



# User Guide

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

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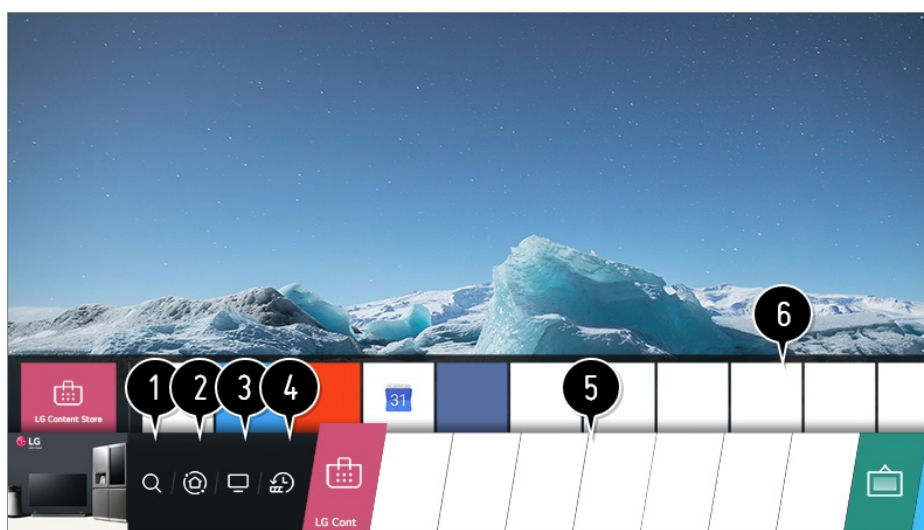
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# Getting Started with LG webOS TV

## 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 combine frequently used apps on a single screen and use whichever you want at any time.



- 1 Launch **Search**.  
To see the details, click the **Enjoying LG Content Store → Content Search** in **User Guide**.
  - 2 Move to the **Home Dashboard**.  
You can select or control a device (mobile, external device, Home IoT Devices, etc.) connected to the TV.  
For more information, see **Connecting External Devices → Using Home Dashboard** in **User Guide**.
  - 3 Move to the TV input you used recently.
  - 4 Move to the recently used app.  
Long-press the  button on the remote control or focus on the **Recents**.  
You can run or close a recently used app in the list provided in the Preview area at the top.
  - 5 You can run, move, and delete the apps installed on your TV.
  - 6 Focus on each App area. It provides the Preview at the top.  
You can check or run useful features of each app and recommended content on the Preview without entering into the app.
    - Some apps may not provide the Preview.
- The home screen will be displayed automatically when the TV is turned on. If you don't

want the home screen to be displayed, set **Home Auto Launch** of  →  → **General** → **Home Settings** as **Off**.

- The availability of and access to Contents and Services in LGE Device are subject to change at any time without prior notice.

## 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, then press and hold the **Wheel (OK)** button on the remote control.

This will activate the app edit mode.

Or you can select the Edit mode button at the right corner of the Home list to enter the App Edit mode.

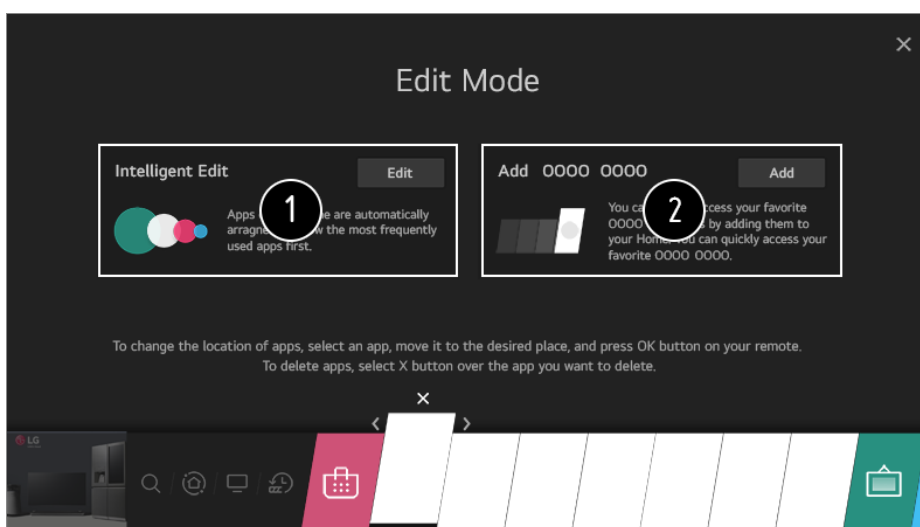
- 02 To move the app to your desired position, go to the position and press the **Wheel (OK)** button.

To delete an app, select the  icon above the app.

- You can move and delete as many apps as you wish before exiting the edit mode.
- You can also move apps with the  /  buttons on your remote control.

- 03 After the editing is done, press the  at the top right to exit the App Edit mode.

- The default TV app cannot be edited.



- 1 You can automatically arrange the app list in the order of most frequently used based on your accumulated app usage pattern.
- 2 You can add your favorite video service channel to the list.

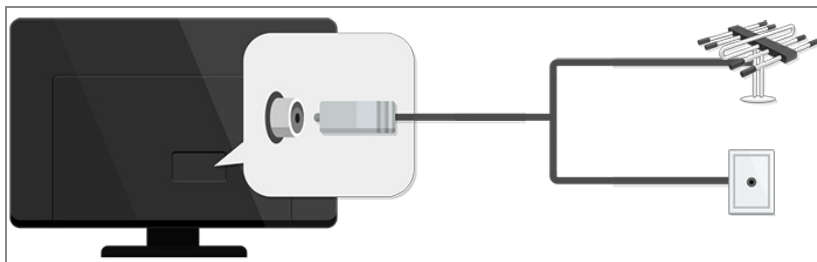
- This feature is available only when the network is connected.
- Some models may not be supported.

## Watching TV Broadcasting

01 Connect the broadcast antenna/cable to the TV.

You may also connect a piece of equipment that can receive broadcasting such as a set-top box instead of the antenna/cable.

Launch  →  → **Connection** → **Device Connection Settings** → **Universal Control Settings**.



02 Start the  →  → **Channels** → **Channel Tuning** → **Auto Tuning**.

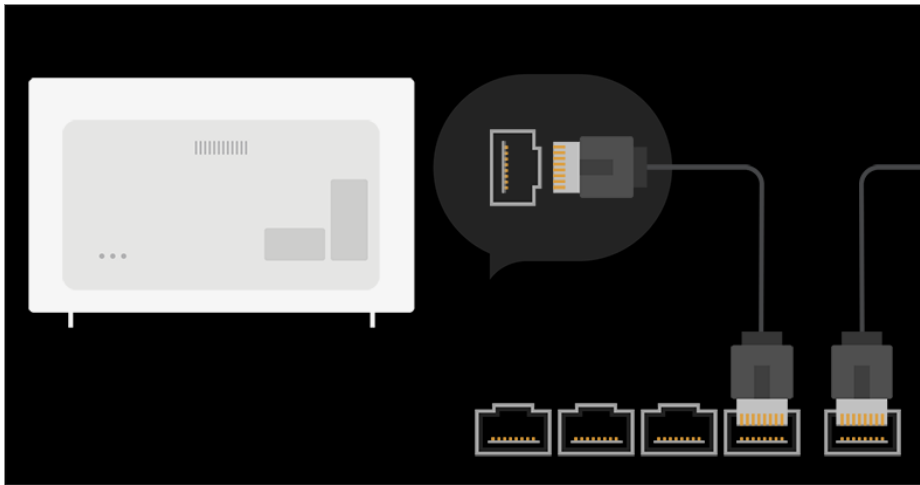
Finds and adds only channels being broadcast.

- To solve a problem related to this function, refer to **Troubleshooting** section of the **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.

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

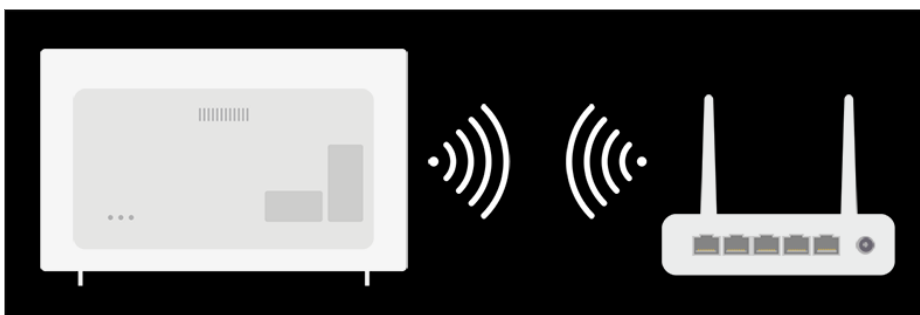
## If the Network Is Not Automatically Connected

02 Press the  button on the remote control.

03 Select  → **Connection** → **Network Connection Settings** → **Wired Connection (Ethernet)**.

To see the details, click the **Settings** → **Connection** → **Network Connection Settings** 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  → **Connection** → **Network Connection Settings** → **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 Router is password protected, enter the password configured for the router.

To see the details, click the **Settings** → **Connection** → **Network Connection Settings** in **User Guide**.

## Network Setting Warnings

- Use standard LAN cable (connect to Cat7 or higher with an RJ45 connector, 10 Base-T, or 100 Base TX LAN port).
- Resetting the modem may fix some network connection problems. Turn the power OFF, disconnect and reconnect it, and then turn the power on to solve the problem.
- LG Electronics is not responsible for any network connection problems or any faults, malfunctions, or errors caused by network connection.
- The network connection may not work properly because of network settings or the Internet service provider.
- DSL service must use a DSL modem and cable service must use a cable modem. Since only a limited number of network connections may be available, TV network settings may not be used depending on the contract with Internet service provider. (If the contract does not allow more than one device per line, only the already-connected PC may be used.)
- A wireless network can experience interference from other devices that use the 2.4 GHz frequency (wireless phone, Bluetooth device, or microwave oven). Although interference can also happen when using the 5 GHz frequency, it is less likely to occur.
- The wireless environment can make wireless network service run slowly.
- Failure to turn off all local home networks may cause excessive traffic on some devices.
- The access point device must support wireless connections and wireless connection feature must be enabled on the device to have AP (access point) connection. Contact the service provider for availability of wireless connections on the access point.
- Check SSID and security settings of the AP. Refer to the appropriate documentation for SSID and security settings of the AP.
- Invalid settings of network devices (wired/wireless line sharer, hub) can cause the TV to operate slowly or not operate properly. Install the devices correctly according to the appropriate manual and network.
- The connection method may differ depending on the AP manufacturer.
- To solve a problem related to this function, refer to **Troubleshooting** section of the **User Guide**.

## Creating LG Account

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

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

- 01 Press the  button on the remote control.
  - 02 Select  → **General** → **Account Management** → **LG Account Sign In**.
  - 03 Select **Create Account**. Read and accept the Terms of Service.
  - 04 Enter an ID and a password. Your ID must be your email address.
  - 05 Enter your birthday.
  - 06 If you select **OK**, a verification link is sent to the email address you entered. Please complete the email verification within the validity period.
  - 07 If email verification is successful, an LG account is created and you can log in with this account information.
- Some models may not be supported.
  - Internet connection is required to create an account.
  - Required information may vary depending upon the country.
  - You may be restricted from the service depending upon your age.
  - To solve a problem related to this function, refer to **Troubleshooting** section of the **User Guide**.

## Managing Your LG Account

You can manage the information of your LG account.

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

### Personal Information

You can view or edit your information of the account currently logged in.  
You can change the password or press **Edit** to edit your personal information.

- Some models may not be supported.

## About User Guide

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

If you press  in the top right of the screen, a brief instruction for the user guide is

shown.

If the function description screen of the **User Guide** has , press  to go to the corresponding function or setting directly.

Text color 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

## Using the Remote Control Button

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



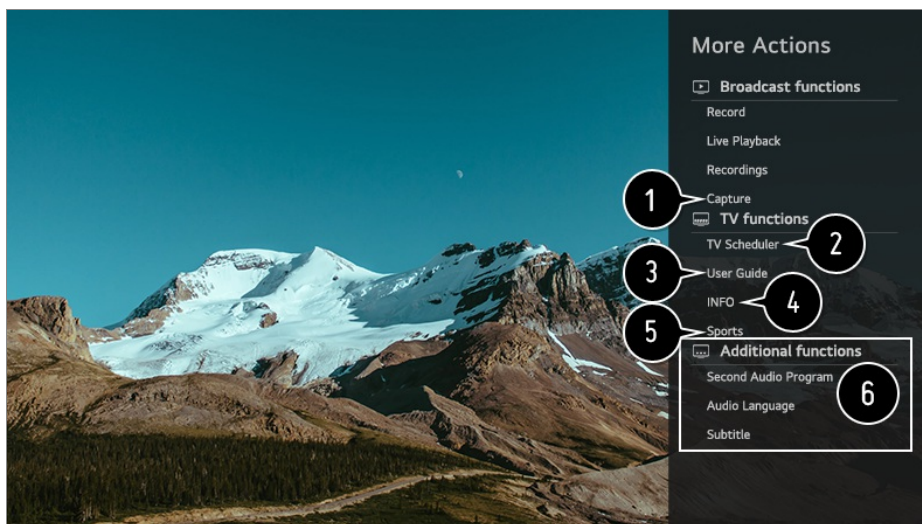
For buttons with #, please long-press (hold for more than a second).

