

User Guide

This is a 「User Guide」 installed on the TV.

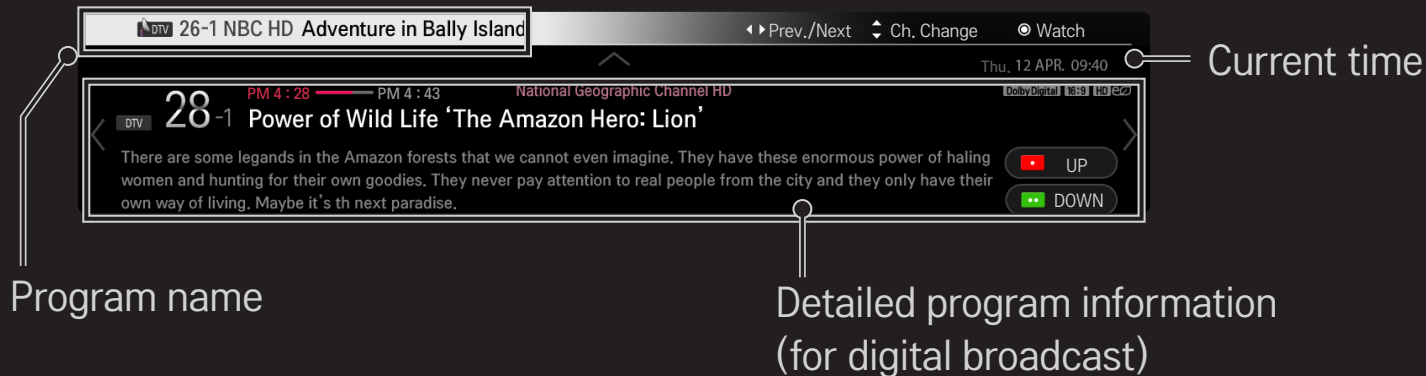
The contents of this guide are subject to change without prior notice for quality improvement.

❑ To view program information

Displays information about the current program and/or current time, etc.

- 1 Move the pointer of the Magic remote control to the top of the TV screen.
- 2 Click the activated channel banner area.
- 3 The program details will be displayed at the bottom of the TV screen.

✎ Image shown may differ from your TV.



❑ To set favorite channels

SMART  ⇒ Settings → CHANNEL → Channel Edit

- 1 Move to the desired channel on **Wheel (OK)** button. Channel is selected.
- 2 Press **Set as Favorite**.
- 3 Select the desired favorite channel group.
- 4 Select **Enter**. Favorite is set.

❑ To use Favorite

SMART  ⇒ Ch. List

Channel list will appear. Select the desired preset favorite channel from Favorite List A to D.

❏ To set Auto Tuning

SMART  ⇒ Settings → CHANNEL → Auto Tuning

Automatically tunes the channels.

- ✎ Channels are not registered properly unless the antenna/cable is connected correctly.
- ✎ Auto Tuning only sets channels that are currently broadcasting.
- ✎ If Lock System is turned on, a pop-up window will appear asking for password.

❑ To set channels manually

SMART  ⇒ Settings → CHANNEL → Manual Tuning

Adjusts channels manually and saves the results.

For digital broadcasting, signal strength, etc. can be checked.

❏ To edit channels

SMART  ⇒ Settings → CHANNEL → Channel Edit

Edits the saved channels.

Set as favorite, block/unblock and Add/Delete etc. the selected channel.

SMART ⇒ Settings → PICTURE → Aspect Ratio

Selects the screen aspect ratio.

16:9	Resizes the image ratio to fit a 16:9 screen.
Just Scan	Displays high-quality image without loss.  In DTV/HDMI/Component (over 720p) mode, Just Scan is available.
Set by Program	Depending on the input signal, screen aspect ratio changes to 4:3 or 16:9.
4:3	Resizes the image ratio to fit 4:3 screen.
Zoom	Resizes the image to fit the screen width. The top and bottom parts of the image may be cut off.
Cinema Zoom	Formats an image to the cinemascope ratio (2.35:1) and zooms in on the ratio.

- ✎ While viewing an external device, these cases may result in image burn:
 - a video with stationary caption (such as network name)
 - 4 : 3 aspect ratio mode for an extended period

Take caution when using these functions.

- ✎ Available picture size may differ depending on the input signal.
- ✎ The screen aspect ratios on HDMI-PC input are available in 4:3 and 16:9 only.
- ✎ [For models supporting 2160p] When a 2160p signal is input or your PC resolution is set to 3840 x 2160, the **Aspect Ratio** is set to **Just Scan**.

SMART ⇒ Settings → PICTURE → Energy Saving

Reduces power consumption by adjusting screen brightness.

Auto	[Depending on model] TV sensor detects the ambient lighting and automatically adjusts the screen brightness.
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 Power button on the remote control to turn the screen back on.

SMART ⇒ Quick Menu → AV Mode

Views the TV with the best picture / audio optimized for different AV modes.

Off	Views with the value set at the picture / sound menu.
Cinema	Optimizes picture and audio settings for movies.
Game	Optimizes picture and audio settings for games.

❑ To adjust pictures with Picture Wizard

SMART  ⇒ **Settings** → **PICTURE** → **Picture Wizard II**

Use the remote control and follow the instructions of the Picture Wizard to calibrate and adjust for optimum picture quality without expensive pattern devices or help from a specialist.

Follow the instructions to obtain the optimum picture quality.

❑ To select Picture Mode

SMART  ⇒ Settings → PICTURE → Picture Mode

Selects the picture mode optimized for the viewing environment or the program.

Vivid	Heightens contrast, brightness and sharpness to display vivid images.
Standard	Displays images in standard levels of contrast, brightness and sharpness.
Eco	The Energy Saver feature changes settings on the TV to reduce power consumption.
Cinema / Game	Displays the optimum picture for movie, game.



Menu for adjusting picture quality that allows experts and amateurs to enjoy the best TV viewing. This menu is ISF-certified and provided for picture tuning experts. (ISF logo can only be used on ISF-certified TV units.)
ISFccc : Imaging Science Foundation Certified Calibration Control

- ✎ Depending on the input signal, the available range of picture modes may differ.
- ✎  **Expert** mode is for picture tuning professionals to control and fine-tune using a specific image. For normal images, the effects may not be dramatic.

❏ To fine-tune picture mode

SMART  ⇒ Settings → PICTURE → Picture Mode → Backlight / Contrast / Brightness / Sharpness / Color / Tint / Color Temp.

First select a Picture Mode of your choice.

Backlight	Adjusts the display brightness by varying the brightness of the LCD panel.
Contrast	Adjusts the difference between bright and dark regions of the screen.
Brightness	Adjusts the overall screen brightness.
Sharpness	Adjusts the sharpness of the borders between bright and dark.

Color	Adjusts the colors on the screen darker or lighter.
Tint	Adjusts the red/green color balance.
Color Temp.	Adjusts the overall tone of colors to warm or cool.

- ✎ Depending on the input signal or other picture settings, the range of detailed items for adjustment may differ.

❑ To set advanced control

SMART  ⇒ **Settings** → **PICTURE** → **Picture Mode** → **Advanced control/Expert Control**

Calibrates the screen for each picture mode or adjusts picture settings for a special screen.

First select a **Picture Mode** of your choice.

Dynamic Contrast	Adjusts the contrast to the optimal level according to the brightness of the image.
Dynamic Color	Adjusts colors for more natural-looking colors.

Preferred Color	Skin Color : Skin color spectrum can be separately set to implement the skin color as defined by the user.
	Grass Color : Natural color spectrum (meadows, hills, etc.) can be separately set.
	Sky Color : Sky color is set separately.
Super Resolution	Provides a crystal-clear picture by improving the details in areas where the picture is blurry or unclear.
Gamma	Sets the gradation curve according to the output of the picture signal in relation to the input signal.
Colour Gamut	Selects the range of colors that can be expressed.
Edge Enhancer	Shows clearer and distinctive yet natural edges of the video.
xvYCC	[Depending on model] Expresses richer colors.

Color Filter	Filters a specific color spectrum in RGB colours to fine-tune colour saturation and hue accurately.
Expert Pattern	Patterns used for expert adjustment.
White Balance	Adjusts the overall tone of the screen as desired. In Expert mode, detailed fine-tuning can be set via the Method / Pattern etc.
Color Management System	This is a function used by experts when they adjust colors using a test pattern of six colours (Red / Green / Blue / Cyan / Magenta / Yellow) without affecting other color areas. For normal images, adjustments may not result in noticeable color changes.

 Depending on input signal or other picture settings, the range of detailed items for adjustment may differ.

❑ To set additional picture options

SMART  ⇒ Settings → PICTURE → Picture Mode → Picture Option

Adjusts detailed setting for images.

Noise Reduction	Reduces screen noise in the video.
MPEG Noise Reduction	Reduces noise caused by compressing digital video.
Black Level	Adjusts the brightness or darkness of the screen to suit the black level of the picture input using the degree of darkness (black level) of the screen.
Real Cinema	Optimizes the screen for movie viewing.

Eye Care	[Depending on model] Adjusts screen brightness to prevent eye glare.
Motion Eye Care	[Depending on model] Saves power consumption by adjusting the brightness corresponding to the movement of the image on the screen.  It does not work while watching 3D images.

-  Depending on input signal or other picture settings, the range of detailed items for adjustment may differ.

❑ To reset Picture Mode

SMART  ⇒ Settings → PICTURE → Picture Mode → Picture Reset

Resets values customized by the user.

Each picture mode is reset. Select the picture mode you wish to reset.

SMART ⇒ Settings → PICTURE → Picture Mode → Picture Option → TruMotion

[Depending on model]

Corrects images to display smoother motion sequences.

Smooth	De-Judder/De-Blur value is set at 3.
Clear	De-Judder/De-Blur value is set at 7.
Clear Plus	The screen appears clearer when Clear is selected.  Clear Plus cannot be selected in 3D mode.  Depending on model.
User	De-Judder/De-Blur can be set manually. • De-Judder : This function adjusts juddering of the screen. • De-Blur : This function adjusts and eliminates blurring of the screen.

SMART ⇒ Settings → PICTURE → Picture Mode → Picture Option → LED Local Dimming

Brightens bright areas and darkens dark areas of the image for maximum contrast and minimum blur while reducing power consumption.

[Depending on model]

Off	Turns off LED Local Dimming.
Low	Expresses in natural black tones. Use this setting for viewing movies.
Medium	Deepens black tones than Low . Use this setting for regular TV viewing.
High	Deepens black tones and delivers clearer image than Medium . Perfect for viewing in brightly lit areas.

 Setting LED Local Dimming to Medium / High reduces power consumption.

❏ To use Sound Mode

SMART  ⇒ Settings → SOUND → Sound Mode

Optimizes TV audio to the selected sound mode.

Standard	Suitable for all types of video.
Music/Cinema/ Sport/Game	[Depending on model] Sets audio optimized for a specific genre.
User Setting	Adjusts the volume to the desired level using the User EQ.

❑ To fine-tune the volume

SMART  ⇒ Settings → SOUND → Sound Mode → User EQ

Sets Sound Mode at User Setting first.

100 Hz / 300 Hz / 1 kHz/
3 kHz / 10 kHz

Sets EQ by manually adjusting sound bands.

Reset

Resets previously changed equalizer value.

❏ To use Smart Sound Mode

SMART  ⇒ Settings → SOUND → Smart Sound Mode

Provides optimized sound adjusted for each content type.

- ✎ If the Smart Sound Mode function is enabled, Sound Mode, Virtual Surround Plus, and Clear Voice II are automatically adjusted.

❑ To use Virtual Surround sound

SMART  ⇒ **Settings** → **SOUND** → **Virtual Surround plus**

LG's proprietary audio processing technology allows 5.1 channel-like surround sound from two speakers.

 If **Clear Voice II** is set to **ON**, **Virtual Surround plus** will not be chosen.

❑ To use Clear Voice II function

SMART  ⇒ **Settings** → **SOUND** → **Clear Voice II**

Boosts voice clarity.

❏ To set Volume Mode

SMART  ⇒ Settings → SOUND → Volume Mode

Sets various modes for volume control.

Auto Volume	Sets Auto Volume to On . The volume varies from channel to channel and program to program. When clicking through the channels, the volume is adjusted automatically to maintain the same level.
Volume Control	Using a single volume curve may result in an inaudible or loud sound depending on the environment. Adjusts volume levels depending on the time of day (day/night).

❏ To synchronize audio and video

SMART  ⇒ Settings → SOUND → AV Sync. Adjust

Synchronizes video and audio directly when they do not match.

If you set AV Sync. Adjust to ON, you can adjust the sound output (TV speakers or SPDIF) to match the video.

TV Speaker

[Depending on model]

Adjusts the synchronization of the sound from the TV's internal speakers.

