

User Guide

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

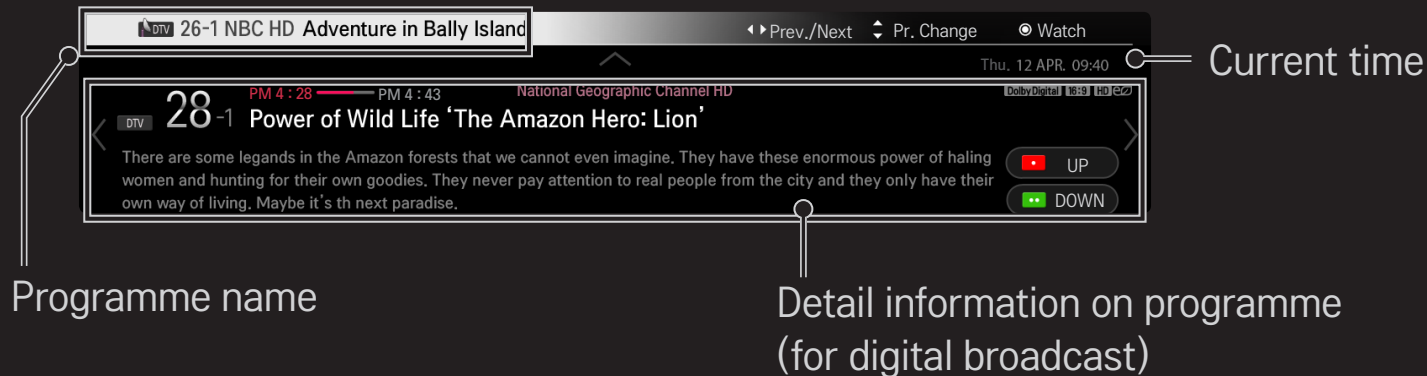
The contents of this guide are subject to change without prior notice for quality improvement.

❑ To view programme information

Displays information on current programme 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 programme details will be displayed at the bottom of the TV screen.

✍ Image shown may differ from your TV.



❑ To set favourite programmes

SMART  ⇒ Settings → SETUP → Programme Edit

- 1 Move to the desired programme and press Wheel (OK) button. Programme is selected.
- 2 Press FAV button to set as favourite.
- 3 Select the desired Favourite Pr. Group.
- 4 Select OK. Favourite is set.

❑ To use Favourite

SMART  ⇒ Programme List

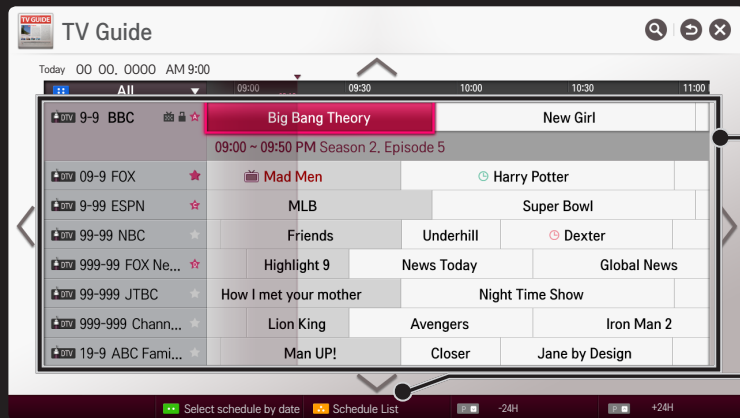
Programme list will appear. Selects the desired preset favourite programme from Favourite List A to D.

SMART ⇒ TV Guide

[In Digital Mode Only]

Obtains information about programmes and airing times. Obtains programme information and schedules viewing / recording.

[Image shown may differ from your TV.]



Press **Wheel (OK)** button after moving to a programme of your choice to view or view / record.

After viewing the schedule list, makes revisions or deletions.

Makes schedule reservation by selecting date / time / programme. Makes repeat schedule reservation.

❑ Automatically Setting Up Programme

SMART  ⇒ **Settings** → **SETUP** → **Auto Tuning**

Automatically tunes the programmes.

1 Initiate **Auto Tuning**.

2 Set Auto Tuning following screen instructions.

- ✎ If Input Source is not connected properly, programme registration may not work.
- ✎ **Auto Tuning** only finds programmes that are currently broadcasting.
- ✎ If **Lock System** is turned on, a pop-up window will appear asking for password.

❏ To use Manual Tuning

SMART  ⇒ **Settings** → **SETUP** → **Manual Tuning**

Adjusts programmes manually and saves the results.

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

❏ To edit programmes

SMART  ⇒ **Settings** → **SETUP** → **Programme Edit**

Edits the saved programmes.

Set as favourite programme, block/unblock programme, skip programme etc. of the selected programme.

123 (Magic remote control) ⇒ **GUIDE** (Screen Remote Control)

(or press the **INFO** button.)

[In Digital mode Only]

This system has an MHEG (Multimedia and hypermedia information coding expert group) to help your navigation through all the possible viewing options.

SMART ⇒ Settings → PICTURE → Aspect Ratio

Selects the screen aspect ratio.

16:9	Resizes images to fit the screen width.
Just Scan	Displays video images in the original size without removing parts of the edge of the image.  In DTV, Component, HDMI, and DVI (over 720p) mode, Just Scan is available.
Original	When your TV receives a wide screen signal it will automatically change to the picture format broadcasted.

Full Wide	When TV receives the wide screen signal, it will let you adjust the picture horizontally or vertically, in a linear proportion, to fill the entire screen fully. 4:3 and 14:9 video is supported in full screen without any video distortion through DTV input.  In DTV mode, Full Wide is available.
4:3	Resizes images to the previous standard 4:3.
14:9	You can view a picture format of 14:9 or a general TV programme in the 14:9 mode. The 14:9 screen is viewed in the same way as in 4:3, but is moved up or down.
Zoom	Resizes the image to fit the screen width. The top and bottom parts of the image may be cut off.
Cinema Zoom	Choose Cinema Zoom when you want to enlarge the picture in correct proportion.

- ✎ 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 fixed to **Just Scan**.

SMART ⇒ Settings → PICTURE → Energy Saving

Reduces power consumption by adjusting screen brightness.

Off	Turns off 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

Sets the best picture / audio optimized for different AV modes.

Off	Operates with the value set in 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 programme.

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 images that have been optimized for movies or games.



Menu for adjusting picture quality that allows experts and aficionados 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 / Colour / Tint / Colour 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.

Colour	Adjusts the colours on the screen darker or lighter.
Tint	Adjusts the red/green colour balance.
Colour Temp.	Adjusts the overall tone of colours 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**

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 Colour	Adjusts colours for more natural-looking colours.

Preferred Colour	Skin Colour : Skin colour spectrum can be separately set to implement the skin colour as defined by the user.
	Grass Colour : Natural colour spectrum (meadows, hills, etc.) can be separately set.
	Sky Colour : Sky colour 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 colours that can be expressed.
Colour Filter	Filters a specific colour 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.
Colour Management System	This is a function used by experts when they adjust colours using a test pattern of six colours (Red / Green / Blue / Cyan / Mgt / Yellow) without affecting other colour areas. For normal images, adjustments may not result in noticeable colour 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 to 3.
Clear	De-Judder / De-Blur value is set to 7.
Clear Plus	The screen appears clearer when Clear is selected.  Clear Plus cannot be selected in 3D mode.
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

This function is depending on model.

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 natural black tones. Uses this setting for viewing movies.
Medium	Deepens black tones compared to Low . Uses 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 a level of your choice 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 manual adjustment of sound bands.
Reset	Resets the equalizer value changed by the user.

❏ To use Smart Sound Mode

SMART  ⇒ **Settings** → **SOUND** → **Smart Sound Mode**

Provides the 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 5.1ch-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 . Different volume outputs from programme to programme. They are then automatically adjusted for convenient TV watching, when clicking through different programme.
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 the screen image.

TV Speaker

[Depending on model]

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

The "-" button makes the sound output faster and the "+" button slower than the default value.

External Speaker

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

The "-" button makes the sound output faster and the "+" button slower than the default value.

 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 on 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 TV's speakers

[Depending on model]

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

Sound is output through the TV speaker.

❑ To use External Speaker

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

[Only available 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
	HE-AAC	Dolby Digital
PCM	All	PCM

❑ To connect and use LG audio device

LG audio device allows you to enjoy rich powerful sound easily.

