# SAMSUNG

# E-MANUAL

Thank you for purchasing this Samsung product. To receive more complete service, please register your product at

www.samsung.com	
Model	_ Serial No

To directly go to the page that provides instructions on how to use the manual for visually impaired users, select the Learn Menu Screen link below.

"Learn Menu Screen" Link

## **Contents**

#### Guide

#### Connections

- 6 Connection Guide
- 8 Connecting to the network
- 12 Displaying your mobile device screen on the Product
- 14 Connection Cables for External Devices
- 16 Switching between external devices connected to the Product
- 19 Connection Notes

#### Remote Control and Peripherals

- 22 About the Samsung Smart Remote
- 25 Connecting the Samsung Smart Remote to the Product
- 26 Controlling External Devices with a Samsung Remote Control - Using the Universal Remote Setup
- 26 Learn how to use Samsung Smart Remote
- 27 Using Anynet+ (HDMI-CEC)
- 28 Controlling the Product with a Keyboard, Mouse, or Gamepad
- 33 Entering Text using the On-Screen Virtual Keyboard

#### **Smart Features**

- 35 Using Smart Hub
- 40 Using Art Mode
- 47 Using Samsung Gaming Hub
- 49 About the Media Home Screen
- 52 About the Menu Home Screen
- 55 Using a Samsung Account
- 57 Using Workspace
- 63 Using the Apps Service
- 67 Using the e-Manual
- 69 Using the Internet
- 70 Using SmartThings
- 75 Playing pictures/video/music
- 80 Using Multi View

- 82 Using Bixby
- 87 Using the Game Bar
- 92 Using Auracast

#### **Product Viewing**

- 93 Using the Guide
- 95 Setting Up Schedule Viewing
- 96 Using the Channel List
- 97 Using the channel edit function
- 98 Using a Personal Favorites List
- 99 Product-Viewing Support Functions

#### Picture and Sound

- 101 Using Intelligent Mode
- 104 Adjusting the Picture Quality
- 107 Changing the Picture Size and Position
- 108 Setting the Viewing Environment for External Devices
- 111 Configuring a Sound Mode and Expert Settings
- 113 Using the Sound Support Functions

#### System and Support

- 116 Using the Time Functions and the Timers
- 118 Using the Power and Energy Saving Functions
- 120 Updating the Product's Software
- 121 Using the Parental Settings function
- 121 Using the Gesture function
- 122 Audio and Video Functions for the Visually or Hearing Impaired
- 127 Using Voice Assistants on the Product
- 128 Using Other Functions

#### Precautions and Notes

- 130 Read Before Using Apps
- 131 Read Before Using the Internet Function
- 133 Read Before Playing Photo, Video, or Music Files
- 138 Read After Installing the Product

- 139 Supported Resolutions for UHD Input Signals
- 140 Supported Resolutions for VRR
- 141 Read Before Connecting a Computer (Supported Resolutions)
- 144 Supported Resolutions for Video Signals
- 146 Read Before Using Bluetooth Devices
- 147 Blocking programs based on their TV Rating
- 150 Licenses & Other Information

## **Troubleshooting**

#### Picture Issues

- 151 The screen is flashing or has become dark
- 151 The picture is not bright, or the picture colors do not look clear
- 152 The picture colors are black and white or do not look the way they should look
- 153 The Product automatically turns off by itself
- 153 Unable to power on
- 153 Unable to find a Channel
- 154 The Product image does not look as good as it did in the store
- 154 Displayed video looks blurry
- 154 The picture is distorted
- 154 There is a dotted line on the edge of the screen
- 155 The picture won't display in full screen
- 155 The Caption function in the Product menu is deactivated
- 155 Captions appear on the Product screen
- 155 The HDR of the connected external device turns off

#### Sound and Noise Issues

- 156 How can I connect an audio device to the Product?
- 156 There is no sound or the sound is too low at maximum volume.
- 156 The picture is good but there is no sound.
- 157 HDMI (eARC/ARC) is connected, and there is no sound.
- 157 The speakers are making an odd sound.
- 157 The sound is interrupted.
- 157 Whenever a function is used on the Product or the channel is changed, the Product voices the activity. The Product explains in voice-over the video scenes displayed on the screen.
- 158 The Product audio is not being played through the Soundbar or A/V receiver.
- 158 The sound is not heard clearly.
- 159 The volume of the external device cannot be adjusted.
- 159 I want to turn the Product and audio device off and on at the same time.

#### Channel and Broadcast Issues

- 160 "Weak or No Signal" displayed in Product mode or cannot find channel.
- 160 The captions are not provided on a digital channel.

#### External Device Connectivity Issues

- 161 The "Mode Not Supported" message appears.
- 161 The video is OK but there is no audio.
- 161 I want to connect to a PC and mobile device via screen mirroring.
- 162 No screen appears when connecting the Product to an external device.
- 162 I want to connect to a Bluetooth speaker.
- 162 The PC screen does not appear or it flickers.

#### Network Issues

- 163 Wireless network connection failed. Unable to connect to a wireless access point. Unable to connect to the network.
- 163 Wired network connection failed.
- 163 Connected to a local network, but not to the Internet.

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

- 164 What is Anynet+?
- 164 Anynet+ does not work. The connected device is not displayed.
- 165 I want to start Anynet+. I also want the connected devices to turn on when the Product is turned on.
- 165 I want to exit Anynet+. It is inconvenient to turn on other devices because the Product also turns on. It is inconvenient because the connected devices (e.g. set-top box) turn off together.
- 165 The message "Connecting to Anynet+ device..." or "Disconnecting from Anynet+ device" appears on the screen.
- 165 The Anynet+ device won't play.

#### Remote Control Issues

- 166 The remote control does not work.
- 166 External devices cannot be operated with the Product remote control.

#### Apps

- 167 I cannot find the app I want.
- 167 I launched an app, but it's in a different language. How can I change the language?

- 167 The app does not work properly. Its image quality is poor.
- 167 The Smart Hub Home Screen keeps appearing whenever you turn on the Product.

#### Media Files

- 168 Some files are interrupted during playback.
- 168 Some files can't be played.

#### Voice Assistant Issues

- 169 The microphone is off.
- 169 The voice commands do not work well.
- 169 Bixby/Alexa answers although I did not call it.
- 170 I spoke "Hi, Bixby/Alexa" but Bixby/Alexa does not answer.
- 170 Voice recognition does not work with the Samsung Smart Remote unlike other features. There is no response even if the Voice Assistant button is pressed.
- 170 During voice recognition, the heavy load message appears and the function does not work.
- 170 I want to see weather information of the desired area.

