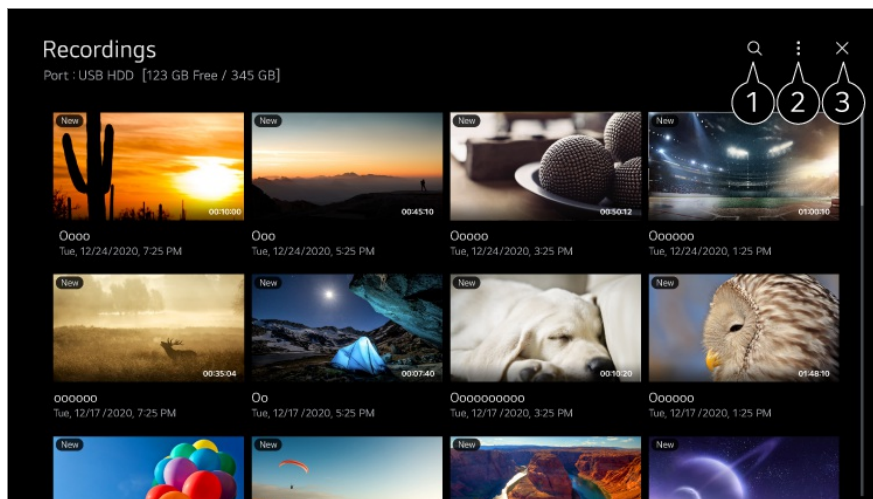
- You can view the recording progress of a series on the details screen in Series Recordings.
- You can play series recordings in the **Recordings** app.
- Check your region and network condition to use these functions.
- If the scheduled series recording and another scheduled recording are at the same time, or if there is a problem with the broadcast information, the series may not be recorded in the order of episodes.
- Series recording may not be available depending on the episode type of the programme provided by the broadcaster.
- The configurable items differ depending on model.

Managing Recordings

You can view and play recordings stored on storage devices by using the **Recordings** app.

01 Run **Live TV** by pressing .

02 Press the **...** button on the remote control and select **Recordings**.



① Launch **Search**.

② You can apply settings, such as storage devices and sort options, for the content list.

③ Closes **Recordings**.

- You can only play recordings made on the current TV in **Recordings**.
- When playing an HFR (High Frame Rate) recording, the motion of the screen may differ from that of the original recording.
- Some models may not be supported.

Playing Recordings

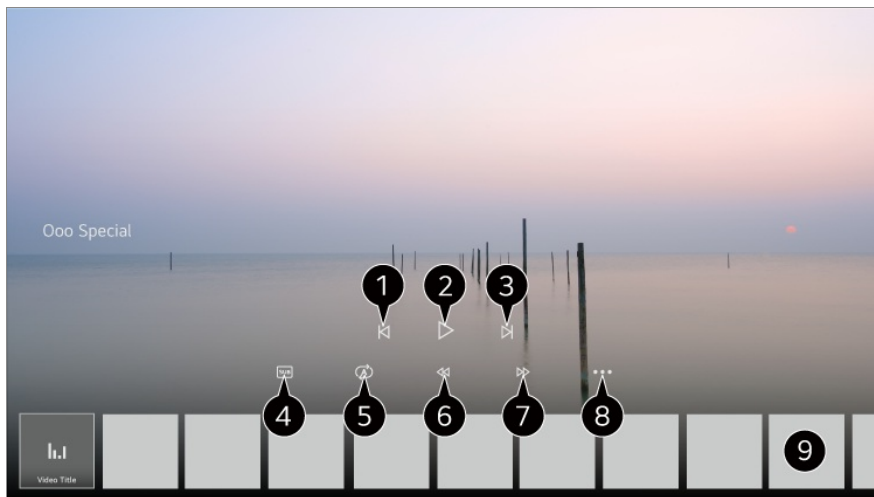
You can access and operate basic features such as playback and pause on the playback screen.

01 Select your desired recording from the **Recordings** app.

02 Pressing the   buttons on the remote control allows you to skip backward/forward 10 seconds.

You can control the playback of your desired recording by pressing the **Wheel (OK)** button during playback.

You can access more features by pressing the  button on the remote control while using the playback control.



- ❶ Shows the previous recording.
 - ❷ Plays or pauses the recording.
 - ❸ Shows the next recording.
 - ❹ Turn subtitles on or off.
 - ❺ You can set continuous playback.
 - ❻ Fast-rewinds the video at higher speeds.
 - ❼ Fast-forwards the video at higher speeds.
 - ❽ You can set features such as Resume and the audio language that can be outputted.
 - ❾ A list of recordings is shown below.
- The configurable items differ depending on model.

Watching Internet Programme

You can watch real-time broadcasts through this service over the Internet.

You can see information on new Internet Programmes or manage the programmes you like in **LG Channels**.

Press the  button on the remote control and select **LG Channels**.

You can also watch **LG Channels** by pressing the  (**Programmes**) / buttons on the remote control.

You can use the 'Interactive Programme' service that enables users to conveniently enjoy content related to the current programme without having to switch apps.

You can use the 'Interactive Programme' by pushing the buttons on your remote control or clicking your screen according to the instructions that appear on the Internet programme screen.

- Some models may not be supported.
- You must connect to the network and agree to **User Agreements** before you use it.
- In the  →  → **General** → **System** → **Location**, the **Broadcast Country** and the **LG Services Country** must be the same. If you change any of them, you cannot use the service.
- While watching an Internet Programme, click the  button on the Remote control. You can start the **LG Channels**.
- Some content can cause a switch from **Live TV** app to a different app.
- Some Internet programmes may not support this service.
- Live Playback and recording are not available for internet programmes.
- Internet Programme services may be stopped or changed without prior notice by the broadcasting company.

To Use Teletext

Teletext is a free service provided by the TV station that offers text-based information about TV programmes, news and weather.

The teletext decoder of this TV can support the SIMPLE, TOP and FASTEXT systems.

- 01 Press the  button on the remote control.
- 02 Select **Teletext**.
- 03 The TELETEXT window appears.
- 04 To view TV broadcasts and TELETEXT at the same time, press the  button on the remote control and select **Teletext**.

Colour button

To select the preceding or following page.

Number button

Enters the page number to move to.

 **(Programmes)**  Button

To select the preceding or following page.

- Some models may not be supported.

Special Teletext Function

- 01 Press the **...** button on the remote control.
- 02 Select **Teletext Option**.
- 03 Select the **TELETEXT** menu.

Index

Select each index page.

Time

When viewing a TV programme, select this menu to display the time at the top right hand corner of the screen. In the teletext mode, press this button to select a sub page number. The sub page number is displayed at the bottom of the screen. To hold or change the sub page, press the /, / or Number buttons.

Hold

Stops the automatic page change which will occur if a teletext page consists of 2 or more sub pages. The number of sub pages and the sub page displayed is, usually, shown on the screen below the time. When this menu is selected the stop symbol is displayed at the top left-hand corner of the screen and the automatic page change is inactive.

Reveal

Select this menu to display concealed information, such as solutions to riddles or puzzles.

Update

Displays the TV picture on the screen while waiting for a new teletext page. The display will appear at the top left hand corner of the screen. When the updated page is available then display will change to the page number. Select this menu again to view the updated teletext page.

Language

Sets Teletext language.

- In Digital Mode Only

To Set Teletext Language

Use the Teletext language function when two or more Teletext languages are broadcast.

01 Press the  button on the remote control.

02 Select  → **General** → **System** → **Language** → **Primary Teletext Language/Secondary Teletext Language**.

- In Digital Mode Only
- If Teletext data in a selected language is not broadcast, the default language will be displayed.
- If you select the wrong local country, teletext may not appear correctly on the screen and some problems may occur during teletext operation.

CI Information

You can view information about the currently connected CI.

 →  → **General** → **Programmes** → **CI Information**

If you use a CI module or CAM module,

- This function enables you to watch some encrypted services (pay services).
- If you remove the CI Module, you cannot watch pay services.
- CI (Common Interface) functions may not be possible depending upon the country broadcasting circumstances.
- When the module is inserted into the CI slot, you can access the module menu.
- To purchase a module and smart card, contact each service provider.
- When the TV is turned on after inserting a CI Module, you may not have any video and audio output in scrambled programme.
- When using a CAM (Conditional Access Module), please make sure it meets fully the requirements of either DVB-CI or CI plus.
- An abnormal process of CAM (Conditional Access Module) may cause a bad picture.
- If the TV does not display any video and audio when CI+ CAM is connected, please contact to the Antenna/Cable/Satellite Service Operator. (Some models may not be supported.)
- While the TV supports paid broadcasting programmes based on the European standard DVB-CI+, some programmes might not be available for watching if some operators of the programmes use a proprietary CAS system.

Learn More about HbbTV

HbbTV (Hybrid Broadcast Broadband TV) is a new broadcasting standard that enables super-teletext type services, delivered by a broadcast TV programme, to be integrated or linked to online services delivered over broadband to a connected Smart TV.

Consumers are therefore able to access various online services such as catch-up TV, Video on Demand (VOD), programme related applications and other rich information services in addition to traditional digital teletext services, all directly on to the TV in a seamless experience. HbbTV services can be activated in a number of ways, the most popular being pressing the . Users typically explore services with the traditional navigation keys (including the OK button and the , , , ). The current version of the HbbTV specification also includes support for “adaptive streaming” of video over a broadband connection thus guaranteeing the best possible image quality for the viewer. For more information about HbbTV, visit www.hbbtv.org

- Some models may not be supported.

To Use HbbTV

 →  → **General** → **Programmes** → **HbbTV**

Sets HbbTV to On.

Enjoy a wide variety of content from HbbTV enabled services.

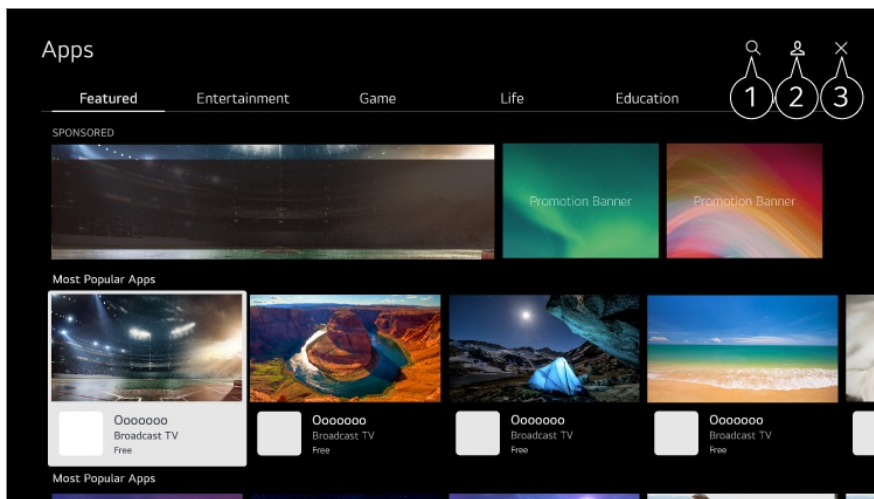
- Service features may be limited when the TV is not connected to the internet.
- The functionality and quality of the HbbTV service may vary depending on the quality of your broadband connection.
- HbbTV services are not guaranteed to be available for all programmes – only those that your broadcaster chooses to support.
- Some models may not be supported.
- When Live Playback is in operation, HbbTV is disabled.
- While using HbbTV service, navigation keys and the **Wheel (OK)** button may be disabled if the Magic Remote's pointer is activated on the screen. In this case, press the left, right, up and down keys in order to deactivate the pointer. (This only applies to models that support the Magic Remote.)

Apps and Content

Installing Apps

You can install apps in a variety of categories such as games, education, and news and conveniently use them on your TV.

- 01 Press the  button on the remote control.
- 02 Launch **Apps**.
- 03 Select a category or press the Search button to search for an app.
- 04 Select an app to install.
- 05 Read the details of the app and then press **Install**.
- 06 When the installation is complete, you can run the app immediately.



- ① Searches for content.
To see the details, click the **Apps and Content** → **Content Search** in **User Guide**.
 - ② You can log in with your LG account and manage apps.
 - ③ Closes **Apps**.
- In order to install apps, you must be logged in.
 - Available categories may vary depending on the country or service status.
 - If the storage on your TV is insufficient, you can install the apps by connecting an external memory device.
 - Some USB storage devices may not be supported or may not work properly.
 - USB stick containing apps from other TVs may not be used.
 - Exercise caution when in use by children. Children may have access to inappropriate online content through this product. You can block inappropriate online content by restricting access to some apps.
Configure the settings in  →  → **General** → **System** → **Safety** → **Application Locks**.

Content Recommendation

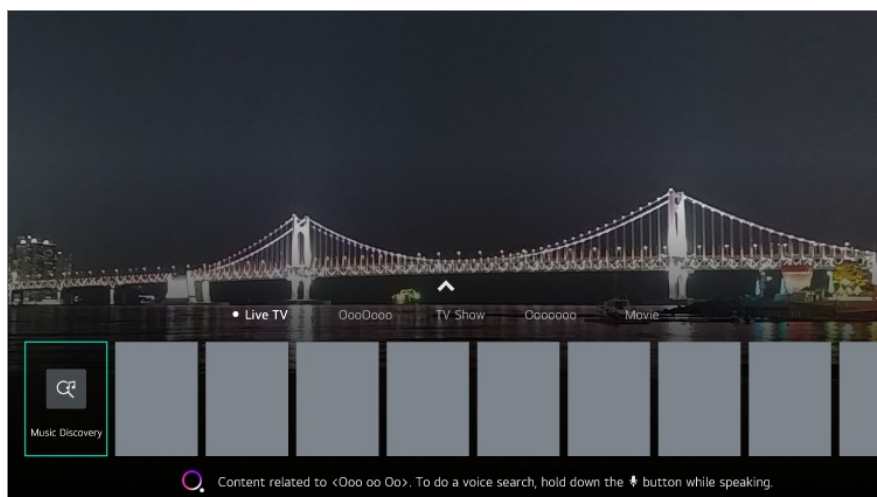
You can get content recommendations based on the programme you are watching or TV viewing patterns.

If you are watching the TV using a set-top box, you must complete the setup of the universal remote control to use the recommendation feature normally. For more information, see **How to Operate TV → Using Universal Remote Control** in **User Guide**.

01 Press the  button on the Magic Remote. The Content Recommendation screen appears.

- When using a standard remote control, press the  button on it.

02 You can view more content by pressing the  icon on the screen.



- Some models may not be supported.
- You must connect to the network to use the recommendation feature.
- The supported services vary depending on countries, so the recommendations may be provided differently.
- The list of the recommendations may be less relevant or irrelevant, depending on the information of the programme you are watching.

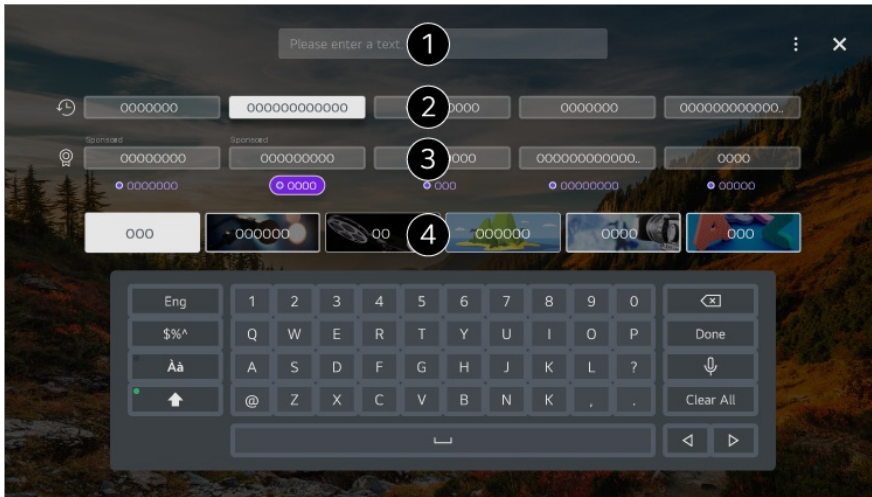
Content Search

Searches for content by title, actor/actress, and genre.

01 Press the  button on the remote control.

02 Launch **Search**.

03 Search for a variety of content and information using the desired search terms.



- ❶ Enter a search term.
 - ❷ Shows recent searches.
 - ❸ You can select one from the suggested keywords and proceed to search.
 - ❹ You can browse content by genre.
- You must connect to the network to use the search feature.
 - Search results may vary depending on the programme, region, network settings, and whether you have agreed to the terms and conditions.

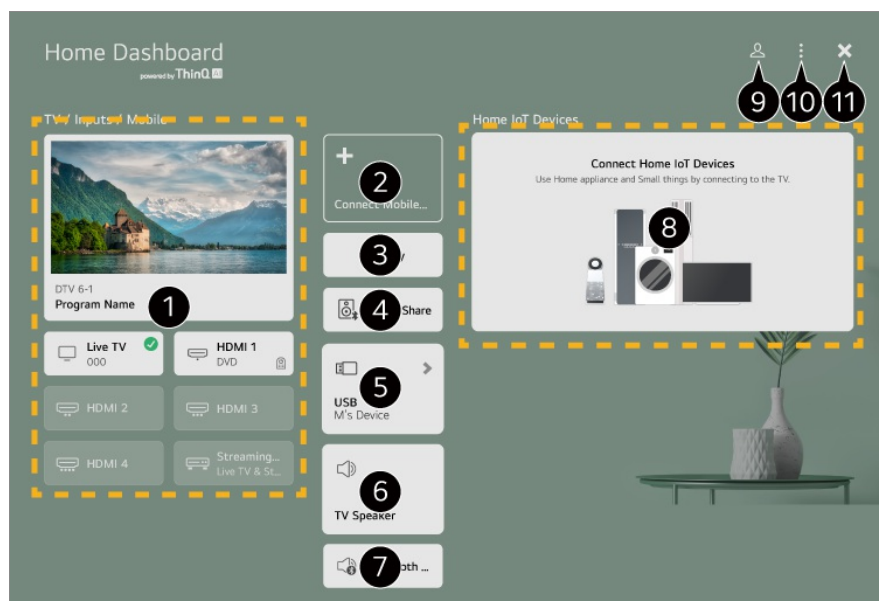
Connecting External Devices

Using Home Dashboard

You can select or control a device (mobile, external device, Home IoT Devices, etc.) connected to the TV.

