

## **CONNECTIONS (NOTIFICATIONS)**

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.

### **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 about recording, refer to the manual provided with the connected device.
- The external device connections shown may differ slightly from illustrations in a manual.
- 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.
- 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.
- Depending upon the graphics card, some resolution settings may not allow the image to be positioned on the screen properly.
- Some USB Hubs may not work. If a USB device connected through a USB Hub is not detected, connect it directly to the USB port on the TV.
- Smart TV Only) The TV may be capable of operating without a set-top from a multichannel video programming distributor (MVPD).

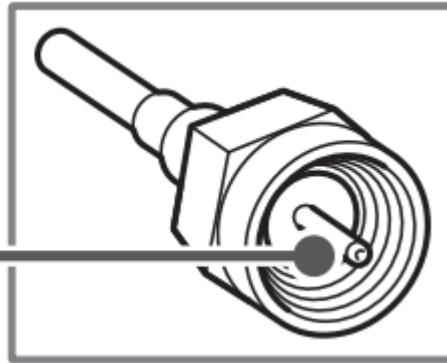
### **Connecting to an Antenna or Cable**

Connect an antenna, cable, or cable box to watch TV. The RF cable may not be supplied, depending upon the model.

### **CAUTION**

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

## Copper wire



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 2 TVs or more.
- DTV Audio Supported Codec: MPEG, Dolby Digital.
- Direct ULTRA HD broadcast is unavailable in areas without an ULTRA HD signal.
- This TV cannot receive ULTRA HD (3840 x 2160 pixels) broadcasts directly because the related standards have not been confirmed. (Depending upon model)

### Other Connections


Connect your TV to external devices. For the best picture and audio quality, connect the external device and the TV with the HDMI cable. Depending upon the model, a cable may not be provided.

