

MAKING CONNECTIONS

- This part of MAKING CONNECTIONS mainly uses picture for 60PH6700.

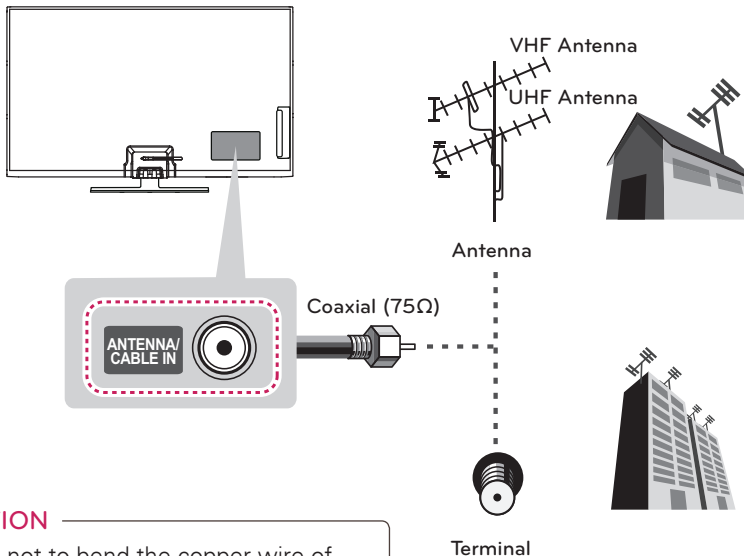
You can connect various external devices to the TV. Supported external devices are: HD receivers, DVD players, VCRs, audio systems, USB storage devices, PC, gaming devices, and other external devices. For more information on external device's connection, refer to the manual provided with each device.

NOTE

- If you record a TV program on a DVD recorder or VCR, make sure to connect the TV signal input cable to the TV through a DVD recorder or VCR. For more information on recording, refer to the manual provided with the connected device.
- The external device connections show may differ from your model.
- Connect external devices to the TV regardless of the order of the TV port.
- If you connect a gaming device to the TV, use the cable supplied with the gaming device.
- Refer to the external equipment's manual for operating instructions.

Connecting to an antenna or cable

Connect an antenna, cable, or cable box to watch TV while referring to the following. The illustrations may differ from the actual items and a RF cable is optional.



CAUTION

- Make sure not to bend the copper wire of the RF cable.



- Complete all connections between devices, and then connect the power cord to the power outlet to prevent damage to your TV.

NOTE

- Use a signal splitter to use more than 2 TVs.
- Visit <http://lgknowledgebase.com> for more information about the antenna and cable connection. Search for antenna.

Connecting to a HD receiver, DVD Player or VCR

Connect a HD receiver, DVD Player or VCR to the TV and select an appropriate input mode.

HDMI Connection

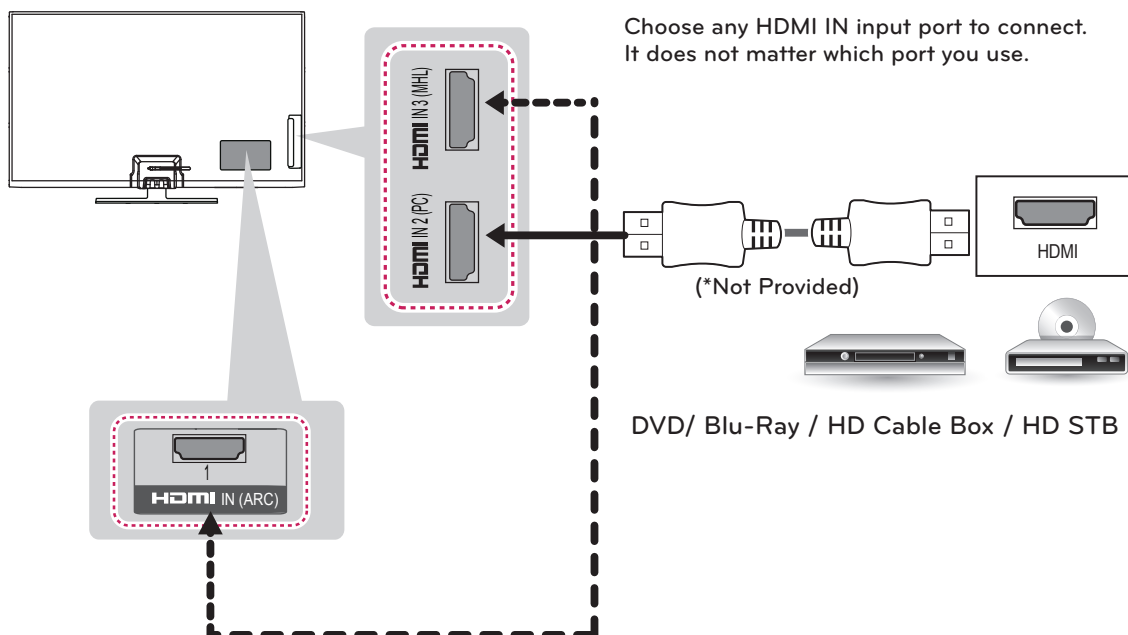
HDMI is the best way to connect a device.

Transmits digital video and audio signals from an external device to the TV. Connect the external device and the TV with the HDMI cable as shown in the following illustration.



NOTE

- Use the latest High Speed HDMI™ Cable that supports CEC (Customer Electronics Control) function.
- High Speed HDMI™ Cables are tested to carry an HD signal up to 1080p and higher.



