

## Connections

You can watch live broadcasts by connecting a coaxial cable to your TV and can get access to the Internet by using a LAN cable or wireless access point. Using various connectors, you can also connect external devices.


### Connection Guide

You can view detailed information about external devices that can be connected to the TV.

 >  Source > Connection Guide


It shows you how to connect various external devices, such as video devices, game consoles, and PCs using pictures. If you select the connection method and an external device, the connection details appear.

- Audio Device: HDMI (ARC), Optical, Bluetooth, Wi-Fi, Wi-Fi Speaker Surround Setup


 HDMI (ARC) is supported by some models. Check the HDMI port name of the purchased product's model.

- Video Device: HDMI
- Smartphone: Screen Sharing (Smart View), SmartThings, Apple AirPlay, NFC on TV
- PC: HDMI, Screen Sharing (Wireless), Apple AirPlay
- Input Device: Remote Control, Keyboard, Mouse, USB Gamepad, Bluetooth Device
- Game Console: HDMI
- External Storage: USB Flash Drive, Hard Disk Drive (HDD)

 The connection method and available external devices may differ depending on the model.


 Using HDMI Troubleshooting, you can check the connection to HDMI cable and external devices (takes approximately 2 minutes).

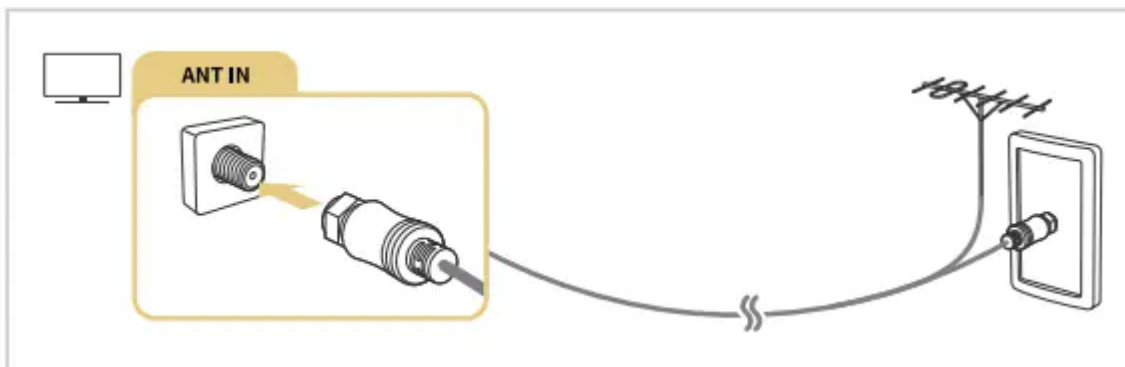


 The image on your TV may differ from the image above depending on the model and geographical area.

## Connecting an Antenna

You can connect a coaxial cable to your TV.

 An antenna connection is not necessary if you connect a cable box or satellite box.





## Connecting to the Internet

You can get access to the Internet through your TV.

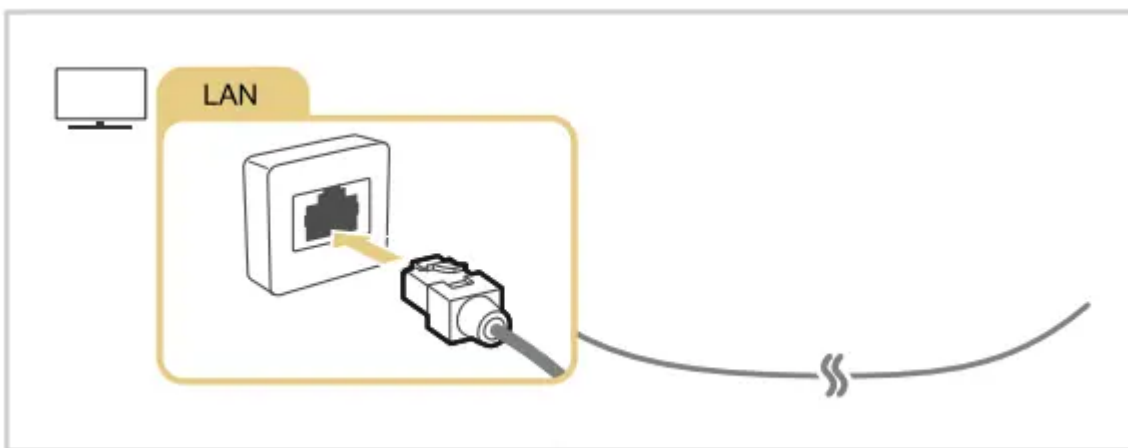
 >  Settings > General > Network > Open Network > Settings

Configure network settings to connect to an available network.

### Establishing a wired Internet connection

 >  Settings > General > Network > Open Network > Settings Wired

If you connect a LAN cable, the TV automatically accesses the Internet.



✎ If the TV does not automatically connect to the network, refer to "Network Issues" in "Troubleshooting."

✎ Use a CAT 7 (\*STP type) cable for the connection.

\* Shielded Twisted Pair

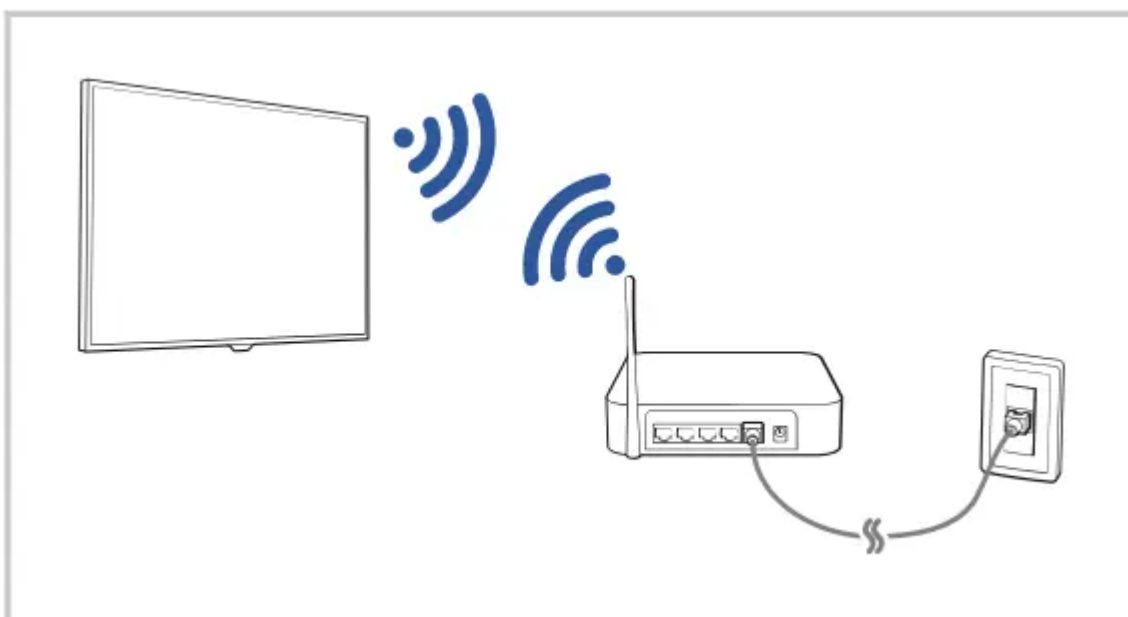
✎ The TV will not be able to connect to the Internet if your network speed is below 10 Mbps.

