

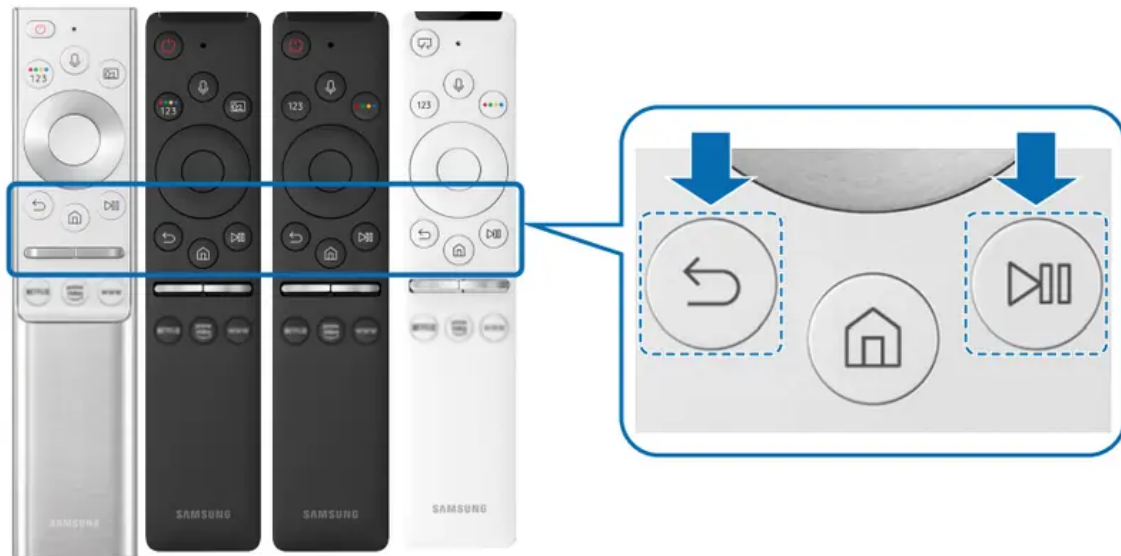


## Quick Guides

### Connecting the Samsung Smart Remote to 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

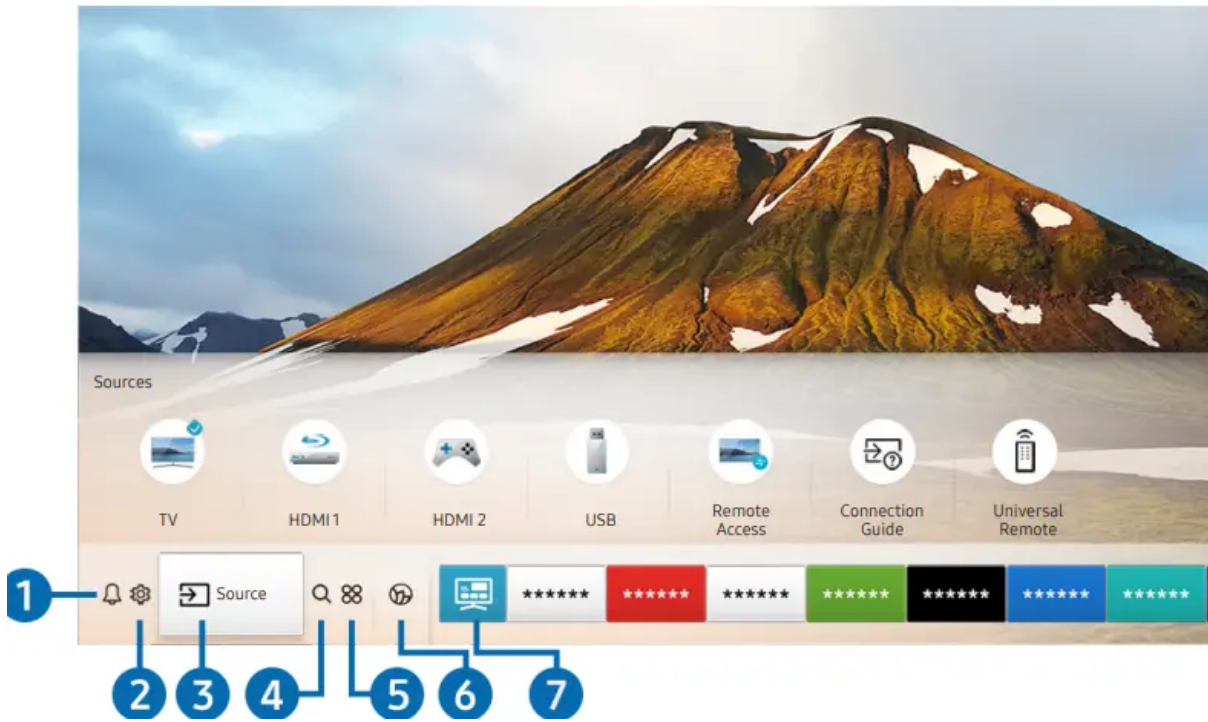
the front of the TV, and then press and hold the  and  buttons simultaneously for 3 seconds or more.