NOTE

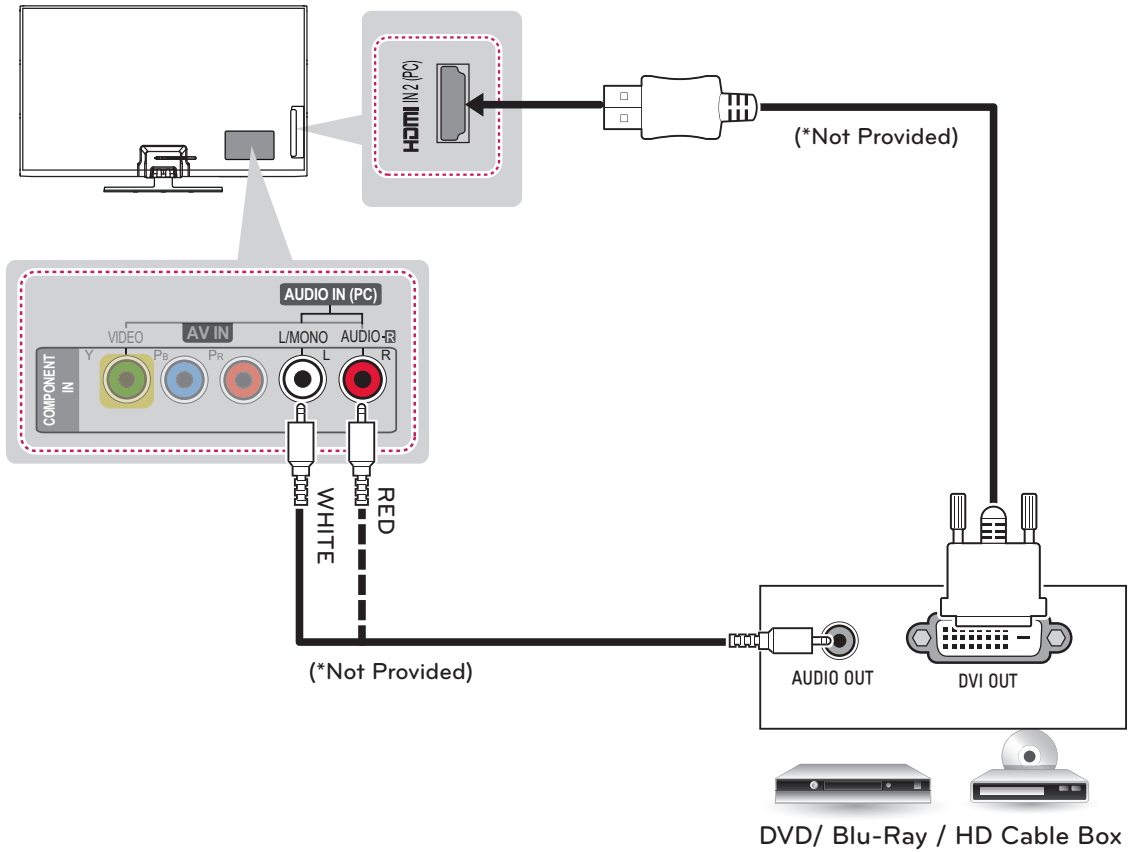
- DTV Audio Supported Codec: MPEG, Dolby Digital
- HDMI Audio Supported Format: Dolby Digital, PCM (Up to 192 KHz, 32k/44.1k/48k/88k/96k/176k/192k) -> Not supported DTS.

ARC (Audio Return Channel)

- When connected with a high-speed HDMI cable, digital audio can be sent to a compatible device without an additional optical audio cable.
- ARC is only supported on the HDMI input 1 (ARC) port. An external audio device that supports ARC should be connected to HDMI 1 if you wish to use ARC.

DVI to HDMI Connection

Transmits the digital video signal from an external device to the TV. Connect the external device and the TV with the DVI-HDMI cable as shown in the following illustration. To transmit an audio signal, connect an audio cable.



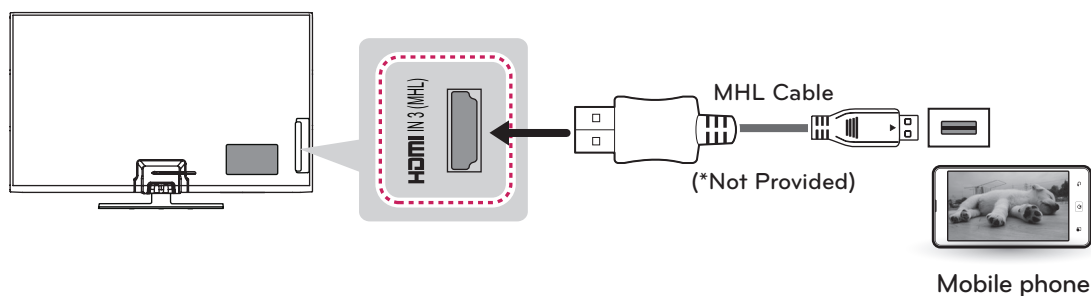
Connecting to a mobile phone

Mobile High-definition Link (MHL) is an interface for transmitting digital audiovisual signals from mobile phones to television sets.



NOTE

- Connect the mobile phone to the HDMI IN 3 (MHL) port to view the phone screen on the TV.
- This only works for the MHL-enabled phone.
- Some applications can be operated by the remote control.
- For some mobile phones supporting MHL, you can control with the Magic Remote Control.
- The MHL passive cable is needed to connect the TV and a mobile phone.