The + and - buttons allow the viewer to synchronize the audio with the video.

External Speaker

Adjusts how the sound is synced to external speakers, such as an external speaker connected to the digital audio output port, LG audio device and headphone.

The + and - buttons allow the viewer to synchronize the audio with the video.

 LG audio device is supported only for models with the optical digital port.

Bypass

Outputs broadcasting signals or the audio of an external device without audio delay. Audio may be output before video as it takes time to process video input into the TV.

❑ To use Sound Option Setting

[Depending on model]

SMART  ⇒ **Settings** → **SOUND** → **Sound Option Setting**

❑ Analogue Out

[Depending upon model]

Allows the user to select the **Headphone** or **External Speaker (Audio Out)** menu depending on the device connected.

❑ Balance

[Depending on model]

Adjusts left/right audio balance.

□ Sound Optimizer

[Depending on model]

Allows optimized sound for custom TV installation.

Normal	General sound mode.
Wall Mount Type	Optimizes sound for a wall-mounted TV.
Stand Type	Optimizes sound for a stand-mounted TV.

❑ To use the TV's speakers

[Depending on model]

SMART  ⇒ **Settings** → **SOUND** → **Sound Out** → **TV Speaker**

Sound is output through the TV speaker.

❑ To use External Speakers

SMART  ⇒ **Settings** → **SOUND** → **Sound Out** → **External Speaker**
(Optical/HDMI ARC)

[Available only for models with an optical or HDMI (ARC) port]

Sound is output through the speaker connected to the optical port.

 SimpLink is supported.

❑ To use Digital Sound Out

SMART  ⇒ Settings → SOUND → Sound Out → External Speaker(Optical/HDMI ARC) → Digital Sound Out

Sets up Digital Sound Output.

Item	Sound Input	Digital Sound output
Auto	MPEG	PCM
	Dolby Digital	Dolby Digital
	Dolby Digital Plus	Dolby Digital
PCM	All	PCM

❑ To connect and use an LG audio device

LG audio device allows you to enjoy rich powerful sound.

❑ Wired Connection

SMART  ⇒ **Settings** → **SOUND** → **Sound Out** → **LG Sound Sync (Optical)**

Connect an LG audio device with the  logo to the optical digital audio output port.

 Available only on models with an optical digital port.

❑ Wireless Connection

SMART  ⇒ **Settings** → **SOUND** → **Sound Out** → **LG Sound Sync (Wireless)**

An LG audio device with the  logo can be connected wirelessly.

- ✎ You can use the TV remote control to adjust the volume of the connected device.
- ✎ When connecting wirelessly, attach the dongle and connect it if the model needs the Magic Remote Control dongle. (AN-MR400, sold separately)
- ✎ For a wireless connection, if the device fails to connect, check the device power and make sure the LG Audio device is set up properly.

- ✎ When you select **LG Sound Sync (Wireless)**, devices available for connection are searched and one of searched devices is automatically connected. When a device is connected, its name is shown.
- ✎ If two or more devices are detected, the first detected device is connected first. To view more detected devices to connect, press the Show More button.
- ✎ When **LG Sound Sync (Wireless)** is active and you turn on the TV, it will search and try to connect the device which recently connected.

❏ To connect and use a Bluetooth headset

SMART  ⇒ **Settings** → **SOUND** → **Sound Out** → **LG Sound Sync (Wireless)**

Sound output is through the Bluetooth headset.

- ✎ The devices that can be connected are:
LG BTS1, LG HBS-700, LG HBS-730, LG HBS-800
(Product availability may vary by country.)

- ✎ When connecting wirelessly, attach the dongle and connect it if the model needs the Magic Remote Control dongle. (AN-MR400, sold separately)
- ✎ For wireless connection, if the device fails to connect. Check the device power to connect and if the LG Audio device is in a proper operating condition.
- ✎ If two or more devices are detected, the first detected device is connected first. To view more detected devices to connect, press the Show More button.

❑ To use Analog Out/Headphone

[Depending on model]

SMART  ⇒ **Settings** → **SOUND** → **Sound Out** → **External Speaker (Audio Out) / Headphone**

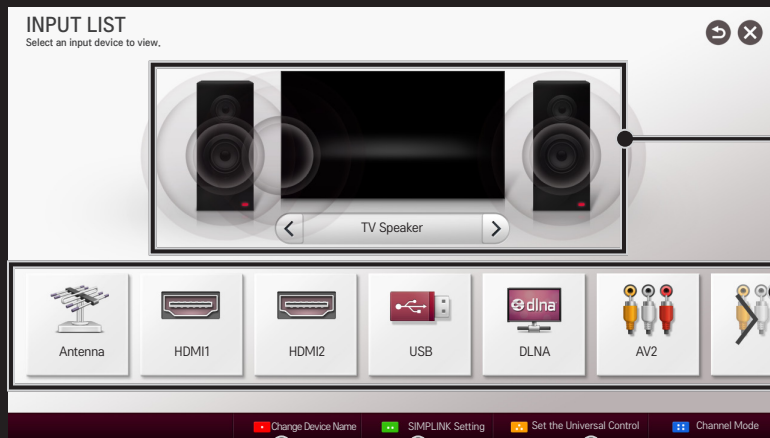
Select **Headphone** or **External Speaker (Audio Out)** depending on the device connected to the analog out port.

- ✎ The available menu may vary depending on whether you select **Headphone** or **External Speaker (Audio Out)** in the **Sound Option Setting > Analog Out**.
- ✎ Some models may support only the **Headphone** function.
- ✎ If you connect headphones while the TV is powered on, it automatically detects the headphones and direct sound through them.

❏ To select an external input

SMART  ⇒ Input List

Selects external input.



Selects speaker.

Selects input.

Allows you to edit the device label.

Sets SIMPLINK.

Sets the Channel Mode.
[Depending on country]

Sets OSS.
[Depending on country]

❑ Using SIMPLINK

SIMPLINK allows users to control and manage multiple multimedia devices using the TV remote control and SIMPLINK menu.

- 1 Connect the TV's **HDMI IN** terminal with the SIMPLINK device's HDMI output terminal using an HDMI cable. For home theater units with SIMPLINK support, connect the HDMI ports and then use an optical cable to connect the Optical Digital Audio Out from the TV to the Optical Digital Audio In of the SIMPLINK device.
- 2 Select **SMART**  ⇒ **SIMPLINK**. The SIMPLINK menu window appears.
- 3 Select **SIMPLINK Setting** in the SIMPLINK menu window. The SIMPLINK setup window appears.
- 4 Set **SIMPLINK** to **On** in the SIMPLINK setup window.
- 5 Close the SIMPLINK setup window.
- 6 Select the device to control from **SMART**  ⇒ **SIMPLINK**.

- ✎ This function works only on devices with the SIMPLINK logo (). Make sure that the external device has a SIMPLINK logo.
- ✎ To use the SIMPLINK function, use a high-speed HDMI® cable (with CEC, or Consumer Electronics Control feature added) and No. 13 pin connected for information exchange between devices.
- ✎ Turn on or select the media of a device with home theater features to see the speaker switch to **External Speaker**.
- ✎ Connect with an Optical cable (sold separately) to use an **External Speaker**.
- ✎ Switching to external input causes devices operating with SIMPLINK to stop.
- ✎ Use of a third-party device with HDMI-CEC features may cause malfunctions.
- ✎ An optical cable connection is supported only for models with the optical digital port.

□ Explanation of SIMPLINK features

Direct Play	Play the multimedia device on the TV instantly without extra steps.
Select multimedia device.	Select the desired device through the SIMPLINK menu and instantly control it from the TV screen.
Disc playback	Manage the multimedia device with the TV remote control.
Power off all devices	Turning the TV off with Auto Power function On in SIMPLINK setting will turn the power off on all SIMPLINK-connected devices.

Sync Power on

If the Auto Power function is set to On in the SIMPLINK settings, turning on a SIMPLINK device will turn the TV on.

Speaker

Selects speaker on the home theater unit or TV.

❏ To use Sleep Timer

SMART  ⇒ **Settings** → **TIME** → **Sleep Timer**

Turns off the TV after a prescribed number of minutes.

To cancel the **Sleep Timer**, select **Off**.

❏ To set current time

SMART  ⇒ Settings → TIME → Clock

Checks or changes the time while watching TV.

Auto	Synchronizes the TV clock to the digital time information sent by the TV station.
Manual	Sets the time and date manually if the auto setup does not correspond to the current time.

❑ To set the TV to turn on and off automatically

SMART  ⇒ Settings → TIME → On Time/Off Time

Sets On/Off time.

Select Off on Repeat to discontinue On Time/Off Time.

- ✎ To use On Time/Off Time, set the current time correctly.
- ✎ Even when the On Time function is on, the TV will turn off automatically in 120 minutes when no button is pressed within that time.

❏ To set password

SMART  ⇒ Settings → LOCK → Set Password

Sets or changes TV password.

 The initial password is set as 「0000」.

❏ To lock system

SMART  ⇒ Settings → LOCK → Lock System

Permits only specific programs by blocking channels or external input.

Select the Lock System to On.

Block Channel

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.

Movie Rating

[Depending on model]

Blocks the movies that are only broadcasted on the TV and contain inappropriate contents, based on the Motion Picture Association of America (MPAA) rating.

- G : (General audiences) All ages admitted
- PG : (Parental guidance suggested) Some material may not be suitable 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

TV Rating– Children

[Depending on model]

Blocks the children's TV programs that parents do not want their children to watch. To block other TV programs, you should set the TV Rating–General feature.

- Age : TV–Y (All children, including children from ages 2–6), TV–Y7 (Directed to older children, suitable for children age 6 and above)
- Fantasy Violence : TY–Y7 (Directed to older children – Fantasy violence, suitable for children age 6 and above, containing more intense or combative fantasy violence)

TV Rating– General

Blocks the TV programs that you want based on the ratings by using the Parental Control Function (V-Chip).

- ✎ The V-Chip electronically reads TV program ratings and allows parents to block program that are unsuitable for children.
 - Age : TV-G (General audience, suitable for all ages)
TV-PG (Parental guidance suggested, containing material that are unsuitable for younger children)
TV-14 (Parents strongly cautioned, containing material that are unsuitable for children age 14 and under)
TV-MA (Mature audience only, unsuitable for children age under 17)
 - Dialog : (suggestive dialogue) TV-PG or TV-14
 - Language : (coarse language)TV-PG, TV-14, or TV-MA
 - Sex : (sexual situation) TV-PG, TV-14, or TV-MA
 - Violence : TV-PG, TV-14, or TV-MA

Downloadable Rating	[In Digital mode Only] This function operates only when TV has received Region5 Rating data. The name of the rating option may differ.
Input Block	Block the input sources.
Application Lock	Lock the Application.

❏ To set password

SMART  ⇒ Settings → LOCK → Set Password

Sets or changes TV password.

 The initial password is set as 「0000」.

❏ To lock system

SMART  ⇒ Settings → LOCK → Lock System

Permits only specific programs by blocking channels or external input.

Select the Lock System to On.

Block Channel

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.

TV Rating– English

[Depending on model]

Selecting Canadian English rating system.

- E : Exempt
- C : Children
- C8+ : Children eight years and older
- G : General programming, suitable for all audiences
- PG : Parental Guidance
- 14+ : Viewers 14 years and older
- 18+ : Adult programming
- Blocking Off : Permits all programs

TV Rating– French

[Depending on model]

Selecting Canadian French rating system.

- E : Exempt
- G : General
- 8ans+ : General–Not convenient for little children
- 13ans+ : Not convenient for children of 13 years and younger
- 16ans+ : Not convenient for children of 16 years and younger
- 18ans+ : This programs is only for adults
- Blocking Off : Permits all programs

Downloadable Rating	[In Digital mode Only] This function operates only when TV has received Region5 Rating data. The name of the rating option may differ.
Input Block	Block the input sources.
Application Lock	Lock the Application.

SMART ⇒ Settings → OPTION → Language

Selects Menu Language and Audio Language displayed on the screen.

Menu Language	Selects a screen menu language.
Audio Language	[In Digital Mode Only] Selects the desired language when watching digital broadcasting containing several audio languages.
Voice Recognition Language	Select the language to make voice search.  Only the voice search adopted model can support this setting.

SMART ⇒ Settings → OPTION → Caption

View subtitles when the TV station provides subtitled programming. Program subtitles work only on digital/analog broadcasts or external input.

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

Mode	CC 1-4 (Closed Captioning) / Text 1-4 Text 1-4 Displays the audio portion of a TV program as text on the TV screen. CC1 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). Service 1-6 This is only available for the digital broadcasting system.
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Digital Option

Set up the size and color of the subtitles on **Digital Option**. Please select **Set by Program** or **Custom**.

Select **Custom** to adjust minute options such as the subtitles' size and color.

