

SAMSUNG

E-MANUAL

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Model _____ Serial No. _____

To directly go to the page that provides instructions
on how to use the manual for visually impaired
users, select the Menu Learning Screen link below.
[“Menu Learning Screen” Link](#)

Contents

Quick Guides

Connecting the Samsung Smart Remote to the TV

Using Smart Hub

Using the Ambient Mode

- 10 Entering Ambient Mode
- 10 Ambient Mode browser screen
- 13 Applying effects to the content
- 13 View detailed information about the content
- 13 Entering the TV viewing screen from Ambient Mode

Using the Shortcuts

- 15 Adding channels
- 15 Moving channels
- 15 Removing a channels

Using Bixby

- 16 Starting Bixby with voice
- 16 Starting Bixby using buttons on the Samsung Smart Remote
- 17 Learning about the Explore Bixby Screen
- 18 Read Before Using Bixby
- 19 Provisions for using Bixby

Updating the TV's Software

- 20 Updating through the Internet
- 20 Updating through a USB device
- 20 Updating the TV automatically

Getting Support

- 21 Getting support through Remote Management
- 21 Finding the contact information for service
- 21 Requesting service

Connections

Connection Guide

Connecting an Antenna (Aerial)

Connecting to the Internet

- 24 Establishing a wired Internet connection
- 25 Establishing a wireless Internet connection

- 26 Checking the Internet connection status
- 26 Resetting Your Network
- 26 Turning on the TV with a mobile device
- 26 Connecting an IP control device to the TV
- 26 Changing the name of the TV on a network

Connection Cables for External Devices

Switching between external devices connected to the TV

- 29 Editing the name and icon of an external device
- 30 Using additional functions

Connection Notes

- 31 Connection notes for HDMI
- 32 Connection notes for audio devices
- 33 Connection notes for computers
- 33 Connection notes for mobile devices

Remote Control and Peripherals

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

About the Samsung Smart Remote (UHD TV and Q50R model)

About the Samsung Smart Remote (The Frame)

Connecting the Samsung Smart Remote to the TV

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

Using Anynet+ (HDMI-CEC)

- 45 Connecting an external device through Anynet+ and using their menus
- 45 Read before connecting an Anynet+ (HDMI-CEC) device

Controlling the TV with a Keyboard, Mouse, or Gamepad

- 46 Connecting a USB keyboard, mouse, or gamepad
- 46 Connecting a Bluetooth keyboard, mouse, or gamepad
- 47 Using the keyboard and mouse
- 48 Setting up the input devices

Entering Text using the On-Screen Virtual Keyboard

- 49 Entering Text using the remote control's microphone and the on-screen Virtual keyboard

Smart Features

Using Smart Hub

- 51 Displaying the Home Screen
- 56 Launching Smart Hub automatically
- 56 Launching the last used app automatically
- 56 Testing Smart Hub connections
- 56 Resetting Smart Hub

Using a Samsung account

- 57 Signing in to a Samsung account
- 57 Creating a new account
- 58 Managing your Samsung account

Using the Ambient Mode

- 59 Entering Ambient Mode
- 59 Ambient Mode browser screen
- 62 Applying effects to the content
- 62 View detailed information about the content
- 62 Entering the TV viewing screen from Ambient Mode

Using the Remote Access

Using the APPS Service

- 65 Installing an app
- 65 Launching an app
- 66 Managing installed apps

Using the Gallery App

Using the Universal Guide App

Using the SmartThings App

Using the e-Manual

- 72 Launching the e-Manual
- 72 Using the buttons in the e-Manual

Using the Internet

Playing pictures/video/music

- 75 Playing multimedia content on a PC or mobile device
- 76 Playing multimedia content on a USB device
- 76 Listening to your mobile device sound through the TV speaker using Sound Mirroring
- 77 Buttons and functions available while playing multimedia content

Using Bixby

- 80 Starting Bixby with voice
- 80 Starting Bixby using buttons on the Samsung Smart Remote
- 81 Learning about the Explore Bixby Screen
- 82 Read Before Using Bixby
- 83 Provisions for using Bixby

TV Viewing

Using the Guide

Recording Programmes

- 87 Using the instant and schedule recording options from the Guide screen
- 87 Using the instant and schedule recording options while watching a programme
- 88 Scheduling a video recording after entering the date and time
- 88 Managing the schedule recording list
- 89 Viewing recorded programmes
- 89 Setting up a schedule recording start

Setting Up a Schedule Viewing

- 89 Using the schedule viewing options from the guide screen
- 90 Using the schedule viewing options while watching a programme
- 90 Using schedule viewing to view programmes at a specified time on a specified date
- 90 Setting the Schedule Viewing Time

Using Timeshift

Buttons and functions available while recording a programme or Timeshift

Using the Channel List

Editing channels

Using a Personal Favourites List

- 96 Viewing and selecting channels on Favourites list only
- 96 Create a favourites list

TV-Viewing Support Functions

- 97 Changing the broadcast signal
- 97 Scanning for available channels
- 98 Checking digital channel signal info and strength
- 98 Restricting Viewing to Specific Channels
- 99 Using Mark Adult Channels
- 99 Selecting the broadcasting audio option
- 99 Using Programme Rating Lock
- 100 Showing common interface menu
- 100 Configuring advanced broadcasting settings
- 101 Tuning broadcast signals manually
- 101 Fine-tuning analogue broadcasts
- 101 Transferring channel list
- 102 Enabling/Disabling Edit Channel Numbers
- 102 Deleting CAM operator profile
- 102 Setting satellite system
- 102 Changing teletext language
- 103 Selecting the broadcast audio language
- 103 Showing TVkey Interface menu
- 103 Reading digital text

Picture and Sound

Using the Intelligent Mode

Adjusting the Picture Quality

- 105 Choosing a picture mode
- 106 Configuring advanced picture settings

Setting the Viewing Environment for External Devices

- 107 Playing games on an optimised screen
- 108 Setting the Game Mode details
- 109 Using Input Signal Plus
- 109 Using HDMI black level

Picture Support Functions

- 110 Viewing a picture-in-picture (PIP)
- 110 Changing the picture size settings

Configuring a Sound Mode and Expert Settings

- 112 Choosing a sound mode
- 112 Configuring advanced sound settings

Using the Sound Support Functions

- 113 Selecting speakers
- 114 Listening to the TV through Bluetooth devices
- 114 Listening to the TV through a Samsung audio device that supports the Wi-Fi function

System and Support

Using the Time Functions and the Timers

- 115 Setting the clock automatically
- 116 Setting the clock manually
- 116 Adjusting the clock for DST and time zone
- 117 Changing the current time
- 117 Using the sleep timer
- 117 Turning off the TV using the off timer

Using the Auto Protection Time and Energy Saving Functions

- 118 Setting the Auto Protection Time
- 118 Reducing the energy consumption of the TV

Updating the TV's Software

- 119 Updating through the Internet
- 119 Updating through a USB device
- 119 Updating the TV automatically

Protecting the TV from Hacking and Malicious Code

- 120 Scanning the TV and connected storage for malicious code

Audio and Video Functions for the Visually or Hearing Impaired

- 121 Running the accessibility functions
- 121 Running Accessibility Shortcuts
- 121 Enabling voice guides for the visually impaired
- 122 Changing the volume, speed, and pitch of the Voice Guide
- 122 Audio Description
- 122 White text on black background (high contrast)
- 122 Setting the screen to a black and white tone

- 123 Inverting the screen colour
- 123 Enlarging the font (for the visually impaired)
- 123 Learning about the remote control (for the visually impaired)
- 123 Learning about the TV menu
- 124 Watching TV broadcasts with subtitles
- 124 Selecting the broadcasting subtitle language
- 124 Listening to the TV through Bluetooth devices (for the hearing impaired)
- 125 Enlarging the sign language screen for the hearing impaired
- 125 Configuring the repeat settings for remote control buttons

Using Other Functions

- 125 Changing the menu language
- 125 Setting up a password
- 126 Selecting Usage or Retail Mode
- 126 Managing External Devices
- 126 Using AirPlay
- 126 Restoring the TV to the factory settings

HbbTV

Using a TV Viewing Card ("CI or CI+ Card")

- 128 Connecting the "CI or CI+ Card" via COMMON INTERFACE slot with the CI CARD Adapter
- 129 Connecting the "CI or CI+ Card" via COMMON INTERFACE slot
- 130 Using the "CI or CI+ Card"

Teletext Feature

- 131 On the Samsung Smart Remote
- 133 On the standard remote control
- 134 Typical Teletext page

Troubleshooting

Picture Issues

- 135 Testing the picture

Sound and Noise Issues

- 138 Testing the sound

Channel and Broadcast Issues

External Device Connectivity Issues

Network Issues

Anynet+ (HDMI-CEC) Issues

Remote Control Issues

Recording Issues

Apps

Media Files

Voice Recognition Issues

Other issues

Diagnosing TV operational issues

Getting Support

- 149 Getting support through Remote Management
- 149 Finding the contact information for service
- 149 Requesting service

Precautions and Notes

Before Using the Recording and Timeshift Functions

- 150 Before using the recording and schedule recording functions
- 152 Before using the timeshift function

Supported broadcasting audio options

Read Before Using APPS

Read Before Using the Internet Function

- 155 Read before setting up a wireless Internet connection

Read Before Playing Photo, Video, or Music Files

- 156 Limitations on use of photo, video, and music files
- 157 Supported subtitles
- 158 Supported image formats and resolutions
- 158 Supported music formats and codecs
- 159 Supported video codecs (RU8 series or higher, QLED TV, The Serif, The Frame)
- 160 Supported video codecs (Q50R model, RU7 series or lower)
- 162 Supported video codecs (Q900RB model)

Read After Installing the TV

- 164 Picture sizes and input signals
- 165 Installing an anti-theft lock

Supported Resolutions for UHD Input Signals

- 165 If Input Signal Plus is set to Off
- 166 If Input Signal Plus is set to On

Resolutions for Input Signals supported by Q900RB model

- 167 If Input Signal Plus is set to On

Supported Resolutions for FreeSync

Read Before Connecting a Computer (Supported Resolutions)

- 169 IBM
- 169 MAC
- 170 VESA DMT
- 171 VESA CVT
- 171 CTA-861

Supported Resolutions for Video Signals

- 172 CTA-861
- 173 VESA CVT

Read Before Using Bluetooth Devices

- 174 Restrictions on using Bluetooth

Licences & Other Information

Accessibility Guidance

Menu Learning Screen

Using the Remote control

- 177 Orientation of the Samsung Smart Remote
- 177 Description of the Samsung Smart Remote

Using the accessibility menu

- 179 Running the Accessibility Shortcuts menu
- 180 Running the Accessibility menu functions using the General menu
- 180 Running the Accessibility menu functions using Bixby
- 181 Learning about the Accessibility menu functions

Using the TV with Voice Guide on

- 183 Changing channel
- 183 Using on-screen number entry via the Samsung Smart Remote
- 184 Changing volume
- 184 Using programme information

Using the guide

- 186 To view a programme on now
- 186 Other options in the guide

Using Schedule Viewing

- 188 Setting up a schedule viewing
- 188 Cancelling a scheduled viewing

Using the Channel List

Recording

- 191 Using the instant and schedule recording options from the guide screen:
- 192 Recording the programme you are watching
- 192 Scheduling recording from the programme info window
- 192 Changing the recording time
- 193 Viewing recorded programmes
- 193 Deleting a recorded programme

Using Smart Hub

- 194 Smart Hub
- 195 Using the Smart Hub home screen

Launching the e-Manual

Using Bixby

- 198 Running Bixby

Quick Guides

You can learn quickly how to run and use the frequently used functions, such as Bixby, Ambient Mode, and Smart Hub.

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 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 and Q50R model, refer to "[About the Samsung Smart Remote \(UHD TV and Q50R model\)](#)".
-  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.



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

When you press the button on your remote control, you can use the following functions and features.

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 programme or when an event occurs on a registered device.

For more information, refer to "[Displaying the Home Screen](#)".

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.

For more information, refer to "[Switching between external devices connected to the TV](#)".

4 Search

You can search for channels, programmes, movie titles, and apps from Smart Hub.

 To use this feature, the TV must be connected to the Internet.

5 APPS

You can enjoy a wide range of content including news, sports, weather, and games by installing the corresponding apps on your TV.

 To use this feature, the TV must be connected to the Internet.

 For more information, refer to "[Using the APPS Service](#)".

6 Ambient Mode

You can enhance your living space with decorative content that matches the surroundings or view essential real-time 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**.

 If you use a remote control other than the Samsung Smart Remote, there may be restrictions to entering **Ambient Mode**.

 Because this function is specific to QLED TV (except for Q50R model) and The Serif, it may not be supported depending on the model.

 For more information about the **Ambient Mode**, refer to "[Using the 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.

 For more information about **Universal Guide**, refer to "[Using the Universal Guide App](#)".

 Images may look blurry depending on the service provider's circumstances.

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

Art

When you are not watching TV or when the TV is turned off, you can use the **Art** mode function to edit image content such as artworks or photos or to display the content.

 This function is supported only in The Frame.

 For more information, refer to the provided user manual.

Using the Ambient Mode

Learn about the functions available in Ambient Mode that are specific to the QLED TV (except for Q50R model) and The Serif.

> Ambient Mode

You can enhance your living space with decorative content that matches the surroundings or view essential real-time information such as weather, time, and news on the TV screen when you are not watching TV.

 Because this function is specific to QLED TV (except for Q50R model) and The Serif, it may not be supported depending on the model.

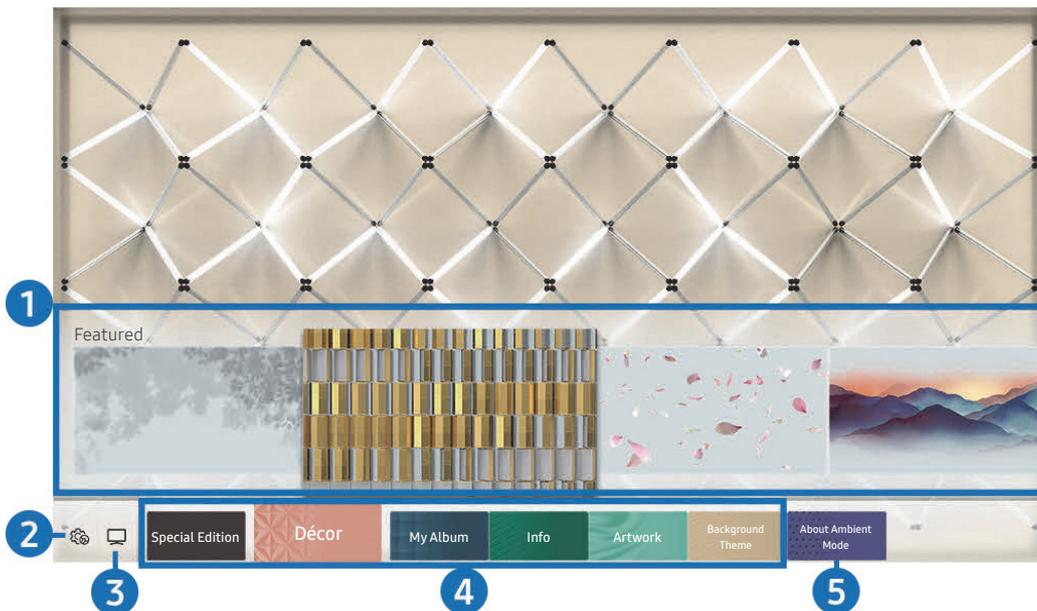
Entering Ambient Mode

To enter **Ambient Mode** from the TV viewing screen, press the  button, or select  >  **Ambient Mode**.

If you press the  button when the TV is turned off, the TV turns on in **Ambient Mode**.

 If you use a remote control other than the Samsung Smart Remote, there may be restrictions to entering **Ambient Mode**.

Ambient Mode browser screen



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

When you press the  or  button in **Ambient Mode**, the **Ambient Mode** browser screen appears at the bottom of the screen. In the **Ambient Mode** browser screen, you can select content and change the **Ambient Mode** settings.

1 Function and content preview

When you select a category at the bottom of the screen, a preview of available functions and content appears here. To view detailed information about a content item, move the focus to it, and then press the up directional button.

2 Ambient Settings

You can configure the following **Ambient Mode** settings:

- **Auto Brightness**

Changes the auto brightness setting for **Ambient Mode**.



When this function is set to **Off**, the brightness level of the TV screen is not automatically adjusted in response to the surrounding light level.

- **Sleep After**

Sets the time when the **Ambient Mode** screen turns off automatically.



If there is no remote control input for the set time, the screen goes off. To turn the screen back on in **Ambient Mode**, press the  button on the remote control.