❑ Wired Connection

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

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

 Only available for models with the optical digital port.

❑ Wireless Connection

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

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 wirelessly connecting, 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 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.
- ✎ If **LG Sound Sync (Wireless)** is being selected and you turn on the TV, it 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 wirelessly connecting, 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 Analogue 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 set the analogue out.

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

❏ DTV Sound Setting

SMART  ⇒ Settings → SOUND → DTV Sound Setting

[Depending on model]

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

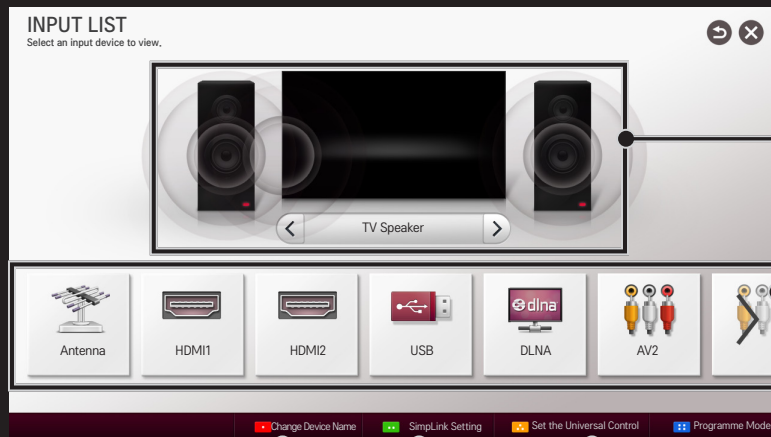
If set to **AUTO** the search order is HE-AAC → Dolby Digital+ → Dolby Digital → MPEG and output is produced in the first Audio Format found.

- ✎ If the selected Audio Format is not supported, another Audio Format may be used for output.

❑ To select an external input

SMART  ⇒ Input List

Selects external input.



Selects speaker.

Selects input.

Edits the name of external device connected to external terminal.

Sets SimpLink.

Sets the Programme mode.
[Depending on country]

Sets OSS.
[Depending on country]

❑ To use SimpLink

SimpLink is a feature that enables you to control and manage various multimedia devices conveniently using the TV remote control only via the SimpLink menu.

- 1 Connect the TV's **HDMI IN** terminal with the SimpLink device's HDMI output terminal using an HDMI cable. For home theatre units with a SimpLink function, connect HDMI terminals as above, and use an optical cable to connect Optical Digital Audio Out from the TV to Optical Digital Audio In of the SimpLink device.
- 2 Select **SMART**  ⇒ **SimpLink**. SimpLink menu window appears.
- 3 Select **Set SimpLink** on SimpLink menu window. SimpLink setup window appears.
- 4 Set **SimpLink** to **On** in SimpLink setup window.
- 5 Close SimpLink setup window.
- 6 Select the device to control from **SMART**  ⇒ **SimpLink**.

- ✎ This function only works on devices with the SimpLink logo (). Verify that the external device has a SimpLink logo.
- ✎ To use the SimpLink function, you need to use a high-speed HDMI® cable (with CEC, or Consumer Electronics Control, feature added). High-speed HDMI® cables have the No. 13 pin connected for information exchange between devices.
- ✎ Turn on or select the media of a device with home theatre features to see the speaker switch to **External Speaker**.
- ✎ Connect with an Optical cable (sold separately) to use **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.
- ✎ Optical cable connection is supported only for models with the optical digital port.

□ Explanation of SimpLink features

Direct Play	Plays the multimedia device on the TV instantly.
Select multimedia device	Selects the desired device via the SimpLink menu to control it from the TV screen instantly.
Disc playback	Manages the multimedia device with the TV remote control.
Power off all devices	If the Auto Power function is set to On in the SimpLink settings, turning the TV off 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 either on the home theatre unit or the TV.

❏ To use Sleep Timer

SMART  ⇒ Settings → TIME → Sleep Timer

Turns off the TV after a preset 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 programmes by blocking channels or external input.

Select the Lock System to On.

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

SMART ⇒ Settings → OPTION → Language(Language)

Selects Menu Language and Audio Language displayed on the screen.

Menu Language	Selects a language for the display text.
Audio Language	[In Digital Mode Only] When watching a digital broadcast containing several audio languages, you can select the language you want.
Subtitle Language	[In Digital Mode Only] Use the Subtitle function when two or more subtitle languages are broadcast.  If subtitle data in a selected language is not broadcast, the default language subtitle will be displayed.
Voice Recognition Language	Select the language to make voice search.  Only the voice search adopted model can support this setting.

❏ To set Hard of Hearing

SMART  ⇒ Settings → OPTION → Hard of Hearing

This function is used for the hearing impaired.

If it is set to on, the subtitle is displayed by default.

❑ To register the Magic Remote Control

(Depend on model.)

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

Register Magic Remote Control as follows before use.

- 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 the 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 together for about 5 seconds. Once reset, the RF transmitter light will blink.
 - 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	Selects a pointer shape from various options.
Size	Chooses the size of the pointer.
Auto Cursor Alignment	Set 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 centre, 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 common remote control.
- ✎ Use within an effective distance of 33 ft. (10 metres). 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 ovens and wireless LANs use the same frequency range (2.4 GHz) as the Magic Remote Control and may cause interference.
- ✎ The Magic Remote Control may be broken if dropped or damaged in any other way.
- ✎ Take care not to bang it against other hard objects such as furniture or the floor.

❏ 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.
<i>123</i>	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.
------------	--

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** → **Factory Reset**

Deletes all optional settings and returns to initial default mode.

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

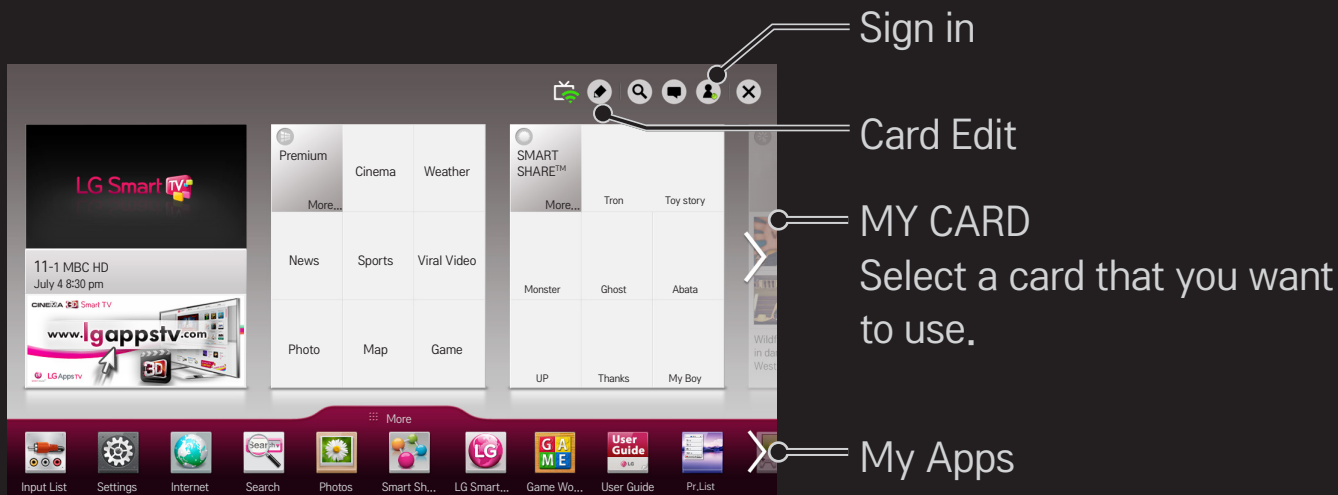
 If **Lock System** is activated, a pop-up password prompt will appear.

 Do not turn off the power during initialisation.

❑ To use Home Screen

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

With all Smart TV features on one screen, everyone can access a wealth of content and applications conveniently via the quick and easy-to-use menu, arranged by themes such as Live TV, Card, My Apps, etc.



❏ 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.