❑ To register the Magic Remote Control

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

Register Magic Remote Control as follows:

- 1 Turn on the TV and wait for about 10 seconds and then press **Wheel(OK)** button while pointing the remote control at the TV.
 - 2 The remote control is automatically registered and a registration completion message appears on the TV screen.
- ✎ If you failed to register the Magic Remote Control, turn off the TV and try again.

❏ To re-register the Magic Remote Control

- 1 Press the **SMART**  and **BACK** buttons at the same time for about 5 seconds.
 - 2 Press the **Wheel (OK)** button towards the TV to re-register the Magic Remote Control.
- ✎ Press the **SMART**  button and **BACK** button at the same time, for five seconds, to reset the Magic Remote Control.
 - ✎ Press the **BACK** button while pointing the remote control at the TV for five seconds to reset and re-register it.

❑ To set the pointer of the Magic Remote Control

SMART  ⇒ Settings → OPTION → Pointer

Sets the speed and shape of the pointer that appears on the TV screen.

Speed	Sets the moving speed of the pointer.
Shape	Chooses from different shapes of the pointer.
Size	Chooses the size of the pointer.
Alignment	Set it to On. If there is any misalignment between the pointer and the actual direction the remote control indicates, move the Magic Remote Control left and right to realign. The pointer will automatically realign to the center, making it easier to control.  If it is set to Off, the Alignment function will not work even when you move the Magic Remote Control left and right.

- ✎ If the pointer has not been used for a certain period of time, it will disappear. When the pointer disappears from the screen, shake the Magic Remote Control to the right and left. Then, it appears again.
- ✎ If you press the navigation button while moving the pointer on the screen, the pointer disappears, and the Magic remote control works as a regular remote control.
- ✎ Use within an effective distance of 33 ft. (10 meters). Using the Remote Control from greater distances or when obstructions block the sight line may cause malfunctions.

- ✎ Electronic devices nearby may cause communication interference. Devices such as microwave oven and wireless LAN use the same frequency range (2.4 GHz) as the Magic Remote Control, which may interfere with the remote control.
- ✎ The Magic Remote Control may be broken if dropped or damaged in any other way.
- ✎ Do not drop or subject the Magic Remote Control to heavy impacts.

❑ To use the pattern gesture function

Press the **Wheel(OK)** button with the normal video screen on and draw a pattern toward the screen.



Previous channel: Moves back to the previous channel.



Recent list: Shows channels recently watched.



Shows channel lists which be related to pattern. Choose the channel.

🖋 It may not work when certain windows are open.

❏ To set Power Indicator

SMART  ⇒ Settings → OPTION → Standby Light

[Depending on model]

Turns the standby light in the front panel of the TV on/off.

❏ To adjust the front LG Logo Light

SMART  ⇒ Settings → OPTION → LG Logo Light

[Depending on model]

You can adjust the LED brightness of the LG logo at the bottom of the TV.

Brightness	You can set the brightness of LG Logo Light to Off/Low/Medium/High when the TV power is off.
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When TV is on

You can set the off time of **LG Logo Light** when the TV power is on.

- **Off right now** : The light is turned off as the TV power is on.
 - **Off after 10 min.** : The light is turned off after 10 minutes when the TV power is on.
-  The initial brightness is set to **Low** when the TV power is on.

❏ To change TV mode

SMART  ⇒ Settings → OPTION → Mode Setting

Selects Home Use or Store Demo.

For use at home, select Home Use.

Store Demo is a mode used for store display.

❏ To return to initial settings

SMART  ⇒ **Settings** → **OPTION** → **Initial Setting**

Deletes all optional settings and returns to initial default mode.

Once initialization is complete, the TV will turn off and on by itself.

- ✎ If **Lock System** is activated, a pop-up password prompt will appear.
- ✎ Do not turn off the power during initialization.

❏ To set ZIP Code

SMART  $\Rightarrow$ **Settings** $\rightarrow$ **OPTION** $\rightarrow$ **ZIP Code**

This function sets your area as the ZIP Code.

 You can check the information of area when network is connected.

❑ Using the Home Screen

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

Thanks to the Smart TV's design, users have convenient access to a wealth of Content and applications via the easy-to-use menu arranged by themes (Live TV, Card, My Apps).



❏ To use and edit MY CARD

SMART  ⇒ MY CARD

To enable you to easily check and access a wide variety of content and functions, the main functions are grouped into categories and displayed on cards.

By selecting the card name, you can go to that category page.

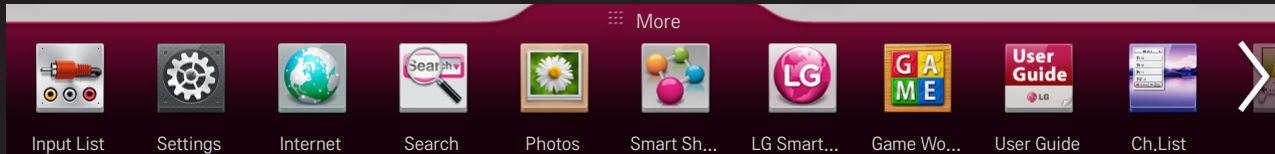
Select **Edit** at the top of the home screen to switch the position of the cards or create your own card. (You cannot edit the **Live** and **Premium** cards.)

❏ To use My Apps

SMART  ⇒ More

Select **More** at the bottom of the home screen.

Select **More** to check apps pre-installed apps and apps you have downloaded.



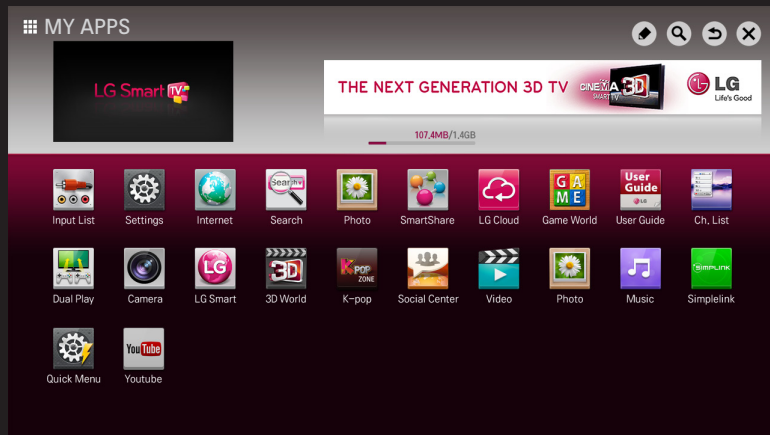
Select the desired app to run.

❏ To edit items in My Apps

SMART  ⇒ More → My Apps → Edit

On the My Apps page, select Edit at the top of the screen to move or delete apps. Please note that system apps can be moved, but cannot be deleted.

✎ On models equipped with the Magic Remote Control, you can move apps or delete them by selecting and then dragging them.



A wireless or wired network connection is necessary to use the Smart TV features.

Once the network connection is established, Premium Content, LG Smart World, DLNA, and more are available.

❑ Network connection by one-click

It's easy to connect to a wired/wireless network.

Select SMART  ⇒ Settings → NETWORK → Network Connection to be automatically connected to an available network. Refer to prompts on the TV.

❑ To connect network through Set Expert

SMART  ⇒ **Settings** → **NETWORK** → **Network Connection**

Used in special circumstances such as in offices (For example, when a static IP is needed).

- 1 Select a network connection either through **Wired** or **Wireless**.
- 2 When connecting via Wi-Fi, use the one of the following network connection methods.

AP List	Connects the network by selecting a network from the AP (Access Point) List.
Enter the SSID	Connects by typing in the name of wireless AP.

WPS-PBC

Connects easily by pressing the button of a wireless access point supporting PBC.

WPS-PIN

Connects easily by typing in the PIN from the admin page of the desired wireless AP.

❑ To use Wi-Fi direct function

SMART  ⇒ **Settings** → **NETWORK** → **Wi-Fi direct**

Wi-Fi Direct is a function that allows your TV to connect with a Wi-Fi Direct device without going through a router or gateway. With SmartShare™, you can watch the files stored on a device connected via Wi-Fi Direct.

- 1 Set **Wi-Fi direct** to **On**. (If you do not use it, please change it to **Off**.)
- 2 Enable the Wi-Fi Direct settings on the device that you want to connect to.
- 3 A list of devices that can be connected to the TV is displayed.
- 4 Select a device to connect.
- 5 Select **Yes**, when the connection request message appears.
- 6 If the device that you want to connect to accepts the request, **Wi-Fi direct** is connected.

❑ To use the Miracast™/Intel's WiDi function

SMART  ⇒ **Settings** → **NETWORK** → **Miracast™/Intel's WiDi**

You can view the screen of a device with Miracast™ and Intel's WiDi technologies on your TV.

- 1 Set **Miracast™/Intel's WiDi** to **On**. (If you do plan on using wither of these features, please change it to **Off**.)
- 2 Enable the Miracast™ or Intel's WiDi settings on the device that you want to connect to.
- 3 A list of devices that can be connected to the TV is displayed.
- 4 Select a device to connect.
- 5 Select **Yes**, when the connection request message appears.
- 6 If the device that you want to connect accepts the request, **Miracast™/Intel's WiDi** is connected.

- ✎ Some models may only support Intel's WiDi.
- ✎ When Wi-Fi Direct is set to Off, if you set Miracast™/Intel's WiDi to On, Wi-Fi Direct is automatically set to On.
- ✎ When you set the Miracast™/Intel's WiDi function to Off, Wi-Fi Direct returns to the previous setting.
- ✎ It is recommended to connect a laptop using Intel's WiDi within close range.
- ✎ Though Intel's WiDi can be connected without a wireless router, it is recommended to connect the wireless router first for optimal performance.
- ✎ You may not connect your TV to a non-LG Electronics device even when it is detected.
- ✎ It is recommended you to connect a device to a 5GHz router.
- ✎ The response rate may vary depending on the user's environment.
- ✎ For more information on the device you want to connect to, refer to its owner's manual.

❏ Network Setting Warnings

- ✎ Use standard LAN cable (connect to Cat5 or higher with 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 setting may not be used depending on the contract with Internet service provider. (If the contract does not allow more than one device per line, only the already-connected PC may be used.)
- ✎ A wireless network can experience interference from other devices that use the 2.4 GHz frequency (wireless phone, Bluetooth device, or microwave oven). Although interference can also happen when using the 5 GHz frequency, it is less likely to occur.
- ✎ The wireless environment can make wireless network service run slowly.
- ✎ 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.

❑ What is Tag On?

Tag On is a data transmission technology that can be used on smartphones with NFC (Near Field Communication). Simply by tapping your smartphone to a Tag On sticker, you can share content between your smartphone and TV.

To connect your smartphone to the TV using Tag On, they must be connected on the same Wi-Fi network. Tag On also supports direct connections like WiFi Direct, Miracast, and WiDi.

- ✎ Do not attach the sticker to a metal part of the TV. Otherwise, your smartphone cannot recognize the Tag On sticker.
- ✎ Do not crumple or fold the Tag On sticker. Otherwise, the Tag On is not recognized
- ✎ To purchase a Tag On sticker, please visit your local retailer.
- ✎ This function is supported only on a smartphone with Android 4.0 (ICS) or later.

❑ To start Tag On for the first time

To connect your smartphone to the TV using NFC, install the Tag On app on the smartphone and complete the authentication process.

- 1 Make sure that the smart TV is on the same network as your smartphone. If Wi-Fi cannot be enabled, go to **SMART**  $\Rightarrow$ **Settings** $\rightarrow$ **Network** $\rightarrow$ **Miracast™/Intel's WiDi** and set to **On**.
- 2 Enable the smartphone's NFC function and set to **Read/Write and P2P Mode**.
For more information on enabling NFC and setting the mode, refer to the owner's manual of your smartphone.
- 3 Tap your smartphone to a Tag On sticker.
Make sure to follow the instructions on the smartphone screen and install the Tag On app and LG TV Remote app.

- 4 Tap the smartphone to the Tag On sticker again.
 - 5 Enter the pairing key displayed on the smart TV into the smartphone.
When two or more TVs are detected, the pairing key is displayed only after the TV you want to connect to is selected in the device list.
 - 6 When the connection is made properly, you can use Tag On.
-  The information of the connected TV is saved in the Tag On sticker.
You can change or reset the information in the Settings menu of the smartphone Tag On app.

❏ To use Tag On

Follow the steps below to share content on your NFC-enabled smartphone.

- 1 Tap the NFC-enabled smartphone to a Tag On sticker.
- 2 The Tag On app starts running on the smartphone to connect to the smart TV.
 - To use a Wi-Fi network, make sure that the smart TV is on the same network as your smartphone.
 - If the smart TV and the smartphone are not on the same network, use Wi-Fi Direct.