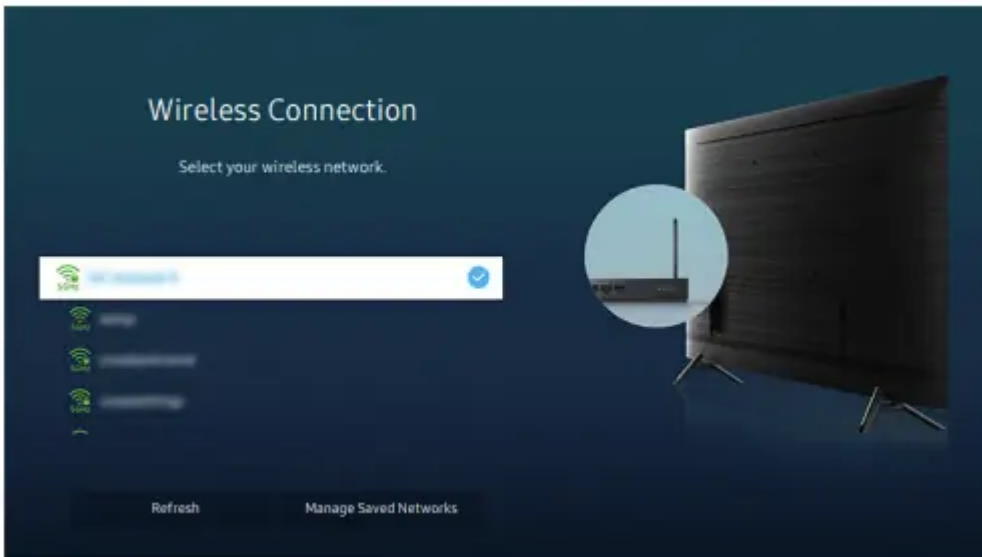
✎ This function may not be supported depending on the model.

### Establishing a wireless Internet connection

🏠 > ⚙️ Settings > General > Network > Open Network > Settings Wireless

Make sure that you have the wireless access point's SSID (name) and password settings before attempting to connect. The network name (SSID) and security key are available on the wireless access point's configuration screen. See the wireless access point's user manual for more information.





The image on your TV may differ from the image above depending on the model and geographical area.

If no wireless access point is found, select Add Network at the bottom of the list and enter the network name (SSID).

If your wireless access point has a WPS or PBC button, select Use WPS at the bottom of the list, and then push the WPS or PBC button on your access point within 2 minutes. The TV will connect automatically.

To view or delete previously connected network names (SSIDs), move the focus to Manage Saved Networks, and then press the Select button.

### Checking the Internet connection status

Settings > General > Network > Network Status

View the current network and Internet status.

### Resetting Your Network

Settings > General > Network > Reset Network

Restore the network settings to the factory default.

### Turning on the TV with a mobile device

Settings > General > Network > Expert Settings > Power On with Mobile




You can turn on the TV using a mobile device connected to the same network as the TV.

This function is available with a mobile device connected to the TV through the SmartThings app or the Apple AirPlay function.


## Connecting an IP control device to the TV

 >  Settings > General > Network > Expert Settings > IP Remote

You can connect an IP control device to the TV remotely to manage your IP device.

-  To use this function, Power On with Mobile must be turned on.
-  Turning this feature on may allow other IP control devices to control your TV. We recommend turning this feature on only if an authorized third-party custom controller is installed and configured specifically for a Samsung TV and if your Wi-Fi network is password protected.
-  This function may not be supported depending on the model.



## Changing the name of the TV




 >  Settings > General > System Manager > Device Name

You can change the name of the TV on the network. Select User Input at the bottom of the list and change the name.

## Screen Sharing (Smart View) with your Mobile Device



You can watch the screen of your mobile device on the TV screen through Smart View or Tap View.

For information on how to share the screen with your mobile device, refer to  >  Source > Connection Guide > Smartphone > Screen Sharing (Smart View).


- To turn off Screen Sharing (Smart View), disconnect the mobile device or press the  button on the remote control.
- You can watch in full screen by setting the aspect ratio to 16:9 in Screen Sharing (Smart View) of your mobile device.
- Use AirPlay if you are an iPhone or iPad user. For more information, refer to  >  Source > Connection Guide > Smartphone > Apple AirPlay.
- While content of your mobile device is playing on the TV, you can adjust the TV volume by using the volume button on the mobile device.

## Using the Tap View

By tapping the mobile device on your TV, you can watch Multi View or mobile device's screen through the TV screen.


-  This function may not be supported depending on the model.
-  This function is available in Samsung mobile devices with Android 8.1 or higher.

1 Enable Tap View on your mobile device.


 For more information about configuration, refer to 'Enabling the Tap View' below for how to set.


2 Turn on the screen of your mobile device.


3 Tap your mobile device on the TV. The TV screen switches to Multi View or mobile device's screen.


 When you perform Tap View in Ambient Mode feature or Art mode (only in The Frame models), only the mobile device's screen appears on the TV.

4 Watch Multi View or mobile device's screen on the TV screen.

 The displayed TV screen may differ depending on the model.


 This function enables mirroring (Smart View) by detecting vibrations generated when you tap the mobile device on the TV.



 Be sure to tap away from the TV screen and bezel corners. It may scratch or break the TV or mobile device screen.


 We recommend using your mobile device with the cover in place and lightly tap it on any external edge of the TV.

### **Enabling the Tap View**

Enable Tap View in the SmartThings app.

 Depending on the SmartThings app version, you may need to register the TV with your mobile device.


1. Launch the SmartThings app on your mobile device.
2. Select Settings ( > ) in SmartThings app on your mobile device.
3. When any mobile device is near the TV, set "Allow phone presence detection" to On.
4. Tap "Allow phone presence detection" and then set the "Remote Smart View" to On.
5. Enter the "Remote Smart View" by tapping, and then set the TV to connect from the device list to On.


 Upon connection for the first time, select Allow on a pop-up window of the TV.


### **Using the Multi View**


While watching the TV, you can see content from your mobile device through mirroring (Smart View).

 This function may not be supported depending on the model.

 In some models, you can view the image on the camera connected to the SmartThings app of your mobile device.

 Q-Symphony is not supported by Multi View.

 When an external device that connects to a receiver or Soundbar is used in Multi View, sound outputs from the TV speaker, not from the receiver or Soundbar.

 The following menus can be set by pressing the down directional button on the TV's remote control.

- Select Content

Selects content to be displayed on the left screen.

 Press the down directional button on the TV screen. Available content items appear.

- Watch Mobile/Camera

Enjoy your mobile content by mirroring (Smart View).

You can view the camera video connected to the SmartThings app on your mobile.

#### 1. Screen Size

Selects the desired size of Multi View.

- PIP Position

Selects the position of a small screen on the full screen.

The focusing left or right screen appears as small window.

- Sound Output

You will hear the sound of the selected screen through another speaker connected to the TV.

 This function may not be supported depending on the model.

- Sound Distribution

You will hear the sound of both screens at the same time by adjusting the ratio of each screens sound.





 This function may not be supported depending on the model.

## Connection Cables for External Devices

You can view detailed information about the connection cables for external devices that can be connected to the TV.

Cable name	Image	Description
HDMI to HDMI		<p>Each cable simultaneously transmits digital video and audio signals from an external device to the HDMI port on the TV.</p> <p>Cables are divided into various types according to the types of input or output ports on external devices.</p>
HDMI to MINI HDMI		
HDMI to Micro HDMI		
HDMI to USB Type-C		
HDMI to DisplayPort		
Mini DisplayPort to HDMI		



Cable name	Image	Description
DVI to HDMI		DVI to HDMI cables can transmit only digital video signals and not audio signals. We recommend that you use HDMI to HDMI cables.
Optical		Optical cables are used to transmit audio signals to external speakers with low signal loss. Optical cables do not transmit video signals.
Component		Component cables transmit analogue signals. The video signal is separated and transmitted to the red, green, and blue terminals to provide HD (1080i) pictures. The audio signal is transmitted to the red and white terminals.
Composite		Composite cables transmit analogue signals. The video signal is transmitted to the yellow terminal, and the audio signal is transmitted to the red and white terminals.

Available connection cables may differ depending on the model or geographical area.