Press the  button on the remote control and select **Home Dashboard**.

You can also press and hold the  button on the remote control.



- 1 You can check and select the external device connected through the external input port or network.
- 2 You can check and select the smart device connected with the LG ThinQ app.
Please refer to **Connecting External Devices → Connecting Smart Devices** in **User Guide** for more information on the action.
- 3 Use AirPlay/HomeKit to control your TV and watch content from your iPad or Mac on the TV screen.
 - The availability of and access to Contents and Services in LGE Device are subject to change at any time without prior notice.
- 4 You can play sound from a smart device connected via Bluetooth.
Please refer to **Connecting External Devices → Playing Sound from a Smart Device through the TV's Speakers** in **User Guide** for more information on the action.
- 5 It can only be selected if you have connected a USB storage device or a media server.
- 6 The currently selected output speaker is displayed, and you can navigate to the output speaker settings screen.
- 7 You can view the list of connected Bluetooth devices and select one.
- 8 You can check and control the device connected via the Home IoT.
Please refer to **Connecting External Devices → Connecting Home IoT Devices** in **User Guide** for more information on the action.
- 9 You can log in or out with your LG ThinQ account.
- 10 **Edit** : You can edit the name of the connected device or apply settings by pressing **Edit Inputs** or **Edit home IoT devices**.
Automatic device discovery : Shows devices that are available for connection on the screen.
Notification : You can turn on or off the notifications on the connected device.
Universal Control Settings : Move to the **Universal Control Settings** app.

User Guide : Move to the **User Guide** app.

11 Exit the **Home Dashboard**.

- Available settings vary depending on the model or region.

Connecting Home IoT Devices

You can check and control the status of the connected Home IoT Devices.

01 Install LG ThinQ app on your smartphone.

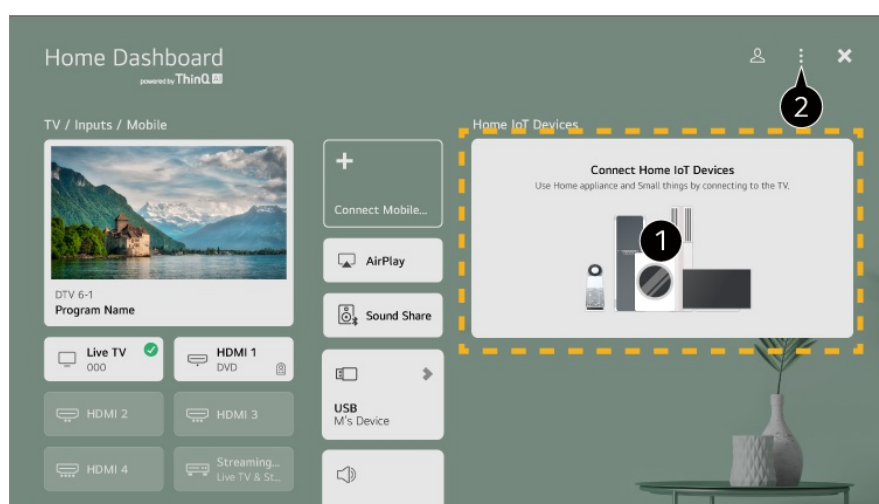
02 Log in to your LG ThinQ account, and register your own LG ThinQ device.

03 Press the  button on the remote control and select **Home Dashboard**.

04 Press the  button on the top right corner to log in.

05 Log in to your LG ThinQ account. A list of the registered LG ThinQ devices will appear.

- If you are in an area where the LG ThinQ app is not in service, LG ThinQ device connection will not be supported.
- To register your IoT device, select **Connect Home IoT Devices** and follow the instructions to apply settings.
- If you are controlling the external device from your mobile app, you might not be able to control the device from your TV. Quit the mobile app to control it from your TV.



1 You can check the connection guide for each type of **Home IoT Devices**. You can connect and see devices registered with your LG ThinQ account or IoT devices. Once the device is connected, the card will be changed to a smaller size and appear at the bottom of the device connection list.

2 Select  → **Edit** → **Edit home IoT devices**.

Edit List : You can rename, **Show/Hide** or change the order of the devices connected to **Home IoT Devices**.

Delete devices : You can delete the connected device. You can only delete certain devices from the TV.

- Available settings vary depending on the model or region.
- IoT devices that can be connected to a TV are subject to change without notice.
- Connectable LG ThinQ devices and available functions may differ between mobile and TV.

Connecting Smart Devices

You can use a variety of features by connecting the TV to a smart device.

Connecting Your Smart Device to a TV Using the LG ThinQ App

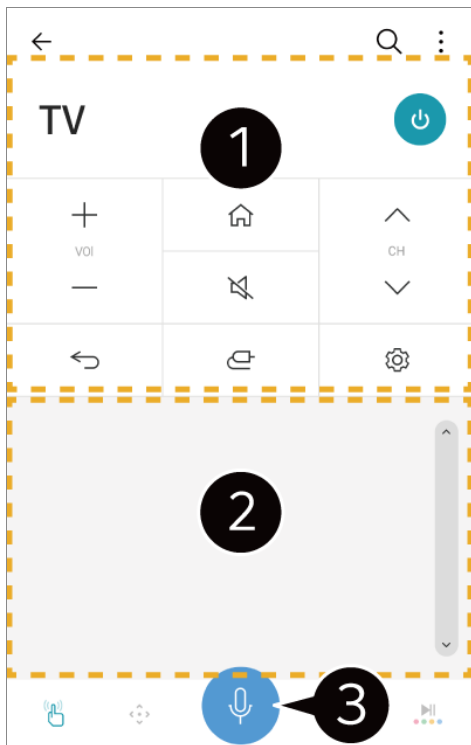
- 01 Download the LG ThinQ app from the app store of your smart device.
You can download the app easily by scanning the QR code.



- 02 Connect your TV and smart device to the same Wi-Fi network.
You can check the Wi-Fi network of TV at  →  → **General** → **Network** → **Wi-Fi Connection**.
 - 03 Run the LG ThinQ app installed on your smart device.
 - 04 Follow the instructions from LG ThinQ app to connect your smart device to the TV.
When your account information of LG ThinQ is linked to the TV, you can manage the IoT devices linked to your account using **Home Dashboard** of the TV.
- Voice commands can also be made through Smart Speaker linked to the account in the settings of the LG ThinQ app.
 - The service may not offer depending on country.

Controlling Your TV with the LG ThinQ App

You can tap the buttons on your smart device's screen to control the TV.



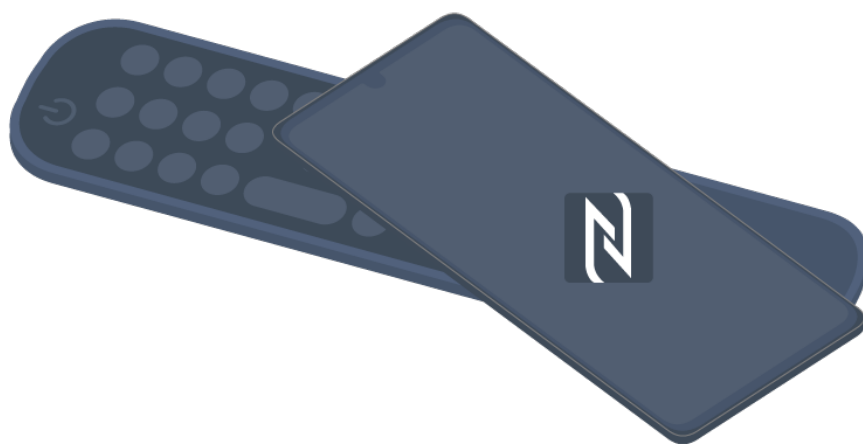
- ❶ When watching a broadcast, you can control the programme, volume, etc. or select the external input with voice commands instead of using the remote control.
- ❷ You can use the same functions as the Magic Remote's pointer and arrow keys.
- ❸ A speech recognition function is available.
 - Some models do not support this function.
 - Some controls may be limited in external input mode.
 - The app's screen and functionality are subject to change without prior notice.
 - Available features may differ depending on your country and OS.

Connecting Smart Devices using NFC Tagging

Near Field Communication (NFC) is a technology that allows you to conveniently send and receive information without any 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.

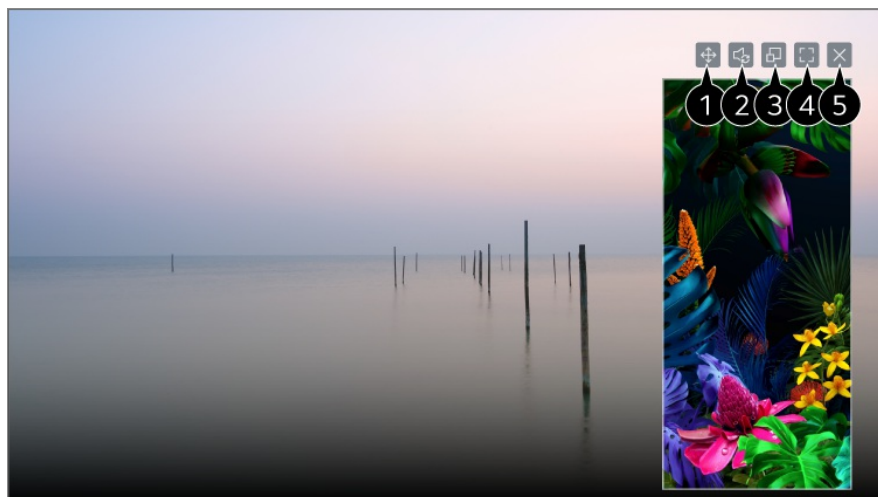
- 01 Turn on NFC in the settings of the smart device.
 To use NFC with Android devices, set the NFC option to enable read/write tags in the settings of the smart device.
 The NFC settings may vary depending on the device.
- 02 Turn on the smart device screen and place it near the **N** on the remote control.
 The maximum distance for NFC tagging is about 1 cm.



- 03 Follow the instructions to install the LG ThinQ app on your smart device.
 - 04 Tagging the smart device to the remote control again allows you to conveniently access new connection features with your device to operate the TV through the LG ThinQ app.
- This feature may not be available in some countries.
 - This feature is available for NFC-enabled smart devices only.
 - This feature is only available if the remote control has an NFC logo.

To See the Mobile Device's Screen on the TV

- 01 Enable Screen Share mode on the mobile device.
- 02 Your TV will be displayed in the list of available devices.
- 03 Select your TV and request connection.
- 04 Select **Accept** in the connection request popup window.
- 05 After the connection is established, the TV will display the screen of the connected device.



- ❶ Changes the position of the mobile device's screen.
 - ❷ Switches between sound from the TV and mobile device.
 - ❸ You can change the size of the screen on your mobile device.
 - ❹ Displays the mobile device's screen in full screen mode.
 - ❺ Exit the **Screen Share**.
- When you connect **Screen Share** for the first time, a popup will appear which allows you to select **Accept**, **Decline** or **Block**.
 - **Accept** : You can connect the device. No connection popup will appear from the second time.
 - **Decline** : Do not connect the device. If you try to connect again, the popup will appear.
 - **Block** : Do not connect the device. Even if you try to connect again, the popup will not appear and the connection will not work.
To turn off **Block**, go to  →  → **General** → **Devices** → **External Devices** and select **Delete Connection History**.
 - Overlay Mode use may be limited depending on the app or video opened.
 - It is recommended that you always update your device to be connected to your TV to the latest OS version for a reliable connection.
 - A non-LGE device may not be connected even when it is detected.
 - It is recommended that you connect the device to a 5 GHz router because the performance may be affected by your wireless environment.
 - The response rate may vary depending on the user's environment.
 - It's differ form devices. For more information on the device you want to connect to, refer to its user guide.
 - If connection fails repeatedly, turn off the TV and the device you want to connect to, then turn them back on and try again.

Playing Sound from a Smart Device through the TV's Speakers

Connect a smart device to the TV via Bluetooth to play sound from the smart device through the TV's speakers.

- 01 Turn the smart device's Bluetooth on, then select the TV from the list of devices.
- 02 The TV will be connected to the smart device.

- If the output speaker is set to **Bluetooth Device** or has a setup history, the TV may not be detected in the list of smart devices.

- If the output speaker is set to **Bluetooth Device**, press and hold the  button on the remote control to open **Home Dashboard** and select **Sound Share** to connect the speaker.

Connecting USB

Connect a USB storage device (USB HDD, USB stick) to the USB port on the TV to enjoy the content files stored on the USB storage device on your TV.

Tips for Using a USB Storage Device

- A USB storage device that has a built-in automatic recognition programme or uses its own driver might not be recognisable.
- Some USB storage devices may not be supported or may not work properly.
- If you use a USB extension cable, the USB storage device may not be recognised or may not work properly.
- Please use only USB storage devices formatted with the FAT32 or NTFS file system provided by Windows OS.
- It is recommended that you use an external USB HDD with a rated voltage of 5 V or less and a rated current of 500 mA or less. If you use a device requiring a higher voltage/current than the rated voltage/current, it may not operate properly due to lack of current.
- It is recommended that you use a USB hub or USB storage device with a power supply.
- We recommend using a storage device with a capacity of 32 GB for the USB memory and 2 TB or less for the USB hard disk.
- If a USB HDD with power-saving function does not work, turn the hard drive off and on again to make it work properly. See the owner's manual for the USB HDD for more information.
- Data on a USB storage device may be damaged, so it is recommended that you back up any important files. Users are responsible for data management. The manufacturer bears no responsibility.
- Press the  button on the remote control. To remove the USB storage device, press the **Eject** button, which appears at the top when you focus on the USB storage device you want to remove. If you disconnect the USB storage device without selecting **Eject**, an error may occur in your TV or storage device.
- When you connect a USB storage device of a file system not supported by the TV to the **USB IN** port, the format message appears. To use the connected USB storage device, you should format the device first.
After format, all the data of USB storage device will be deleted and formatted as NTFS or FAT32 file system.
- Press and hold the  button on your remote control. Select the connected USB from

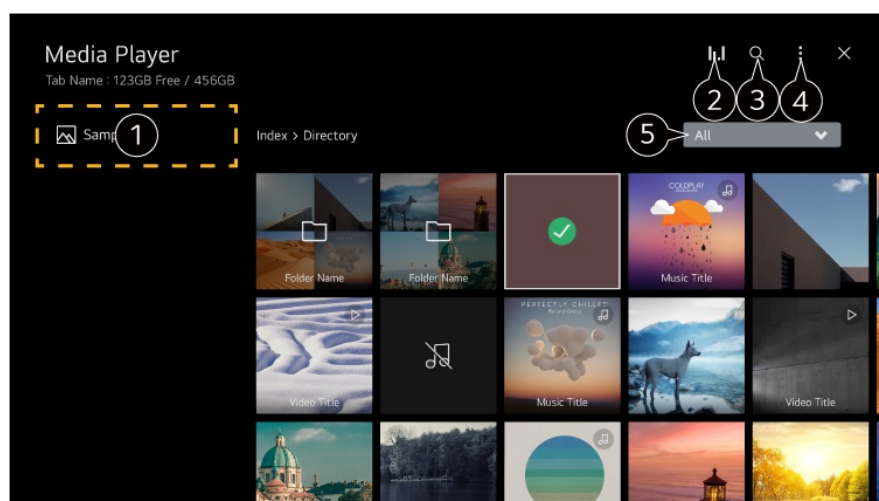
Home Dashboard and select the **Format** button to format the USB storage device.

- When connecting a USB storage device, a random file/folder can be created to provide Smart TV services such as the saving and retrieving of thumbnail images.

Using the **Media Player**

You can search and view photos or play videos and songs with the **Media Player** app.

- 01 Press the  button on the remote control.
- 02 Run the **Media Player** app.
- 03 Select a device to use from the device list.
- 04 Select the content to play.



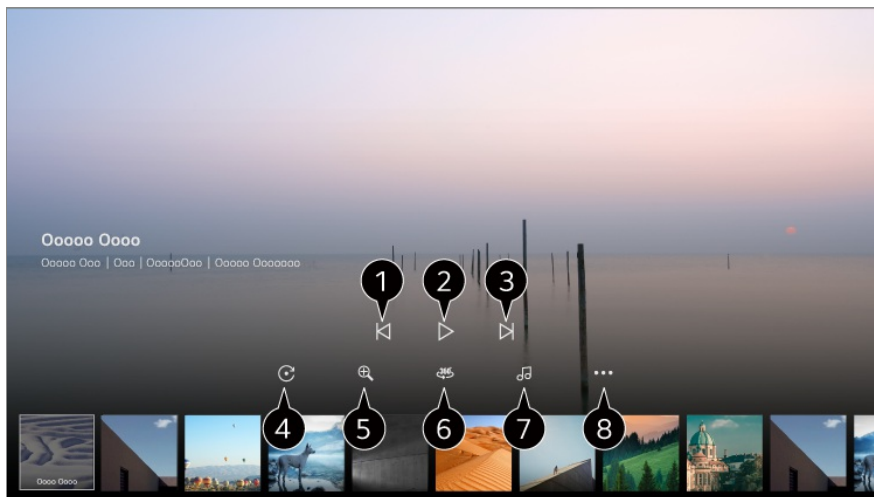
- ① You can select a device connected to your TV.
 - ② Displayed only when music is playing. Press the  to access the Play Music screen.
 - ③ Launch **Search**.
 - ④ **View Type** : Selects a content display mode.
Sort : Select the option to sort content.
Group : If you filter by **Music**, you can group content into categories such as **Artist** and **Album**.
Selection Play : You can select and play multiple pieces of content.
Delete : You can select and delete multiple pieces of content.
User Guide : Move to the **User Guide** app.
 - ⑤ Shows the content of the selected type only.
- You cannot delete files that are shared from other devices.
 - Different settings items are available depending on the filtering or model you selected.
 - Certain content may not be displayed on the list if the number of all content exceeds

40,000.