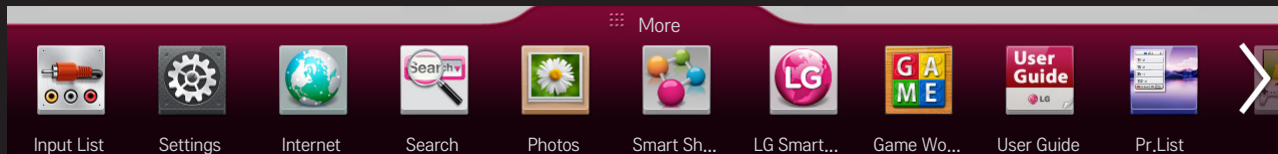
Select **Edit** at the top of the home screen to switch the position of the cards or create your own card. (You cannot edit the **Live** and **Premium** cards.)

☐ 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.



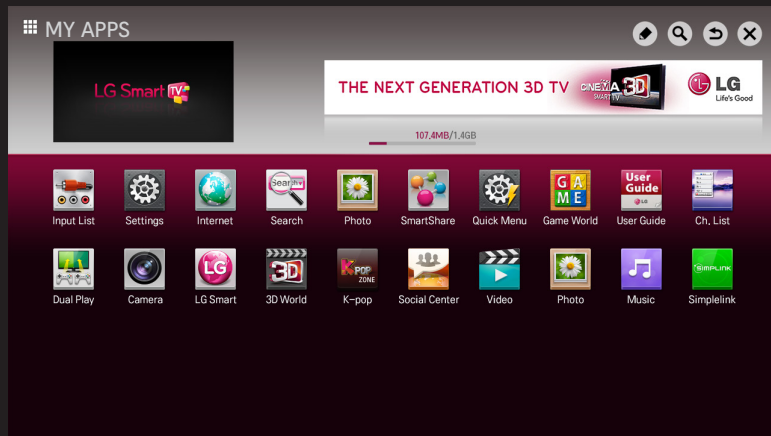
Select the app you want to run.

❏ 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.

✎ Changes orders / deletes items by dragging the app icons if your device has a Magic Remote Control.



A wireless or wired network connection is required to use Smart features.

When connected to the network, you can use Premium content, LG Smart World, DLNA and more.

❑ One-click network connection

Connects easily to a wired/wireless network.

SMART  ⇒ Settings → NETWORK → Network Connection to connect to an available network automatically. Follow the prompts on the TV.

❑ To connect to a network through Set Expert

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

For use in special circumstances such as in offices (in cases where a static IP is used).

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

AP List	Connects to the network selected from the AP List.
Enter the SSID	Connects to the wireless AP typed in.

WPS-PBC

Connects easily when the button of a wireless AP supporting PBC is pressed.

WPS-PIN

Connects easily when the PIN of the wireless AP that you wish to connect to is entered in to the AP website.

❑ To use the 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 Internet connection. 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 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 not use it, please change it to **Off**.)
- 2 Enable the **Miracast™/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 provide the Intel's WiDi function only.
- ✎ 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.

❏ Setting a network - warning

- ✎ Use a standard LAN cable (Cat5 or higher with RJ45 connector, 10 Base-T or 100 Base TX LAN port).
- ✎ Resetting your modem can cause network connection problems. To resolve the problem, turn the power off, disconnect and reconnect, and then turn the power back on.
- ✎ LG Electronics is not responsible for any network connection problems or any faults, malfunctions and errors caused by an network connection.
- ✎ A network connection may not work properly depending on the Internet service provider.

- ✎ A DSL modem is required for a DSL service; a cable modem is required for a cable service. Only a limited number of network connections may be available, and TV network setting may not be available depending on your contract with your Internet Service Provider (ISP). (If only one device is allowed per line and the PC is already connected, other devices cannot be used.)
- ✎ Wireless networks can be subject to interference from other devices operating at a frequency of 2.4 GHz (wireless phones, Bluetooth devices or microwave ovens). There may also be interference from devices with a frequency of 5 GHz, same as other Wi-Fi devices.
- ✎ The surrounding wireless environment can cause the wireless network service to run slowly.
- ✎ If you do not turn off the entire local home network, network traffic may occur on some devices.

- ✎ For an AP connection, an access point device that supports wireless connection is required and the wireless connection feature must be enabled on the device. Contact your service provider regarding availability of wireless connection on your access point.
- ✎ Check the SSID and security settings of the AP for AP connection. Refer to the appropriate documentation for SSID and security settings of the AP.
- ✎ Invalid settings on network devices (wired/wireless line sharer, hub) can cause the TV to run slowly or not operate properly. Install the devices correctly according to the appropriate manual and set the network.
- ✎ Connection method may differ according to 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 or **Miracast™/Intel's WiDi** of the smart TV is set to **On**.

- ✎ Do not attach the sticker to a metal part of the TV. Otherwise, your smartphone cannot recognise the Tag On sticker.
- ✎ Do not crumple or fold the Tag On sticker. Otherwise, the Tag On is not recognised
- ✎ To purchase a Tag On sticker, please contact the LG Electronics Service Centre.
- ✎ 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 the 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 device

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

To remove a USB storage device, select the **Quick Menu → USB Device** that you wish to remove; do not remove physically until you see the message that the USB has been removed. If detached early, an error may occur on the TV or the USB storage device.

- 🔧 Once a USB device has been selected for removal, it can no longer be read. Remove the USB storage device and then re-connect it.

❏ Using a USB storage device - warning

- ✎ If the 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 may work incorrectly.
- ✎ If you use a USB extension cable, the USB device may not be recognized or may not work properly.
- ✎ Use only USB storage devices formatted with the Windows FAT32 or NTFS file system.
- ✎ For external USB HDDs, it is recommended that you use devices with a rated voltage of less than 5 V and a rated current of less than 500 mA.
- ✎ 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.)

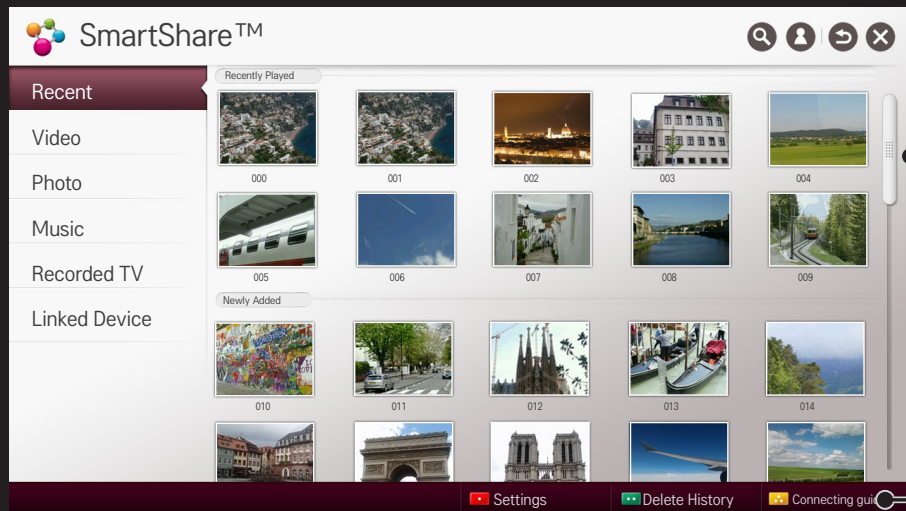
- ✎ It is recommended that you use USB memory sticks of 32 GB or less and USB HDDs of 2 TB or less.
- ✎ If a USB HDD with power-saving function does not work properly, turn the power off and on. For more information, refer to the user manual of the USB HDD.
- ✎ Data in USB storage device can be damaged so be sure to back up important files to other devices. Data maintenance is the user's responsibility and the manufacturer is not responsible for data loss.

❏ To use SmartShare™

SMART  ⇒ SmartShare™

Provides photo / music / video files on your TV by connecting to a USB device or home network (DLNA).

 Image shown may differ from your TV.