### Switching between external devices connected to the TV

You can switch between TV programs and the content of external devices.



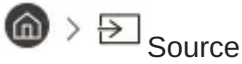
When you select a connected external device on the Source screen, the output of the selected device is displayed on the TV's screen.

To control a device (Blu-ray player, game console, etc.) that supports universal remote control with the TV's remote control, connect the device to an HDMI port on the TV, and then turn on the device. The output displayed on the TV is automatically switched to the output of the device or you can configure universal remote control for the device automatically. For more information, refer to "Controlling External Devices with a Samsung Remote Control - Using the Universal Remote."

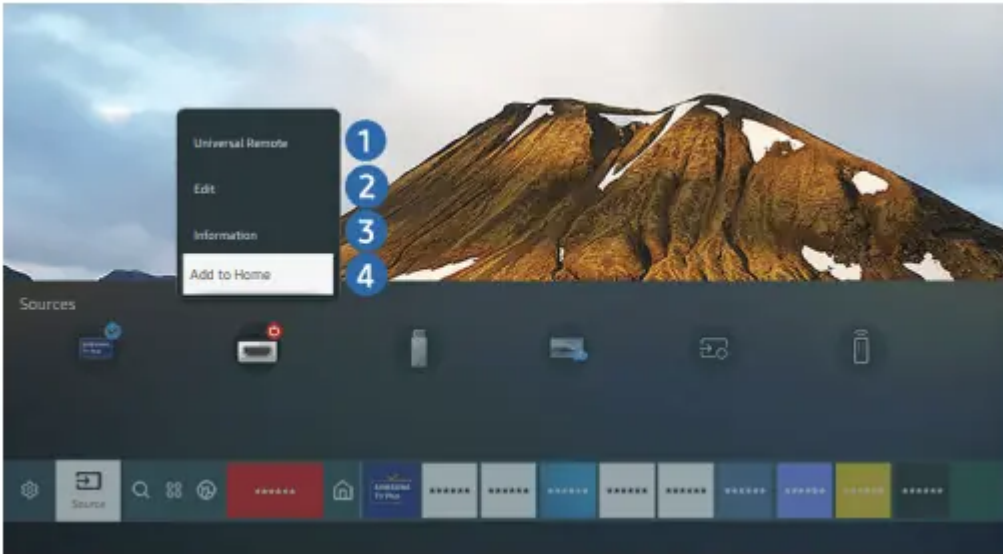
When a USB device is connected to the USB port, a pop-up message appears that lets you switch easily to the media content listed on the device.

This function may not be supported depending on the device and geographical area.

## Editing the name and icon of an external device



You can change the port name for a connected external device or add it to the Home Screen.



The image on your TV may differ from the image above depending on the model and geographical area.

1. Move the focus to a connected external device.
2. Press the up directional button. The following functions become available:

Available functions may differ depending on the port type

### 1 Universal Remote

You can control external devices connected to the TV using a Samsung remote control. To control external devices, register them by following the instructions on the screen.

This function may not be supported depending on the model or geographical area.

For more information, refer to "Controlling External Devices with a Samsung Remote Control - Using the Universal Remote."

### 2 Edit

You can rename the input ports and change the device icons.

### 3 Information

You can view detailed information about an external device.

### 4 Add to Home


You can add the port of an external device to the Home Screen for quick switching.

### Using additional functions

You can use the following features on the Source screen.


- [Remote Access](#)

Use the TV to access your PC via remote PC or Screen Sharing (Wireless).

 For more information, refer to "Using Remote Access."

- [Connection Guide](#)


Displays device connection instructions.

 For more information, refer to "Connection Guide."

- [Universal Remote](#)


Lets you register external devices to your Samsung remote control and control them using the Remote.


 This function may not be supported depending on the model or geographical area.

 For more information, refer to "Controlling External Devices with a Samsung Remote Control - Using the " Universal Remote."

### Connection Notes

When connecting an external device, note the following:

 The number of connectors, and their names and locations may differ with the model.

 Refer to the external device's operating manual when connecting it to the TV. The number of external device connectors, and their names and locations may differ with the manufacturer.

### Connection notes for HDMI

- The following types of HDMI cables are recommended:

High Speed HDMI Cable

High Speed HDMI Cable with Ethernet

Premium High Speed HDMI Cable

Premium High Speed HDMI Cable with Ethernet

Ultra High Speed HDMI Cable

- Use an HDMI cable with a thickness of 0.66 inches (17 mm) or less.
- Using a non-certified HDMI cable may result in a blank screen or a connection error.



- Some HDMI cables and devices may not be compatible with the TV due to different HDMI specifications.
- This TV does not support HDMI Ethernet Channel. Ethernet is a Local Area Network (LAN) built with coaxial cables standardized by the IEEE.
- Use a cable shorter than 10 feet (3 m) to get the best UHD viewing quality.
- Many computer graphics adaptors do not have HDMI ports, but have DVI or DisplayPort ports instead. If your PC does not support HDMI video out, connect your PC with a DVI to HDMI or HDMI to DisplayPort cable.
- When the TV is connected to an external device, such as a DVD/BD player or a set-top box via HDMI, power sync mode will be automatically activated. In the power sync mode, the TV continues to detect and connect external devices via HDMI cable. This function can be deactivated by removing the HDMI cable of the connected device.

 This function may not be supported depending on the model.



### Connection notes for audio devices

- For better audio quality, it is a good idea to use an AV receiver.
- If you connect an external audio device using an optical cable, the Sound Output setting is automatically changed to the connected device. However, to make this happen, you must turn on the external audio device before connecting the optical cable. To manually change the Sound Output setting, do one of the following:

- Use the Quick Settings screen to change to the connected device:

Use the Select button to select Optical on the Sound Output menu. (  >  Settings > up directional button > Sound Output).

- Use the Settings screen to change to the connected device:

Select Optical on the Sound Output menu. (  >  Settings > Sound > Sound Output).

 Refer to the sound bar's user manual when connecting it to the TV.



- An unusual noise coming from a connected audio device while you are using it may indicate a problem with the audio device itself. If this occurs, ask for assistance from the audio device's manufacturer.
- Digital audio is only available with 5.1 channel broadcasts.

### Connection notes for computers

- For the resolutions supported by the TV, refer to "Read Before Connecting a Computer (Supported Resolutions)."
- If you want to connect your PC and TV wirelessly, both of them must be connected to each other on the same network.

- When sharing content with other network-based devices, such as those in an IP (Internet Protocol) storage system, sharing may not be supported due to the network's configuration, quality, or functionality, for example, if the network has an NAS (Network-Attached Storage) device.

### Connection notes for mobile devices

- To use the Smart View function, the mobile device must support a mirroring function, such as Screen Mirroring or Smart View. To check whether your mobile device supports the mirroring function, refer to the mobile device's user manual.
- To use Wi-Fi Direct, the mobile device must support the Wi-Fi Direct function. To check whether your mobile device supports Wi-Fi Direct function, refer to the mobile device's user manual.
- The mobile device and your Smart TV must be connected to each other on the same network.
- Use AirPlay if you are an iPhone or iPad user. For more information, refer to  >  Source > Connection Guide > Smartphone > Apple AirPlay.

 This function may not be supported depending on the model.

- The video or audio may stop intermittently, depending on network conditions.
- When sharing content with other network-based devices, such as those in an IP (Internet Protocol) storage system, sharing may not be supported due to the network's configuration, quality, or functionality, for example, if the network has an NAS (Network-Attached Storage) device.