- ✎ If the Tag On app is not installed, the installation page appears automatically.
- ✎ For more information on how to share content between your smartphone and TV, refer to the Tag On app's help. Click to run the Tag On app on your smartphone and select the Settings menu to view the help.

❑ To connect a USB storage device

Connect a USB storage device (external hard drive or USB memory) to the USB port of TV to enjoy multimedia files stored on the USB device.

To remove a USB storage device, choose the **Quick Menu → USB Device** to disconnect the device. Wait for the message that the USB has been removed before taking it out physically. If detached early, an error may occur on the TV or USB storage device.

✎ After selecting to remove USB device, it is impossible to read the USB storage device. Remove USB storage device and reconnect it.

❏ Caution when using USB storage device

- ✎ If a USB storage device has a built-in auto recognition program or uses its own driver, it may not work.
- ✎ Some USB storage devices may not work or work improperly.
- ✎ If you use a USB extension cable, the USB device may not be recognized or may not work properly.
- ✎ Only use USB storage devices formatted with FAT32 or NTFS File System provided by Windows.
- ✎ For external USB hard drives, it is recommended to only use devices rated at 5V and less than 500mA current.
- ✎ It is recommended to use a USB hub or hard disk drive with power supplied. (If the power supplied is not enough, the USB storage device may not be detected properly.)

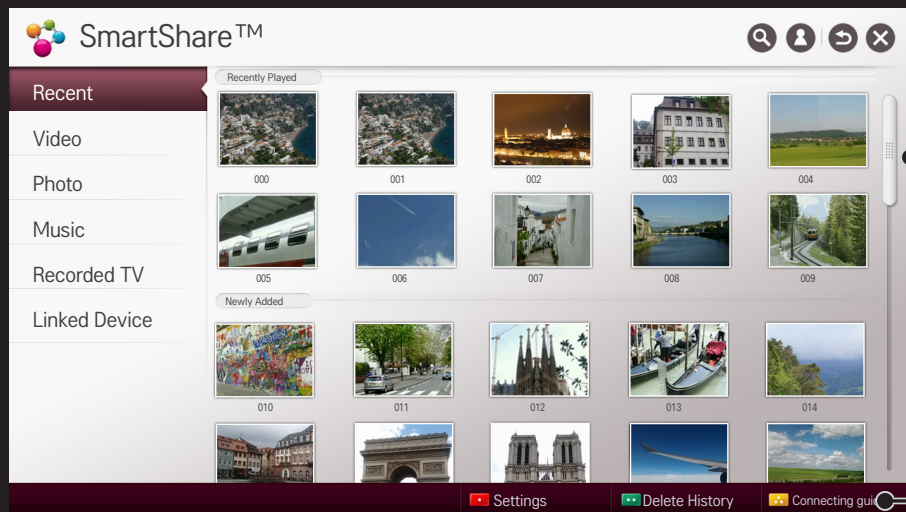
- ✎ It is recommended to use USB Memory Sticks with 32 GB or less and USB hard drives with 2 TB or less.
- ✎ For USB hard drives with energy-saving features, turn off and turn on again if it does not work properly. For more information, refer to the user manual of USB HDD.
- ✎ Data on a USB storage device can be damaged so be sure to back up important files in a separate storage device. Data maintenance is the user's responsibility and the manufacturer is not responsible for any data loss.

❏ To use SmartShare™

SMART 🏠 ⇒ SmartShare™

Playback photo/music/video files on the TV from a USB device or home network (DLNA).

🖋 Image shown may differ from your TV.



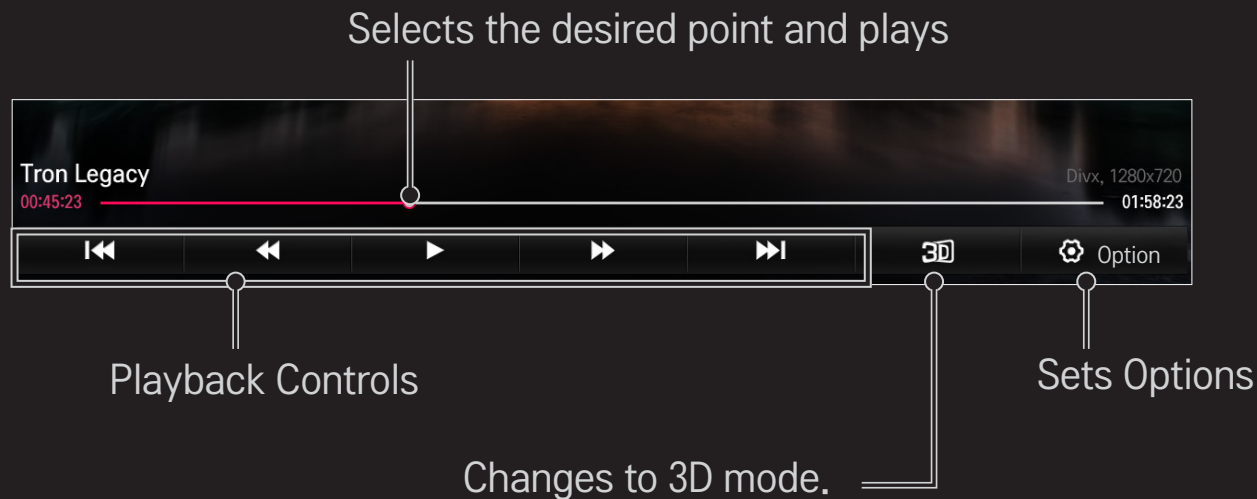
Displays photo/music/video files from all of the devices connected to the TV.

Shows how to connect PCs, Smartphones, and USB drives.

❏ To control video playback

Controls playback and sets options while viewing videos.

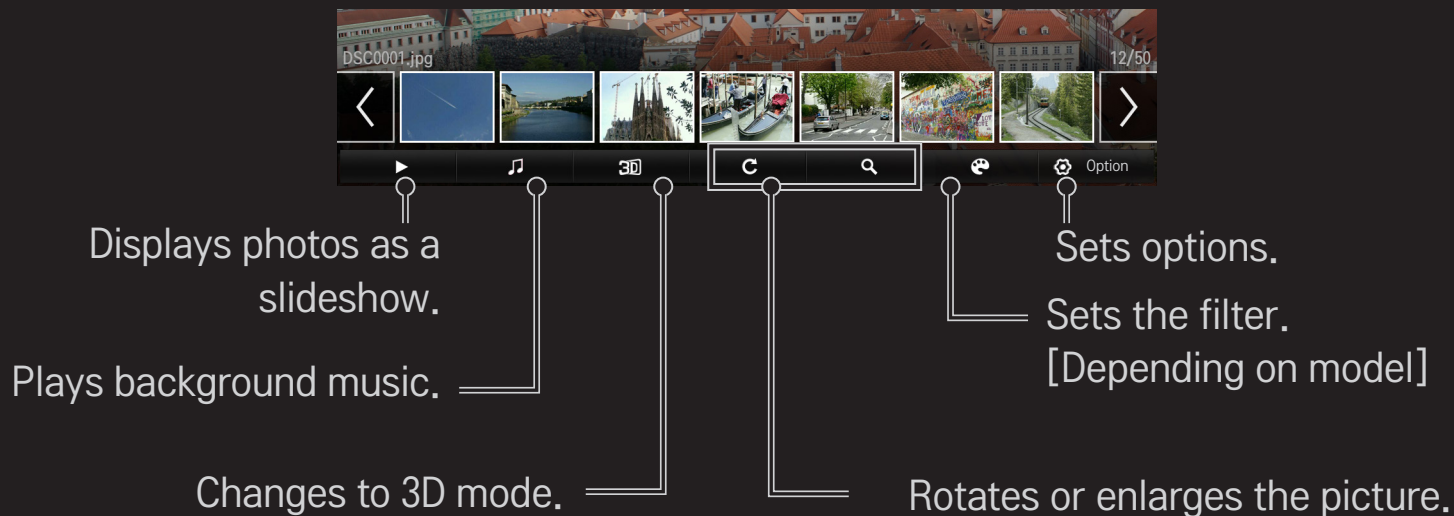
✎ Image shown may differ from your TV.



❏ To control photo view

Controls playback and sets options while viewing pictures in full screen.

- ✎ For 3D pictures, the **Slide Show Effect** does not work even when the **Slideshow** function is enabled.
- ✎ Image shown may differ from your TV.



❏ To control music playback

Controls playback and sets options while playing music.

✎ Image shown may differ from your TV.



Selects the desired point and plays

Sets options

Plays
Sets the repeat/random function.
Listens to music with the video turned off.

- ✎ You can control playback using the ◀◀ , ▶ and ▶▶ keys on a standard remote control.
- ✎ If you use the USB device, time information will be not shown on screen.

❑ To set SmartShare™ related functions

SMART  ⇒ **SmartShare™** → **Settings**

Changes settings related to SmartShare™ content play.

❑ **Advanced Setting**

My TV Name	Changes the name that appears when searching for the TV from other devices.
Network Status	Checks the network connection.
Wi-Fi direct	Allows use of wireless connection functions such as Wi-Fi direct and WiDi.
Auto Play on Receive	Accepts/Rejects Content transferred from other devices.

DivX(R) VOD

Registers or releases DivX.

Checks DivX Registration Code for playing DivX-protected videos. Register at <http://vod.divx.com>.

Uses Registration Code to rent or purchase movies at www.divx.com/vod.

- ✎ When using the DivX Registration Code of another device, the rented/purchased DivX file cannot be played. Use only the DivX Registration Code granted to this device.
- ✎ Converted files not conforming to DivX Codec Standard may produce abnormal images and sound.

□ Delete History

To delete contents history, press **Delete History** button below. Use the contents at **Recent** menu.

❑ SmartShare™ supporting file

Maximum data transfer rate :

- Full HD
1920 X 1080: 20 Mbps (Mega bit per second)
- ULTRA HD [Depending on model] ULTRA HD Video
3840 X 2160 (H.264 L5.1) : 50 Mbps
3840 X 2160 (H.265 L5.0) : 25 Mbps

External supported subtitle formats :

*.smi, *.srt, *.sub (MicroDVD, SubViewer 1.0/2.0),
*.ass, *.ssa, *.txt (TMPlayer), *.psb (PowerDivX), *.dcs (DLP Cinema)

Internal supported subtitle formats :

- Full HD Video
1920 X 1080: XSUB (Supports internal subtitles generated from DivX6)
- [Supports only ULTRA HD model] ULTRA HD Video: It does not support internal subtitles.

□ Video Supported Codec

Maximum:

- Full HD :1920 x 1080 @30p
- ULTRA HD [Depending on model] : 3840 x 2160 @ 30p

Extension	Codec	
.asf	Video	VC-1 Advanced Profile, VC-1 Simple and Main Profile
.wmv	Audio	WMA Standard, WMA 9 Professional
.divx	Video	DivX3.11, DivX4, DivX5, DivX6, XViD, H.264/AVC, Motion Jpeg, MPEG-4 Part 2
.avi	Audio	MPEG-1 Layer I, II, MPEG-1 Layer III (MP3), Dolby Digital, Dolby Digital Plus, LPCM, ADPCM, DTS

Extension	Codec	
.mp4 .m4v .mov	Video	H.264/AVC, MPEG-4 Part 2
	Audio	MPEG-1 Layer III (MP3)
.3gp .3g2	Video	H.264/AVC, MPEG-4 Part 2
	Audio	AMR-NB, AMR-WB
.mkv	Video	H.264/AVC
	Audio	Dolby Digital
.ts .trp .tp .mts .m2ts	Video	H.264/AVC, MPEG-2, VC-1
	Audio	MPEG-1 Layer I, II, MPEG-1 Layer III (MP3) Dolby Digital, Dolby Digital Plus

Extension	Codec	
.vob	Video	MPEG-1, MPEG-2
	Audio	Dolby Digital, MPEG-1 Layer I, II, DVD-LPCM
.mpg	Video	MPEG-1, MPEG-2
.mpeg	Audio	MPEG-1 Layer I, II, MPEG-1 Layer III(MP3)

□ Available music file

File type	Item	Info
mp3	Bit rate	32 Kbps - 320 Kbps
	Sample freq.	16 kHz - 48 kHz
	Support	MPEG1, MPEG2, Layer2, Layer3

□ Available photo file

File type	Item	Profile
2D (jpeg, jpg, jpe)	JPEG	Minimum: 64 x 64 Maximum: Normal Type: 15360 (W) x 8640 (H) Progressive Type: 1920 (W) x 1440 (H)
3D(jps)	JPS	Minimum: 64 x 64 Maximum: Normal Type: 15360 (W) x 8640 (H)
3D(mpo)	MPO	4:3 size 3648 x 2736 2592 x 1944 2048 x 1536 3:2 size 3648 x 2432

❏ Caution for playing video

- ✎ Some subtitles created by users may not work properly.
- ✎ The video and subtitle files should be placed in the same folder. In this case, you must assign the same names for the video and subtitle files for proper display.
- ✎ Subtitles on an NAS (Network Attached Storage) device may not be supported depending on the manufacturer and model.
- ✎ We do not support any stream that contains GMC (Global Motion Compensation) or Qpel (Quarterpel Motion Estimation).