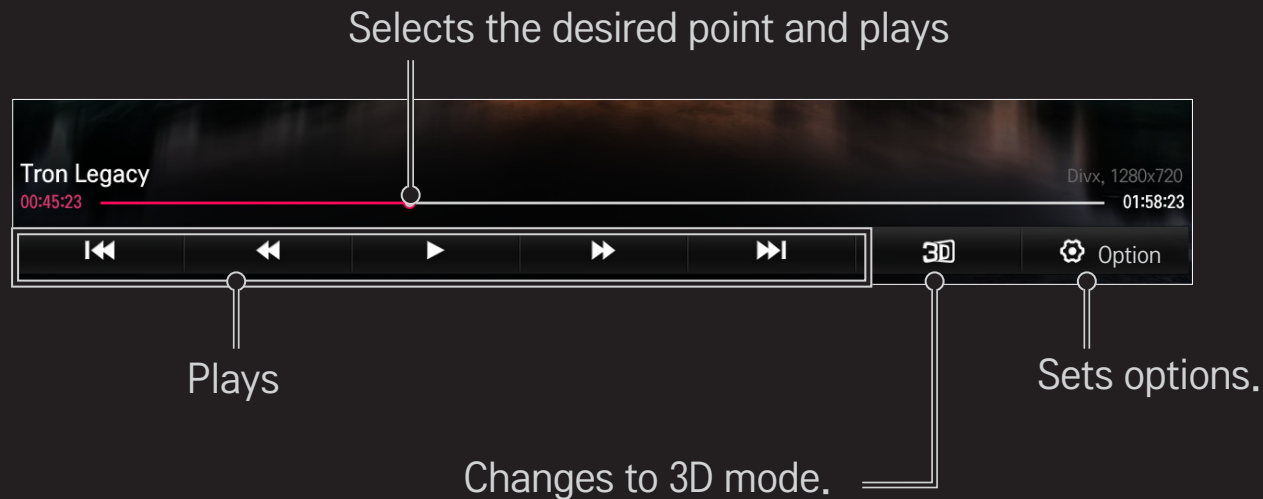
Displays photo / music / video files on all devices connected to the TV.

Shows how to connect PC, smartphone/device, and USB.

❏ To control video playback

Controls playback and sets options while viewing videos.

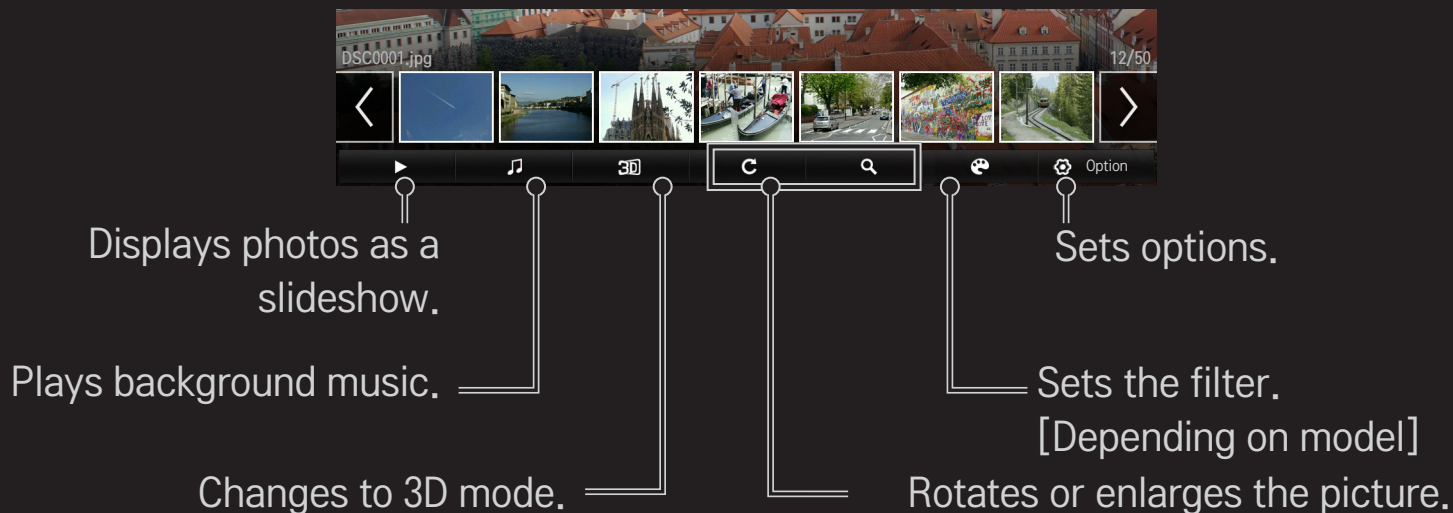
✎ Image shown may differ from your TV.



❏ 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

Listens to music with the monitor turned off.

Plays

Sets the repeat/random function.

- ✎ 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 playback.

❑ **Advanced Setting**

My TV Name	Changes the name that appears when searching for the TV from other devices.
Auto Play on Receive	Accepts / rejects content transferred 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.

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.

- ✎ Rented/purchased DivX files cannot be played if the DivX Registration Code of a different device is used. Use only the DivX Registration Code granted to this device.
- ✎ Converted files not conforming to the DivX Codec Standard may not play or may produce abnormal images and sound.

❑ SmartShare™ supporting file

Maximum data transfer rate :

- Full HD
1920 X 1080: 20 Mbps (megabits 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 subtitle formats supported :

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

Internal subtitle formats supported :

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

Extension	Codec	
.mp4 .m4v .mov .3gp .3g2	Video	H.264/AVC, MPEG-4 Part 2
	Audio	AAC, MPEG-1 Layer III (MP3)
	Video	H.264/AVC, MPEG-4 Part 2
	Audio	AAC, AMR-NB, AMR-WB
.mkv	Video	H.264/AVC
	Audio	HE-AAC, 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, AAC

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), AAC

□ 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

❏ Playing video - warning

- ✎ Some subtitles created by users may not work properly.
- ✎ The video and subtitle files should be placed in the same folder. For subtitles to display correctly, the video and subtitle files must have the same name.
- ✎ 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, AAC, HE-AAC
.ts	Video	H.265(HEVC)
	Audio	Dolby Digital, Dolby Digital Plus, AAC, HE-AAC

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

- ✎ The file size limit is dependent on the encoding environment.
- ✎ It works only the above version of Window Media Audio V2.
- ✎ It's not supported AAC Main Profile.
- ✎ 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 the USB device that do 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 you to enjoy video / music / photo files stored on a PC or server on your TV via home networking.

❑ To connect a DLNA-authenticated Smartphone

The TV and the smartphone should be on the same network.

- 1 Ensure that Wi-Fi is enabled on the smartphone.
- 2 Install / run the app to share content on the smartphone.
- 3 Run “Share my mobile phone Content”.
- 4 Select the kind of content (video / music / photo) you wish 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 you want to play content from.
(TV model name is on the label of the device.)
- 8 Play ► Shows the selected file on TV.

❑ To connect DLNA DMR (Digital Media Renderer)

If the PC's operating system is Windows 7 or Windows 8 or the DLNA-certified device (e.g. mobile phone) is connected via a network, you can play music / videos / photos on TV without installing a separate program.

- 1 Configure TV and PC on the same network. Configure Windows 7 or Windows 8-installed PC on the network.
- 2 Right-click the music / video / photo file that you want to play and use the “Remote Playback” feature that comes with Windows 7 or Windows 8. To play content from a device such as a mobile phone, refer to the user guide for the device.
- 3 Content will be played on one device only even if more than one TV or device is connected. Play speed can vary depending on network speed.

❑ To connect DLNA DMP (Digital Media Player)

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

- 1 Configure TV and PC on the same network. The TV and each device should be connected through a single access point to enable DLNA service.
 - 2 Install SmartShare PC Software on the PC from the website. Before installation, close all running programs including firewall and anti-virus programs.
 - 3 The sever should be running in order to watch the shared file 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.

□ In case of a DLNA malfunction

- ✎ If the DLNA feature does not work properly, check your network settings.
- ✎ A 5GHz access point is needed to view 1080p videos via DLNA. A 2.4GHz access point may cause frequent buffering or other problems.
- ✎ DLNA may not work properly in the wireless network. It is recommended to connect to the wired network.
- ✎ When playing video in DLNA mode, Multi Audio and internal subtitles are not supported.
- ✎ 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 the DLNA device.
- ✎ DLNA feature may not work properly depending on the network environment.
- ✎ DLNA feature cannot be used with some access points that do not support

multicasting. For more information, refer to the access point manual or consult the manufacturer.

- ✎ Supported file types may differ depending on DLNA server environment, even for file types supported by the TV.
- ✎ Too many sub-folders and files in one folder may cause malfunction.
- ✎ The information about the file from the DLNA server may not be displayed correctly.
- ✎ When viewing video subtitles on a DLNA server, we recommend that you use SmartShare PC Software.
- ✎ If subtitle file is added later, turn off the shared folder and reset.
- ✎ DRM file / *.tp file / *.trp file / *.mpo file located on a SmartShare PC Software server cannot be played.
- ✎ **ULTRA HD** video (3840 X 2160) file does not work.