#### Other issues

- 171 The Product is hot.
- 171 The Product smells like plastic.
- 171 The settings are lost after 5 minutes or every time the Product is turned off.
- 172 A POP (Product's internal banner ad) appears on the screen.
- 172 The Product is making a popping noise.
- 172 The Product is making a humming noise.
- 172 The Product narrates the screen events in voice-over.

#### Diagnosing Product operational issues

- 173 Self Diagnosis
- 175 Reset Smart Hub
- 175 Reset picture
- 175 Reset sound

#### **Getting Support**

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

# **Accessibility Guidance**

#### Learn Menu Screen

- 177 Using the Samsung Smart Remote
- 179 Using the Accessibility Menu
- 184 Using the Product with Voice Guide on
- 186 Using the guide
- 188 Using Schedule Viewing
- 189 Using the Channel List
- 190 Using Smart Hub
- 192 Launching the e-Manual
- 193 Using Bixby

# Guide

Learn how to use various features.

## **Connections**

You can get access to the network 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 Product.

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

- Audio Device: HDMI (eARC/ARC), Optical, Bluetooth, USB, Wi-Fi, Wi-Fi Speaker Surround Setup
- Video Device: HDMI
- Smartphone: Screen Sharing (Smart View), Screen Sharing (Tap View), Samsung DeX, SmartThings, Camera Sharing
- PC: HDMI, Screen Sharing (Wireless), Easy Connection to Screen
- Input Device: Remote Control, USB Keyboard, USB Mouse, USB Gamepad, USB Camera, Bluetooth Device
- Game Console: HDMI

- External Storage: USB Flash Drive, Hard Disk Drive (HDD)
- The connection method and available external devices may differ depending on the model.
- Some functions may not be supported depending on the model or geographical area.
- Using HDMI Troubleshooting, you can check the connection to HDMI cable and external devices (takes approximately 2 minutes).



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

## Connecting to the network

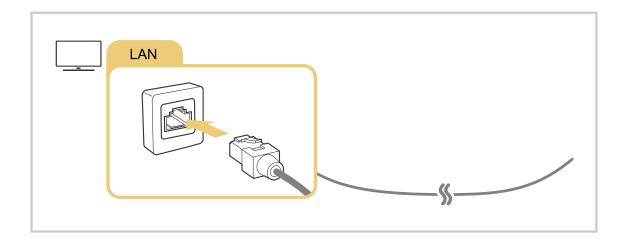
You can get access to the network through your Product.

♠ > = (left directional button) > ⊕ Settings > All Settings > Connection > Network > Open Network Settings (Try Now)

Configure network settings to connect to an available network.

## Establishing a wired network connection

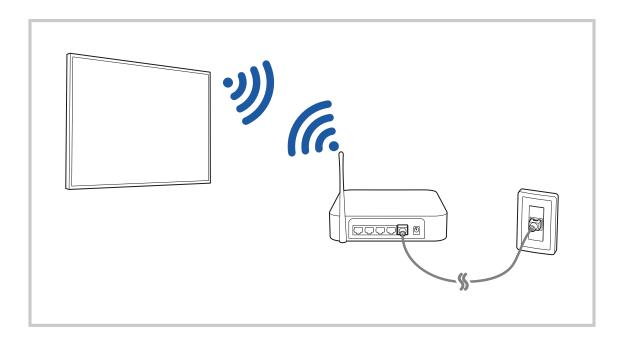
If you connect a LAN cable, the Product automatically accesses the network.

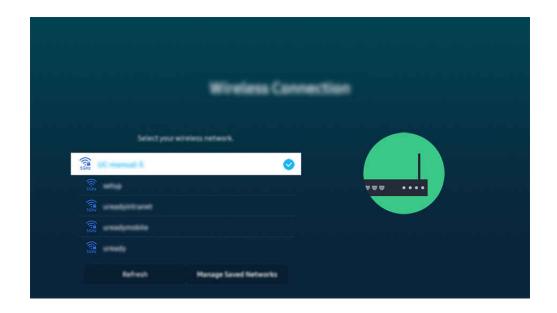


- If the Product does not automatically connect to the network, refer to "Wired network connection failed." in "Troubleshooting."
- To connect a LAN cable, use a CAT 7 (\*STP type) cable for the connection. (100/10 Mbps)
  - \* Shielded Twisted Pair
- The Product will not be able to connect to the network if your network speed is below 10 Mbps.
- This function may not be supported depending on the model.
- Wired networks are not supported by some models.

## Establishing a wireless network connection

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





- The image on your Product 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 Product will connect automatically.
- To view or delete previously connected network names (SSIDs), move the focus to **Manage Saved Networks**, and then press the Select button.

#### Checking the network connection status

♠ > ≡ (left directional button) > ♠ Settings > All Settings > Connection > Network > Network Status (Try Now)

View the current network status.

## **Resetting Your Network**

Restore the network settings to the factory default.

#### Turning on the Product with a mobile device

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

This function is available with a mobile device connected to the Product through the SmartThings app.

#### Connecting an IP control device to the Product

You can connect an IP control device to the Product 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 Product. We recommend turning this feature on only if an authorized third-party custom controller is installed and configured specifically for a Samsung Product and if your Wi-Fi network is password protected.
- This function may not be supported depending on the model.

#### Allowing to connect a wireless network

You can enable the connection to Wi-Fi.

To connect a wireless network, the function must be active.

#### Allowing to connect the Wi-Fi Direct

When using Wi-Fi Direct, you can connect directly with other devices and share content without using a wireless router.

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

#### Changing the name of the Product

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

## Displaying your mobile device screen on the Product

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

When you start screen sharing with a mobile device (Smart View / Tap View), the Product screen switches to the Multi View or mobile device's screen. Watch multiple contents at the same time with the Multi View screen.

- This function may not be supported depending on the model.
- For more information, refer to "Using Multi View."

## Using Screen Sharing (Smart View)

For information on how to share the screen with your mobile device, refer to o >  $\equiv$  (left directional button) >  $\heartsuit$  Connected Devices > Connection Guide > Smartphone > Screen Sharing (Smart View). Try Now

- To turn off Screen Sharing (Smart View), disconnect the mobile device or press the button on the remote control.
- Using the Smart View menu on your mobile device, you can change the settings such as aspect ratio.

## Using Screen Sharing (Tap View)

By tapping the mobile device on your Product, you can watch Multi View or mobile device's screen through the Product screen. When you tap a mobile device on your Product while running a music app on your mobile device, the Product screen switches to the Music Wall screen.