Viewing Photos

You can select a photo from the **Media Player** app and view the photo.

You can use more features by pressing the ▼ button on the remote control while viewing a photo.



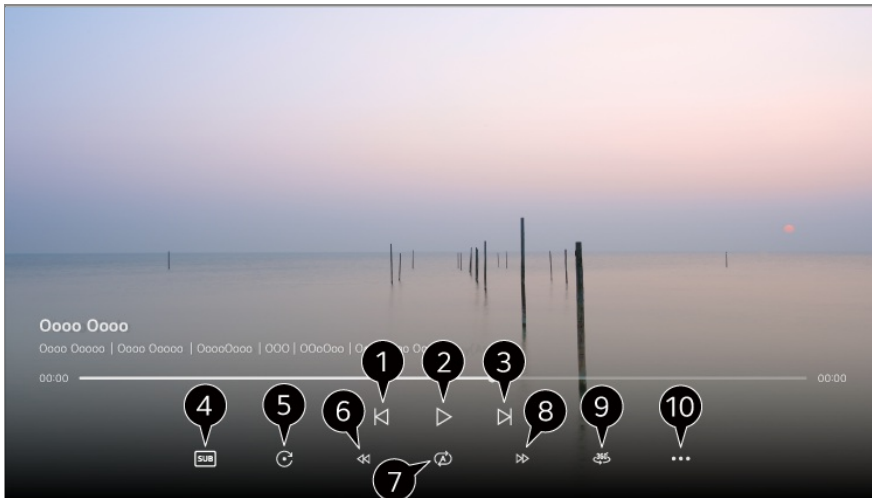
- ❶ Shows the previous content.
- ❷ Starts the slide show.
- ❸ Shows the next content.
- ❹ Rotates photos.
- ❺ Enlarges or reduces the photo.
- ❻ 360-degree photos can be viewed in 360 degrees.
 - Using the 360° VR Play on a normal photo may distort the image.
 - Some models may not be supported.
- ❼ Plays a music file selected from the storage device as background music.
- ❽ Sets the photo size or changes the speed or effects for the slideshow.
 - Some models may not be supported.

Playing Videos

You can select a video from the **Media Player** app and play the video.

Pressing the ◀▶ buttons on the remote control allows you to skip backward/forward 10 seconds.

You can access more features by pressing the ▼ button on the remote control while playing a video.

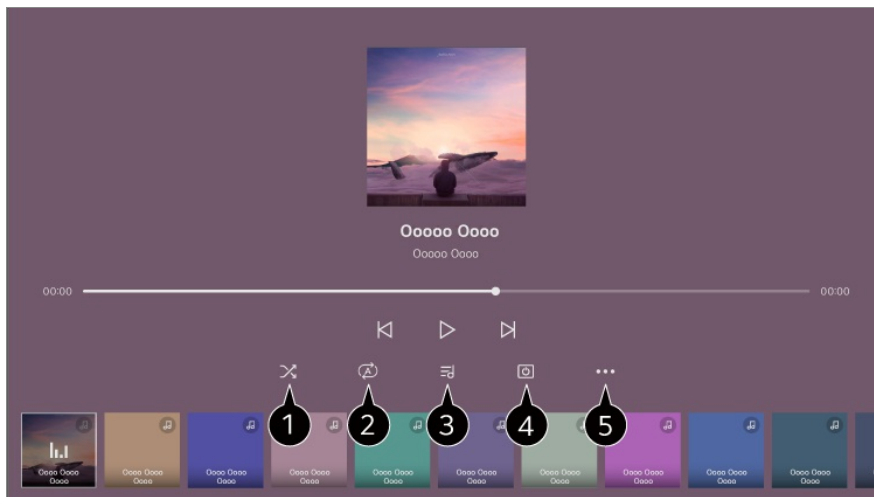


- ① Shows the previous video.
- ② Plays or pauses the video.
- ③ Shows the next video.
- ④ You can change subtitle settings.
- ⑤ Rotates videos.
- ⑥ Fast-rewinds the video at higher speeds.
- ⑦ You can do the settings related to play on repeat of the video.
- ⑧ Fast-forwards the video at higher speeds.
- ⑨ 360-degree videos can be viewed in 360 degrees.
 - Using the 360° VR Play on a normal video may distort the image.
 - Some models may not be supported.
- ⑩ **Resume Play** : You can set continue watching to resume playing from the last viewed scene.
Play Speed : Sets the playback speed.
Audio Track : You can set audio tracks.

Listening to Music

You can select a song from the **Media Player** app and play the song.

You can use more features by pressing the ▼ button on the remote control while playing a song.



- ❶ You can set the random play mode.
- ❷ You can set the repeat play mode.
- ❸ Lyrics are available for music files that provide them.
In some music files, you can choose a lyric section and move the playback position.
 - The lyrics feature is only supported on some devices.
 - The lyrics may not be displayed in sync depending on the lyrics data in the music file.
- ❹ You can listen to music with the screen turned off.
- ❺ You can set the lyric speed.
 - This feature may not be supported depending on the music.

Watch content saved in your PC on the TV

You can enjoy videos/music/photos stored on your PC on the TV when these devices are connected to the same network.

Browse the content on your PC to watch on TV (Windows 10)

- 01 Connect your TV and PC to the same network.
- 02 Right-click the file you want to play and select “Cast to Device”.
- 03 Select the name of the TV you want to watch from the displayed list, and playback will start on that TV.
 - Even when multiple TVs or devices are connected, the selected file is only played through one device. The playback rate may vary depending on the network connection.
 - To play on other operating systems or devices, refer to the manual of the operating system/device.

Browse and watch the content stored on the PC using the TV (Windows 10)

- 01 Connect your TV and PC to the same network.
 - 02 Open the “Start” menu on your PC screen, search for “media streaming options” and then select the result that appears.
 - 03 Select the “Turn on media streaming” button in the window that opens.
 - 04 Allow all of the “media streaming options”.
 - 05 Select “OK” to save the settings.
 - 06 Select the connected PC in the **Home Dashboard** app on the TV, and then select and play the file you want.
- To play on other operating systems or devices, refer to the manual of the operating system/device.

Matters That Require Attention of Content Share

- Check your network settings if the content share option does not work properly.
- May not work properly on a wireless network. It is recommended that you connect to a wired network.
- May not work properly depending on the network environment.
- If multiple TVs are connected to one device, the content may not be played properly depending upon server performance.
- To watch a 1080p video through the content sharing function, a router using the 5 GHz frequency is required. If you use the existing 2.4 GHz router, the video may be laggy or not play properly.
- The Content Share function may not be supported for a router that does not support multi-cast. For more information, refer to the user guide that came with your router or contact the manufacturer.
- Captions are only supported on some connected devices.
- If you have added a caption file afterward, disable the shared folder on the PC and then enable it again.
- The DRM files in the connected device will not play.
- Even for the file format supported by the TV, the supported file format may differ depending on the connected device environment.
- If there are too many folders or files in a folder, it may not work properly.
- The information on the file imported from the connected device may not be displayed correctly.
- Depending on the encoding, some streams may not play in content sharing mode.

To See the PC Screen on the TV

Connect Wireless

- 01 Enable Screen Share mode on the PC. Your TV will be displayed in the list of available devices.
 - 02 Select your TV and request connection.
 - 03 After the connection is established, the TV will display the screen of the connected PC.
- It is recommended that you always update your device to be connected to your TV to the latest OS version for a reliable connection.
 - It is recommended that you use this function at close range.
 - Start Screen Share faster by having your mobile device or PC connected to the same network as the TV.
 - Though it can be connected without a wireless router, connecting your device to a 5 GHz router is recommended because the performance can be affected by the surrounding wireless environment.
 - The response rate may vary depending on the user's environment.
 - It's differ from Windows version. For more information on the device you want to connect to, refer to its user guide.
 - If connection fails repeatedly, turn off the TV and the device you want to connect to, then turn them back on and try again.

Connect wired

- 01 Connect your PC to the TV using an HDMI cable.
 - 02 Switch the current input source to the port where the HDMI cable is connected in the  → **Home Dashboard**.
 - 03 After the connection is established, the TV will display the screen of the connected PC.
- If there is a problem with your connection, refer to **Troubleshooting** → **Troubleshooting PC Connection Issues** in **User Guide**.

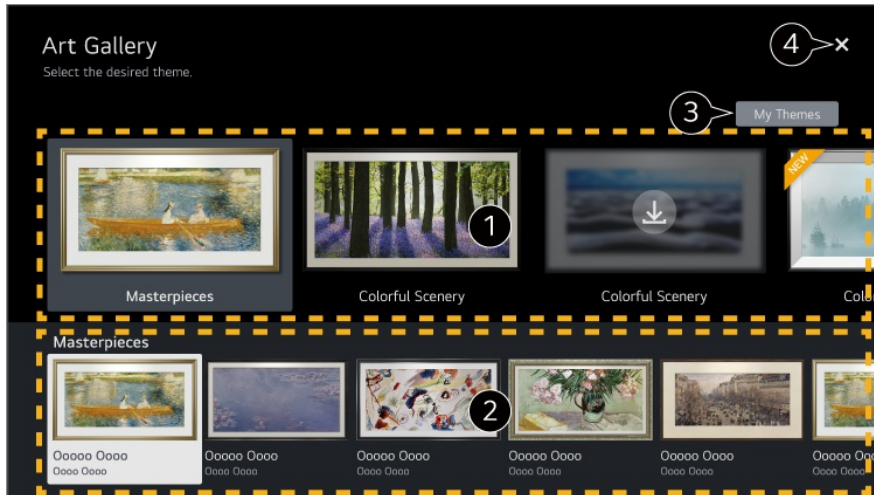
Making the Most of Smart TV

Making the Most of **Art Gallery**

You can enjoy a high-definition image provided for each theme.

01 Press the  button on the remote control.

02 Run the **Art Gallery** app.



① View the built-in images for each theme.

② You can view the information and image of the focused theme in advance.

③ You can delete a downloaded theme or select the desired theme to play.

④ Exit the **Art Gallery**.

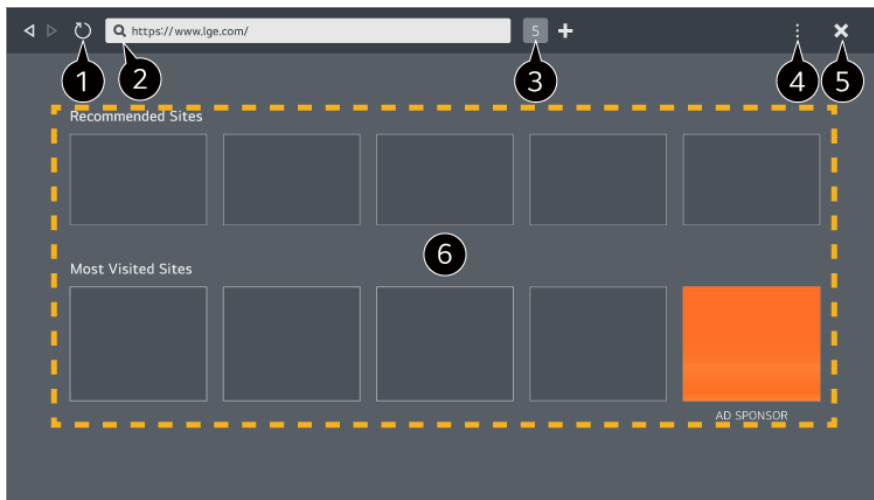
Using the **Web Browser**

You can enter the website when you input the web address on the URL bar.

If you input the search word, it will find the information about search word base on the search engine.

01 Press the  button on the remote control.

02 Run the **Web Browser** application.



- 1 You can refresh the web page you are viewing.
 - 2 You can type in a web address to navigate to a specific website or enter a search term directly.
 - 3 You can view the tabs that are currently open.
 - 4 You can zoom in or out on the screen while browsing the website.
Add to bookmarks : You can add the website you are currently viewing to your Favourites.
Block Ads : You can block ads within the web page you are viewing. However, this button is only displayed if **Settings** → **Use Block Ads** feature is set to **On**.
TV View : Split the screen to display the TV screen. You can browse web pages while watching TV.
History : You can view and delete the website visit history.
Bookmarks : You can view and delete the list of websites you have added to your Favourites.
Settings : You can change the web browser settings.
User Guide : Launch **User Guide**.
 - 5 Exit the **Web Browser**.
 - 6 The new tab screen shows a list of **Recommended Sites** and **Most Visited Sites**. If you do not want **Recommended Sites** to be displayed, set **Settings** → **Show Recommended Sites** to **Off**.
Recommended Sites may vary by country and is only available in certain countries.
- The **Web Browser** app on your TV is a browser for TV, so it may work differently than the browser for your PC.
 - Some contents may not be played properly.
 - Flash Plug-in is not supported, and only HTML5 media is supported.
 - Plug-in installation is not supported.
 - Media in formats other than JPEG/PNG/GIF may not be played.

- Apps may be forced to shut down if the TV runs out of memory.
 - The fonts provided on the TV are used. Depending on the content, characters may look different from PC or mobile browsers.
 - File and font downloads are not supported.
 - Caution is required because malicious or phishing sites are not automatically blocked.
 - Some functions of Web Browser may not be supported temporarily due to external factors.
- The website can be accessed through the TV's **Web Browser** app, so care needs to be taken about children's access to harmful online contents.
You can lock the **Web Browser** app to prevent access to harmful online contents.
Configure the settings in  →  → **General** → **System** → **Safety** → **Application Locks**.
 - If you experience problems while using **Web Browser**, refer to **Troubleshooting** in **User Guide**.

Changing **Web Browser** Settings

Select  → **Settings** at the top of the **Web Browser** app.

On Startup

You can choose the page that appears when you start the **Web Browser** app.

Search Engines

You can select a search engine to search for when entering a keyword in the address bar.

- Search engine settings may be subject to change without notice based on the supplier's circumstances.

Show Recommended Sites

You can set whether or not to display a list of **Recommended Sites** on the new tab screen.

Always Show Address Bar

When set to **On**, the address bar and menu bar area at the top will always be displayed.

Automatic Web Browser Issue Report

When it is set to **On**, if a failure (malfunction, media playback failure, page loading failure, abnormal shutdown, delay in response due to insufficient memory, etc.) occurs

while using the web browser, the relevant information will be automatically sent to the web browser development team at the LG Electronics headquarters (Korea). The submitted information will only be used to improve the Web Browser performance.

Use Block Ads

When it is set to **On**, if you press the  at the top of **Web Browser**, a button to turn on or off **Use Block Ads** will appear on the screen. Turning on the **Use Block Ads** feature speeds up page loading by blocking ads included in the website.

Site Filtering

You can register websites to block or allow.

Approved Sites : You can configure the settings to open the previously registered web pages only.

Blocked Sites : You can configure the settings to block specific websites.

- To use the **Site Filtering** function, you should enter the TV password.

Pop-up Blocker

Blocks pop-ups that are automatically displayed by web pages.

Private Browsing

If set to **On**, a history of website visits will not be stored.

Do Not Track

You can request to not leave a history of your visit on the website. The operation may vary depending on the policy of the website.

Adaptive Streaming using JavaScript

The media streaming technology using JavaScript allows you to view video with optimised resolution.

If this is set to **Off**, the resolution of the videos played in **Web Browser** is limited to 720p.

Cookies Settings

Enables the website to store and use cookie data.

Clear Browsing Data

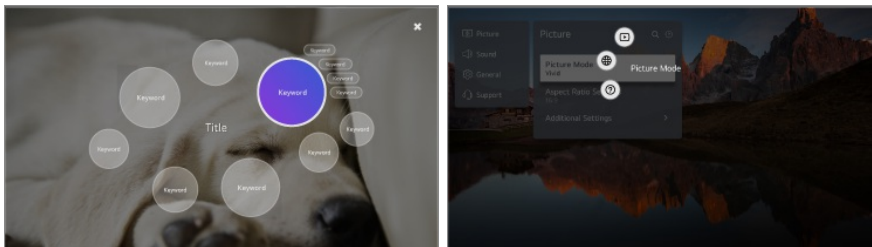
Clear Cookies : Deletes cookie data. When deleted, you are logged out of most sites.

Clear All Browsing Data : Deletes all browsing history, including cookies.

To use Magic Explorer

You can run a search conveniently through various apps based on on-screen text or video information.

- 01 Magic Explorer can be used if the pointer colour of the Magic Remote changes (e.g., to the 🟡).
- 02 Press and hold the **Wheel (OK)** button on the image if you are watching a broadcast, or on the text if you are using **Guide**, **Settings**, **Sports Alert** or **Art Gallery** apps.
- 03 On the broadcast screen, keywords associated with the programme appear. On the text in the app, an icon appears that allows you to go to an item, such as Web Browser or Search.
- 04 Choose an item to use.
 - You can move an item by pressing the ▲/▼/◀/▶ buttons on the remote control.
- 05 You can exit Magic Explorer by pressing the ↶ button on the remote control.



- You can also use this feature by pressing and holding the **OK** button on the standard remote control.
- Available features vary depending on the region or service.
- Some models may not be supported.

Using Sports Alert

- 01 Press the 🏠 button on the remote control.
- 02 Run the **Sports Alert** app.
- 03 Register my team/player to check the game schedule and real-time scores.
 - The match schedule or status may differ from actual ones depending on the circumstances of the data provider.

- Real-time alarm may not be available when using certain apps.
- This feature is available only when the network is connected.
- Some models may not be supported.

Using the **Live Plus** Function

Live Plus provides an enhanced viewing experience related to the content you're watching including looking at additional information, participating in events, interacting with advertisements, etc.

- 01 Press the  button on the remote control.
- 02 Select  → **General** → **System** → **Additional Settings**.
- 03 Set **Live Plus** to **On**.