- ✎ Full HD Video: 1920 X 1080
 - Only H.264/AVC profile level 4.1 and lower is supported.
- ✎ [Supports only ULTRA HD model] ULTRA HD Video: 3840 X 2160
 - It supports the playback through USB only.
 - LG's ULTRA HD is fully compatible with most of ULTRA HD contents encode in HEVC delivering stunning high resolution contents. However it may not support certain types of codec contents.
 - New codecs can be updated through SW upgrade.

Extension	Codec	
.mkv / .mp4 / .ts	Video	H.264/AVC
	Audio	Dolby Digital, Dolby Digital Plus
.ts	Video	H.265(HEVC)
	Audio	Dolby Digital, Dolby Digital Plus

- ✎ Some ULTRA HD models need connection with “ULTRA HD Upgrade Kit”.

- ✎ The file size limit is dependent on the encoding environment.
- ✎ Only Window Media Audio V2 and above is supported.
- ✎ Video files created by some encoders may not be played back.
- ✎ Video files in formats other than the ones specified here may not be played back.
- ✎ Playback of video files stored on a USB device that does not support High Speed, may not work properly.
- ✎ The TV supports DTS audio codec when the USB/HDMI video file playback.

DLNA stands for Digital Living Network Alliance, which allows users to access video/music/photo files stored on a PC or server and enjoy them on the TV via home networking.

❑ To connect a DLNA-authenticated Smartphone

TV and the smartphone should be on the same network.

- 1 Enable Wi-Fi on the smartphone.
- 2 Install/run a DLNA app to share content on the smartphone (It's called SmartShare on LG phones).
- 3 Run "Share my mobile phone Content".
- 4 Select the kind of Content (video/music/photo) to play.
- 5 Select the video, music, or photo file to play on the TV.
- 6 Select Add to Play List.
- 7 Select TV model name on the device to replay content. (TV model name is on the label of the device.)
- 8 Press Play ► to enjoy the selected file on the TV.

❑ To connect a DLNA DMR (Digital Media Renderer)

With the Windows 7 or Windows 8 PC operating system or DLNA-certified device (e.g. mobile phone), music/videos/photos may be played on the TV without installing a separate program.

- 1 Configure the TV and PC on the same network. Configure the Windows 7 or Windows 8 PC on the network.

- 2 To play a music/video/photo file, right-click on the file and use the Remote Playback or PlayTo Windows 7 or Windows 8 feature.

For playback on devices like a mobile phone, refer to the model's user guide.

- 3 Content will be played on only one device even if more than one TV or device is connected. Play speed can vary depending on network speed.

❑ To connect a DLNA DMP (Digital Media Player)

With a PC having SmartShare PC Software, music/video/photo files may be played on the TV via home networking.

- 1 Configure the TV and the PC on the same network. The TV and each device should be connected through a single access point to enable DLNA service.
 - 2 Install the SmartShare PC Software from the web site onto a PC. Before installation, close all running programs including firewall and Anti-Virus programs.
 - 3 The sever should be running in order to watch shared files on your TV.
- ✎ For the website information, go to SMART  ⇒ Settings → SUPPORT → Product/Service Info.
 - ✎ For how to use the SmartShare PC software, refer to the software help.

□ If a DLNA malfunction occurs

- ✎ If a DLNA feature does not work properly, check network settings.
- ✎ A 5-GHz access point is needed to view 1080p videos via DLNA.
A 2.4-GHz access point may cause frequent buffering or other problems.
- ✎ DLNA may not work properly on a wireless network. It is recommended to use a wired connection.
- ✎ Multi audio and internal subtitles are not supported in DLNA mode.
- ✎ If more than one TV is connected to a single server in DLNA mode, the content may not play depending on server performance.
- ✎ Subtitles may not be supported depending on DLNA device.
- ✎ The DLNA feature may not work properly in all network environments.

- ✎ The DLNA feature cannot be used with some access points that do not support multicasting. For more information, refer to access point manual or consult with the manufacturer.
- ✎ Supported file types may differ depending on the DLNA server environment, even for the file types supported by TV.
- ✎ Too many sub-folders and files included in one folder may cause a malfunction.
- ✎ Information about the file from DLNA server may not be displayed correctly.
- ✎ SmartShare PC Software is recommended when watching video subtitles from a DLNA server.
- ✎ To add a subtitle file later, turn off the shared folder and reset.
- ✎ DRM files located in SmartShare PC Software server are not played.
- ✎ **ULTRA HD** video (3840 X 2160) file does not work.

❑ To use Premium

SMART  ⇒ Premium

This service gives you easy access to a wide variety of content, such as video, news and UCC (User Created Content), at any time, as long as you are connected to a network. For Premium content, specialized country-specific services are offered that take into account regional content, in addition to globally provided content.



❑ To use paid Content

Some Premium Content is provided as for-free services. To purchase for-free services, use either LG Electronics' proprietary billing system or that of each content provider.

Before using the LG billing system, you will need to sign up for membership and register payment information on TV or the website (www.lgappstv.com) .

You can sign up for membership on the login screen on your TV or our website. You can then log into both the TV and the website with one ID.

- 1 Click **Sign In** button in upper right corner of Home screen to sign in.
- 2 Move to the desired Premium service.
(For some premium services, separate sign-in is required after signing up for the premium service.)
- 3 After checking the content's pricing and service information, click the Purchase button. (There may be limitations on the available period and number of times depending on content.)
- 4 Once the purchasing process is completed, view the paid content by clicking the **Buy** button.
- 5 Select your ID on upper menu of Home screen and check history of purchases from **My Page** → **Payment inquiry**. It is also available on My Page → Purchase History of web site (www.lgappstv.com).

❏ To reset Premium

SMART  ⇒ Premium → Option → Initialization of Premium

Premium list, Premium information, country setting, and user sign-in information will be reset. When an error occurs during Premium update, reset will fix the problem.

- ✎ Content on offer by service providers are subject to change to enhance their service quality or deletion without any prior notice. Refer to the web site of each content provider for questions, troubleshooting, or latest information about Content. LG Electronics does not take any legal responsibility for content services and related information including discontinuation of service by the service provider.
- ✎ The quality of Premium service may be affected by Internet connections. For any questions related to Internet speed or any other service problems, contact the Internet service provider.
- ✎ For best service quality, subscribe to an Internet service of 4.0 Mbps (1.5 Mbps or faster). Contact the ISP (Internet service provider) for any problems related to Internet speed.
- ✎ Content providers may make available content that is unsuitable for minors. Parental discretion advised.

❑ To use LG Smart World

[This function may not be applied some countries.]

SMART ⇒ LG Smart World

LG Smart World is a TV application service available through Smart TV Service. You can download and enjoy many different apps (for fee or free) including education, entertainment, life and news.

Sign in.

When you sign in, ID is displayed.

When you select the ID, you can select
My Page and **Sign Out**.

Select the app to install.



❏ To sign up with LG Smart World

SMART  ⇒ Sign In

Sign up is required to download and run apps.

- 1 Select **Sign Up** and agree to Legal Notice.
 - 2 Enter ID and password.
 - 3 In Confirm Password box, enter password again.
 - 4 Select **OK** to complete sign-up process.
- ✎ You can sign up for membership on either your TV or the website (www.lgappstv.com).
 - ✎ After signing up for membership, log into your TV and our website with the same ID.
 - ✎ You can sign in up to five TVs with a single ID.

❏ To install app on TV

SMART ⇒ LG Smart World

- 1 Click the **Sign In** button at the top of the home screen to log in.
- 2 Select the **LG Smart World** card.
- 3 Select an app you want from the list.
- 4 Check the details of the app, then select the **Install** or **Buy** button.
- 5 Check that you have the functions or TV accessories required to install the app, then select the **OK** button.
- 6 For paid apps, payment and purchase authentication is required.
- 7 Select **Run** once installation is complete to run the app immediately.
If you do not want to run immediately, select **Close**. If you want to run the app later, select **My Apps** to check the list of apps installed on TV.

- ✎ You can purchase apps from PC or TV but you must use the TV to install and run them.
- ✎ If you have insufficient storage space on the TV, you can download apps to a USB storage device connected to the TV's USB Apps port. Apps stored on a USB device are available to run/delete/move via the **My Apps** screen.
- ✎ A USB Memory Stick containing apps cannot be used for other data. (For USB Apps Only)

❏ To manage my information

SMART  ⇒ LG Smart World

- 1 Sign in.
- 2 Select the currently signed-in ID at the top of the screen.
- 3 Select **My Page**.
- 4 Manages by examining Member Information, My Purchased Apps List and TV Installed Apps List.

My Information	Shows basic information about the ID currently signed in. To change your member information, please visit www.lgappstv.com on your PC.
Payment Inquiry	Views Payment History with the ID you have signed in.
Purchased Apps	Vews My Purchased Apps List with the ID you have signed in. You can delete/re-install the purchased apps.

SMART ⇒ Search

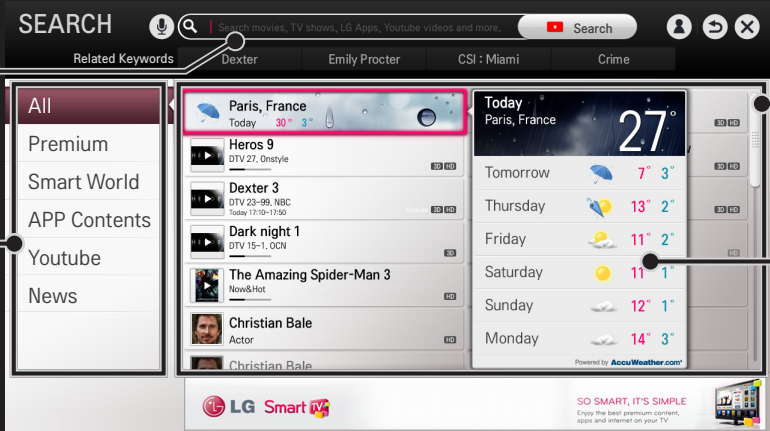
You can search apps and contents using the **Search** function of the LG Smart TV. When you enter keywords using the input device, such as the remote control, you can find apps from **LG Smart World** and some contents of the **Premium** service. Links are also provided to go for web search. If you are using **SmartShare™**, you can also search the contents of **SmartShare™**. The **Search** categories and content types vary depending on the country and will be kept updating.

Enters search terms.

Category of search results

Search results

Detailed information about the search item



Category	Item	Details
All	Paris, France	Today 30° - 3°
	Heros 9	DTV 27, Onstyle
	Dexter 3	DTV 23-99, NBC
	Dark night 1	DTV 19-1, DCN
	The Amazing Spider-Man 3	Now&Hot
	Christian Bale	Actor

Day	Weather	High/Low
Today	Paris, France	27°
Tomorrow		7° - 3°
Thursday		13° - 2°
Friday		11° - 2°
Saturday		11° - 1°
Sunday		12° - 1°
Monday		14° - 3°

❑ To use the voice recognition function

❑ Using this function through search

- 1 Go to **SMART**  ⇒ **Search**. Select the voice recognition icon (🎤) on the left of the text field.
- 2 Speak slowly and clearly after the voice recognition window appears. After the voice recognition is completed, the Similar List window pops up. If the pop-up window does not have the results you want, press **Retry** to try again. Select the most similar result, then it will be displayed in the text field. Press the Search button to get the result you want.

□ Using this function in the Internet (Web browser)

- 1 Go to SMART  ⇒ Internet. Move the Magic Remote Control pointer in the text field on a website to open the virtual keyboard.
- 2 Select the voice recognition icon (🗣️) on the left of the text field on the virtual keyboard.
- 3 Speak slowly and clearly after the voice recognition window appears.
- 4 After the voice recognition is completed, the Similar List window pops up. If the pop-up window does not have the results you want, press Retry to try again. Select the most similar result, then it will be displayed on the text field. Press the Search button on the website to get the result you want.