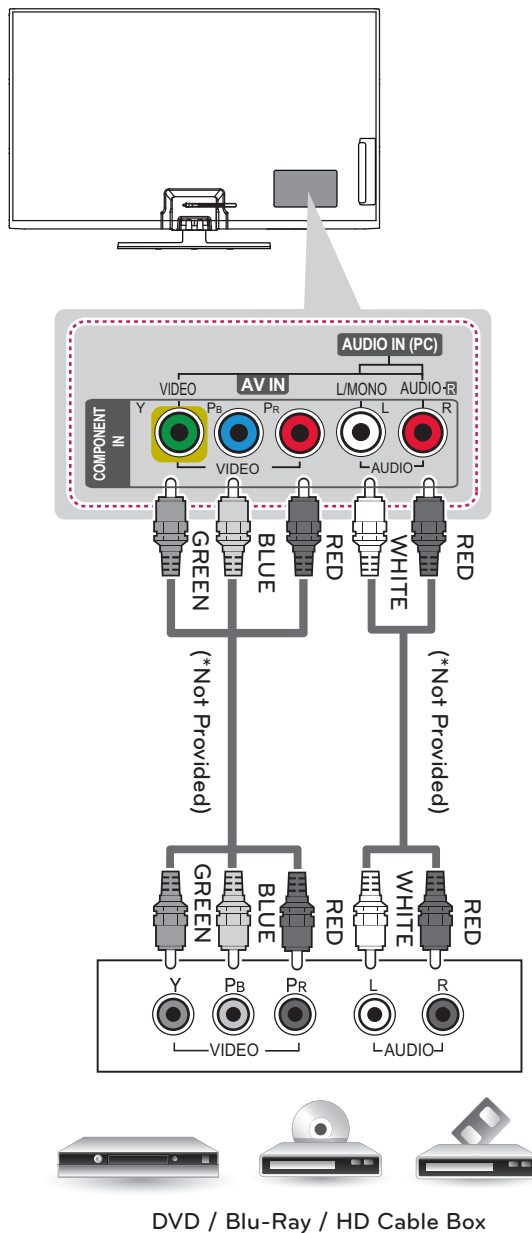
Component Connection

Transmits analog video and audio signals from an external device to the TV. Connect the external device and the TV with a component cable as shown in the following illustration.



NOTE

- If cables are installed incorrectly, it could cause the image to display in black and white or with distorted color.
- Check to ensure each cable is matched with the corresponding color connection.



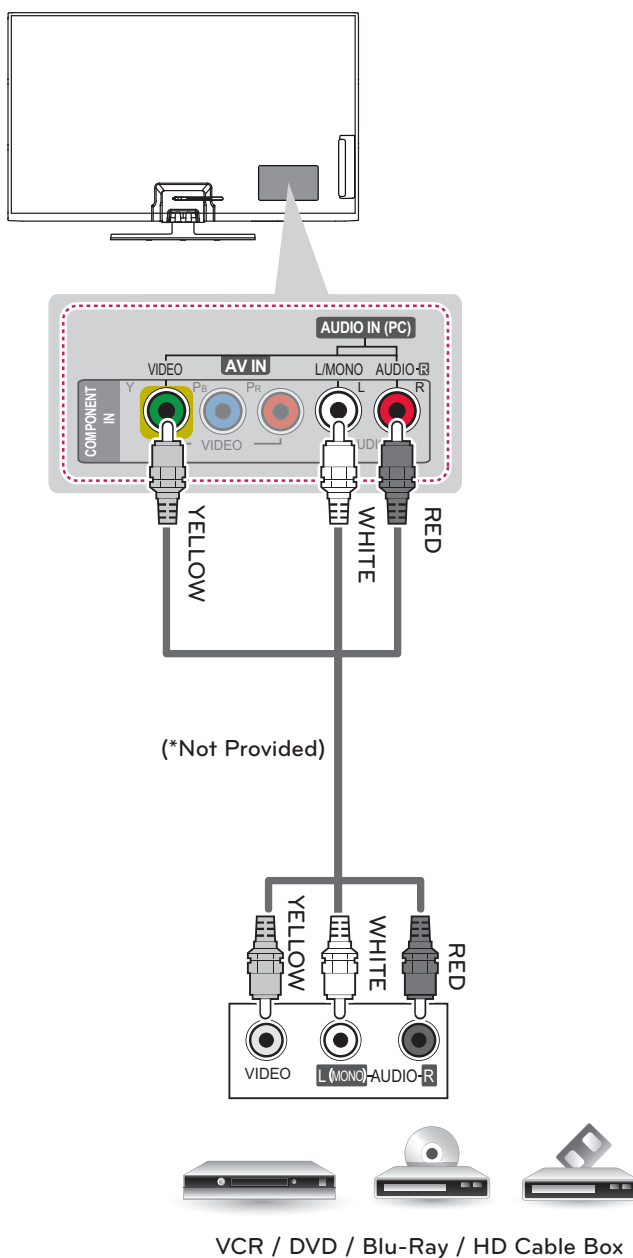
Composite Connection

Transmits analog video and audio signals from an external device to the TV. Connect the external device and the TV with the composite cable as shown in the following illustration.



NOTE

- If you have a mono VCR, connect the audio cable from the VCR to the AUDIO L/MONO jack of the TV.



Connecting to a PC

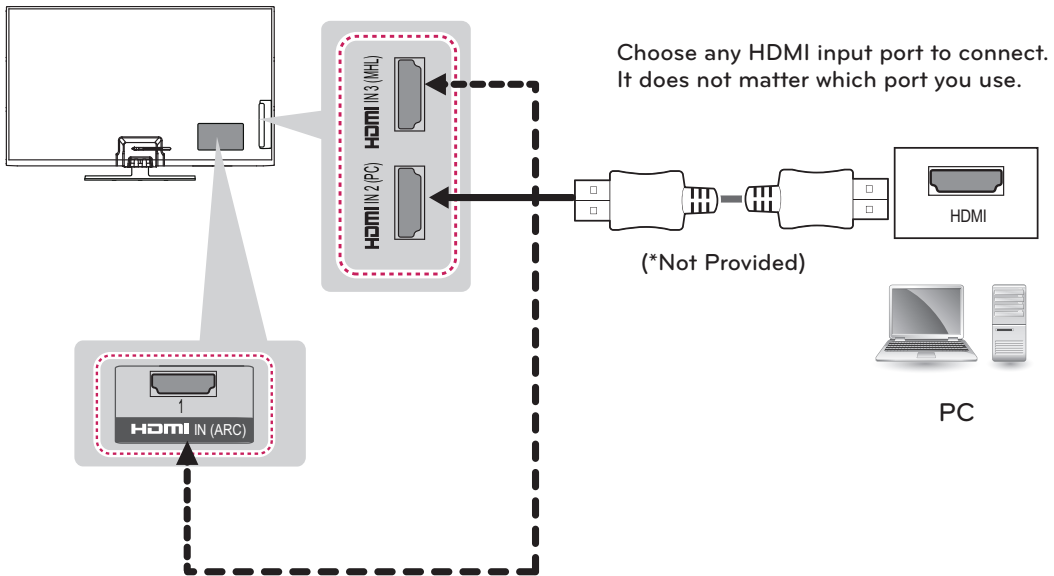
! NOTE

- It is recommended to use the HDMI connection for the best image quality.
- Depending on the graphics card, DOS mode video may not work if a HDMI to DVI Cable is in use.
- In PC mode, there may be noise associated with the resolution, vertical pattern, contrast or brightness. If noise is present, change the PC output to another resolution, change the refresh rate to another rate or adjust the brightness and contrast on the PICTURE menu until the picture is clear.
- The synchronization input form for Horizontal and Vertical frequencies is separate.
- Depending on the graphics card, some resolution settings may not allow the image to be positioned on the screen properly.