- This function may not be supported depending on the model.
- This function is only available in Samsung mobile devices with Android 8.1 or higher.
- 1. Enable Tap View on your mobile device.
  - For more information about configuration, refer to 'Enabling Tap View'.
- 2. Turn on the screen of your mobile device.
- 3. Tap your mobile device on the Product. The Product screen switches to Multi View, Music Wall, or mobile device's screen.
  - Be sure to tap away from the Product screen and bezel corners. It may scratch or break the Product or mobile device screen.
  - We recommend using your mobile device with the cover in place and lightly tap it on any external edge of the Product.
  - When you perform Tap View in **Art** mode, only the mobile device's screen appears on the Product.
- 4. Watch the Multi View, Music Wall, or mobile device's screen on the Product screen.
- Music Wall screen is a function that allows you to enjoy music along with visual video effects that change according to the genre and beat of the music.
- The displayed Product screen may differ depending on the model.
- This function enables Screen/Sound Mirroring by detecting vibrations generated when you tap the mobile device on the Product.

#### **Enabling Tap View**

Enable Tap View in the SmartThings app.

- Depending on the SmartThings app version, you may need to register the Product with your mobile device.
- This function may not be supported depending on the model.
- 1. Launch the SmartThings app on your mobile device.
- 2. Select Settings ( $\equiv$  >  $\otimes$ ) in SmartThings app on your mobile device.
- 3. Set Tap View to on.
  - Upon connection for the first time, select Allow on a pop-up window of the Product.

## **Connection Cables for External Devices**

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

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

Cable name	Image	Description
DVI to HDMI		DVI to HDMI cables can transmit only digital video signals and not audio signals. We recommend that you use HDMI to HDMI cables.
Optical		Optical cables are used to transmit audio signals to external speakers with low signal loss.  Optical cables can't transmit video signals.
Banana jack Speaker cable		Banana jack Speaker cables are used to connect AMP with speaker for transmitting audio signals.

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

## Switching between external devices connected to the Product

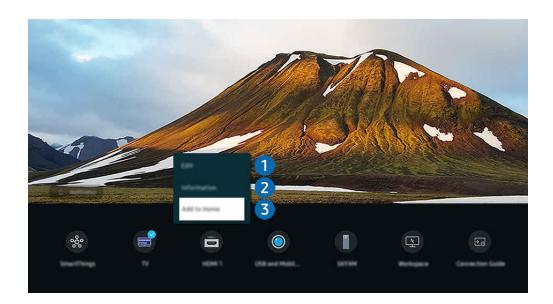
You can switch between Product programs and the content of external devices.

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

- To control a device (Blu-ray player, game console, etc.) that supports universal remote control with the Product's remote control, connect the device to an HDMI port on the Product, and then turn on the device. The output displayed on the Product 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 Setup."
- When a USB device is connected to the USB port, a pop-up message appears that lets you switch easily to the media content listed on the device.
- This function may not be supported depending on the device and geographical area.

#### Editing the name and icon of an external device

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



- The image on your Product 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 down directional button. The following functions become available:
  - Available functions may differ depending on the port type.

## 1 Edit

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

## 2 Information

You can view detailed information about an external device.

## 3 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 **SmartThings** feature.

#### SmartThings

It allows the Product to connect and control the detected various devices in the same space.

For more information, refer to "Using SmartThings."

You can use the following features on the Sources screen.

#### Camera Experience

Connect a USB camera, or use the SmartThings app on your mobile phone to connect a camera.

Connect a camera to use video call, home workout, and other new features.

- For details on how to connect, refer to Camera Sharing ( > = (left directional button) > < Connected Devices > Connection Guide > Smartphone > Camera Sharing).
- This function may not be supported depending on the model.

#### Workspace

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

For more information, refer to "Using Workspace."

You can use the following features on the Featured screen.

#### · Connection Guide

Displays device connection instructions.

For more information, refer to "Connection Guide."

#### Universal Remote Setup

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 Setup."

#### **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 Product. 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 a blank screen or a connection error.
- Some HDMI cables and devices may not be compatible with the Product due to different HDMI specifications.
- This Product does not support HDMI Ethernet Channel. Ethernet is a Local Area Network (LAN) built with coaxial cables standardized by the IEEE.
- Use a cable shorter than 10 feet (3 m) to get the best UHD viewing quality.
- Many computer graphics adapters 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 Product 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 Product 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

- To obtain better Product audio quality, connect a soundbar or A/V receiver to the Product.
- You can watch the center channel of the A/V receiver through the Product. First, connect the speaker cable between the center channel of the A/V receiver and the Product.
  - Some models may not have embedded speakers.
  - When the optical cable is connected between the Product and the A/V receiver, select MICRO LED + Optical (♠ > ≡ (left directional button) > ♦ Settings > All Settings > Sound > Sound Output).
  - When the HDMI (ARC, eARC) cable is connected between the Product and the A/V receiver, select MICRO
     LED + AV Receiver ( > ≡ (left directional button) > Settings > All Settings > Sound > Sound Output).
  - This function may not be supported depending on the model or geographical area.
  - This feature may not be supported depending on the channel configuration of the sound source.
  - Maximum wattage AV receiver that can be connected to Product is 150 W with 8-ohm.
  - While watching the center channel of the A/V receiver through the Product, when you turn off the A/V receiver, noise may occur. Change the Sound Output to Product speaker, and then turn off the power.
- If you connect an external audio device using an optical cable, the Sound Output setting automatically changes
  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
  - This function may not be supported depending on the model.
  - Use the Quick Settings screen to change to the connected device:
     Use the Select button to select Optical on the Sound Output menu. (♠ > ≡ (left directional button) > ⊗
     Settings > down directional button > Sound Output) (ry Now)
  - Use the Settings screen to change to the connected device:
     Select Optical on the Sound Output menu. ( > ≡ (left directional button) > ⊗ Settings > All Settings > Sound > Sound Output) ( ry Now )
    - Refer to the soundbar's user manual when connecting it to the Product.
- 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 Product, refer to "Read Before Connecting a Computer (Supported Resolutions)."
- If you want to connect your PC and Product 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 a 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 not 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, refer to the mobile device's user manual.
- The mobile device and your Product 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 a NAS (Network-Attached Storage) device.

# Remote Control and Peripherals

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

## About the Samsung Smart Remote

Learn about the buttons on the Samsung Smart Remote.



Button	Description	
(Power)	Press to turn the Product on or off.	
1 MIC / LED	Used as MIC when using voice recognition with the remote control. When charging the remote control via the USB port, the LED is lit if charging is in progress. When charging is complete, the LED is turned off.  • Do not impact the MIC hole or use a sharp object to poke into the hole.	
(Voice Assistant)	Runs Voice Assistant. Press and hold the button, say a command, and then release the button to run Voice Assistant.	
	Each time you press this button, Settings menu / virtual numeric pad / Option pad with Color buttons are displayed alternately.	
	Use this button to access additional options that are specific to the feature in use.	
(Settings - Number - Color button)	<ul> <li>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 or Enter Number to enter a numeric value. Use to change the channel, enter a PIN, ZIP code and etc.</li> </ul>	
	If the Color Button appears with a number strip on the screen, select the Color Button and then select a specific color by using the directional button (up, down, left, right).	
2 Directional button (up, down, left, right)	Use to navigate the menu or move the focus to highlight items on the Home Screen.	
3 Select	Selects or runs a focused item. When pressed while you are watching contents, detailed program information appears.	
(Return)	Press to return to the previous menu. When pressed for 1 second or more, the running function is terminated. When pressed while you are watching a program, the previous channel appears.	
(Smart Hub)	Press to switch to the Home Screen.	