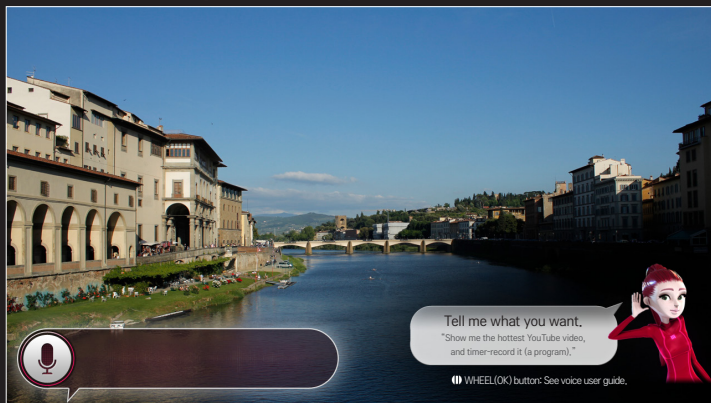
- ✎ You can use Voice Search when you press the **Voice recognition**() on the Magic remote control even if QWERTY keyboard is shown on your screen.
- ✎ Check the network connection before using the voice recognition function.
- ✎ When speaking, hold the remote within 10cm of your mouth.
- ✎ The voice recognition may fail if you speak too fast or too slowly.
- ✎ The recognition rate may vary depending on the user's characteristics (voice, pronunciation, intonation, and speed) and the environment (noise and TV volume).
- ✎ To change the voice recognition language, go to **SMART**  ⇒ Settings → **OPTION** → **Language** → **Voice Recognition Language**.
- ✎ You can turn the avatar **On/Off** in **SMART**  ⇒ Settings → **OPTION** → **See Avatar**.

[This function may not be available on some models.]

❑ What is Voice Mate?

Voice Mate allows you to search desirable programs and content with your voice and adjust the TV.

- 1 Press the **Voice recognition** (🎤) button on the Magic Remote Control.
- 2 When the Voice Display bar (🎤) is activated on the left of the screen, say what you want to watch.



- 3 Press the **Wheel (OK)** button with the Voice Search standby to see the supported language in the voice guide.

❏ How to Use Voice Mate?

- ✎ To use all the functions and services of Voice Mate, you need to set Smart Wizard and Time. Set up the network, region, auto tuning, and universal remote control through the Smart Wizard.
- ✎ In order to use Voice Mate, you must set up the network, time, region, and tuning.
- ✎ Set the language of your country to use Voice Mate.
- ✎ You can change the language for Voice Search in SMART 🏠 ⇒ Settings → OPTION → Language → Voice Recognition Language.
- ✎ You can turn the avatar On/Off in SMART 🏠 ⇒ Settings → OPTION → See Avatar.

- ✎ It is recommended you to point the universal remote control towards the set-top box when you use Voice Mate with it.
- ✎ When speaking a command, hold the remote within 10cm of your face.
- ✎ The voice search may fail when you speak too fast or too slow.
- ✎ The recognition rate of Voice Mate may vary depending on the user's characteristics (voice, pronunciation, intonation and speed) and the environment (noise and TV volume).
- ✎ If your voice is not recognized properly, Voice Mate may function regardless of your intention.

❏ What are other functions of Voice Mate?

You can access various TV features using Voice Mate.

Channel	You can tune TV channels and search channel information. Example: “What time is American Idol on?”
Recommendation and Search	You can recommend and search TV programs and content files. Example: “Look up American Idol”
Information and Internet	You can also search other information such as today’s weather. Example: “How’s the weather today?”

 Available functions may vary depending on the country.

 For more supported examples, see the voice user guide.

SMART 🏠 ⇒ Internet (Web browser)

You can type in a URL manually or visit a Web site from the Favorites list.

Type in Web addresses here. Add the current page to favorites.

Open a new tab.



- ✎ The **Internet** (Web browser) supports up to Flash 11 but does not support platform-dependent technology like ActiveX.
- ✎ The **Internet** (Web browser) only works with pre-installed plug-ins.
- ✎ The **Internet** (Web browser) only replays the following media file formats:
JPEG / PNG / GIF
- ✎ The **Internet** (Web browser) is forcibly closed when memory is insufficient.
- ✎ For the **Internet** (Web browser) , fonts installed on the TV are used and may not be displayed normally depending on the content played.
- ✎ The **Internet** (Web browser) does not support file and font download.
- ✎ The **Internet** (Web browser) is made for a TV so it may function differently from PC browsers.
- ✎ The **Internet** (Web browser) is a TV browser and may not work properly when playing some content files.

Sign up is required to use LG Smart World.

Free apps are available immediately after signing up, but you need to register your payment method in order to use paid apps.

You can sign up and register payment methods on the TV or on our website (www.lgappstv.com).

Problem	Solution
When entering menu, the "Initializing" message always appears.	• The "Initializing" message shows you how long it takes to reboot the microprocessor and hardware, set up network communications, and communications with SDP (device authentication and basic information download). It takes about 20 seconds and this is a normal process.
There is no content shown on the Premium card.	• Content may not be shown after changing the country setting on Smart TV. Change to desired country in SMART  ⇒ Settings → OPTION → Service Country Setting

Problem	Solution
While using internet features, there is a blank space on some Web pages.	• The internet of the TV supports up to Flash 11 and may not replay any file format other than the following : JPEG, PNG, GIF
Internet (Web Browser) closes automatically when visiting website.	• If memory is insufficient because of large volume of image information in the web page, internet may be forced to close.
I already signed up on TV. Do I need to sign up again at web site (www.lgappstv.com)?	• If you sign up on your TV, no additional sign-up on the LG website (www.lgappstv.com) is required. After signing up on TV, you can sign into the website by using the same ID and password and entering the additional information to complete the email verification process.

Problem	Solution
Can each family member use a different ID with a single TV?	• It is possible to register and use more than one ID on one TV. • To check the ID registered with TV from SMART  ⇒ Sign in → ID List. • You can check the list of apps purchased by each ID. However, you can see all apps installed by each ID in SMART  ⇒ Sign in → My Page.
What should I do if I forget my ID?	• After signing up on a PC, use “Forgot ID?” feature on web site (www.lgappstv.com) when needed. • After signing up on TV, check it from SMART  ⇒ Sign in → Find ID.

Problem	Solution
I purchased an app from the LG TV Apps Web site. How can I use it on TV?	• To check purchased apps from the TV, sign in and open the Purchased Apps menu. Select the ID at the top of Home and check the app in My Page → Purchased Apps.
Can I see history of my purchased apps?	• Select the ID at the top of Home and check the app in My Page → Purchased Apps. • Sign in to website (www.lgappstv.com) and then select My Page → Purchase History.

Problem	Solution
I deleted a paid app. Do I have to purchase again to download it?	• If a purchased app is accidentally deleted, you can download and reinstall it without having to buy it again, as long as it is still in service. Select the ID at the top of Home and re-download apps in My Page → Purchased Apps. (Previously owned apps may not be re-downloaded or run depending on the software version.)
Can I use apps from LG Smart TV's LG Smart World on both a TV and a PC?	• Please check if the TV model supports LG Smart World. • The apps provided from LG Smart TV's LG Smart World can only be used on an LG Smart TV. • Apps may be purchased from the website (www.lgappstv.com) but cannot be used on a PC or Mac. Use care when purchasing.

Problem	Solution
How can I check the ID currently signed in on the TV?	• Select the ID at the top of Home and check the currently signed-in ID in My Page → My Information.
I installed an app on the TV. Where can I check the installed app?	• Select SMART  ⇒ My Apps. All paid and free apps installed on TV are displayed.
There is a difference between the app size shown on the screen and the actual app size installed on TV.	• The app size shown in the screen includes the additional space needed for installing apps so it may be different from actually installed app size.

Problem	Solution
I forgot my password on the TV. What should I do?	• If you only provide the ID and password when signing up on your TV, you cannot recover your password when it is lost. Create a new ID and sign up with the ID. • If you provide other information than the ID and password when signing up on your TV or the LG website (www.lgappstv.com), you can recover your password on the website.

Problem	Solution
Do I have to enter payment information to purchase paid apps?	• To purchase paid apps, you should have a credit card registered on the LG Smart World website (www.lgappstv.com) or have an account credit. If you do not want your credit card details to be saved, you may add a credit to your account before buying an app. Charging credit is only available on our website, and you cannot purchase paid apps if your credit card details are not registered or you don't have enough credit.
Can I cancel an app that I have purchased?	• As a member you cannot demand refund just because you changed your mind after purchase. • If there is a defect in the product or a problem of using the product, which does not caused by your fault, you can ask for a refund. However, the valid reason for refund must be provided.

Problem	Solution
I signed up on my TV, but I cannot purchase paid apps.	• To purchase paid apps, you need to have a credit card registered with the website (www.lgappstv.com). Also, you can have place a credit on your account ahead of time. You cannot purchase paid apps if your credit card details are not registered with us or you don't have enough credit.
Should I only use an email address for my ID?	• For new sign-up members, the ID format has changed from a combination of alphanumerics to your email address. • You can only use an email address for your ID when signing up.

Problem	Solution
Do I need to change my ID format to the email address?	• For new sign-up members, the ID format has changed from a combination of numbers and letters to using an email address. • If you are already a member, you can still use your existing ID or change it to an email address.
What is the LG account?	• The LG account allows you to sign into all of the LG Smart services with a single ID and password. You can use the following services with your LG account: LG Smart TV, LG Smart World (excluding some countries), LG Smart ThinQ, and LG Smart air conditioning, etc. • Additional information may be required depending on the service.

❏ To set the service country

SMART  ⇒ **Settings** → **OPTION** → **Service Country Setting**

You can change the country setting of your Smart TV.

The Premium service and LG Smart World that are available for the country you selected will be provided.

Auto Setting	A service country is automatically set for your Smart TV.
Manual Setting	A service country can be set manually for your Smart TV.

✎ If a network is disconnected while setting the service country, it may not be set properly.

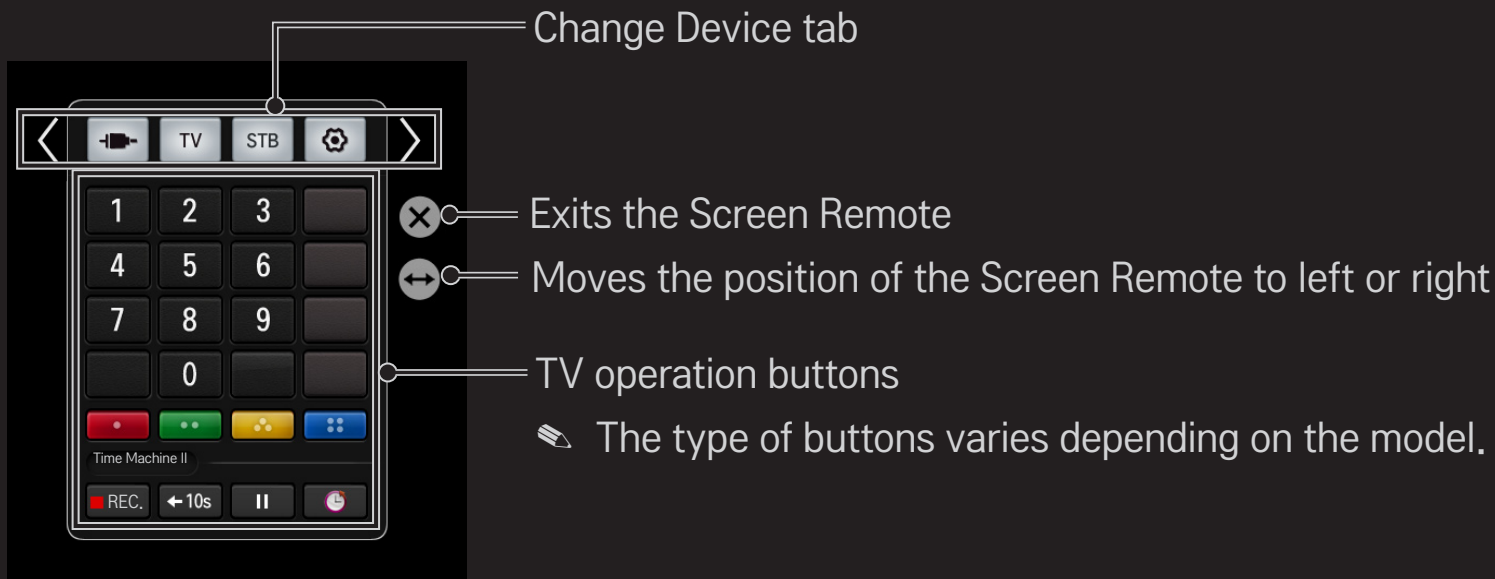
❑ To use Screen Remote

Press the **123** button on the Magic Remote Control.

Use the Magic Remote Control to select buttons on the Screen Remote displayed on the screen.

□ To use Screen Remote

- ✎ The type of buttons on the Screen Remote varies depending on the region or the type of connected device.
- ✎ Image shown may differ from your TV.



❑ To control a device connected to the TV using the Screen Remote

You can control a device connected via SimpLink or MHL using the Screen Remote.

- 1 Check if the device is connected to the TV.
 - 2 After pressing the **123** button on the Magic Remote Control, select the device you want to control in the Change Device tab. The Screen Remote that can control the device appears.
- ✎ This may not work with the **123** button for some models.
 - ✎ For more information about SimpLink or MHL connection, please refer to the connection section of "Owner's Manual" provided with the TV.