HDMI Connection or DVI to HDMI Connection

Choose method A or B to make connection.

Method A: HDMI Connection



[illegible]

Connecting to an Audio System

You can use an optional external audio system instead of the built-in speaker.

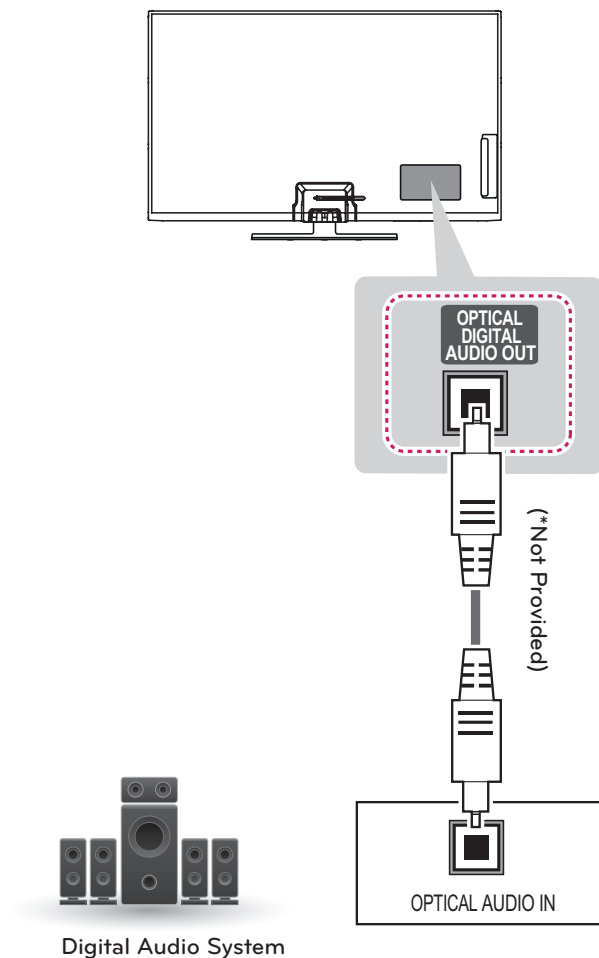


NOTE

- If you use an optional external audio device instead of the built-in speaker, set the TV speaker feature to off.

Digital Optical Audio Connection

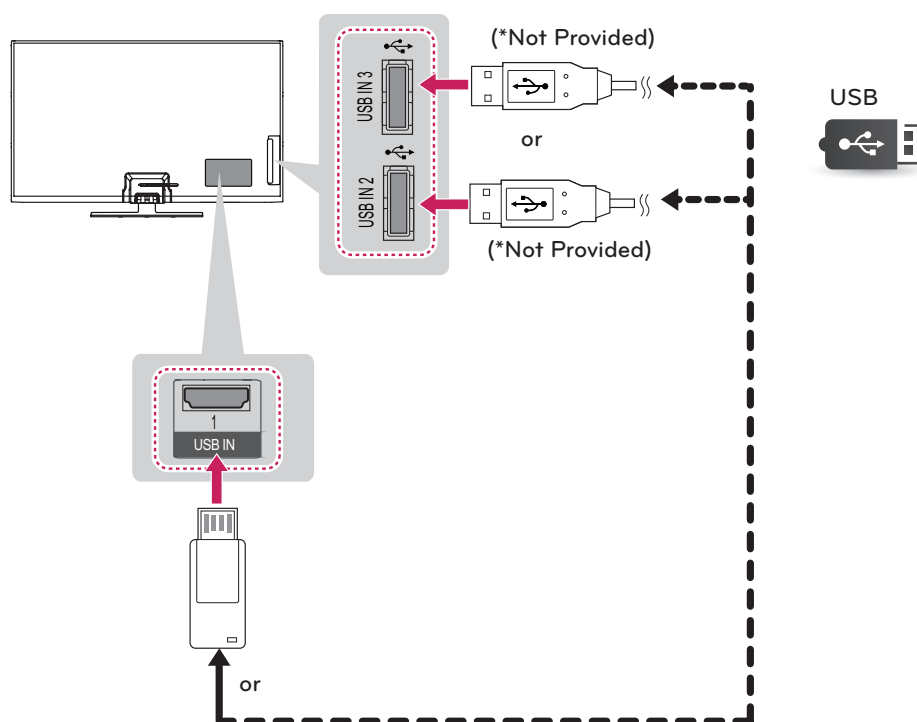
Transmits a digital audio signal from the TV to an external device. Connect the external device and the TV with the optical audio cable as shown in the following illustration.



Connecting a USB Device

Connect a USB storage device such as a USB flash memory, external hard drive, or a USB memory card reader to the TV and access the USB menu to use various multimedia files.

Choose any USB input port to connect.
It does not matter which port you use.



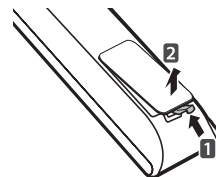
REMOTE CONTROL

For 50PH4700

The descriptions in this manual are based on the buttons on the remote control.

Please read this manual carefully and use the TV correctly.

To install batteries, open the battery cover, replace batteries (1.5 V AAA) matching the ⊕ and ⊖ ends to the label inside the compartment, and close the battery cover. To remove the batteries, perform the installation actions in reverse.



CAUTION

- Do not mix old and new batteries, as this may damage the remote control.

This remote uses infrared light. When in use, it should be pointed in the direction of the TV's remote sensor. The remote sensor on this TV is in the lower right corner.



⏻ (POWER)
Turns the TV on or off.

? (User-Guide)
Sees User-Guide.

📺 RATIO
Resizes an image.