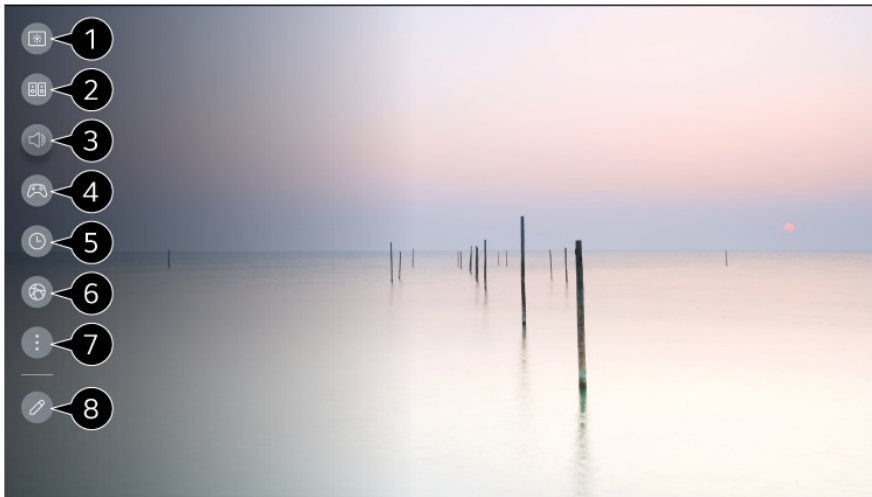
- Some models may not be supported.
- You can still access some of the **Live Plus** features when using external devices such as a set-top box.
- If you set up a universal remote control, you can use **Live Plus** even when using external devices.
- This service is provided for only select content with contracted partners.

Settings

To Use Setting Function Quickly

Set of light-weight controls quickly and simply such as **Picture Mode**, **Sound Out**, **Sleep Timer** and so on.

Press the  button on the remote control.



- ① You can set **Picture Mode**.
- ② You can set **Sound Mode**.
- ③ You can choose **Sound Out**.
- ④ Directs to the **Game Optimiser** settings.
- ⑤ You can set **Sleep Timer**.
- ⑥ Directs to the **Network** settings.
- ⑦ You can set more options.
 - You can also long-press  button of the remote control to run the All settings directly.
- ⑧ You can add/delete the quick setting items or change their order.
 - After entering each item, press and hold the **Wheel (OK)** button on the remote control to go to the corresponding menu.

Picture

Selecting Picture Mode

 →  → **Picture** → **Select Mode**

Select the picture mode that is best suited to your viewing environment, preferences or video type.

Select a picture mode. By adjusting and setting each item in more detail based on the mode, your video is better optimised for its characteristics.

- The configurable items differ depending on model.

When You Use Normal Signals

Vivid

Sharpens the image by increasing the contrast, brightness and sharpness.

Standard

Displays the picture with normal contrast, brightness and sharpness levels.

Eco / APS

The Energy Saver feature changes settings on the TV to reduce power consumption.

- The configurable items differ depending on model.

Cinema

Suitable picture for movies.

Sports / Football / Cricket

Suitable picture for sports games. Sharpens the image of rapid movements such as kicking or throwing a ball.

- The name of the sport may differ depending on region.

Game Optimiser

Suitable picture for gameplay.

FILMMAKER MODE

Provides optimized Cinema Picture quality certified by UHD Alliance, the standard setting body for UHD-related technologies.

- To auto-switch to **FILMMAKER MODE** when a signal that can be operated with this mode is entered, set **FILMMAKER MODE Auto Start** to **On**.

Expert (Bright space, daytime) / **Expert (Dark space, night)**

This mode is suitable for movies, etc. viewed in a dark environment.

Expert (Dark space, night) has lower color temperature than **Expert (Bright space, daytime)**.

Select a mode that is suitable for the movie you are watching.

ISFccc : Imaging Science Foundation Certified Calibration Control

When You Use the HDR/Dolby Vision Signals

Vivid

Sharpens the image by increasing the contrast, brightness and sharpness.

Standard

In a normal viewing environment, it opens a screen that can properly show the expressiveness and brightness of HDR.

Cinema Home

The screen appears as a bright and clear screen than the **Cinema**.

Cinema

Suitable picture for HDR video signal.

Game Optimiser

Suitable picture for gameplay.

FILMMAKER MODE

Provides optimized Cinema Picture quality certified by UHD Alliance, the standard setting body for UHD-related technologies.

- To auto-switch to **FILMMAKER MODE** when a signal that can be operated with this mode is entered, set **FILMMAKER MODE Auto Start** to **On**.
- If the HDR/Dolby Vision video signal is input to the models that do not support the HDR/Dolby Vision technology, It will be provide normal signals picture mode options.
- Depending on the input signal, the available picture modes may be different.
- When watching online service content, the Picture Mode may be changed to match the content being shown.
-  Expert is an option that allows a picture quality expert to fine-tune the quality of the standard picture. Thus, it may not be effective for a normal picture.
- **Select Mode** change may modify **Energy Saving** and **Motion Eye Care** settings and it can affect energy consumption. You can change the settings in **Support** → **Energy Saving** and **Picture** → **Advanced Settings** → **Brightness** → **Motion Eye Care**.

Setting the Screen Size

 →  → **Picture** → **Aspect Ratio** → **User Selection**

You can change the screen size according to the type of content you are watching.

16:9

Displays an aspect ratio of 16:9.

Original

The optimal screen ratio changes depending on the input image signal.

Full Wide

You can watch content across the full screen.

Please note that picture distortion can occur depending on signal type.

4:3

Displays an aspect ratio of 4:3.

Vertical Zoom

You can adjust the vertical dimension of the screen and align the screen vertically by using **Adjust Zoom Ratio** and **Adjust Screen Position**.

4-Way Zoom

You can adjust the horizontal/vertical/diagonal dimensions of the screen and align the screen horizontally/vertically by using **Adjust Zoom Ratio** and **Adjust Screen Position**.

- The configurable items differ depending on model.
- The picture may get distorted while zooming in or out.
- Selecting a different screen size from the original size may cause the image to look different.
- Depending on the combination of picture format and screen size, the edges may be hidden or shown in black, or both sides of the picture may flicker. Also, when selecting an item shown on the broadcast screen, the outline may not be aligned correctly.
- Depending on the input signal, the available screen sizes may be different.

View Screen with **Just Scan**

 →  → **Picture** → **Aspect Ratio** → **Just Scan**

If you turn this feature **On**, you can view the content in the aspect ratio that is in the broadcast signal or content source. If the edge of the screen is not clean, please turn it **Off**.

If set to **Auto**, the feature switches between **On** or **Off** status depending on the

information contained in the video signal.

- The items that can be selected may vary depending on the current input.

Adjusting the Brightness of a Picture

⚙️ → ⓘ → **Picture** → **Advanced Settings** → **Brightness**

You can adjust the brightness of the entire screen.

Panel Brightness

Controls the level of screen brightness by adjusting the backlight. The closer to 100, the brighter the screen.

- Decrease the **Panel Brightness** to reduce energy consumption.
- Depending on the **Energy Saving (Auto/Maximum)**, you may not be able to adjust the **Panel Brightness**.

In this case, navigate to ⚙️ → ⓘ → **Support** → **Energy Saving** → **Energy Saving Step** and set to **Off** or **Minimum**.

- Depending on your TV model, you might not have the **Panel Brightness** setting.

OLED Pixel Brightness

Adjusts the display brightness by varying the brightness of the OLED panel.

- Depending on the **Energy Saving (Auto/Maximum)**, you may not be able to adjust the **OLED Pixel Brightness**.

In this case, navigate to ⚙️ → ⓘ → **Support** → **Energy Saving** → **Energy Saving Step** and set to **Off** or **Minimum**.

- Depending on your TV model, it might not have the **OLED Pixel Brightness** setting.

Contrast

Adjusts the contrast of the bright and dark areas of the picture. The closer to 100, the higher the contrast.

Screen Brightness

Adjusts the overall screen brightness. The closer to 100, the brighter the screen. You may use the **Screen Brightness** settings particularly to set the dark part of the image.

Auto Dynamic Contrast

Corrects the difference between the bright and dark sides of the screen for optimal

results depending on the brightness of the picture.

HDR Tone Mapping

Suitable contrast settings based on image brightness of the HDR content.

Peak Brightness

Adjust peak brightness for the brightest luminance.

Gamma(Adjust Brightness)

Adjusts the medium brightness of the picture.

Select **Low** for a bright picture, select **High1** or **High2** for a dark picture or select **Medium** for medium brightness.

Live Theatre or **Expert (Bright space, daytime)/Expert (Dark space, night)** can be selected from **1.9/2.2/2.4/BT.1886**.

- **High2/BT.1886** expresses the gradation in ITU-R BT.1886, which is an international standard.

Black Level

Adjusts the darkness of the screen in order to display a perfect black. Select **Auto**, **Limited**, or **Full** to match the colour range of the external input device.

- This feature can be used while watching content through an external input.

LED Local Dimming

Maximizes the contrast ratio by making the bright side of the screen brighter and the dark side of the screen darker.

- **Off** : Disables the **LED Local Dimming** function.
- **Low / Medium / High** : Changes the contrast ratio.
- Turning this option **Off** may increase energy consumption.

Motion Eye Care

Automatically adjusts brightness and reduces image blur based on image data to reduce eyestrain.

- Turning this option **Off** may increase energy consumption.
- Depending on the input signal or the selected picture mode, the available options may differ.

- The configurable items differ depending on model.

Adjusting the Colour of an Picture

⚙️ → ⓘ → **Picture** → **Advanced Settings** → **Colour**

Colour Depth

Tones down or up the colours displayed on the screen. The closer to 100, the deeper the colour.

Tint

Adjusts the colour balance between red and green displayed on the screen. The closer to Red 50, the more red the colour will be. The closer to Green 50, the more green the colour will be.

Colour Gamut

Selects the range of Colours to display. Set color gamut to **Auto Detect** according to the signal, or to **Native** to display more vivid and richer color.

Fine Tune

This is used when experts control it by using a test pattern. You can control it by selecting areas of six colours (**Red/Green/Blue/Cyan/Magenta/Yellow**). For normal images, adjustments may not result in noticeable colour changes.

Colour Upgrade

Adjusts the Colour and saturation of the picture to make the image more Colourful and lively.

Select Colour

From **Red/Green/Blue/Cyan/Magenta/Yellow**, select a tone to adjust.

Saturation / Adjust Tint / Adjust Luminance

Adjust the chroma/tint/luminance of the tone in the range of -30 to +30.

White Balance

The function to adjust each colour to be reproduced more accurately based on white allows you to adjust the overall colour tone of the screen to your preference.

Colour Temperature

You can set the colour to make the display look cooler or warmer.

Method

This method is used for fine-tuning the color temperature setting. You can control the colour temperature at two points of the bright part and dark part of the video if you select **2 Points**, at each point of 10 levels if you select **10 Points Signal Level(%)**, and at each point of 22 levels of the video if you select **22Points Signal Level(%)**.

Point

Select screen brightness for color temperature adjustment.

If **Method** is set to **2 Points**, use Low to select shadows and High to select highlights.

If **Method** is set to **10 Points Signal Level(%)**, you can select brightness using numbers indicating 10 levels.

When the **Method** is set to **22Points Signal Level(%)**, you can select the brightness with the 22 levels of brightness.

Signal Level(%)

Select screen brightness for color temperature adjustment.

If **Method** is set to **10 Points Signal Level(%)**, you can select brightness using numbers indicating 10 levels.

When the **Method** is set to **22Points Signal Level(%)**, you can select the brightness with the 22 levels of brightness.

Show brightness level at the maximum signal level(%)

Adjust the luminance to the highest IRE (100 points).

Adjust brightness level at the selected signal level(%)

You can adjust the selected brightness by points.

- You can do these settings only when the **Picture → Select Mode** is the **Live Theatre, Expert (Bright space, daytime)** or the **Expert (Dark space, night)** and when the **Method** is set to **10 Points Signal Level(%)** or **22Points Signal Level(%)**.

Red / Green / Blue

Adjust the color temperature of the selected point.

Adjust the intensity of **Red/Green/Blue** in the range of -50 to 50.

You can adjust respective values for the brightness selected in **Point**.

- Depending on the input signal or the selected picture mode, the available options may differ.
- The configurable items differ depending on model.

Adjusting the Contrast of a Picture

⚙️ → ⓘ → **Picture** → **Advanced Settings** → **Clarity**

You can adjust the contrast of a Picture to show it more clearly.

Sharpness

Adjusts the sharpness of the image. The closer to 50, the sharper and clearer the image.

Super Resolution

Adjusts the resolution to make dim and blurred images clearer.

Noise Reduction

Removes small dots that stand out so as to make the image clean.

MPEG Noise Reduction

Reduces the noise produced during the creation of digital video signals.

Smooth Gradation

It reduces the phenomenon that the outline of the image is rugged and in a staircase pattern and displays a smoother screen.

Cinema Screen

Optimise display for movies.

TruMotion

Suitable the image quality of fast-moving pictures.

- **Off** : Turns off the **TruMotion**.
- **Cinematic Movement** : Adjusts the shaking of the motion on the screen to make it feel like you are in a movie theatre.
- **Natural** : Sets images with a lot of motions to look natural and clear.
- **Smooth Movement** : Softens fast-moving pictures.

- **User Selection** : Sets **TruMotion** manually.
 - **De-Judder** : Adjusts juddering on the screen.
 - **De-Blur** : Reduces the blurring effects of motion.
 - **OLED Motion / OLED Motion Pro / Motion Pro / NanoCell Motion Pro** : You can make your video clearer by eliminating afterimages.

- The advanced settings can be changed only in **User Selection** mode.
- Depending on the input signal or the selected picture mode, the available options may differ.
- The configurable items differ depending on model.

Applying the Current Picture Settings to All Inputs

 →  → **Picture** → **Advanced Settings** → **Apply to all inputs**

The settings you specify only apply to the currently selected input mode.

To apply your current picture settings to all input modes, select **Apply to all inputs**.

Resetting Picture Mode

 →  → **Picture** → **Advanced Settings** → **Reset**

If you want to reset the image settings to the factory defaults after configuring the image settings, select reset for each image mode.

FILMMAKER MODE Auto Start

 →  → **Picture** → **Advanced Settings** → **FILMMAKER MODE Auto Start**

Set to **On**. When **HDMI IN** recognises a movie content, it switches to **FILMMAKER MODE** automatically.

- While this mode effectively conveys the creator's intention, it may appear darker than other Select Mode.

To Use Reduce Blue light Feature

 →  → **Picture** → **Advanced Settings** → **Reduce Blue light**

The colour temperature will be adjusted to reduce eye fatigue.

On

The colour temperature of your TV screen is adjusted.

Off

Turns off the **Reduce Blue light**.

- Some models may not be supported.

Sound

Select Mode

 →  → **Sound** → **Select Mode**

You can select the most suitable sound mode for each genre.

AI Sound / AI Sound Pro

Automatically optimise sound based on content type.

Standard

Optimises the sound for all types of content.

Cinema

Optimises the sound for cinemas.

Clear Voice / Clear Voice Pro

Boosts voice clarity.

Sports / Football / Cricket

Optimises the sound for sports games.

Music

Optimises the sound for music.

Game Optimiser

Optimises the sound for gameplay.

- This setting only applies to the internal speakers of the TV or **HDMI (ARC)** connected devices that support **TV Sound Mode Share**.
- The configurable items differ depending on model.

Use TV Speaker

 →  → **Sound** → **Sound Out** → **Use TV Speaker**

Audio is played through the TV's internal speakers.

Use Wireless Speaker

 →  → **Sound** → **Sound Out** → **Use Wireless Speaker**

Bluetooth Device

Wirelessly connect a Bluetooth audio device to enjoy TV sound more conveniently. Refer to the user manual of the Bluetooth audio device for details on how to connect and use the device.

- Press  to view the connected devices or the devices that can be connected to connect any one of them.
- LG Sound Sync devices will automatically try to connect to the recently used devices when you turn the TV on.
- We recommend that you connect an LG audio device that supports LG Sound Sync, using LG TV mode or LG Sound Sync mode on device.
- Some models may not be supported.
- If the device fails to connect, check the power of the device to connect to and check if the audio device is working properly.
- Using a Bluetooth headset is recommended when you connect two Bluetooth devices.
- Depending on the type of the Bluetooth device, the device may not connect correctly or an abnormal behavior may occur such as unsynchronized video and audio.
 - The mobile-only headsets may not work.
 - If two different Bluetooth devices are connected and used at the same time, the voice may not match.
- Sound may stutter or sound quality may be reduced if:
 - the Bluetooth device is too far from the TV;
 - there are obstacles between the Bluetooth device and the TV; or

- used together with radio equipment such as a microwave oven or wireless LAN

- If the **Picture → Select Mode** is set to **Game Optimiser** and **Sound Out** is set to **Bluetooth Device**, the **Picture → Select Mode** changes to **Standard**.
- If you continue to experience problems, we recommend using a wired connection. (Optical digital, **HDMI (ARC)** port)

WiSA Speakers

You can wirelessly connect the TV to the **WiSA Speakers** to enjoy high-quality sound. Select  to adjust detailed settings for **WiSA Speakers**.

- Some models may not be supported.
- To use the WiSA speakers, you need to connect the exclusive dongle.
- Connection issues between the WiSA Dongle and WiSA Speaker may occur in environments with wireless interference. In this case, contact the speaker manufacturer.
- For more information on the purchase of WiSA authorized products, check on www.wisaassociation.org.

Mobile Device

If you install the LG ThinQ app on a smart device and connect it to your TV, you can use the device as a speaker for the TV.

Use Wired Speaker

 →  → **Sound → Sound Out → Use Wired Speaker**

Optical Out Device

You can connect an audio device that supports Optical to the optical digital audio output port to enjoy your TV's sound in richer quality and greater convenience.

- Only available for models with an optical digital port.
- For some devices, you can adjust the volume using the TV remote control.

HDMI(ARC) Device

Sound from the TV can be output through an external audio device connected via a **HDMI (ARC)** port.

- Select **HDMI(ARC) Device** to automatically turn on SIMPLINK. Once SIMPLINK is turned off, the output speaker settings automatically revert to the default settings for uninterrupted

audio output.

Audio Out Device / Wired Headphones

Select **Wired Headphones** or **Audio Out Device** to optimise audio output according to the device connected.