- 🔍 : The **Search** screen will be displayed.
- ⚙️ : Enters the Quick Settings menu.
- 📺 : Selects an input source.
- 0 # : The **QUICK ACCESS** edit screen appears.
- ⋮ : It displays the additional buttons on the remote control.
- 🔊 : Select to turn off the sound from the TV.
- 🔊 # : Enter the **Accessibility** menu.
- 🏠 : Displays the Home menu.
- 🏠 # : Displays the list used previously.

## 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.



❶ You can capture your TV screen.

- Some models may not be supported.
- You can view/delete screen-captured images in the **Photo & Video** app.
- You can copy screen-captured images to USB storage device in the **Photo & Video** app.  
(Some models may not be supported.)

❷ Launch **TV Scheduler**.

❸ Connect to the **User Guide**.

Select the **User Guide** in some TV settings items, and you can see the User Manual of the item.

❹ The information of the TV program you are watching and the external input is displayed on the screen.

❺ You can set the picture/sound mode for watching sports games.

❻ You can set features related to the program you are watching.

- 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.

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

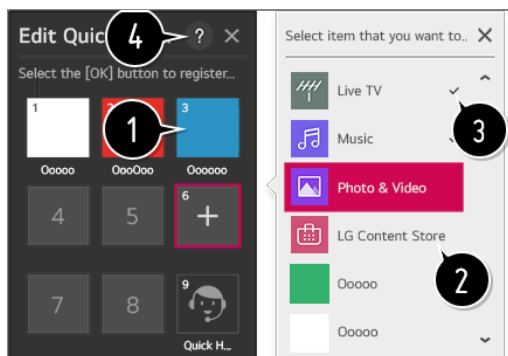
Press and hold a number button on the remote control to open an app or to activate an external input registered to the button.

### Setting the **QUICK ACCESS**

- 01 Launch the app or select the channel 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 number **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.
- ③ An item that has been registered to a different number is indicated with a check mark.
- ④ 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  → **Connection** → **Device Connection Settings**.
  - 04 Set **SIMPLINK (HDMI-CEC)** to **On**.
  - 05 Configure the **Auto Power Sync** settings to **On** or **Off**. (If Auto Power Sync is set to **On**, turning on a SIMPLINK-linked device will turn the TV on. When you turn off the TV, the device will also be turned off.)
  - 06 Turn on the connected device. When the TV automatically connects to the device, the input will switch.  
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<sup>®</sup> cable with CEC (Consumer Electronics Control) function. The High-Speed HDMI<sup>®</sup> 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 pointer function of the Magic Remote can be limited.

### Main Power Off

If **Auto Power Sync** is set to **On** in the **Device Connection Settings** and you turn off your TV, the devices connected to your TV via SIMPLINK will also be turned off.

- This feature is only available in certain devices.

### Main Power On

If **Auto Power Sync** is set to **On** in the **Device Connection Settings**; turning on a SIMPLINK-linked device will turn the TV on.

- If **SIMPLINK (HDMI-CEC)** is set to **Off**, **Auto Power Sync** cannot be set to **On**.
- 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 Colors**, 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/keyboard, the experience may be affected by the distance and wireless condition.

## 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.
- Wireless USB keyboard use may be affected by the usage range 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.  
LOGITECH F310, LOGITECH F510, LOGITECH F710, LOGITECH Rumblepad 2, LOGITECH Cordless Rumblepad 2, LOGITECH Dual Action Gamepad, MICROSOFT Xbox 360 Controller (cable), SONY Playstation(R)3 Controller

## 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.

Or press the **Wheel (OK)** button on the remote control and select **Channels**.



- ① **Channels** : View a list of broadcast content that is currently being broadcast.
  - ② **Guide** : You can view programs and the schedule of each program.  
To see the details, click the **Enjoy Live TV → Viewing Guide** in **User Guide**.
  - ③ **TV Scheduler** : You can set the date and time of the desired broadcasting program, and watch the program.  
To see the details, click the **Enjoy Live TV → Using TV Scheduler** in **User Guide**.
- The channels displayed in Channel List are a configuration of channels provided by the

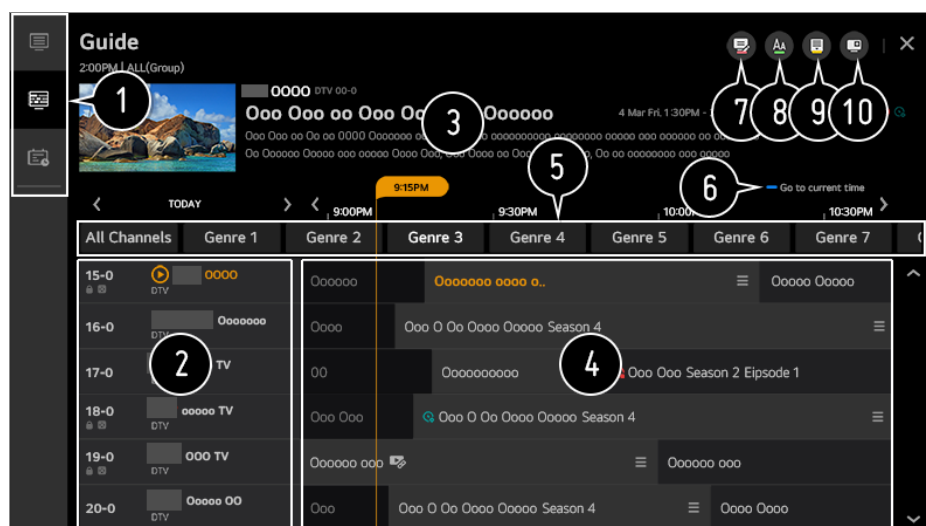
broadcast service provider. Therefore, if the broadcast service provider has changed its channel configuration without notice, the channels displayed in Channel List may differ from the actual TV channels.

- Because channel information displayed in Channel List includes information provided by external Electronic Program Guide (EPG) providers, it may differ from the actual TV channels.
- You must complete the settings of the network, region, and auto-channel to receive normal live broadcast service.
- The configurable items differ depending upon model.

## Viewing Guide

You can view programs and the schedule of each program.

Press the remote control's **LIST** button, and select the **Guide** tab on the left side of the screen.



- 1 Click on each area, and you can move to the app.
- 2 You can view information on the channel and broadcaster.
- 3 You can view information about the program you are currently watching as well as the focused program information.
- 4 Select the  button or the title of the desired program. You can view more information on the program and perform **Watch/Record** (only available on certain models) or **Reminder/Scheduled Recording** (only available on certain models), etc.
- 5 Only channels that correspond to the selected genre can be filtered to be displayed.
- 6 You will be taken to the program list for the current date and time.
- 7 Launch **Channel Manager**.
- 8 You can change the size of the program list to adjust the number of channels displayed on

the screen.

- ⑨ Sets the filter.
- ⑩ You can turn on/off Mini TV.
- Program information is not displayed for channels with no provided broadcast information.

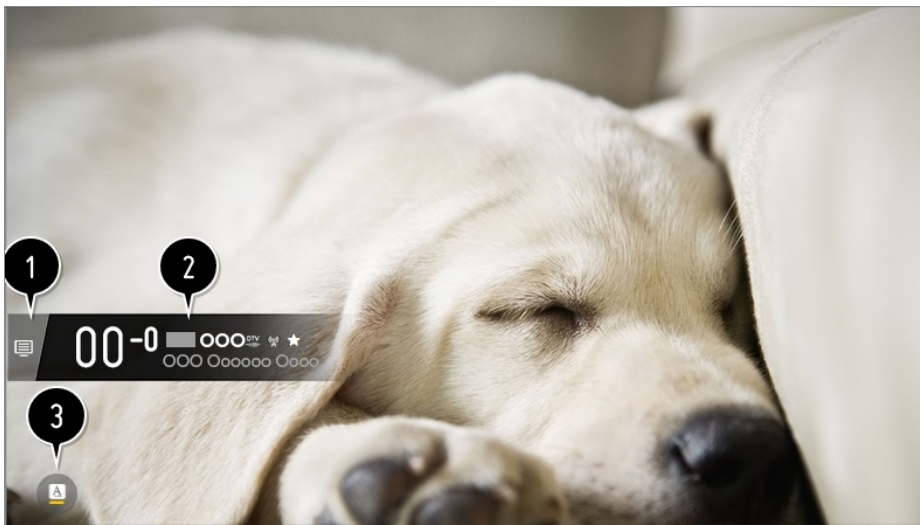
## Viewing Set-Top Box Guide

After connecting the Set-Top Box, you can view programs and the schedule of the Set-Top Box and use the Magic Remote.

- Some models may not be supported.

## Viewing Program Information

While watching a live broadcast press the **Wheel (OK)** button. The Channel Banner appears.



- ① Move to the **Channels**.  
To see the details, click the **Enjoy Live TV → Making the Most of Live Menu** in **User Guide**.
- ② It displays the information about the program you are watching. Select a channel banner to enter the detailed information pop-up to see the detailed program information or run additional features related to the banner.

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

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

Press the **■** button on the remote control to move the banner's position.

- The features can be controlled only within the detailed information pop-up.
- 3 If the program you are watching includes information such as **Closed Caption** or **Audio Language**, you can set these features.
-  : You can set **Closed Caption**.
  -  : You can set **Audio Language**.
    - Only available with digital broadcasts.
  -  : You can set **Multi Audio**.
    - Only available with analog broadcasts.
- Available features may vary depending on the broadcast signal.

## Using **Who.Where.What?**

Provides a variety of information related to the scene you are currently watching.

- Information may vary depending on the program.
- Some models may not be supported.

## Entering **Who.Where.What?**

Method 1. Press the **Wheel (OK)** button on your remote control.

Press **Who.Where.What?** on the channel banner.



Method 2. If the information is recognized while you are watching a program, a notification will appear automatically. Please click on the displayed notification.

- To receive automatic recommendations, you must set  →  → **General** → **AI Service** →

**AI Recommendation** → **Who.Where.What?** to On.



Method 3. It can also be used with the speech recognition feature.  
Example) Who is this person?/Where is this place?/What is this bag?

- Some models may not be supported.

## Checking **Who.Where.What?** Information

A variety of information related to the scene you are watching appears on the screen.  
Select the information you want to view the details.  
Store the information in **Wish List** and come back anytime you want.

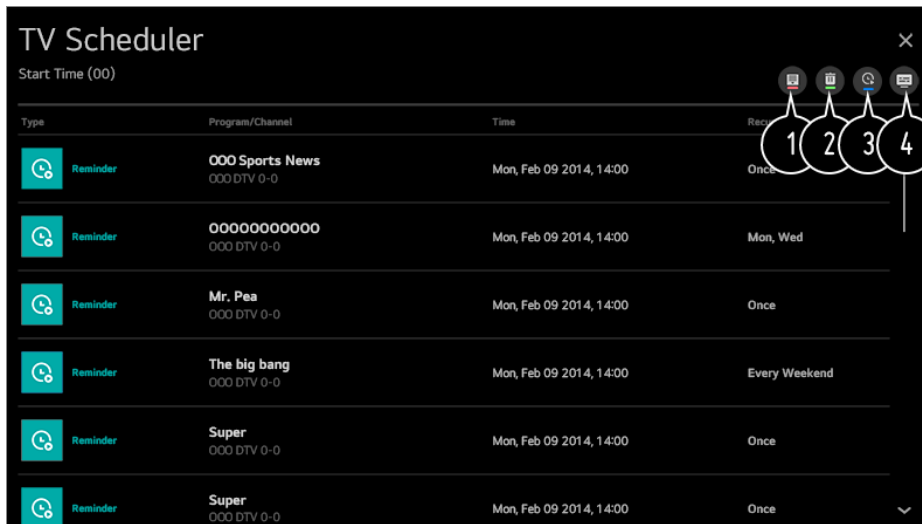


- Only available if ⚙️ → ⋮ → **General** → **Additional Settings** → **Live Plus** is set to **On**.
- Only available for a Live TV or set-top box with universal remote control.
- You must connect to the network and agree to the terms of use before you use it.
- It is not available if you are watching **LG Channels** (IP channel) or in a mode that does not support screen capture.

## Using TV Scheduler

This function is used to set the time and date for watching a specific program.

- 01 Press the remote control's **LIST** button, and select the **TV Scheduler** tab on the left side of the screen.
- 02 Select the  at the top right.



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

## Program Scheduling

You can select a show to schedule it for watching.

- 01 Press the remote control's **LIST** button, and select the **Guide** tab on the left side of the screen.
- 02 Select the program you want.  
If you want to watch a live broadcast, click the **Watch** button.  
In case of an upcoming program, click the **Reminder** button.