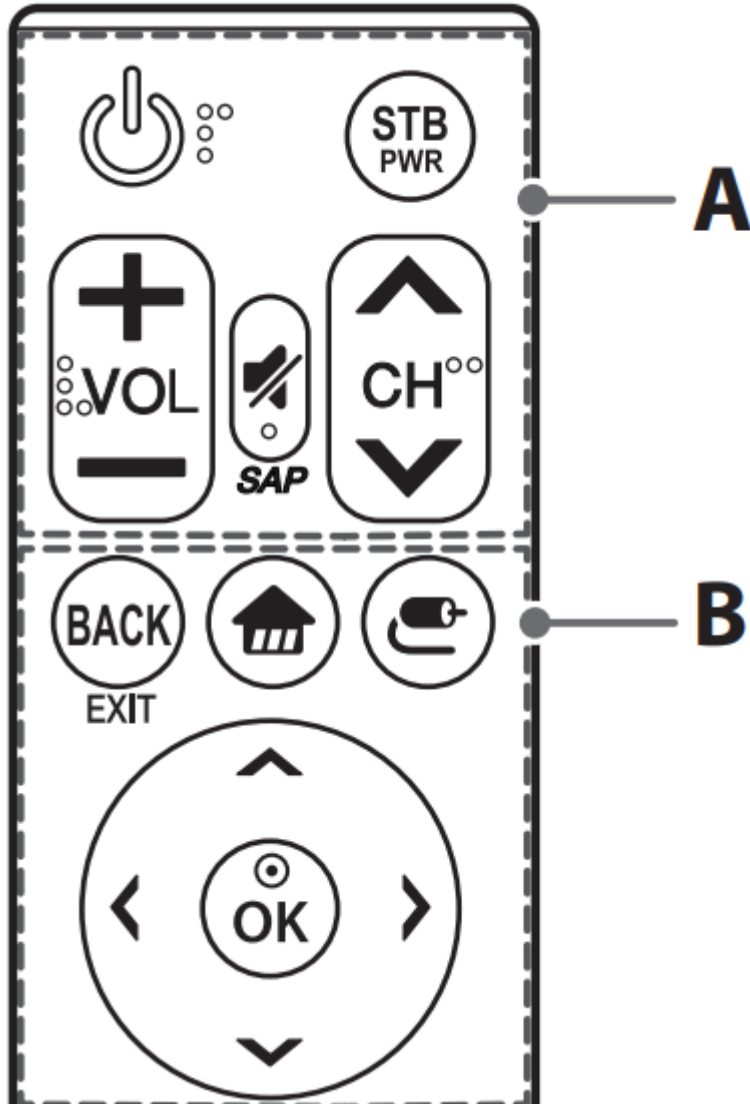
### NOTE

-  →  →  → **PICTURE** → **HDMI ULTRA HD Deep Color:**
  - On: Support 4K @ 60 Hz (4:4:4, 4:2:2, 4:2:0)
  - Off: Support 4K @ 60 Hz (4:2:0)
- If the device connected to Input Port also supports ULTRA HD Deep Color, your picture may be clearer. However, if the device doesn't support it, it may not work properly. In that case, connect the device to a different HDMI port or change the TV's HDMI ULTRA HD Deep Color setting to Off.
  - This feature is available only on certain models which support HDMI ULTRA HD Deep Color.
- HDMI Audio Supported Format: PCM (32 kHz / 44.1 kHz / 48 kHz / 96 kHz / 192 kHz)


### Slim Remote Control

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 replace coin batteries, turn the battery cover

counterclockwise by using a coin. Then, take the battery cover. Insert and fix the battery (CR2032) with the  facing forward. And, Put the battery cover on the remote control and turn it clockwise to close. To remove the coin batteries, perform the installation actions in reverse. When in use, it should be pointed in the direction of the TV's remote sensor.




## A


 (POWER) Turns the TV on or off.


**STB PWR** You can turn your set-top box on or off by adding the set-top box to the universal remote control for your TV.

+ **VOL** - Adjusts the volume level.

 (MUTE) Mutes all sounds

 \* \* Video descriptions function will be enabled.

• **SAP** (Secondary Audio Program) Feature can also be enabled by pressing the  \* key.

 **CH** Scrolls through the saved channels.

## B

**BACK** Returns to the previous screen.

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

 (Home) Accesses the Home menu.

 (INPUT) Changes the input source.

\* Pressing and holding the  (INPUT) button displays all the lists of external inputs.

 (Navigation buttons) Scrolls through menus or options. (up/down/left/right)

 **OK** Selects menus or options and confirms your input.

\* : To use the button, press and hold for more than 3 seconds.

## EXTERNAL CONTROL DEVICE SETUP

**NOTE \* Cable is not provided.**

### USB to Serial converter with USB Cable

#### USB Type



- LGTV supports PL2303 chip-based (Vendor ID : 0x0557, Product ID : 0x2008) USB to serial converter which is not made nor provided by LG.
- It can be purchased from computer stores that carry accessories for IT support professionals.

## RS-232C With RS232C Cable

### DE9 (D-Sub 9pin) Type

- You need to purchase the RS-232C (DE9, D-Sub 9pin female-to-female type) to RS-232C cable required for the connection between the PC and the TV, which is specified in the manual.

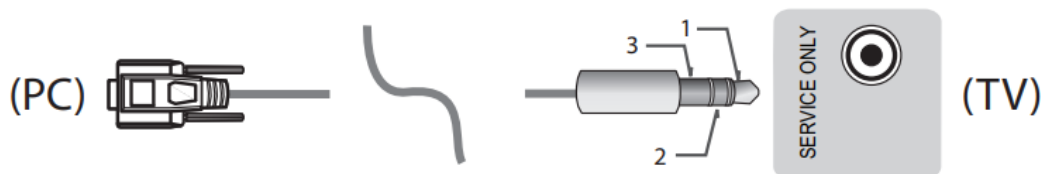


### Phone jack Type

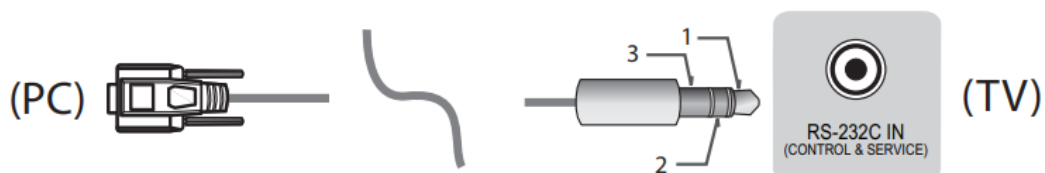
- You need to purchase the phone-jack to RS-232 cable required for the connection between the PC and the TV, which is specified in the manual.