- 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 that comes with the QLED TV (except for Q50R model) and The Serif, refer to "About the Samsung Smart Remote (QLED TV and The Serif).
- For more information about the Samsung Smart Remote that comes with the UHD TV, refer to "About the Samsung Smart Remote (UHD TV).
- For more information about the Samsung Smart Remote that comes with The Frame, refer to "About the Samsung Smart Remote (The Frame).
- The Samsung Smart Remote may not be supported depending on the model or geographical area.

### Using Smart Hub

Connect to Smart Hub for apps, games, movies, and more. Enjoy the multiple functions provided by Smart Hub simultaneously on a single screen.



1.  Notification - You can view a list of notifications for all events that occur on your TV. A notification appears on the screen when it is time to broadcast a scheduled program or when an event occurs on a registered device.
2.  Settings - When the focus is moved to Settings, a list of quick settings icons appears above the top of the menu. You can quickly set frequently used functions by clicking the icons.
3.  Source - You can select an external device connected to the TV.
4.  Search - You can search for channels, programs, movie titles, and apps from Smart Hub.
5.  APPS - You can enjoy a wide range of content including news, sports, weather, and games by installing the corresponding apps on your TV.
6.  Ambient Mode - You can enhance your living space with decorative content that matches the surroundings or view essential realtime information such as weather, time, and news on the TV screen when you are not watching TV. To enter Ambient Mode, press the  button. To return to the TV mode, press the  button. To shut off the TV, press the  button. If you press the  button when the TV is turned off, the TV turns on in Ambient Mode.

7.  Universal Guide - Universal Guide is an app that allows you to search for and enjoy various content such as TV shows, dramas, and movies in one place. Universal Guide can recommend content tailored to your preferences.

## Updating the TV's Software

DO NOT turn off the TV's power until the update is complete. The TV will turn off and on automatically after completing the software update. Video and audio settings will be reset to their defaults after a software update.

 >  Settings > Support > Software Update

### Updating through the Internet

 >  Settings > Support > Software Update > Update Now

- Updating from the Internet requires an active Internet connection.


### Updating through a USB device

 >  Settings > Support > Software Update > Update Now

After downloading the update file from the Samsung website and storing it on a USB device, connect the USB device to the TV to update.

- To update using a USB device, download the update package from Samsung.com to your computer. Then, save the update package in the USB device's top-level folder. Otherwise, the TV will not be able to locate the update package.

### Updating the TV automatically

 >  Settings > Support > Software Update > Auto Update

If the TV is connected to the Internet, you can have the TV's software update itself automatically while you are watching the TV. When the background update is completed, it is applied the next time the TV is turned on. If you agree to the Smart Hub terms and conditions, Auto Update is set to On automatically. If you want this function disabled, use the Select button to turn it off.

- This function may take a longer time if another network function is running concurrently.
- This function requires an Internet connection.

# Connections

## Connection Guide

 >  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.



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

## Connecting an Antenna

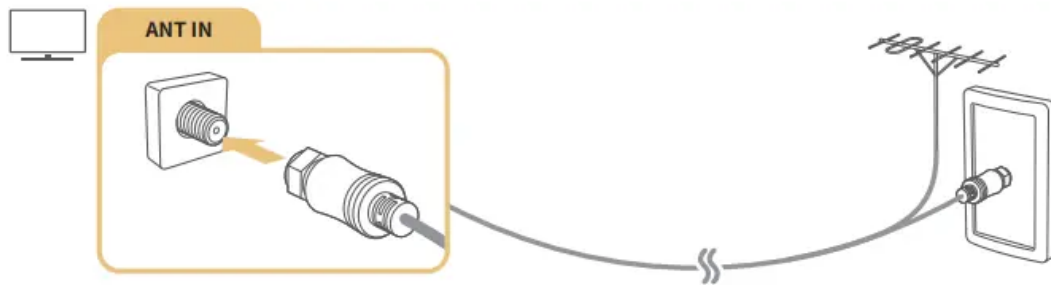
You can connect an antenna cable to your TV. An antenna connection is not necessary if you connect a cable box or satellite box.