- **Reset All Photos**

Resets the photos imported from your mobile device or Samsung Cloud.

3 TV

You can enter the TV viewing screen.

4 Selecting a content category

You can select your preferred content and background for the **Ambient Mode** screen.

 Available content categories may differ depending on the model or geographical area.

- **Special Edition**

Allows you to enjoy creative artwork and interior design content created by the world's finest artists and designers.

- **Décor**

Allows you to select content with a sensible and beautiful design.

- **My Album**

Allows you to set a photo stored in your mobile device or Samsung Cloud as the wallpaper of the **Ambient Mode** screen.

 To import photos from your mobile device or Samsung Cloud, use the SmartThings app on your mobile device.

 For more information about how to configure the photo settings, select **View Help**. This function is available after you select a photo in the **My Album** category.

- **Info**

Allows you to select essential real-time information such as weather, temperature, time, and news.

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

- **Artwork**

Allows you to select content such as world famous photos and artwork.

- **Background Theme**

Allows you to select a background theme provided by Samsung.

 Take a picture of a wall using the SmartThings app on your mobile device to create a custom background theme. When you use this function, there may be a delay in image transmission and optimisation depending on network conditions.

 You can set a background theme you created as a background of a content item. To set a background theme as the background of a content item, press the down directional button while watching the **Ambient Mode** screen.

5 About Ambient Mode

You can view information about **Ambient Mode**.

Applying effects to the content

When you are enjoying content in **Ambient Mode**, press the down directional button to change the following settings for the content:

 Available functions may not be supported depending on the content.

- **Backgrounds**

Changes the background of the content.

 This function may not be supported depending on the content.

 You can use the SmartThings app on your mobile device to take a picture of a wall and create a custom background. For more information, select the **How-To** icon. This function may be a delay in image transmission and optimization depending on network conditions, and may not be supported depending on the model.

- **Shadow Effects**

Applies a shadow effect that you select to the content.

 This function may not be supported depending on the content.

- **Brightness**

Adjusts the brightness of the content.

- **Saturation**

Adjusts the saturation of the content.

- **Colour Tone**

Adjusts the colours of the content.

- **Red Tone / Green Tone / Blue Tone**

Adjusts the red, green, blue contrast.

View detailed information about the content

When you are enjoying content in **Ambient Mode**, press the up directional button to view detailed information about the content.

Entering the TV viewing screen from Ambient Mode

To enter the TV viewing screen from **Ambient Mode**, press the  button, or select  **TV** in the **Ambient Mode** browser screen.

 If you press the  button when the TV is turned off, the TV viewing screen appears.

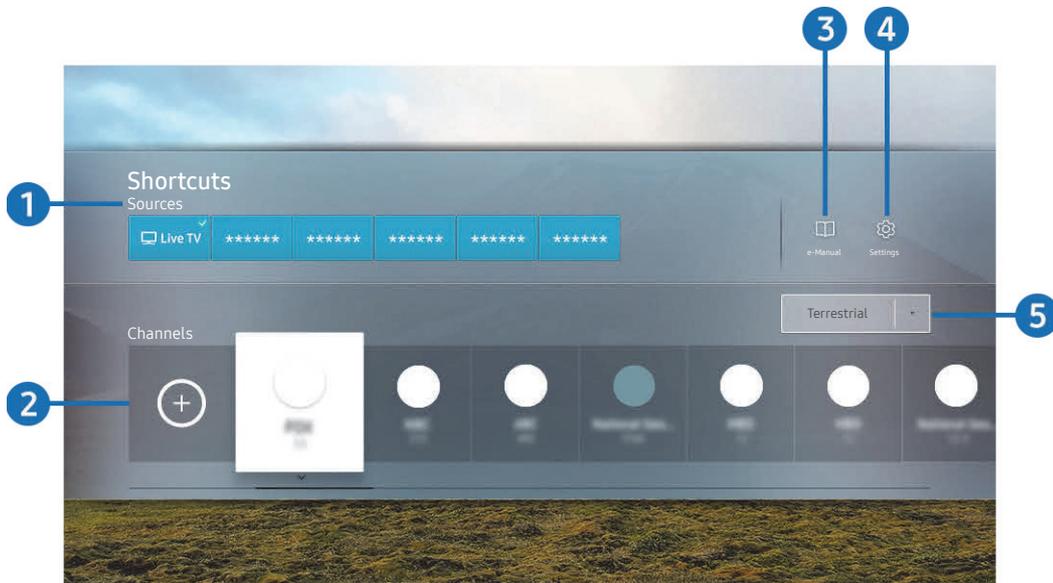
Using the Shortcuts

You can easily use the contents of Sources without running a series of commands.

To display the **Shortcuts** menu screen, press and hold the  button for 1 second or more.

To return to the TV mode, press the  button.

 Because this function is a QLED TV (except for Q50R model)-specific function, it may not be supported depending on the model.



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

1 Sources

You can select an external device connected to the TV.

2 Channels

Press the  button to add a broadcast channel. You can move or remove added broadcast channels.

3 e-Manual

Displays the e-Manual guide.

4 Settings

Displays the main on-screen menu.

5 Terrestrial, Cable, Satellite, or Service Provider

Choose the broadcast type of the content: [Terrestrial](#), [Cable](#), [Satellite](#), or [Service Provider](#).

 This function may not be supported depending on the incoming broadcast signal.

Adding channels

1. Press . You can add only the channel that you are currently watching.
2. Move to the desired location.
3. Press the Select button.

The target channel is added in the bookmark ([Channels](#)) area.

Moving channels

1. Move the focus to the channel to move.
2. Press the down directional button.
3. Select [Move](#).
4. Move the selected channel to the desired location.
5. Press the Select button.

The selected channel is moved.

Removing a channels

1. Move the focus to the channels to remove.
2. Press the down directional button.
3. Select [Remove](#).

The selected channel is removed.

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.

Starting Bixby with voice

You can immediately start a conversation with Bixby by saying "Hi, Bixby". Say "Hi, Bixby", and the Bixby icon at the bottom of the TV screen is activated in Listen mode. Continue speaking. If Bixby does not respond to your voice, turn on the [Voice Wake-up](#) function, and then try again. ( > [Explore Now](#) >  [Settings](#) > [Voice Wake-up](#))

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

Starting Bixby using buttons on the Samsung Smart Remote

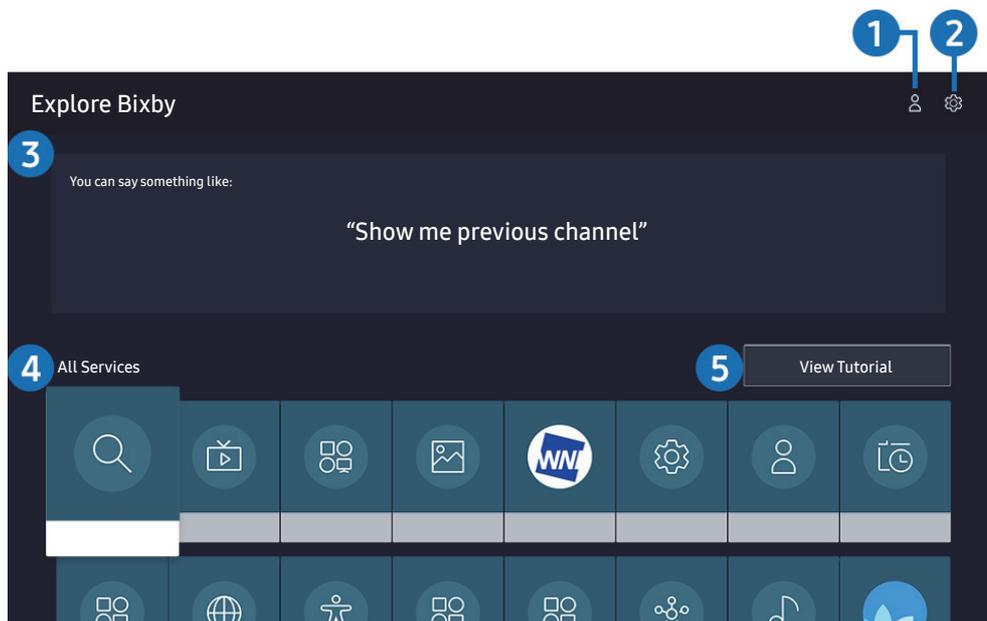
You can also have a conversation with Bixby using the Samsung Smart Remote buttons. Press and hold the  button on your Samsung Smart Remote, say a command, and then release the  button.

To view the Bixby guide, press the  button once:

- When you press the  button, the [Explore Now](#) button appears at the bottom of the screen. Press the Select button to go to the [Explore Bixby](#) screen.



Learning about the Explore Bixby Screen



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

1 My Profile

Go to the [My Profile](#) screen to create a new account or register a voice ID. Sign in to your account with your voice, that is, your registered voice ID.

 If you are signed out of your Samsung account, select  [My Profile](#) to sign in.

2 Settings

You can change the settings for using Bixby.

 These functions may not be supported depending on the model or geographical area.

- **Language**

You can change Bixby's language.

 The languages of the TV and other apps will not change.

 Bixby only supports some languages.

- **Voice response**

You can change or turn off Bixby's voice.

 This function may not be supported depending on the language selected for Bixby.

- **Voice Wake-up**

You can configure this function to make Bixby respond to your voice.

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

- **Sound feedback**

Play a sound when Bixby starts and stops listening.

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

- **Privacy**

You can permit or prohibit Bixby from utilising your personal information when you are using Bixby services.

3 Recommended commands

Displays recommended commands you can use to control the TV with Bixby given the current context.

4 All Services

You can learn the voice commands that let you use Bixby in various situations. Use the directional buttons to move to the desired command, and then press the Select button. You can operate the TV with various voice commands.

5 View Tutorial

The popup window on using Bixby appears.

Read Before Using Bixby

- The supported voice interaction languages and features may differ depending on the geographical area.
- If the language set differs from the language of your country, some features are not available.
- Bixby is available only when the TV is connected to the Internet.
- Even if the TV is connected to the Internet, there may be no response due to a Bixby server error.

- The existing functional specifications may be changed if Bixby is updated.
- Bixby is available only on TVs that support it and come with remote controls that have a microphone.
- Symbols including "-" and special characters are not supported. Consequently, if a word or sentence contains numeric values or symbols, the function may not operate properly.
- Searched results may not provide complete results.
- You may be required to pay for some apps. Consequently, you may encounter a service application or contract.
- To change the current channel by saying channel names as voice commands, you must finish [Set Up Your Service Provider](#). If [Set Up Your Service Provider](#) is not completed, you can complete it using [Reset](#) (🏠 > ⚙️ [Settings](#) > [General](#) > [Reset](#)). [Try Now](#)
- To use the voice text input function and the search function, you must consent to provisions allowing third parties to collect and use your voice data.
- To use the Bixby function, you must:
 - Agree to Smart Hub's Terms of Use
 - Agree to a guidance regarding the collection and use of personal information for the Smart Hub service.
 - Consent to the collection and use of personal information for the voice interaction-based service.

Provisions for using Bixby

- The voice interaction rate differs with the volume/tone, pronunciation, and ambient sound environment (TV sound and ambient noise).
- The optimal volume for voice commands is between 75 dB and 80 dB.

Updating the TV's Software

View your TV's software version and update it if necessary.

 **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 update its software 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.

Getting Support

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

Getting support through Remote Management

 >  [Settings](#) > [Support](#) > [Remote Management](#) Try Now

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.

 You can also start this function by pressing and holding the  button for 5 or more seconds.

Finding the contact information for service

 >  [Settings](#) > [Support](#) > [About This TV](#) Try Now

You can view the address of the Samsung website, the call centre phone number, your TV's model number, your TV's software version, Open Source Licence 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](#) > [Request Support](#) Try Now

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

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

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

 This function requires an Internet connection.

Connections

You can watch live broadcasts by connecting an antenna and antenna 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](#) Try Now

It guides you the way to connect various external devices such as the video devices, game console, and PC through pictures. If you select the connection method to an external device, the information details appear.

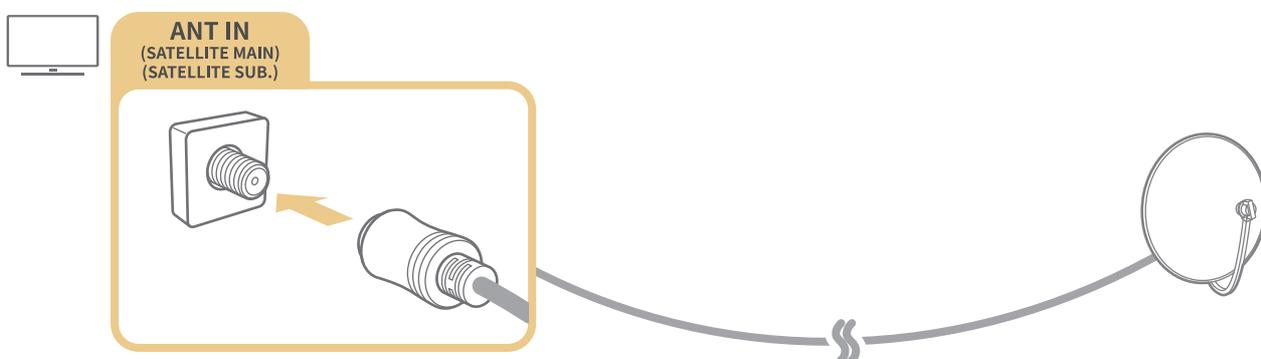
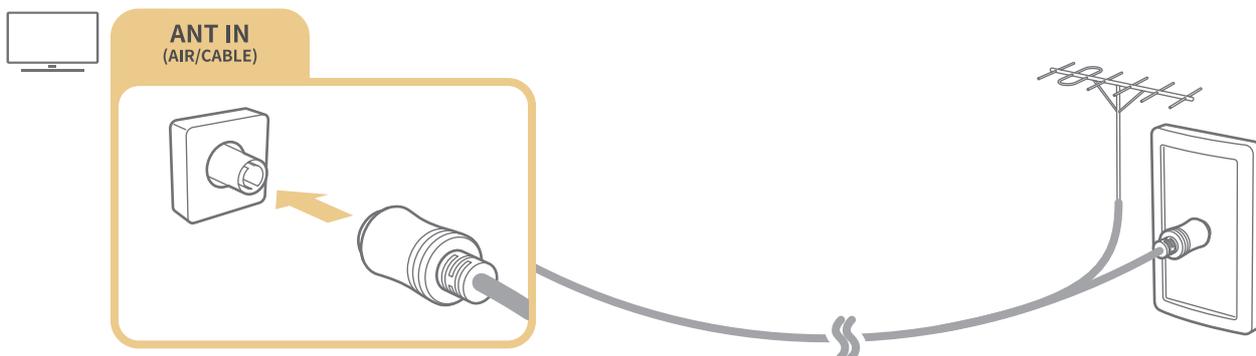


 The image on your TV may differ from the image above depending on the model and geographical area.

Connecting an Antenna (Aerial)

You can connect an antenna cable to your TV.

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



It is best to connect the both connectors using a Multi-Switch or DiSEqC Switch, etc and to set **Aerial Connection Type** to **Dual**.

-  A connection method may differ with the models.
-  The DVB-T2 system may not be supported depending on the geographical area.
-  Depending on the model or geographical area.

Connecting to the Internet

You can get access to the Internet through your TV.

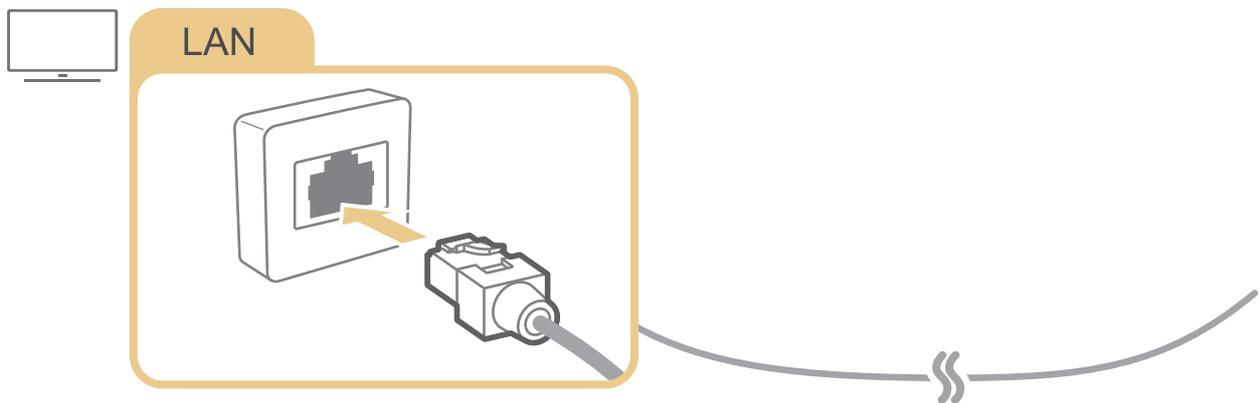
 >  **Settings** > **General** > **Network** > **Open Network Settings** Try Now

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.