- Some models may not be supported.
- If you connect the wired headphones while the TV is powered on, it automatically detects the wired headphones and redirects audio through them.

Use Multiple Speakers

 →  → **Sound** → **Sound Out** → **Use Multiple Speakers**

Audio can be played through the multiple devices simultaneously.

Bluetooth Device + TV Speaker

Both the internal speaker of the TV and the Bluetooth speaker can be used to output the sound at the same time or a surround sound can be used.

Up to two Bluetooth devices of the same model can be connected.

- 01 Select  to connect a Bluetooth speaker.
 - 02 Run **Audio Delay** to synchronize the TV's internal speaker with the Bluetooth speaker. You can adjust the sync automatically or manually.
- When you set **Sound Out** as **Bluetooth Device + TV Speaker**, if **Picture** → **Select Mode** is **Game Optimiser**, it will be changed to **Standard** and **Dolby Atmos** will be turned off.
 - While using Screen Share function, the video and audio may be out of sync. We recommend using **Use TV Speaker** in **Sound Out**.
 - Depending on the type of your Bluetooth device, two devices may not be connected at the same time.
 - Depending on the type of the Bluetooth device, the device may not connect correctly or an abnormal behavior may occur such as unsynchronized video and audio.

Optical Out Device + TV Speaker

Audio is played through the TV's built-in speakers and the audio device connected to the digital optical audio output port simultaneously.

Wired Headphones + TV Speaker

Audio is played through the TV's internal speakers and the **Wired Headphones** simultaneously.

- Some models may not be supported.
- If you connect the wired headphones while the TV is powered on, it automatically detects the wired headphones and redirects audio through them.

Dolby Atmos

 →  → **Sound** → **Advanced Settings** → **Dolby Atmos**

Dolby Atmos is based on the concept of audio objects. Any sound can be mixed as a single audio element, an object, that's independently placed in three-dimensional space. Your new LG TV has been enabled with the latest Dolby Atmos sound technology. Dolby Atmos is the ultimate sound experience which creates moving audio that flows around you using TV speakers.

The menu, which acts as On/Off, the default value is **On**. Given the effect of the **Dolby Atmos**, Dolby Atmos content applies. (Menu when turned **On**)

- Some Dolby Atmos contents may not be played.

Balance

 →  → **Sound** → **Advanced Settings** → **Balance**

You can adjust the volume of the left and right speakers.

- This setting is only available for Internal TV Speaker.

Equalizer

 →  → **Sound** → **Advanced Settings** → **Equalizer**

You can adjust the sound by increasing or decreasing the output of the specific frequency range of the voice signal.

- This option can be enabled if **Sound** → **Select Mode** is set to **Standard**.
- This setting only applies to the internal speakers of the TV or **HDMI (ARC)** connected devices that support **TV Sound Mode Share**.

Installation Type

 →  → **Sound** → **Advanced Settings** → **Installation Type**

This mode optimises the sound based on the TV setup.

Stand Type

Select this if the TV is installed in stand-type.

Wall-mounted Type

Select this if the TV is installed in wall-mounted type.

- This setting is only available for Internal TV Speaker.

Automatic Volume Adjustment

⚙️ → ⓘ → **Sound** → **Advanced Settings** → **Automatic Volume Adjustment**

If it is set to **On**, the volume will be automatically adjusted to a suitable level for each content you watch to help you enjoy watching more comfortably.

- This setting only applies to the internal speakers of the TV or **HDMI (ARC)** connected devices that support **TV Sound Mode Share**.

DTV Audio Setting

⚙️ → ⓘ → **Sound** → **Advanced Settings** → **DTV Audio Setting**

When different audio types exist in an input signal, this function allows you to select the audio type you want.

If set to **Auto** the search order is AC4 → HE-AAC → Dolby Digital Plus → Dolby Digital → MPEG and output is produced in the first Audio Format found.

- The following search order may change depending on the country : AC4 → HE-AAC → Dolby Digital Plus → Dolby Digital → MPEG.
- If the selected Audio Format is not supported, another Audio Format may be used for output.
- Some models may not be supported.

Adjusting AV Synchronization

⚙️ → ⓘ → **Sound** → **Advanced Settings** → **Match Screen and Sound**

Adjusts the synchronization of the sound from the speaker that is working.

The closer the value is set to 60, the slower the voice output speed will be than the default speed.

If you select **Bypass**, Outputs the broadcast signals or the sound from external devices without any audio delay. The audio may be output before the video because of the time the TV takes to process the video input.

- Available options vary by **Sound Out** setting.

Select HDMI Input Audio Format

⚙️ → ⓘ → **Sound** → **Advanced Settings** → **Select HDMI Input Audio Format**

You can set the audio format for each HDMI input. When the voice delivered through the HDMI port is not synchronized, set it to **PCM**.

TV Sound Mode Share

⚙️ → ⓘ → **Sound** → **Advanced Settings** → **TV Sound Mode Share**

Connect an LG Soundbar that supports **TV Sound Mode Share** and set it to **On**. The **Sound** → **Select Mode** set on the TV is applied to the soundbar to deliver a variety of sounds.

Sound Bar Mode Control

⚙️ → ⓘ → **Sound** → **Advanced Settings** → **Sound Bar Mode Control**

Connect an LG Soundbar that supports **Sound Bar Mode Control** and set it to **On**. You can set the sound mode of the soundbar in ⚙️ → ⓘ → **Sound** → **Select Mode** on the TV.

- The name of the sound mode displayed on the soundbar may differ from that of the **Sound** → **Select Mode** on the TV, depending on the model. In this case, it will be matched with the Sound Mode with similar effects.

LG Sound Sync

⚙️ → ⓘ → **Sound** → **Advanced Settings** → **LG Sound Sync**

Connect the LG Sound Sync device to the optical digital input port and set **Sound Out** to **Optical Out Device**.

By setting this feature to **On**, you can adjust the volume of the connected LG Sound Sync device using a TV remote control.

- If the auto-power feature of the sound bar that supports LG Sound Sync is set to On, the sound bar will be turned on or off together when the TV is turned on or off.

Setting Digital Sound Output

⚙️ → ⓘ → **Sound** → **Advanced Settings** → **Digital Sound Output**

You can configure the **Digital Sound Output** settings.

- This setting is only available when ⚙️ → ⓘ → **Sound** → **Sound Out** → **Use Wired Speaker** is set to **Optical Out Device/HDMI(ARC) Device**.
- When **Pass Through** is enabled, sound effects may not be output.
- The codec output with a device may differ from input signals.

	Sound Input	Digital Sound Output
PCM	All	PCM
Auto / Pass Through	MPEG	PCM
	Dolby Digital	Dolby Digital
	Dolby Digital Plus / Atmos	(Optical) Dolby Digital (HDMI ARC) Dolby Digital Plus / Atmos
	Dolby TrueHD (HDMI only)	(Optical) Dolby Digital (HDMI ARC) Dolby Digital Plus / Atmos
	HE-AAC / AAC	(Optical) Dolby Digital (HDMI ARC) Dolby Digital / Dolby Digital Plus

- Dolby TrueHD , HDMI eARC , Dolby Atmos : Some models may not be supported.
- When connected with HDMI eARC, the output audio type will depend on the audio type supported by the connected device.
 - Depending on the device connected and input audio type, it can be output as Dolby Metadata-Enhanced Audio Transmission PCM (Dolby MAT PCM).
 - If **Digital Sound Output** is set to **Pass Through** and HDMI input is Dolby TrueHD or Multi-Channel PCM, audio can be output as Bypass.

Using eARC Supported Audio Device

→ → **Sound** → **Advanced Settings** → **eARC Support**

eARC is a technology that can send and receive more sound information faster thanks to its wider bandwidth than that of the conventional ARC. You can enjoy TV sound with higher quality than ARC through a connected audio device.

- 01 Connect an audio device that supports eARC to the **HDMI (ARC)** port.
- 02 Go to **Sound Out** → **Use Wired Speaker** and choose **HDMI(ARC) Device**.
- 03 Set **eARC Support** to **On**.

Initializing Sound Settings

→ → **Sound** → **Advanced Settings** → **Reset**

Restores the detailed effect settings for the **Standard** sound mode to the initial settings.

- This setting only applies to the internal speakers of the TV or **HDMI (ARC)** connected devices that support **TV Sound Mode Share**.

AI Service

AI Picture / AI Picture Pro

→ → **General** → **AI Service** → **AI Picture / AI Picture Pro**

When set to **On**, the image quality is automatically optimized for content characteristics based on the algorithms learned with deep learning techniques.

- It is supported for only digital broadcasting, videos of a USB memory device, and HDMI video input.
- If  →  → **Picture** → **Select Mode** is **Game Optimiser**, you cannot set up this feature.
- It does not work with copyrighted content.

AI Brightness Settings

→ → **General** → **AI Service** → **AI Brightness Settings**

When set to **On**, the screen brightness is automatically calibrated based on the brightness around the TV.

Auto Genre Selection

⚙️ → ⓘ → **General** → **AI Service** → **Auto Genre Selection**

When set to **On**, the image quality is automatically optimised for the genre of the content by the artificial intelligence.

- It does not work with copyrighted content.

AI Sound / AI Sound Pro

⚙️ → ⓘ → **General** → **AI Service** → **AI Sound / AI Sound Pro**

If set to **On**, the optimal sound and realistic surround effects are provided per the content based on artificial intelligence.

- This setting only applies to the internal speakers of the TV or **HDMI (ARC)** connected devices that support **TV Sound Mode Share**.
- When this feature is set to **On**, ⚙️ → ⓘ → **Sound** → **Select Mode** is changed to **AI Sound/AI Sound Pro**.

AI Acoustic Tuning

⚙️ → ⓘ → **General** → **AI Service** → **AI Acoustic Tuning**

With the **AI Acoustic Tuning** feature, you can detect the space where your TV is installed using your Magic Remote's microphone to optimise the audio of your TV for your environment.

Select **Start New Sound Tuning** to measure the space in which the TV is installed. When the initial detection is complete, you can select your desired audio mode.

- **Off** : This option disables the use of **AI Acoustic Tuning**-adjusted audio. Selecting this option outputs your TV's default sound without making any adjustments to it.
- **Standard** : Selecting this option outputs **AI Acoustic Tuning**-adjusted audio in Standard mode. This mode provides a clean and natural sound.
- **Bass Boost** : Selecting this option outputs **AI Acoustic Tuning**-adjusted audio with an emphasis on bass.
- **Treble Boost** : Selecting this option outputs **AI Acoustic Tuning**-adjusted audio with an emphasis on treble.
- If there is more than a library noise level (over 30 ~ 40 dBA), we recommend that you install from within 3 metres.

- This function may not work properly
 - The background noise is too large over 40 dBA.
 - TV and Magic Remote distance 5 metres or more.

Viewing **Voice Recognition Help**

⚙️ → ⓘ → **General** → **AI Service** → **Voice Recognition Help**

You can see the list of features you can use through voice control.

Using **Voice Recognition Settings**

⚙️ → ⓘ → **General** → **AI Service** → **Voice Recognition Settings**

You can apply settings for voice recognition features.

AI Recommendation

⚙️ → ⓘ → **General** → **AI Service** → **AI Recommendation**

You can get content recommendation messages according to your content viewing history and app usage history.

Smart Tips

You can get an introduction to smart features you can use when watching TV or using an app.

Next Picks

You can get recommendations based on your TV viewing patterns.

- This feature may not be available in some countries.

Who.Where.What?

You can get recommendations for the information related to the broadcast you are watching.

- This feature may not be available in some countries.

Reset Usage Data

It resets the content view history and the app usage history. If you reset them, it takes some time to receive recommendations for contents again.

App Alarm

Sports Alert

Move to the **Sports Alert** app. You can check information about sports events and set alarms.

For more information, see **Making the Most of Smart TV → Using Sports Alert** in **User Guide**.

- The configurable items differ depending on model.

Game Optimiser

Sets up the features for an immersive experience when you play with a video game console.

01 Press the  button on the remote control.

02 Select  on the screen.

03 Selecting **On** turns on all related settings.

- It only works with HDMI inputs.
- When **Game Optimiser** is set to **On**, audio delays may occur if you set **Sound Out** to **Bluetooth Device/WiSA Speakers/Optical Out Device/HDMI(ARC) Device**. Switch to **Use TV Speaker** or change  →  → **Sound** → **Advanced Settings** → **Select HDMI Input Audio Format** to **PCM**.
- The configurable items differ depending on model.

Picture

Game Genre

You can optimise the screen depending on the genre of the game.

You can select **Black Stabiliser/White Stabiliser** and fine-tune dark and light areas.

Click **Reset** to reset **Black Stabiliser/White Stabiliser** settings.

OLED Motion / OLED Motion Pro

You can make your video clearer by eliminating afterimages.

Reduce Blue Light

You can adjust the blue light output to rest your eyes while watching the screen.

Prevent input delay (input lag)

Minimize the input delay according to the image signal.

- If you turn this feature **On**, you cannot change some video settings items.
- The **Select Mode** must be set to **Game Optimiser** before using the feature.

Sound

AI Game Sound

Optimises the sound for gameplay.

- When this feature is set to **On**,  →  → **Sound** → **Select Mode** is changed to **Game Optimiser**.
- This setting only applies to the internal speakers of the TV or **HDMI (ARC)** connected devices that support **TV Sound Mode Share**.

Input

VRR

This reduces screen cracking and video lagging during game play.

VRR & G-Sync

NVIDIA's display adaptive sync technology adjusts frames to minimize screen tearing and stuttering.

AMD FreeSync Premium

AMD's display adaptive sync technology adjusts the injection rate to minimize screen breaks and stuttering.

Fine Tune Dark Areas

You can calibrate the brightness of the dark areas with **VRR**, **VRR & G-Sync** and **AMD FreeSync Premium** set to **On**.

- This feature is available for OLED TVs only.
- To use each function, **HDMI Deep Colour** for the terminal must be set to **4K** or **8K**.
- Setting each function to **On** may cause the brightness to change slightly depending on the frequency of the external device.

- If **AMD FreeSync Premium** is set to **On**, Dolby content cannot be played.

Programmes

Automatically Setting Up Programme

⚙️ → ⓘ → **General** → **Programmes** → **Programme Tuning** (**Programme Tuning & Settings**) → **Auto Tuning**

Automatically tunes the programmes.

- 01 Select Country where the TV is used. Programme settings change depending on the country you choose.
 - 02 Initiate **Auto Tuning**.
 - 03 Select programme tuning modes.
 - 04 Set Auto Tuning following screen instructions.
- If Input Source is not connected properly, programme registration may not work.
 - **Auto Tuning** only finds programmes that are currently broadcasting.
 - If **Safety** is turned on, a pop-up window will appear asking for password.

Set Cable Setting

When searching for programmes using FULL setting it can take a long time.

The following values are needed in order to search all available programmes quickly and correctly. The commonly used values are provided as “default”.

The configurable items differ depending on **Type**.

Frequency (kHz)

Enter a user-defined frequency.

Symbol Rate (kS/s)

Speed at which a device such as modem sends symbols to a programme.

Modulation

Loading of audio or video signals onto carrier.

Network ID

Unique identifier allocated for each user.

Start Frequency (kHz)

Enter a user-defined start frequency range.

End Frequency (kHz)

Enter a user-defined end frequency range.

Set Satellite Setting

You can add/delete/set the satellite you want.

- If the programme mode is set to Satellite

Satellite

Select your desired Satellite.

LNB Frequency

Select one value from 9750/10600, 9750/10750, 9750, 10600, 10750, 11300, 5150, MDU1, MDU2, MDU3, MDU4, MDU5. If you select 9750/10600, 9750/10750(MHz), **22kHz Tone** is disabled. If you cannot find the LNB frequency value from the list, select User and manually enter the frequency.

- Some models may not be supported.

Transponder

Select the transponder you want to tune.

22kHz Tone

When using 22kHz Tone switch, select 22kHz or 0 Hz. If you use **22kHz Tone**, Unicable and Motor Type are disabled.

LNB Power

To enable the power supply for the LNB, select **On**. If you select **Off**, **Motor Type** is disabled.

DiSEqC

When using DiSEqC, select one option from A~D/ToneA~B. If you use **DiSEqC**, Unicable and Motor Type are disabled.

Unicable

Select On to use Unicable and set the Unicable in the **Unicable Settings** menu. When Unicable is enabled, **22kHz Tone**, **DiSEqC**, **Motor Type** are disabled.

Motor Type

Select Motor Type to use Motor and set the Motor in the Motor Setting menu. When Motor is enabled, **22kHz Tone**, **DiSEqC**, **Unicable** are disabled.

- If you set satellite to others, you must add a transponder using Transponder Edit.
- When selecting 22kHz Tone and DiSEqC, you must connect them in the same position as displayed on the OSD.
- If you delete a Satellite, all programmes stored in the Satellite are deleted.

Set Motor Setting

DiSEqC 1.2 : Control motor to change satellite dish position.

Drive Direction

Select the direction in which you want to move the motor.

Drive Mode

Two modes are available : Step and Continuous.

- Step : The motor moves based on the value you enter (from 1 to 128).
- **Continuous** : The motor moves continuously until you press the Stop.

Test Transponder

Select the test Transponder you want to tune.

Set Limit

Set the motor movement to east or west to have the motor move only within the direction set.

- On : You can limit the movement to the current direction by selecting the West/East.
- Off : You can cancel the limit you set.

Go to 0

You can move the motor to Zero.

USALS : Set your current location (Longitude/Latitude).

To Use Manual Programme Tuning

⚙️ → ⓘ → **General** → **Programmes** → **Programme Tuning** (**Programme Tuning & Settings**) → **Manual Tuning**

This function is for manually searching and saving programmes.

For digital broadcasting, signal strength and signal quality can be checked.

Editing Transponder

⚙️ → ⓘ → **General** → **Programmes** → **Programme Tuning & Settings** → **Transponder Edit**

You can add / modify / delete a transponder.

- If the programme mode is set to Satellite
- If the System Operator provides 'user home TP edit' feature, it will show the 🏠 on the screen.
So that you can set the desired **Transponder** as Home by pressing the 🏠.
(This feature is available on certain service provider only.)