❑ To use the Universal Control function

[For Magic Remote Control only]

[This function may not be applied some countries.]

With the Magic Remote Control, you can control a set-top box, Blue-ray player, home theater system, etc.

- 1 Connect the device you wish to control to the TV.
- 2 After pressing the **123** button on the Magic Remote Control, select the icon of a device you want in the Change Device tab.

If the device you wish to control is not listed, press the  on the tab, and select the external device you want. Once the setup is complete, the name of the selected device is displayed in the Change Device tab.

- 3 When you select a device in the Change Device tab, the Screen Remote that can control the device appears on the screen. To see more control buttons, select  at the bottom of the Screen Remote.

□ To change or clear the Universal Control settings

- 1 After pressing the **123** button on the Magic Remote Control, select the  (TV/input selection) button.
 - 2 Select **Change Setting** or **Cancel Setting** at the bottom of the device to be changed.
-  When **Change Setting**, check if the power of the device to be changed is turned on.

- ✎ You can set one device per type.
- ✎ With the Screen Remote, you can only control the devices of a brand or manufacturer that you can select in the setup screen.
- ✎ If you connect to a network before setting the universal remote control, update for the latest manufacturer list is available.
- ✎ Some buttons may not work depending on the external device model.
- ✎ Place the device near the TV for seamless operation.
- ✎ If the device is in a drawer, open the drawer.
- ✎ Go to **SMART**  ⇒ **Universal Control** or **SMART**  ⇒ **INPUT LIST** → Set the **Universal Control** and add, delete, or change a device

❏ To view 3D images

3D imaging is a technology that utilizes the slight difference in left/right eyes to make the images on TV appear just like real-life 3-dimensional space.

- 1 Play a 3D-image title or tune to a 3D channel.
- 2 Put on 3D glasses.
- 3 Press the 3D button to activate 3D.
- 4 When finished viewing 3D images, press the 3D button on the remote control to end 3D image viewing.

✎ Depending on the input signal, available 3D type may differ.

❑ To adjust details of 3D images

SMART  ⇒ Settings → PICTURE → 3D Settings

Adjusts various aspects of 3D imaging.

3D Mode

Provides the appropriate 3D depth.

- **3D Depth** : Adjust 3D depth between the foreground object(s) and the background.
- **3D Viewpoint** : 3D image can be made closer or farther from user.

3D Sound Zooming	Provides 3D-optimized sound.
3D Pattern Recognition	This will activate and deactivate 3D mode automatically based on the input.
Normal Image View	This will down-convert a 3D signal to 2D.
3D Color Correction	Corrects the color of 3D images.  Depending on model, the 3D Color Correction may not be available.
3D Image Correction	Switches the left/right images of 3D video.

❏ Caution when viewing 3D images

- ✎ When viewing 3D images, it is recommended that the viewer maintain a distance of at least twice the screen's diagonal length.
- ✎ 3D images may not be viewed correctly with shutter-type glasses that require recharging.
- ✎ If a future 3D broadcasting format that is not supported by this TV becomes the standard, an additional device such as a set-top box may be required.

❏ Warning when using 3D glasses

- ✎ Do not use the 3D glasses as a replacement for your own corrective glasses, sunglasses, or protective goggles. Improper use of 3D glasses may cause eye injuries.
- ✎ Do not store 3D glasses in extreme conditions. Exposure to excessively high or low temperatures may deform the lenses. Do not use deformed glasses.
- ✎ Do not apply pressure to or subject 3D glasses to any impact. Subjecting 3D glasses to rough handling may cause a defect.
- ✎ The lenses on 3D glasses (with polarizing film) are vulnerable to scratches. Use only a clean and soft cloth for cleaning. Dirty cloth may scratch the polarizing film.
- ✎ Scratching the lens surface of the 3D glasses with sharp objects or cleaning with chemicals may distort 3D images.

❏ What is Motion Recognition?

You can control the TV simply by gesturing for the camera.

You can use the Motion Recognition function to turn the TV off, change the channel, or control the volume.

- ✎ Motion Recognition is only active when watching TV and is not supported when using the smart menu, for example when connecting wireless devices, including TV apps and USB ports.



❑ To use the Motion Recognition function

- 1 Prepare the Smart TV camera for use. If your Smart TV is not equipped with a camera, install an LG video call camera (sold separately). (For more information, please refer to the installation manual or owner's manual of the camera.)
- 2 The camera is activated 20 to 30 seconds after the TV is switched on.
- 3 Go to **SMART**  ⇒ **Settings** → **OPTION** and check if **Motion Recognition** is set to **On**.
- 4 Look at the camera, lift your hand near your face with your index finger straight and pointing up while watching TV. The motion recognition controller appears on the TV screen. (You can check the motion recognition range of the camera in **SMART**  ⇒ **Settings** → **OPTION** → **Camera Setting Help**.)

- 5 Move your hand left or right to select a function. Bend and then straighten your index finger to start the function.
 - 6 If you lower your hand out of the range of motion recognition, the controller disappears from the screen.
- ✎ If you bend your index finger for longer than a second, the selected function is performed repeatedly until you straighten your finger.
 - ✎ If you are watching TV using a set-top box, install an IR blaster (AN-BL100, sold separately) to control the volume and the channel of the set-top box using Motion Recognition.
 - ✎ Refer to the tutorial for more information on the recognized postures and their proper use. (You can also find more information in **SMART**  ⇒ **Settings** → **OPTION** → **Camera Setting Help** → **Motion Recognition Tutorial**.)

- ✎ Motion Recognition may not work properly if:
- The room is either too bright or too dark. (Optimal ambient brightness: 50 lux - 600 lux)
 - When your hand cannot be recognized because of an intense bright light behind you.
 - When there is another movement that interferes during motion recognition or while taking a motion that opens the controller.
 - You are too far away or too close to the camera (Ideal distance: 1.5 m - 4.5 m).
 - Your fingers cannot be detected by the camera because you are wearing gloves or a bandage.
 - When your hand is in front of your face during motion recognition.
 - When there is a complex pattern behind your hand.
 - When the motion that opens the controller or the selection motion, is either too slow or too fast.
 - Your skin color is similar to the background color.
 - The background is striped.

- ✎ A gesture may not be recognized in the following cases.
 - If Motion Recognition is set to Off in SMART  ⇒ Settings → OPTION,
: Set it to On.
 - If any other menu than the motion recognition controller is displayed on the TV screen,
: Make it disappear.
 - (For built-in camera) If the camera is not lifted up,
: Make sure to lift-up the camera.
- ✎ Devices connected through a USB port or a wireless connection cannot be switched via Motion Recognition.

- ✎ If multiple people attempt to perform motion recognition at the same time, only the first gesture is recognized. To switch hands when operating the controller, lower your first hand down to clear the controller from the screen and then raise your second hand up for motion recognition.
- ✎ Be careful not to move your hand too fast or make too big motion. Move your hand slowly near your face.
- ✎ If **Motion Recognition** does not work properly, lower your hand and then lift it up again.
- ✎ If your index finger is bent at an angle, the camera may not recognize it, or may recognize it as a bent finger, and perform a function.

❑ To take a picture using the TV camera

You can take a picture or video using the Smart TV camera.

- 1 Prepare the Smart TV camera for use. If your Smart TV is not equipped with a camera, install an LG video call camera (AN-VC500, sold separately). (For more information, please refer to the installation manual or owner's manual of the camera.)
- 2 Go to **SMART**  ⇒ **MY APPS** → **Camera**.
- 3 Take a picture by selecting  (Picture Mode) or  (Video Mode).

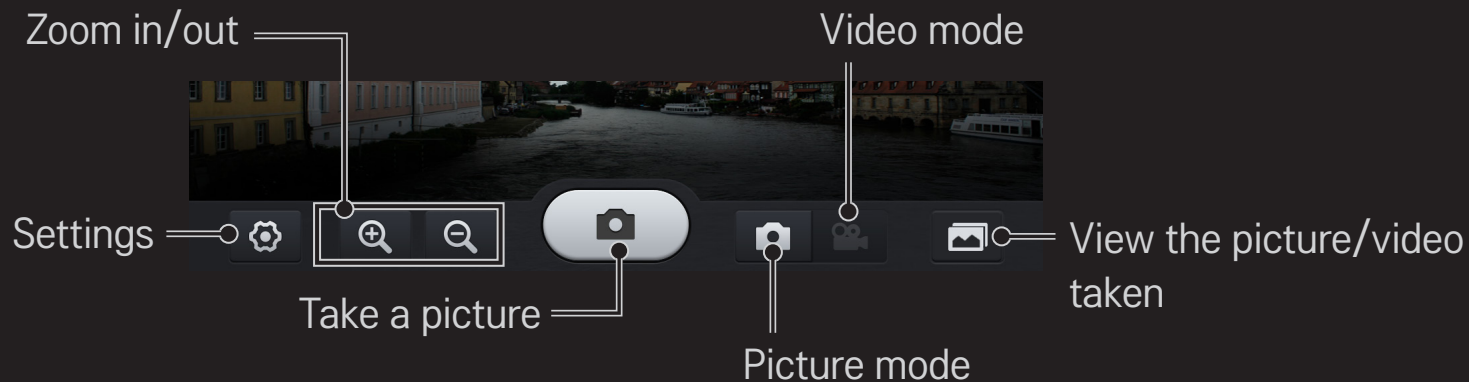
❑ To take a picture

SMART  ⇒ **MY APPS** → **Camera** →  (Picture Mode) →  (Start)

□ To take a video

SMART 🏠 ⇒ **MY APPS** → **Camera** → 📹 (Video Mode) → 📹 (Start)

To stop taking a video, press 📹 (Stop) again.



✎ Image shown may differ from your TV.

□ To set up the camera

SMART  ⇒ MY APPS → Camera →  (Settings)

Properties	You can set the properties of pictures/videos you will take.
Storage device	You can select a device where the pictures/videos taken will be saved.

- ✎ For a USB storage device, use only a USB hard disk that is formatted with an NTFS file system provided in Windows. If a storage device is formatted with a non-Windows file system, it may not be recognized.
- ✎ In case of watching the videos or seeing the pictures, you can only open one recent file.
- ✎ Go to SmartShare™ → Linked Device → Camera Memory to delete the pictures or videos stored in the internal memory.
 - You cannot delete pictures or videos stored on the USB storage device.

❑ To turn on the TV with voice

You can turn your TV on without using a remote control simply by speaking "TV Power On" towards the TV.

1 SMART  ⇒ Settings → OPTION and then check if Turn on by Voice is set to On.

2 SMART  ⇒ Settings → General → Language and then set Voice Recognition Language to the language you want.

3 If you say "TV Power On^{*1)}" when your TV is turned off, it will be turned on.

 ^{*1)} Use the following commands to turn your TV on depending on your Voice Recognition Language setting.

English	TV Power On
---------	-------------

- ✎ Even when the built-in camera is hidden, you can use the **Turn on by Voice** function.
- ✎ The **Turn on by Voice** function may not work properly when:
 - You are too far away from the TV (Recommended distance: within 4.5 m).
 - You did not use the standard dialect or your pronunciation is unclear.
 - There are loud noises from the surroundings (Using in the place where the surrounding noise level is 40 dB or below is recommended.)
 - You speak in a small voice. (Your voice level must be 60 dB or higher.)
 - You speak too fast or too slow.
- ✎ Your TV can be turned on if it detects a noise similar to the command used for turning the TV on.

❑ What is Dual Play mode?

When playing a 2 player head-to-head game with a game console, such as Playstation, XBox and Wii, users used to play the game with the screen divided top and bottom or side by side.

With Dual Play mode, each player can enjoy the game with a full screen.

To play in Dual Play mode, the Dual Play glasses (type A and B) are required.

If your model does not include the Dual Play glasses, please purchase them separately.

❑ Starting Dual Play

- 1 Connect your game console to your TV.
 - 2 Select **SMART**  ⇒ **More** → **Dual Play**. The Dual Play mode starts.
 - 3 Put on the Dual Play glasses to enjoy the game.
 - 4 Dual Play mode turns off when you select **SMART**  ⇒ **More** → **Dual Play** while it is on.
-  Select the **Screen split mode** (Side by Side / Top & Bottom) that the game supports.
- If the selected **Screen split mode** is not supported by the game you want to play, then Dual Play mode is not available.

- ✎ The game should support the Screen split mode to be played in Dual Play mode.
- ✎ If the screen does not look clear enough with the Dual Play glasses on, players can change the glasses with each other. You should choose proper glasses according to the operation type of Dual Play.
- ✎ To set up the game menu, turn off the Dual Play mode.
- ✎ Certain images may appear to be overlapped during playing game. It is recommended to play a game facing the centre of the screen.
- ✎ When the game console has a low resolution, the picture quality may not be good in Dual Play mode.
- ✎ The picture on the screen is only in 2D in Dual Play mode.