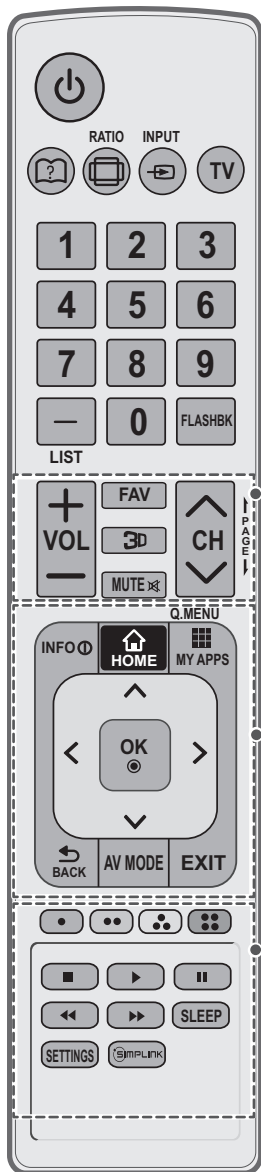
📶 INPUT
Changes the input source; Turns the TV on.

TV
Returns to the last TV channel.

Number button
Enters numbers.

LIST, - (Dash)
LIST: Accesses the saved channel list.
- (Dash): Inserts a dash between numbers such as 2-1 and 2-2.

FLASHBK
Alternates between the two last channels selected (pressing repeatedly).

**+ VOL -**

Adjusts the volume level.

FAV

Accesses your favorite channel list.

3D

Used for viewing 3D video.

MUTE

Mutes all sounds.

^ CH v, ↓ PAGE↓

CH: Scrolls through the saved channels.

PAGE: Moves to the previous or next screen.

INFO

Views the information of the current program and screen.

HOME

Accesses the HOME menu.

MY APPS

Shows the list of Apps.

Q. MENU

Accesses the quick menu.

Navigation buttons (up/down/left/right)

Scrolls through menus or options.

OK

Selects menus or options and confirms your input.

BACK

Returns to the previous level.

AV MODE

Selects an AV mode.

EXIT

Clears all on-screen displays and returns to TV viewing.

Color buttons

These access special functions in some menus.

Control buttons

Controls the Premium contents, Smart Share menus, or the SIMPLINK compatible devices (USB, SIMPLINK).

SLEEP

Sets the length of time until the TV to turns off.

SETTINGS

Accesses the main menu.

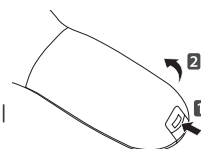
SIMPLINK

Accesses the AV devices connected to the TV;
Opens the SIMPLINK menu.

Magic Remote Control Functions

For 60PH6700

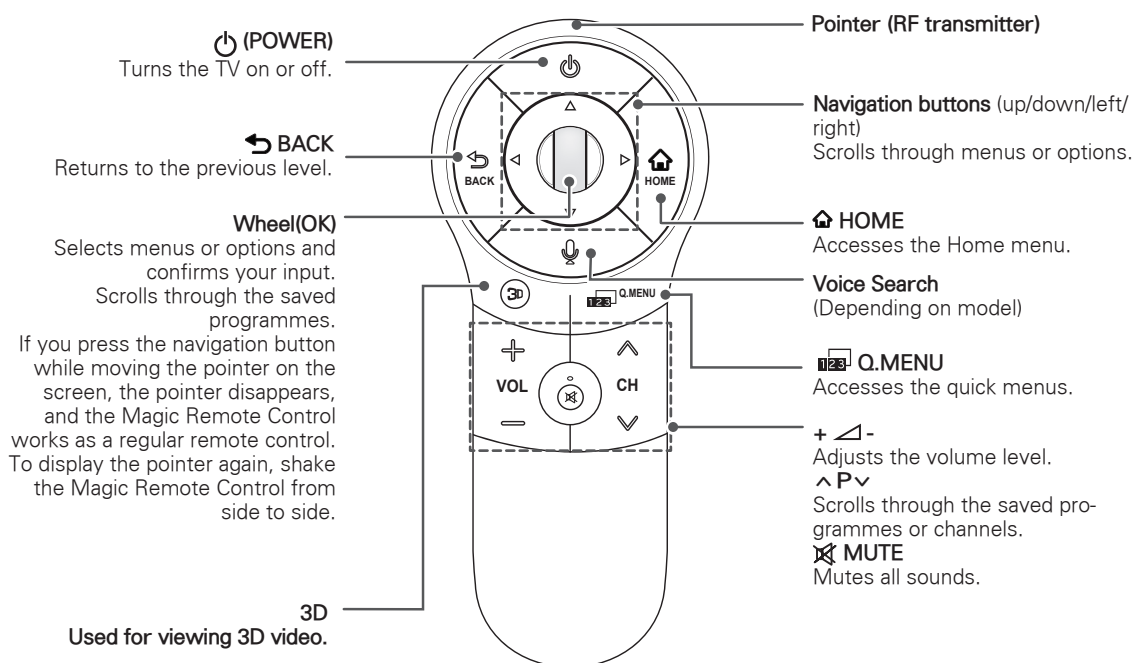
When the message "Magic remote control battery is low. Change the battery." is displayed, replace the battery. To replace batteries, open the battery cover, replace batteries (1.5 V AA) matching ⊕ and ⊖ ends to the label inside the compartment, and close the battery cover. Be sure to point the remote control at the remote control sensor on the TV. To remove the batteries, perform the installation actions in reverse.



CAUTION

- Do not mix old and new batteries, as this may damage the remote control.

Make sure to point the remote control at the remote control sensor on the TV.



Voice Search

This is a beta version and only available in selected functions for supported models.

- Select the Voice Search icon on the screen.
- Speak slowly and precisely. When a voice is recognized, the processing message appears on the screen.
 - Use the magic remote control no further than 15 cm from your face.

Registering Magic Remote Control

The Magic Remote Control operates by pairing with your TV.

Once you purchased the TV, please register the Magic remote control as follows;

How to register the Magic Remote Control



To register automatically, turn the TV on and press the **Wheel (OK)**. When registration is completed, the completion message appears on the screen. If registration fails, turn the TV off and back on, then press the **Wheel (OK)** to complete registration.