\* For other models, connect to the USB port.

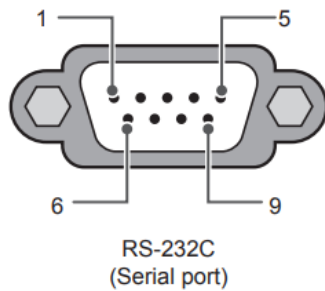
\* The connection interface may differ from your TV.



- or

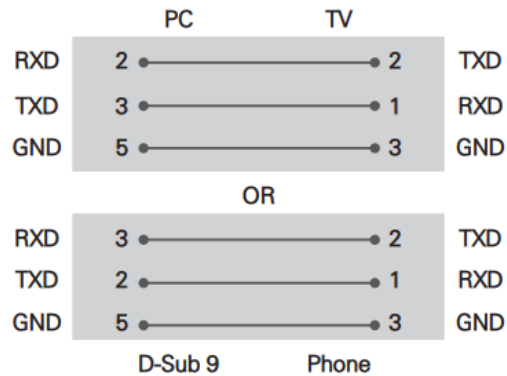


## Customer Computer



## RS-232C configurations

3-Wire Configurations(Not standard)




## Set ID

1. Press **SETTINGS** to access the main menus.
2. Press the Navigation buttons to scroll to (**\*General** → **About this TV** or **OPTION**) and press **OK**.
3. Press the Navigation buttons to scroll to **SET ID** and press **OK**.
4. Scroll left or right to select a set ID number and select **CLOSE**. The adjustment range is 1-99.
5. When you are finished, press **EXIT**.

## Network IP Control

(For USA only)

### How to connect

1. Connect your TV to a wired or wireless network.
2. Press and hold the  (Settings) button on the remote control for at least 5 seconds on the Live TV screen. Once the Live TV channel banner appears at the top of the screen, enter 828 and press the **OK** button to enter the 'IP Control Setup' menu.
3. The 3-digit password (default password: 828) can be changed using **Password Change**. After entering the 'IP Control Setup' menu, set the 'Network IP Control' submenu to 'On'. The reboot popup window will appear. Select 'Yes' to reboot your TV. Set to 'Off' when the feature is not in use.
4. Open a terminal program (e.g. **putty**, **teraterm**) on a computer and connect to your TV with your TV's IP address through **telnet** service and the port number 9761 as shown below. ex) `username : ex) username : ~$ telnet 10.186.119.107 9761`

5. If the connection is successful, the following message will appear. Or if 'NG' appears when you press Enter, the connection has been established.