❏ Cautions When Using Dual Play Glasses

- ✎ Please note that Dual Play glasses are different from regular 3D glasses. There is the mark "Dual Play" written on the Dual Play glasses.
- ✎ Do not use Dual Play glasses as ordinary glasses, sunglasses or protective goggles. If you do so, this may cause injury.
- ✎ Do not store Dual Play glasses in very hot or very cold conditions. If you do, this may cause them to become distorted. Do not use distorted glasses.

- ✎ Do not drop Dual Play glasses or allow them to come into contact with other objects. This can result in damage to the product.
- ✎ The lenses of Dual Play glasses (polarizing film) are easily scratched. Use a soft clean cloth when cleaning them. Foreign particles on the cloth may cause scratches.
- ✎ Do not scratch the surface of the Dual Play glasses lenses with sharp objects or wipe them with chemicals. If the lenses get scratched, images may not look normal when viewing Dual Play.

❑ Dual Play Supported Modes [FHD]

Input	Signal	Resolution	Horizontal Frequency (KHz)	Vertical Frequency (Hz)
Composite	480i	720x480	15.73	60
Component	480i	720x480	15.73	60
	480p	720x480	31.50	60
HDMI/ Component	720p	1280 x 720	45	60
	1080i	1920 x 1080	33.75	60
	1080p	1920 x 1080	67.50	60
			27	24
			33.75	30

❑ Dual Play Supported Modes [ULTRA HD] : HDCP1.4

Input	Signal	Resolution	Horizontal Frequency (KHz)	Vertical Frequency (Hz)
Composite	480i	720x480	15.73	60
Component	480i	720x480	15.73	60
	480p	720x480	31.50	60
HDMI/ Component	720p	1280 x 720	45	60
	1080i	1920 x 1080	33.75	60
	1080p	1920 x 1080	67.50	60
			27	24
			33.75	30
HDMI	2160p	3840x2160	53.95	23.976
			54	24
			56.25	25
			61.43	29.97
			67.5	30

✎ Some models may not support Composite/Component input.

✎ Supported Dual Play Formats: Side by Side / Top & Bottom

You can download the LG TV Remote app from Google Play Store or Apple App Store and control a TV that is on the same network as your smartphone.

- Now you can enjoy your favourite TV shows on your smartphone. (Some models only)
- You can easily enter your account information to log in.
- You can add your favourite channels on your smartphone.
- You can use the functions such as PREMIUM, MY Apps, and SmartShare™ directly on your smartphone.
- The text input function is supported, so you can enter text easily. (Text cannot be entered on some screens.)
- Select the app's touch pad to control the cursor in the same way the pointer of the Magic Remote Control works.
- You can control the game app of the TV by selecting the Game Pad in the LG TV Remote app.

- Keypad will allow you to control some set-top box and media devices. (Some models with specified conditions only.)
 - You can set the TV to the power-saving mode while watching TV on your smartphone.
 - You can capture the screen you are watching and share it through social network services such as Twitter and Facebook.
-  The supported functions may vary depending on the TV or the version of the LG TV Remote app.

❑ To use a USB wired/wireless mouse

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

Mouse	Magic Remote Control
Left Button	OK Button on Magic Remote Control
Wheel Button	Wheel Button on Magic Remote Control

- ✎ The right mouse button and any special buttons will not work with the TV.
- ✎ The usability of a wireless USB mouse and keyboard may be affected by Radio Frequency environment and the distance.

❑ To use a USB wired/wireless keyboard

Connect your keyboard to a USB port on the TV. You can enter text with the keyboard when using the search function and the Web browser.

✎ Text cannot be entered on some screens.

✎ It is recommended to use a product which has been tested for compatibility with LG TVs.

LOGITECH K200, LOGITECH K400, MICROSOFT Comfort Curve 2000,
MICROSOFT MS800, and LG Electronics ST-800

✎ You can change the input language by pressing the language switch key (or the right Alt key) on your keyboard.

❏ To use a gamepad

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

✎ It is recommended to use an authorized gamepad which is 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 (wired) and SONY PLAYSTATION(R)3 Controller

SMART ⇒ Settings → SUPPORT → Software Update

Uses Software Update to check and obtain the latest version.

It is also possible to check manually for available updates.

Software Update	Set it to On . If an update is available, a prompt will appear to perform the update.
Automatic update mode	If an update is available, the update automatically starts without prompting.
Check Update Version	Checks the version installed and when an update is available, the download process can be performed manually.

- ✎ When the update starts, the update progress window appears for a short time and disappears.
- ✎ 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.

If the following symptoms occur, please recheck the system. It may not be a failure.

❑ General

Problem	Solution
Cannot view certain channels.	• Adjust the location or orientation of the antenna. • Save the desired channels on Auto Tuning or Channel Edit.
After turning on the TV, there is a delay before full images appear.	• It is not a problem because this process was intended to clean up the image noises that may occur when turning on the TV.

❏ Pictures

SMART  ⇒ **Settings** → **SUPPORT** → **Picture Test**

Check if the image signal output is normal by beginning with Picture Test.

If there is no problem with the test image, check external device connections or broadcast signals.

Problem	Solution
Images from previous channel or other channels linger or the screen shows annoying lines.	• Try adjusting the antenna to the direction of the TV station or refer to the manual for proper way to connect the antenna.

Problem	Solution
Vibrating horizontal/vertical lines and fishnet patterns appear momentarily.	• Such a problem may happen when there is strong electronic interference. Turn off other electronic devices such as mobile phones, power tools and other small electrical appliances.
The screen display freezes or does not work properly in digital broadcast.	• It may happen when the signals are weak or the reception unstable. Adjust the antenna's orientation or cable connections. • If the signal strength or quality is low on Manual Tuning, call the TV station or administration office for checkup.
Digital broadcast is not on even though the cable is connected.	• Check with cable operator regarding the subscription and/or signal. (Depending on the subscription, digital broadcasting may not be supported.)

Problem	Solution
Image is not on or not clear when connected to HDMI.	• Check the HDMI® cable specifications. Use only HDMI® cable. Other cables may cause images to fade in and out or not be displayed properly. • Verify that all cable connections are securely connected. When connections are not secure, images may not be properly displayed.
Does not work when USB storage device is connected.	• Verify that the USB device and cable is version 2.0 or higher.

❏ Sound

SMART 🏠 ⇒ **Settings** → **SUPPORT** → **Sound Test**

Try Sound Test first to verify that sound signal output is normal.

When the test sound is normal, check external device connections or broadcast signals.

Problem	Solution
Screen display is on but no sound.	• Check other TV channels. • Make sure the TV Speaker is set to On.
For analog broadcast, stereo is not clear or sound comes from one speaker only.	• In a poor reception area (areas with weak or unstable signal) or if multi audio is not stable, select Mono on Multi Audio. • Adjust the balance with the Navigation button.

Problem	Solution
TV sound is not in sync with the lips or the sound breaks up occasionally.	• If it happens on a certain TV channel, it may be caused by problems with an individual station's broadcast signal. Check with the TV station or local cable operator.
Whenever changing the channel, the volume is different.	• Depending on the channel, there can be differences in volume. • Please set Auto Volume to On.

Problem	Solution
On certain channels, sound does not come out or only the background music plays. (If it is a program created for overseas)	• On Language, set Language → Audio Language as the desired language. Even if the language on Multi Audio is changed, once the power is turned off or the channel is changed, the default settings will be reset.
There is no sound when connected to HDMI/USB.	• Verify that the HDMI® cable is high speed. • Check if the USB device and cable is version 2.0 or higher. • Use only regular music (*.mp3) files.

❑ PC connection problem

Problem	Solution
The screen display is not on after connecting to the computer.	• Verify that the computer and the TV are securely connected. • Turn the TV off and back on using the remote control. • Restart the PC with the TV on. • Check if the resolution is correctly set for PC input. • To use the TV as a secondary monitor, check if the connected desktop or laptop supports dual monitor displays. • Reconnect the HDMI cable.
There is no sound after connecting the computer with the HDMI cable.	• Check with the video card manufacturer to ensure it supports HDMI voice output. (Video cards manufactured in DVI format require connection of a separate sound cable.)

Problem	Solution
When connected to the computer, the display is partially cut off or shifts to one side.	• Set up the resolution supporting PC input. (If it does not work, please reboot the computer.)

❑ Trouble with replaying movies in My Media.

Problem	Solution
Files on the Movie List are not displayed.	• Check if the file on the USB storage device can be read on a computer. • Check that the file extension is supported.
"This file is invalid." The above error message appears or the image display is not normal even though the sound is okay.	• Verify that the file replays normally on the video player in the computer. (Check for damaged files.) • Check if the resolution is supported by the computer. • Verify that the video/audio codec is supported. • Verify that the frame rate is one that is supported.

Problem	Solution
"Unsupported Audio." The above error message appears or the sound is not normal even though the image display is okay.	• Verify that the file replays normally on the video player in the computer. (Check for damaged files.) • Check that the audio codec is supported by the computer. • Verify that the bit rate is supported. • Verify that the sample rate is supported.

Problem	Solution
Subtitle is not displayed.	• Verify that the file replays normally on the video player in the computer. (Check for damaged files.) • Check if the video file shares the same name with the subtitle file. • Verify that the video and subtitle files are placed in the same folder. • Verify that the subtitle file format is supported. • Verify that the subtitle language is supported. (Open the subtitle files in Notepad to check for the language.)

 Image shown may differ from your TV.

 For information on requesting service, refer to the TV's menu.

SMART  ⇒ Settings → SUPPORT → Product/Service Info.

Federal Communications Commission (FCC) Statement

You are cautioned that changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- 1 this device may not cause harmful interference, and
- 2 this device must accept any interference received, including interference that may cause undesired operation of the device.

Indoor use only

FCC Caution: for indoor use only, use outdoors or in other modes not covered by this manual may violate the FCC regulation and violate the user authority to use the product. Specially, within the 5.15-5.25 GHz band, U-NII device is restricted to indoor operations to reduce any potential for harmful interference to co-channel MSS operations.

FCC RF Radiation Exposure Statement

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

❑ Industry Canada Statement

This device complies with RSS-210 of the Industry Canada Rules. Operation is subject to the following two conditions:

- 1 this device may not cause interference and
- 2 this device must accept any interference, including interference that may cause undesired operation of the device

❑ Avis d'Industrie Canada

Cet appareil est conforme à la norme CNR-210 des règlements d'Industrie Canada. Son fonctionnement est sujet aux deux conditions suivantes :

- 1 Cet appareil ne doit pas provoquer d'interférences et
- 2 Cet appareil doit accepter toutes les interférences, y compris celles pouvant entraîner son dysfonctionnement.

IC Radiation Exposure Statement

This equipment complies with IC radiation exposure limits set forth for an uncontrolled environment.

NOTE: THE MANUFACTURER IS NOT RESPONSIBLE FOR ANY RADIO OR TV INTERFERENCE CAUSED BY UNAUTHORIZED MODIFICATIONS TO THIS EQUIPMENT. SUCH MODIFICATIONS COULD VOID THE USER'S AUTHORITY TO OPERATE THE EQUIPMENT.

☐ Avis d'Industrie Canada sur l'exposition aux rayonnements

Cet appareil est conforme aux limites d'exposition aux rayonnements d'Industrie Canada pour un environnement non contrôlé.

REMARQUE : LE FABRICANT N'EST PAS RESPONSABLE DES INTERFÉRENCES RADIOÉLECTRIQUES CAUSÉES PAR DES MODIFICATIONS NON AUTORISÉES APPORTÉES À CET APPAREIL. DE TELLES MODIFICATIONS POURRAIENT ANNULER L'AUTORISATION ACCORDÉE À L'UTILISATEUR DE FAIRE FONCTIONNER L'APPAREIL.

☐ COFETEL(Para México)

La operación de este equipo está sujeta a las siguientes dos condiciones:

- (1) es posible que este equipo o dispositivo no cause interferencia perjudicial y
- (2) este equipo o dispositivo debe aceptar cualquier interferencia, incluyendo la que pueda causar su operación no deseada.

LG Recycling Policy

LG Electronics offers a customized e-waste take-back & recycling service that meets local needs and requirements in the countries where e-waste regulations are in place, and also provides product and packaging take-back & recycling service voluntarily in some countries. LG Electronics evaluates products' recyclability at the design step using LG's recyclability evaluation tool, with the goal of improving recyclability where practicable. Through these activities, LG seeks to contribute to conserving natural resources and protecting the environment.

For more information about the LG Recycling Policy, please visit our global site at <http://www.lg.com/global/sustainability/environment/take-back-recycling>