How to Re-register the Magic Remote Control

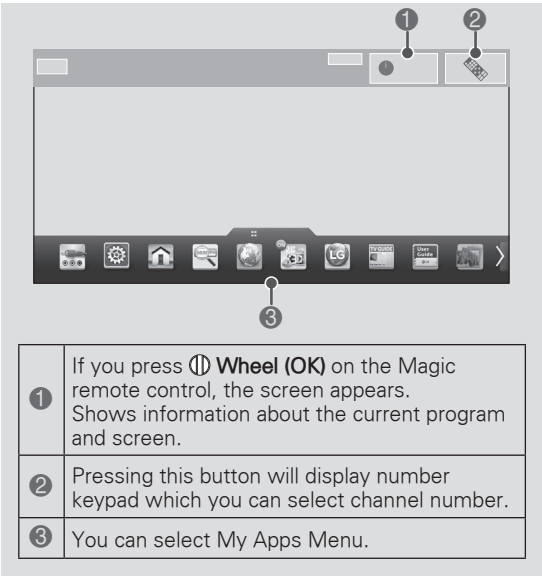


- 1 Press and hold the **BACK** and **HOME** buttons together for 5 seconds to reset, then register it by following "How to register the Magic remote control" above.
- 2 To re-register the Magic remote control, press and hold the **BACK** button for 5 seconds toward the TV.

How to use Magic Remote Control



- 1 You can move the pointer by aiming the Pointer Receiver of the remote control at your TV then move it left, right, up or down.
 - » If the pointer does not work properly leave the remote control for 10 seconds then use it again.
- 2 If the pointer disappears, move the remote control slightly to left or right. Then, it will automatically appear on the screen.
 - » If the pointer has not been used for a certain period of time, it will disappear.



Precautions to Take when Using the Magic Remote Control

- Use the Magic remote control within the maximum communication distance (10 m, 32.8ft). Using the remote control beyond this distance, or with an object obstructing it, may cause a communication failure.
- A communication failure may occur due to nearby devices. Electrical devices such as a microwave oven or wireless LAN product may cause interference, as these use the same bandwidth (2.4 GHz) as the Magic remote control.
- The Magic remote control may be damaged or may malfunction if it is dropped or receives a heavy impact.
- Take care not to bump into nearby furniture or other people when using the Magic remote control.
- Manufacturer and installer cannot provide service related to human safety as the applicable wireless device has possibility of electric wave interference.
- It is recommended that an Access Point (AP) be located more than 1 m (3.28 ft) away from the TV. If the AP is installed closer than 1 m (3.28 ft), the Magic remote control may not perform as expected due to frequency interference.

WATCHING TV

Turning the TV on for the first time

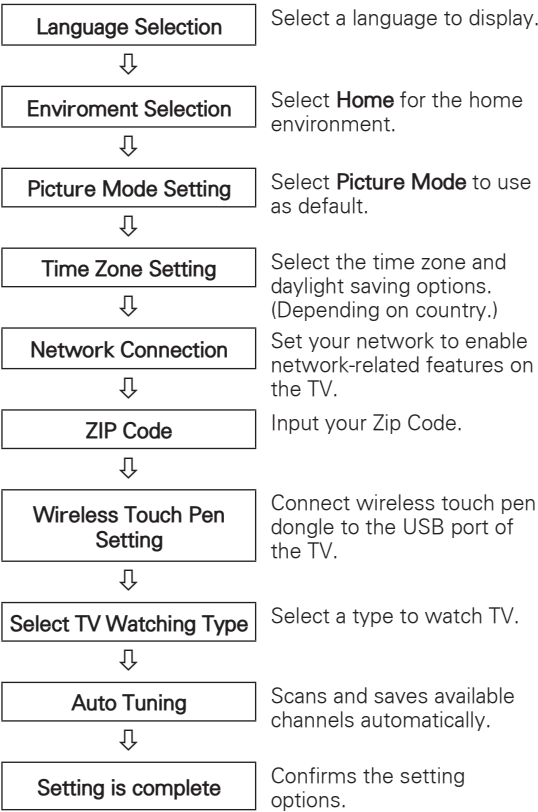
When you turn the TV on for the first time, the Initial setting screen appears. Select a language and customize the basic settings.

- 1 Connect the power cord to a power outlet.
- 2 In Standby mode, press the power button on the remote control to turn the TV on.
The Initial setting screen appears when you turn the TV on for the first time.

 **NOTE**

- You can also access **Initial Setting** by accessing **OPTION** in the main menu.

- 3 Follow the on-screen instructions to customize your TV settings according to your preferences.



 **NOTE**

- To display images in the best quality for your home environment, select **Home Use**.
- **Store Demo** is suitable for the retail environment.
- If you select **Store Demo**, the any customized settings will switch back to the default settings of **Store Demo** in 5 minutes.

- 4 When the basic settings are complete, press the **Wheel (OK)** button.

 **NOTE**

- If you do not complete the Initial setting, it will appear whenever the TV turns on.
- Disconnect the power cord from the power outlet when you do not use the TV for a long period of time.

- 5 To turn the TV off, press the power button on the remote control.

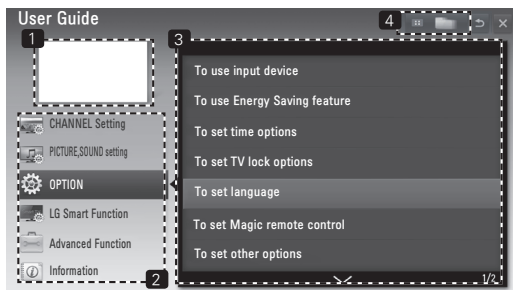
USING THE USER GUIDE

User Guide allows you to more easily access the detailed TV information.