1. Trying 10.186.119.107...
2. Connected to 10.186.119.107.
3. Escape character is '^ ]'.

6. Enter a command like the example shown below and press Enter.

1. VOLUME\_MUTE on

7. If the command has been successfully entered, 'OK' will appear. If not, 'NG' will appear.




8. To exit the program, enter 'quit' and press Enter. Then, the following message will appear.

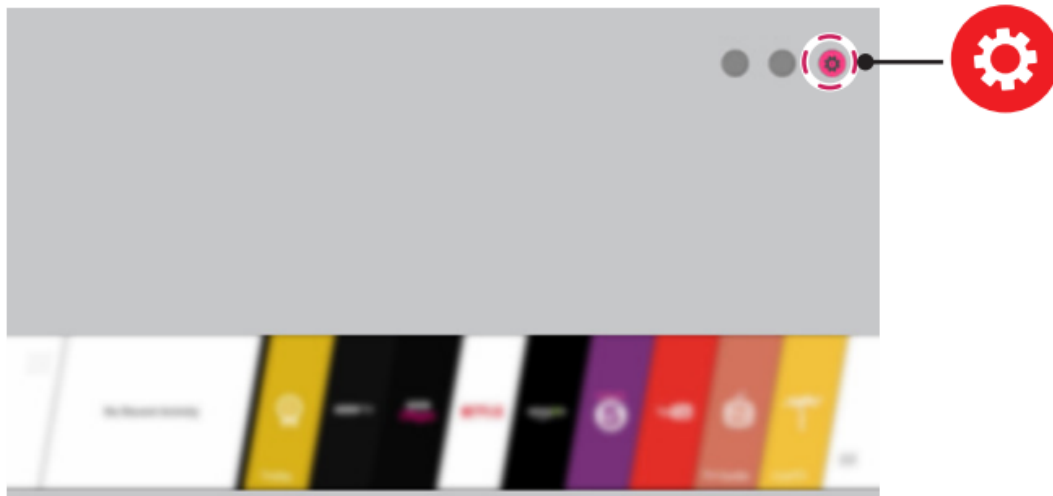
1. quit
2. Connection closed by foreign host



\*Power ON through WOL(Wake On Lan)

You can turn on the TV, after setting the 'Mobile TV On' submenu(Setting > General > Mobile TV On) to On' and installing the app related with WOL(Wake On Lan) through iOS or Google Play on your mobile phone.


## Network Settings

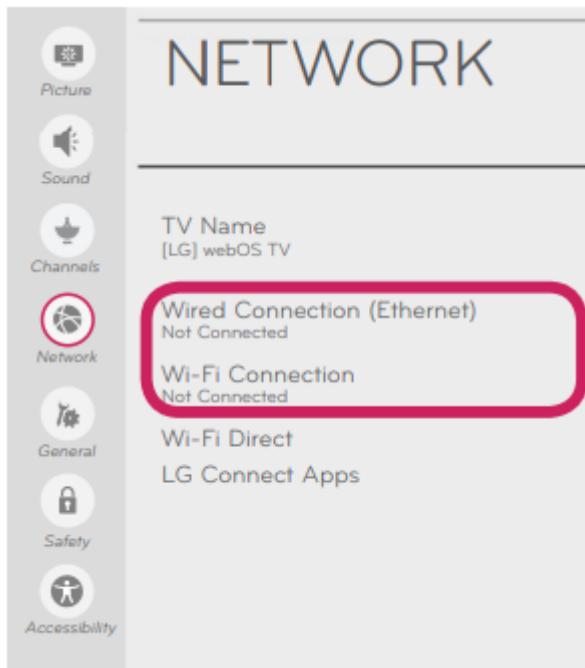
1. Press the  (Home) button to access the Smarthome menu. Select  (Settings) and press  Wheel (OK).



2. Select  (All Settings) and press  Wheel (OK)



3. Select the Network  Wired Connection (Ethernet) or Wi-Fi Connection.



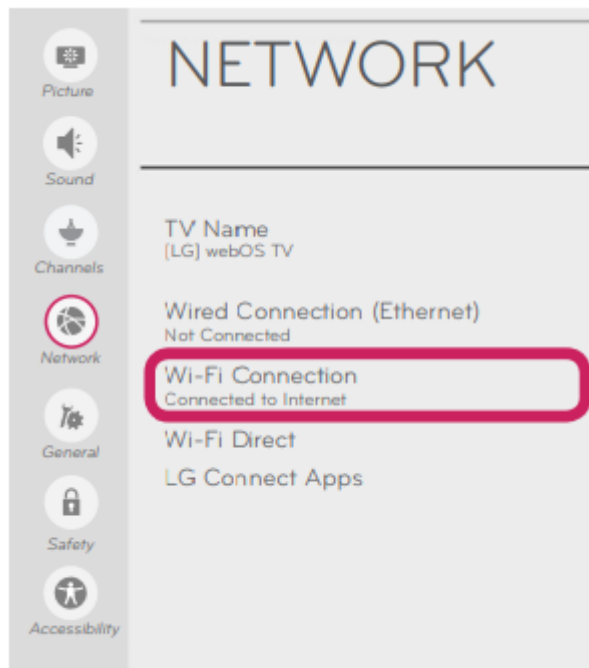
4. The device automatically tries to connect to the available network (wired network first).