## Connecting to the Internet

### Establishing a wired Internet connection



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

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



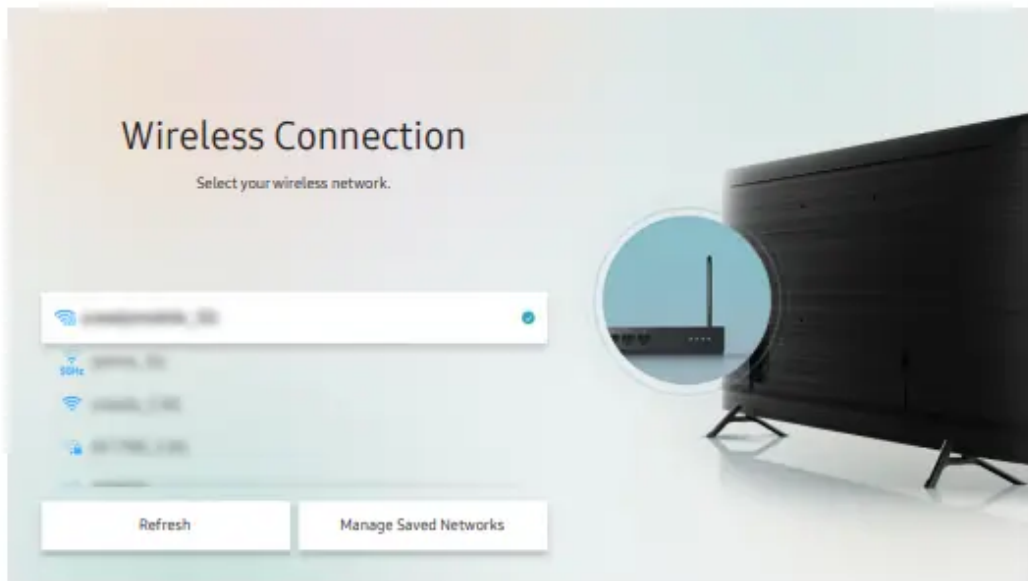
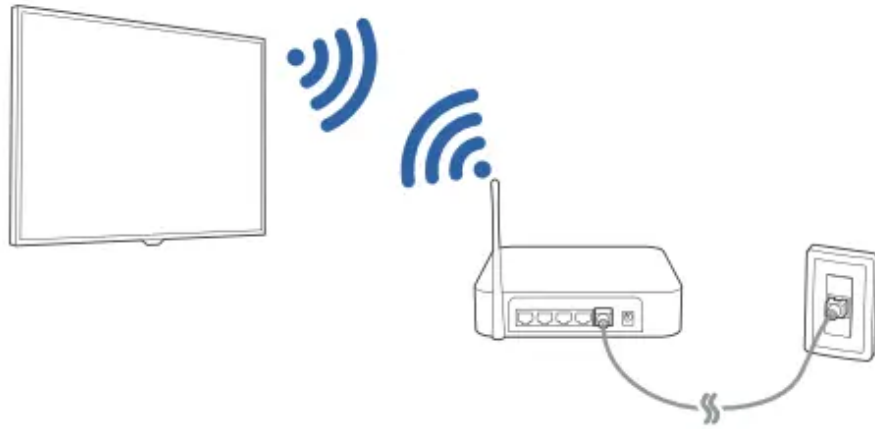
- If the TV does not automatically connect to the network, refer to "Network Issues" in "Troubleshooting."
- Use a CAT 7 (\*STP type) cable for the connection.
- The TV will not be able to connect to the Internet if your network speed is below 10 Mbps.
- This function may not be supported depending on 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 Wireless may not appear depending on the model.





- 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 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 or geographical area.

### Changing the name of the TV on a network

 >  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.






## Connection Notes

### 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).
- 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.
- 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**


### **About the Samsung Smart Remote (QLED TV and The Serif)**

Learn about the buttons on the Samsung Smart Remote that comes with the QLED TV (except for Q50R model) and The Serif.



1. **Directional pad (up/ down/left/right)** - Moves the focus.
2. **Select** - Selects or runs a focused item. When pressed while you are watching content, detailed program information appears.
3. **(Launch app button)** - Launch the app indicated by the button

 (Bixby) - Runs Bixby. Press and hold the button, say a command, and then release the button to run Bixby. When you press the button, the Explore Now menu appears at the bottom of the screen. To move to the Explore Bixby screen, press the Select button.

 (Color / Number button) - Each time you press this button, the colored buttons window and the virtual numeric pad are displayed alternately.

- Use these colored buttons to access additional options that are specific to the feature in use. These buttons are not available in the U.S.A. and Canada.

- Press to bring up the virtual numeric pad on the screen. Use the numeric keypad to enter numeric values. Select numbers and then select Done to enter a numeric value. Use to change the channel, enter a PIN, enter a ZIP code, etc. If the Color Button appears with a number strip on the screen, select the Color Button and then select a specific color by using the directional pad (up/down/left/right). Use this to access additional options that are specific to the feature in use.



(Ambient Mode) - In TV mode, press the button to enter Ambient Mode. If you press the button when the TV is turned off, the TV turns on in Ambient Mode.



(Return) - Press to return to the previous menu. When pressed for 1 second or more, the running function is terminated. When pressed while you are watching a program, the previous channel appears.



(Smart Hub) - Press to return to the Home Screen.



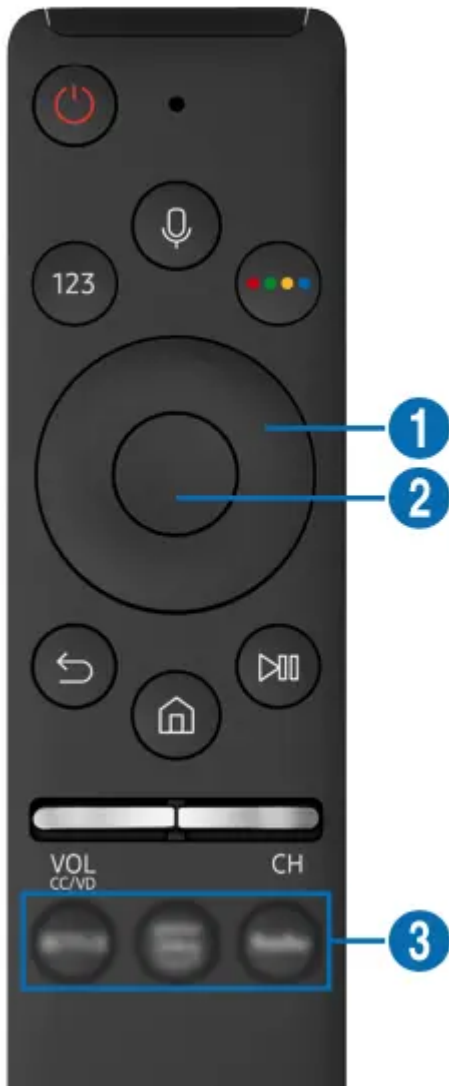
(Play/pause) - When pressed, the playback controls appear. Using these controls, you can control the media content that is playing.