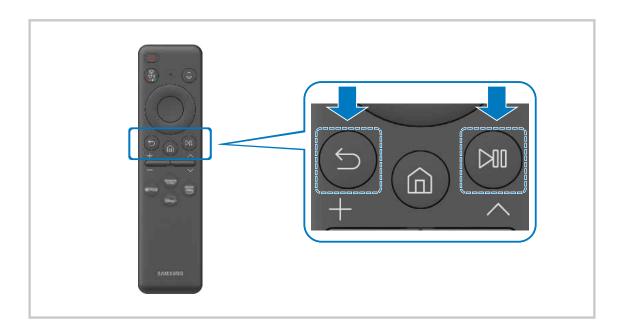
Button	Description
(Play/pause)	When pressed, the playback controls appear. Using these controls, you can control the media content that is playing.
	To use Game Bar, press and hold the button in Game Mode.
	Game Bar may not be supported depending on the model or geographical area.
+/-(Volume)	Move the button up or down to adjust the volume. To mute the sound, press the button. When pressed for 2 seconds or more, the Accessibility Shortcuts appears.
^/∨(Channel)	Move the button up or down to change the channel. To see the <b>Guide</b> screen, press the button. When pressed for 1 second or more, the <b>Channel List</b> screen appears.  Press and hold the button up or down to quickly change the channel.
4 Launch app button	Launch the app indicated by the button.  Available apps may differ depending on the geographical area or contents provider.

- Use the Samsung Smart Remote less than 20 feet (6 m) from the Product. 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 Setup."
- 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 Product using an HDMI cable. For more information, refer to "Using Anynet+ (HDMI-CEC)."

## Connecting the Samsung Smart Remote to the Product

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

When you turn on the Product for the first time, the Samsung Smart Remote pairs to the Product automatically. If the Samsung Smart Remote does not pair to the Product automatically, point it at the front of the Product, and then press and hold the and buttons simultaneously for 3 seconds or more.



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

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

You can control all external devices connected to the Product using a single Samsung remote. Run the **Universal Remote Setup** menu to register external devices.

- 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 Product's remote control without any additional setup. For more information, refer to "Using Anynet+ (HDMI-CEC)."
- Specific external devices connected to the Product may not support the universal remote feature.
- Do not place any obstacles in front of an external device and Product's logo. It may cause improper transmitted signals from the remote control.
- The Product memorizes both the external device and its connection port (HDMI 1, HDMI 2, etc.).
- If you have difficulty controlling external devices with the Universal Remote, try adjusting the positions of the external devices.
- This function may not operate properly depending on the Product installation environment and the features of external devices.

## Learn how to use Samsung Smart Remote

You can learn how to use Samsung Smart Remote.

Find details on how to use the Samsung Smart Remote.

Press the menu to use a variety of functions of the Samsung Smart Remote.

This function may not be supported depending on the model.

## Using Anynet+ (HDMI-CEC)

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

You can use the Product's remote control to control external devices that are connected to the Product 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

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

The device is automatically connected to the Product. After the connection process is finished, you can access the menu of the connected device using your Product 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 Product with an HDMI cable. Note that some HDMI cables may not support Anynet+ (HDMI-CEC).
- You can configure the Product's Universal Remote to control third-party cable boxes, Blu-ray players, and home theaters that do not support HDMI-CEC. For more information, refer to "Controlling External Devices with a Samsung Remote Control Using the Universal Remote Setup."
- Anynet+ cannot be used to control external devices that do not support HDMI-CEC.
- The Product 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 when those devices are either in standby mode or turned on.
- Anynet+ (HDMI-CEC) can control up to 12 compliant external devices (up to 3 of the same type) except for home theaters. Anynet+ (HDMI-CEC) can control only one home theater system.
- To listen to 5.1 channel audio from an external device, connect the device to the Product via an HDMI cable and connect a 5.1 home theater system directly to the external device's digital audio output connector.
- If an external device has been set up for both Anynet+ and a universal remote control, the device can be controlled only with the universal remote control.

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

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

You can connect a keyboard, mouse, or gamepad to control the Product easily.

#### 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 Workspace function.
- XInput USB gamepads are supported.
- For more information, refer to Input Device in Connection Guide ( > = (left directional button) > % Connected Devices > Connection Guide > Input Device)

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

♠ > ≡ (left directional button) > ⊕ Settings > All Settings > Connection > Bluetooth Device List
(ry Now)

- If your device was not detected, position the keyboard close to the Product, and then select **Refresh**. The Product scans for available devices again.
- If you connect a mouse, it is available only in the **Internet** app.
- A maximum of four gamepads can be connected, regardless of connection method (e.g., USB or Bluetooth).
  - When using two BT audio devices, it is best to use USB gamepads.
  - When using one BT audio device, up to two BT gamepads can be connected.
- For more information, refer to the Bluetooth device's user manual.
- This function may not be supported depending on the model or geographical area.

## Using the keyboard and mouse

Button	Description
Directional keys	Use to navigate the menu, or move the focus to highlight items on the Home Screen.
Enter key	Selects or runs a focused item
ESC key	Returns to the previous screen
Number keys	Enter numbers
F1 key	Turns on or off the Product
F2 key	Displays the Settings menu / numeric keypad / Option pad  Each time you press this button, Settings menu / virtual numeric pad / Option pad are displayed alternately.
F3 key	Plays/pauses
F4 key	Displays the Settings screen
F5 key	Displays the Home Screen
F6 key	Displays the Sources 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 webpage displayed by the Internet app.
Left-click	Selects and runs an item.  Available only in the Internet app.  You can click a menu or link to start a function as you do on a PC.