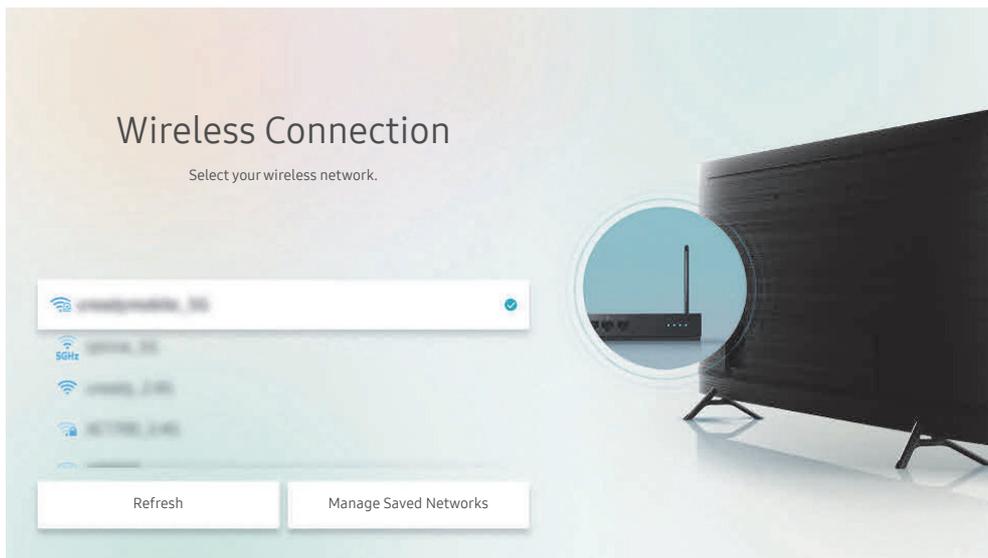
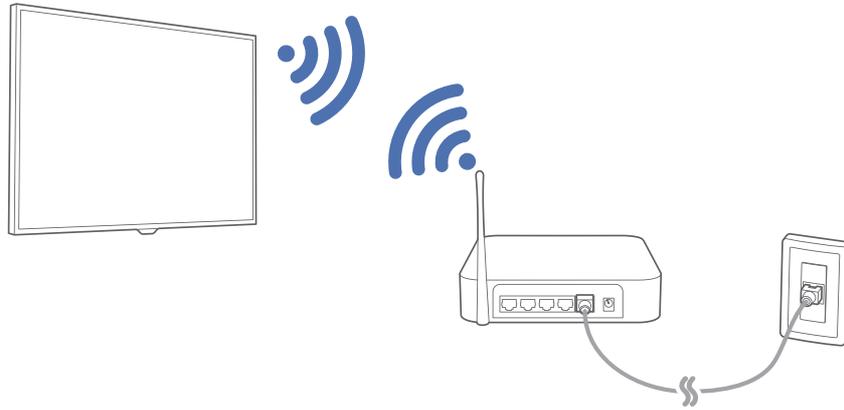
-  If the TV does not automatically connect to the network, refer to "Network Issues" in "Troubleshooting".
-  Use a CAT 7 (*STP type) cable for the connection.
* Shielded Twisted Pair
-  The TV will not be able to connect to the Internet if your network speed is below 10 Mbps.
-  This function may not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



-  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.
-  To disconnect Wi-Fi, select **Disconnect** in  **Settings** > **General** > **Network** > **Network Status**.

Checking the Internet connection status

 >  [Settings](#) > [General](#) > [Network](#) > [Network Status](#) Try Now

View the current network and Internet status.

Resetting Your Network

 >  [Settings](#) > [General](#) > [Network](#) > [Reset Network](#) Try Now

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 with your mobile device when both of them are connected to the same network.

 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 authorised 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

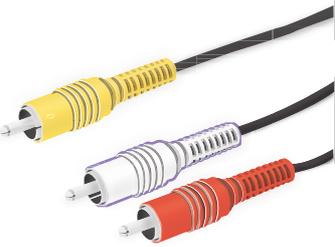
 >  [Settings](#) > [General](#) > [System Manager](#) > [Device Name](#) Try Now

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 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/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		<p>DVI to HDMI cables can transmit only digital video signals and not audio signals. We recommend that you use HDMI to HDMI cables.</p>
Optical		<p>Optical cables are used to transmit audio signals to external speakers with low signal loss. Optical cables do not transmit video signals.</p>
Component		<p>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.</p>
Composite		<p>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.</p>

 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 programmes and the content of external devices.

> Source

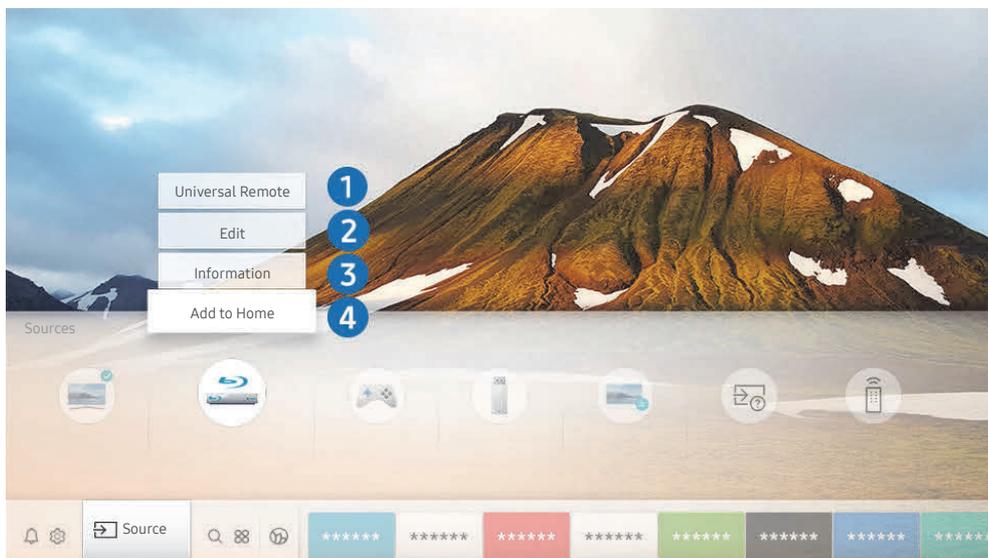
When you select a connected external device on the **Source** screen, the output of the selected device is displayed on the TV's screen.

-  On the standard remote control, press the SOURCE button.
-  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

> Source

You can change the port name for a connected external device or add it to 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 the detailed information about the external devices connected to the TV.

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 the Remote Access](#)".

- **Connection Guide**

The guide to device connections.

- **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 standardised by the IEEE.
 - Use a cable shorter than 10 feet (3 m) to get the best UHD contents 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.
- The Screen Sharing (Smart View) feature may not operate smoothly in a 2.4 GHz environment. For better experience, 5.0 GHz is recommended. 5 GHz may be available depending on the model.
- 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

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

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.

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



Button	Description
 (Bixby)	<p>Runs Bixby. Press and hold the button, say a command, and then release the button to run Bixby.</p> <p>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.</p> <p> The supported Bixby's languages and features may differ by geographical region.</p>
 (Colour / Number button)	<p>Each time you press this button, the coloured buttons window and the virtual numeric pad are displayed alternately.</p> <ul style="list-style-type: none"> • Use this button to access additional options specific to the feature you are using. • 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. <p> When pressed for 1 second or more for a channel that supports the teletext service, the TTX menu appears on the TV screen. For more information, refer to "Teletext Feature".</p> <p> If the Colour Button appears with a number strip on the screen, select the Colour Button and then select a specific colour by using the directional pad (up/down/left/right). Use this to access additional options that are specific to the feature in use.</p>
 (Ambient Mode)	<p>In TV mode, press the button to enter Ambient Mode.</p> <p>If you press the button when the TV is turned off, the TV turns on in Ambient Mode.</p> <p> When pressed for 1 second or more, the Shortcuts menu screen appears.</p> <p> This function may not be supported depending on the model or geographical area.</p>
 1 Directional pad (up/down/left/right)	<p>Moves the focus.</p>
 2 Select	<p>Selects or runs a focused item. When pressed while you are watching a broadcast programme, detailed programme information appears.</p>

Button	Description
 (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 programme, 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. Press the button to use the recording or Timeshift function while watching the broadcast.
VOL (Volume)	Point the Samsung Smart Remote at the remote control sensor of the TV, and then move the button up or down to adjust the volume on the TV. 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. When pressed for 1 second or more, the Channel List screen appears. Press and hold the button up or down to quickly change the channel.
 (Launch app button)	Launch the app indicated by the button.

-  Use the Samsung Smart Remote less than 6 m from the TV. The usable distance may vary with the wireless environmental conditions.
-  The images, buttons, and functions of the Samsung Smart Remote may differ with the model or geographical area.
-  To use the Samsung Smart Remote to control a compatible external device that does not support HDMI-CEC (Anynet+), you must configure universal remote control for the device. For more information, refer to "[Controlling External Devices with a Samsung Remote Control - Using the Universal Remote](#)".
-  To use the Samsung Smart Remote to control a compatible external device that does support HDMI-CEC (Anynet+), connect the device to an HDMI port on the TV using an HDMI cable. For more information, refer to "[Using Anynet+ \(HDMI-CEC\)](#)".
-  This function may not be supported depending on the model or geographical area.
-  For Q50R model, refer to "[About the Samsung Smart Remote \(UHD TV and Q50R model\)](#)".

About the Samsung Smart Remote (UHD TV and Q50R model)

Learn about the buttons on the Samsung Smart Remote that comes with the UHD TV and Q50R model.

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



Button	Description
 (Bixby)	<p>Runs Bixby. Press and hold the button, say a command, and then release the button to run Bixby.</p> <p>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.</p> <p> The supported Bixby's languages and features may differ by geographical region.</p>
 (Number button)	<p>When pressed, the virtual numeric pad appears on the screen so that you can enter a numeric value using it.</p> <p>Select numbers and then select Done to enter a numeric value. Use to change the channel, enter a PIN, enter a ZIP code, etc.</p> <p> When pressed for 1 second or more for a channel that supports the teletext service, the TTX menu appears on the TV screen. For more information, refer to "Teletext Feature".</p>
 (Colour button)	<p>When pressed, coloured buttons appear on the screen. Use this button to access additional options specific to the feature you are using.</p>
 Directional pad (up/down/left/right)	<p>Moves the focus.</p>
 Select	<p>Selects or runs a focused item. When pressed while you are watching a broadcast programme, detailed programme information appears.</p>

Button	Description
 (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 programme, 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. Press the button to use the recording or Timeshift function while watching the broadcast.
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. When pressed for 1 second or more, the Channel List screen appears. Press and hold the button up or down to quickly change the channel.
 (Launch app button)	Launch the app indicated by the button.

-  Use the Samsung Smart Remote less than 6 m from the TV. The usable distance may vary with the wireless environmental conditions.
-  The images, buttons, and functions of the Samsung Smart Remote may differ with the model or geographical area.
-  To use the Samsung Smart Remote to control a compatible external device that does not support HDMI-CEC (Anynet+), you must configure universal remote control for the device. For more information, refer to "[Controlling External Devices with a Samsung Remote Control - Using the Universal Remote](#)".
-  To use the Samsung Smart Remote to control a compatible external device that does support HDMI-CEC (Anynet+), connect the device to an HDMI port on the TV using an HDMI cable. For more information, refer to "[Using Anynet+ \(HDMI-CEC\)](#)".
-  This function may not be supported depending on the model or geographical area.

About the Samsung Smart Remote (The Frame)

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



Button	Description
 (POWER)	<p>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.</p> <p> When the TV turns off and on again, display the last used mode.</p>
 (Bixby)	<p>Runs Bixby. Press and hold the button, say a command, and then release the button to run Bixby.</p> <p>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.</p> <p> The supported Bixby's languages and features may differ by geographical region.</p>
 (Number button)	<p>When pressed, the virtual numeric pad appears on the screen so that you can enter a numeric value using it.</p> <p>Select numbers and then select Done to enter a numeric value. Use to change the channel, enter a PIN, enter a ZIP code, etc.</p> <p> When pressed for 1 second or more for a channel that supports the teletext service, the TTX menu appears on the TV screen. For more information, refer to "<u>Teletext Feature</u>".</p>
 (Colour button)	<p>When pressed, coloured buttons appear on the screen. Use this button to access additional options specific to the feature you are using.</p> <p> To immediately set Colour & Brightness while enjoying Art mode, press the button.</p>
 Directional pad (up/down/left/right)	<p>Moves the focus.</p>
 Select	<p>Selects or runs a focused item. When pressed while you are watching a broadcast programme, detailed programme information appears.</p>

Button	Description
 (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 programme, the previous channel appears.
 (Smart Hub)	Press to return to the Home Screen. Press in Art mode to switch to TV mode.
 (Play/pause)	When pressed, the playback controls appear. Using these controls, you can control the media content that is playing. Press the button to use the recording or Timeshift function while watching the broadcast.
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. When pressed for 1 second or more, the Channel List screen appears. Press and hold the button up or down to quickly change the channel.
 (Launch app button)	Launch the app indicated by the button.

-  Use the Samsung Smart Remote less than 6 m from the TV. The usable distance may vary with the wireless environmental conditions.
-  The images, buttons, and functions of the Samsung Smart Remote may differ with the model or geographical area.
-  To use the Samsung Smart Remote to control a compatible external device that does not support HDMI-CEC (Anynet+), you must configure universal remote control for the device. For more information, refer to "[Controlling External Devices with a Samsung Remote Control - Using the Universal Remote](#)".
-  To use the Samsung Smart Remote to control a compatible external device that does support HDMI-CEC (Anynet+), connect the device to an HDMI port on the TV using an HDMI cable. For more information, refer to "[Using Anynet+ \(HDMI-CEC\)](#)".
-  This function may not be supported depending on the model or geographical area.

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.
-  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.

 >  [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+ \(HDMI-CEC\)](#)".
-  Certain 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 memorises 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 connection is finished, you can access the menu of the connected device on your TV screen 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 theatres 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+ (HDMI-CEC)-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 theatres. Anynet+ (HDMI-CEC) can control only one home theatre 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 theatre 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](#) Try Now

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](#)

-  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	Colour 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 on 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 on the menu may differ depending on the selected item. <ul style="list-style-type: none">• Open• Open Link in New Tab• Enable Scroll Mode

 The key operations may differ on some apps.

Setting up the input devices

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

- **Keyboard Settings**

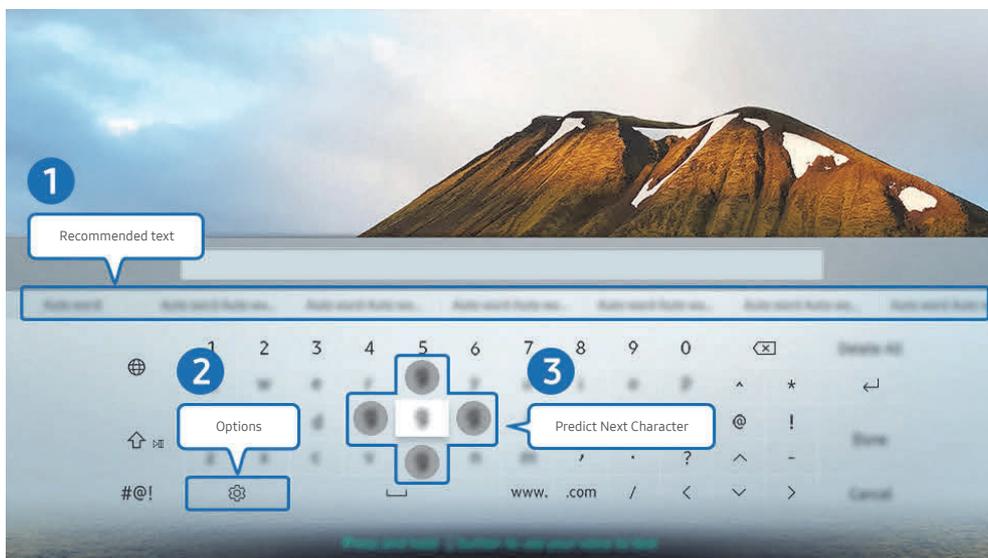
You can set up the keyboard with the **Keyboard Language** and **Keyboard type** functions.

- **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 search for, this function shows 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](#)
- [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, and you can use the directional buttons on the remote control to select one from them.