- Applies to digital broadcasting.

## Manual Scheduling

You can select the date, time, and channel to watch the channels.

- 01 Press the remote control's **LIST** button, and select the **TV Scheduler** tab on the left

side of the screen.

- 02 Select the  at the top right.
- 03 Select the  at the top right.
- 04 Select **CREATE MANUALLY**.
- 05 Set the date, time, and channel to watch.

- Some models may not be supported.

## Watching Internet Channel

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

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

- 01 Press the  button on the remote control.
- 02 Select  → **Channels**.
- 03 Set **LG Channels** to **On**.
- 04 You can watch an Internet Channel in **TV**.
- 05 While watching an Internet Channel, click the  button on the Remote control. You can start the **LG Channels**.
- 06 You can use the 'Interactive Channel' service that enables users to conveniently enjoy content related to the current channel without having to switch apps.  
You can use the 'Interactive Channel' by pushing the buttons on your remote control or clicking your screen according to the instructions that appear on the Internet channel screen.

- Some models may not be supported.
- Some Internet channels may not support this service.
- Some content can cause a switch from **TV** app to a different app.
- The TV should be connected to a network with Internet access.
- You cannot receive the service if you change the **LG Services Country**.
- Live Playback and recording are not available for internet channels.
- Internet Channel services may be stopped or changed without prior notice by the broadcasting company.

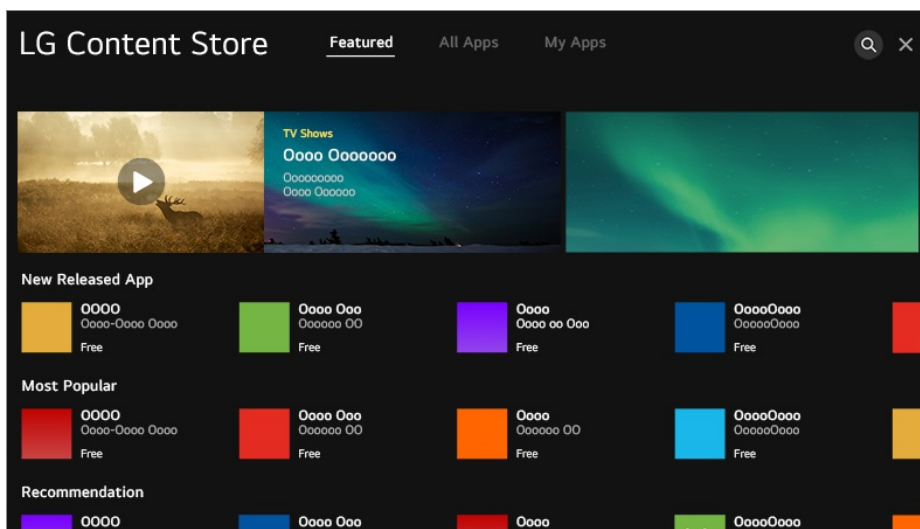
# Enjoying LG Content Store

## Using LG Content Store

You can download and use apps from various categories such as education, entertainment, lifestyle, news, and games.

01 Press the  button on the remote control.

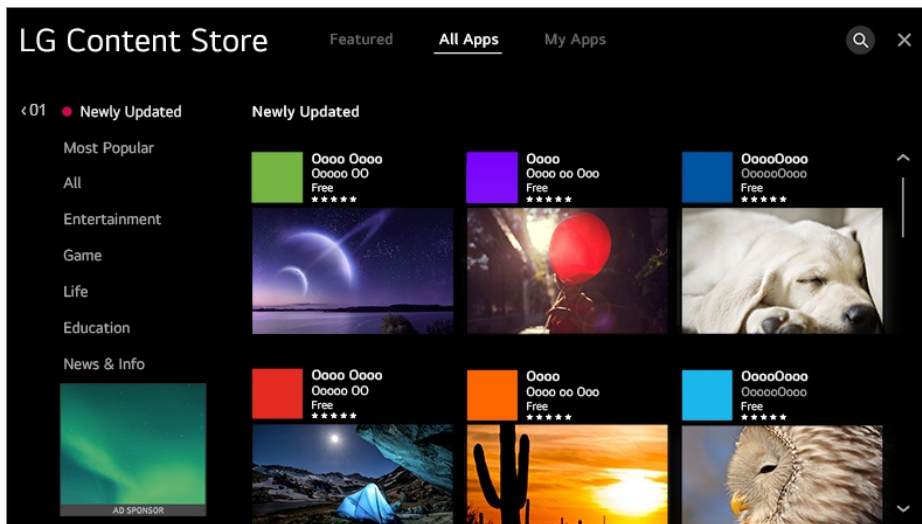
02 Launch **LG Content Store**.



- Depending on the model, the provided contents may differ or some features may be limited.
- Exercise caution when in used 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** → **Safety** → **Application Locks**.

## Installing Apps

You can install various apps on your TV from the **LG Content Store**.



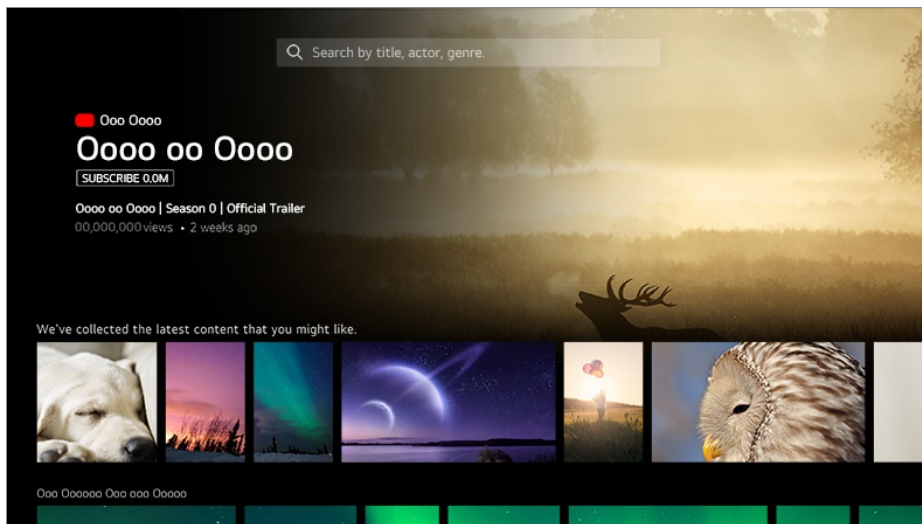
- 01 Press the  button on the remote control.
  - 02 Launch **LG Content Store**.
  - 03 Select the **All Apps** category shown at the top of the screen.  
The list of available apps in the selected category will be shown.
  - 04 Select an app to set up from the list.
  - 05 Read the details of the app and then press **Install**.
  - 06 When the installation is complete, you can run the app immediately.
- 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.
  - You can delete apps you have downloaded in **My Apps**.

## Content Recommendation

You can get content recommendations based on the program 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 remote control.
- 02 Launch .



- 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 program you are watching.

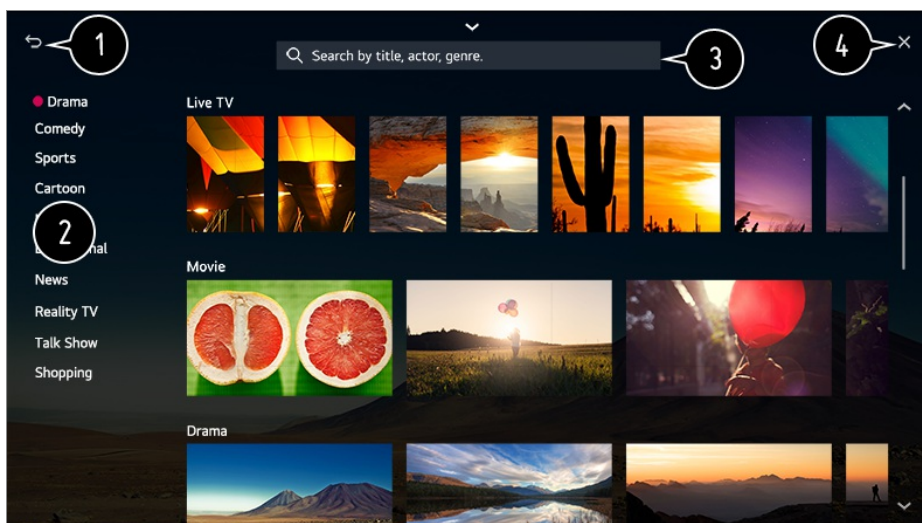
## Content Search

You can receive recommendations for content based on viewing patterns or search by yourself for the content you want.

01 Press the  button on the remote control.

02 Launch .

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



① Returns to the previous screen.

- ② Provides a list of content for the selected genre.
  - ③ Enter a search term.
  - ④ Exit the Search.
- You must connect to the network to use the search feature.
  - Search results may vary depending on the channel, region, network settings, and whether you have agreed to the terms and conditions.

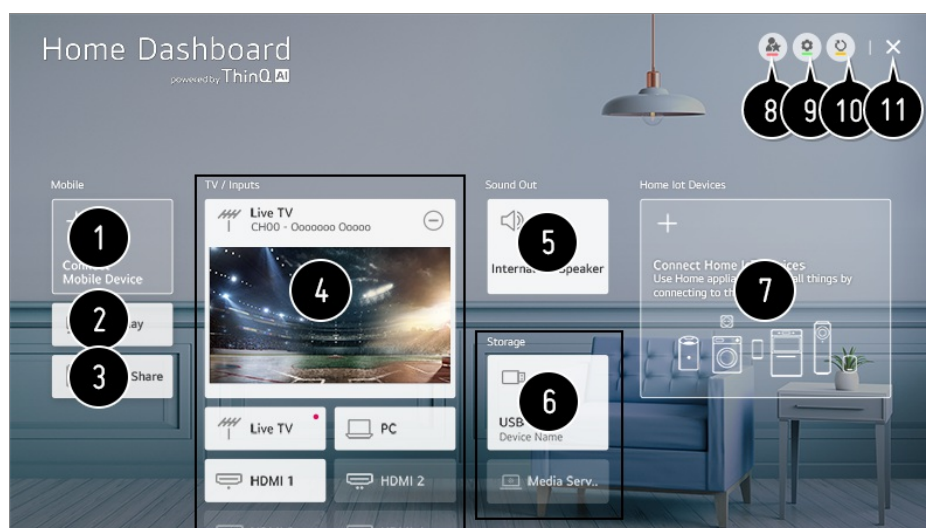
# Connecting External Devices

## 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 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.
- ② 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.

- 3 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.
  - 4 You can check and select the external device connected through the external input port or network.
  - 5 The currently selected output speaker is displayed, and you can navigate to the output speaker settings screen.
  - 6 You can view and select the connected storage device.
  - 7 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.
  - 8 You can easily control your device by presetting the desired operations.
  - 9 **Sign In** : You can log in/out to and from the LG ThinQ account you created on mobile.  
**Edit** : You can edit the name of the device connected to **Inputs** or **Home IoT Devices** or configure the related settings.  
**Link to Smart Speaker** : You can control your TV by connecting to an external Smart Speaker.
  - 10 It refreshes the device list.
  - 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  at the top right to select the **Sign 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 OCF (Open Connectivity Foundation) Supporting Device<sup>1)</sup> or other IoT devices, select **Connect Home IoT Devices** and configure settings following instructions.  
1) OCF (Open Connectivity Foundation) Supporting Device: Devices certified by an organization of the Internet of Things standards development

- 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 easily control your device by presetting the desired operations.
  - 2 You can log in/out to and from the LG ThinQ account you created on mobile.
  - 3 **Edit List** : You can rename, **Show/Hide** or change the order of the devices connected to **Home IoT Devices**.  
**Notification** : If you turn it **On**, you can receive notifications about the status of the Home IoT Devices.  
**Delete** : You can delete the connected device. You can only delete certain devices from the TV.
  - 4 You can control your TV by connecting to an external Smart Speaker.
  - 5 You can check the connection guide for each type of **Home IoT Devices**. You can connect and display the devices registered to your LG ThinQ account, your OCF (Open Connectivity Foundation) Supporting Device, and other 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.
- Available settings vary depending on the model or region.
  - Only some of the OCF (Open Connectivity Foundation) Supporting Device that is OCF v1.3 certified can be connected.
  - 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.
  - When resetting the TV, it also requires resetting the OCF (Open Connectivity Foundation) Supporting Device connected to the set.