VOL (Volume) - Move the button up or down to adjust the volume. To mute the sound, press the button. When pressed for 1 second or more, the Accessibility Shortcuts appears.

CH (Channel) - Move the button up or down to change the channel. To see the Guide screen, press the button. Press and hold the button up or down to quickly change the channel.

## About the Samsung Smart Remote (UHD TV)

Learn about the buttons on the Samsung Smart Remote that comes with the UHD TV.

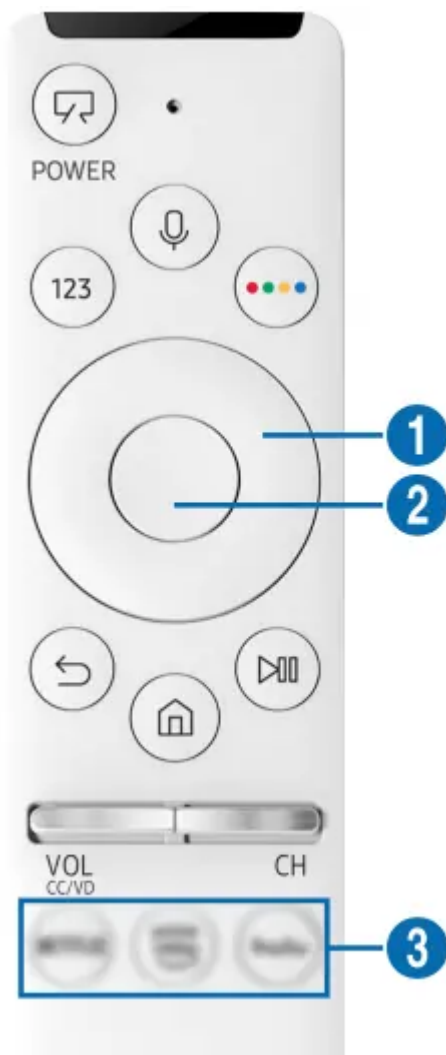



**123** (Number button) - Press to bring up the virtual numeric pad on the screen. Use the numeric keypad to enter numeric values. Select numbers and then select Done to enter a numeric value. Use to change the channel, enter a PIN, enter a ZIP code, etc.

**Color button** - When pressed, colored buttons appear on the screen. Use these colored buttons to access additional options that are specific to the feature in use. These buttons are not available in the U.S.A. and Canada



### About the Samsung Smart Remote (The Frame)

Learn about the buttons on the Samsung Smart Remote that comes with the The Frame.



 (Power) - When watching TV, press to switch to Art mode. In Art mode, press to switch to watching TV. Press and hold to turn off the TV completely. When the TV turns off and on again, display the last used mode.

### Connecting to the Samsung Smart Remote

**Pair the TV with the Samsung Smart Remote.** 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.
- The Samsung Smart Remote may not be supported depending on the model or geographical area.

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

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





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.



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

**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

- This function may not be supported depending on the model or geographical area.
- 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 about how to connect a Bluetooth device, refer to the Bluetooth device's user manual.

### Using the keyboard and mouse

Button	Description
Directional keys	Moves the focus
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 <a href="#">Source</a> screen
F7 key	Displays the <a href="#">Channel List</a>
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 <a href="#">Internet</a> app.
Left-click	Available only in the <a href="#">Internet</a> app. You can click a menu or link to start a function as you do on a PC.
Right-click	Available only in the <a href="#">Internet</a> app. You can use the following functions:  The options displayed in the menu may differ depending on the selected item. <ul style="list-style-type: none"> <li>• <a href="#">Open</a></li> <li>• <a href="#">Open Link in New Tab</a></li> <li>• <a href="#">Enable Scroll Mode</a></li> </ul>

## 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.



## Smart Features

### Using a Samsung account

#### Signing in to a Samsung account

•  >  Settings > General > System Manager > Samsung Account > Sign In



#### Creating a new account

 >  Settings > General > System Manager > Samsung Account > Create Account

To create a new Samsung account, follow the instructions on the screen.


- For more information about the terms and conditions, privacy policy, select View Details.
- To protect personal information, select Profile image selection and password entry (High security) in the field below the password entry bar.
- If you want the TV to log you into your account automatically whenever you turn on the TV, click Stay Signed In

### Creating a Samsung account using a PayPal account

 >  Settings > General > System Manager > Samsung Account > Create with PayPal

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

### Managing your Samsung account

 >  Settings > General > System Manager > Samsung Account > My Account

When you sign in to your Samsung account, you can use the following functions:

- Sign Out - When multiple people share the TV, you can sign out of your account to prevent others from seeing it.
- Edit Profile - You can edit your account information.
- Payment Info - You can view or manage your payment information.
- Back up - You can back up the TV settings to your Samsung Cloud storage. When resetting or replacing the TV, you can also restore its settings with the backed-up settings.
- Sync Internet - Once you sign in to your Samsung account and configure the Sync Internet settings, you can share the favorites and website bookmarks that you registered on other devices.
- Remove Account - You can delete an account from the TV. Although you have deleted your Samsung account from the TV, you are not unsubscribed. To unsubscribe from your Samsung Account, visit the Samsung Accounts website (<http://account.samsung.com>).
- Terms & Conditions, Privacy Policy - You can view the user agreement and privacy policy.