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.

Smart Features

You can enjoy various apps with Smart Hub.

Using Smart Hub

View descriptions of Smart Hub's basic functions.

From Smart Hub, you can use the Internet search function, install and use various apps, view photos and videos or listen to music stored on external storage devices, and perform more functions.

-  Some of the Smart Hub services are paid services.
-  To use Smart Hub, the TV must be connected to the Internet.
-  Some Smart Hub features may not be supported depending on the service provider, language, or geographical area.
-  Smart Hub service outages can be caused by disruptions in your Internet service.
-  To use Smart Hub, you must agree to the Smart Hub service agreement and the collection and use of personal information. Without giving consent, you cannot use the additional features and services. You can view the entire text of the [Terms & Privacy](#) by navigating to  >  [Settings](#) > [Terms & Privacy](#). [Try Now](#)
-  If you want to stop using Smart Hub, you can cancel the agreement. To cancel the Smart Hub service agreement, select [Reset Smart Hub](#) ( >  [Settings](#) > [Support](#) > [Self Diagnosis](#) > [Reset Smart Hub](#)).

Displaying the Home Screen

Press the  button.



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

On the Home Screen, you can easily run the apps you have used previously or frequently. The apps can also be moved or deleted from the 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 programme or when an event occurs on a registered device.

If you move the focus to **Notification**, and then press the Select button, a notification window appears on the right and the following functions are available:

-  **Delete All**
You can delete all your notifications.
-  **Settings**
 - You can select services you want to be notified about.
 - When you select **Allow sound**, notifications are displayed with a notification sound.

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.

- **e-Manual**

You can open the user manual embedded in your TV.

- **Intelligent Mode**

In **Intelligent Mode**, the TV recognises and analyses the surroundings, the content, and your usage patterns to provide the best viewing experience. To turn **Intelligent Mode** on or off, press the Select button. To set the detailed options, press the up directional button, and then select **Intelligent Mode Settings**.



Because this function is specific to QLED TV (except for Q50R model), The Frame and The Serif, it may not be supported depending on the model.



For more information about the Intelligent Mode, refer to "[Using the Intelligent Mode](#)".

- **Picture Mode**

You can select the picture mode that provides the best viewing experience. To change the picture mode, press the Select button. To make fine adjustments, press the up directional button, and then select **Picture Setup**.

- **Sound Mode**

You can select a sound mode to optimise your listening experience. To change the sound mode, press the Select button. To make fine adjustments, press the up directional button, and then select **Equaliser Setup**.

- **Sound Output**

You can select which speakers the TV uses for audio output. To change the audio output, press the Select button. To connect to a Bluetooth speaker, press the up directional button, and then select **Bluetooth Speaker List**.



Connecting to a Bluetooth speaker may not be supported depending on the model or geographical area.

- **Game Mode**

You can enable game mode to optimise the TV's settings for playing video games with a gaming console, such as a PlayStation™, Xbox™ or Nintendo Switch™. To turn **Game Mode** on or off, press the Select button. To set the detailed options, press the up directional button, and then select **Go to Game Mode Settings**.



For more information about Game Mode, refer to "[Setting the Viewing Environment for External Devices](#)".



This function is only available when an external input source is being used.

- **Subtitle**

You can watch TV broadcasts with subtitles. To activate/deactivate the **Subtitle** function, press the Select button. To run **Accessibility Shortcuts**, press the up directional button, and then select **Accessibility Shortcuts**.

- **Audio Language**

You can change to the audio language you want to hear. To make fine adjustments, press the up directional button, and then select **Go to Audio Options**.

- **PIP**

While using a connected external device, you can watch a TV broadcast in a small picture-in-picture (PIP) window. To make fine adjustments, press the up directional button, and then select **PIP Setup**.

- **Network**

You can view the current network and Internet status. Press the up directional button, and then select **Network Status** or **Network Settings**.

- **Picture Size**

You can change to the picture size you want to view. To make fine adjustments, press the up directional button, and then select **Go to Picture Size**.

- **Colour Tone**

You can select a colour tone suitable for your viewing preferences. To change to a colour tone that you want, press the Select button.

- **Auto Motion Plus**

You can optimise pictures that contain a lot of motions. To turn this function on or off, press the Select button. To set the detailed options, press the up directional button, move to **Auto Motion Plus Settings**, and then press the Select button.

- **Contrast Enhancer**

You can prevent excessive differences between bright and dark areas on the TV screen. To change the **Contrast Enhancer** setting, press the Select button.

- **Digital Output Audio Format**

You can select an output format for digital audio. Note that the **Dolby Digital+** option is only available via HDMI (ARC) for external devices that support the Dolby Digital+ format.

 The HDMI (ARC) port may support eARC in some models.

- **Colour Space**

You can set the spectrum of colours on the TV screen. To change to a colour space that you want, press the Select button. To set the detailed options, press the up directional button, and then select **Colour Space Settings**.

- **TV Device Manager**

You can run **TV Device Manager** to view at a glance and easily optimise the CPU usage, memory usage, and the storage space of the TV.

 Pressing  **Settings** displays all setting menus available.

 These functions may not be supported depending on the model or geographical area.

3 Source

You can select an external device connected to the TV.

 For more information, refer to "[Switching between external devices connected to the TV](#)".

4 Search

You can search for channels, programmes, movie titles, and apps from Smart Hub.

 To use this feature, the TV must be connected to the Internet.

5 APPS

You can enjoy a wide range of content including news, sports, weather, and games by installing the corresponding apps on your TV.

 To use this feature, the TV must be connected to the Internet.

 For more information, refer to "[Using the APPS Service](#)".

6 Ambient Mode

You can enhance your living space with decorative content that matches the surroundings or view essential real-time 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**.

 If you use a remote control other than the Samsung Smart Remote, there may be restrictions to entering **Ambient Mode**.

 Because this function is specific to QLED TV (except for Q50R model) and The Serif, it may not be supported depending on the model.

 For more information about the **Ambient Mode**, refer to "[Using the 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.

 For more information about **Universal Guide**, refer to "[Using the Universal Guide App](#)".

 Images may look blurry depending on the service provider's circumstances.

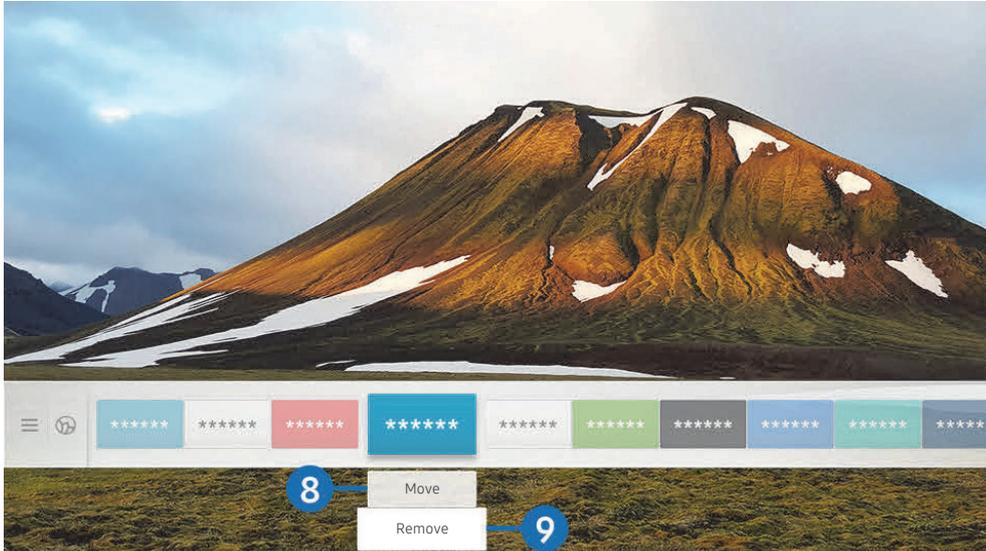
 This function may not be supported depending on the model or geographical area.

Art

When you are not watching TV or when the TV is turned off, you can use the **Art** mode function to edit image content such as artworks or photos or to display the content.

 This function is supported only in The Frame.

 For more information, refer to the provided user manual.



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

8 Moving an item on the Home Screen

Move the focus to the app you want to move, press the down directional button on the remote control, and then select **Move**. Move the app to the desired position by pressing the left or right directional button, and then press the Select button. The selected app is moved on the Home screen.

9 Removing an item on the Home Screen

Move the focus to the app you want to delete, press the down directional button on the remote control, and then select **Remove**. The selected app is deleted.

 You can add the apps you want to use often to the Home Screen using APPS. To add your favourite apps to the Home Screen, refer to "[Managing installed apps](#)".

Launching Smart Hub automatically

 >  [Settings](#) > [General](#) > [Smart Features](#) > [Autorun Smart Hub](#) [Try Now](#)

When you set [Autorun Smart Hub](#) to **On**, the TV displays the Home Screen automatically when you turn the TV on. You can also turn this function on or off. Press the Select button at the current menu.

Launching the last used app automatically

 >  [Settings](#) > [General](#) > [Smart Features](#) > [Autorun Last App](#) [Try Now](#)

If [Autorun Last App](#) is set to **On**, the last used app is automatically run when you turn on the TV. You can also turn this function on or off. Press the Select button at the current menu.

 This function may not be supported depending on the app.

Testing Smart Hub connections

 >  [Settings](#) > [Support](#) > [Self Diagnosis](#) > [Start Smart Hub Connection Test](#) [Try Now](#)

Resetting Smart Hub

 >  [Settings](#) > [Support](#) > [Self Diagnosis](#) > [Reset Smart Hub](#) [Try Now](#)

 You can reset the Smart Hub settings. To reset Smart Hub, enter the PIN. The default PIN is "0000" (for France and Italy: "1111"). You can set the PIN in  >  [Settings](#) > [General](#) > [System Manager](#) > [Change PIN](#).

Using a Samsung account

Create and manage your own Samsung account.

 >  **Settings** > **General** > **System Manager** > **Samsung Account** Try Now

 You can view the entire text of the Terms & Policy in  >  **Settings** > **General** > **System Manager** > **Samsung Account** > **My Account** > **Terms & Conditions, Privacy Policy** after logging in to your Samsung account.

 You can also create a Samsung account at <http://account.samsung.com>. Once you have an account, you can use the same ID on both the TV and the Samsung website.

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**

Sign up for a Samsung account on your mobile or PC. Visit : <https://account.samsung.com>

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.

 To sign out of your [Samsung Account](#) ( >  [Settings](#) > [General](#) > [System Manager](#) > [Samsung Account](#)), move the focus to your account's icon, and then press the Select button. When a pop-up window appears, select [Sign out](#).

- [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 favourites 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 Ambient Mode

Learn about the functions available in Ambient Mode that are specific to the QLED TV (except for Q50R model) and The Serif.

> Ambient Mode

You can enhance your living space with decorative content that matches the surroundings or view essential real-time information such as weather, time, and news on the TV screen when you are not watching TV.

 Because this function is specific to QLED TV (except for Q50R model) and The Serif, it may not be supported depending on the model.

Entering Ambient Mode

To enter **Ambient Mode** from the TV viewing screen, press the  button, or select  >  **Ambient Mode**.

If you press the  button when the TV is turned off, the TV turns on in **Ambient Mode**.

 If you use a remote control other than the Samsung Smart Remote, there may be restrictions to entering **Ambient Mode**.

Ambient Mode browser screen



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

When you press the  or  button in **Ambient Mode**, the **Ambient Mode** browser screen appears at the bottom of the screen. In the **Ambient Mode** browser screen, you can select content and change the **Ambient Mode** settings.

1 Function and content preview

When you select a category at the bottom of the screen, a preview of available functions and content appears here. To view detailed information about a content item, move the focus to it, and then press the up directional button.

2 Ambient Settings

You can configure the following **Ambient Mode** settings:

- **Auto Brightness**

Changes the auto brightness setting for **Ambient Mode**.



When this function is set to **Off**, the brightness level of the TV screen is not automatically adjusted in response to the surrounding light level.

- **Sleep After**

Sets the time when the **Ambient Mode** screen turns off automatically.



If there is no remote control input for the set time, the screen goes off. To turn the screen back on in **Ambient Mode**, press the  button on the remote control.

- **Reset All Photos**

Resets the photos imported from your mobile device or Samsung Cloud.

3 TV

You can enter the TV viewing screen.

4 Selecting a content category

You can select your preferred content and background for the **Ambient Mode** screen.

 Available content categories may differ depending on the model or geographical area.

- **Special Edition**

Allows you to enjoy creative artwork and interior design content created by the world's finest artists and designers.

- **Décor**

Allows you to select content with a sensible and beautiful design.

- **My Album**

Allows you to set a photo stored in your mobile device or Samsung Cloud as the wallpaper of the **Ambient Mode** screen.

 To import photos from your mobile device or Samsung Cloud, use the SmartThings app on your mobile device.

 For more information about how to configure the photo settings, select **View Help**. This function is available after you select a photo in the **My Album** category.

- **Info**

Allows you to select essential real-time information such as weather, temperature, time, and news.

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

- **Artwork**

Allows you to select content such as world famous photos and artwork.

- **Background Theme**

Allows you to select a background theme provided by Samsung.

 Take a picture of a wall using the SmartThings app on your mobile device to create a custom background theme. When you use this function, there may be a delay in image transmission and optimisation depending on network conditions.

 You can set a background theme you created as a background of a content item. To set a background theme as the background of a content item, press the down directional button while watching the **Ambient Mode** screen.

5 About Ambient Mode

You can view information about **Ambient Mode**.

Applying effects to the content

When you are enjoying content in **Ambient Mode**, press the down directional button to change the following settings for the content:

 Available functions may not be supported depending on the content.

- **Backgrounds**

Changes the background of the content.

 This function may not be supported depending on the content.

 You can use the SmartThings app on your mobile device to take a picture of a wall and create a custom background. For more information, select the **How-To** icon. This function may be a delay in image transmission and optimization depending on network conditions, and may not be supported depending on the model.

- **Shadow Effects**

Applies a shadow effect that you select to the content.

 This function may not be supported depending on the content.

- **Brightness**

Adjusts the brightness of the content.

- **Saturation**

Adjusts the saturation of the content.

- **Colour Tone**

Adjusts the colours of the content.

- **Red Tone / Green Tone / Blue Tone**

Adjusts the red, green, blue contrast.

View detailed information about the content

When you are enjoying content in **Ambient Mode**, press the up directional button to view detailed information about the content.

Entering the TV viewing screen from Ambient Mode

To enter the TV viewing screen from **Ambient Mode**, press the  button, or select  **TV** in the **Ambient Mode** browser screen.

 If you press the  button when the TV is turned off, the TV viewing screen appears.

Using the Remote Access

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

 >  **Source** > **Remote Access**

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

 Before running this function, connect your keyboard and mouse to the TV.

- **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.

- **Office 365**

Provides access to **Office 365** features from Microsoft.

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

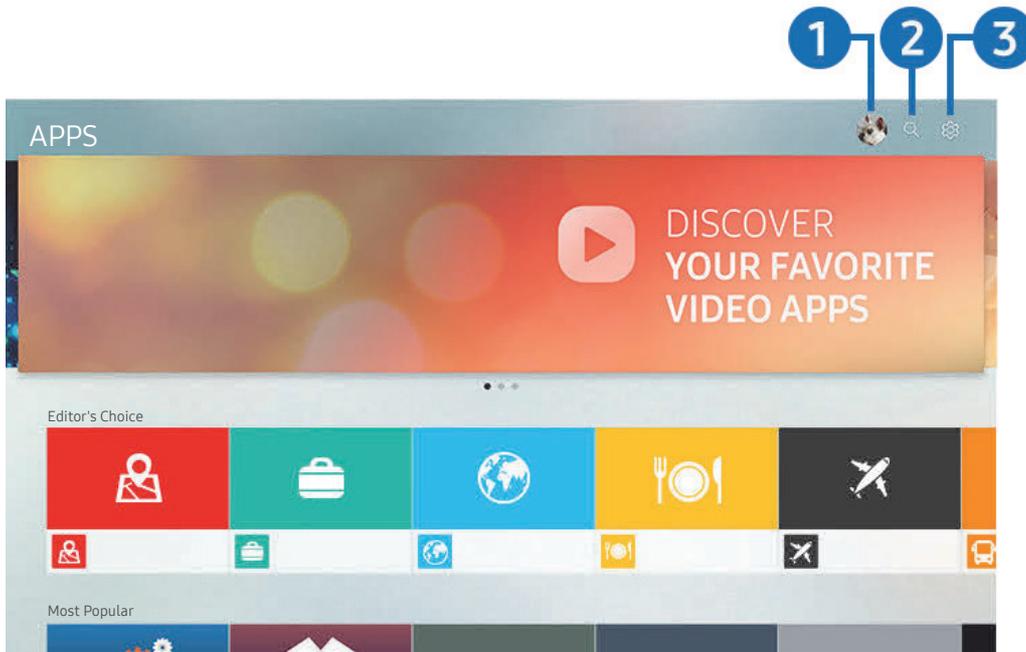
Using the APPS Service

Download and run various apps from Smart Hub.