## 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.

- Android



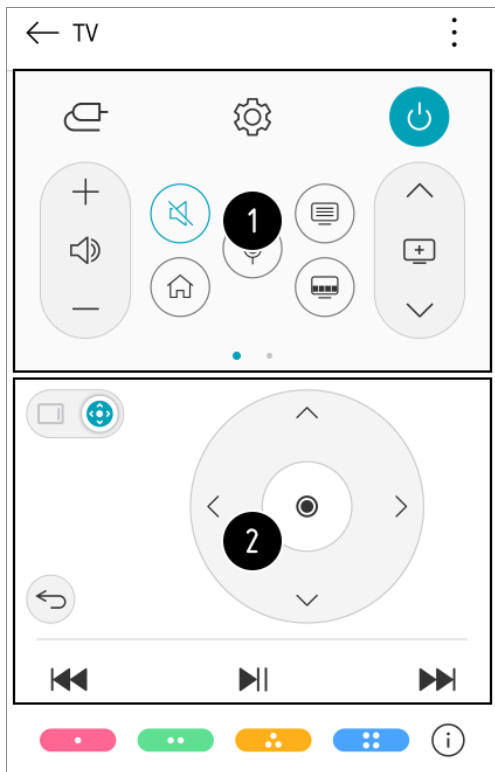
- iOS



- 02 Connect your TV and smart device to the same Wi-Fi network.  
You can check the Wi-Fi network of TV at  →  → **Connection** → **Network Connection Settings** → **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.
- If you register LG ThinQ in the app of the Smart Speaker you want to use, you can also use it with a voice command through Smart Speaker.

## 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 channel, 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.
- 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.

## 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.
- When you connect **Screen Share** for the first time, a popup will appear which allows you to select **Decline**, **Accept** or **Block**.
    - **Decline** : Do not connect the device. If you try to connect again, the popup will appear.
    - **Accept** : You can connect the device. No connection popup will appear from the second time.

- **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 cancel **Block**, go to  →  → **Connection** → **Mobile Connection Management** → **Screen Share**.

- For a reliable connection always keep the connected device to your TV updated to the latest OS version.
- A non-LGE device might not connect even when it is detected.
- Connect the device to a 5 GHz router because the performance may be affected by your wireless environment.
- The response rate may vary depending upon the user's environment.
- It differs among devices. When trying to connect to a device, refer to the device's User's Guide for more information.
- If the connection fails repeatedly, turn off the TV and the device you are trying to connect. Then turn them back on and try again.

## 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

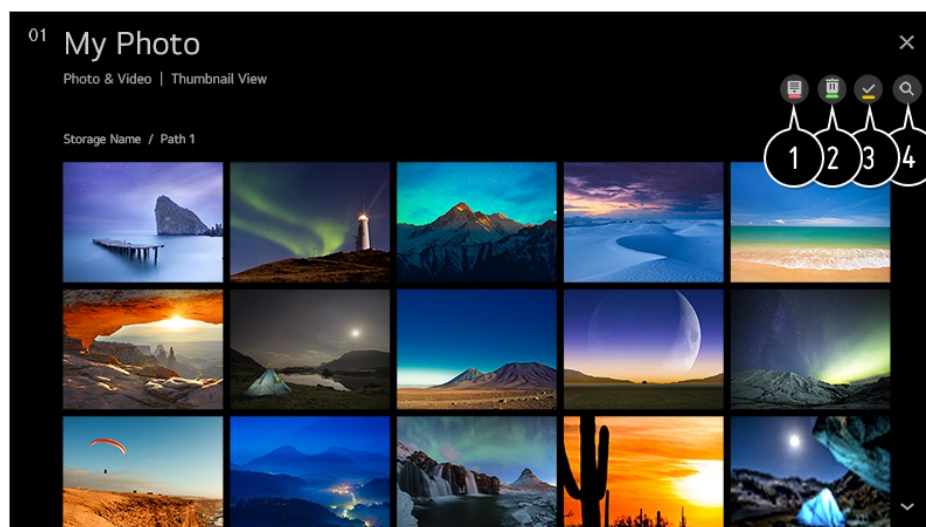
- A USB storage device that has a built-in automatic recognition program or uses its own driver might not be recognizable.
- Some USB storage devices may not be supported or may not work properly.
- If you use a USB extension cable, the USB storage device may not be recognized or may not work properly.
- 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 5V 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. For more information about the USB HDD, see the Owner's manual.

- Data on a USB storage device may be damaged. 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** → **Storage** 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.

## Viewing Photos and Videos

You can view photos and videos using the **Photo & Video** app.

- 01 Press the  button on the remote control.
- 02 Run the **Photo & Video** app.
- 03 Select your desired storage device.
- 04 Select and view your desired photo or video.

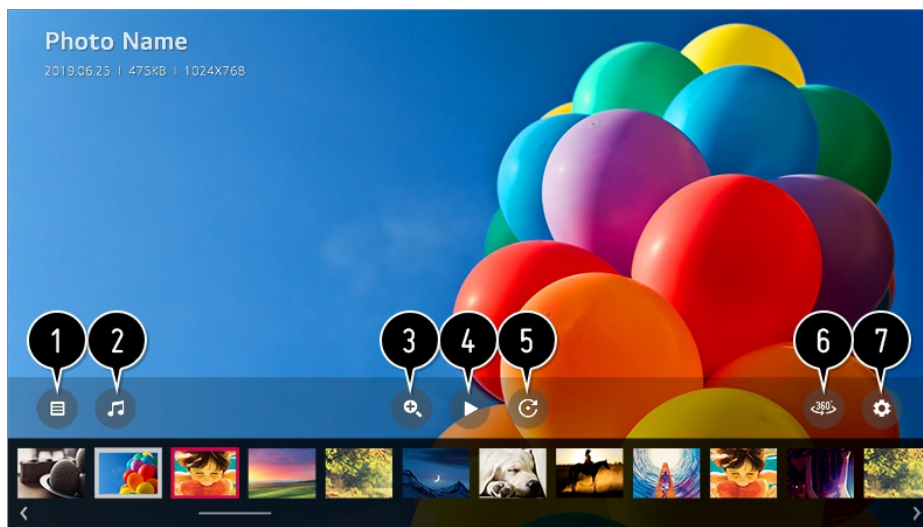


- ① Select your desired type of content and viewing method.
- ② Select and delete the desired content.

- You cannot delete files that are shared from other devices.
- 3 Select the content you want to play. You can only select the same type of content as you first selected.
  - 4 Launch **Search**.
- Certain content may not be displayed on the list if the number of all content exceeds 40,000.

## Using Photo Player

Selecting a photo in the **Photo & Video** app runs the photo player. You can view your saved photos.



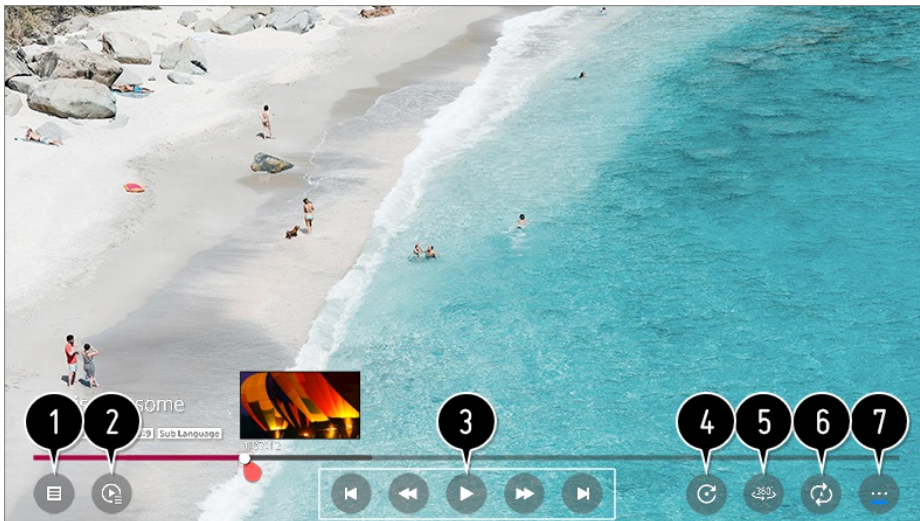
- 1 Returns to the entire content list.
- 2 You can play background music by running the music player.
- 3 You can zoom the photos in/out.
- 4 Starts the slide show.
- 5 Rotates photos.
- 6 360-degree photos can be viewed in 360 degrees.
  - Using the 360° VR Play on a normal photo may distort the image.
  - Some models may not be supported.
- 7 You can set the size of a photo or change the speed and effect of a slide show.
  - Some models may not be supported.

# Supported Photo Files

| File Format    | Format | Resolution                                                                                                   |
|----------------|--------|--------------------------------------------------------------------------------------------------------------|
| jpeg, jpg, jpe | JPEG   | Minimum : 64 × 64<br>Maximum<br>Normal Type : 15360 (W) × 8640 (H)<br>Progressive Type : 1920 (W) × 1440 (H) |
| png            | PNG    | Minimum : 64 × 64<br>Maximum : 5760 (W) × 5760 (H)                                                           |
| bmp            | BMP    | Minimum : 64 × 64<br>Maximum : 1920 (W) × 1080 (H)                                                           |

# Using Video Player

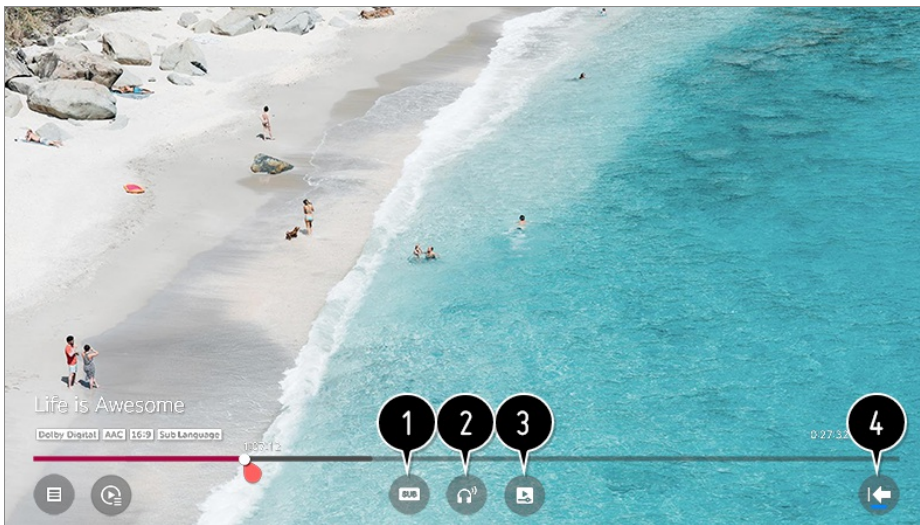
Selecting a video in the **Photo & Video** app runs the video player. You can view your saved videos.



- ① Returns to the entire content list.
- ② You can select other content by displaying the playlist while watching a video.
- ③ You can control basic video playback functions.
- ④ Rotates videos.

- Some models may not be supported.
- 5 360-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.
  - 6 You can do the settings related to play on repeat of the video.
  - 7 You can set additional options.

## Setting Additional Options



- 1 You can change subtitle settings.
- 2 You can set audio tracks.
- 3 You can set continue watching to resume playing from the last viewed scene.
- 4 Returns to the basic operation screen.

## Supported Video Files

### 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 support models only)

HEVC 3840 × 2160@120P Main/Main10@L5.2 Maximum 60Mbps

- Dolby Vision video (Dolby Vision support models only)  
HEVC 3840 × 2160@60P Main/Main10@L5.1 Maximum 50Mbps
- 8K video (8K models only)  
VP9 7680 × 4320@60P Maximum 50Mbps (Some models may not be supported.)  
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  
MP4 : Timed Text

## Supported Video Codecs

| Extension         | Codec |                                                                                             |
|-------------------|-------|---------------------------------------------------------------------------------------------|
| asf<br>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<br>m4v<br>mov | Video | H.264/AVC, MPEG-4, HEVC, AV1                                                                |
|                   | Audio | Dolby Digital, Dolby Digital Plus, AAC, MPEG-1 Layer III (MP3), Dolby AC-4, MPEG-H 3D Audio |

|                        |       |                                                                                                     |
|------------------------|-------|-----------------------------------------------------------------------------------------------------|
| 3gp<br>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<br>trp<br>tp<br>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<br>mpeg<br>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 , MPEG-H 3D Audio : 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.

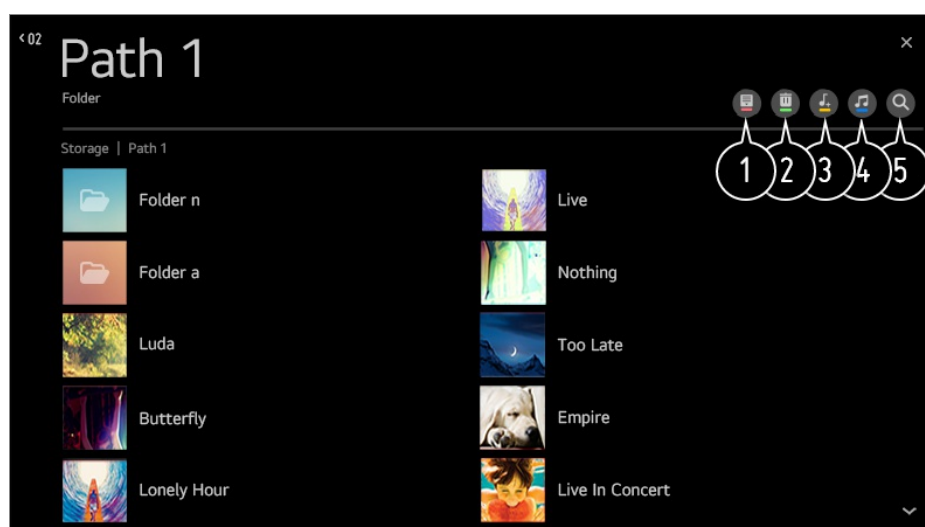
| Extension  | Codec |                                        |
|------------|-------|----------------------------------------|
| mkv/mp4/ts | Video | H.264/AVC, HEVC                        |
|            | Audio | Dolby Digital, Dolby Digital Plus, AAC |

- 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.