## Using the Remote Access

You can use the TV to access your PC via remote PC or Screen Sharing (Wireless).

- Remote PC - Provides the same functionality as Windows Remote Desktop Connection. Enter the IP address of the remote access PC or select a profile. To remotely connect to a PC, you must enter a correct user name and password.
  - To register a frequently used PC, move the focus to Manage User Profiles, and then press the Select button. When a pop-up window appears, select Add, and then enter the PC information.
  - To use this function, you must select Allow remote connections to this computer in advance on the Windows PC you want the TV to connect to.
  - This function is only supported by a Professional or higher edition of Windows 7 or higher.
- Screen Sharing (Wireless) - Follow the instructions on the screen to adjust the PC settings and wirelessly connect the TV to the PC
  - This function is only available for PCs that support wireless screen sharing.
  - This function is supported by Windows 10.

## Using the Internet

When you run Internet, you can see recently viewed web sites or featured recommendations. When you select a desired web site, you can get immediate access to it.

- You can use the Internet function more easily after connecting a keyboard and mouse.
- You can scroll web pages with the directional pad on the Samsung Smart Remote.
- The web pages may differ from those on a PC.
- Before using the Internet, refer to "Read Before Using the Internet Function."

## Using Bixby

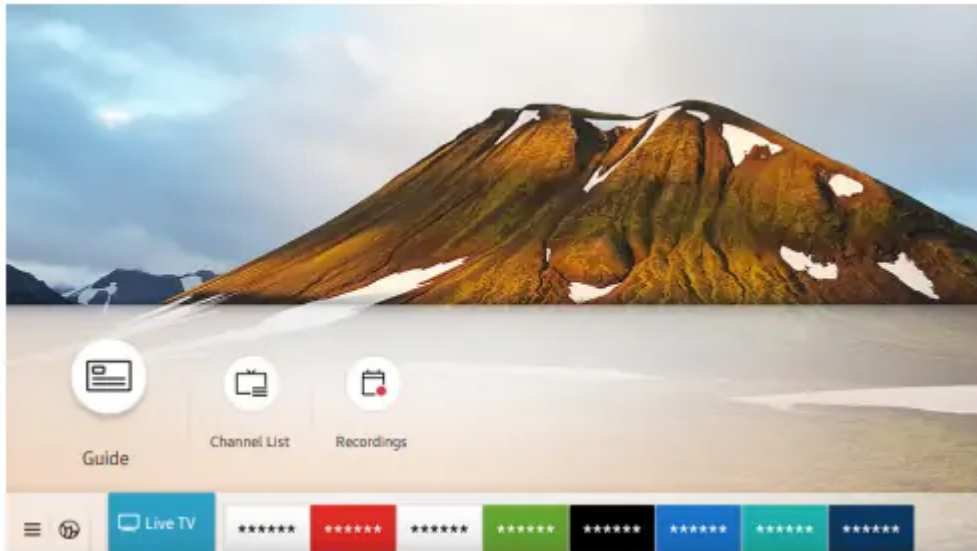
Speak into the microphone on your Samsung Smart Remote to control your TV.

- Bixby is available only when the TV is connected to the Internet.
- To use Bixby, you must register and sign in to your Samsung account. Some functions may not be supported if you are not signed in to your Samsung account.
- Bixby only supports some languages, and the supported functions may differ depending on the geographical area.
- Bixby may not be supported depending on the model or geographical area.



# TV Viewing

## Using the Guide

 > Live TV > Guide



In the Guide, you can see the daily program schedules for each broadcaster, see program information, choose a program to watch, and set up a schedule viewing or recording.

- To view the Guide while watching TV, press the CH button on the Samsung Smart Remote or press the GUIDE button on the standard remote control.
- To see information about analog channels and use the analog channel functions of the Guide, you must finish the service provider settings in initial setup.
- To view the Guide, you must first set the TV's clock (  >  Settings > General > System Manager > Time > Clock).

Move the focus to the program you want in the Guide, and then press and hold the Select button. You can use the following functions:

- Record - You can make a recording of a current program.
- Stop - You can stop the recording function that is currently running.
- Edit Recording Time - You can change the start and end times of scheduled program recordings.
- Schedule Viewing - You can schedule the viewing of a broadcast scheduled program.
- Schedule Recording - You can schedule recording of a broadcast scheduled program.
- Cancel Scheduled Viewing / Cancel Scheduled Recording - You can cancel scheduled viewings or recordings.



- View Details - You can see detailed information about the selected program. The information may differ or may not be provided depending on the broadcast signal.
- Channel Filter - You can view channels and programs categorized by the types defined in Channel List.
- Antenna Type - You can change the type of broadcast signals the TV receives.
- Schedule Manager - You can see the Schedule Manager or Recording & Schedule Manager screen.

## Recording Programs

Using the instant and schedule recording options from the Guide screen

- Instant Recording: Select a live program from the Guide, press and hold the Select button, and then select Record from the popup menu to start recording immediately.
- Schedule Recording: Select a program scheduled to be broadcast, press the Select button, and then select Schedule Recording to set up a scheduled recording of the scheduled program.