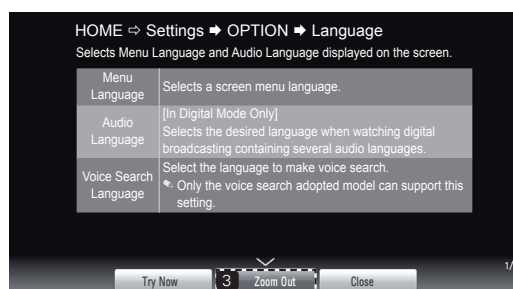
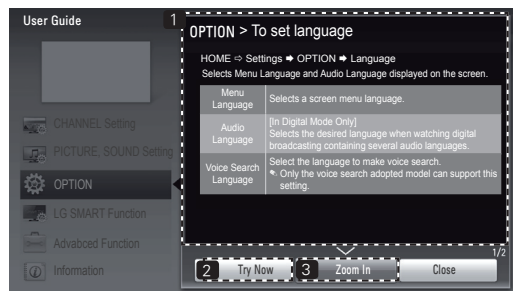
- 1 Press the **HOME** button to access the HOME menu.
- 2 Select User Guide and press the **Wheel (OK)** button.



User Guide



- 1 Shows the current channel.
- 2 Allows to select the category you want.
- 3 Allows to select the item you want.
You can use **^**/**v** to move between pages.
- 4 Allows to browse the description of the function you want from the index.



- 1 Shows the description of the selected menu.
You can use **^**/**v** to move between pages.
- 2 Moves to the selected menu directly from the User Guide.
- 3 Zooms in or out the screen.

TROUBLESHOOTING

General

Problem	Solution
Cannot control the TV with the remote control.	• Check the remote control sensor on the product and try again. • Check if there is any obstacle between the product and the remote control. • Check if the batteries are still working and properly installed (⊕ to ⊕, ⊖ to ⊖).
No image display and no sound is produced.	• Check if the product is turned on. • Check if the power cord is connected to a wall outlet. • Check if there is a problem in the wall outlet by connecting other products.
The TV turns off suddenly.	• Check the power control settings. The power supply may be interrupted. • Check if the Auto sleep feature is activated in the Time settings. • If there is no signal while the TV is on, the TV will turn off automatically after 15 minutes of inactivity.
When connecting to the PC, 'No Signal' or 'Invalid Format' is displayed.	• Turn the TV off/on. • Reconnect the RGB/HDMI cable. • Restart the PC with the TV on.

EXTERNAL CONTROL DEVICE SETUP

To obtain the external control device setup information, please visit 'www.lg.com'.

SPECIFICATIONS

Product specifications may be changed without prior notice due to upgrade of product functions.

Power requirement		AC 100 - 240 V ~ 50 / 60 Hz
Television System		NTSC-M, ATSC, 64 & 256 QAM
Program Coverage		VHF 2-13, UHF 14-69, CATV 1-135, DTV 2-69, CDTV 1-135
External Antenna Impedance		75 Ω
Environment condition	Operating Temperature	0 - 40 °C
	Operating Humidity	Less than 80 %
	Storage Temperature	-20 - 60 °C
	Storage Humidity	Less than 85 %

MODELS		50PH4700 (50PH4700-UD)
Dimensions (Width x Height x Depth)	With stand	1,168 mm x 755.4 mm x 292.7 mm (45.9 inch x 29.7 inch x 11.5 inch)
	Without stand	1,168 mm x 698.6 mm x 57.0 mm (45.9 inch x 27.5 inch x 2.2 inch)
Weight	With stand	25.4 Kg (55.9 lbs)
	Without stand	24.0 Kg (52.9 lbs)
Current Value / Power consumption		

MODELS		60PH6700 (60PH6700-UB)
Dimensions (Width x Height x Depth)	With stand	1,386.8 mm x 874.0 mm x 340.0 mm (54.5inch x 34.4 inch x 13.3 inch)
	Without stand	1,386.8 mm x 821.7 mm x 57.0 mm (54.5 inch x 32.3 inch x 2.2 inch)
Weight	With stand	37.7 Kg (83.1 lbs)
	Without stand	34.5 Kg (76.0 lbs)
Current Value / Power consumption		

3D supported mode

- Media contents and a player need to support HDMI 3D Frame Packing, HDMI 3D Side by Side, HDMI 3D Top & Bottom to play in 3D.
- Video, which is input as HDMI,USB,DLNA, is switched into the 3D screen automatically. (This function does not support all of the 3D video format. The specific 3D video format is not switched into the 3D screen automatically.)
- 2D -> 3D mode is available to watch for all signals.
- For models supporting WiDi, you can set the 3D mode in the same way as in RGB (PC) mode.

Input	Signal	Resolution	Horizontal Frequency (kHz)	Vertical Frequency (Hz)	Playable 3D video format	
HDMI-DTV	480p	640X480	62.938 / 63	59.94/ 60	Frame packing, Line alternative	
		720X480				
		640X480	31.469 / 31.5			Side-by-side(Full), Top-and-Bottom, Side-by-side(half)
		720X480				
	720p	1280X720	89.91/90	59.94 / 60	Frame packing, Line alternative	
			44.96 / 45	59.94 / 60	Side-by-side(Full), Top-and-Bottom Side-by-side(half), Single Frame Sequential	
	1080i	1920X1080	67.432 / 67.5	59.94 / 60	Frame packing, Field alternative	
			33.72 / 33.75	59.94 / 60	Side-by-side(Full), Top-and-Bottom, Side-by-side(half)	
	1080p	1920X1080	53.946 / 54	23.97 / 24	Frame packing, Line alternative	
			67.432/67.5	29.976 / 30		
26.97 / 27			23.97 / 24	Side-by-side(Full), Top-and-Bottom, Side-by-side(half), Checkerboard		
33.716 / 33.75			29.976 / 30.00			
67.43 / 67.5			59.94 / 60	Top-and-Bottom, Side-by-side(half), Checkerboard, Single Frame Sequential, Row Interleaving, Column Interleaving		
HDMI-PC	1024x768		48.363	60.004	Side by Side(Half), Top & Bottom	
	1360x768		47.712	60.015	Side by Side(Half), Top & Bottom	
	1920x1080		67.50	60.00	Side by Side(Half), Top & Bottom Checkerboard, Single Frame Sequential Row Interleaving, Column Interleaving	
Component	720p	1280X720	44.96 / 45	59.94 / 60	Side by Side, Top & Bottom	
	1080i	1920X1080	33.72 / 33.75	59.94 / 60		
USB	1080p	1920X1080	33.75	30	Side by Side, Top & Bottom, Checker Board, Single Frame Sequential, Row Interleaving, Column Interleaving, MPO(Photo), JPS(Photo) (Photo : Side by Side(half), Top & Bottom)	
DLNA	1080p	1920X1080	33.75	30	Side by Side, Top & Bottom, Checker Board, Single Frame Sequential, Row Interleaving, Column Interleaving, MPO(Photo), JPS(Photo) (Photo : Side by Side(half), Top & Bottom)	
	Signal				Playable 3D video format	
DTV	720p, 1080i				Side by Side, Top & Bottom	