## Playing Music

You can listen to music by using the **Music** app.

- 01 Press the  button on the remote control.
- 02 Run the **Music** app.
- 03 Select your desired storage device.  
You can select your desired songs from all of your storage devices and add them to **My Playlist**.
- 04 Select your desired music content and enjoy it.



- ① Select the desired type of content list.
- ② Select and delete the desired content.

- You cannot delete files that are shared from other devices.
- 3 Select content and add it to **My Playlist**.
  - 4 Open the music player.
  - 5 Launch **Search**.

## Using the Music Player

You can play music conveniently by selecting the music files saved in the **Music** app or by selecting the music player icon during content playback in apps such as **Photo & Video**.



- 1 You can play music from the selected storage device.
  - 2 You can set repeat playback and random playback.
  - 3 The configurable items differ depending upon model.
    - ⏻ : You can turn the screen off while listening to music or display the music player in full-screen mode.
    - ⏸ : You can listen to music with the screen turned off.
  - 4 You can change the position of the music player.
  - 5 You can minimize the music player.
  - 6 This feature closes the music player.
  - 7 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.
- Reopen your music player by pressing the VOLUME key on your remote control.

- You may not be able to use the music player for some features.

## Audio Format

| File Format | Item         | 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            |
|      | Channels     | up to 6 ch     |
| flac | Bit rate     | -              |
|      | Sample freq. | 8 kHz ~ 96 kHz |
|      | Support      | FLAC           |
|      | Channels     | mono, stereo   |

- The number of supported channels may vary depending upon the sample frequency.

## 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 played through only 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 Special Attention during 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.
- We recommend using the SmartShare PC software when viewing video subtitles.
- When a new subtitle file is added, disable the shared folder 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 upon 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 device.
- For a reliable connection always keep the connected device to your TV updated to the latest OS version.
  - 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 upon the user's environment.
  - It's different from Windows version. For more information on the device you want to connect to, refer to its user guide.
  - If the connection fails repeatedly, turn off the TV and the device you are trying to connect. Then turn them back on and try again.

## Connect wired

Connect the PC to your TV using an HDMI cable.

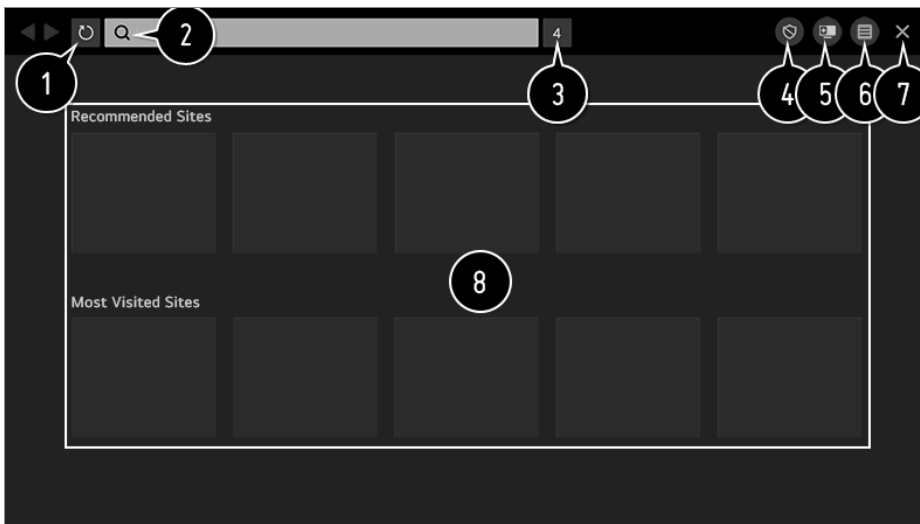
# Making the Most of Smart TV

## 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 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**.
  - 5 Split the screen to display the TV screen. You can browse web pages while watching TV.
  - 6 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 Favorites.  
**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 Favorites.  
**Settings** : You can change the web browser settings.
  - 7 Exit the **Web Browser**.
  - 8 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** → **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

When starting the **Web Browser** app, you can set the app to operate in one of **Open the New Tab page/Continue where I left off/Home page**: custom websites.

### 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 set to **On**, if a failure occurs due to insufficient memory (operation delay or malfunction, media playback failure, page loading failure, abnormal shutdown, etc.),

the information is automatically sent to the LG Electronics (Korea) Web Browser development team. The submitted information will only be used to improve the Web Browser performance.

## Use Block Ads

When set to **On**, a button will appear in the menu bar area at the top of **Web Browser** to turn the **Use Block Ads** feature on and off. 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.  
The initial password is set as "0000".

## 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 optimized 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.

## 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** → **Additional Settings**.
- 03 Set **Live Plus** to **On**.

- Some models may not be supported.
- You can use the **Live Plus** function only with LG remote controls.
- This service is only provided for select content with contracted partners.

## Using **Sports Alert**

- 01 Press the  button on the remote control.
- 02 Run the **Sports Alert** app.
- 03 Select **Add My Team** to add desired sports team to My Team.  
You can check the match schedule of the registered team or set an alarm.

- 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.

# Settings

## To Use Setting Function Quickly

Displays a 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 the **Picture Mode**.
  - ② You can set the **Sound Mode**.
  - ③ You can choose the **Sound Out**.
  - ④ You can set the **Sleep Timer**.
  - ⑤ Move to the **Connection** screen.
  - ⑥ You can set more options.
  - ⑦ 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** → **Picture Mode Settings** → **Picture 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 optimized for its characteristics.

- The configurable items differ depending upon 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.

### APS

**APS** (Auto Power Saving) mode reduces power consumption by using dimming control.

### Cinema

Suitable picture for movies.

### Sports / Soccer

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

Suitable picture for gameplay.

### HDR Effect

This feature lets you enjoy a more dynamic, clearer image by correcting the light and dark areas of the display.

This feature provides a realistic image, even when the source image's gradation level is high.

- If you set **Picture Mode** to **HDR Effect**, you will not be able to use some of **Picture Mode Settings**.

### 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 Change** to **On**.

## **Expert (Bright Room)** / **Expert (Dark Room)**

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

**Expert (Dark Room)** has lower color temperature than **Expert (Bright Room)**.

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 brighter and clearer than that of the **Cinema** screen.

#### **Cinema**

Suitable picture for HDR video signal.

#### **Game**

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 Change** to **On**.
- If an HDR/Dolby Vision video signal is input to the models that do not support the HDR/Dolby Vision technology, normal signal picture mode options will be made available.
- Depending upon 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.
- **Picture Mode** changes may modify **Energy Saving** and **Motion Eye Care** settings and it

can affect energy consumption. You can adjust their settings manually in the **Energy Saving** and **Picture Options** menu.

## Fine-Tuning Picture Mode

⚙️ → ⓘ → **Picture** → **Picture Mode Settings**

This feature allows you to adjust the selected picture mode in detail.

### Backlight

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

- Decrease the **Backlight** to reduce energy consumption.
- Depending on the **Energy Saving (Auto/Maximum)**, you may not be able to adjust the **Backlight**.  
In this case, navigate to ⚙️ → ⓘ → **Picture** → **Energy Saving** and set to **Off** or **Minimum**.
- Depending on your TV model, you might not have the **Backlight** setting.

### OLED LIGHT

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

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

### Contrast

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

### Brightness

Adjusts the overall screen brightness. The closer to 100, the brighter the screen will become.

You may use the **Brightness** settings specifically to set the dark part of the image.

### Sharpness

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

### Color

Tones down or up the colors displayed on the screen. The closer to 100 the deeper

the color.

## Tint

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

## Color Temperature

Adjusts the color tone of the entire image. As you lower the level, you get a warmer tone, and as you raise it, you get a cooler tone.

- The settings you specify only applies to the currently selected input mode. To apply your current picture settings to all input modes, select **Apply to All Inputs**.
- Depending upon the input signal or the selected picture mode, the available options may differ.
- The configurable items differ depending upon model.

### Resetting Picture Mode

 →  → **Picture** → **Picture Mode 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.

## Setting the Advanced Control Options

 →  → **Picture** → **Picture Mode Settings** → **Advanced Controls**

### Dynamic Contrast

Corrects the difference between the bright and dark areas of the screen for optimal results depending on the brightness of the picture.

### Dynamic Tone Mapping

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

### Dynamic Color

To make the image more colorful and lively adjust the Color and saturation of the picture.

### Color Gamut

Selects the range of Colors to display. Set color gamut to **Auto** according to the signal, or display more vivid and richer color in the order of **Extended** and **Wide**.

## Super Resolution

Adjusts the resolution to make dim and blurred images clearer.

## Gamma

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 Theater** or **Expert (Bright Room)/Expert (Dark Room)** 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.

## White Balance

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

## Color Temperature

Select **Warm1/Warm2/Warm3** for warm colors, select **Cool** for cold colors or select **Medium** for medium colors.

## Method

This method is used for fine-tuning the color temperature setting. You can control the color 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 IRE**, and at each point of 22 levels of the video if you select **22 Points IRE**.

## 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 IRE**; you can select brightness using numbers indicating 10 levels.

When the **Method** is set to **22 Points IRE**, you can select the brightness with the 22 levels of brightness.

## IRE

Select screen brightness for color temperature adjustment.

If **Method** is set to **10 Points IRE**; you can select brightness using numbers indicating 10 levels.

When the **Method** is set to **22 Points IRE**, you can select the brightness with the 22 levels of brightness.

## Luminance

You can adjust the selected brightness by points.

- You can do these settings only when the **Picture Mode** is the **Live Theater**, **Expert (Bright Room)** or the **Expert (Dark Room)** and when the **Method** is set to **10 Points IRE** or **22 Points IRE**.

## 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**.

## Color Management System

This is used when experts control it by using a test pattern. You can control it by selecting areas of six colors (**Red/Green/Blue/Cyan/Magenta/Yellow**).

For normal images, adjustments may not result in noticeable Color changes.

## Color

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

## Saturation / Tint / Luminance

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

## Peak Brightness

Adjust peak brightness for the brightest luminance.

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

## Setting Picture Options

 →  → **Picture** → **Picture Mode Settings** → **Picture Options**

## 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.

## Black Level

Adjusts the brightness of the dark parts of images.

Select **High** for a bright screen or select **Low** for a dark screen.

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

## Real Cinema

Optimize display for movies.

## Motion Eye Care

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

- Turning this option **Off** may increase energy consumption.

## LED Local Dimming

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

## TruMotion

Suitable the image quality of fast-moving pictures.

- **Off** : Turns off the **TruMotion**.

- **Cinema Clear** : Adjusts the shaking of the motion on the screen to make it feel like you are in a movie theater.
- **Natural** : Sets images with a lot of motions to look natural and clear.
- **Smooth** : Softens fast-moving pictures.
- **User** : Sets **TruMotion** manually.
  - **De-Judder** : Adjusts juddering on the screen.
  - **De-Blur** : Reduces the blurring effects of motion.
  - **OLED Motion / Motion Pro** : Make fast-moving pictures clearer using the light control.
- The advanced settings can be changed only in **User** mode.
- Depending upon the input signal or the selected picture mode, the available options may differ.
- The configurable items differ depending upon model.

## Setting the Screen Size

 →  → **Picture** → **Aspect Ratio Settings** → **Aspect Ratio**

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

Changes the aspect ratio to 4:3 or 16:9 depending upon the input video signal.

### 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 upon 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 upon the input signal, the available screen sizes may be different.

## View Screen with **Just Scan**

 →  → **Picture** → **Aspect Ratio Settings** → **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.

## To Use Energy Saving Feature

 →  → **Picture** → **Energy Saving**

Reduces power consumption by adjusting peak screen brightness.

### **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.

### **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** function, brightness of your TV will be affected.

## To Use **Eye Comfort Mode** Feature

 →  → **Picture** → **Additional Settings** → **Eye Comfort Mode**

The color temperature will be adjusted to reduce eye fatigue.

### **On**

The color temperature of your TV screen is adjusted.

### **Off**

Turns off the **Eye Comfort Mode**.

- Some models may not be supported.

## **HDMI ULTRA HD Deep Color**

 →  → **Picture** → **Additional Settings** → **HDMI ULTRA HD Deep Color**

If you connect a device that supports **HDMI ULTRA HD Deep Color**, you can enjoy a clearer image. After connecting the playback device, set **HDMI ULTRA HD Deep Color** to **On**.

If the connected device does not support this function, it may not work properly.

In that case, change the TV's **HDMI ULTRA HD Deep Color** setting to **Off**.