Using the instant and schedule recording options while watching a program

- Instant Recording: If you select Record after pressing the  button twice or after pressing the  button once while watching a broadcast, recording starts.
- Schedule Recording: Press the Select button while watching a program to display the program info window. Use the left or right directional button to select a scheduled program. Press the Select button, and then select Schedule Recording to set up a scheduled recording of the scheduled program.

## Setting Up a Schedule Viewing

Using the schedule viewing options from the guide screen: On the Guide screen, select a program you would like to view, press and hold the Select button, and then select Schedule Viewing in the pop-up menu that appears.

Using the schedule viewing options while watching a program: Press the Select button while watching TV. The Program Info window appears. Select a program that will be broadcast using the left or right directional buttons. Press the Select button, and then select Schedule Viewing to schedule viewing of that program.

Using schedule viewing to view programs at a specified time on a specified date: To schedule a viewing, set the values for Antenna, Channel, Repeat, Date, and Start Time of the broadcast program to view, and then select Save.



Setting the schedule Viewing Time: You can change scheduled viewing information or cancel scheduled viewings. " You can set up a maximum total of 30 Schedule Viewing and Schedule Recording entries

- Edit - You can set the start time of a scheduled viewing. If you choose a program from the Guide, the Start Time can be set to up to 10 minutes before the program.
- Delete - You can delete scheduled viewings.
- View Details - You can view detailed information about scheduled viewings.



## TV-Viewing Support Functions

Changing the broadcast signal:  > Live TV > Channel List

- Press the right directional button on your remote control, move the focus to Air or Cable, and then press the Select button

Scanning for available channels:  >  Settings > Broadcasting > Auto Program

- Do not use this function if your TV is connected to a cable box or satellite box.
- If the TV has saved channels, Auto Program deletes the existing list, and then saves the newly scanned channels.



Using Program Rating Lock:  >  Settings > Broadcasting > Program Rating Lock Settings

This function is useful for controlling what programs children can watch on the TV based on their ratings. Program Rating Lock Settings does not, however, block programs originating from external sources, such as Blu-ray players, DVD players, or USB files.

Every time you access Program Rating Lock Settings, you must enter the security PIN. You must also enter this PIN to watch a blocked program. The default PIN is



"0000." To change the PIN, go to  >  Settings > General > System Manager > Change PIN.

- Program Rating Lock Settings may not be supported depending on your input signal.
- For more information about how to set your password, refer to "Setting up a password."
- For more information about the rating system of different countries, refer to "Blocking programs based on their TV Rating."

Configuring advanced broadcasting audio settings:  >  Settings > Broadcasting > Audio Options

Audio Options functions differently for analog and digital channels.

- Preferred Language: This is the language you will hear while watching TV if the language is included in the broadcast signal.
- Multi-Track Sound: You can select the multi-track sound function depending on broadcasting signal.

Checking digital channel signal info and strength:  >  Settings > Support > Self Diagnosis > Signal Information



- If your TV is attached to a separate, over-the-air antenna, you can use the signal strength information to adjust the antenna for increased signal strength and improved HD channel reception.
- This function is only available for digital channels.
- This function may not be supported depending on the geographical area.

## Troubleshooting



### Picture Issues

#### 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, or Motion Lighting



◦  >  Settings > General > Eco Solution > Ambient Light Detection

◦  >  Settings > General > Eco Solution > Power Saving Mode



◦  >  Settings > General > Eco Solution > Motion Lighting

#### Component Connections/ Screen Color

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










◦  >  Settings > Support > Self Diagnosis > Start Picture Test

- If the test results indicate that the problem is not caused by the TV, do the following:  
When using the One Connect, confirm that its video input connectors are connected to the correct external device video output connectors. 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 > Backlight
-  >  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 Auto Motion Plus Settings function to resolve the issue.



-  >  Settings > Picture > Expert Settings > Auto Motion Plus 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

### 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.
- If you are using analog cable, upgrade to digital cable.
- If you use an analog cable box or satellite box, upgrade to a digital cable box or satellite box and adjust the digital cable box and satellite box's video output resolution to UHD or HD.
- Be sure to use an HDMI cable to enjoy high quality videos.
- 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."

### 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.
- Check whether Grayscale is set to On.

-  >  Settings > General > Accessibility > Grayscale

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

## Sound and Noise Issues

How can I connect an audio device to the TV?

- The connection method may differ depending on the audio device. 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.

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.


No sound is heard.

- Check whether Digital Output Audio Format is set to Dolby Digital+.
- Set Digital Output Audio Format to Dolby Digital+ only when you play Dolby Digital+ (with Atmos) content.
- If you are using an AV receiver that does not support Dolby Digital+, you will hear no sound when you select Dolby Digital+.

-  >  Settings > Expert Settings > Digital Output Audio Format > Dolby Digital+

The speakers are making an odd sound.

- Run Start Sound Test.

-  >  Settings > Support > Self Diagnosis > Start 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.

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.
- If the problem persists, we recommend that you use a wired connection

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.

- Make sure that the AV receiver is connected to the TV's HDMI (ARC) port with an HDMI cable.
- Confirm that the AV receiver is HDMI (ARC) compatible.
- If the AV receiver is not HDMI (ARC) compatible, connect the TV and the AV receiver with an optical cable. The HDMI (ARC) port may support eARC in some models.