Regional Programme

⚙️ → ⓘ → **General** → **Programmes** → **Programme Tuning & Settings** → **Regional Programme**

If you set up the feature, you can view the local programmes provided by the broadcasters.

Select a local broadcaster and a region providing local channels in ⚙️ → ⓘ → **General** → **Programmes** → **Programme Tuning & Settings** → **Programme Tuning** and complete programme settings to watch programmes in the selected region.

- Some models may not be supported.
- Service providers or regions are subject to change, and the services can be terminated without prior notice.

Programme List Update

⚙️ → ⓘ → General → Programmes → Programme Tuning & Settings → Programme List Update

It updates the changed Programme List information by based on country broadcasting circumstance and satellite.

It updates the Programme List when the TV is turned off.

After updates, the Programme List may be changed. If not want, select **Off**.

- Some models may not be supported.

To Use the Signal Test

⚙️ → ⓘ → General → Programmes → Programme Tuning (Programme Tuning & Settings) → Signal Test

Shows the MUX and Service information etc.

- Signal test is only available in Antenna or Cable mode.
- Some models may not be supported.

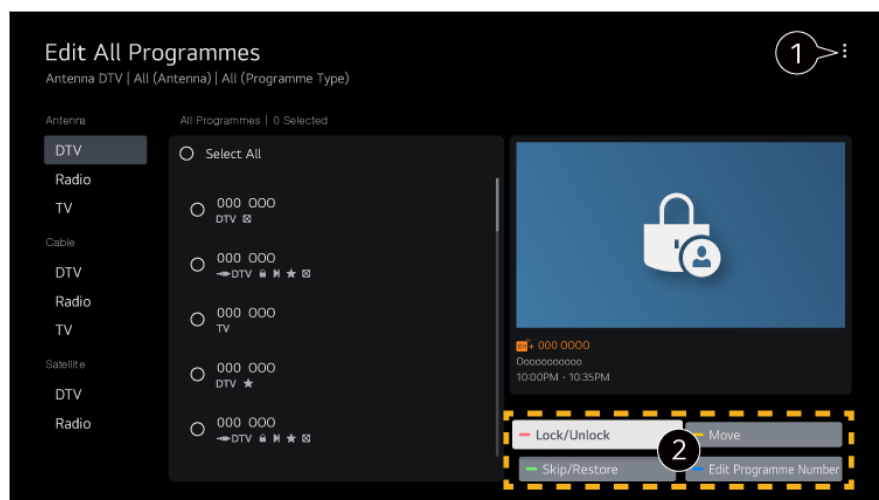
Edit Programmes

You can edit the selected programmes from all the stored programmes or add/delete them to/from the favourite programmes.

Edit All Programmes List

⚙️ → ⓘ → General → Programmes → Programme Manager → Edit All Programmes

You can lock or unlock the selected programmes from all the stored programmes, or you can set them to be skipped when switching programmes.

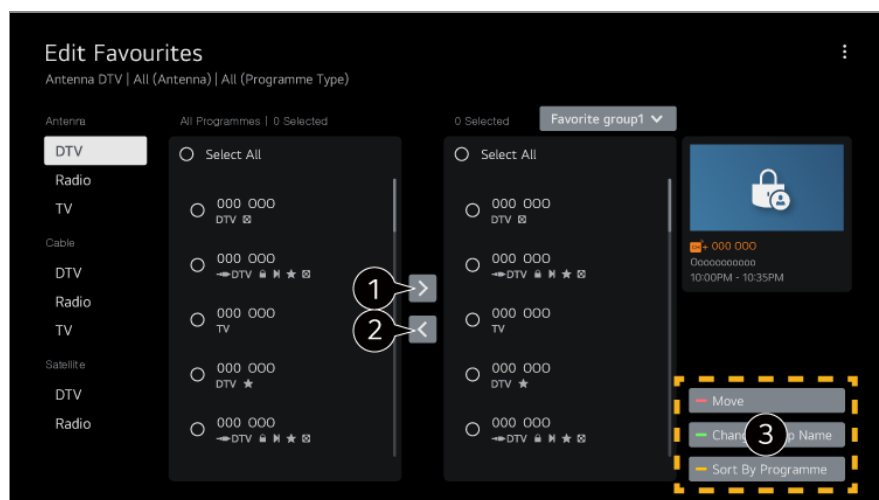


- ❶ Set the sorting option.
 - ❷ **Lock / Unlock** : Lock the selected programmes or unlock the locked programmes.
Skip / Restore : Set the selected programmes to be skipped when switching programmes, or disable the skipping option of the programmes previously set to be skipped.
Move : Move the selected programmes.
Edit Programme Numbers : Change the numbers of the selected programmes.
Delete : Delete the selected programmes.
- Available features may vary depending on the broadcast signal.
 - For a model that supports satellite programmes, you can manage the satellite programmes in **Edit Satellite Programmes (Advanced)**.

Edit Favourite Programmes List

⚙️ → ⓘ → **General** → **Programmes** → **Programme Manager** → **Edit Favourites**

You can add/delete desired programmes to/from the favourite programmes, change their positions, etc.



- ❶ Select the desired programmes from the all programmes list and press the button to add them to the favourite programmes list.
- ❷ Delete the selected programmes from the favourite programmes list.
- ❸ **Move** : Select one or more programmes in the Preferred Programmes list, press the **Move** button, and then select the position to move it to. The selected programmes will move to the position you selected.
Change Group Name : Change the name of the favourite programmes list.
Sort by Programme : Sorts the list of favourite programmes by programme.

Multi Feed

→ → **General** → **Programmes** → **Multi Feed**

You can watch the desired angle on the TV through the broadcast that filmed from various angles.

- Some models may not be supported.

Learn More about HbbTV

HbbTV (Hybrid Broadcast Broadband TV) is a new broadcasting standard that enables super-teletext type services, delivered by a broadcast TV programme, to be integrated or linked to online services delivered over broadband to a connected Smart TV.

To see the details, click the **Enjoy Live TV** → **HbbTV** in **User Guide**.

- Some models may not be supported.

What is CI Information

This function enables you to watch some encrypted services (pay services).

To see the details, click the **Enjoy Live TV** → **CI Information** in **User Guide**.

Save CI Password

→ → **General** → **Programmes** → **Save CI Password**

Input the Pin Code in **Save CI Password**. You don't need to input the Pin Code after save it.

- You can see the **Save CI Password** when insert a CI CAM (Conditional Access Module) which is supported Pin Code.
- If CI CAM has a Pin code, you can see the **Reset CI Password**.

Copy Programmes

→ → **General** → **Programmes** → **Copy Programmes**

Export your TV's programme list information to a connected USB storage device or Import your TV's programme list information from a connected USB storage device.

- For Satellite models

Network

Setting a Wired Network

 →  → **General** → **Network** → **Wired Connection (Ethernet)**

If you configure settings for the network, you can use various services such as online contents and applications.

If the router connected to the network supports the DHCP feature, connecting the TV and router by wire will automatically connect to the network. If the automatic setup is not supported, you can select **Edit** to manually set up the network connection.

- The IPv6 setup does not support **Edit**.
- For more information on how to connect to the network, see **Getting Started with LG webOS TV → Connecting to the Network** in **User Guide**.

Setting a Wireless Network

If you configure settings for the network, you can use various services such as online contents and applications.

If you have set the TV up for a wireless network, you can check and connect to the available wireless Internet networks.

- 01 Press the  button on the remote control.
- 02 Select  → **General** → **Network** → **Wi-Fi Connection**.
- 03 Set to **On**.
- 04 Select the wireless router to connect.
For more detailed settings, select **Other Network**.

Add a hidden wireless network

If you input the name of network directly, you can add a wireless network.

Connect via WPS PBC.

If the wireless router you want to connect to has a Wi-Fi Protected Setup-Push Button Configuration (WPS-PBC) feature, you can easily connect to the wireless router by pressing the WPS-PBC button on the router. Press the wireless router's WPS-PBC button and then press the TV's [Connect] button.

Connect via WPS PIN.

This is a method to connect to an access point using a Wi-Fi Protected Setup-Personal Identification Number (WPS-PIN). Select the access point you want to

connect to. Enter the PIN displayed on the access point's Wi-Fi device.

Advanced Wi-Fi Settings

Once you connect to a wireless network, you can view connection information such as detailed IP address information. In addition, you can change the IP address and DNS server address you want to connect to by pressing the **Edit** button.

- The IPv6 setup does not support **Edit**.
- For more information on how to connect to the network, see **Getting Started with LG webOS TV → Connecting to the Network** in **User Guide**.

Devices

Setting TV

 →  → **General** → **Devices** → **TV**

Home/Store Mode

You can choose between **Home Mode** and **Store Mode**.

To use the TV at home, select **Home Mode**.

Select **Store Mode** only when the TV will be displayed in store. The **Store Mode** provide settings optimised for store display.

Quick Start+

This setting puts your TV in standby mode when it's turned off so it will help using TV's functions quicker when you turn the TV back on.

Set **Quick Start+** to **On**.

- Some models may not be supported.
- Turning this option on may increase energy consumption.

TV Information

You can view information including **Model**, **Serial Number**, **Device Name**.

Managing External Device Connections

 →  → **General** → **Devices** → **External Devices**

You can set to use a smart device connected to the TV to control the TV or manage the connection history.

- The configurable items differ depending on model.

Connect Bluetooth Controller

You can connect and use devices such as a Bluetooth-enabled keyboard, mouse, or a gamepad with your TV.

Turn on the device, set it to pairing mode, and then click **Connect** on your TV screen. When a device you've connected before is turned on, it automatically connects to your TV. To disconnect the existing connection, click **Disconnect**.

- It is recommended that you use a product that has been tested for compatibility with LG TVs.
Bluetooth Keyboard : LG Rolly Keyboard2 KBB-710, Artek HB192, LOGITECH K480, Apple Magic Keyboard, Artek HB030B Keyboard
Bluetooth Mouse : LOGITECH Mx Master 2S, LOGITECH M535, Apple Magic Mouse2
Bluetooth Gamepad : SONY Dualshock4, MICROSOFT Xbox One S, NVIDIA Shield Controller
- This feature is available for Bluetooth-enabled models only.
- Connecting multiple Bluetooth devices may result in poor connection or operation.
- If the Bluetooth device is too far from the TV, or there are obstacles between them, they may not operate normally.
- Depending on the peripherals (wireless router, microwave oven, etc.), communication failures may occur.
- If the device you selected from **Registered Devices** does not reconnect, **Disconnect** and then reconnect the device.
- It's differ form devices. For more information on the device you want to connect to, refer to its user guide.

Universal Control Settings

If you set up the universal remote control, you can control peripheral devices connected to the TV with the Magic Remote instead of their own remote controls. For more information, see **How to Operate TV → Using Universal Remote Control** in **User Guide**.

TV On With Mobile

If **Turn on via Wi-Fi/Turn on via Wi-Fi(Networked Standby Mode)** or **Turn on via Bluetooth/Turn on via Bluetooth(Networked Standby Mode)** is set to **On**, you can turn on your TV using an application that supports **TV On With Mobile**.

- The TV should be connected to a network.
- The TV and the device to be used should be connected to the same network.

- The **Turn on via Wi-Fi/Turn on via Wi-Fi(Networked Standby Mode)** feature must be used in an app on a smart device that supports the feature.
- The **Turn on via Bluetooth/Turn on via Bluetooth(Networked Standby Mode)** feature can only be used with certain LG Electronics smartphones.
- The TV must be plugged in.
- To connect for the first time, make sure the device to be used is ready to connect.
- Some models may not be supported.

Delete Connection History

You can delete the connection history of the devices connected to the TV on the wireless network.

Setting HDMI External Input

⚙️ → ⓘ → **General** → **Devices** → **HDMI Settings**

You can apply settings to ensure a clear picture and easy control for the HDMI connected devices.

HDMI Deep Colour

If you connect a device that supports **HDMI Deep Colour**, you can enjoy a clearer image. After connecting the playback device, set **HDMI Deep Colour** to **4K**. If the connected device does not support this function, it may not work properly. In that case, change the TV's **HDMI Deep Colour** setting to **Off**.

Supported Display Resolution

- 4K : Supports 4K@120 Hz (4:4:4, 4:2:2 and 4:2:0)
- Off : Supports 4K@60 Hz (4:2:0)

4K @ 100/120 Hz Support Format

Resolution	Frame rate (Hz)	Colour Depth/Chroma Sampling		
		8 bit	10 bit	12 bit
3840 × 2160p	50	YCbCr 4:2:0	YCbCr 4:2:0 ¹⁾	YCbCr 4:2:0 ¹⁾
4096 × 2160p	59.94			
	60	YCbCr 4:2:2 ¹⁾	YCbCr 4:2:2 ¹⁾	YCbCr 4:2:2 ¹⁾

	YCbCr 4:4:4 ¹⁾	YCbCr 4:4:4 ^{1) 2)}	YCbCr 4:4:4 ^{1) 2)}
	RGB 4:4:4 ¹⁾	RGB 4:4:4 ^{1) 2)}	RGB 4:4:4 ^{1) 2)}
100	YCbCr 4:2:0 ^{1) 2)}	YCbCr 4:2:0 ^{1) 2)}	YCbCr 4:2:0 ^{1) 2)}
120	YCbCr 4:2:2 ^{1) 2)}	YCbCr 4:2:2 ^{1) 2)}	YCbCr 4:2:2 ^{1) 2)}
	YCbCr 4:4:4 ^{1) 2)}	YCbCr 4:4:4 ^{1) 2)}	-
	RGB 4:4:4 ^{1) 2)}	RGB 4:4:4 ^{1) 2)}	-

1) Supported when **HDMI Deep Colour** is set to **4K**.

2) This feature is available for **HDMI (4K@120 Hz) IN** terminals only.

- You can only change the settings of the **HDMI IN** you are watching at the time.
- You can specify a different setting for each HDMI port.

SIMPLINK (HDMI-CEC)

You can conveniently control and use various multimedia devices connected through HDMI with the TV remote control.

To see the details, click the **How to Operate TV → SIMPLINK (HDMI-CEC)** in **User Guide**.

System

Configuring Language Settings

⚙️ → ⓘ → **General** → **System** → **Language**

You can choose the menu language displayed on the screen and the audio language of the digital broadcast.

Menu Language

You can select one of the menu languages to be displayed on the screen. The

language for the speech recognition will be automatically set to the selected language for the menu.

- The speech recognition is only applied to some models.

Primary Audio Language / Secondary Audio Language

You can choose the language you want when watching a digital broadcasting programme, which includes multiple audio languages.

For programmes that do not support multiple languages, the default will be used.

- Applies to Digital broadcasting.

Keyboard Languages

Select the language to use the on-screen keyboard.

To Set Teletext Language

Sets Teletext language.

To see the details, click the **Enjoy Live TV → TELETEXT** in **User Guide**.

- In Digital Mode Only

Setting the Location

 →  → **General** → **System** → **Location**

You can change the location setting of your Smart TV.

Address Setting

You can set the **Region** and **City** of your TV.

Broadcast Country

You can set the broadcast country on your TV.

Postcode

This function is used to set the broadcast location of the TV by entering your postcode.

LG Services Country

If you don't set the **Set Automatically**, you can select the country manually.

- You must set the country manually when you are not connected to the network.
- The configurable items differ depending on model.

Time & Timer

 →  → **General** → **System** → **Time & Timer**

You can check the time or configure related settings.

Set Automatically

The TV time is automatically set to the time of digital broadcasting information sent from the broadcasting station or the time sent from the server.

Time / Date / Time Zone

You can manually set the time and date if the automatically set current time is incorrect.

- If you set the time manually with the antenna connected, schedule information, programme guide, etc. may not function correctly.

Custom Time Zone

When select the **Custom** in **Time Zone**, **Custom Time Zone** menu is activated.

Timers

Sleep Timer

Sets the TV to turn off at a specified time.

If you do not want to use **Sleep Timer**, select **Off**.

Power On Timer

Set **Power On Timer** to **On**.

The TV is turned on and displays the set programme at the set time.

- **Time** : Set the time at which to turn the TV on.
- **Timer Repeat** : Set the day of the week. Set the option to **None** to operate the feature only once.
- **Input** : Set an external input to display when the power is turned on.
- **Timer Programme** : Set a channel to display when the power is turned on. This option can be set only when **Input** is set to **TV**.
- **Volume** : Set audio volume to use when the power is turned on.

Power Off Timer

Set **Power Off Timer** to **On**.

The TV is turned off at the set time.

- **Time** : Set the time at which to turn the TV off.
- **Timer Repeat** : Set the day of the week. Set the option to **None** to operate the feature only once.

Auto Power Off after 4 Hours

If you do not press any button for 4 hours after the TV is turned on by a feature such as **Power On Timer**, the TV will be turned off automatically.

To ensure the TV does not automatically turn off, set **Auto Power Off after 4 Hours** to **Off**.

- Some models may not be supported.
- To use **Power On Timer/Power Off Timer**, set the time correctly.

Setting Safety

 →  → **General** → **System** → **Safety**

You can put a lock on TV broadcasts or apps.

Set it to **On** to apply the lock.

TV Rating Locks

This function operates according to information from the broadcasting station.

Therefore if the signal has incorrect information, this function does not operate.

Prevents children from watching certain adult's TV programmes, according to the ratings limit set. Enter a password to watch a blocked programme. Rating differs by country.

- Supported only in the digital mode.
- Some models may not be supported.

Programme Locks

Blocks the programmes that contain inappropriate contents for children. The programmes can be selected but the screen is blank and the audio is muted. To watch a locked programme, enter the password.

Application Locks

You can lock or unlock the application.

- The lock function is not immediately available for the currently running application.

Input Locks

You can lock or unlock the Inputs.

Reset Password

Set or change the password for the TV.

- The default password is set as “0000”.
When France or Norway is selected for Country, the password is not “0000” but “1234”.

Resetting a Lost Password

If you lose the password you set, you can reset it as follows:

- 01 Press the  button on the remote control.
- 02 Select  → **General** → **System** → **Safety**.
- 03 Press  (**Programmes**)  →  (**Programmes**)  →  (**Programmes**)  →  (**Programmes**)  on the remote control. The master password input window will appear.
- 04 Enter the numbers “0313” in the master password input window, then press **Enter**.
The password will be reset.