### **Supported Display Resolution**

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

### 4K @ 50/60 Hz Support Format

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

|                           |                           |                           |
|---------------------------|---------------------------|---------------------------|
| YCbCr 4:2:2 <sup>1)</sup> | YCbCr 4:2:2 <sup>1)</sup> | YCbCr 4:2:2 <sup>1)</sup> |
| YCbCr 4:4:4 <sup>1)</sup> | -                         | -                         |
| RGB 4:4:4 <sup>1)</sup>   | -                         | -                         |

1) Supported when **HDMI ULTRA HD Deep Color** is set to **On**.

- 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.

## Using **Instant Game Response**

 →  → **Picture** → **Additional Settings** → **Instant Game Response**

Set the HDMI port connected to the device to be **On** to enjoy games with the optimal video for the game.

If the connected device does not support this function, it may not work properly.

- Set the **HDMI ULTRA HD Deep Color** feature to **On** for the HDMI terminal connected to the gaming device to enable **Instant Game Response**.
- It works only when the  →  → **Sound** → **Sound Out** is **Internal TV Speaker/Audio Out (Line Out)/Wired Headphones/Wired Headphones + Internal TV Speaker**. (The configurable items differ depending upon model.)
- When the **Instant Game Response** is launched, the video may blink temporarily.
- If you turn this feature **On**, you cannot change some video settings items.

## Using **AMD FreeSync Premium**

 →  → **Picture** → **Additional Settings** → **AMD FreeSync Premium**

This reduces screen cracking and video lagging during game play.

- To use the **AMD FreeSync Premium** feature, the **HDMI ULTRA HD Deep Color** of the corresponding terminal must be set to **On** or **4K/8K**.
- When operating **AMD FreeSync Premium**, minor brightness change may occur depending on the frequency of the external device.
- Some models may not be supported.

## **FILMMAKER MODE Auto Change**

⚙️ → ⓘ → **Picture** → **Additional Settings** → **FILMMAKER MODE Auto Change**

If set to **On**, **Picture Mode** will automatically be changed to **FILMMAKER MODE** when a signal that can be operated with **FILMMAKER MODE** is entered.

# Sound

## Sound Mode Settings

⚙️ → ⓘ → **Sound** → **Sound Mode Settings**

### Sound Mode

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

- **AI Sound** / **AI Sound Pro** : Automatically optimize sound based on content type.
- **Standard** : Optimizes the sound for all types of content.
- **Cinema** : Optimizes the sound for cinemas.
- **Clear Voice III** / **Clear Voice IV** : Boosts voice clarity.
- **Sports** / **Soccer** : Optimizes the sound for sports games.
- **Music** : Optimizes the sound for music.
- **Game** : Optimizes the sound for gameplay.

### Balance

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

### **Virtual Surround Plus** / **Virtual Stadium Surround Plus** / **ULTRA Surround** / **ULTRA Stadium Surround** / **OLED Surround**

Enjoy an immersive soundscape with the virtual multi-channel surround sound effect.

- This option can be enabled if **Sound Mode** is set to **Standard**.

### Equalizer

You can set the desired sound by adjusting the equalizer directly.  
(100 Hz/300 Hz/1 kHz/3 kHz/10 kHz)

- This option can be enabled if **Sound Mode** is set to **Standard**.

## Reset

You can reset the sound effect settings.

- This option can be enabled if **Sound Mode** is set to **Standard**.
- This setting is only available for Internal TV Speaker.
- The configurable items differ depending upon model.

## Setting Sound Out

 →  → **Sound** → **Sound Out**

- When **Instant Game Response** is set to **On**, audio delays may occur if you set **Sound Out** to **WiSA Speakers/Optical/HDMI ARC**.

Switch to **Internal TV Speaker** or change  →  → **Sound** → **Additional Settings** → **HDMI Input Audio Format** to **PCM**.

### Internal TV Speaker

Audio is played through the TV's internal speakers.

### Bluetooth

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 any devices that can be connected and connect to 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 the device.
- If the device fails to connect, check the power of the device to connect to and check if the audio device is working properly.
- 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. )
- 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 Mode** is set to **Game** and **Sound Out** is set to **Bluetooth**, the **Picture 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](http://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.

### Optical

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

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

- Select **HDMI ARC** 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 (Line Out) / Wired Headphones

Select **Wired Headphones** or **Audio Out (Line Out)** 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.

## Playing Audio through the TV's Internal Speakers and External Audio Device Simultaneously

Audio can be played through multiple devices simultaneously.

### Bluetooth Surround Sound + Internal TV Speaker

Using the TV's built-in speaker and Bluetooth speaker for simultaneous sound output provides you with realistic surround effects when watching a movie or drama. You can connect up to two Bluetooth devices of the same model to set the left/right surround sound.

- 01 Select  → **Bluetooth Surround Sound Setup** 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 Surround Sound + Internal TV Speaker**, if **Picture Mode** is **Game**, 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 **Internal 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 + Internal 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 + Internal 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.

## TV Installation Type

 →  → **Sound** → **Additional Settings** → **TV Installation Type**

This mode optimizes the sound based on the TV setup.

### Stand

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

### Wall-mounted

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

- This setting is only available for Internal TV Speaker.

## Setting Volume Mode

 →  → **Sound** → **Additional Settings** → **Volume Mode**

### Auto Volume

Click **On** to adjust the volume automatically for different broadcasting companies so you can always listen to channels at the desired volume, even after switching the channels.

### Volume Increase Amount

Select **Low/Medium/High** to adjust the volume range. Higher values increase volume increments.

- This setting is only available for Internal TV Speaker.

## Adjusting AV Synchronization

 →  → **Sound** → **Additional Settings** → **AV Sync Adjustment**

Adjusts the synchronization of the sound from the speaker that is working.  
The closer to **>**, the slower the audio output.

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.

## HDMI Input Audio Format

 →  → **Sound** → **Additional Settings** → **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**.

## LG Sound Sync

 →  → **Sound** → **Additional Settings** → **LG Sound Sync**

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

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 Out

 →  → **Sound** → **Additional Settings** → **Digital Sound Out**

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

- This setting is only available when  →  → **Sound** → **Sound Out** is set to **Optical/HDMI ARC**.
- 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 |
|----------------------------|---------------|----------------------|
| <b>PCM</b>                 | All           | PCM                  |
| <b>Auto / Pass Through</b> | MPEG          | PCM                  |
|                            | Dolby Digital | Dolby Digital        |
|                            |               |                      |

|                             |                                                                                                             |
|-----------------------------|-------------------------------------------------------------------------------------------------------------|
| Dolby Digital Plus / Atmos  | (Optical) Dolby Digital<br>(HDMI ARC) Dolby Digital Plus / Atmos                                            |
| Dolby TrueHD<br>(HDMI only) | (Optical) Dolby Digital<br>(HDMI ARC) Dolby Digital Plus / Atmos<br>(HDMI ARC eARC On) TrueHD <sup>1)</sup> |
| HE-AAC                      | Dolby Digital                                                                                               |

1) When connected with eARC, the output audio type will depend on the audio type supported by the connected device.

- Dolby TrueHD , eARC , Dolby Atmos : Some models may not be supported.

## Channels

### Using Auto Tuning

 →  → **Channels** → **Channel Tuning** → **Auto Tuning**

This function automatically searches and remembers channels that are available for viewing.

- If the **Antenna** or **Cable** is not connected properly, channels are not added.
- **Auto Tuning** finds and adds only channels being broadcast.
- A password box will appear in **Safety** mode.

### To Use Manual Channel Tuning

 →  → **Channels** → **Channel Tuning** → **Manual Tuning**

This function is for manually searching and saving channels.  
You can check the signal strength of digital broadcasting.

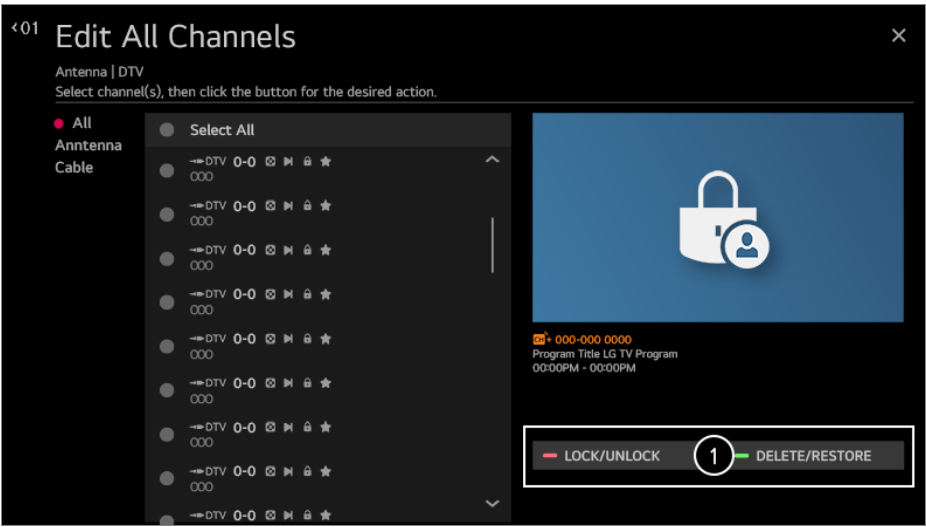
### Edit Channels

You can edit the selected channels from all the stored channels or add/delete them to/from the favorite channels.

**Edit All Channels List**

⚙️ → ⋮ → **Channels** → **Channel Manager** → **Edit All Channels**

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

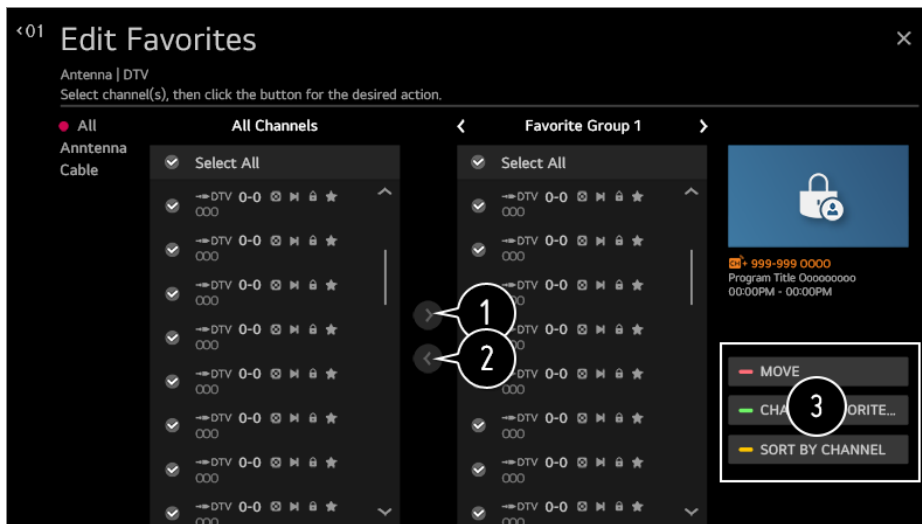


- 1 Lock / Unlock** : Lock the selected channels or unlock the locked channels.  
**Delete / Restore** : Set the selected channels to be skipped when switching channels, or disable the skipping option of the channels previously set to be skipped.

**Edit Favorite Channels List**

⚙️ → ⋮ → **Channels** → **Channel Manager** → **Edit Favorites**

You can add/delete desired channels to/from the favorite channels, change their positions, etc.



- 1 Select the desired channels from the all channels list and press the button to add them to the favorite channels list.
  - 2 Delete the selected channels from the favorite channels list.
  - 3 **Move** : Select one or more channels in the Preferred Channels list, press the **Move** button, and then select the position to move it to. The selected channels will move to the position you selected.  
**Change Group Name** : Change the name of the favorite channels list.  
**Sort by Channel** : Sorts the list of favorite channels by channel.
- If you have set up the Internet channels, you can also lock them, set them to be skipped, or add them to the favorite channels list.  
(Some models may not be supported.)

## Watching Internet Channel

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

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

To see the details, click the **Enjoy Live TV** → **Watching Internet Channel (LG Channels)** in **User Guide**.

- Some models may not be supported.

# Connection

## Setting the TV Name

⚙️ → ⋮ → **Connection** → **TV Name**

You can use the screen keyboard to set the name for the smart TV to be used on the network.

- Up to 25 characters can be entered using the English alphabet.

## Network Connection Settings

 →  → **Connection** → **Network Connection Settings**

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

### Setting a Wired Network

Select **Wired Connection (Ethernet)**.

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.

### Setting a Wireless Network

Select **Wi-Fi Connection**.

You can check and connect to the available wireless Internet networks; if you have set up the TV for a wireless network.

### Add a Hidden Wireless Network

You can add a wireless network if you input the name of the network directly.

### 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 (AP) to which you would like to connect. 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**.

## Device Connection Settings

 →  → **Connection → Device Connection Settings**

You can link the information about the devices connected to the TV and configure settings related to operations.

### Auto Device Detection

It automatically sets to enable you to control the devices connected via the HDMI with the Magic Remote.