## Channel and Broadcast Issues

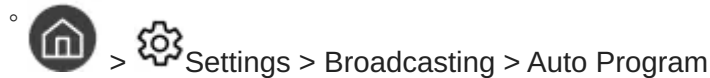
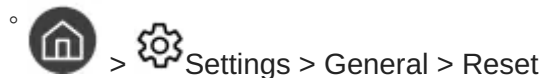
"Weak or No Signal" displayed in TV mode/ cannot find channel.

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



The TV is not receiving all channels.

- Confirm that the coaxial cable is securely connected to the TV.
- Run Reset or Auto Program.



There are no captions with digital channels.

- Go to Caption Settings and turn on the Caption function, and then change the Caption Mode.



- Some channels may not have caption data.

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.
- Broadcasting cannot be accessed while a recording is in progress or the Timeshift function is running.

## External Device Connectivity Issues

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.

How can I use 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 wireless 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

## Network Issues

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 access point, 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.



## Anynet+ (HDMI-CEC) Issues

What is Anynet+?

- You can use the TV's remote control to control external devices that support Anynet+ (HDMICEC) 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+ (HDMICEC) menu to see if Anynet+ (HDMI-CEC) is set to On.

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

I want to exit Anynet+. I also do not want the connected devices to turn on and off when the TV is turned on or off.

- Turn off the Anynet+ (HDMI-CEC) function

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

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.
- 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

The remote control does not work.

- The connection between the Samsung Smart Remote and the TV may be lost.
- Point the Samsung Smart Remote at the front of the TV, and then press and hold the  and  buttons simultaneously for 3 seconds or more.
- 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.

The remote control batteries run out quickly.

- The batteries may be consumed quickly if the remote control is used very frequently or the Voice Wake-up function is turned on.
- You can extend the battery life by turning off the Voice Wake-up function.

 > Explore Now >  Settings > Voice Wake-up

## Recording Issues

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.

## **Apps**

I launched an app, but it's in English. 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.

My application is not working.

- 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**

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 about the supported codecs, refer to "Read Before Playing Photo, Video, or Music Files."

## **Voice Recognition Issues**

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 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

## Other issues

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 of 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.

The TV is making a popping noise

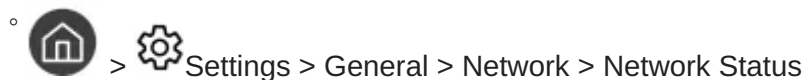
- The expansion and contraction of the TV's outer casing may cause a popping noise.
- This does not indicate a product malfunction.
- The TV is safe to use

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.

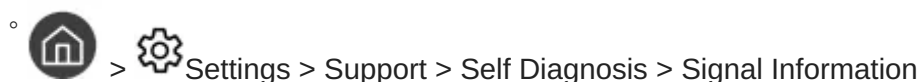


- If the TV is not connected to a network, connect it to a network.
- The upgrade stops if you already have the latest software version.

## Diagnosing TV operational issues


Cannot select Signal Information in Self Diagnosis.

- Verify that the current channel is a digital channel.
- Signal Information is only available for digital channels



## 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 > Self Diagnosis > Reset Smart Hub


## Reset picture

- Resets current picture settings to the default settings.

◦  >  Settings > Support > Expert Settings > Reset Picture

## Reset sound

- Resets current sound settings to the default settings.



◦  >  Settings > Support > Expert Settings > Reset Sound

## Precautions and Notes

### Before Using the Recording and Timeshift Functions



#### Before using the recording and schedule recording functions



- To set up a Schedule Recording, you must first set the TV's clock. Set the Clock.

◦  >  Settings > General > System Manager > Time > Clock

- You can set up a maximum total of 30 Schedule Viewing and Schedule Recording entries.
- Recordings are DRM-protected and therefore cannot be played back on a computer or on a different TV. In addition, these files cannot be played back on your TV if its video circuit has been replaced.
- A USB hard drive with a speed of 5,400 rpm or above is recommended. However, RAID-type USB hard drives are not supported.
- USB memory sticks are not supported.
- The total recording capacity may differ with the amount of available hard drive space and the recording quality level.
- Schedule Recording requires at least 100 MB of free space on the USB storage device. Recording will stop if the available storage space falls below 50 MB while recording is in progress.

- If the available storage space falls below 500 MB while both the Schedule Recording and Timeshift functions are in progress, only the recording will stop.
- The maximum recording time is 720 minutes.
- Videos are played according to the TV settings.
- If the input signal is changed while recording is in progress, the screen will go blank until the change is made. In this case, recording will resume, but ● will not be available.
- When using the Record or Schedule Recording function, the actual recording may start a second or two later than the specified time.
- If the Schedule Recording function is operating while a recording is being made on an HDMI-CEC external device, the priority is given to the Schedule Recording.
- Connecting a recording device to the TV automatically deletes abnormally saved recorded files.
- If the Sleep Timer or Auto Power Off has been set, the TV will override these settings, continue to record, and turn off after the recording has ended.