### Remote Control and Peripherals

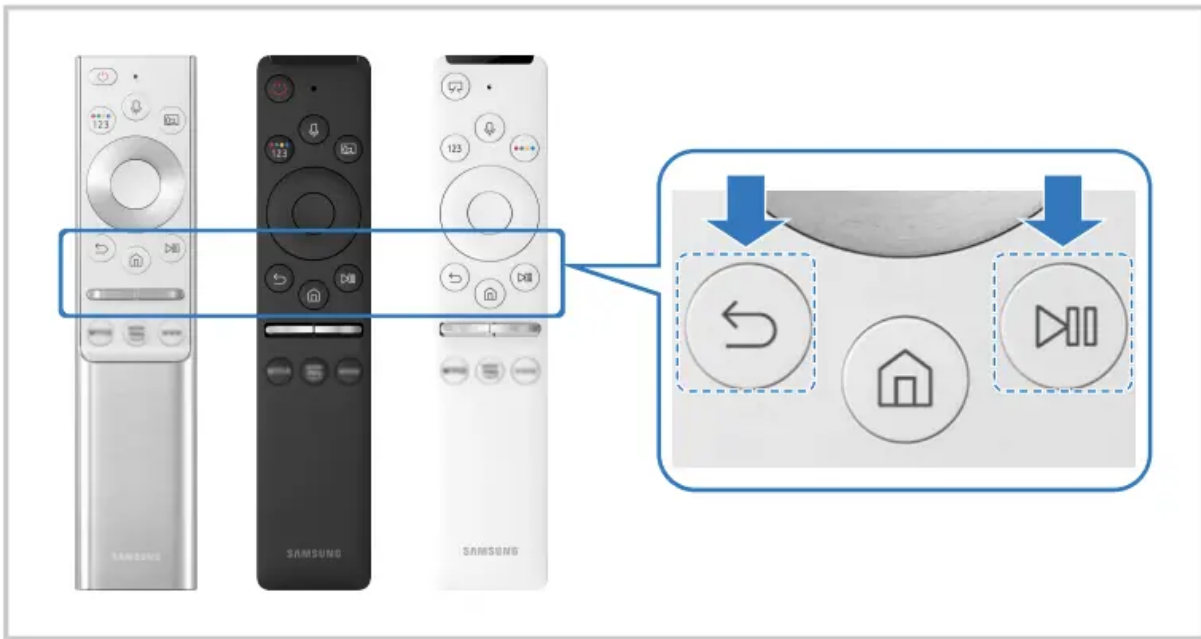
You can control TV operations with your Samsung Smart Remote. Pair external devices, such as a keyboard, for ease of use.

#### Connecting the Samsung Smart Remote to the TV

Connect the Samsung Smart Remote to your TV to operate the TV.

When you turn on the TV for the first time, the Samsung Smart Remote pairs to the TV automatically. If the Samsung Smart Remote does not pair to the TV automatically, point it at the

front of the TV, and then press and hold the  and  buttons simultaneously for 3 seconds or more.



✎ The images, buttons, and functions of the Samsung Smart Remote may differ with the model or geographical area.

✎ For more information about the Samsung Smart Remote, refer to "About the Samsung Smart Remote."

✎ For more information about the Samsung Smart Remote that comes with The Frame, refer to "About the Samsung Smart Remote (The Frame)."

✎ For more information about the Samsung Smart Remote that comes with The Sero, refer to "About the Samsung Smart Remote (The Sero)."

### **Controlling External Devices with a Samsung Remote Control - Using the Universal Remote**

Control the TV and connected external devices with a Samsung remote control.


 >  Source > Universal Remote


You can control external devices connected to the TV using a Samsung remote control. To control external devices, register them by following the instructions on the screen.


✎ This function may not be supported depending on the model or geographical area.


✎ You can also use the Anynet+ (HDMI-CEC) function to operate external Samsung devices with your TV's remote control without any additional setup. For more information, refer to "Using Anynet+ (HDMI-CEC)."

✎ Specific external devices connected to the TV may not support the universal remote feature.

 Do not place any obstacles in front of an external device and TV's logo. It may cause signals from the remote control to be transmitted improperly.

 The TV memorizes both the external device and its connection port (HDMI 1, HDMI 2, etc.).

 If you have difficulty controlling external devices with the Universal Remote, try adjusting the positions of the external devices.

 This function may not operate properly depending on the TV installation environment and the features of external devices.

### **Using Anynet+ (HDMI-CEC)**

Control an external device connected via Anynet+ (HDMI-CEC) with the remote control.


You can use the TV's remote control to control external devices that are connected to the TV by an HDMI cable and that support Anynet+ (HDMI-CEC). Note that you can only set up and operate Anynet+ (HDMI-CEC) with the remote control.

### **Connecting an external device through Anynet+ and using their menus**


 >  Settings > General > External Device Manager > Anynet+ (HDMI-CEC)


1. Set Anynet+ (HDMI-CEC) to On.
2. Connect an HDMI-CEC-compliant device to the TV.
3. Turn on the connected external device.

The device is automatically connected to the TV. After the connection process is finished, you can access the menu of the connected device using your TV remote and control the device.


 The connecting process can take up to 2 minutes to complete.


### **Read before connecting an Anynet+ (HDMI-CEC) device**


 Anynet+ (HDMI-CEC)-enabled devices must be connected to the TV with an HDMI cable. Note that some HDMI cables may not support Anynet+ (HDMI-CEC).

 You can configure the TV's Universal Remote to control third-party cable boxes, Blu-ray players, and home theaters that do not support HDMI-CEC. For more information, refer to "Controlling External Devices with a Samsung Remote Control - Using the Universal Remote."


 Anynet+ cannot be used to control external devices that do not support HDMI-CEC.


 The TV remote control may not work under certain circumstances. If this occurs, set up the device as an Anynet+ (HDMICEC)-enabled device again.

 Anynet+ (HDMI-CEC) works only with external devices that support HDMI-CEC, and only when those devices are either in standby mode or turned on.

 Anynet+ (HDMI-CEC) can control up to 12 compliant external devices (up to 3 of the same type) except for home theaters.

 Anynet+ (HDMI-CEC) can control only one home theater system.

 To listen to 5.1 channel audio from an external device, connect the device to the TV via an HDMI cable and connect a 5.1 home theater system directly to the external device's digital audio output connector.

 If an external device has been set up for both Anynet+ and a universal remote control, the device can be controlled only with the universal remote control.

### **Controlling the TV with a Keyboard, Mouse, or Gamepad**


Connecting a keyboard, mouse, or gamepad to make it easier to control the TV.

 >  Settings > General > External Device Manager > Input Device Manager



You can connect a keyboard, mouse, or gamepad to make it easier to control the TV.

### **Connecting a USB keyboard, mouse, or gamepad**



Plug the keyboard, mouse or gamepad cable into the USB port.


 If you connect a mouse, it is available only in the Internet app and Remote Access function.


 XInput USB gamepads are supported.


 For more information, refer to Input Device in Connection Guide (  >  Source > Connection Guide > Input Device).

### **Connecting a Bluetooth keyboard, mouse, or gamepad**

 >  Settings > General > External Device Manager > Input Device Manager > Bluetooth Device List

 If your device was not detected, position the keyboard close to the TV, and then select Refresh. The TV scans for available devices again.

 If you connect a mouse, it is available only in the Internet app.


 For more information, refer to the Bluetooth device's user manual.

### **Using the keyboard and mouse**

Directional keys Use to navigate the menu, or move the focus to highlight items on the Home Screen.

Windows key Displays the TV settings

Enter key Selects or runs a focused item  
ESC key Returns to the previous screen

F1 / F2 / F3 / F4 key Color buttons — 

F5 key Displays the Home Screen

F6 key Displays the Source screen

F7 key Displays the Channel List

F8 key Mutes the sound


F9 / F10 key Adjusts the volume


F11 / F12 key Changes the channel

Page Up / Page Down Scrolls a web page displayed by the Internet app.

Left-click Available only in the Internet app. You can click a menu or link to start a function as you do on a PC.