### SIMPLINK (HDMI-CEC)

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.

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

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

### Auto Power Sync

If Auto Power Sync is set to **On**, turning on a SIMPLINK-linked device will turn the TV on. When you turn off the TV, the device will also be turned off.

### LG Wireless Keyboard

This feature enables you to connect a LG wireless keyboard to your TV.

Turn on the device, set it to pairing mode, and then click **Connect** on your TV screen. If there is a LG wireless keyboard previously connected, it will be automatically reconnected to your TV once your TV turns on. To disconnect the existing connection, click **Disconnect**.

- Supported keyboard  
LG Rolly Keyboard
- This feature is only available for models with built-in Bluetooth dongles.

## 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**.

- The configurable items differ depending upon model.

## Mobile Connection Management

 →  → **Connection** → **Mobile Connection Management**

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

### TV On With Mobile

If **Turn on via Wi-Fi** or **Turn on via Bluetooth** 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** feature must be used in an app on a smart device that supports the feature.
- The **Turn on via Bluetooth** 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.

### Screen Share

You can delete the connection history of the device that was connected to the TV through Screen Share.

### Sound Share

You can delete the connection history of the smart device that was connected to the TV via Bluetooth.

# General

## Setting the **AI Service**

 →  → **General** → **AI Service**

You can enable the recommended services based on the usage history.

### **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** → **Picture Mode Settings** → **Picture Mode** is **Game**, you cannot set up this feature.
- It does not work with copyrighted content.

### **AI Brightness Control**

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

### **Auto Genre Selection**

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

- It does not work with copyrighted content.

### **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 is only available for Internal TV Speaker.
- When this feature is set to **On**,  →  → **Sound** → **Sound Mode Settings** → **Sound Mode** is changed to **AI Sound/AI Sound Pro**.

### **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 optimize 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 meters (9.8 feet).
  - This function may not work properly
    - The background noise is too large over 40 dBA.
    - TV and Magic Remote distance 5 meters (16.4 feet) or more.

### Voice Recognition Settings

You can apply settings for voice recognition features.

### Voice Recognition Help

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

### AI Recommendation

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

### Content Recommendations

You can get content recommendations or introductions to new features based on your pattern of viewing TV and using apps.

- To see the details, click the **Enjoying LG Content Store** → **Content Recommendation** in **User Guide**.

### Network-Based Personalization Recommendations

You can get recommendations for viewing history based channels and content

through the network.

- **On** : Get more recommendations through the server.
- **Off** : We recommend basic contents based on your viewing history.

## Who.Where.What?

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

- Some models may not be supported.

## 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.

## Sports Alert

Move to the **Sports Alert** app.

- The configurable items differ depending upon model.

## Configuring Language Settings

 →  → **General** → **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.

### Audio Language

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

For programs 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.

## Setting the Location

 →  → **General** → **Location**

You can change the location setting of your Smart TV.

### Service Area Zip Code

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

### LG Services Country

If you haven't selected **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 upon model.

## Time

 →  → **General** → **Time**

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

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

## 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 channel 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 Channel** : 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.

## 4 Hours Auto Power Off

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 **4 Hours Auto Power Off** to **Off**.

- Some models may not be supported.
- To use **Power On Timer/Power Off Timer** set the time correctly.
- If **Timer Repeat** of **Power On Timer/Power Off Timer** is set to **None**  
If the time set in the **Power On Timer** is passed while watching TV, the power will turn on automatically when it reaches the set time and the TV is turned off on the next day or later.  
If the time set in the **Power Off Timer** is passed while TV is in standby, the power will turn off automatically when it reaches the set time while watching TV on the next day or later.

## Enabling TV Program Locks

- 01 Press the  button on the remote control.
- 02 Select  → **General** → **Safety**.
- 03 Set **Safety** to **On**.
- 04 Select the **TV Program Locks**.

## TV Lock

Locks the TV shows you do not want your children to watch. In addition, locks the TV shows of your choice based on ratings by using the parental control function (V-Chip).

- Children Age : TV-Y (Preschool children aged 2-6 years), TV-Y7 (Advise school children aged over 6)
  - Fantasy Violence : TV-Y7 (Advise school children; Suitable for children aged over 7 years. May contain fantasy violence.)
  - General Age : TV-G (General Audience. All ages admitted.) TV-PG (Parental Guidance Suggested. Some material may not be suitable for preschool children.) TV-14 (Parents Strongly Cautioned. Some material may not be suitable for children under 14.) TV-MA (Adults Only. Not suitable for children under 17.)
  - Sexually Suggestive Dialogue : TV-PG or TV-14
  - Adult Language (Violent Language) : TV-PG, TV-14 or TV-MA
  - Sexual Situations (Sexually Explicit) : TV-PG, TV-14 or TV-MA
  - Violence : TV-PG, TV-14 or TV-MA
- The configurable items differ depending upon model.

## Movie Lock

Blocks films that are broadcast and contain inappropriate content, based on the Motion Picture Association of America (MPAA) rating.

- G : (General Audiences) All ages admitted
  - PG : (Parental Guidance Suggested) Some content is inappropriate for children
  - PG-13 : (Parents Strongly Cautioned) Some material may be inappropriate for children under 13.
  - R : (Restricted) Under 17 requires accompanying parent or adult guardian.
  - NC-17 : No one 17 and under admitted.
  - X : Adults only
- The configurable items differ depending upon model.

## Downloadable Rating

This function is only enabled when the TV receives the Region5 rated data. The name of the rating option may differ.

- Supported only in the digital mode.
- The initial password is set as "0000".

- Some models may not be supported.

## Enabling TV Program Locks

- 01 Press the  button on the remote control.
- 02 Select  → **General** → **Safety**.
- 03 Set **Safety** to **On**.
- 04 Select the **TV Program Locks**.

## TV Rating English

Select Canadian English Rating System.

- E : Exempt
  - C : Children
  - C8+ : Children aged 8 or older
  - G : All ages admitted
  - PG : Parental Guidance Suggested
  - 14+ : 14 or older
  - 18+ : Adults only
  - Off : View all programs
- The configurable items differ depending upon model.

## TV Rating French

Select Canadian French Rating System.

- E : Exempt
  - G : All ages admitted
  - 8+ : Children aged 8 or older
  - 13+ : Suitable for 13 years and over
  - 16+ : Suitable for 16 years and over
  - 18+ : Adults only
  - Off : View all programs
- The configurable items differ depending upon model.

## Downloadable Rating

This function is only enabled when the TV receives the Region5 rated data. The name

of the rating option may differ.

- Supported only in the digital mode.
- The initial password is set as “0000”.
- Some models may not be supported.

## Enabling Channel Locks

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

- 01 Press the  button on the remote control.
- 02 Select  → **General** → **Safety**.
- 03 Set **Safety** to **On**.
- 04 Select the **Channel Locks**.
- 05 Select the Channels to lock.
- 06 Select **Lock / Unlock**.

- The initial password is set as “0000”.

## Enabling Application Locks

You can lock or unlock the application.

- 01 Press the  button on the remote control.
- 02 Select  → **General** → **Safety**.
- 03 Set **Safety** to **On**.
- 04 Select the **Application Locks**.
- 05 Select the Applications to lock.

- The initial password is set as “0000”.
- The lock function is not immediately available for the currently running application.

## Enabling Input Locks

You can lock or unlock the Inputs.

- 01 Press the  button on the remote control.
- 02 Select  → **General** → **Safety**.

- 03 Set **Safety** to **On**.
- 04 Select the **Input Locks**.
- 05 Select the Inputs to lock.

- The initial password is set as “0000”.

## Reset Password

 →  → **General** → **Safety** → **Reset Password**

Set or change the password for the TV.

- The initial password is set as “0000”.

## 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** → **Safety**.
- 03 Press  (Channels)  →  (Channels)  →  (Channels)  →  (Channels)  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 **Account Management**, you can use your email address to create a new LG account. For more information, see **Getting Started with LG webOS TV → Account Management** in **User Guide**.

## Home Settings

 →  → **General** → **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.

## Home Animation

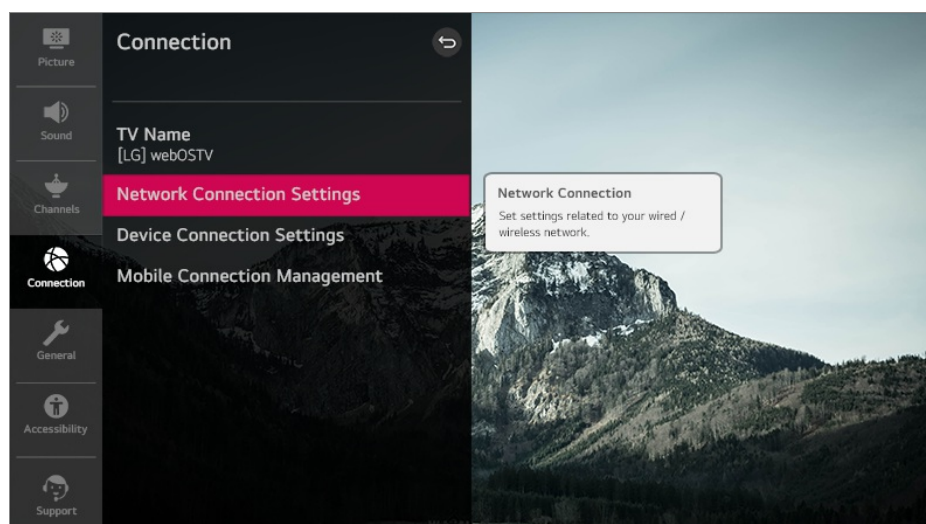
You can turn on or off the animation effects that appear on the Home screen for a certain period.

- The configurable items differ depending upon model.

## To Use Settings Help

⚙️ → ⓘ → **General** → **Additional Settings** → **Settings Help**

If you select the setting menus; you will see the hints of the settings. Turn on/off description box in Settings.



## Setting up Menu Transparency

⚙️ → ⓘ → **General** → **Additional Settings** → **Menu Transparency**

By setting this feature to **On**, you can make some of the menus (e.g. Live Menu, **Search**, etc.) transparent.

## Using the Screen Saver

⚙️ → ⓘ → **General** → **Additional Settings** → **Screen Saver**

When the currently displayed app has not received any user input for an hour, it will be replaced by a **Screen Saver**.

- Setting the **Screen Saver** feature to **Off**, maintains the same display for an extended period, which may compromise quality. The compromised screen may not be recoverable.

## Configuring the Screen When There Is No Signal

⚙️ → ⓘ → **General** → **Additional Settings** → **No Signal Image**

You can turn on or off the image displayed when there is no signal.

### On

The default image is displayed if there is no signal.

### Off

The **No Signal** message is displayed if there is no signal.

## Using Power Saving Mode

⚙️ → ⓘ → **General** → **Additional Settings** → **Power Saving Mode**

Set power options to reduce energy consumption.

### HDD Power Saving Mode

If you set the mode to **On**, the USB HDD connected to the TV will go into power-saving mode when it has been left unattended for an extended period of time.

## Switching TV Modes

⚙️ → ⓘ → **General** → **Additional Settings** → **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 optimized for store display.

## Using the Live Plus

**Live Plus** is a service that provides a variety of information about the programs 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.

## TV Power Setting

 →  → **General** → **Additional Settings** → **Quick Start+**

This setting puts your TV in standby mode when it's turned off so it will start up more quickly the next time it's turned on.

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

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

## To Set Power Indicator

 →  → **General** → **Additional Settings** → **Standby Light**

You can turn the standby light on or off.

- Some models may not be supported.

## Advertisement

 →  → **General** → **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.

# Accessibility

## To Use Audio Guidance

 →  → **Accessibility** → **Audio Guidance**

If **Audio Guidance** is set to **On**, audio guides will be provided in various situations, such as when you change channels, 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 upon 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.

## TV Power Sound

 →  → **Accessibility** → **TV Power Sound**

This feature lets you turn on/off the sound effects that you hear when your TV is switched on or off.

- Some models may not be supported.

## Changing the Menu to High-Contrast Screen

 →  → **Accessibility** → **High Contrast**

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

## Grayscale

 →  → **Accessibility** → **Grayscale**

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

## Invert Colors

 →  → **Accessibility** → **Invert Colors**

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

## To Set Closed Caption

 →  → **Accessibility** → **Closed Caption**

View closed captions when the TV station provides closed captioned programming.

Program closed captions work only on digital/analog broadcasts or external input. (**AV IN** port is available in certain models only.)

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

### Analog Mode

#### **CC 1 - CC 4** (Closed Captioning) / **TEXT 1 - TEXT 4**

Displays the audio portion of a TV program as text on the TV screen. **CC 1** is the most common mode in use.

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

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

### Digital Mode

According to the digital broadcasting type you are watching, you can select the caption in **HD Mode** or the **NEXTGEN TV Mode**.

- In the case of HD broadcasting, you can set the size and color of the caption at the **HD Mode Option**. Please select **Set By Program** or **Custom**. You can adjust detailed options such as the size and color of the caption by selecting the **Custom**.
- The configurable items differ depending upon model.