◦  >  Settings > General > System Manager > Time Sleep > Timer

◦  >  Settings > General > Eco Solution > Auto Power Off

### Before using the timeshift function

- A USB hard drive with a speed of 5,400 rpm or above is recommended. However, RAID-type USB hard drives are not supported.
- USB memory sticks or flash drives are not supported.
- The total recording capacity may differ with the amount of available hard drive space and the recording quality level.
- If the available storage space falls below 500 MB while both the Schedule Recording and Timeshift functions are in progress, only the recording will stop.
- The maximum amount of time available for the Timeshift function is 90 minutes.
- The Timeshift function is not available for locked channels.
- Time-shifted videos are played according to the TV settings.
- The Timeshift function may be terminated automatically once it reaches its maximum capacity.
- The Timeshift function requires at least 1.5 GB of free space available on the USB storage device.

## Read Before Using APPS

- If you want to download new apps using APPS, first sign in to your Samsung account.
- Due to the product characteristics featured on Samsung Smart Hub, as well as limitations in available content, certain features, applications, and services may not be available on all devices or in all territories. Visit [http:// www.samsung.com](http://www.samsung.com) for more information on specific device information and content availability. Services and content availability are subject to change without prior notice.
- Samsung Electronics takes no legal responsibility whatsoever for any interruption of app services caused by the service provider for any reason.
- Application services may be provided in English only and available content may differ with the geographical area.
- For more information about applications, visit the applicable service provider's website.
- An unstable Internet connection may cause delays or interruptions. In addition, applications may terminate automatically depending on the network environment. If this occurs, check your Internet connection and try again.
- Application services and updates may become unavailable.
- Application content is subject to change by the service provider without prior notice.
- Specific services may differ with the version of the application installed on the TV.
- An application's functionality may change in future versions of the application. If this occurs, run the application's tutorial or visit the service provider's website.
- Depending on the service provider's policies, certain applications may not support multitasking.

## Read Before Using the Internet Function

- File download is not supported.
- The Internet function may not be able to access certain websites, including websites operated by certain companies.
- The TV does not support playback of flash videos.
- E-commerce for online purchases is not supported.
- ActiveX is not supported.
- Only a limited number of fonts are supported. Certain symbols and characters may not be displayed properly.
- The response to remote commands and the resulting on-screen display may be delayed while a web page is loading.
- Loading a web page may be delayed or suspended completely depending on the status of the participating systems.

- Copy and paste operations are not supported.
- When composing an email or a simple message, certain functions such as the font size and color selection may not be available.
- There is a limit to the number of bookmarks and the size of the log file that can be saved.
- The number of windows that can be opened concurrently is limited.
- Web browsing speed will differ with the network environment.
- Browsing history is saved from latest to oldest, with the oldest entries being overwritten first.
- Depending on the types of video/audio codecs supported, you may not be able to play certain HTML5 video and audio files.
- Video sources from PC-optimized streaming service providers may not play properly on our proprietary Internet browser.

### **Read before setting up a wireless Internet connection**

#### Precautions for wireless Internet

- This TV supports the IEEE 802.11 a /b /g /n /ac communication protocols. Samsung recommends using IEEE 802.11n. Video files stored on a device connected to the TV via a Home Network may not play back smoothly. " Some of the IEEE 802.11 communication protocols may not be supported depending on the model or geographical area.
- To use wireless Internet, the TV must be connected to a wireless access point or modem. If the wireless access point supports DHCP, the TV can use a DHCP or static IP address to connect to the wireless network.
- Select a channel that is not currently being used by the wireless access point. If the channel set is currently being used by the wireless access point to communicate with another device, the result is usually interference and/or a communications failure.
- Most wireless networks have an optional security system. To enable a wireless network's security system, you need to create a password using characters and numbers. This password is then needed to connect to a security-enabled access point.

#### Wireless security protocols

- The TV only supports the following wireless network security protocols. The TV cannot connect to non-certified wireless access point. – Authentication Modes: WEP, WPAPSK, WPA2PSK – Encryption Types: WEP, TKIP, AES
- In compliance with the Wi-Fi certification specifications, Samsung TVs do not support WEP or TKIP security encryption in networks running in the 802.11n mode. If the wireless access point supports WPS (Wi-Fi Protected Setup), you can connect the TV

to your network using PBC (Push Button Configuration) or a PIN (Personal Identification Number). WPS automatically configures the SSID and WPA key settings.

## Read Before Playing Photo, Video, or Music Files

### Limitations to the use of photo, video, and music files

- The TV supports MSC (Mass Storage Class) USB devices only. MSC is a class designation for mass storage devices. Types of MSC devices include external hard drives, flash card readers, and digital cameras. (USB hubs are not supported.) These kinds of devices must be connected directly to the USB port. The TV may not be able to recognize a USB device or read the files on the device if it is connected with a USB extension cable. Do not disconnect USB devices while they are transferring files.
- When connecting an external hard drive, use the USB (HDD 5V 1A) port. We recommend that you use an external hard drive with its own power adapter.
- Certain digital cameras and audio devices may not be compatible with the TV.
- If there are multiple USB devices connected to the TV, the TV might not be able to recognize some or all the devices. USB devices that use high-power input should be connect to the USB (HDD 5V 1A) port.
- The TV supports the FAT, exFAT, and NTFS file systems.
- In the media contents list, the TV can display up to 1,000 files per folder. If the USB device contains more than 8,000 files and folders, however, some files and folders might not be accessible.
- Certain files, depending on how they are encoded, may not play on the TV.
- Certain files are not supported on all models.
- The DivX and DTS codecs are not supported by the Samsung TV models released in 2019

#### 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.