> APPS

You can enjoy a wide range of content including news, sports, weather, and games by installing the corresponding apps on your TV.

-  To use this feature, the TV must be connected to the Internet.
-  When Smart Hub is launched for the first time, the default apps are automatically installed. The default apps may differ depending on the geographical area.



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

1 Samsung Account

Go to the [Samsung Account](#) screen to create a new account or sign out of your account.

-  If you are signed out of your Samsung account, select  [Sign In](#) to sign in.
-  If you want to download new apps using **APPS**, first sign in to your Samsung account.

2 App Search

You can search for available apps.

3 Settings

You can manage the installed apps.

Installing an app

1. Move to the app you want to install, and then press the Select button. The detailed information screen appears.
2. Select **Install**. When the installation is completed, the **Open** menu appears.
3. Select **Open** to run the app immediately.

 You can view installed apps on the **Settings** screen.

 If the TV's internal memory is insufficient, you can install some specific apps on a USB device.

 You can run an app installed on a USB device only when the USB device is connected to the TV. If the USB device is disconnected while an app is running, the app is terminated.

 You cannot run an app installed on a USB device on a PC or another TV.

Launching an app

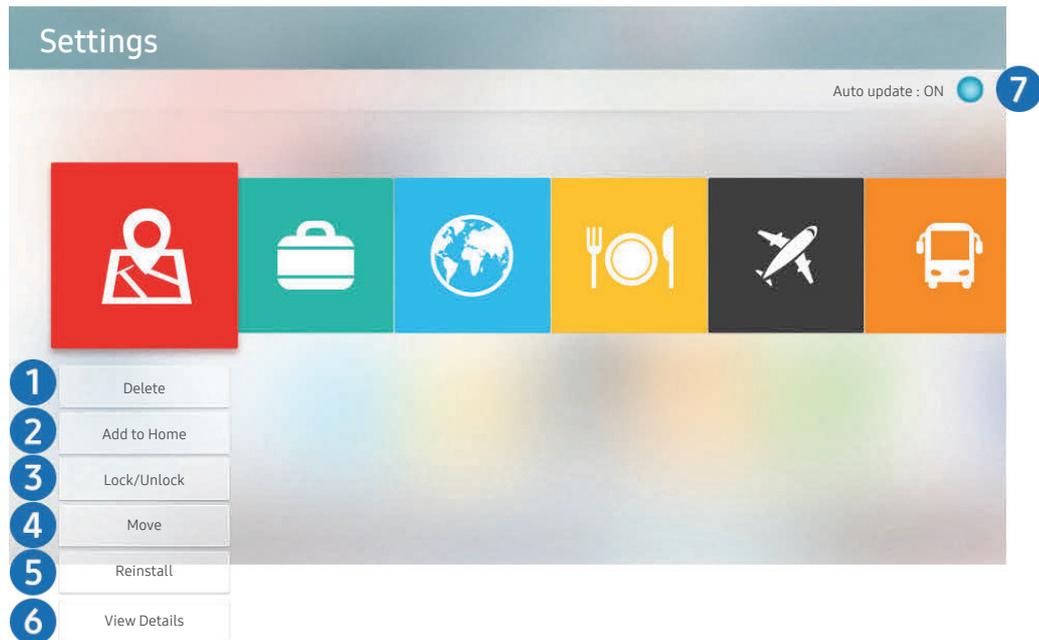
You can run the app desired from **Downloaded App**.

The icons below appear within the selected app's icon and indicate the following:

-  : The app is installed on a USB device.
-  : The app is locked.
-  : The app needs to be updated.
-  : The app supports mirroring function.

Managing installed apps

Select  **Settings** on **APPS**. You can manage installed apps.



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

1 Removing an app

1. Move the focus to an app to delete.
2. Select **Delete**.

The selected app is deleted.

 Ensure that the related app data is also removed when you remove an app.

 Standard apps cannot be uninstalled.

2 Adding apps to the Home Screen

1. Move the focus to an app to add.
2. Select **Add to Home**.
3. After the Home screen appears, move the selected app to the desired location.
4. Press the Select button.

The selected app is added to the Home Screen.

 If the selected app is already added to the Home Screen, this function is disabled.

3 Locking and unlocking apps

1. Move the focus to an app to lock or unlock.
2. Select [Lock/Unlock](#).

The selected app is locked or unlocked.

 To lock or unlock an app, enter the PIN. The default PIN is "0000" (for France and Italy: "1111"). You can set the PIN in  [Settings](#) > [General](#) > [System Manager](#) > [Change PIN](#).

4 Moving apps

1. Move the focus to an app to move.
2. Select [Move](#).
3. Move the selected app to the desired location.
4. Press the Select button.

The selected app is moved.

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

5 Reinstalling an app

1. Move the focus to the app to install again.
2. Select [Reinstall](#).

Reinstallation starts.

6 Checking the app information details

1. Move the focus to the app to check.
2. Select [View Details](#).

The app information screen appears.

 You can rate an app on the [View Details](#) screen.

7 Automatically updating apps

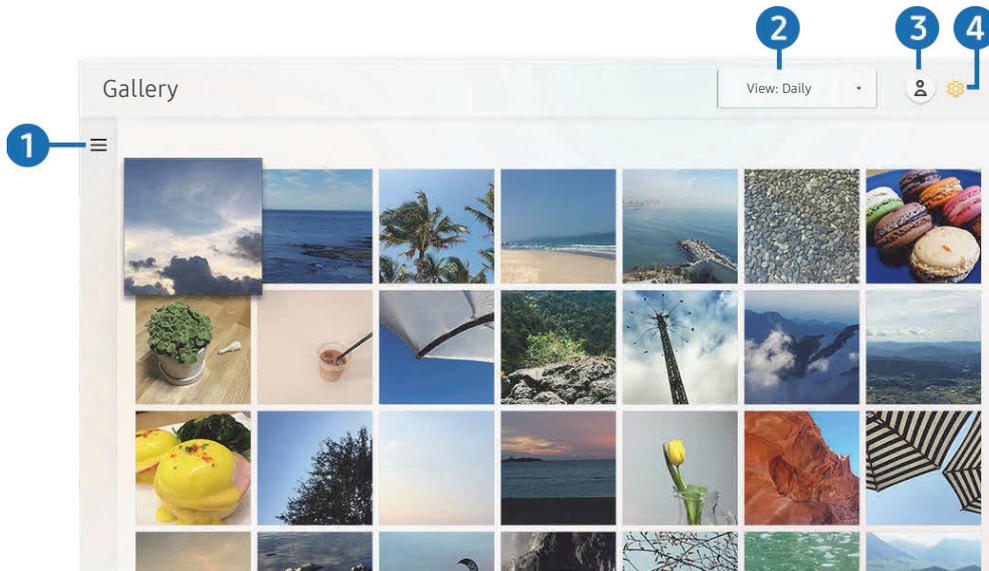
To automatically update the installed apps, set [Auto update](#) to **ON**.

 Automatic update is enabled only when the TV is connected to the Internet.

Using the Gallery App

View photos and videos synchronised with the Samsung Cloud.

 > Gallery



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

You can enjoy various content synchronised with a mobile device that supports the Samsung Cloud. The available content types are photos, videos, stories, and other content shared through your groups.

If you have shared content from your groups, you can access them in notifications.

 To use the **Gallery** app, you must be signed in to your Samsung account that uses the Samsung Cloud.

 To use this function, the PIN number is required.

1 Open category

Move to  at the top left of the screen using the directional buttons on the remote control to view the content synchronised with the Samsung Cloud by category.

2 **View: Daily / View: Monthly**

Sort the content by day or month.

3 Samsung Account

Go to the **Samsung Account** screen to create a new account or sign out of your account.

 If you are signed out of your Samsung account, select  **Sign In** to sign in.

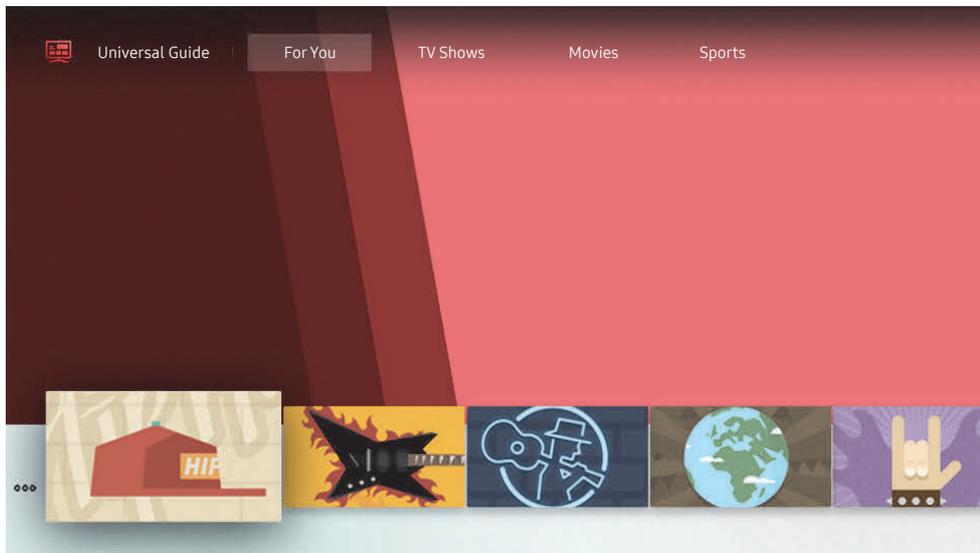
4 Gallery Settings

Set a PIN for screen lock to restrict access to the **Gallery** app, or view the terms and condition.

Using the Universal Guide App

Search for and enjoy content such as TV shows, dramas, movies, and sports broadcasts.

 >  Universal Guide



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

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.

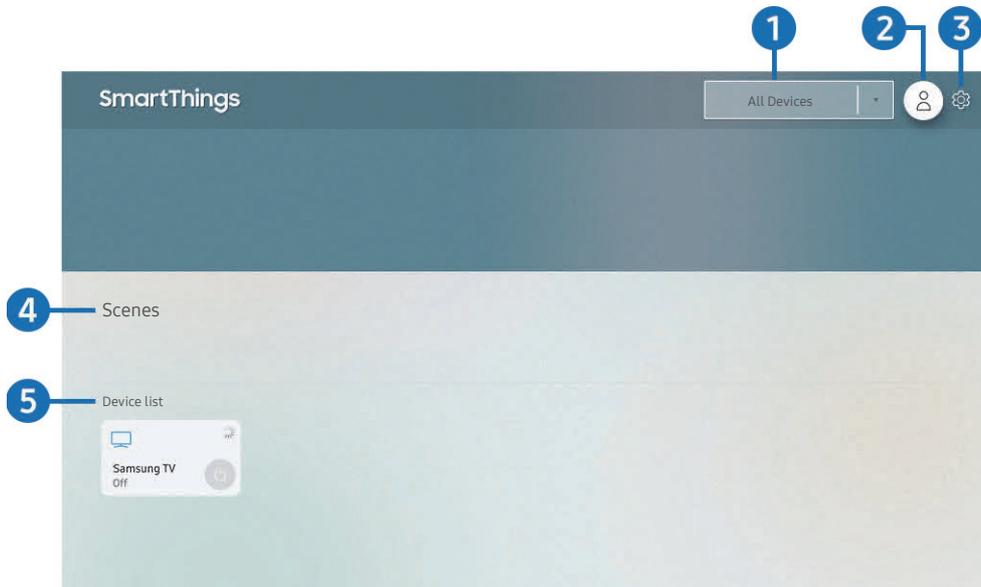
You can use this feature on your mobile device with the Samsung SmartThings app.

-  To enjoy the content from these apps on your TV, they must be installed on the TV.
-  When you watch some paid content, you may need to make a payment using their associated app.
-  Some content may be restricted depending on your network conditions and your subscriptions to paid channels.
-  Parental control is necessary when children use this service.
-  Images may look blurry depending on the service provider's circumstances.
-  This function may not be supported depending on the model or geographical area.

Using the SmartThings App

Monitor and configure the smart devices you have connected to the SmartThings service.

 > SmartThings



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

From the TV, you can monitor and configure your smart devices connected to the SmartThings service via the SmartThings app installed on them. You can receive notifications about the statuses of your connected devices.

 To use this function, you must be logged in to your Samsung account.

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

1 Location selection list

Press the Select button to identify all connected devices or the devices specific to a location.

2 Samsung Account

Go to the [Samsung Account](#) screen to create a new account or sign out of your account.

 If you are signed out of your Samsung account, select  [Sign In](#) to sign in.

3 Settings

Turn notifications on or off for the connected smart devices.

4 Scenes

Control multiple devices with one command after setting scenes via the SmartThings app on your mobile device.

5 Device list

View a list of the connected smart devices and their statuses.

You can add a new device through the SmartThings app on your mobile device. Please refer to the user guide in the SmartThings app on your mobile device for more details.

Using the e-Manual

Control and read the manual embedded in your TV.

Launching the e-Manual

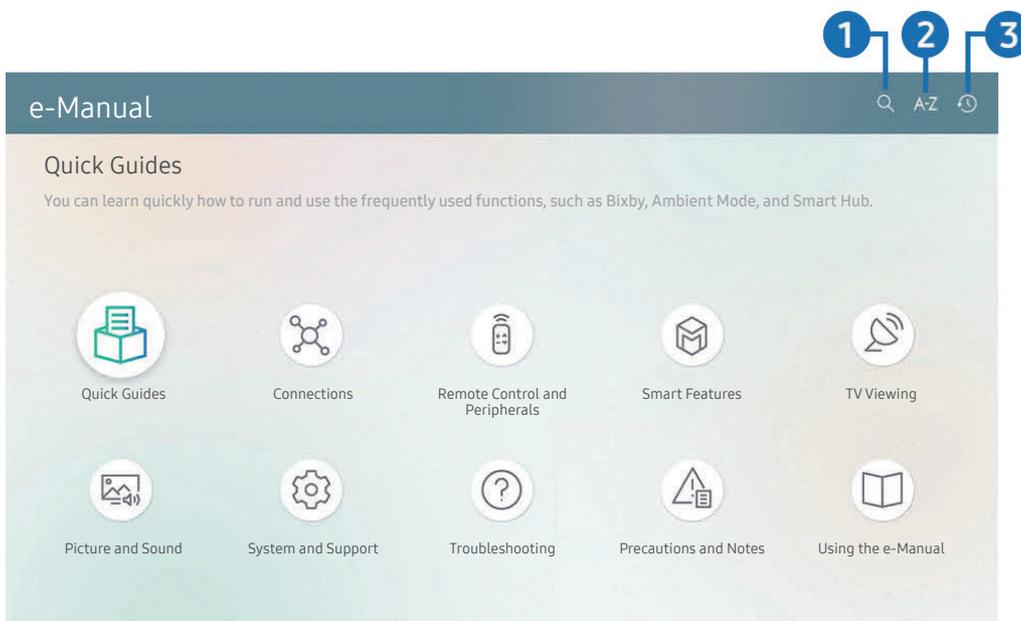
 >  **Settings** > **Support** > **Open e-Manual**

You can view the embedded e-Manual that contains information about your TV's key features.

 You can download a copy of the e-Manual from Samsung's website to view or print on your PC or mobile device (<http://www.samsung.com>).

 Some menu screens cannot be accessed from the e-Manual.

Using the buttons in the e-Manual



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

1 (Search)

Select an item from the search results to load the corresponding page.

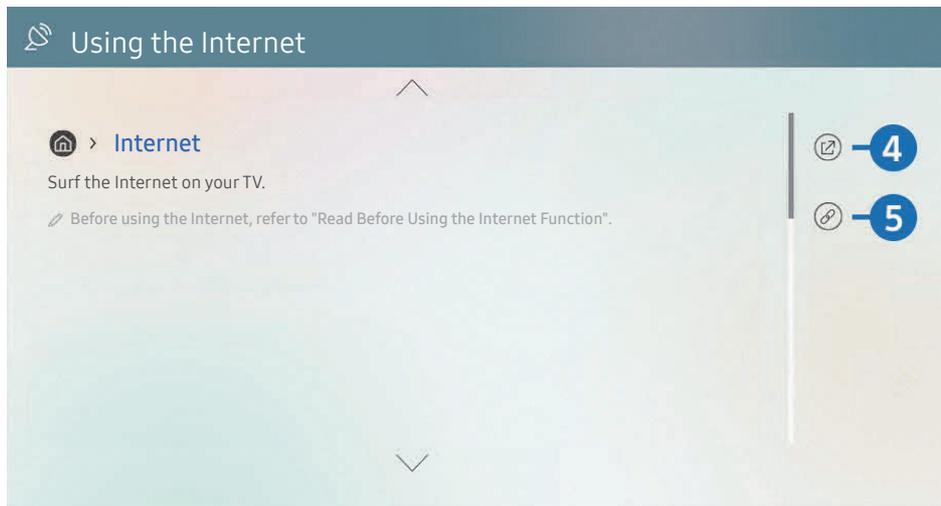
2 **A-Z** (Index)

Select a keyword to navigate to the relevant page.