When you select the Wi-Fi Connection, the network list available is displayed. Choose the network you wish to use.



For wireless AP (Router) that has the  symbol, you need to enter the security key.

5. If the connection is completed, Connected to Internet is displayed.



You can check the status of connection in Advanced Wi-Fi Settings.



## TROUBLESHOOTING

### Cannot control the TV with the remote control.

- Check if anything such as tape has been placed over the receiver.
- Check if there is any obstacle between the product and the remote control.
- Replace the batteries with new ones.




### No image display and no sound is produced.

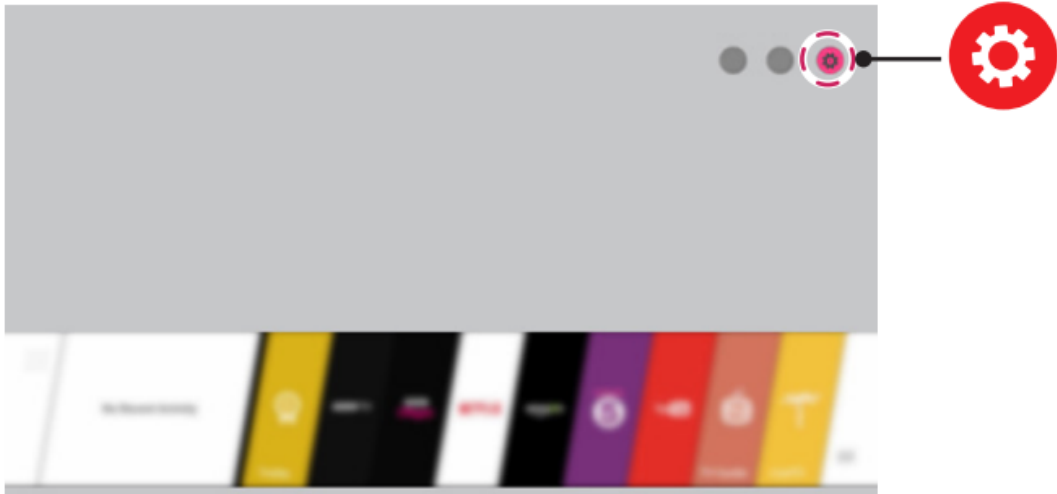
- Check if the product is turned on.
- Check if the power cord is connected to a wall outlet.
- Check if there is a problem in the wall outlet by connecting other products.



### The TV turns off suddenly.

- Check the power control settings. The power supply may be interrupted.
- Check if the Sleep Timer / Timer Power Off feature is activated in the TIMERS settings.
- If there is no signal while the TV is on, the TV will turn off automatically after 15 minutes of inactivity.