Right-click Available only in the Internet app. You can use the following functions:

-  The options displayed in the menu may differ depending on the selected item.
  - Open
  - Open Link in New Tab
  - Enable Scroll Mode

 The key operation may differ depending on some apps or the keyboard.

### Setting up the input devices

 >  Settings > General > External Device Manager > Input Device Manager

- Keyboard Settings

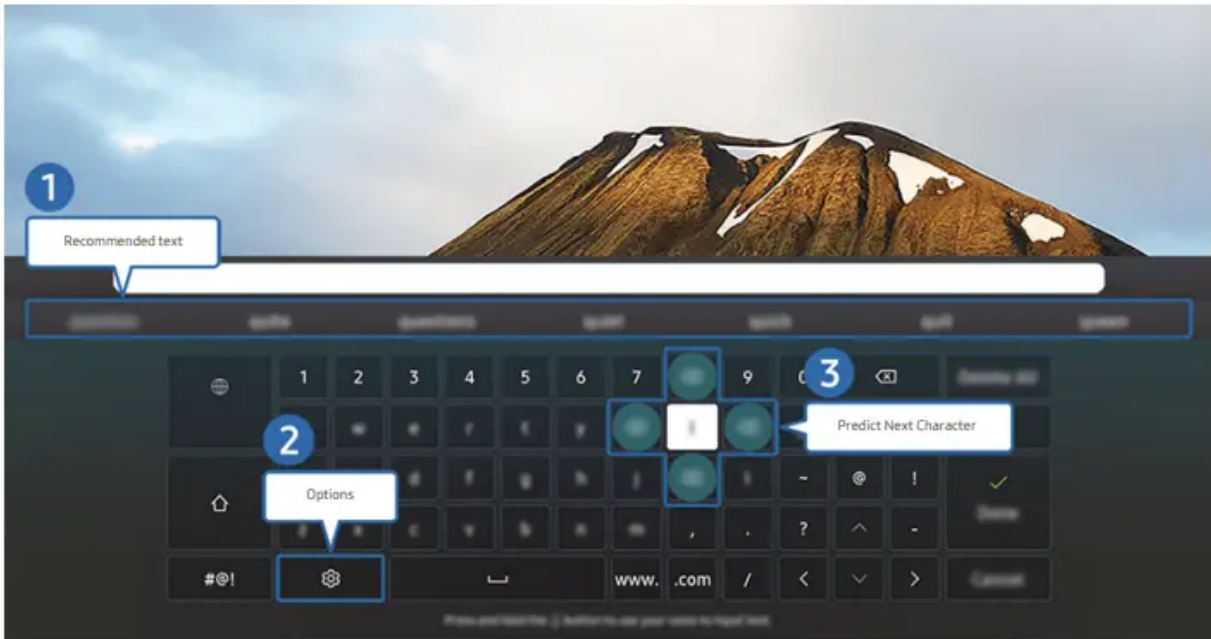
You can set up the keyboard with the Keyboard Language and Keyboard Type functions.

- Mouse Settings

You can set up the mouse with the Primary Button and Pointer Speed functions.

### Entering Text using the On-Screen Virtual Keyboard

Use the virtual keyboard to enter text on your TV.



The image on your TV may differ from the image above depending on the model and geographical area.

### 1 Recommended text

When you type a word you want to use as a search term, this function displays related suggestions from which you can choose one.

### 2 Options

Select on the virtual keyboard screen. The following options are available:


The options available may differ depending on the function running currently.


- Recommended text
- Reset Recommended Text Memory
- Accented Character Preview
- Predict Next Character (when using direction buttons)
- Language

### 3 Predict Next Character

Each time you type a character on the virtual keyboard, the next characters predicted to be typed are displayed. You can use the directional buttons on the remote control to select one.

## Entering Text using the remote control's microphone and the on-screen virtual keyboard

When the virtual keyboard is on the screen, press and hold the  button on the Samsung Smart Remote, speak into the microphone on the Samsung Smart Remote, and then release the button. What you say appears on the screen as text.

 Entering text with your voice may not be supported for some functions.

 This function may not be supported depending on the model or geographical area.


## Troubleshooting

If you have a problem with your TV, you can access various solutions while watching TV. If your problem is not addressed in the Troubleshooting section, view the FAQ section or contact the Samsung Call Center.

### Picture Issues

When the TV has trouble with the picture, these steps may help resolve the problem.

#### Testing the picture

 >  Settings > Support > Device Care > Self Diagnosis > Picture Test

Before you review the list of problems and solutions below, use Picture Test to determine if the problem is caused by the TV. Picture Test displays a high definition picture you can examine for flews or faults.

#### Flickering and Dimming

If your TV is flickering or dimming sporadically, you may need to disable some of the energy efficiency features.

Disable Ambient Light Detection, Power Saving Mode, Motion Lighting, or Contrast Enhancer.

- Settings General Eco Solution Ambient Light Detection
- Settings General Eco Solution Power Saving Mode
- Settings General Eco Solution Motion Lighting
- Settings Picture Expert Settings Contrast Enhancer

Run Picture Test. When the tested image quality is normal, check the signal of the connected device.

- Settings Support Device Care Self Diagnosis Picture Test

#### Component Connections and Screen Color

If the color on your TV screen is not correct or the black and white colors are off, run Picture Test.

- Settings Support Device Care Self Diagnosis Picture Test

If the test results indicate that the problem is not caused by the TV, do the following:

When using the component cable, confirm that the green (Y), blue (Pb), and red (Pr) jacks are plugged into their proper connectors.

For more information about how to connect an external device, run Connection Guide.

- Source Connection Guide

### **Screen Brightness**

If the colors on your TV are correct but just a little too dark or bright, try adjusting the following settings first

- Settings Picture Expert Settings Contrast
- Settings Picture Expert Settings Brightness
- Settings Picture Expert Settings Sharpness
- Settings Picture Expert Settings Color
- Settings Picture Expert Settings Tint (G/R)

### **Blurring, or Juddering**

If you notice blurring or juddering on the screen, use the Picture Clarity Settings function to resolve the issue.

- Settings Picture Expert Settings Picture Clarity Settings

### **Unwanted Powering Off**

If your TV appears to turn off by itself, try disabling some of the TV's energy efficiency functions.

See if Sleep Timer has been enabled. The Sleep Timer automatically turns the TV off after a specified period of time.

- Settings General System Manager Time Sleep Timer

If the Sleep Timer has not been enabled, see if Auto Power Off or Off Timer has been enabled and disable it.

- Settings General Eco Solution Auto Power Off
- Settings General System Manager Time Off Timer

### **Problems Powering On**

If you are having problems powering on your TV, there are a number of things to check before calling the service department.

Confirm that the TV's power cord is connected correctly at both ends and that the remote control is operating normally.

Make sure that the antenna cable or cable TV cable is firmly connected.

If you have a cable box or satellite box, confirm that it is plugged in and turned on.

### **Unable to find a Channel**

If your TV is not connected to a cable box or satellite box, run Auto Program.

- Settings Broadcasting Auto Program

When using a broadcast receiver such as set-top box and IPTV, check the connection to the TV.

- Source Connection Guide

When the symptom persists, contact your service provider.

### **The TV image does not look as good as it did in the store**

Store displays are tuned to a digital UHD channel or HD channel.

Change the output resolution of your devices, such as digital broadcast receiver, IPTV, and set-top box to UHD or HD.

Be sure to use an HDMI cable to enjoy high quality videos.

Source Connection Guide Video Device HDMI

To connect the TV with your PC, make sure that your PC's graphic card supports UHD resolutions.

For more information about the supported UHD resolutions, refer to "Supported Resolutions for UHD Input Signals."

Make sure that the set-top box or cable box supports the content or broadcast for UHD and set the resolution. For more information, contact your service provider.

When using a Samsung TV Plus channel, check the network connection. When the network speed is slow, the app may not work or the image quality may be poor.