 The menus may not appear depending on the geographical area.

3 (Recent pages)

Select a topic from the list of recently viewed topics.



 Words in blue (e.g., **Internet**) indicate a menu item.

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

4 (Try Now)

Allows you to access the corresponding menu item and try out the feature right away.

5 (Link)

Access an underlined topic referred to on an e-Manual page immediately.

Using the Internet

Surf the Internet on your TV.

> **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** more easily after connecting a keyboard and mouse.

 You can scroll web pages with the directional pad on the Samsung Smart Remote.

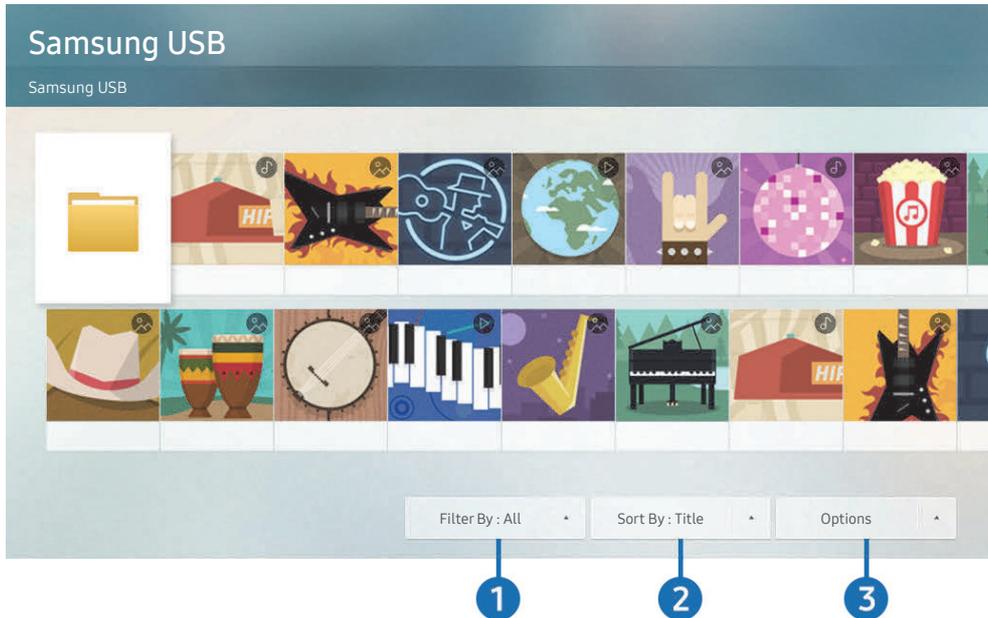
 The web pages may differ from those on a PC.

 Before using the **Internet**, refer to "Read Before Using the Internet Function".

Playing pictures/video/music

Play media content stored on your TV, USB devices, mobile devices, cameras, PCs, etc.

Home > Source > Connected Device Try Now



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

You can play media content saved on storage devices, such as USB devices, mobile devices, and cameras, on the TV.

You cannot play media content if the content or the storage device is not supported by the TV. For more information, refer to "[Read Before Playing Photo, Video, or Music Files](#)".

Backup important files before connecting a USB device. Samsung is not responsible for damaged or lost files.

You can use the following functions on the media content list screen of a storage device.

1 Filter By

Filters the media content by type of media.

2 Sort By

Sorts the content list.

 This function may not be supported depending on the type of external device.

3 Options

Deletes or plays the selected media content in the media content list. When you select **Refresh**, the content list is reloaded.

 You can delete only the recorded content. To delete content, change the **Filter By** option to **Recorded**.

Playing multimedia content on a PC or mobile device

1. Select a device with media content in  >  **Source**. The media content list in the device appears.
2. Select a media content item from the list.

The selected content is played.

 The content may not be played depending on the encoding method or file format. Furthermore, several functions may be restricted.

 Content on devices connected to the TV via your network may not play smoothly due to the network communication problems. If this occurs, use a USB device.

Playing multimedia content on a USB device

1. Connect a USB device to the USB port.
2. When a pop up message appears on the screen, select **Browse** to easily move to the list of multimedia content stored on the device.

 If a USB device that contains the content you want to play is already connected to the TV, select the USB device in the  >  **Source** screen.

3. Select a content item to play from the list.

The selected content is played back.

Listening to your mobile device sound through the TV speaker using Sound Mirroring

1. Search for and connect to your TV from the  (Bluetooth) device list on your mobile device.
2. Select media content to play on your mobile device.

The selected contents media is played through the TV speaker.

 In some models, **Ambient Mode** or **Art** mode is entered automatically, and then the selected media content is played.

 This function may not be supported depending on the model.

 If the TV and the sound bar are connected wirelessly, the operation may be restricted.

Buttons and functions available while playing multimedia content

Press the Select button while playing any video, photo, or recorded content. The following buttons appear.

 The provided buttons and functions may not be supported depending on the model or geographical area.

 The available buttons and functions may differ with the content you are viewing or playing.

- **Pause / Play**

Pauses or plays the multimedia content. You can use the following functions when the video is paused.

- **Slow Rewind** or **Slow Forward**: Allows you to play the video slowly backward or forward by selecting the  or  option. To change the playback speed in 3 levels, press the option repeatedly. To return to normal speed, select the  option or press the  button.

- **Jump Backward / Jump Forward**

Press the up directional button to move the focus to the playback control bar, and then select the left or right directional button in the playback control bar to move backward or forward by 10 seconds in the video.

- **Move to a specific playback section**, move up the focus on the playback bar, and then select one of the five thumbnails.

 This function may not be supported depending on the file format.

- **Stop**

Stop the contents being played.

- **Previous / Next**

Displays the previous or the next multimedia content file.

- **Rewind / Fast Forward**

Rewinds or fast forwards the multimedia content. To increase the rewind or fast forward speed up to 3 times faster than normal, select the button repeatedly. To return to normal speed, select the  option or press the  button.

- **360 Mode**

Provides a 360-degree view for videos and photos.

-  This function may not be supported depending on the file format.
-  Video files using the mjpeg codec do not support a 360-degree view.
-  When a video or photo does not support a 360-degree view, applying 360 rotation to it may cause the screen to look distorted.
-  Videos may be interrupted if 360 rotation is applied during double speed playback.
-  Videos that support a 360-degree view may be interrupted if 360 rotation is simultaneously applied with other functions during playback.

- **360 Auto Rotation**

Automatically adjusts the video's viewing angle by analysing the amount of image changes during playback of a video file that provides a 360-degree view. When this function is started, the rotation starts in a short time.

When **360 Auto Rotation** is focused, press the Select button to change to the following modes:

- **General**
- **Dynamic**
- **Natural**

-  This function is only available when **360 Mode** is selected.
-  Even if you watch the same video file in the same **360 Auto Rotation** mode, the current effect of this function may differ a little from the previous effects.
-  The video's viewing angle is not automatically adjusted in **General** mode.
-  This function may not be supported depending on the file format.
-  Video files that use the mjpeg codec do not support a 360-degree view.
-  When a video does not support a 360-degree view, applying 360 rotation to it may cause the screen to look distorted.
-  Videos may be interrupted if 360 rotation is applied during double speed playback.
-  Videos that support a 360-degree view may be interrupted if 360 rotation is simultaneously applied with other functions during playback.

- **Repeat**

Plays the current multimedia content repeatedly or all multimedia content files in the same folder repeatedly.

- **Shuffle**

Plays music files in random order.

- **Picture Off**

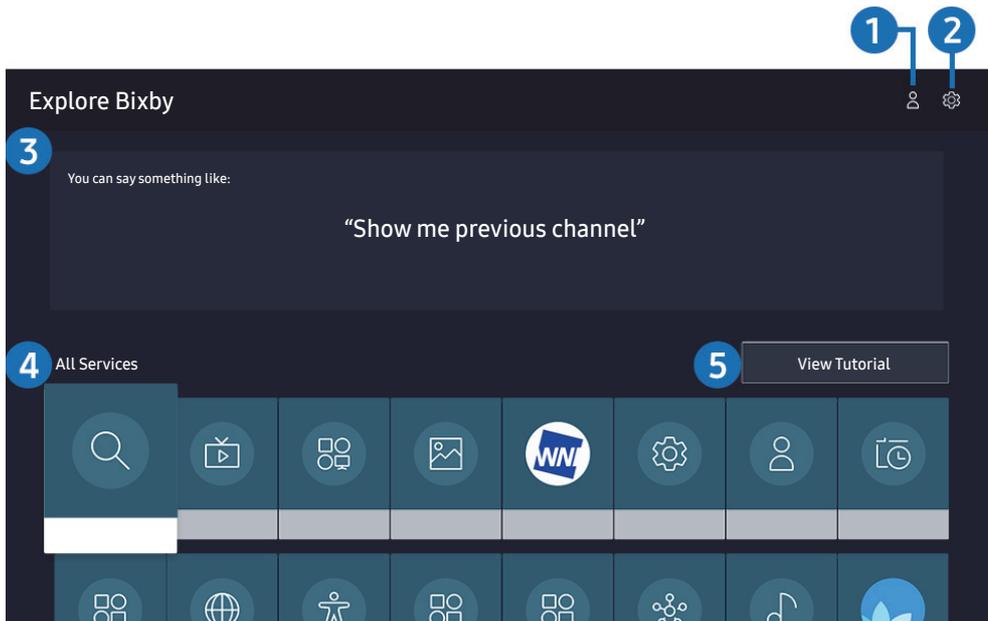
Plays music files with the screen off.

- **Fit to Screen**
Fits a photo to the screen.
- **Rotate left / Rotate right**
Rotates a photo left or right.
- **Zoom**
Zooms in a photo.
- **Background Music**
Pauses or resumes the background music while the TV displays photos.
- **Options**

 The available options may differ with the model and content.

Function	Description
Slideshow Speed	Sets the slideshow speed.  If there is only one image file in the USB device, the slide show is not played.
Slideshow Effect	Applies transition effects to the slide show.  If there is only one image file in the USB device, the slide show is not played.
Background Music	Plays background music as you set in the pop-up window while the TV displays photos.  The music files must be saved in the same USB device as the photo files.  To pause the background music, select Background Music on the playback screen bottom.
Subtitles	You can set the detailed subtitle options such as the language, sync, size, and colour.  If subtitles are not displayed correctly, check the encoding setting.
Rotate	Rotates the video.
Audio Language	Changes the audio language you want to hear.  This function is only available if the video supports multi-track sound.
Information	Displays detailed information about the current multimedia content.

Learning about the Explore Bixby Screen



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

1 My Profile

Go to the [My Profile](#) screen to create a new account or register a voice ID. Sign in to your account with your voice, that is, your registered voice ID.

 If you are signed out of your Samsung account, select  [My Profile](#) to sign in.

2 Settings

You can change the settings for using Bixby.

 These functions may not be supported depending on the model or geographical area.

- **Language**

You can change Bixby's language.

 The languages of the TV and other apps will not change.

 Bixby only supports some languages.

- **Voice response**

You can change or turn off Bixby's voice.

 This function may not be supported depending on the language selected for Bixby.

- **Voice Wake-up**

You can configure this function to make Bixby respond to your voice.

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

- **Sound feedback**

Play a sound when Bixby starts and stops listening.

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

- **Privacy**

You can permit or prohibit Bixby from utilising your personal information when you are using Bixby services.

3 Recommended commands

Displays recommended commands you can use to control the TV with Bixby given the current context.

4 All Services

You can learn the voice commands that let you use Bixby in various situations. Use the directional buttons to move to the desired command, and then press the Select button. You can operate the TV with various voice commands.

5 View Tutorial

The popup window on using Bixby appears.

Read Before Using Bixby

- The supported voice interaction languages and features may differ depending on the geographical area.
- If the language set differs from the language of your country, some features are not available.
- Bixby is available only when the TV is connected to the Internet.
- Even if the TV is connected to the Internet, there may be no response due to a Bixby server error.

- The existing functional specifications may be changed if Bixby is updated.
- Bixby is available only on TVs that support it and come with remote controls that have a microphone.
- Symbols including "-" and special characters are not supported. Consequently, if a word or sentence contains numeric values or symbols, the function may not operate properly.
- Searched results may not provide complete results.
- You may be required to pay for some apps. Consequently, you may encounter a service application or contract.
- To change the current channel by saying channel names as voice commands, you must finish [Set Up Your Service Provider](#). If [Set Up Your Service Provider](#) is not completed, you can complete it using [Reset](#) (🏠 > ⚙️ [Settings](#) > [General](#) > [Reset](#)). [Try Now](#)
- To use the voice text input function and the search function, you must consent to provisions allowing third parties to collect and use your voice data.
- To use the Bixby function, you must:
 - Agree to Smart Hub's Terms of Use
 - Agree to a guidance regarding the collection and use of personal information for the Smart Hub service.
 - Consent to the collection and use of personal information for the voice interaction-based service.

Provisions for using Bixby

- The voice interaction rate differs with the volume/tone, pronunciation, and ambient sound environment (TV sound and ambient noise).
- The optimal volume for voice commands is between 75 dB and 80 dB.

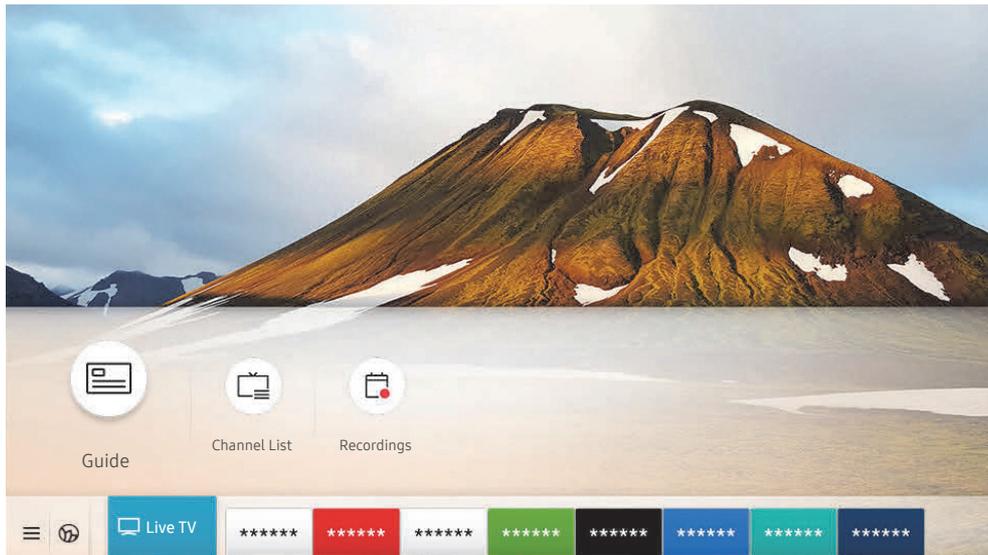
TV Viewing

You can use convenient features while watching TV. Additionally, you can edit the channel list or create favourite channel lists.

Using the Guide

See an overview of each channel's programme lineup.

 > [Live TV](#) > [Guide](#) Try Now



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

In the [Guide](#), you can see the daily programme schedules for each broadcaster, see programme information, choose a programme 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 analogue channels and use the analogue 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 programme you want in the [Guide](#), and then press and hold the Select button. You can use the following functions:

- **Record**

You can record the programme that you are currently watching or a programme on another channel.



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

- **Stop**

You can stop the recording function that is currently running.

- **Edit Recording Time**

You can change the start and end times of scheduled programme recordings.



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

- **Schedule Viewing**

You can schedule the viewing of a broadcast scheduled programme.



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

- **Schedule Recording**

You can schedule recording of a broadcast scheduled programme.



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

- **Cancel Scheduled Viewing / Cancel Scheduled Recording**

You can cancel scheduled viewings and recordings.

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

- **View Details**

You can see detailed information about the selected programme. The information may differ or may not be provided depending on the broadcast signal.