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

## Using the Gamepad

Check the supported gamepads. [ry Now]

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

anufacturer	Controllers	Connection	Force feedback
	Xbox Series X/S controller	BT	0
	Xbox One S controller	BT	0
	Abox One 5 controller	USB	0
Microsoft	Xbox 360 controller	USB	0
	Xbox Elite Wireless Controller Series 2	BT	0
	Vh au Adantius santuallau	BT	-
	Xbox Adaptive controller	USB	-
	Dualagras Edga	BT	0
	Dualsense Edge	USB	0
Conv	Dualesses	BT	0
Sony	Dualsense	USB	0
	Dual Charle 4	BT	0
	DualShock 4	USB	0
	Stadia controller	USB	Not support
Google	Stadia Controller	Wi-Fi	Not support
		BT	0
Amazon	Luna controller	USB	0
		Wi-Fi	Not support
Joytron	CYVOX DX	USB	0
	F710	USB	0
Logitech	F510	USB	0
	F310	USB	-
Dowers	MOGA XP5-X Plus Bluetooth controller	BT	-
PowerA	MODA XP5-X Plus Bluetooth Controller	USB	-
Nividia	Chield controller	BT	0
Nvidia	Shield controller	USB	Not support
	Nintanda Cuitah Des	BT	0
Nintendo	Nintendo Switch Pro	USB	0
	Nintendo Joy-Con (L/R)	BT	0

- Some keys are not available on this product depending on controller.
- Force feedback :
  - "Not support" (This product can't support force feedback.)
  - "-" (Controllers don't have force feedback function.)
  - \* Tizen Products will support only XInput mode for the supported gamepads.
  - \* Xbox controllers may require firmware updates.
- Ø Other controllers may or may not work for cloud gaming.

## Using the controller

Button	Description
Left joystick and dpad	4 way navigation
Right joystick	<ul> <li>Up / Down : Volume control (Up / Down)</li> <li>Left / Right : Channel control (Up / Down) on Product screen</li> <li>Select (press): Mute the sound</li> </ul>
A button or X button (Sony Only)	Enter (OK)
B button or O button (Sony Only)	Return (Cancel)
Pressing and holding the B button or O button (Sony Only)	Exit
Home button	Gaming hub homepage (Gaming hub supported countries)  Smart hub homepage
Pressing and holding the Home button	(During cloud game play) Quick panel
Option button on the left	Game Bar (when Game Mode is turned on and an external source is connected)
X button or □ button (Sony Only)	Numeric buttons (123)
Pressing and holding the left and right joysticks simultaneously	Power Off (Turning power on is not possible)

 $<sup>{ \</sup>slash\hspace{-0.6em} \not\hspace{-0.6em} }$  The button operation may differ depending on some apps or the controller.

<sup>\*</sup> Gaming Hub and Cloud game may not be supported depending on the country.

## Setting up the input devices

Keyboard Settings (Try Now)

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

Mouse Settings (Try Now)

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 Product.



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

## 1 Recommended text

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

## 2 Editing Buttons

By selecting any of pop-up Editing Buttons after entering characters on the virtual keyboard, you can quickly perform the editing function.

This function is only available when the **Show Editing Buttons** feature is turned on.

## 3 Settings

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

- The options available may differ depending on the function running currently.
- Recommended text
  - Recommended text
  - Reset Recommended Text Memory
  - Show Editing Buttons
- Keypad Language

#### 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.
- The Samsung Smart Remote may not be supported depending on the model or geographical area.

## **Smart Features**

You can enjoy various apps with Smart Hub.

## **Using Smart Hub**

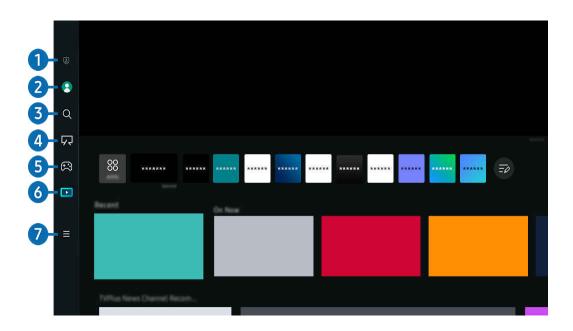
View descriptions of Smart Hub's basic functions.

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

- Some Smart Hub services are paid services.
- To use smart functions, you should connect to a network, agree to the terms and conditions, and log in with your Samsung account.
- 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 network service.

## Displaying the Home Screen

Press the **a** button.



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

## 1 S Privacy Choices

From your Product, easily manage the privacy policy regarding services related to Smart Hub and verify how personal information is protected.

- 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 > = (left directional button) > Settings > All Settings > General & Privacy > 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 ( > ≡ (left directional button) > ⊕ Settings > Support > Device Care > Self Diagnosis > Reset
   Smart Hub). (Try Now)

## 2 Samsung Account

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

For more information, refer to "Using a Samsung Account."

# **3 Q Search**

Search for channels, programs, movies, and apps offered by Smart Hub.

- To use the Search service, make sure the Product is connected to a network.
- This function may not be supported depending on the model or geographical area.

## 4 PArt

When you are not watching Product, you can use the Art mode function to edit image content, such as artworks, photos, or to display the content.

For more information, refer to "Using Art Mode."

## Game

Play games from the Product screen by connecting a Controller to the Product. Configure settings to optimize the Controller and audio device for playing games.

- This function may not be supported depending on the model or geographical area.
- For more information, refer to 'Using Samsung Gaming Hub.'

## **6** ▶ Media

View a variety of contents. Install various apps offered by Smart Hub, such as video, music and sports apps, and use the apps from the Product.

For more information, refer to "About the Media Home Screen."

# **7** ≡ Menu

Manage external devices connected to the Product, and configure settings for various functions available on the Product.

For more information, refer to "About the Menu Home Screen."

## Launching Smart Hub automatically

♠ > = (left directional button) > ⊕ Settings > All Settings > General & Privacy > Start Screen
Option > Start with Smart Hub Home (ry Now)

Enabling Start with Smart Hub Home automatically launches Smart Hub when the Product is turned on. Navigate to this option to enable or disable the feature.

## Launching the last used app automatically

If Autorun Last App is set to on, the last used app is automatically run when you turn on the Product. You can turn this function on or off. Press the Select button at the current menu.

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

## Automatic Mirroring from Multi View

If you screen mirror your mobile device, the Multi View automatically displays the device screen. Navigate to this option to enable or disable the feature.

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

## Automatic casting in Multi View

Casting YouTube content from the mobile device automatically displays the content on Multi View.

- it is available on the screen for any broadcast, external device, or app that supports Multi View.
- This function may not be supported depending on the model.

## **Testing Smart Hub connections**

ⓐ > ≡ (left directional button) > ② Settings > Support > Device Care > Self Diagnosis > Smart Hub Connection Test (Try Now)

## **Resetting Smart Hub**

- ✓ You can reset the Smart Hub settings. To reset Smart Hub, enter the PIN. The default PIN is "0000." You can set the PIN in

  ✓ Settings > All Settings > General & Privacy > System Manager > Change PIN.

  ✓ Now
- Change PIN may not be supported depending on the model or geographical area.

# **Using Art Mode**

Learn about the functions available in Art Mode.