HDMI/DVI-DTV supported mode

Resolution	Horizontal Frequency (kHz)	Vertical Frequency (Hz)
720x480	31.469 31.5	59.94 60
1280x720	44.96 45	59.94 60
1920x1080	33.72 33.75 26.97 27 33.716 33.75 67.43 67.5	59.94 60 23.97 24 29.976 30.00 59.94 60

Component port connecting information

Component ports on the TV	Y	P _B	P _R
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Video output ports on DVD player	Y	P _B	P _R
	Y	B-Y	R-Y
	Y	Cb	Cr
	Y	Pb	Pr

Signal	Component
480i	O
480p	O
720p/1080i	O
1080p	O (60 Hz only)

Wireless LAN module(WN8122E1) specification

Standard	IEEE802.11a/b/g/n
Frequency Range	2400 to 2483.5 MHz 5150 to 5250 MHz 5725 to 5850 MHz
Output Power (Max.)	802.11a: 16.5 dBm 802.11b: 16 dBm 802.11g: 15.5 dBm 802.11n - 2.4GHz: 15.5 dBm 802.11n - 5GHz: 16.5 dBm

- Because band channel used by the country could be different, the user can not change or adjust the operating frequency and this product is set for the regional frequency table.
- The product with Wireless LAN module is designed for Indoor use only and the product should be installed and operated with minimum distance 20 cm between the radiator & your body.
- Contains FCC ID: BEJWN8122E1
- Contains IC: 2703H-WN8122E1

Bluetooth module (BM-LDS401) specification

Standard	Bluetooth Version 3.0
Frequency Range	2400 ~ 2483.5 MHz
Output Power (Max.)	10 dBm or lower

- Contains FCC ID: BEJLDS401
- Contains IC: 2703H-LDS401

MAINTENANCE

Cleaning Your TV

Clean your TV regularly to keep the best performance and to extend the product lifespan.



CAUTION

- Before Cleaning, turn the power off and disconnect the power cord and all other cables.
- When the TV is left unattended or unused for a long time, disconnect the power cord from the wall outlet to prevent possible damage from lightning or power surges.

Screen, frame, cabinet and stand

To remove dust or light dirt, wipe the surface with a dry, clean, and soft cloth.

To remove major dirt, wipe the surface with a soft cloth dampened in clean water or a diluted mild detergent. Then wipe immediately with a dry cloth.



CAUTION

- Do not push, rub, or hit the surface with your fingernail or a sharp object, as this may result in scratches on the screen and image distortions.
- Do not use any chemicals, such as waxes, benzene, alcohol, thinners, insecticides, air fresheners, lubricants, as these may damage the screen's finish and cause discoloration.
- Do not spray liquid onto the surface. If water enters the TV, it may result in fire, electric shock, or malfunction.

Power cord

Remove the accumulated dust or dirt on the power cord regularly.

CHILD SAFETY:

It Makes A Difference How and Where
You Use Your Flat Panel Display

Congratulations on your purchase! As you enjoy your new product, please keep these safety tips in mind:



THE ISSUE

- The home theater entertainment experience is a growing trend and larger flat panel displays are popular purchases. However, flat panel displays are not always supported on the proper stands or installed according to the manufacturer's recommendations.
- Flat panel displays that are inappropriately situated on dressers, bookcases, shelves, desks, speakers, chests or carts may fall over and cause injury.

THIS MANUFACTURER CARES!

- The consumer electronics industry is committed to making home entertainment enjoyable and safe.

TUNE INTO SAFETY

- One size does NOT fit all. Follow the manufacturer's recommendations for the safe installation and use of your flat panel display.
- Carefully read and understand all enclosed instructions for proper use of this product.
- Don't allow children to climb on or play with furniture and television sets.
- Don't allow place flat panel displays on furniture that can easily be used as steps, such as a chest of drawers.
- Remember that children can become excited while watching a program, especially on a "larger than life" flat panel display. Care should be taken to place or install the display where it cannot be pushed, pulled over, or knocked down.
- Care should be taken to route all cords and cables connected to the flat panel display so that they cannot be pulled or grabbed by curious children.

WALL MOUNTING: IF YOU DECIDE TO WALL MOUNT YOUR FLAT PANEL DISPLAY, ALWAYS:

- Use a mount that has been recommended by the display manufacturer and/or listed by an independent laboratory (such as UL, CSA, ETL).
- Follow all instructions supplied by the display and wall mount manufacturers.
- If you have any doubts about your ability to safely install your flat panel display, contact your retailer about professional installation.
- Make sure that the wall where you are mounting the display is appropriate. Some wall mounts are not designed to be mounted to walls with steel studs or old cinder block construction. If you are unsure, contact a professional installer.
- A minimum of two people are required for installation. Flat panel displays can be heavy





LG Customer Information Center

For inquiries or comments, visit www.lg.com or call;

1-800-243-0000 USA, Consumer User

1-888-865-3026 USA, Commercial User

1-888-542-2623 CANADA

Register your product Online!

www.lg.com

The model and serial number of the TV is located on the back and/or one side of the TV. Record it below should you ever need service.

MODEL _____

SERIAL _____

(TBD)



This product qualifies for ENERGY STAR in the "factory default (Home Use)" setting.

Changing the factory default settings or enabling other features may increase power consumption that could exceed the limits necessary to qualify for ENERGY STAR.