Managing Your LG Account

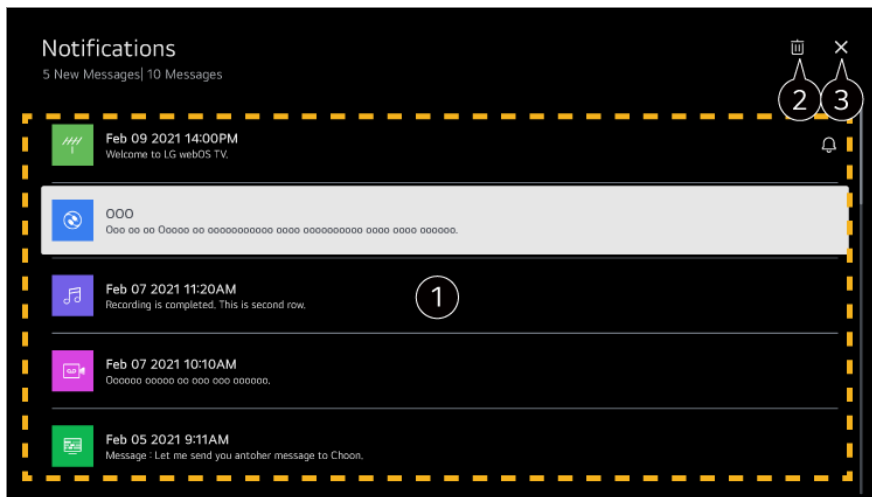
In **LG Account**, you can use your email address to create a new LG account.

For more information, see **Getting Started with LG webOS TV → Managing Your LG Account** in **User Guide**.

Using Notifications

 →  → **General** → **System** → **Additional Settings** → **Notifications**

You can view all notifications from TV apps and LG service at the same time. You can view and delete each notification message. For notifications that support shortcuts, you can go directly to that app or website.



- ① You can check the details by selecting the desired item. If it supports shortcuts, you can launch the app.
- ② You can delete notifications.
- ③ Closes **Notifications**.

Home Settings

⚙️ → ⓘ → **General** → **System** → **Additional Settings** → **Home Settings**

Home Auto Launch

You can set Home to launch automatically when turning on the TV.

Home Promotion

You can turn on or off the advertisements on the Home screen.

- The configurable items differ depending on model.

To Set Power Indicator

⚙️ → ⓘ → **General** → **System** → **Additional Settings** → **Standby Light**

You can turn the standby light on or off.

- Some models may not be supported.

Setting the Pointer of Magic Remote

⚙️ → ⓘ → **General** → **System** → **Additional Settings** → **Pointer Options**

You can set the pointer speed and size you want while it is on the screen.

Tracking Speed

Sets the pointer speed.

Pointer Size

Selects the pointer size.

Advertisement

 →  → **General** → **System** → **Additional Settings** → **Advertisement**

If your TV is connected to the Internet, webOS may use a frequency capping cookie to keep track of the number of times an ad is shown on your TV.

This information is used to help limit the number of times the same ad is displayed. You can clear this cookie or turn it on or off at any time by going to the **Advertisement** setting on your TV.

No personally identifiable information is tied to this cookie.

- Some models may not be supported.

Using the Live Plus

Live Plus is a service that provides various information on the programme you watch.

To see the details, click the **Making the Most of Smart TV** → **Live Plus** in **User Guide**.

- Some models may not be supported.

Restoring the Default Settings

 →  → **General** → **System** → **Reset to Initial Settings**

Return TV to its initial settings. This will revert all settings to their default values.

After reset, the TV will automatically turn off and on.

- If **Safety** is set to **On**, you should type the password to **Reset to Initial Settings**.
- Do not turn off the power during initialization.
- We recommend that you reset the TV to **Reset to Initial Settings** before you sell it or transfer it to a third party.

Accessibility

To Use Audio Guidance

⚙️ → ⓘ → **General** → **Accessibility** → **Audio Guidance**

If **Audio Guidance** is set to **On**, audio guides will be provided in various situations, such as when you change programmes, adjust the volume or change settings and input signals.

Speed

Adjust the speed of spoken guide.

Volume

Adjust the volume of spoken guide.

Pitch

Adjust the tone of spoken guide.

- This feature is available on certain languages only.
- Some models may not be supported.
- The configurable items differ depending on model.
- For visually impaired users.
- Setting the **Audio Guidance** to **On** automatically switches the **TV Power Sound** (only available on certain models) to **On** as well.

Changing the Menu to High-Contrast Screen

⚙️ → ⓘ → **General** → **Accessibility** → **High Contrast**

When this feature is set to **On**, it adjusts the background of some of the menus on the screen and font colours to highlight the contrast between the light and dark areas.

Grayscale

⚙️ → ⓘ → **General** → **Accessibility** → **Grayscale**

Change the colour of the menu on the screen to black and white tone to make its ambiguity very clear. Set to **On**.

Invert Colours

 →  → **General** → **Accessibility** → **Invert Colours**

To enhance the visibility of the menus on the screen, you can invert and calibrate certain colours in some menus. Set to **On**.

To Set Subtitle

 →  → **General** → **Accessibility** → **Subtitles**

View subtitles when the TV station provides subtitled programming. Change **Subtitles** to **On** and select subtitle setting.

- Some models may not be supported.
- Applies to Digital broadcasting.

Menu for the Visually Impaired

 →  → **General** → **Accessibility** → **Audio Description**

The contents on the screen will be described with voice for visually impaired viewers. You can use this function if the broadcasting company supports **Audio Description** for the visually impaired.

- Some models may not be supported.

Audio Type

 →  → **General** → **Accessibility** → **Audio Type**

Audio commentary or subtitles are provided for those who are hard of hearing or visually impaired.

Normal

Selects default Audio.

Audio Description

For the visually impaired Selects the preferred default Audio combined with Visual Impaired Audio.

Spoken Subtitle

For the visually impaired, selects the preferred Visual Impaired Audio only.

Any Supplementary Audio

Displays all supplementary audio.

- Some models may not be supported.

To Set Hard of Hearing

01 Press the  button on the remote control.

02 Select  → **General** → **Accessibility**.

03 Set **Subtitles** to **On**.

04 Set **Hard of Hearing** to **On**.

A caption will be provided for the hearing-impaired.

- When the **Hard of Hearing** is turned **On**, it will be prioritized over the general captions.
- Some models may not be supported.

Support

Software Update

 →  → **Support** → **Software Update**

Uses software update to check and obtain the latest version.

Auto Update

When it is set to **On**, updates are automatically made without a separate confirmation procedure except for some important updates.

Check for Updates

When checking for the latest update version, you can only perform updates if an update file of a later version is available. The TV automatically checks your software version but, if necessary, you can perform a manual check.

- The configurable items differ depending on model.
- The latest version can be obtained via digital broadcast signals or internet connections.
- Changing the programme while downloading the software via digital broadcast signal interrupts the download process. Returning to the initial programme allows downloading to resume.

- If software is not updated, certain functions may not work properly.
- In some countries, **Auto Update** is not displayed if you are not connected to the Internet.
- Your device will have to occasionally download and install software updates in order to maintain optimal functionality. While the software is updated the screen of your device may, in the absence of any user interaction within 4 hours, turn off, but the device will not completely enter standby mode until the installation is finished. This can result in an increased power consumption during software update.

Setting up the OLED Screen

 →  → **Support** → **OLED Screen Saver**

With **OLED Screen Saver**, you can improve image quality issues related to image sticking when the screen has been on for a certain amount of time.

Pixel Cleaning

It calibrates any issues that may arise on the screen when your TV has been turned on for a long time.

Calibration takes more than an hour.

- **Operate once when TV is off** : Press the Power button to turn off the TV when you are done watching. The **Pixel Cleaning** will start running.
 - **Start Now** : Your TV turns off immediately and the **Pixel Cleaning** starts running. The TV will automatically turn back on when it is done.
- Do not unplug the power cord while it is in progress.
 - If you power on the TV, the **Pixel Cleaning** will stop operating.

Screen Move

This moves the screen slightly at regular intervals to prevent image sticking on the display panel.

Adjust Logo Brightness

Adjust the luminance of static images such as logos within content to correct potential picture quality issues.

To Use Energy Saving Feature

 →  → **Support** → **Energy Saving**

Reduces power consumption by adjusting screen brightness.

Energy Saving Step

Auto : TV sensor detects the ambient lighting and automatically adjusts the screen brightness.

- Some models may not be supported.

Off : Turns off the Energy Saving mode.

Minimum / **Medium** / **Maximum** : Applies the pre-set Energy Saving mode.

Auto Power Off

When the TV is on, it turns off automatically if you do not press any button within the set period of time.

- Some models may not be supported.

Screen Off

Screen is turned off and only sound is played.

Press any button except the power and the volume buttons to turn the screen back on.

- If you use **Energy Saving Step** function, brightness of your TV will be affected.

Screen Self-diagnosis

 →  → **Support** → **Screen Self-diagnosis**

After running a test to verify that the image signal is output normally, you can select whether there is an error with the signal on the screen.

If there are no problems in the test, check the connected external device or broadcast signal.

Sound Self-diagnosis

 →  → **Support** → **Sound Self-diagnosis**

Start the Sound Test to check that the sound signal output is normal, and then select whether there is an error.

If there are no problems in the test, check the connected external device or broadcast signal.

Privacy & Terms

 →  → **Support** → **Privacy & Terms**

User Agreements

These are the terms and conditions for privacy for the use of Smart TV-related services.

Legal Notice

It's a legal notice for services provided via TV.

Open Source Software Notice

You can view the instructions for each item.

Troubleshooting

Perform Check-up with the Quick Help

When the TV malfunctions, you can get help to solve the problem.

Press  button on the remote control and select  → **Support** → **Quick Help**.

You can also long-press the number **9** button of the remote control to run the **Quick Help**.

Optimisation Settings

You can automatically check the overall status of your TV and view and change the recommended setting values.

Check Items

Select the problematic item, and you can get help to solve the problem.

- **Self-Diagnosis of TV Settings** : Select the item that matches the symptom to find instructions that can help you solve the problem.
- **Check the status of TV** : You can check your TV's current status for the selected item.

LG Remote Service

You can get help for troubleshooting through the remote control.

For **LG Remote Service**, make sure to contact the LG Electronics Customer Service Center.

- Some models may not be supported.
- When there is no related content in the **Quick Help**, please refer to the **Troubleshooting** in **User Guide**.
- If you still fail to solve the problem, please contact our Customer Service Centre.

Troubleshooting Power/Remote Control Issues

If you experience any of the problems below while using the product, please check the following: There may be no problem with the product.

I cannot turn on the TV.

- Please make sure your TV power plug is correctly connected to the outlet.
- If you are using a multi-outlet, check if it is working properly. To check whether a power strip is working properly, plug the TV's power plug directly to a wall outlet and observe its operation.
- Try to power on using the button on your TV set.

The power is on, but the screen comes on later.

- This is because there is a noise-removal process to eliminate any possible noise that may appear during power-on. This does not mean the product is defective.

The pointer of Magic Remote is not appear in the screen.

- Hold the remote control towards the TV and press the  and  buttons at the same time for more than 5 seconds until instructions appear. The previously registered remote control is deregistered and then registered again.
- Replace the batteries when you are prompted to do so on your TV screen. (Use alkaline batteries.)
- If  →  → **General** → **Accessibility** → **Audio Guidance** is set to **On**, the pointer of the Magic Remote does not appear. Set **Audio Guidance** to **Off**. (Some models may not be supported.)

I cannot turn the TV on with the remote control.

- Please make sure your TV power plug is correctly connected to the outlet.

- Replace the batteries in the remote control. (Use alkaline batteries.)
- Check if there is an obstacle blocking the signal in front of the TV's remote control receiver. If there is an obstacle, such as a soundbar, in front of the receiver at the bottom of the TV, IR recognition may not work properly.

 The power turns off suddenly.

- Check if **Power Off Timer** is set.
- The TV will be turned off automatically if you do not press any buttons for 4 hours even after the TV is turned on at the time set by **Reminder** or **Power On Timer**.
- There is also a chance that the internal protection circuitry has activated because the internal temperature of the product has risen unusually or excessively.

Troubleshooting Screen Issues

If you experience any of the problems below while using the product, please check the following: There may be no problem with the product.

First of all, perform a  →  → **Support** → **Screen Self-diagnosis** for check any abnormalities in the TV.

If you are using a set-top box, turn it off, and then turn it back on.

Make sure that the set-top box is correctly connected to your TV.

 It says there is no signal on the screen.

- Check whether the coaxial cable or the cable connected to the external device is properly connected to the TV.
- Go to  to choose the connected input.
- Check if your external device, such as set-top box or Blu-ray player, is turned on.

 I cannot see some programmes.

- Launch  →  → **General** → **Programmes** → **Programme Tuning (Programme Tuning & Settings)** → **Auto Tuning**.
- If you are using a set-top box, consult its supplier.

 The screen is cut off.

- Go to  →  → **Picture** and change the **Aspect Ratio**.

 The screen shakes after the momentary appearance of vertical/horizontal lines and net pattern.

- Connect wireless telephones, hairdryers, electrical drills, etc. to a different power outlet. The problem may be caused by high-frequency electronic devices such as another TV or strong electro-magnetic sources nearby.

 Each programme has a different image quality.

- Depending on the type of videos provided by the broadcasters, programmes may have different image qualities.
- If you are using a set-top box, consult its supplier.
- Run **Screen Self-diagnosis** first. If it is normal, there may be a problem with the broadcast signal.

 There is a difference in image quality from those seen at the store.

- Depending on the type of video provided by the broadcasters, there may be a difference in image quality from those displayed at the store.
- Run **Screen Self-diagnosis** first. If it is normal, there may be a problem with the broadcast signal.

 A digitally broadcasted programme stops or its screen is broken.

- This happens when a signal is weak or reception is unstable. Adjust the antenna direction or check the cable connection.
-  →  → **General** → **Programmes** → **Programme Tuning** (**Programme Tuning & Settings**) → **Manual Tuning**
If the signal strength is too low in **Manual Tuning**, contact the broadcasting station or management office to have the signals checked.
- If you are using a set-top box, consult its supplier.

 When HDMI input is in use, a vertical solid line or colour blurring appears on the upper/lower/left/right edges of the screen.

-  →  → **Picture** → **Aspect Ratio** → **Just Scan**
Set **Just Scan** to **Off**.

Just Scan shows you the original image as it is. If the signal is weak, the top/bottom/left/right sides of the screen may be snowy.

 I don't see anything, or the image keeps flickering when I try to connect the HDMI cable.

- Check whether your HDMI[®] cable is compliant with the specifications. You may experience flickering or a blank screen if the HDMI[®] cable is faulty (bent, broken).
- Make sure that the cable is correctly connected to the port. Bad or loose contact may cause display problems on the screen.
- If using a UHD set-top box, adjust  →  → **General** → **Devices** → **HDMI Settings** → **HDMI Deep Colour**.

 The screen looks too dim or dark.

-  →  → **Picture** → **Select Mode**
Switch **Select Mode** to your desired picture mode. (**Standard**, **Vivid**, etc.)
This applies to the current input mode only.
-  →  → **Picture** → **Advanced Settings** → **Brightness** → **Motion Eye Care**
Switch **Motion Eye Care** to **Off**. This applies to the current input mode only.
-  →  → **Support** → **Energy Saving**
Switch **Energy Saving** to either **Off** or **Minimum**.
-  →  → **Picture** → **Advanced Settings** → **Reduce Blue light**
Switch **Reduce Blue light** to **Off**.

 The screen is in black and white or displaying strange colours.

- Check the input mode or cable connection.
- Go to  to choose the connected input.
- When you are connecting to the **AV IN**, check to ensure each cable is matched with the corresponding color connection.
- **AV IN** port is available in certain models only.

 ULTRA HD video does not display.

- With some HDMI cables, signals may not be received.
- Change the settings of the connected device to the supported signal.

Troubleshooting Sound Issues

If you experience any of the problems below while using the product, please check the following: There may be no problem with the product.

First of all, perform a  →  → **Support** → **Sound Self-diagnosis** for check any abnormalities in the TV.

If you are using a set-top box, turn it off, and then turn it back on.

Make sure that the set-top box is correctly connected to your TV.

 The screen is fine, but it does not play any sound.

- Try another programme.
- If you use a set-top box, there will be no sound if you have set the volume of the set-top box or your TV to 0 or enabled Mute. Set the volume to an appropriate level.
-  →  → **Sound** → **Sound Out**
Set the **Sound Out** to **Optical Out Device + TV Speaker** or **Use TV Speaker**, and then check it once again. If you can hear the sound without any problem, check the connection with external speakers such as sound bar and the settings of the external speakers.

 There is no sound coming from one of the speakers.

-  →  → **Sound** → **Advanced Settings** → **Balance**
Adjust the balance as necessary with the Navigation button in **Balance**.
- When you are connecting to the **AV IN**, check if the audio left/right (white/red) cables are correctly connected. (**AV IN** port is available in certain models only.)

 The TV sound is not synchronized with the picture, or the sound sometimes breaks up.

- If this happens on only some of the programmes, it may be caused by the broadcasting company's transmission signal. Please have your broadcasting services provider (wired/cable) diagnose the problem.
- If all programmes are out of sync, go to  →  → **Sound** → **Advanced Settings** → **Match Screen and Sound** and adjust the sync.
- If you are using a set-top box, consult its supplier.

 The volume changes when I change the programme.

- The volume of different broadcasting stations' transmission output may vary.
-  →  → **Sound** → **Advanced Settings** → **Automatic Volume Adjustment**
Set **Automatic Volume Adjustment** to **On**.
- If you are using a set-top box, consult its supplier.

 The sound does not work or only the background music is played in some programmes.

(Programmes produced for export by broadcasting companies)

- Set your language preference in  → **Audio Language**.