✎ DLNA supports *.JPG image only.

✎ Because of the oneseft function DLNA restriction, DLNA supports video format less than USB, *.rmvb and *.rm are not support.

❑ 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 various kinds of hot paid/free apps including education, entertainment, life and news.

 Image shown may differ from your TV

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 to up to five TVs with a single ID.

❏ To install an app on your TV

SMART ⇒ LG Smart World

- 1 Click the **Sign In** button at the top of 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 to check the list of apps installed on TV.

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

❏ To manage my information

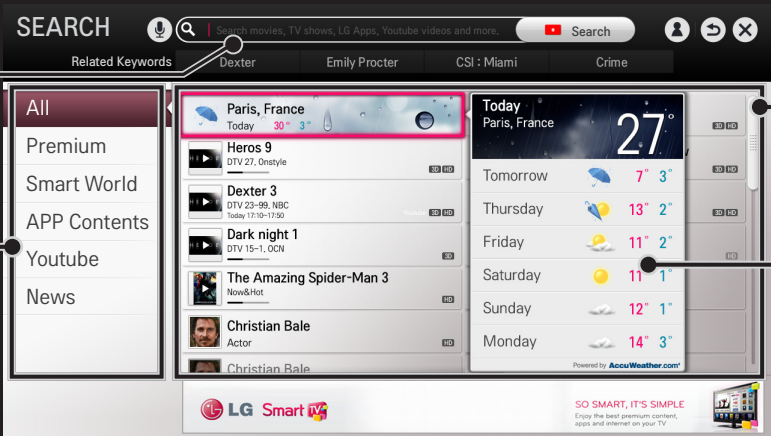
SMART  ⇒ LG Smart World

- 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, visit www.lgappstv.com on your PC.
Payment inquiry	Shows Payment History of the signed-in ID.
Purchased Apps	Shows My Purchased Apps List for the signed-in ID. You can delete/re-install the purchased apps.

SMART ⇒ Search

Smart TV's search function enables efficient searching of Apps and other content. Enter search terms using an input device such as the remote control to search Apps, PLEX Content and parts of Premium Service.



The screenshot shows the LG Smart TV Search interface. At the top, there is a search bar with the text "SEARCH" and a microphone icon. Below the search bar, there are tabs for "Related Keywords", "Dexter", "Emily Procter", "CSI : Miami", and "Crime". The main content area is divided into three sections: "All", "Premium", "Smart World", "APP Contents", "Youtube", and "News". The "All" section is selected, showing a list of search results including "Paris, France", "Heros 9", "Dexter 3", "Dark night 1", "The Amazing Spider-Man 3", "Christian Bale", and "Christian Bale". The "Paris, France" result is highlighted with a red box. To the right of the search results, there is a weather widget showing "Today Paris, France 27°" and a list of weather forecasts for "Tomorrow", "Thursday", "Friday", "Saturday", "Sunday", and "Monday".

Enter search terms.

Category of search results

Search results

Detailed information about the search item

LG Smart TV

SO SMART, IT'S SIMPLE
Enjoy the best premium content,
apps and internet on your TV.

❑ 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.
- 3 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 on the Internet

- 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.
- ✎ It is recommended to use the remote control no further than 10 cm from your face.
- ✎ 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(Language) → Voice Recognition Language.
- ✎ You can set Avatar to On/Off in **SMART**  ⇒ Settings → **OPTION** → See Avatar.

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

SMART ⇒ Internet

Types URL manually on TV or visits websites added to Favourite.

Types in the web address.

Add the current page to favorites.

Chooses when you
open several web
browsers.



- ✎ **Internet** supports up to Flash 11 but does not support platform-dependent technology like ActiveX.
- ✎ **Internet** only works with a pre-installed plug-in.
- ✎ **Internet** may not play any media file format other than the following:
JPEG / PNG / GIF
- ✎ **Internet** will be forcibly closed when there is insufficient memory.
- ✎ **Internet** uses LG-provided fonts so texts may not display correctly on the screen depending on the content.
- ✎ **Internet** does not support file and font download.
- ✎ **Internet** is made for TV so it may have a different function to browsers made for PC.
- ✎ **Internet** 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 should 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 appears while the microprocessor and hardware are rebooted, network communications are set up, and communication with SDP (device authentication and basic information download) is established. This takes about 20 seconds and is a normal process.
There is no content shown on the Premium card.	Content may not be shown if you change the country setting on Smart TV. Change country in SMART  ⇒ Settings → OPTION → Service Country Setting.

Problem	Solution
While using internet features, some websites contain empty spaces.	• The TV's internet supports up to Flash 11 and only plays files in the following formats : JPEG, PNG, GIF
Internet closes automatically when visiting a website.	• The internet may be forced to close if memory is insufficient for the volume of information on a web page.
I have already signed up on the TV. Do I need to sign up again on the website (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 on a single TV?	• You can register and use more than one ID on one TV. • You can view the IDs registered on the TV in 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 My Apps.
What should I do if I forget my ID?	• If you signed up via a PC, use the "Forgot ID?" feature on the website (www.lgappstv.com). • If you signed up on the TV, IDs can be viewed in SMART  ⇒ Sign in → My Page.

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

Problem	Solution
I deleted a paid app - do I have to purchase it 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 TV and PC?	• Check if the TV model supports LG Smart World. • Apps from LG Smart TV's LG Smart World can only be run on LG Smart TV. • Also, you can purchase apps from the website (www.lgappstv.com) but cannot use them on PC or Mac so be careful when purchasing them.

Problem	Solution
How can I find out which ID is currently signed in to 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 my TV. Where can I see the installed app?	• Select SMART  ⇒ My Apps. All paid and free apps installed on the TV are displayed.
The app size shown on screen differs from the actual app size installed on the TV.	• The app size shown on screen includes the additional space needed for installing apps and may differ from the app size as actually installed.

Problem	Solution
I forgot my TV password. 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 save the payment information to purchase paid apps?	• To purchase paid apps, you should have a credit card registered on TV or the website (www.lgappstv.com) or have credit. If you do not want your credit card details to be saved, charge credit in advance. 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 return an app that I have purchased?	• As a member, you may not request a refund if you change 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 your credit ready by charging it on the website to purchase them. - 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 numbers and alphabets to the email address. • You can only use the 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 alphabets to the email address. • If you are already a member, you can still use your existing ID or change it to the email address.
What is the LG account?	• The LG account allows you to sign into all of the LG Smart service 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.

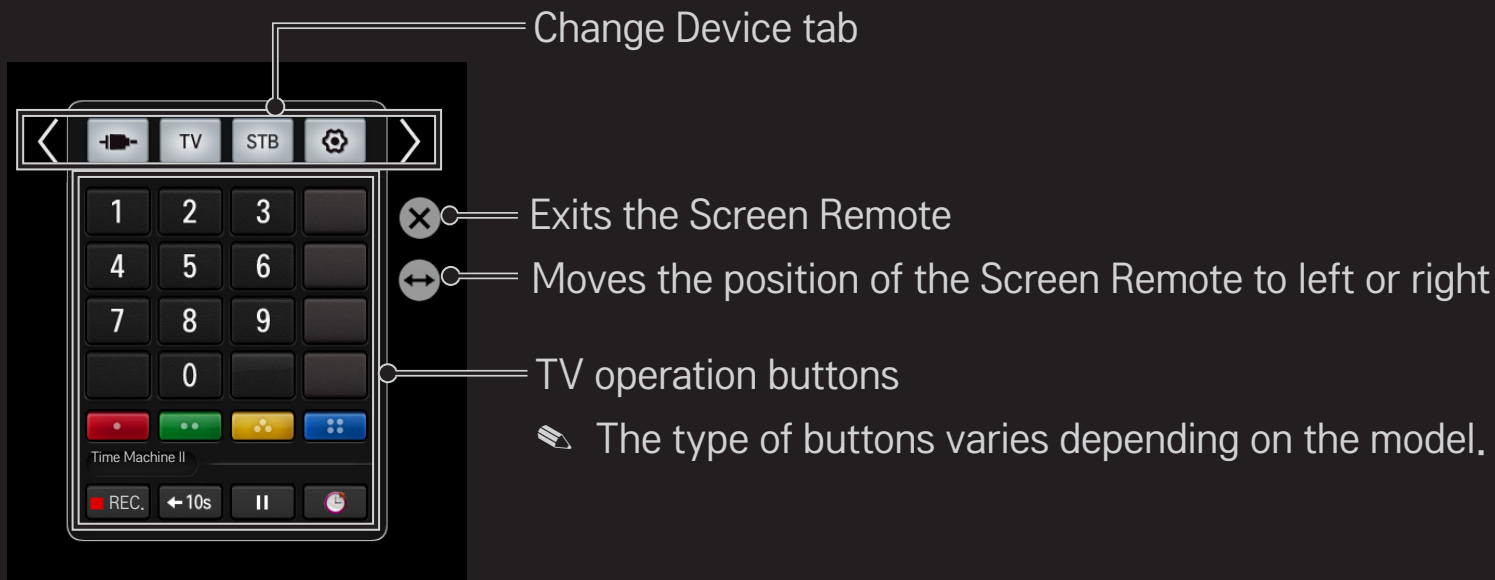
❑ To use Screen Remote

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

Select a button on the Screen Remote displayed on the screen using the Magic Remote Control.