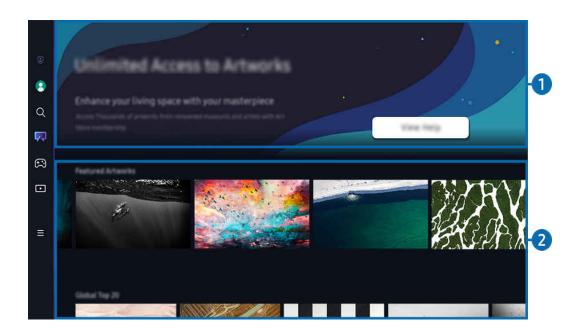
♠ > left directional button > ▼ Art

You can use Art mode function to display image content such as artworks or photos when you are not watching Product in full screen mode.

- Press the **a** button in Art mode to enter to Media Home.
- While in Art mode, use the SmartThings app on your mobile device to save photos on the device to the Product.
  - This function may not be supported depending on the Product model or mobile device.
  - Supported features may differ depending on the version of the SmartThings app.

#### About the Art Home screen

♠ > left directional button > ▼ Art



- The image on your Product may differ from the image above depending on the model and geographical area.
- 1 Useful Information

View information and promotions related to the Art home.

# 2 List of image categories

From the displayed list of categories, select an image and press the Select button to view details about the image. Select **Preview** to preview the image in full screen for 30 seconds. If you like the image, you can keep it as an artwork by purchasing it or subscribing to the **Membership**.

If you select a saved image, the Product goes into Art mode. In Art mode, press the Select button on the remote control to use the following menu options:

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

### • Changing art work

Change the artwork to display in Art mode. Press the Select button on the remote control to move the focus to an artwork. Use the left or right directional button to move to the desired art work, and then press Select button on the remote control.

### View Details

View detailed information about the selected image.

#### Favorite

Add or delete specific images in Favorite by pressing the Select button on the remote control. To view items that are set as Favorites, navigate to My Art Store > Favorite.

- ─ Favorite: The item is not set as favorite
- Favorite: The item is set as favorite

#### Mat

Customize the border style and color to suit your preferences. To save changes, select the desired mat style and color, and press either the Select or button.

- Recommended resolution: 3840 x 2160

### Screen Settings

Customize the Art mode screen settings to suit your preferences.

### - Brightness

Adjust the screen brightness. Press the Select button to save the change.

#### - Color Tone

Adjust the image colors. Press the Select button to save the change.

### - Brightness Reset

Reset the screen brightness to the default value.

### Recents

Manage recently displayed images.



## 3 My Art Store

#### Favorites

Manage images saved in Favorite.

Display All / Resume Play

Play images in Favorite as a slideshow.

- Delete

Select and delete multiple images in Favorite simultaneously.

#### Purchased

Once you purchase artworks from the Art Store, you will see them here.

If you subscribe to a membership during your free trial period, your account is immediately switched to a membership account regardless of the remaining trial period, and you can use a variety of artworks without any restrictions.

#### Membership

If you sign up for Membership, you can use artwork without any restrictions. You can also replace it with new artwork periodically to suit your preference.

Follow the on-screen instructions to proceed with the payment.

### Payment Info

View artwork purchase details, and easily purchase artworks by entering required payment information.

For details about payment information, visit Samsung Checkout (sbox.samsungcheckout.com).

# 4 Art Mode Options

Configure options related to the Art mode screen.

This menu can be found at the bottom of the Art home. To configure the option settings, scroll down to the far bottom.

### • Sleep After

The Product automatically turns off after the specified period of time. Press the Select button to specify a time period.

#### • What is Art?

Briefly view information about Art mode, including functions.

### Import images from USB memory

- 1. Connect the USB memory device storing images to the Product.
- 2. The USB memory is automatically recognized, and the screen displays a list of image, music, and video files that are stored in the USB memory.
  - An alternative way to run the USB memory is to navigate to  $\bigcirc$  >  $\equiv$  (left directional button) >  $\checkmark$  Connected Devices and select the USB memory.
- 3. Navigate to the folder that contains the image file you want to save to the Product, and then select Options > Send to Art Mode.
- 4. Select the image and press Send. The image, stored in the USB memory, is saved under Art mode.
  - Recommended resolutions (16:9): 3840 x 2160

### Using Art mode with the SmartThings app

Once you have installed the SmartThings app on your mobile device, you can use the following functions:

You can download the SmartThings app from Google Play Store, Samsung Apps, or the App Store.

If the Product is not registered in your SmartThings app, press + (Add Device) and register the Product before using the mode.

- The features or terminology may vary depending on the version of the SmartThings app.
- On tablet devices, **Art** mode features may not be supported by the SmartThings app.
- Selecting an image under Art mode.
- Saving photos from a mobile device to the Product: Use the Add picture function to save photos on a mobile device to the Product.
  - Add Picture > select 2 to 3 images > Create Mat: Combine the 2 to 3 images to create a single image.
  - My Album > select content, such as Dynamic Filter or Auto Gallery, and then press Select Photo to set the
    content as mobile photos.
- Subscribing to Art mode Membership.
- Applying border styles and colors to images.
- : (more) > Art Mode Options
  - Setting the brightness for **Art** mode.
  - Setting Sleep After: The Product automatically turns off while in Art mode after the specified period of time.

### Precautions when using Art mode

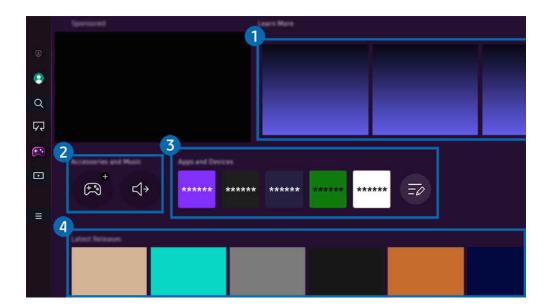
- Motion Sensor may not be supported depending on the model or geographical area.
- The motion sensor is located at the bottom of the Product. Do not block the sensor at the front of the Product. The motion sensor as well as the brightness and color tone of the screen can be affected.
- Art mode uses algorithms to minimize image burn-in that can be caused by displaying still images on the screen for long periods of time.
- The performance of the sensor may vary depending on the Product installation and operating environment.
  - The screen brightness and color tone may be affected depending on the color of the floor on which the Product stands.
  - In an environment where special light sources other than standard light sources (halogen, fluorescent) are
    used, the sensor's motion recognition performance may vary depending on the positions, types, and number
    of the light sources.
  - If the area around the Product is too dark or bright, the screen brightness may be limited or the sensor may not work normally.
  - If the Product is installed too high or too low, the sensor may not work normally.
  - The motion sensor may sense motion from a flashing LED, a pet, a car moving outside the window, or other occurrence and start operating.
- Depending on the Auto Power Off function settings, the Product may turn off when there is no user input in Art mode, such as inputs from the remote control ( > ≡ (left directional button) > ⊗ Settings > All Settings > General & Privacy > Power and Energy Saving > Auto Power Off). ( Iry Now)
- The following functions are disabled in Art mode.
  - ⑥ > ≡ (left directional button) > ② Settings > All Settings > General & Privacy > System Manager > Time > Sleep Timer (Try Now)

  - (left directional button) > ⊗ Settings > All Settings > General & Privacy > Power and Energy Saving > Screen Saver (ry Now)

# **Using Samsung Gaming Hub**

Gamestream a wide variety of games right on your Product through Samsung Gaming Hub. Connect your controller through Bluetooth or USB.