### Position Settings

You can move the position of subtitles.

- You can control only while watching a TV broadcast.

## Support

### Software Update

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

Uses software update to check and obtain the latest version.

### Allow Automatic Updates

If set to **On**, updates will be proceeded automatically without asking when there is a new update after a version check.

## Check for updates

When checking for the latest update version, you can perform updates only 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 upon model.
- The latest version can be obtained via digital broadcast signals or internet connections.
- Changing the channel while downloading the software via digital broadcast signal interrupts the download process. Returning to the initial channel allows downloading to resume.
- If software is not updated, certain functions may not work properly.
- In some countries, **Allow Automatic Updates** is not displayed if you are not connected to the Internet.

## TV Information

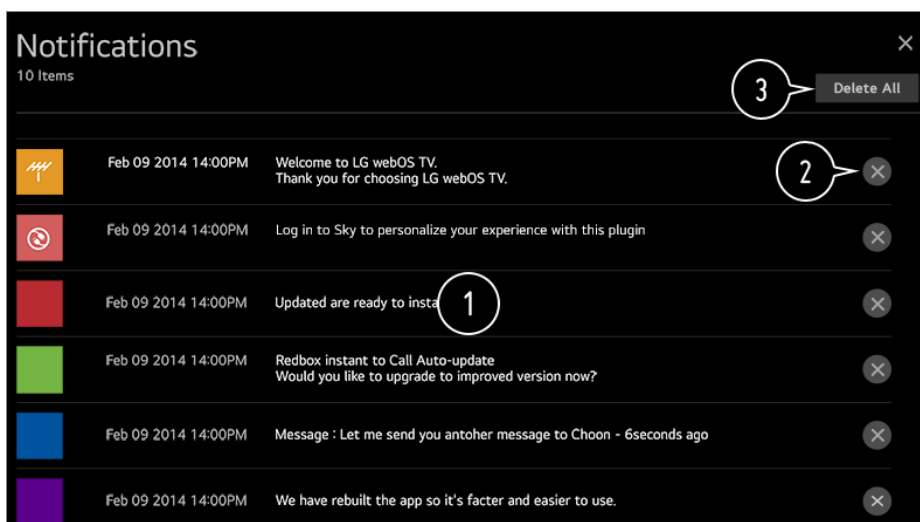
⚙️ → ⓘ → **Support** → **TV Information**

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

## Using Notifications

⚙️ → ⓘ → **Support** → **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.



- ❶ You can check the details by selecting the desired item. If it supports shortcuts, you can launch the app.
- ❷ You can delete notifications.
- ❸ You can delete all notifications.

## Additional Settings

 →  → **Support** → **Additional Settings**

### Picture Test

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 Test

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.

### 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.

## Restoring the Default Settings

 →  → **Support** → **Reset to Initial Settings**

Return TV to its initial settings. This will return 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.

# 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**.

### **Optimization 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.

- 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 Center.

# Troubleshooting Power/Remote Control Issues

If you experience any of the problems below while using the product, please check the following. There may not be a 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.

 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 whether the **Power Off Timer**, **No Signal Auto Off** or **No Operation Auto Off** 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 not be a problem with the product.

First of all, perform a  →  → **Support** → **Additional Settings** → **Picture Test** 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 channels.

- Start the  →  → **Channels** → **Channel Tuning** → **Auto Tuning**.
- If you are using a set-top box, consult its supplier.

 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 channel has a different image quality.

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

 A digitally broadcasted program 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.
-  →  → **Channels** → **Channel Tuning** → **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 color blurring appears on the upper/lower/left/right edges of the screen.

-  →  → **Picture** → **Aspect Ratio Settings** → **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<sup>®</sup> cable is compliant with the specifications. You may experience flickering or a blank screen if the HDMI<sup>®</sup> 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  →  → **Picture** → **Additional Settings** → **HDMI ULTRA HD Deep Color**.

 The screen looks too dim or dark.

-  →  → **Picture** → **Picture Mode Settings** → **Picture Mode**  
Switch **Picture Mode** to your desired picture mode. (**Standard**, **Vivid**, etc.)  
This applies to the current input mode only.
-  →  → **Picture** → **Picture Mode Settings** → **Picture Options** → **Motion Eye Care**  
Switch **Motion Eye Care** to **Off**. This applies to the current input mode only.
-  →  → **Picture** → **Energy Saving**  
Switch **Energy Saving** to either **Off** or **Minimum**.
-  →  → **Picture** → **Additional Settings** → **Eye Comfort Mode**  
Switch **Eye Comfort Mode** to **Off**.

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

- Check the input mode or cable connection.
- Go to  to choose the connected input.
- You may get a black and white screen if you have connected to the **COMPONENT IN** but selected the **AV**.  
Go to  and choose **Component**.
- When you are connecting to the **AV IN** or **COMPONENT IN**, check to ensure each cable is matched with the corresponding color connection. For component cables, make sure the video (red) cable and audio (red) cable are connected properly.
- **AV IN/COMPONENT IN** ports are 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 not be a problem with the product.

First of all, perform a  →  → **Support** → **Additional Settings** → **Sound Test** to check for 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 channel.
- 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 + Internal TV Speaker** or **Internal 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** → **Sound Mode Settings** → **Balance**  
Adjust the balance as necessary with the Navigation button in **Balance**.
- When you are connecting to the **AV IN/COMPONENT IN**, check if the audio left/right (white/red) cables are correctly connected. (**AV IN/COMPONENT IN** ports are 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 channels, it may be caused by the broadcasting company's transmission signal. Please have your broadcasting services provider (wired/cable) diagnose the problem.
- If all channels are out of sync, go to  →  → **Sound** → **Additional Settings** → **AV Sync Adjustment** and adjust the sync.
- If you are using a set-top box, consult its supplier.

 The volume changes when I change the channel.

- The volume of different broadcasting stations' transmission output may vary.
-  →  → **Sound** → **Additional Settings** → **Volume Mode** → **Auto Volume**  
Set **Auto Volume** 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 programs.  
(Programs produced for export by broadcasting companies)

- **Wheel (OK)** →   
Set your language preference in **Audio Language**.

## Troubleshooting PC Connection Issues

Press and hold the  button on your remote control. Select  → **Edit** 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.

To connect a different device to the same input terminal, you need to set the icon again because the settings of the Edit icon will not be automatically restored.

If you experience any of the problems below while using the product, please check the following. There may not be a 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 high speed 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** 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 not be a problem with the product.

For more information about supported files, see Supported Video Files from **Connecting External Devices → Viewing Photos and Videos** in **User Guide**.

 I cannot find a file in the **Photo & Video**.

- Check whether the files saved on your USB storage device can be read by the PC.
- Check that the file extension is supported.
- Select  to see if **Filter** is set to **Photo & Video**.

 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 channels 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.  
Select  →  in the control panel at the bottom of the video playback screen 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 program 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 recognized 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 Network Connection Issues

If you experience any of the problems below while using the product, please check the following. There may not be a problem with the product.

You can check the network connection status as shown below.

-  →  → **Connection** → **Network Connection Settings** → **Wired Connection (Ethernet)**
-  →  → **Connection** → **Network Connection Settings** → **Wi-Fi Connection** → **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) on 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) on 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](http://www.lgappstv.com))?

- You can use the website with the membership information that you used when signing up on TV.  
You can use the website by logging in to the website with the ID and password you used when signing up on TV, entering additional information and completing the email verification process.

 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 not be a 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** → **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 **LG Content Store** and re-install it. Go to  → **LG Content Store** 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 not be a 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, it does not support 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.

 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

## HDMI-DTV Supported Mode

| Resolution | Horizontal Frequency (kHz) | Vertical Frequency (Hz) |
|------------|----------------------------|-------------------------|
| 640 × 480p | 31.46                      | 59.94                   |
|            | 31.5                       | 60                      |
| 720 × 480p | 31.47                      | 59.94                   |
|            | 31.5                       | 60                      |

|              |        |        |
|--------------|--------|--------|
| 720 × 576p   | 31.25  | 50     |
| 1280 × 720p  | 37.5   | 50     |
|              | 44.96  | 59.94  |
|              | 45     | 60     |
| 1920 × 1080i | 28.12  | 50     |
|              | 33.72  | 59.94  |
|              | 33.75  | 60     |
| 1920 × 1080p | 26.97  | 23.97  |
|              | 27     | 24     |
|              | 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 | 53.95  | 23.98 |
|              | 54     | 24    |
|              | 56.25  | 25    |
|              | 61.43  | 29.97 |
|              | 67.5   | 30    |
|              | 112.5  | 50    |
|              | 134.86 | 59.94 |
|              | 135    | 60    |
| 4096 × 2160p | 53.95  | 23.98 |
|              | 54     | 24    |
|              | 56.25  | 25    |
|              | 61.43  | 29.97 |
|              | 67.5   | 30    |
|              | 112.5  | 50    |
|              | 134.86 | 59.94 |
|              | 135    | 60    |

# HDMI-PC Supported Mode

| Resolution                                                            | Horizontal Frequency<br>(kHz) | Vertical Frequency<br>(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<br>(ULTRA HD, 8K models only)                             | 63.98                         | 60.02                      |
| 1920 × 1080<br>(Full HD, ULTRA HD, 8K models only)                    | 67.5                          | 60                         |
| 1920 × 1080<br>(ULTRA HD, 8K models only)                             | 134.86                        | 119.88                     |
|                                                                       | 135                           | 120                        |
| 2560 × 1440 <sup>1)</sup><br>(ULTRA HD 50/60 Hz models only)          | 88.78                         | 59.95                      |
| 2560 × 1440 <sup>1) 2)</sup><br>(ULTRA HD 100/120 Hz, 8K models only) | 182.99                        | 119.99                     |

|                                                                       |        |        |
|-----------------------------------------------------------------------|--------|--------|
| 3840 × 2160<br>(ULTRA HD, 8K models only)                             | 53.95  | 23.98  |
|                                                                       | 54     | 24     |
|                                                                       | 56.25  | 25     |
|                                                                       | 61.43  | 29.97  |
|                                                                       | 67.5   | 30     |
|                                                                       | 112.5  | 50     |
|                                                                       | 134.86 | 59.94  |
|                                                                       | 135    | 60     |
| 3840 × 2160 <sup>1) 2)</sup><br>(ULTRA HD 100/120 Hz, 8K models only) | 225    | 100    |
|                                                                       | 269.73 | 119.88 |
|                                                                       | 270    | 120    |
| 4096 × 2160<br>(ULTRA HD, 8K models only)                             | 53.95  | 23.98  |
|                                                                       | 54     | 24     |
|                                                                       | 56.25  | 25     |
|                                                                       | 61.43  | 29.97  |
|                                                                       | 67.5   | 30     |
|                                                                       | 112.5  | 50     |
|                                                                       |        |        |

|                                                                       |        |        |
|-----------------------------------------------------------------------|--------|--------|
|                                                                       | 134.86 | 59.94  |
|                                                                       | 135    | 60     |
| 4096 × 2160 <sup>1) 2)</sup><br>(ULTRA HD 100/120 Hz, 8K models only) | 225    | 100    |
|                                                                       | 269.73 | 119.88 |
|                                                                       | 270    | 120    |
| 7680 × 4320 <sup>3)</sup><br>(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) (ULTRA HD models only) Supported when **HDMI ULTRA HD Deep Color** is set to **On**.

2) (8K models only) Supported when **HDMI ULTRA HD Deep Color** is set to **4K**.

3) (8K models only) Supported when **HDMI ULTRA HD Deep Color** is set to **8K**.

- Supported HDMI-PC port may differ by model. Refer to the manual that is provided with the product.

## Component Supported Mode

| Resolution   | Horizontal Frequency (kHz) | Vertical Frequency (Hz) |
|--------------|----------------------------|-------------------------|
| 720 × 480i   | 15.73                      | 59.94                   |
|              | 15.75                      | 60                      |
| 720 × 480p   | 31.47                      | 59.94                   |
|              | 31.5                       | 60                      |
| 1280 × 720p  | 44.96                      | 59.94                   |
|              | 45                         | 60                      |
| 1920 × 1080i | 33.72                      | 59.94                   |
|              | 33.75                      | 60                      |
| 1920 × 1080p | 67.43                      | 59.94                   |
|              | 67.5                       | 60                      |

## Component Connection Information

|                                  |   |                |                |
|----------------------------------|---|----------------|----------------|
| Component ports on the TV        | Y | P <sub>B</sub> | P <sub>R</sub> |
|                                  |   |                |                |
| Video output ports on DVD player | Y | P <sub>B</sub> | P <sub>R</sub> |

|   |     |     |
|---|-----|-----|
| Y | B-Y | R-Y |
| Y | Cb  | Cr  |
| Y | Pb  | Pr  |

| Signal     | Component             |
|------------|-----------------------|
| 480i       | <input type="radio"/> |
| 480p       | <input type="radio"/> |
| 720p/1080i | <input type="radio"/> |
| 1080p      | <input type="radio"/> |

# 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.

## HEVC