□ To use Screen Remote

- ✎ The type of buttons on the Screen Remote varies depending on the region or the type of a 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 view 3D images

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

- 1 Play a 3D image title or turn to a 3D programme.
- 2 Put on the 3D glasses.
- 3 Press **3D** button to change to 3D imaging.
- 4 To end 3D image viewing, press the **3D** button on the remote control while viewing 3D images.

✎ 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 appropriate 3D depth.

- **3D Depth** : Adjust 3D depth between object and background.
- **3D Viewpoint** : Adjust 3D image (includ object and background) to improve 3D effect.

3D Sound Zooming	Provides the 3D-optimized sound.
3D Pattern Recognition	Converts to 3D screen automatically by analysing the pattern of the original screen.
Normal Image View	You can view the 2D images removed the 3D effect.
3D Colour Correction	Corrects the colour of 3D images.  Depending on model, the 3D Colour Correction may not be available.
3D Image Correction	Switches left/right images of 3D video.

❏ Viewing 3D images – warning

- ✎ 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, you may require an additional device such as a set-top box.

❑ Using 3D glasses – warning

- ✎ Do not use the 3D glasses as a replacement for your own corrective glasses, sunglasses, or protective goggles. Incorrect 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 3D glasses or subject them to any impact. Subjecting 3D glasses to rough handling may damage them.
- ✎ The lenses on 3D glasses (with polarizing film) are vulnerable to scratches. Use only a soft and clean cloth for cleaning. A dirty cloth may scratch the polarizing film.
- ✎ Do not scratch the lens surface of the 3D glasses with sharp objects or clean with chemicals. If the lens surface is scratched, 3D images may not display correctly.

❑ What is Time Machine II ?

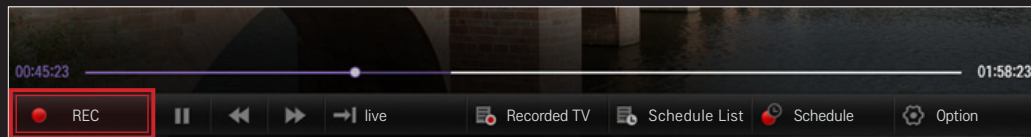
It is a function you can use to record a programme you are currently watching or want to watch and also rewind a programme you are watching in real time.

Immediate Rec	Immediately records a programme you are watching.
Scheduled Rec	Selects a programme you want or sets the time to record.
Play	Plays back the recordings.
TimeShift	Rewinds a programme you are watching in real time.

- ✎ [Depending on model] You can also record digital/analogue programmes transmitted over an RF cable and content played through the AV IN input.
- ✎ Recording copyrighted content, provided with a set-top box using an AV jack, is not supported. Recording genuine DVD/Blu-ray titles is also not supported.
- ✎ All broadcasts are protected by copyright; you may need to obtain permission from the copyright owner prior to reproducing or playing back these broadcasts. If a user records audio or video using this device, the recordings must be for personal use only. Selling, transferring or renting recordings protected by copyright is prohibited.

❑ To use the immediate rec function

- 1 To record what you are watching immediately, press the **Wheel (OK)** button on the Magic remote control and press the **Rec** button on the progress bar that appears.



- 2 The **Rec** button changes to the Recording stop (■) button while recording is in progress.
- ✎ You can also record immediately using the **Rec** button in the **Information** display window or the **Rec** button on the screen remote control.
 - ✎ The maximum time allowed for instant recording is 3 hours with an external USB storage device and 1 hour with the internal storage. To change the end time of the recording, press the **Recording stop** button and set the **Recording end time modify** option.

- ✎ The recordable time may vary depending on the capacity of your USB storage device.
- ✎ When no USB device is connected, the recording is stored in the built-in memory. Connect a USB device to save more recordings.
- ✎ Press the **Wheel (OK)** button while recording to display information about the recording in the top right of the screen.
- ✎ The **Wheel (OK)** button operation may vary depending on your country.
- ✎ If you force your TV to power off while recording, the programme may not be saved. Ideally, you should stop the recording and check that the programme has been recorded before turning the TV off.
- ✎ Some functions may not be available while recording.

❑ To stop recording

Press the **Recording stop** () button on the progress bar, in the Information window or on the screen remote control to select **Recording stop**.

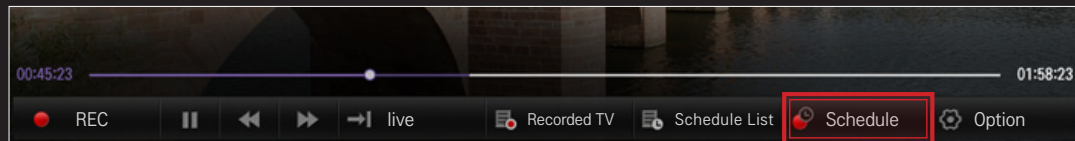
❑ To modify the recording end time

Press the **Recording stop** () button on the progress bar, in the Information window or on the screen remote control to select **Recording end time modify**.

 You can set up to 5 hours for **Recording end time modify**.

❏ To schedule recording

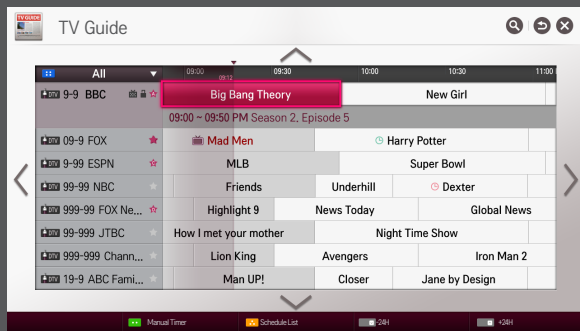
This is a function that allows you to set the date and time to record a programme you want to watch. Press the **Wheel (OK)** button on the Magic remote control and then click **Schedule** on the progress bar that appears.



- ✎ The **Wheel (OK)** button operation may vary depending on your country.
- ✎ You can also use the progress bar (🕒) button on the screen remote control to schedule recording.

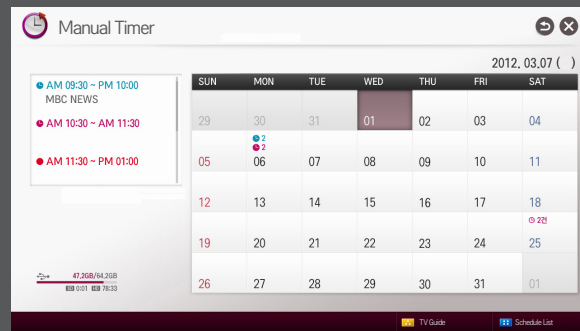
TV Guide

You can select a programme you want to schedule for watching or recording.



Manual Timer

You can select a date, time and channel to schedule the watching or recording time.



- Image shown may differ from your TV.
- When no Programme Guide is available, only the **Manual Timer** menus are displayed.
- The length of the scheduled recording should be at least 2 minutes.

❏ To check or modify the schedule list

Wheel (OK) ⇒ Schedule List

This is a function you can use to check, modify or delete the watching and recording schedule you have set.

- ✎ The **Wheel (OK)** button operation may vary depending on your country.
- ✎ Up to 30 programmes can be added to the **Schedule List**.
- ✎ You can use the progress bar () button on the screen remote control to view the **Schedule List**.

❏ To watch recordings

Wheel (OK) ⇒ Recorded TV

You can view the recordings stored on a USB device. You can select a recording to play or delete.