## Troubleshooting Network Problems

1. Press the  (Home) button to access the Smarthome menu. Select  (Settings) and press  Wheel (OK).

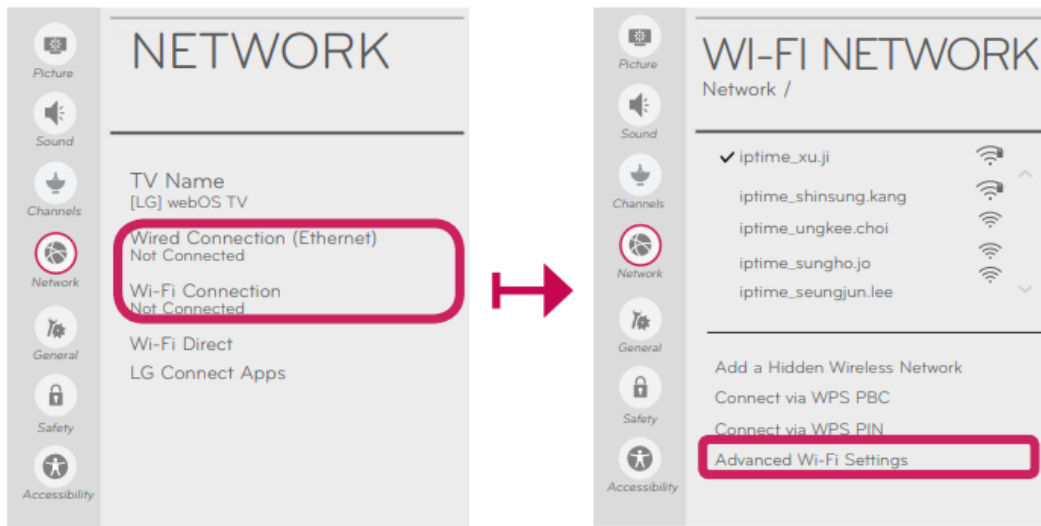


2. Select  (All Settings) and press  Wheel (OK)



3. Select the Network  (Wired Connection Ethernet) or Wi-Fi Connection  Advanced WiFi Settings.





Follow the instructions below that match to your network status.

**Check the TV or the AP (Router).**



**When X appears next to TV:**

1. Check the connection status of the TV, AP (Router) and cable modem.
2. Power off and power on in the following order; (1st) the cable modem, wait for the cable modem to reset, (2nd) the AP (Router), wait for the AP (Router) to reset and (3rd) the TV.
3. If you are using a static IP, enter the IP directly.
4. Contact Internet service provider or AP (Router) manufacturer.

**Check the AP (Router) or consult your Internet service provider.**



### When X appears next to Gateway:

1. Unplug the power cord of the AP (Router) or cable modem, wait 10 seconds. Reapply power.
2. Initialize (Reset) the AP (Router) or cable modem.
3. Contact Internet service provider or AP Router) manufacturer.



### When X appears next to DNS:

1. Unplug the power cord of the cable modem or the AP (Router), wait 10 seconds. Reapply power.
2. After the cable modem or AP (Router) has initialized (Reset), try to reconnect.
3. Check that the MAC address of the TV/AP (Router) is registered with your Internet service provider.
4. The MAC address displayed on the right pane of the network status window should be registered with your Internet service provider.)
5. Check the AP (Router) manufacturer's website to make sure your router has the latest firmware version installed.

## Wi-Fi Network Problems

### Checkpoints

- **Make sure that you have the latest version of the software.**
  - If you are using a Wi-Fi router, check whether you have the latest firmware installed.
  - If there are any available updates, update the firmware according to the manufacturer's instructions.
  - Check the current software version and if there is an available update, install it.

(Home) (Settings) (All Settings) General About This TV Software Version

### Check if the same symptom occurs with two or more Wi-Fi devices.

- Wi-Fi problems may be related to network condition and a device that is connected to the network.


- If other Wi-Fi devices can connect to the Internet at the same location as the TV, then your Wi-Fi router is probably normal.

**Check the power and Ethernet cables of the Wi-Fi router.**

- When the Ethernet cable connected to the Wi-Fi router is loose or disconnected, network problems can occur.
- Check all power and Ethernet cables of the Wi-Fi router to see if they are correctly connected.