To move to the **Channel Filter**, **Schedule Manager**, or **Aerial Type** screen: Press the  or  button. (If the remote control button is , press it twice.)

- **Channel Filter**

You can view channels and programmes categorised by the types defined in **Channel List**.

- **Schedule Manager**

You can see the **Schedule Manager** or **Recording & Schedule Manager** screen.

- **Aerial Type**

You can change the broadcast signal the TV receives.

 This function may not be supported depending on the incoming broadcast signal.

 These functions may not be supported in the **Guide** depending on the model or geographical area.

Recording Programmes

Record a current or upcoming programme using a USB device instead of a video recorder.

-  Read all precautions before using the recording feature. Refer to "[Before Using the Recording and Timeshift Functions](#)" for more information.
-  You can record only the programmes that have been received through an aerial.
-  The  appears next to the programmes that have been configured for a scheduled viewing.
-  This function may not be supported depending on the model or geographical area.
-  If you go to  > **Live TV** while no USB device is connected, the **Schedule Manager** screen appears in place of the **Recordings** screen.

Using the instant and schedule recording options from the Guide screen

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

Using the instant and schedule recording options while watching a programme

- **Instant Recording**
To activate the **Record** function while watching TV, press the  button twice or press the  button once. Afterwards press the Select button and then select **Record**.
- **Schedule Recording**
Press the Select button while watching a programme to display the programme info window. Use the left or right directional button to select a scheduled programme. Press the Select button, and then select **Schedule Recording** to set up a schedule recording of the scheduled programme.

Scheduling a video recording after entering the date and time

 > [Live TV](#) > [Schedule Manager](#) or [Recordings](#) > [Schedules](#) > [Add Recording](#)

To schedule a recording, set the values for [Aerial](#), [Channel](#), [Repeat](#), [Date](#), [Start Time](#), and [End Time](#) of the broadcast programme to record, and then select [Save](#).

 Check the current time in  >  [Settings](#) > [General](#) > [System Manager](#) > [Time](#) > [Clock](#).

 The menus may not appear depending on the model or geographical area.

Managing the schedule recording list

 > [Live TV](#) > [Schedule Manager](#) or [Recordings](#) > [Schedules](#)

You can change scheduled recording information or cancel scheduled recordings.

 The menus may not appear depending on the model or geographical area.

 You can schedule up to 30 recordings or viewings at once using [Schedule Recording](#) and [Schedule Viewing](#).

- [Edit](#)

You can set the start and end times for a schedule recording. You can set the start time up to 10 minutes before the programme starts and the end time up to 10 minutes after the programme ends.

 The menus may not appear depending on the model or geographical area.

- [Delete](#)

You can delete scheduled recordings.

 The menus may not appear depending on the model or geographical area.

- [View Details](#)

You can view detailed information about scheduled recordings.

 The menus may not appear depending on the model or geographical area.

Viewing recorded programmes

 > [Live TV](#) > [Schedule Manager](#) or [Recordings](#) > [Recordings](#)

Select a file containing a recording from the list. The file is played back.

Move the focus to the recorded file, and then view [Play](#), [Delete](#) or [View Details](#) on the right menu.

 Buttons that appear may differ depending on the file being played. For more information about control buttons, refer to "[Buttons and functions available while recording a programme or Timeshift](#)".

 The menus may not appear depending on the model or geographical area.

Setting up a schedule recording start

 > [Live TV](#) > [Schedule Manager](#) or [Recordings](#) > [Settings](#)

- [Start Recording Early](#)

You can set the time to start the recording earlier than the broadcast start time in the programme guide.

- [Continue Recording After](#)

You can set the time to end the recording later than the broadcast end time in the programme guide.

- [Symbol Information](#)

Provide users with the information of the symbol and the explanation about an icon used in the schedule manager.

 The menus may not appear depending on the model or geographical area.

Setting Up a Schedule Viewing

Configure the TV to show a specific channel or programme at a specific time and date.

 The  appears next to programmes that have been configured for a schedule viewing.

 To set up a schedule viewing, you must first set the TV's clock ( >  [Settings](#) > [General](#) > [System Manager](#) > [Time](#) > [Clock](#)).

Using the schedule viewing options from the guide screen

On the [Guide](#) screen, select a programme you would like to view, press the Select button, and then select [Schedule Viewing](#) in the pop-up menu that appears.

Using the schedule viewing options while watching a programme

Press the Select button while watching TV. The Programme Info window appears. Select a programme 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 programme.

Using schedule viewing to view programmes at a specified time on a specified date

 > [Live TV](#) > [Schedule Manager](#) or [Recordings](#) > [Schedules](#) > [Add Viewing](#)

To schedule a Viewing, set the values for [Aerial](#), [Channel](#), [Repeat](#), [Date](#), and [Start Time](#) of the broadcast programme to View, and then select [Save](#).

Check the current time in  >  [Settings](#) > [General](#) > [System Manager](#) > [Time](#) > [Clock](#).

 The menus may not appear depending on the model or geographical area.

Setting the Schedule Viewing Time

 > [Live TV](#) > [Schedule Manager](#) or [Recordings](#) > [Schedules](#)

You can change scheduled viewing information or cancel scheduled viewings.

 The menus may not appear depending on the model or geographical area.

 You can set up a maximum total of 30 [Schedule Viewing](#) and [Schedule Recording](#) entries.

- [Edit](#)

You can set the start time of a schedule viewing. If you choose a programme from the [Guide](#), the [Start Time](#) can be set to up to 10 minutes before the programme.

- [Delete](#)

You can delete scheduled viewings.

- [View Details](#)

You can view detailed information about scheduled viewings.

Using Timeshift

Play, pause, or rewind live TV.

You can pause and rewind live TV by using **Timeshift**. Activating this function disables the **Broadcasting** function.

Try Now

To activate the **Timeshift** function while watching TV, press the  button twice or press the  button, press the **Select** button and then select **Timeshift**, or press the  button.

-  When the Timeshift function is running, some of function are not available in  >  **Settings** > **Broadcasting**.
-  To use Timeshift, you must connect a USB device for recording.
-  Read all precautions before using the Timeshift function. For more information, refer to "[Before Using the Recording and Timeshift Functions](#)".
-  This function may not be supported depending on the model or geographical area.

Buttons and functions available while recording a programme or Timeshift

Review available buttons and functions of how they are used while recording a programme or Timeshift.

-  The available buttons and functions may differ with the functions.
-  This function may not be supported depending on the model or geographical area.

When you press the down directional button, the control bar appears and the following options are available:

- **Pause / Play**

You can use the following functions when the video is paused. Note that with the video paused, the TV does not play audio.

- **Slow Rewind** or **Slow Forward**: Allows you to play the video slowly (1/8, 1/4, 1/2) backward or forward by selecting the  or  option. To increase the rewind or forward speed in slow mode up to 3 times, select the option repeatedly. To return to normal speed, select the  option.

-  When the **Slow Rewind** function is activated, you can view the difference between the current recording time and the current rewind time.

- **Jump Backward / Jump Forward**

Press the up directional button to move the focus to the playback control bar, and then select the left or right directional button in the playback control bar to move backward or forward by 10 seconds in the video.



When the Jump Backward function is activated, you can view the difference between the current recording time and the current rewind time.

- **Rewind / Fast Forward**



This function is not available while you are watching a programme that is currently being broadcast.

- **Stop Recording / Stop Timeshift**

Ends the recording or Timeshift function.

- **Record**

You switch from the Timeshift function to the recording function. When switching to the recording function, you can include the content recorded by the Timeshift function into the new recording.



This function is only available when the Timeshift function is running.

- **Edit Recording Time**

You can set for what period of time the programme will be recorded.



This function is only available when a programme is being recorded.

- **Go to Live TV**

Select to return to the current scenes of the programme when the Timeshift function is playing its past scenes.

- **Info**

Displays the programme info window about the programme on which the recording or Timeshift function is working.

Using the Channel List

Change the channel or check programmes on other digital channels.

> [Live TV](#) > [Channel List](#)

Using the [Channel List](#), you can change the channel or check programmes on other digital channels while watching TV. On standard remote control, press the CH LIST button.

The [Channel List](#) screen contains the following icons:

-  : A favourite channel
-  : A locked channel.
-  : CI card required channel.

If you press the right directional button when viewing the [Channel List](#) screen, you can use the following functions:

- [All](#)
Displays the channels that have been automatically searched.
 The channels received to the currently selected [Terrestrial](#), [Cable](#), or [Satellite](#) are displayed.
- [Samsung TV Plus](#)
While the TV is connected to the Internet, you can watch popular programmes or highlights for each theme through a virtual channel at any time. As with regular channels, the TV provides the daily programme schedules for [Samsung TV Plus](#).
 This function may not be supported depending on the model or geographical area.
- [Favourites](#)
Displays [Favourites 1](#) to [Favourites 5](#).
- [Channel Type](#)
Sorts the list so that it includes channels of a selected type. However, [Channel Type](#) can only be used channels contain the type information.
 This function may not be supported depending on the incoming broadcast signal.
- [Sort](#)
Sorts the list by [Number](#) or by [Name](#).
 This option is only available on digital channels and may not always be available.
- [Terrestrial](#), [Cable](#), or [Satellite](#)
Allows you to choose between [Terrestrial](#), [Cable](#), and [Satellite](#).
 This function may not be supported depending on the incoming broadcast signal.
 This function may not be supported depending on the model or geographical area.

Editing channels

Edit the channels stored on your TV.

 > [Live TV](#) > [Channel List](#) > [All](#) > [Edit Channels](#)

The [Edit Channels](#) screen icons indicate the following:

-  : A favourite channel
-  : A locked channel.
-  : CI card required channel.

On the [Edit Channels](#) screen, you can select channels and use the following functions:

- **Delete**

After selecting a target channel to remove in [Edit Channels](#), select [Delete](#). Removed channels are not displayed in the [Channel List](#).

- **Lock / Unlock**

After selecting a target channel in [Edit Channels](#), select [Lock](#) or [Unlock](#). Then the channel is locked or unlocked. A locked channel cannot be viewed.

 If you want to use this function or set the password, set  >  [Settings](#) > [Broadcasting](#) > [Apply Channel Lock to On](#).

 For more information about how to set your password, refer to "[Setting up a password](#)".

- **Rename channel**

After selecting a channel to change in [Edit Channels](#), select [Rename channel](#) to change the channel name.

 You can rename only one channel at a time.

 This function is only available for analogue broadcasts.

- **Change Number**

After selecting a channel to change in **Edit Channels**, select **Change Number** to change the channel number.

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

 When a channel number is changed, its channel information is not updated automatically.

- **Restore Samsung TV Plus**

You can restore the deleted **Samsung TV Plus** channels.

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

- **Exit**

Closes the **Edit Channels** screen.

Using a Personal Favourites List

Designate frequently watched channels as favourite channels.

Favourite channels are highlighted in the [Edit Channels](#) and [Channel List](#) screens with the  symbol. You can create up to five favourites lists so that your family can create their own personal favourites list.

Viewing and selecting channels on Favourites list only

 > [Live TV](#) > [Channel List](#)

1. Press the right directional button on your remote control.
2. Select [Favourites](#).
3. Select the desired list among the five favourites lists on the screen.

The channels in the selected favourites list appear.

 If you select an empty favourites list, you are moved to the [Edit Favourites](#) screen.

Create a favourites list

 > [Live TV](#) > [Channel List](#) >  [Favourites](#) > [Favourites 1 - Favourites 5](#) > [Edit Favourites](#)

-  [\(Add to Favourites\)](#)
Selects one or more channels from a list of all channels to add to a favourites list.
-  [\(Remove from Favourites\)](#)
Removes one or more channels from a favourites list.
- [Change order](#)
Changes the order of one or more channels selected in a favourites list.
- [Rename Favourites](#)
Renames a favourites list.
- [Exit](#)
Closes the [Edit Favourites](#) screen.

TV-Viewing Support Functions

Use the functions that are supported by digital or analogue channels.

Changing the broadcast signal

 > [Live TV](#) > [Channel List](#)

Press the right directional button on your remote control, move the focus to [Terrestrial](#), [Cable](#), [Satellite](#), or [Service Provider](#) and then press the Select button.

 You do not need to use this function if your TV is connected to a cable box or satellite box.

 The displayed Channel List may vary depending on the incoming broadcast signals.

Scanning for available channels

 >  [Settings](#) > [Broadcasting](#) > [\(Auto Tuning Settings\)](#) > [Auto Tuning](#)

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

 If the TV is connected to a cable box or satellite box, you do not need to do this.

 The DVB-T2 system may not be supported depending on the geographical area.

 The [Auto Tuning Settings](#) may not appear depending on the model or geographical area.

Selecting the cable network search option

 >  [Settings](#) > [Broadcasting](#) > [\(Auto Tuning Settings\)](#) > [Cable Search Option](#)

Sets additional search options such as the frequency and symbol rate for a cable network search.

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

 The [Auto Tuning Settings](#) may not appear depending on the model or geographical area.

Scanning for available channels on standby mode

 >  [Settings](#) > [Broadcasting](#) > [\(Auto Tuning Settings\)](#) > [Standby Auto Tuning](#)

Automatically scan for channels while your TV is in standby mode.

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

 The [Auto Tuning Settings](#) may not appear depending on the model or geographical area.

Setting the Wake-up time

 >  [Settings](#) > [Broadcasting](#) > [\(Auto Tuning Settings\)](#) > [Wake-up Timer](#)

Schedule timer to turn the TV on and scan channels automatically.

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

 The [Auto Tuning Settings](#) may not appear depending on the model or geographical area.

Checking digital channel signal info and strength

 >  [Settings](#) > [Support](#) > [Self Diagnosis](#) > [Signal Information](#) Try Now

 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.

 [Signal Information](#) is only available for digital channels.

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

Restricting Viewing to Specific Channels

 >  [Settings](#) > [Broadcasting](#) > [Apply Channel Lock](#) Try Now

By selecting the menu, you can turn on or off the [Apply Channel Lock](#) function.

Lock specific channels to prevent children from watching adult content.

 To use this function, the PIN number is required.

Using Mark Adult Channels

 >  [Settings](#) > [Broadcasting](#) > [Mark Adult Channels](#)

Enables or disables all adult services. When disabled, adult services will not be available.

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

Selecting the broadcasting audio option

 >  [Settings](#) > [Broadcasting](#) > [Dual Sound](#) Try Now

Set audio options for stereo or bilingual broadcasts. For more information, refer to "[Supported broadcasting audio options](#)".

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

Using Programme Rating Lock

 >  [Settings](#) > [Broadcasting](#) > [Programme Rating Lock](#) Try Now

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

This function is useful for controlling what programmes children can watch on the TV based on their ratings.

[Programme Rating Lock Settings](#) does not, however, block programmes originating from external sources, such as Blu-ray players, DVD players, or USB files.

Every time you access [Programme Rating Lock Settings](#), you must enter the security PIN. You must also enter this PIN to watch a blocked programme. The default PIN is "0000" (for France and Italy: "1111"). To change the PIN, go to

 >  [Settings](#) > [General](#) > [System Manager](#) > [Change PIN](#).

 For more information about how to set your password, refer to "[Setting up a password](#)".

 The [Broadcasting](#) is not available in HDMI or Component mode.

 [Programme Rating Lock](#) may not be supported depending on your input signal.

Showing common interface menu

 >  [Settings](#) > [Broadcasting](#) > [Common Interface](#)

You can view information about common interfaces.

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

- [CI Menu](#)

Enables the user to select from the CAM-provided menu. Select the CI menu based on the menu PC Card.

- [Application Info](#)

Displays information about the CAM inserted into the CI slot and about the “CI or CI+ CARD” inserted into the CAM. You can install the CAM any time, with or without the TV turned on.

- [CICAM PIN Manager](#)

Manages Common Interface Common Access Module (CICAM) PIN. Save PIN or change stored PIN and then set other PIN options.

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

- [Descramble Mode](#)

- [CAM video transcoding](#)

Configures the setting to transcode the video codec from the CAM automatically. Turn it Off if you do not want to use it.

 You must use a CAM that supports video codec transcoding.

Configuring advanced broadcasting settings

 >  [Settings](#) > [Broadcasting](#) > [Expert Settings](#) [Try Now](#)

Tuning broadcast signals manually

 >  [Settings](#) > [Broadcasting](#) > [Expert Settings](#) > [Manual Tuning](#) Try Now

You can scan for all the channels manually and store the scanned channels in the TV.

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

Tuning digital channels

 >  [Settings](#) > [Broadcasting](#) > [Expert Settings](#) > [Manual Tuning](#) > [Digital Channel Tuning](#)

Select [New](#), and then configure [Channel](#), [Frequency](#), and [Bandwidth](#), and then select [Search](#) to automatically scan and store a list of digital channels in the TV.