Troubleshooting PC Connection Issues

Press and hold the  button on your remote control. Select  → **Edit** → **Edit Inputs** in the upper right corner of **Home Dashboard**. In the Edit mode, set the icon of the HDMI terminal connected to the PC to **PC** to apply the video and aspect ratio settings that are aligned with the PC.

If you experience any of the problems below while using the product, please check the following: There may be no problem with the product.

 The screen remains blank after it is connected to a PC.

- Check that the PC is properly connected to the TV.
- Turn the TV off and back on using the remote control.
- Restart the PC with the TV on.
- Make sure that the output resolution set on the PC is set to the HDMI-PC supported resolution of the TV.
- To use dual monitors, check that the PC or notebook supports dual-monitor mode.
- Reconnect the HDMI cable.
- If you have connected the RGB output port of your PC to the **HDMI IN** of your TV, you need an RGB to HDMI gender.
You will not see anything on the screen if you use an HDMI to RGB gender.

 The screen is not fully shown or is lopsided when connected to a PC.

- Set the PC's resolution to one supported by the TV. For more information, see **Being Aware of the Information** → **Supported Resolution : HDMI-PC** in **User Guide**.

- Set the connected HDMI device's name to PC.
Press and hold the  button on your remote control. Select  → **Edit** → **Edit Inputs** in the upper right corner. Change the icon of the HDMI port connected to **Inputs** to PC and select **Save**.

 The sound does not play when the PC is connected with an HDMI cable.

- Set LGTV as the default device in Sound → Playback in Control Panel of PC settings.
- Consult your manufacturer on whether your graphics card supports HDMI audio output.

Troubleshooting Movie Playback Issues

If you experience any of the problems below while using the product, please check the following: There may be no problem with the product.

More information about supported files can be found in **Being Aware of the Information** → **Supported video file formats** in the **User Guide**.

 I cannot find a file in the **Media Player**.

- Check whether the files saved on your USB storage device can be read by the PC.
- Check that the file extension is supported.
- Change the filter to **All**.

 I see a message that says the file is not supported.

- Check that the file plays without any problems on the video player on a PC. (Check for file damage.)
- Check that the file extension is supported.
- Check that the resolution is supported.
- Check that the video codec is supported.
- Check that the frame rate is supported.

 I get a message saying “This audio is not supported” or the video is playing normally but the audio is not.

- Check that the file plays without any problems on the video player on a PC. (Check for file damage.)

- Check that the file extension is supported.
- Check that the audio codec is supported.
- Check that the bit rate is supported.
- Check that the sample frequency is supported.
- Check that the number of audio programmes is supported.

I cannot see the subtitles.

- Check that the file plays without any problems on the video player on a PC. (Check for file damage.)
- Check that the video and subtitle files have the same name.
- Also check that both the video file and the subtitle file are in the same folder.
- Check that the subtitle file format is supported.
- Check that the language is supported.
(You can check the language of the subtitle file by opening the file in the Notepad.)
- If subtitles encoding is incorrectly set, subtitles may not be displayed properly.
Press the ▼ button on the remote control during video playback actions. Select **SUB** and change the **Code Page** value.
- If you play a video file stored on another device by using the content sharing feature, subtitles may not be available depending on the programme you use.
- Subtitles are not supported if you are playing video through an NAS unit. Consult your NAS manufacturer.

My USB storage device is not recognised when connected.

- Check whether it is a USB storage device supported by the TV.
For more information, see **Connecting External Devices → Connecting USB** in **User Guide**.

Troubleshooting Recording Issues

Refer to **Enjoy Live TV → Recording** in the **User Guide** for details on recording.

How do I start recording?

- Connect a USB storage device with at least 4 GB of total space. The device must have at least 1 GB of available space. (Refer to **Connecting External Devices → Connecting USB** in the **User Guide** for details on USB storage devices.)

Press the **...** button on the remote control and select **Record**.

you can also start recording by long pressing **RECORD** button on the Magic Remote.

- Some USB storage devices require formatting on your TV. Formatting deletes all data stored on the USB storage device, and the device is formatted with the NTFS or FAT32 file system. Before you connect a USB storage device to your TV, back up any data that is stored on your device to your PC.

Which signals support recording?

- Real-time and scheduled recordings are available only for programmes received directly by the TV.
- Programmes from the set-top box cannot be recorded.
- Protected content is not recorded.

Is **Scheduled Recording** possible even if the TV is off?

- **Scheduled Recording** starts and completes recording at the set time even if the TV is off.
- **Scheduled Recording** does not function if the TV's power plug is unplugged.

Troubleshooting Network Connection Issues

If you experience any of the problems below while using the product, please check the following: There may be no problem with the product.

Before connecting to a wireless network, check the name and password of the Wi-Fi device to connect.

You can check the network connection status as shown below.

-  →  → **General** → **Network** → **Wired Connection (Ethernet)**
-  →  → **General** → **Network** → **Wi-Fi Connection** → **Other Network** → **Advanced Wi-Fi Settings**



When X appears next to TV

- Check the TV or the AP (Router).
- Check the connection status of the TV, AP (Router) and cable modem.

- Power off and power on in the following order;
 1. Turn your cable modem off and back on, and wait for the device to reset.
 2. Turn the wired/wireless router off and back on, and wait for the device to reset.
 3. Turn the TV off and on.
- If you want to establish a wired LAN connection, check whether an IP address can be obtained from your router properly. If you are setting up your network manually, check whether all settings are correct.
- If you want to establish a wireless connection, check the following points as well.
 - ① Set your router's SSID (network name) or wireless channel.
 - ② Set your router's security key.

If you can't complete this setting, refer to the router's user manual and the instructions provided by your Internet provider. If you are still unable to establish your configuration, consult your router's manufacturer or your Internet service provider.
- If you are using a static IP, enter the IP directly.



When X appears next to Gateway

- Check the AP (Router) or consult your Internet service provider.
- Unplug the router/cable modem from the wall outlet, wait 10 seconds and reconnect it.
- Initialize (Reset) the AP (Router) or cable modem.
- Check the AP (Router) manufacturer's website to make sure your router has the latest firmware version installed.
- If you can't complete this setting, refer to the router's user manual and the instructions provided by your Internet provider. If you are still unable to establish your configuration, consult your router's manufacturer or your Internet service provider.



When X appears next to DNS

- Check the AP (Router) or consult your Internet service provider.
- Unplug the router/cable modem from the wall outlet, wait 10 seconds and reconnect it.
- Initialize (Reset) the AP (Router) or cable modem.
- Check that the MAC address of the TV/AP (Router) is registered with your Internet service provider. (The MAC address displayed on the pane of the network status window should be registered with your Internet service provider.)
- If you can't complete this setting, refer to the router's user manual and the instructions provided by your Internet provider. If you are still unable to establish your configuration, consult your router's manufacturer or your Internet service provider.

Troubleshooting LG Account Issues

 I've signed up for the membership on TV. Do I have to sign up again on the website (www.lgappstv.com)?

- You can use the website with the membership information that you used when signing up on TV.

 I forgot my password. What should I do?

- On the TV's login screen, select the **FORGOT PASSWORD?** button to go to the find password page. Enter your email address on the find password page, and we'll send you a link to reset your password.
- You can also reset your password in LG Account → Reset Password on the website (www.lgappstv.com).
- In some countries, access to the website (www.lgappstv.com) may be restricted.

Troubleshooting Contents Issues

If you experience any of the problems below while using the product, please check the following: There may be no problem with the product.

 I cannot see any content in HOME.

- You may not be able to see the content if the service country setting has been changed. Change to the service country you are going to use the service from in  →  → **General** → **System** → **Location** → **LG Services Country**.
(Some models may not be supported.)
- If you cannot see some apps, it may be because you deleted them. Please reinstall the appropriate app.
- If the app is deleted, you can download the app at **Apps** and reinstall it. Go to  → **Apps** to find and install the app you want.
- The type of supported content differs by country.
- The content offerings are subject to change or interruption by the service provider.

Troubleshooting Internet Browser Issues

If you experience any of the problems below while using the product, please check the following: There may be no problem with the product.

 Some parts of a particular website are not visible when I am using the Internet.

- The **Web Browser** supports only HTML5 media and not Flash Plug-in.
- The **Web Browser** does not support plug-in installation.
- On the **Web Browser**, it may not be possible to play media files in formats other than : JPEG/PNG/GIF
- You cannot save attachments or images.
- If the **Use Block Ads** feature is turned on, the area on the website that appears to show an ad will appear blank. If some content on the website is hidden and invisible, try setting  → **Settings** → **Use Block Ads** to **Off** in **Web Browser**. **Sponsored AD** on the new tab page will be displayed even if you set the **Use Block Ads** feature to **Off**.

 The Internet browser automatically shuts down when I visit a website.

- The Internet browser may be forced to shut down if the available memory size is not sufficient to accommodate the image information for a website. Check if you can access the site with the issue on your PC.

 When watching a video in **Web Browser**, the video is forced off.

- You may be able to fix this by setting  → **Settings** → **Adaptive Streaming using JavaScript** to **Off** in **Web Browser**. The setting is not applied to tabs that were open before the change, and is only applied to tabs opened after the change.

Being Aware of the Information

Supported photo file formats

File Format	Format	Resolution
-------------	--------	------------

jpeg, jpg, jpe	JPEG	Minimum : 64 × 64 Maximum Normal Type : 15360 (W) × 8640 (H) Progressive Type : 1920 (W) × 1440 (H)
png	PNG	Minimum : 64 × 64 Maximum : 5760 (W) × 5760 (H)
bmp	BMP	Minimum : 64 × 64 Maximum : 1920 (W) × 1080 (H)

Supported video file formats

Maximum Data Transfer Rate

- Full HD video
H.264 1920 × 1080@60P BP/MP/HP@L4.2 Maximum 40Mbps
HEVC 1920 × 1080@60P Main/Main10@L4.1 Maximum 40Mbps
- ULTRA HD video (ULTRA HD models only)
H.264 3840 × 2160@30P BP/MP/HP@L5.1 Maximum 50Mbps
HEVC 3840 × 2160@60P Main/Main10@L5.1 Maximum 60Mbps
- HFR video (HFR supported models only)
HEVC 3840 × 2160@120P Main/Main10@L5.2 Maximum 60Mbps
- Dolby Vision video (Dolby Vision supported models only)
HEVC 3840 × 2160@60P Main/Main10@L5.1 Maximum 50Mbps
- 8K video (8K models only)
AV1 7680 × 4320@60P
HEVC 7680 × 4320@60P Main/Main10@L6.1 Maximum 100Mbps

Supported External Subtitles

smi, srt, sub (MicroDVD, SubViewer 1.0/2.0), ass, ssa, txt (TMPlayer), psb (PowerDivX), dcs (DLP Cinema)

Supported Embedded Subtitles Format

Matroska (mkv) : Sub Station Alpha (SSA), Advanced Sub Station Alpha (ASS), SRT

Supported Video Codecs

Extension	Codec	
asf wmv	Video	VC-1 Advanced Profile (except for WMVA), VC-1 Simple and Main Profiles
	Audio	WMA Standard (except for WMA v1/WMA Speech)
avi	Video	Xvid (GMC is not supported), H.264/AVC, Motion Jpeg, MPEG-4
	Audio	MPEG-1 Layer I, II, MPEG-1 Layer III (MP3), Dolby Digital, LPCM, ADPCM
mp4 m4v mov	Video	H.264/AVC, MPEG-4, HEVC, AV1
	Audio	Dolby Digital, Dolby Digital Plus, AAC, MPEG-1 Layer III (MP3), Dolby AC-4
3gp 3g2	Video	H.264/AVC, MPEG-4
	Audio	AAC, AMR-NB, AMR-WB
mkv	Video	MPEG-2, MPEG-4, H.264/AVC, VP8, VP9, HEVC, AV1
	Audio	Dolby Digital, Dolby Digital Plus, AAC, PCM, MPEG-1 Layer I, II, MPEG-1 Layer III (MP3)
ts trp tp mts	Video	H.264/AVC, MPEG-2, HEVC
	Audio	MPEG-1 Layer I, II, MPEG-1 Layer III (MP3), Dolby Digital, Dolby Digital Plus, AAC, PCM, Dolby AC-4

mpg mpeg dat	Video	MPEG-1, MPEG-2
	Audio	MPEG-1 Layer I, II, MPEG-1 Layer III (MP3)
vob	Video	MPEG-1, MPEG-2
	Audio	Dolby Digital, MPEG-1 Layer I, II, DVD-LPCM

- Dolby AC-4 : Some models may not be supported.

Cautions for Video Playback

- Some user-created subtitles may not work properly.
- A video file and its subtitle file must be in the same folder. For subtitles to be displayed properly, make sure that the video file and the subtitle file have the same name.
- Subtitles on a Network Attached Storage (NAS) device may not be supported depending on the manufacturer and model.
- Streams that include Global Motion Compensation (GMC) and Quarterpel Motion Estimation (Qpel) are not supported.
- ULTRA HD video (ULTRA HD models only) : 3840 × 2160, 4096 × 2160
Some HEVC-encoded ULTRA HD videos other than the content officially provided by LG Electronics may not be played.
Some codecs can be supported after a software upgrade.

Extension	Codec	
mkv/mp4/ts	Video	H.264/AVC, HEVC
	Audio	Dolby Digital, Dolby Digital Plus, AAC

- Only Window Media Audio V7 and later are supported.
- The AAC main profile is not supported.
- Video files created by some encoders may not be played.
- Video files in a different format than specified may not be played properly.
- Video files stored on a USB storage device that does not support High Speed may not be played properly.

Supported music file formats

File Format	Info	
mp3	Bit rate	32 kbps ~ 320 kbps
	Sample freq.	16 kHz ~ 48 kHz
	Support	MPEG-1, MPEG-2
	Channels	mono, stereo
wav	Bit rate	-
	Sample freq.	8 kHz ~ 96 kHz
	Support	PCM
	Channels	mono, stereo
ogg	Bit rate	64 kbps ~ 320 kbps
	Sample freq.	8 kHz ~ 48 kHz
	Support	Vorbis
	Channels	mono, stereo
wma	Bit rate	128 kbps ~ 320 kbps
	Sample freq.	8 kHz ~ 48 kHz
	Support	WMA

flac	Channels	up to 6 ch
	Bit rate	-
	Sample freq.	8 kHz ~ 96 kHz
	Support	FLAC
	Channels	mono, stereo

- The number of supported programmes may vary depending on the sample frequency.

HDMI-DTV Supported Mode

Resolution	Horizontal Frequency (kHz)	Vertical Frequency (Hz)
640 × 480p	31.46	59.94
	31.5	60
720 × 480p	31.46	59.94
	31.5	60
720 × 576p	31.25	50
1280 × 720p	37.5	50
	44.95	59.94
	45	60
1920 × 1080i	28.12	50

	33.71	59.94
	33.75	60
1920 × 1080p	26.97	23.97
	27	24
	28.12	25
	33.71	29.97
	33.75	30
	56.25	50
	67.43	59.94
	67.5	60
	112.5	100
	134.86	119.88
	135	120
3840 × 2160p	53.94	23.97
	54	24
	56.25	25
	67.43	29.97

	67.5	30
	112.5	50
	134.86	59.94
	135	60
3840 × 2160p ^{1) 2)}	225	100
	269.73	119.88
	270	120
4096 × 2160p	53.94	23.97
	54	24
	56.25	25
	67.43	29.97
	67.5	30
	112.5	50
	134.86	59.94
	135	60
4096 × 2160p ^{1) 2)}	225	100
	269.73	119.88

270

120

1) Supported when **HDMI Deep Colour** is set to **4K**.

2) Only some HDMI input ports are supported.

HDMI-PC Supported Mode

Resolution	Horizontal Frequency (kHz)	Vertical Frequency (Hz)
640 × 350	31.46	70.09
720 × 400	31.46	70.08
640 × 480	31.46	59.94
800 × 600	37.87	60.31
1024 × 768	48.36	60
1152 × 864	54.34	60.05
1360 × 768	47.71	60.01
1280 × 1024 (ULTRA HD, 8K models only)	63.98	60.02
1920 × 1080 (Full HD, ULTRA HD, 8K models only)	67.5	60
1920 × 1080 (ULTRA HD, 8K models only)	134.86	119.88
	135	120

2560 × 1440 ¹⁾ (ULTRA HD 50/60 Hz models only)	88.78	59.95
2560 × 1440 ¹⁾ (ULTRA HD 100/120 Hz, 8K models only)	182.99	119.99
3840 × 2160 (ULTRA HD, 8K models only)	53.94	23.97
	54	24
	56.25	25
	67.43	29.97
	67.5	30
	112.5	50
	134.86	59.94
	135	60
3840 × 2160 ¹⁾ (ULTRA HD 100/120 Hz, 8K models only)	225	100
	269.73	119.88
	270	120
4096 × 2160 (ULTRA HD, 8K models only)	53.94	23.97
	54	24
	56.25	25

	67.43	29.97
	67.5	30
	112.5	50
	134.86	59.94
	135	60
4096 × 2160 ¹⁾ (ULTRA HD 100/120 Hz, 8K models only)	225	100
	269.73	119.88
	270	120
7680 × 4320 ²⁾ (8K models only)	107.89	23.98
	108	24
	110	25
	131.87	29.97
	132	30
	220	50
	263.74	59.94
	264	60

-
- 1) Supported when **HDMI Deep Colour** is set to **4K**.
 - 2) Supported when **HDMI Deep Colour** is set to **8K**.
-

- Supported HDMI-PC port is differ by model. Refer the manual that provide with product.

License Information

Supported licenses may differ by model.

Dolby

Manufactured under license from Dolby Laboratories. Dolby, Dolby Vision, Dolby Vision IQ, Dolby Audio, Dolby Atmos, and the double-D symbol are trademarks of Dolby Laboratories.

HDMI

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

Bluetooth

The Bluetooth® word mark and logos are registered trademarks owned by the Bluetooth SIG, Inc. and any use of such marks by LG Electronics Inc. is under license. Other trademarks and trade names are those of their respective owners.

Quickset

QUICKSET®

HEVC

 **HEVCAdvance™**
Covered by Patents at patentlist.hevcadvance.com