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



- The image on your Product may differ from the image above depending on the model and geographical area.
- 1 Learn More

Provides information about Samsung Gaming Hub and details on how to use devices.

- 2 Accessories and Music / Accessories
- Controllers

Select a Controller to connect to the Product.

- For more information about supported controllers, refer to "Using the Gamepad."
- Audio

Select an Audio Device (e.g. Gaming Headset) to connect to the Product.

• Music Player

Manage the music to play while playing a game.

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

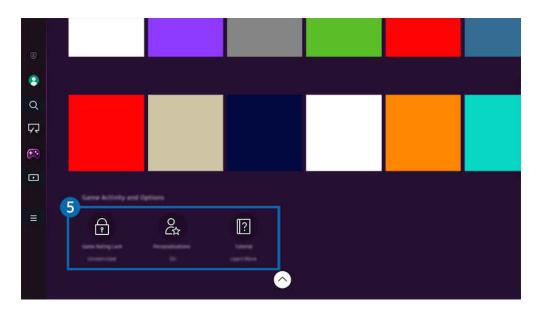
# 3 Apps and Devices

Install or remove apps or devices that are required to play games.

## 4 Game list

Purchase games or subscribe to service offered by the Samsung Gaming Hub. Select a game to view the game details.

Installation of related apps is required to run some games.



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

## **5** Game Activity and Options

This menu is provided at the very bottom of the Samsung Gaming Hub screen. To configure **Game Activity and Options**, scroll down to the very bottom.

### Game Rating Lock

Set the age limit for playing games.

The age limit is only supported to cloud game browsing domain in Gaming Hub.

### • Personalization

Tailored content is recommended, according to the games recently played by the user and the content the user is interested in.

#### Tutorial

Provides information about the Samsung Gaming Hub and details on how to use devices.

## About the Media Home Screen

View a variety of contents. Install various apps offered by Smart Hub, such as video, music and sports apps, and use the apps from the Product.



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

## 1 % APPS

Install a variety of apps offered by Smart Hub, such as video, music, sports and game apps, and use the apps from the Product.

- To use APPS, make sure the Product is connected to a network.
- For more information, refer to "Using the Apps Service."

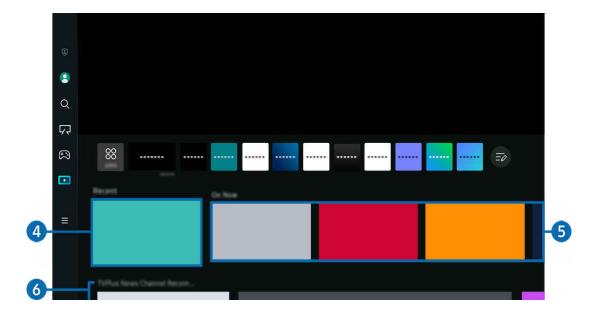
# 2 Moving an item on the Home Screen

From the end of the APPS list, select List Edit. Move the focus to the app to relocate, and press the down directional button on the remote control. Select Move from the option menu. Use the left or right button to reposition the app and then press Select. This repositions the app on the Home Screen.

An alternative way to move an app is to move the focus to the app to move and then press and hold the Select button.

# Removing an item on the Home Screen

From the end of the APPS list, select List Edit. Move the focus to the app to remove, and press the down directional button on the remote control. Select Remove from the option menu. This removes the app from the Home Screen list.



## 4 Recent

Access your last watched contents, apps or last used input source.

## **5** On Now

Display a list of contents currently being aired.

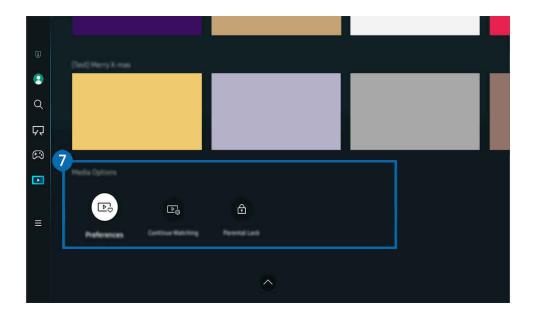
This function may not be supported, depending on the input signal and settings.

## 6 Universal Guide

**Universal Guide** is a function that allows you to search for and enjoy various content, such as news, 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 access Universal Guide, press the down directional button on the remote control in Home Screen.
- To enjoy the content from these apps on your Product, they must be installed on the Product.
- 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.



## Media Options

- This menu can be found at the bottom of the Media home. To configure the option settings, scroll down to the far bottom.
- This function may not be supported depending on the model or geographical area.
- Preferences: Select a preferred service to receive content recommendations to suit your preference.
- Continue Watching: Choose content providers for Continue Watching. You can continue watching different shows in one place from all the Continue Watching-supported content providers listed below.
- Parental Lock: Redirect to the Parental Lock menu. Turn all parental control settings on or off.

## About the Menu Home Screen

Manage external devices connected to the Product, and configure settings for various functions available on the Product.

♠ > left directional button > ≡ Menu



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

## 1 Q Notification

You can view a list of notifications for all events that occur on your Product. A notification appears on the screen when it is time to schedule viewing, etc.

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.

# 

Select an external device that is connected to the Product.

For more information, refer to "Switching between external devices connected to the Product."

# ③ Settings

Move the focus to the **Settings** menu to display quick setting options below the menu. Quick Settings can be used to quickly configure frequently used features.

The **Settings** items may not be supported depending on the model or geographical area.

#### Sound Output

You can select which speakers the Product uses for audio output. To change the audio output, press the Select button.

#### Picture Mode

Change the picture mode for the optimal viewing experience. Press the Select button to change the Picture Mode.

#### · Bluetooth Device List

Connect your Product to Bluetooth devices. This can be done by selecting Bluetooth Device List to automatically search for Bluetooth devices.

Connecting Bluetooth devices may not be supported depending on the model or geographical area.