### **The picture is distorted**

The compression of video content may cause picture distortions, especially in fast moving pictures from sports programs and action movies.

If the signal reception is weak or poor, screen distortion may be visible but it is not a malfunction.

Mobile phones used close to the TV (within 3.2 ft) may cause noise on analog and digital channels.

### **The color is wrong or missing**

If you're using a Component connection, make sure that the Component cables are connected to the correct jacks.

Incorrect or loose connections may cause color problems or a blank screen.

### **The color is poor or the picture is not bright enough**

Go to Picture and then adjust the Picture Mode, Brightness, Sharpness, and Color settings.

- Settings Picture Picture Mode
- Settings Picture Expert Settings Brightness
- Settings Picture Expert Settings Sharpness

- Settings Picture Expert Settings Color

See if Power Saving Mode has been enabled.

- Settings General Eco Solution Power Saving Mode

Try resetting the picture.

- Settings Picture Expert Settings Reset Picture

### **There is a dotted line on the edge of the screen**

Change Picture Size Settings to 16:9 Standard.

- Settings Picture Picture Size Settings 16:9 Standard

### **The picture is black and white**

Use a composite cable when you connect AV equipment to the TV.

If you are using the composite cable, connect the video cable (Yellow) to the VIDEO (Yellow / Green) input port.

The COMPONENT IN port may not be supported depending on the model or geographical area.

### **The picture won't display in full screen**

HD channels will have black bars on either side of the screen when displaying upscaled SD( 4:3) content.

Black bars will appear at the top and bottom of the screen when you watch movies that have aspect ratios different from your TV.

Adjust the picture size options on your external device or set the TV to full screen.

- Settings Picture Picture Size Settings Picture Size

### **The Caption function in the TV menu is deactivated**

When an external device is connected with an HDMI or Component cable, the Caption function is unavailable. Adjust the caption setting on the external device.

### **Captions appear on the TV screen**

Turn off the Caption function in Caption Settings.

- Settings General Accessibility Caption Settings Caption

### **The HDR of the connected external device turns off**

Expand the reception range of the corresponding HDMI input signal in Input Signal Plus.

- Settings General External Device Manager Input Signal Plus

If the test picture does not appear or there is noise or distortion, the TV may have a problem. Contact Samsung's Call Center for assistance.

If the test picture is displayed properly, there may be a problem with an external device. Please check the connections.

If the problem persists, check the Signal Information or refer to the external device's user manual.

## **Sound and Noise Issues**

When the TV has difficulties with sound, these steps may help resolve the problem.

### **Testing the sound**

- Settings Support Device Care Self Diagnosis Sound Test

If the TV plays the Sound Test melody without distortion, there may be a problem with an external device or the broadcast signal's strength.

### **How can I connect an audio device to the TV?**

The connection method may differ depending on the audio device, such as HDMI eARC), Optical, Bluetooth, and Wi-Fi.

HDMI (ARC) is supported by some models. Check the HDMI port name of the purchased product's model.

For more information about how to connect an audio device, run Connection Guide.

- Source Connection Guide Audio Device

### **There is no sound or the sound is too low at maximum volume.**

Check the volume control of your TV, and then check the volume control of the external device (cable box or satellite box, DVD, Blu-ray, etc.) connected to your TV.

Check the cable connection between an external device and the TV and then try cable connection again.

### **The picture is good but there is no sound.**

Set Sound Output to TV Speaker.

- Settings Sound Sound Output

If you are using an external device, check the device's audio output option.

For example, you may need to change your cable box's audio option to HDMI if the box connected to your TV is using an HDMI cable.

To listen to computer sound, connect an external speaker to the computer's audio output connector.

If your TV has a headphone jack, make sure there is nothing plugged into it.

Reboot the connected device by disconnecting and then reconnecting the device's power cable.

With a set-top box or cable box, check the cable connection and reboot the external device. When the symptom persists, contact your service provider.

**No sound is heard.**

Check whether Digital Output Audio Format is set to Pass-Through.

If you select the Pass-Through option to use an AV receiver that does not support Dolby Digital+, no sound is output with Dolby Digital+ content.

It is recommended to set Digital Output Audio Format to Auto when the connected receiver supports only the limited audio formats.

- Settings Sound Expert Settings Digital Output Audio Format Auto

**The speakers are making an odd sound.**

Run Sound Test.

- Settings Support Device Care Self Diagnosis Sound Test

Make sure that the audio cable is connected to the correct audio output connector on the external device.

For antenna or cable connections, check the Signal Information. A low signal level may cause sound distortions.

- Settings Support Device Care Self Diagnosis Signal Information

**The sound is interrupted.**

The sound may frequently be interrupted when a Bluetooth speaker is used. Make sure that the Bluetooth speaker and the wireless access point are on a straight line, and the Bluetooth speaker is placed as close as possible to the TV.

To minimize interruptions, we recommend a wireless access point that uses a 5 GHz frequency.

When the symptom persists, it is recommended to use wired connection such as HDMI eARC and Optical.

HDMI (ARC) is supported by some models. Check the HDMI port name of the purchased product's model.

**Whenever a function is used on the TV or the channel is changed, the TV voices the activity. The TV explains in voice-over the video scenes displayed on the screen.**

Turn off the Voice Guide function in Voice Guide Settings.

- Settings General Accessibility Voice Guide Settings Voice Guide

**The TV audio is not being played through the AV receiver.**



Check the A/V receiver's power supply and its settings.

- When connecting the optical cable between the TV and A/V receiver, make sure that the sound output is set Optical on your TV.
- In case of HDMI eARC connection, make sure that it is connected to the eARC dedicated HDMI port on your TV. However, the eARC can be used only when the A/V receiver supports the eARC feature.

HDMI (ARC) is supported by some models. Check the HDMI port name of the purchased product's model.

### **The sound is not heard clearly.**

Change to an appropriate sound mode.

- Settings Sound Sound Mode

This function may not be supported depending on the model.

### **The volume of the external device cannot be adjusted.**

Check the cable connection between the TV and the external device.

When connecting an external speaker such as home theater via HDMI, make sure it is connected to the HDMI (eARC) port on the TV. Make sure that the Settings General External Device Manager Anynet+ (HDMI-CEC) is active on your TV.

HDMI (ARC) is supported by some models. Check the HDMI port name of the purchased product's model.

### **I want to turn off and on the TV and audio device at the same time.**

When you connect the Samsung Soundbar to the TV via Bluetooth, the power turns off and on together. It may not be supported depending on the Samsung Soundbar model.

When you connect an audio device that supports HDMI eARC to the HDMI (eARC) port on the TV, the power turns off and on together.

HDMI (ARC) is supported by some models. Check the HDMI port name of the purchased product's model.

## **Channel and Broadcast Issues**

When the TV has difficulties receiving broadcasts, these steps may help resolve the problem

### **"Weak or No Signal" displayed in TV mode or cannot find channel.**

Make sure that the external device is connected securely and turned on. Move to Sources to switch to other input sources.

- Source Sources

When using a set-top box or cable box, check the broadcast signals or the network that is connected to the external device.

**The TV is not receiving all channels.**

Confirm that the coaxial cable is securely connected to the TV.

Run Reset or Auto Program.

- Settings General Reset
- Settings Broadcasting Auto Program

**The captions are not provided on a digital channel. I want to turn off the captions.**

When watching channels with the antenna cable connected, run Caption Settings.

- Settings General Accessibility Caption Settings

Some channels may not have caption data.

When watching a channel on an external device such as set-top box and cable box, turn on the caption function on the device. For more information, contact your service provider.

**Broadcasting is deactivated.**

Broadcasting is only available when Source is set to TV.

Broadcasting cannot be accessed while you watch TV using a cable box or satellite box.

## **External Device Connectivity Issues**

When the TV has difficulties connecting to external devices such as a PC, game console, or mobile device, these steps may help resolve the problem.