Play on previous playtime.	Resumes play of a recording you have played back before.
Play from the start.	Plays back the selected recording from the beginning.
Delete	Deletes the selected recording.

📁 Up to 600 recordings can be added in Recorded TV.

📁 You can also view the recordings from SMART 🏠 ⇒ SmartShare™ → Recorded TV.

❏ To manage recordings

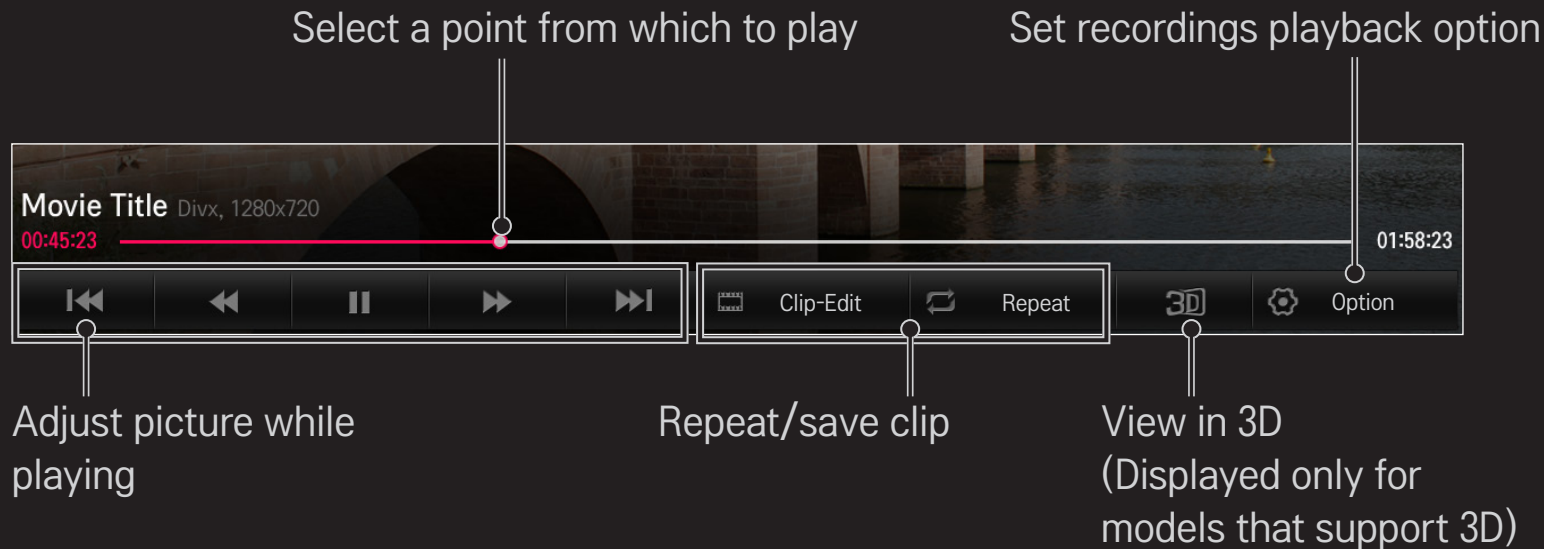
Wheel (OK) ⇒ Recorded TV

Protection	Prevents the selected recording from being automatically deleted.
Delete	Deletes the selected recording.

🖋 You can also view the recordings from SMART 🏠 ⇒ SmartShare™ → Recorded TV.

❑ To control playback of recordings

Press the **Wheel (OK)** button on the remote control while playing.



✎ The picture may differ from the screen on the TV.

❑ To connect a USB device for Time Machine II

- 1 Prepare a USB device to be used for Time Machine II .
 - 2 Connect a USB storage device to the port with the **HDD IN** label at the back or on the side of your TV.
 - 3 To use a USB device only for the Time Machine II function, you must initialise the device.
Select **Wheel (OK)** ⇒ **Option** → **USB storage device initialization** if you connect a device that has not been initialised. The **USB storage device initialization** screen appears.
 - 4 To complete **USB storage device initialization** and use TimeShift, set the **TimeShift** mode to **ON**.
- ✎ You can start **USB storage device initialization** from **SMART** 🏠 ⇒ **Time Machine II** ⇒ **Option** → **USB storage device initialization**.

- ✎ You can use a Hard Disk Drive (HDD) or Solid State Drive (SSD) as a USB device for Time Machine II only.
- ✎ It is recommended that you use a USB device with a capacity between 40 GB and 2 TB.
- ✎ For an SSD, there is a limit to the amount of reading/writing that can be done. Therefore, it is recommended that you use an HDD.
- ✎ To remove a USB device, select **Quick Menu → USB Device**. Make sure you receive the confirmation message that the USB device has been removed.
- ✎ If a USB device is faulty, the Time Machine II function may not operate normally.
- ✎ If you use a USB extension cable, the USB device may not be recognized or may not work properly.

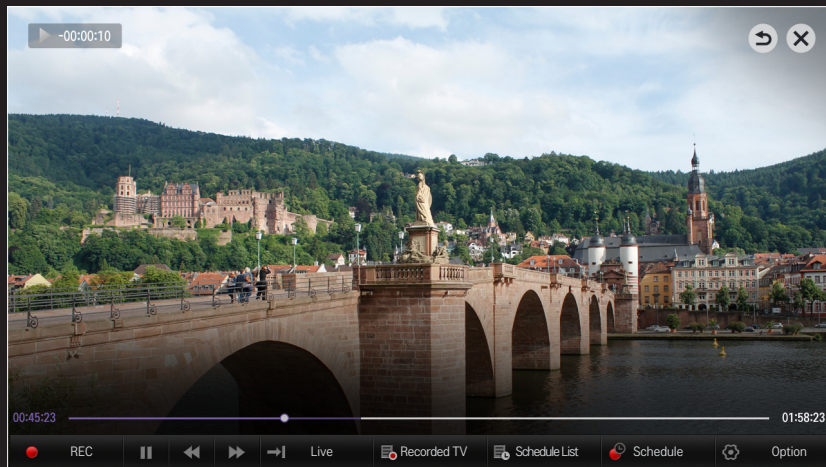
❏ What is TimeShift (real-time playback)?

It is a function you can use to save the programme you are currently watching temporarily on a USB device so you can play back a scene you missed while watching TV. This function allows you to continue watching from where you were previously if you go out for a while.

- ✎ You have to set the **TimeShift** mode to **ON** after connecting a USB device to use the TimeShift function.
- ✎ [Depending on model] This function works for analogue/digital programmes and AV input mode.
- ✎ With the TimeShift function, you can play a programme back for up to two hours. This time may vary depending on your region.
- ✎ While in the TimeShift mode, the picture stored by this function is deleted if you turn off the TV without recording it.

❑ To use the TimeShift (real-time playback) function

Use the left or right navigation button on the Magic remote control to wind the picture you are watching back or forward by 10 seconds.



✎ You can also operate TimeShift using the left or right navigation button on a standard remote control.

❑ To set the Time Machine II functions

Wheel (OK) ⇒ Option

You can change the settings for Time Machine II while using the function.

Recording Quality	[Depending on model] Sets the picture quality of recordings. You can set it to High Quality or Normal Quality.  The recording time may vary depending on the recording quality.
TimeShift	Plays back a scene that you have missed. • ON: Enables the TimeShift function automatically when you turn on the TV. • OFF: Disables the TimeShift function.

Auto deleting	Automatically deletes old recordings when a USB device is full in order to secure space to save new recordings.  Protected recordings are not deleted automatically.
USB storage device initialization	Sets a connected storage device to be used only for Time Machine II . All data saved on the USB device is deleted.

-  A storage device on which **USB storage device initialization** has been performed will not be detected by a PC.
-  Recordings saved on a USB device can be damaged. The manufacturer is not liable for any damaged recordings since it is the user's responsibility to manage data.

❏ To use Time Machine II in various ways

You can use Time Machine II in various ways by combining it with different functions.

Search	Searches for a picture you want. You can search for a programme using a programme name to record immediately or schedule a recording or watching time.
--------	---

✎ Available functions may vary depending on the country.

✎ For a description of each function, refer to the corresponding section in SMART  ⇒ User Guide.

❑ 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 and control the volume.

- ✎ Motion Recognition is only a function for watching TV and it is not supported when using the smart menu, such as when connecting wireless devices, including TV apps or 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**.)