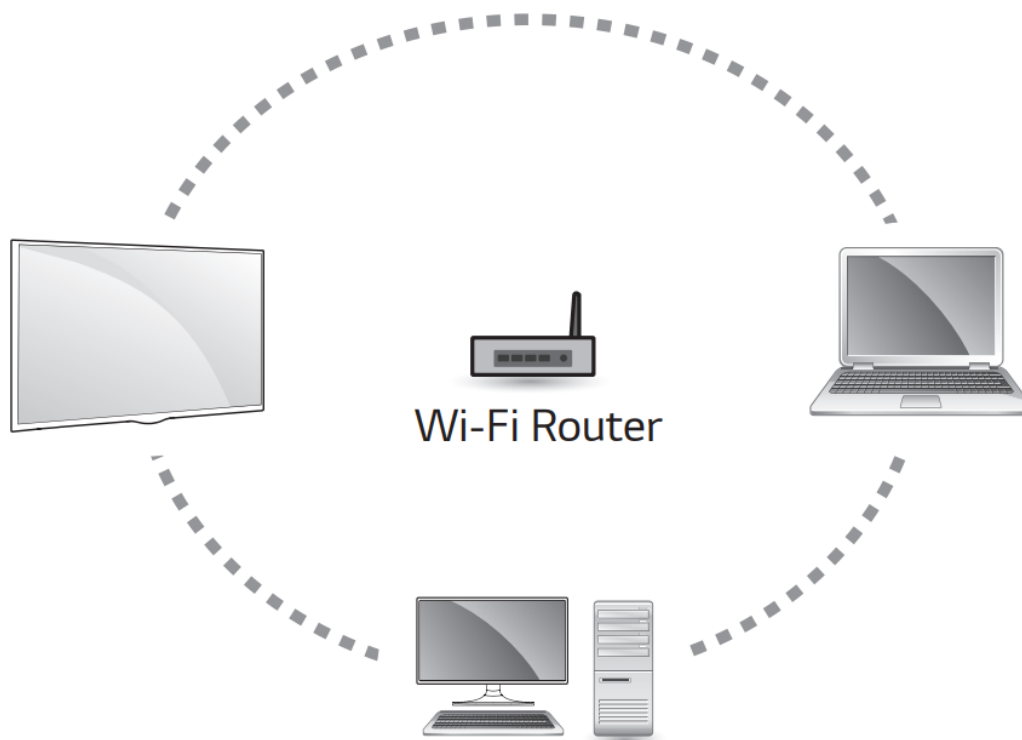
**Check the Wi-Fi router to see if the router is set to the recommended wireless settings. If network problems continue, reset your network devices.**

**Check the signal strength of the Wi-Fi router to connect to from the TV UI.**

- The  that is next to the Wi-Fi router name (SSID) in the menu indicates the sensitivity of the receiver.
- It is recommended that you connect to a Wi-Fi network with 3 or more bars of signal strength.
- If the number of bars indicating signal strength are less than 3, the network connection status may be weak or unstable, so shorten the distance between the Wi-Fi router and the TV.

**If the signal strength of the Wi-Fi router is weak, wireless speed slowdowns and network disconnection may occur.**

**To supplement wireless coverage of network equipment, your Wi-Fi router should be placed in the middle of the network equipment.**



### **Interference Factors**

- If there is any interference from surrounding equipment, the network connection may be weak or unstable.
- Wireless telephones that operate in the 2.4 GHz or 5 GHz bandwidth
- Wireless speakers that operate in the 2.4 GHz or 5 GHz bandwidth
- Video transmitters that operate in the 2.4 GHz or 5 GHz bandwidth
- Other wireless devices (Microwaves, cameras, baby monitors, neighboring wireless devices, etc.) that operate in the 2.4 GHz or 5 GHz bandwidth.

### **How to reduce the effects of interference between Wi-Fi and Bluetooth devices**

- Set the channel on your wireless network equipment to avoid the 2.4 GHz or 5 GHz bandwidth which has lots of interference.
- If possible, use the 5 GHz wireless network.
- If the Wi-Fi router is located too far away or in environments with high interference, the network connection may be weak or unstable.
- In this case, move the Wi-Fi router closer to the TV or check if there are any obstructions (e.g., concrete walls, cabinets) between the two devices.

### **Radio Frequency (RF) Interference and Absorbing Obstructions**

Type of Barrier	Interference Potential	Type of Barrier	Interference Potential	Type of Barrier	Interference Potential
Wood	Low	Water	Medium	Plaster	High
Synthetic material	Low	Bricks	Medium	Concrete	High
Glass	Low	Marble	Medium	Bulletproof glass	High
Metal	Very High				

### Warning

This content is compiled from multiple sources and is provided for reference purposes only. It may not be complete or fully applicable to all situations. If you are unable to resolve your issue, please contact the product manufacturer or an authorized service provider for official support.