**The "Mode Not Supported" message appears.**

Adjust the output resolution of the external device to a resolution supported by the TV.

**The video is OK but there is no audio.**

If you are using an HDMI connection, check the audio output setting on your PC.

If you are using a DVI to HDMI cable, a separate audio cable is required.

To listen to the computer sound, connect external speakers to the audio output connection of the computer.

**I want to connect to a PC and mobile device via screen mirroring.**

To wirelessly connect the TV to your PC, read the instructions at PC Screen Sharing (Wireless) in Connection Guide, and then try to connect.

- Source Connection Guide PC Screen Sharing (Wireless)

Confirm that the TV and your PC are connected to the same network.

To wirelessly connect the TV to your mobile device, read the instructions at Smartphone Screen Sharing (Smart View) in Connection Guide, and then try to connect.

- Source Connection Guide Smartphone Screen Sharing (Smart View)

If the TV has difficulties connecting to your PC or mobile device due to surrounding radio interferences, change the frequency of the wireless access band, and then try to connect.

**No screen appears when connecting the TV to an external device.**

For more information about how to connect an external device, run Connection Guide.

- Source Connection Guide

Make sure that the external device is connected securely and turned on. Move to Sources to switch to other input sources.

- Source Sources

Using HDMI Troubleshooting, you can check the connection to HDMI cable and external devices (takes approximately 2 minutes).

- Source Connection Guide Video Device HDMI Troubleshooting

When using a set-top box or cable box, check the broadcast signals or the network that is connected to the external device.

**The PC screen does not appear or it flicker**

When the PC screen does not appear or the PC is not recognized, check the power supply of the PC and then reconnect the HDMI cable between the PC and TV. When the symptom persists, check that the PC is in Sleep mode.

When the set resolution is not matched, the screen may flicker For the PC supported resolution, see 'Read Before Connecting a Computer (Supported Resolutions).'

**Network Issues**

When the TV has difficulties connecting to the Internet, these steps may help resolve the problem.

Settings Support Device Care Self Diagnosis Smart Hub Connection Test

If the TV has trouble with network connection or TV services, check the Smart Hub connection status

**Wireless network connection failed. Unable to connect to a wireless access point.**

- Make sure that no items that can generate electromagnetic interferences are placed between the TV and the wireless/wired access point.
- Check if the access point is turned on. If it is on, turn it off, wait 1 or 2 minutes, and then turn it on.
- Enter the correct password if required.



- If the wireless connection fails, connect the TV to the access point via a LAN cable.
- If the TV can connect to the Internet normally via the wired connection, there might be a problem with the access point. In this case, try using a different access point.

### **Wired network connection failed.**

Check if the LAN cable is plugged in on both ends. If it is plugged in, check if the access point is turned on. If it is on, turn it off, wait 1 or 2 minutes, and then turn it on.

### **Auto IP configuration failed. Unable to connect to the network.**

Check if the LAN cable is plugged in on both ends. If it is plugged in, check if the access point is turned on.

If the access point is on, turn it off, wait 1 or 2 minutes, and then turn it on.

Disconnect and then reconnect the power cable of the TV, or press and hold the power button for 3 seconds.

### **Connected to a local network, but not to the Internet.**

1. Check if the Internet LAN cable is connected to the access point's external LAN port.
2. Check the DNS setting in IP Settings.

- Settings General Network Network Status IP Settings

### **Network setup is completed, but unable to connect to the Internet.**

If the problem persists, contact your Internet service provider.

Wired networks are not supported by some models.

## **Anynet+ (HDMI-CEC) Issues**

When Anynet+ (HDMI-CEC) isn't working, these steps may help resolve the problem.

### **What is Anynet+?**

You can use the TV's remote control to control external devices that support Anynet+ (HDMI-CEC) and that are connected to the TV via an HDMI cable. For example, if a connected external device supports Anynet+, you can have the connected device turn on or off when you turn the TV on or off.

### **Anynet+ does not work.**

Confirm that the device is an Anynet+ device. The Anynet+ system supports Anynet+ devices only.

Check if the power cord of the Anynet+ device is properly connected.

Check the cable connections of the Anynet+ device.

Go to Anynet+ (HDMI-CEC) and see if Anynet+ (HDMI-CEC) has been set to On.

- Settings General External Device Manager Anynet+ (HDMI-CEC)

Anynet+ may not function when some other functions are active, including Channel Search, Smart Hub, Initial Setup, etc.

If you have disconnected and then reconnected the HDMI cable, scan for devices again or turn your TV off and on.

**I want to start Anynet+. I also want the connected devices to turn on when the TV is turned on.**

Move the focus to the Anynet+ device at Source, press the up directional button to move to Anynet+ (HDMI-CEC), and then press the Select button.

Check if the Anynet+ device is properly connected to the TV, and then select Anynet+ (HDMI-CEC) menu to see if Anynet+ (HDMI-CEC) is set to On.

- Settings General External Device Manager Anynet+ (HDMI-CEC)

**I want to exit Anynet+. It is inconvenient to turn on other devices because the TV also turns on. It is inconvenient because the connected devices (e.g. set-top box) turn off together.**

To turn off the Anynet+ function of a device connected to the TV, turn off the Anynet+ (HDMI-CEC) function of the device.

- Settings General External Device Manager Anynet+ (HDMI-CEC)

When Anynet+ (HDMI-CEC) is turned off, the sound bar connected via the HDMI eARC) port does not turn off and on together with the TV. To prevent a specific device connected to the TV from turning off automatically, turn off the HDMI-CEC function on a specific device connected to the TV.

HDMI (ARC) is supported by some models. Check the HDMI port name of the purchased product's model.

**The message "Connecting to Anynet+ device..." or "Disconnecting from Anynet+ device" appears on the screen.**

You cannot use the remote control when the TV is configuring Anynet+ or switching to the TV viewing screen.

Use the remote control after the TV has completed the Anynet+ configuration or has switched to the TV viewing screen.

**The Anynet+ device won't play.**

You cannot use the play function when Reset is in progress.

**The connected device is not displayed.**

Check whether the device supports Anynet+.

Anynet+ devices must be connected to the TV using an HDMI cable. Make sure the device is connected to your TV with an HDMI cable. Some HDMI cables may not support Anynet+.

Check whether the HDMI cable is properly connected.

Go to Anynet+ (HDMI-CEC) and see if Anynet+ (HDMI-CEC) has been set to On.

- Settings General External Device Manager Anynet+ (HDMI-CEC)

Scan for Anynet+ devices again.

If the connection is terminated because there has been a power failure or the HDMI cable has been disconnected, please scan for the device again.

## **Remote Control Issues**

When the remote control isn't working, these steps may help resolve the problem.

### **The remote control does not work.**

The connection between the remote control and the TV may be lost.

Also, if the remote control is not working or slow, the batteries might be low or dead. If this is the case, replace the batteries. Alkaline batteries are recommended for longer battery life.

### **External devices cannot be operated with the TV remote control.**

Check the cable connection between the TV and external devices.

When the symptom persists, set it manually in Source Universal Remote Setup.

## **Recording Issues**

When Timeshift or Schedule recording aren't working, these steps may help resolve the problem

### **The Timeshift or recording function cannot be used.**

- Check if there is a storage device connected to the TV.
- Recording will automatically stop if the signal becomes too weak.
- Check the free space on the storage device.
- The function will not work if there isn't enough storage space on the USB device.
- Before using the recording function, be sure to read all precautions. For more information, refer to "Before Using the Recording and Timeshift Functions."

### **Cannot record videos received from an external device or Samsung TV Plus.**

The recording function is only available for digital broadcast channels received by the TV. You cannot record videos received from an external device or Samsung TV Plus.

### **The "Format Device" message appears when the Timeshift or recording function is used.**

- To use the recording function, the storage device connected to the TV must have been already formatted.
- Formatting the storage device deletes all data from it, and the storage device is formatted in NTFS.