The Motion Recognition may not be working properly if:

- You are in either too bright or too dark place. (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.
- The distance between you and the camera is too close or too far (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.

- ✎ A gesture may not be recognised 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 the 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.

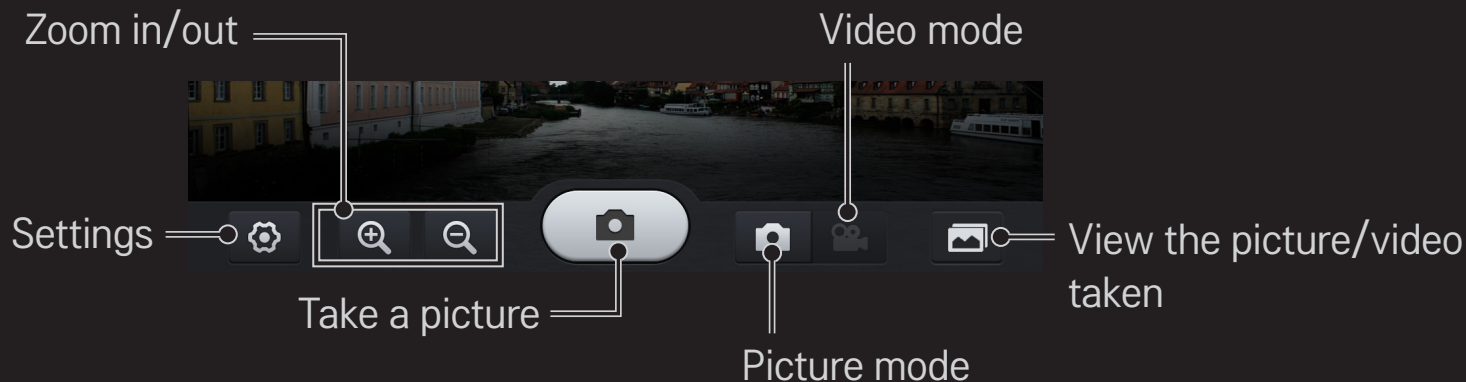


 Image shown may differ from your TV.

□ 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 program, 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.

❑ What is Dual Play mode?

When playing a 1:1 battle 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 game.
 - 4 The 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, the 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 center 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 Supporting Mode [FHD]

Input	Signal	Resolution	Horizontal Frequency (KHz)	Vertical Frequency (Hz)
Composite	480i	720x480	15.73	60
	576i	720x576	15.625	50
Component	480i	720x480	15.73	60
	480p	720x480	31.50	60
	576i	720x576	15.625	50
HDMI/ Component	720p	1280x720	45	60
			37.5	50
	1080i	1920X1080	33.75	60
			28.125	50
	1080p	1920X1080	67.50	60
			56.250	50
			27	24
			33.75	30

❑ Dual Play Supporting Mode [ULTRA HD] : HDCP1.4

Input	Signal	Resolution	Horizontal Frequency (KHz)	Vertical Frequency (Hz)
Composite	480i	720x480	15.73	60
	576i	720x576	15.625	50
Component	480i	720x480	15.73	60
	480p	720x480	31.50	60
	576i	720x576	15.625	50
HDMI/ Component	720p	1280x720	45	60
			37.5	50
	1080i	1920X1080	33.75	60
			28.125	50
	1080p	1920X1080	67.50	60
			56.250	50
			27	24
			33.75	30

Input	Signal	Resolution	Horizontal Frequency (KHz)	Vertical Frequency (Hz)
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 use it on any TV connected with your smartphone.

- Now you can enjoy your favorite TV shows on your smartphone. (Some models only)
- You can easily enter your account information to log in.
- You can add your favorite 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 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 which allows you to control the set-top box and media devices is provided. (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 the USB port. 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 and the special buttons on the mouse do not work.
- ✎ 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 the USB port. You can enter text with the keyboard when using the search function and the Internet.

- ✎ Text cannot be entered on some screens.
- ✎ It is recommended to use the product which is tested for compatibility with LG TV.
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 TV.
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 latest update version installed. When a new 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 the digital broadcast signal or an internet connection.
- ✎ Changing the programme while downloading the software via a digital broadcast signal interrupts the download process. Returning to the initial programme allows downloading to resume.
- ✎ If software is not updated, certain functions may not work properly.

If the following symptoms occur, please carry out the checks and adjustments described below. There may be no malfunction.

SMART  ⇒ **Settings** → **SUPPORT** → **Signal Test**

Shows the MUX and Service information etc.

General

Problem	Solution
Cannot view certain programmes.	• Adjust the location or orientation of the antenna. • Save the programmes you wish to view later using Auto Tuning or Programme Edit.
There is a delay after the TV is switched on before the image is fully visible.	• This is not a problem. Image noise that may occur when the TV is first switched is being cleaned up.

❏ Pictures

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

First run a Picture Test to verify that the image signal output is normal.

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

Problem	Solution
Images from previous programme or other programmes linger or the screen displays annoying lines.	• Adjust the orientation of the antenna to the TV transmitter, or refer to the manual for instructions on connecting 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 during a digital broadcast.	• This may occur in case of a weak signal or unstable reception. Adjust the antenna orientation and cable connections. • If the signal strength or quality is low on Manual Tuning, check with the TV station or administration office.
Digital broadcasting is not available even though the cable is connected.	• Check with the cable operator providing your subscription and/or signal. (Depending on your subscription, digital broadcasting may not be supported.)

Problem	Solution
The display is inactive or unclear when connected to an HDMI® source.	• Check the HDMI® cable specifications. If your HDMI® cable is not genuine, images may fade in and out or not be displayed properly. • Ensure that all cables are securely connected. When connections are not secure, images may not be properly displayed.
Does not work with a USB storage device.	• Verify that the USB device and cable is version 2.0 or higher.

❏ Sound

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

First run a Sound Test to verify that the sound signal output is normal.

If there is no problem with the test sound, check connected external devices and the broadcast signal.

Problem	Solution
Screen display is on but there is no sound.	• Check other TV programmes. • Ensure the TV Speaker is set to On.
For an analogue broadcast, stereo is not clear or sound comes from one speaker only.	• In a poor reception area (areas with weak or unstable signals) or if Multi Audio is not stable, select Mono on Multi Audio. • Adjust the Balance using the Navigation button.

Problem	Solution
TV sound is not in sync with the image or the sound breaks up occasionally.	• If the issue affects a specific TV programme only, it may be caused by problems with the broadcast signal for the individual station. Check with the TV station or your cable operator.
The volume changes when I change programme.	• Volume can vary from programme to programme. • Set Auto Volume to On.
On certain programmes, there is no sound at all, or only the background music can be heard (in case of a programme created for overseas viewers).	• In Language, set Language → Audio Language to the language of your choice. Even if you change the language on Multi Audio, you can go back to the default setup once you turn off the power or change the programme.

Problem	Solution
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 does not come 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 whether 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 display. • Reconnect the HDMI cable.
There is no sound after connecting the computer with the HDMI cable.	• Check with manufacturer of your video card to ensure it supports HDMI voice output. (Video cards 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 the resolution to support PC input. (If this does not work, reboot the computer.)

❑ Problems replaying movies in My Media

Problem	Solution
I cannot view the files on the Movie List.	• Check whether the file on the USB storage device can be read on a computer. • Check whether the file extension is supported.
"This file is invalid." message appears or the image display is not normal even though the sound is OK.	• Make sure that the file replays normally on the computer's video player. (Check for damaged files.) • Check whether the resolution is supported by the computer. • Verify that the video/audio codec is supported. • Verify that the frame rate is supported.

Problem	Solution
"Audio not supported." message appears or the sound is not normal even though the image display is OK.	• Make sure that the file replays normally on the computer's video player. (Check for damaged files.) • Check if the audio codec is supported by the computer. • Verify that the bit rate is supported. • Verify that the sample rate is supported.

Problem	Solution
Subtitles are not displayed.	• Make sure that the file replays normally on the computer's video player. (Check for damaged files.) • Check if the video file has the same name as the subtitle file. • Make sure that the video and subtitle files are in the same folder. • Verify that the subtitle file format is supported. • Verify that the subtitle language is supported. (Subtitle files can be opened in Notepad to check the language.)

 Image shown may differ from your TV.

 For information on requesting service, refer to the following menu.

SMART  ⇒ Settings → SUPPORT → Product/Service Info.