Tuning analogue channels

 >  [Settings](#) > [Broadcasting](#) > [Expert Settings](#) > [Manual Tuning](#) > [Analogue Channel Tuning](#)

Select [New](#) and configure [Programme](#), [Colour System](#), [Sound System](#), [Channel](#), and [Search](#) to scan for analogue channels. Then, select [Store](#) to store the scanned channels in the TV.

 This function is only available for analogue broadcasts.

Fine-tuning analogue broadcasts

 >  [Settings](#) > [Broadcasting](#) > [Expert Settings](#) > [Fine Tune](#) Try Now

 This function is only available for analogue broadcasts.

Transferring channel list

 >  [Settings](#) > [Broadcasting](#) > [Expert Settings](#) > [Transfer Channel List](#)

You can import or export the channel list to a USB storage. To use this function, the PIN number is required.

- [Import from USB](#): Imports channel list from a USB storage.
- [Export to USB](#): Exports channel list saved in the TV to a USB storage.

 This function is available when USB is connected.

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

Enabling/Disabling Edit Channel Numbers

 >  [Settings](#) > [Broadcasting](#) > [Expert Settings](#) > [Edit Channel Numbers](#)

Use this to change channel number. When channel number is changed, channel information is not updated automatically.

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

Deleting CAM operator profile

 >  [Settings](#) > [Broadcasting](#) > [Expert Settings](#) > [Delete CAM Operator Profile](#)

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

Setting satellite system

 >  [Settings](#) > [Broadcasting](#) > [Expert Settings](#) > [Satellite System](#)

You can configure a set of satellite dish settings before performing a channel scan.

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

Changing teletext language

 >  [Settings](#) > [Broadcasting](#) > [Expert Settings](#) > [Teletext Language Settings](#) > [Teletext Language](#)

You can set or change the teletext language. To watch the teletext broadcast in your preferred language, select a language to use in [Primary Teletext Language](#). If this language is not supported, you can watch the teletext broadcast in your secondary preferred language set in [Secondary Teletext Language](#).

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

Selecting the broadcast audio language

 >  [Settings](#) > [Broadcasting](#) > [Expert Settings](#) > [Audio Options](#) Try Now

This is the language you will hear while watching TV if the language is included in the broadcast signal. [Audio Options](#) functions differently for analogue and digital channels.

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

- [Audio Language Settings](#)

You can change the audio language you want to hear.

 The available language may differ with the broadcast.

- [Audio Format](#)

You can change the audio format you want to hear.

 The supported audio format may differ with the broadcast programme.

 This option is only available on digital channels.

Showing TVkey Interface menu

 >  [Settings](#) > [Broadcasting](#) > [Expert Settings](#) > [TVkey Interface](#)

You can use the following functions:

- [TVkey Menu](#): Show TVkey Interface menu.
- [Guide](#): Select the guide you want to use when watching with TVkey.
- [Delete TVkey Operator Profile](#): Show the TVkey operator list to delete.

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

Reading digital text

 >  [Settings](#) > [Broadcasting](#) > [Expert Settings](#) > [Digital Text \(MHEG\)](#)

You can use this function when you watch a broadcast that includes both text and multimedia content.

 This function is only available in UK.

 Multimedia and Hypermedia Information Coding Experts Group (MHEG) is an International standard for data encoding systems used in multimedia and hypermedia. This is at a higher level than the MPEG system which includes data-linking hypermedia such as still images, character service, animation, graphic and video files as well as multimedia data. MHEG is user runtime interaction technology and is being applied to various fields including Video-On-Demand (VOD), Interactive TV (ITV), Electronic Commerce (EC), tele education, teleconferencing, digital libraries and network games.

Picture and Sound

You can change the settings for the picture and the sound according to your preference.

Using the Intelligent Mode

Let the TV analyse the surrounding and the content you are watching so that it can provide an upgraded viewing experience.

 >  **Settings** > **General** > **Intelligent Mode Settings**

In **Intelligent Mode**, the TV recognises and analyses the surroundings, the content, and your usage patterns to provide the best viewing experience. You can turn the options below on or off. Create your preferred viewing environment.

 Because this function is specific to QLED TV (except for Q50R model), The Frame and The Serif, it may not be supported depending on the model.

- **Intelligent Mode**

Turn **Intelligent Mode** on or off.

- **Adaptive Brightness**

Automatically adjusts the backlight brightness of the screen by detecting the ambient light level using ambient light sensor.

 This function may not be supported by some modes or apps. (For example, **Ambient Mode**, and **Game Mode**)

- **Adaptive Sound**

Provides optimised sound quality by analysing the viewing environment and the acoustic components of the content.

- **Check TV Space**

Optimises the sound by analysing the space where the TV is installed. When the surroundings are quiet, point the Samsung Smart Remote at the front of the TV, and then start this function. This function is only available when the TV is paired with the Samsung Smart Remote.

 This function is only available when the sound output of the TV is set to **TV Speaker**.

 This function may not be supported by some modes or apps. (For example, **Ambient Mode**, **Game Mode**, and apps that control the TV sound)

- **Adaptive Volume**

Automatically adjusts to a specific volume level while you are watching TV. The TV analyses your volume usage history by time period to automatically adjust the volume when you use an app or switch to an external input source.

-  This function is only available when the sound output of the TV is set to **TV Speaker**.
-  This function may not be supported by some apps or external devices.
-  This function's operation affects **Auto Volume** function, but it does not work the other way around.
-  This function operates based on your volume usage history, and may not operate if the volume usage history by time period is insufficient.
-  The amount of difference made by this function does not exceed +/- 5 levels from the current volume, and this function does not change the current volume if it exceeds 40.

Adjusting the Picture Quality

Change the Picture Mode and adjust Expert Settings.

Choosing a picture mode

 >  **Settings** > **Picture** > **Picture Mode** 

You can select the **Picture Mode** that provides the best viewing experience.

- **Dynamic**
Makes the picture brighter and clearer in bright viewing environments.
- **Standard**
Is the default mode suitable for general viewing environments.
- **Natural**
Reduces eye strain for a comfortable viewing experience.
- **Movie**
Is suitable for watching TV or movies in a dark room.

 This function may not be supported depending on the model.

Configuring advanced picture settings

 >  [Settings](#) > [Picture](#) > [Expert Settings](#) [Try Now](#)

Configure the screen settings to your taste by using the following functions:

- [Backlight](#) [Try Now](#)
- [Brightness](#) [Try Now](#)
- [Contrast](#) [Try Now](#)
- [Sharpness](#) [Try Now](#)
- [Colour](#) [Try Now](#)
- [Tint \(G/R\)](#) [Try Now](#)
- [Apply Picture Settings](#) [Try Now](#)
- [Digital Clean View](#) [Try Now](#)
- [Auto Motion Plus Settings](#) [Try Now](#)



When **LED Clear Motion** is set to **On**, the screen appears darker than when it is **Off**.

- [Local Dimming](#)



Controls the brightness of individual areas on the screen to maximise contrast automatically.



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

- [Contrast Enhancer](#) [Try Now](#)

- [Film Mode](#) [Try Now](#)



This function is only available when the input signal is TV, AV, Component (480i, 576i, 1080i), or HDMI (1080i).

- [Colour Tone](#) [Try Now](#)
- [White Balance](#) [Try Now](#)
- [Gamma](#) [Try Now](#)
- [RGB Only Mode](#) [Try Now](#)
- [Colour Space Settings](#) [Try Now](#)
- [Reset Picture](#) [Try Now](#)

Setting the Viewing Environment for External Devices

You can optimise the TV for viewing specific video formats.

Playing games on an optimised screen



> [Settings](#) > [General](#) > [External Device Manager](#) > [\(Game Mode Settings\)](#) > [Game Mode](#)

You can enable the game mode to optimise the TV's settings for playing video games with a gaming console, such as a PlayStation™, Xbox™ or Nintendo Switch™.



The [Game Mode Settings](#) may not appear depending on the model or geographical area.



The game mode is not available for normal TV viewing.



The screen may shake somewhat.



When [Game Mode](#) is enabled, [Picture Mode](#) and [Sound Mode](#) are switched to [Game](#) automatically. [Sound Mode](#) may not be automatically switched depending on the selected audio device on the [Sound Output](#) menu.



When [Game Mode](#) is set to [On](#), some functions are not available.



To use other external device on the same port, remove the game console connection, set [Game Mode](#) to [Off](#), and then connect the external device to the port.



The [Game Mode](#) functions used for Nintendo Switch™ are subject to change without prior notice.

Setting the Game Mode details

 >  **Settings** > **General** > **External Device Manager** > **Game Mode Settings**

 These functions may not be supported depending on the model.

- **Game Enhancer**

You can make your games more immersive by using intense, vivid picture quality and three-dimensional sound optimised for games.

- **Dynamic Black Equalizer**

You can easily detect items or hidden enemies lurking in dark corners by improving visibility and object details in dark scenes without washing out colours and contrast in brighter scenes.

- **Game Motion Plus Settings**

You can configure the Game Motion Plus settings.

- **FreeSync**

You can make your gaming experience more pleasant by eliminating screen tearing and stuttering.

- Be sure to set this function only for the external devices that support the AMD Radeon FreeSync feature.
- For an optimised game environment, set the resolution of the external device to 1080p at 120 Hz. For more information, refer to "Supported Resolutions for FreeSync".

 If the resolution is not supported, the operation may not be smooth.

 When the FreeSync options are set or the FreeSync function is operating for an external device, the screen may flicker.

 Slight brightness changes may occur during FreeSync operation due to frequency variation of the external device.

 Before playing a game, set **FreeSync** to **Basic** or **Ultimate**.

Using Input Signal Plus

 >  [Settings](#) > [General](#) > [External Device Manager](#) > [Input Signal Plus](#) [Try Now](#)

Expands the input signal range for HDMI connections.

-  If you move to the HDMI connector with which you want to use the [Input Signal Plus](#) function and press the Select button to set the function to **On**, the TV screen may flicker.
-  When you connect the TV to an external device that supports only the UHD 24 Hz or UHD 30 Hz frequency, or any FHD frequency, the [Input Signal Plus](#) function may not be available. In this case, turn off the [Input Signal Plus](#) function.
-  For more information about the supported UHD resolutions, refer to "[Supported Resolutions for UHD Input Signals](#)".
-  For more information about the Q900RB model, refer to "[Resolutions for Input Signals supported by Q900RB model](#)".

Using HDMI black level

 >  [Settings](#) > [General](#) > [External Device Manager](#) > [HDMI Black Level](#) [Try Now](#)

Use HDMI Black Level to adjust the black level to compensate for low black levels, low contrast, or dull colours generated by external devices connected to the TV via an HDMI cable.

-  This function is only available when the input signal, connected to the TV via an HDMI connector, is set to RGB444.

Picture Support Functions

Configure the picture settings for your TV.

Viewing a picture-in-picture (PIP)

 >  [Settings](#) > [Picture](#) > [PIP](#)

While viewing video from an external device such as a Blu-ray player on the main screen, you can watch a TV broadcast in a picture-in-picture (PIP) window.

-  This function may not be supported depending on the model or geographical area.
-  PIP is not available while Smart Hub is active.
-  Playing a game or using the karaoke function on the main screen can result in lower PIP picture quality.
-  The PIP function is only available under the following conditions: 1) The main screen's source is a Component or HDMI connection. 2) The input resolution is less than FHD (Full HD).
-  The PIP window supports digital channels only and does not support UHD channels.

Changing the picture size settings

 >  [Settings](#) > [Picture](#) > [Picture Size Settings](#)

- **Picture Size** [Try Now](#)

You can change the size of the picture displayed on the TV screen to **16:9 Standard**, **Custom**, or **4:3**.

 Supported picture sizes differ with the input signal. For more information about supported picture sizes, refer to "[Picture sizes and input signals](#)".

- **Auto Wide**

Changing the picture size automatically.

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

- **4:3 Screen Size**

You can select a picture size suitable for your geographical area while you are watching TV in the **4:3** or **Fit to screen** mode. The supported screen sizes differ with the country and this function allows you to adjust the picture size in this case.

 The **4:3** mode is not available when an external device is connected to the TV via a Component connector or an HDMI connector.

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

- **Fit to screen** [Try Now](#)

Fitting the picture to the screen.

 This function may not be supported depending on the **Picture Size** setting.

 This function may not be supported depending on broadcasting signals.

- **Zoom and Position** [Try Now](#)

Adjusting the picture size and/or position.

 This function is available only if **Picture Size** is set to **Custom**.

 To change the picture position on analogue channels, first enlarge the picture and then change the position.

 These functions may not be available on **Samsung TV Plus** and some applications.

Configuring a Sound Mode and Expert Settings

Change the Sound Mode and adjust Expert Settings.

Choosing a sound mode

 >  **Settings** > **Sound** > **Sound Mode** [Try Now](#)

You can select the available sound mode - **Standard** or **Amplify** - that you prefer for a content type or your listening environment.

 This function may not be supported depending on the model.

 When an external device is connected, **Sound Mode** may change accordingly.

Configuring advanced sound settings

 >  **Settings** > **Sound** > **Expert Settings** [Try Now](#)

You can personalise the sound quality by adjusting the following settings.

- **Balance** [Try Now](#)

- **Equaliser** [Try Now](#)

 This function is not available when the **Adaptive Sound** function is turned on.

 The name of this function display may appear differently depending on the connected external device.

- **Digital Output Audio Format** [Try Now](#)

To play Dolby Digital+ (with Atmos) content, select **Dolby Digital+**.

 The **Dolby Digital+** option is only available via HDMI (ARC) for external devices that support the format.

 The HDMI (ARC) port may support eARC in some models.

 If you use a AV receiver that does not support Dolby Digital+, you will hear no sound if you select **Dolby Digital+**.

- **Digital Output Audio Delay** [Try Now](#)

 This feature is only available when the external device is connected via HDMI (ARC) and SPDIF (Sony Philips Digital Interface).

 This function may not be supported depending on the model.

- **Dolby Atmos Compatibility** [Try Now](#)

You can set the TV to allow Dolby Digital+ with Atmos streams that are inputted from external devices.

Set to **On** if the audio device connected via HDMI (ARC) supports Dolby Atmos. The TV screen may flicker when this function is turned on or off.

 If this function is on, set **Digital Output Audio Format** to **Dolby Digital+**.

 The HDMI (ARC) port may support eARC in some models.

- **Auto Volume** [Try Now](#)

- **Sound Feedback** [Try Now](#)

- **Reset Sound** [Try Now](#)

 Standard audio signals are sampled at 48 kHz while HD audio signals are sampled at 96 kHz.

 Some SPDIF receivers may not be compatible with HD audio format.

Using the Sound Support Functions

Configure the sound settings for your TV.

Selecting speakers

 >  **Settings** > **Sound** > **Sound Output** [Try Now](#)

You can select which speakers the TV uses for audio output.

 External speakers may not be controlled with the Samsung Smart Remote. When an external speaker is enabled, some sound menus are not supported.

Listening to the TV through Bluetooth devices

 >  **Settings** > **Sound** > **Sound Output** > **Bluetooth Speaker List**

You can connect Bluetooth audio devices to the TV. They must be paired using the TV's Bluetooth function. For more information on pairing, refer to the Bluetooth audio device's operating manual.

-  This function may not be supported depending on the model or geographical area.
-  If the TV fails to find a Bluetooth audio device, place the device closer to the TV, and then select **Refresh**.
-  When you turn on a paired Bluetooth audio device, the TV detects it automatically, and then displays a pop-up window. Use this pop-up window to activate/deactivate the Bluetooth audio device.
-  The sound quality may be affected by the condition of the Bluetooth connection.
-  Before using a Bluetooth audio device, refer to "Read Before Using Bluetooth Devices".

Listening to the TV through a Samsung audio device that supports the Wi-Fi function

For more information about how to connect and use a Samsung audio device that supports the Wi-Fi function, refer to its user manual.

 >  **Settings** > **Sound** > **Wi-Fi Speaker Surround Setup** 

If you've connected one or more Samsung wireless audio devices that support the Wi-Fi function to the TV, you can create an optimal sound set up by configuring the surround effect settings. You can select any of the surround sound configurations, with or without a sound bar.

A surround sound configuration can be used if all of the following conditions are met:

- Two or more Samsung wireless speakers of the same type must be connected to the same wireless network.
 - The Samsung audio devices that supports the Wi-Fi function, must be connected to the same wireless network as the TV.
-  The surround sound configurations with a sound bar may not be supported depending on the product.
 -  If you activate the Screen Mirroring function while using the Samsung audio devices that supports the Wi-Fi function, the connection is disconnected.
 -  Lip syncs with mismatched video and audio time codes may occur depending on the device type.
 -  This function may not be supported depending on the model or geographical area.