### **The recorded files on the TV are not played back on a PC.**

The recorded files on the TV can only be played back on the same TV. Those video files cannot be played back on a PC or other TV.

- ✎ This function is not available in the U.S.A. and Canada.
- ✎ This function may not be supported depending on the model or geographical area

## **Apps**

When apps aren't working, these steps may help resolve the problem

### **I launched an app, but it's in a different language. How can I change the language?**

- Languages supported by an app may be different from the TV Language set in the menu.
- The ability to change the language depends on the app's provider.

### **The app does not work properly. Its image quality is poor.**

- Check the network connection. When the network speed is slow, the app may not work or its image quality may be poor.
- The services of your application are not provided by the TV but by the application service provider.
- Refer to the Help section on the application service provider's website.

## **Media Files**

When files don't play, this may help resolve the problem.

### **Some files are interrupted during playback.**

- This problem may occur with unsupported files or high-bitrate files. Most files can be played back, but some files may not play smoothly.

### **Some files can't be played.**

- Some files that use an unsupported codec may not be played back.
- Make sure that the codec is supported by the TV. For more information, refer to "Read Before Playing Photo, Video, or Music Files."

## **Voice Recognition Issues**

When the voice recognition or Bixby functions aren't working, these steps may help resolve the problem. The Voice Wake-up function may not be supported depending on the model or geographical area.

### **Bixby answers automatically.**

The TV may recognize an ambient noise or everyday conversation as a call to Bixby.

Turn off the Voice Wake-up function or set the Wake-Up Sensitivity to Low.

- > Explore Now >  Settings > Voice Wake-up

**I spoke "Hi, Bixby" but Bixby does not answer.**

The Samsung Smart Remote may not recognize your voice when it is far away from you, turned upside down, or located in an environment with loud ambient noise.

- Use the Samsung Smart Remote less than 2 feet (1.5 m) with the remote control buttons facing upward. (There is a built-in microphone on the front of the Samsung Smart Remote.)
- Do not place the Samsung Smart Remote near the TV speaker or an audio speaker.

Turn on the Voice Wake-up function.

- > Explore Now >  Settings > Voice Wake-up

**With Samsung Smart Remote, the following features are available except for voice recognition. There is no response even if the voice entry button is pressed.**

- Try pairing the remote control with the TV.

**During voice recognition, the heavy load message appears and the function does not work.**

- Unplug and then plug the TV power cable and then try again after 1 minute and seconds. It may take a while if the voice recognition server is being inspected.


**I want to see weather information of the desired area.**

- Say with the area name included.

**The voice commands do not work well. They works in Bixby but not in Amazon Alexa.**

Voice commands may differ between Bixby and Amazon Alexa. Refer to the command examples for each voice assistant.

- Bixby: > Explore Now

- Amazon Alexa:  >  Settings > General > Voice > Amazon Alexa Settings

**Other issues**

Use these procedures to resolve other issues that may occur in relation to the product

**The TV is hot.**

- Watching TV for an extended period of time causes the panel to generate heat.
- The heat from the panel is dissipated through internal vents running along the top of the TV.
- The bottom, however, may feel hot to the touch after extended use.

- Children watching TV need constant adult supervision to prevent them from touching the TV.
- This heat, however, is not a defect and does not affect the TV's functionality.

**The TV smells like plastic.**

- This smell is normal and will dissipate over time.

**The settings are lost after 5 minutes or every time the TV is turned off.**

If Usage Mode is set to Retail Mode, the TV's audio and video settings are automatically reset every 5 minutes.

Change Usage Mode to Home Mode.

- Settings General System Manager Usage Mode

**The TV is tilted to the side.**

Remove the base stand from the TV and reassemble it.

**The stand is wobbly or crooked.**

Refer to the Quick Setup Guide and make sure that the stand is assembled correctly.

**PIP is not available.**

PIP is available only when an external device is connected with an HDMI or Component cable.

Note that the function is unavailable when Smart Hub is active.

This function may not be supported depending on the model or geographical area.

**A POP (TV's internal banner ad) appears on the screen.**

Change Usage Mode to Home Mode.

- Settings General System Manager Usage Mode

**The TV is making a popping noise.**

- The expansion and contraction of the TV's outer casing may cause a popping noise.
- This does not indicate a product malfunction.
- The TV is safe to use.

**The TV is making a humming noise.**

- Your TV utilizes high-speed switching circuits and high levels of electrical current. Depending on the TV's brightness level, the TV may seem slightly noisier than a conventional TV.
- Your TV has undergone strict quality control procedures that meet our demanding performance and reliability requirements.

- Some noise coming from the TV is considered normal and is not an acceptable cause for an exchange or refund.

### **The software update over the Internet has failed.**

Check the network connection status.

- Settings General Network Network Status

If the TV is not connected to a network, connect it to a network.

The upgrade stops if you already have the latest software version.

### **The TV narrates the screen events in voice-over.**

To turn off Voice Guide, move the focus from Accessibility Shortcuts to Voice Guide and then press the Select button. You can turn on or off Voice Guide. To run Accessibility Shortcuts, see the following:

- Press and hold the (Volume) button on your Samsung Smart Remote.
- Press the CC/VD button or press and hold the MUTE button on your standard remote control.
- Settings General Accessibility Voice Guide Settings Voice Guide

## **Diagnosing TV operational issues**

You can diagnose issues with your TV and Smart Hub and run reset functions.

- Settings Support Device Care Self Diagnosis

You can use the Picture Test to help diagnose video issues and the Sound Test to diagnose sound issues. You can also view signal strength information for over-the-air digital signals, test the Smart Hub Internet connection, and run the Smart Hub and TV factory reset functions.

- Picture Test
- Sound Test
- HDMI Troubleshooting
- Signal Information
- Smart Hub Connection Test
- Reset Smart Hub

### **Cannot select Signal Information in Self Diagnosis.**

Verify that the current channel is a digital channel.

Signal Information is only available for digital channels.

- Settings Support Device Care Self Diagnosis Signal Information

### **Reset Smart Hub**

Resets all Smart Hub settings to their factory defaults and deletes all information related to Samsung accounts, linked service accounts, Smart Hub service agreements, and Smart Hub applications.

- Settings Support Device Care Self Diagnosis Reset Smart Hub

### **Reset picture**

Resets current picture settings to the default settings.

- Settings Picture Expert Settings Reset Picture

### **Reset sound**

Resets current sound settings to the default settings.

- Settings Sound Expert Settings Reset Sound

## **Getting Support**

Get help directly from Samsung if you have a problem with your TV.

### **Getting support through Remote Management**

Settings Support Remote Management

After consenting to our service agreement, you can use Remote Management to access Remote Support and have a

Samsung service technician diagnose your TV, correct problems, and update your TV's software remotely via the web. You can also turn Remote Management on and off.

This function requires an Internet connection.

### **Finding the contact information for service**

Settings Support About This TV

You can view the address of the Samsung website, the call center phone number, your TV's model number, your TV's software version, Open Source License and other information you may need to get service support from a Samsung call agent or the Samsung website.

You can also view information by scanning the QR code of your TV.

You can also start this function by pressing and holding the button for 5 or more seconds. For the standard remote control, press and hold the (Play) button for 5 or more seconds. Continue holding the button until the customer information pop-up window appears.

### **Requesting service**

Settings Support Device Care Request Support

You can request service when you encounter a problem with the TV. Select the item matching the problem that you encountered, enter the required item, move the focus to Next, and then press the Select button. Select Request Now Send or Schedule Appointment Request Send. Your service request will be registered. The Samsung

Contact Center will contact you to set up or confirm your service appointment.

You must agree to the terms and conditions for the service request.

This function may not be supported depending on the geographical area.

This function requires an Internet connection.

**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.