### • Sleep Timer

You can turn off the Product automatically at a specific time. To change the sleep time, press the Select button. To set the specific time at which the Product turns off automatically, press the down directional button, and then select Set Up Off Timer.

#### Picture Setup

Easily configure the screen settings: Brightness, Contrast, Sharpness, Color and Tint (G/R).

#### Sound Mode

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

#### • Intelligent Mode

Improves your viewing experience by recognizing your content, usage patterns and the environment around your Product.

- This function may not be supported depending on the model or geographical area.
- For more information, refer to "Using Intelligent Mode."

#### Wi-Fi / Wired

Check your network connection. To check your network connection or change the connection settings, press the down directional button, and select either Network Status or Network Settings.

#### · Game Mode

You can set the Game Mode to optimize the Product screen for better gaming performance. To turn Game Mode on or off, press the Select button. To set the detailed options, press the down directional button, and then select Go to Game Mode Settings.

- This function is only available when an external input source is being used.
- For more information, refer to "Setting the Viewing Environment for External Devices."
- This function may not be supported depending on the model or geographical area.

#### Picture Size

You can change the size of the picture displayed on the Product screen.

### Energy Saving Solution

Reduce power consumption by adjusting brightness settings.

#### Support

Displays the Support settings menu.

#### All Settings

Displays the **Settings** menu for configuring specific settings.

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

## 4 Multi View

While watching the Product, you can simultaneously view multiple screens that are split.

- For more information, refer to "Using Multi View."
- This function may not be supported depending on the model or geographical area.

## 5 List Edit

From the end of the Settings list, select List Edit. You can change the location of functions in the Settings screen.

An alternative way to move a function is to move the focus to the function to move and then press and hold the Select button.

# Using a Samsung Account

Create and manage your own Samsung account.

- Follow the instructions on your Product screen to create or log in to a Samsung account.
- Samsung account can be used on Product, mobile device, and website with one ID.

### Signing in to a Samsung Account

## Creating a new account

## Managing your Samsung Account

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

#### Sign Out

When multiple people share the Product, you can sign out of your account to prevent others from using it.

To sign out of your Samsung Account (⑥ > ≡ (left directional button) > ᠄ Settings > All Settings > General & Privacy > 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.

- To protect personal information, enter Edit Profile and then Sign-in Method is set to Select your ID and input password (high security).
- If you want the Product to log you into your account automatically whenever you turn on the Product, click **Stay Signed** In.
- When the Product is used by multiple people, turn off **Stay Signed In** to protect personal information.

#### PIN Setting

Set or change your PIN.

### • Payment Info

You can view or manage your payment information.

### • Back up

You can back up the Product settings to your Cloud storage. When resetting or replacing the Product, you can also restore its settings with the backed-up settings.

### • Product Registration

You can register the current Product or see the registered information. You can easily receive services after product registration.

✓ You can see the registered information or delete it at the Samsung account website (https://account.samsung.com).

### • Personalization Settings

Select to change settings for the Customization Service.

### Sync Internet

Once you sign in to your Samsung account and configure the **Sync Internet** settings, you can share the favorites and website bookmarks that you registered on other devices.

#### Remove Account

You can delete an account from the Product. Although you have deleted your Samsung account from the Product, you are not unsubscribed.

To unsubscribe from your Samsung account, visit the Samsung accounts website (https://account.samsung.com).

### • Terms & Conditions, Privacy Policy

You can view the user agreement and privacy policy.

For more information about the terms and conditions, privacy policy, select View Details.

# **Using Workspace**

Use the remote function to connect to and use a Windows PC, Mac, or mobile device from the Product.

Connect a Windows PC, Mac, or mobile device to the Product to easily use the device.

For easy computer use, connect a keyboard and a mouse to your Product in advance.

## Using Screen Sharing (Windows PC) / AirPlay (Mac)

Follow the instructions on the screen to adjust the PC settings and wirelessly connect the Product to the PC.

- This function is only available for PCs that support wireless screen sharing.
- This function may not be supported depending on the model or geographical area.
- Connection via Windows OS is available in Windows 10 and later versions only.
- Connection via Mac OS is available in AirPlay.

### Using Easy Connection to Screen

You can easily use remote access function after installing Easy Connection to Screen on your PC.

Follow the instructions on the screen to download and install the **Easy Connection to Screen** PC app. Then you can easily connect a remote PC.

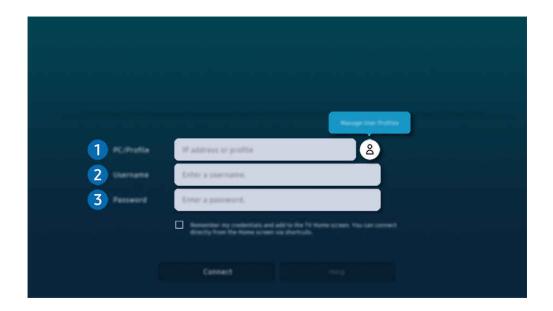
- 1. Download the Easy Connection to Screen PC app from http://smsng.co/easy and then install it on your PC.
- 2. Log in to the same Samsung account for both Product and PC.
- 3. When the PC is turned on and connected via the network, Workspace's Home Screen displays the PC.
- The Easy Connection to Screen PC app is available in Windows 10 and later versions only.
- Depending on the network environment including the firewall configuration, router type, and wireless signal strength, connection problems may occur, such as low speed, disconnection, or limited connection.

## Connecting a Remote PC

Provides Remote Desktop Connection (RDP) for remotely connecting to a PC running on Windows and Virtual Network Computing (VNC) for a PC running on Mac. To remotely connect to a PC, you must enter the IP address of the remote PC or select a saved profile. Enter a correct username and password. If there is any computer that can be accessed via the same network, the found IP is displayed.

- To register a frequently used PC, move the focus to  $\stackrel{\triangle}{\sim}$  Manage User Profiles, and then press the Select button. When a popup window appears, select Add, and then enter the PC information.
- When your PC enters in power saving mode, connection is not available. It is recommended to cancel the power saving mode.
- It is recommended to connect the wired network because the screen or sound may be interrupted depending on the network condition.
- 1. Configure your computer's settings to use the Workspace function.
  - Connection to Windows via the RDP protocol is available in Windows 10 Professional or higher.
  - Remote connection to a PC running on Mac via the VNC protocol is only supported for Mac OS X 10.5 or later.
  - Windows OS:
    - 1) Right-click the My PC icon on Desktop or Windows Explorer and then click Properties.
    - 2) Click Remote Desktop and select Activate Remote Desktop.
  - Mac OS:
    - 1) Select Menu > System > Preferences and then click Sharing.
    - 2) Select the Screen Sharing and Remote Login check box.
    - 3) Run the resolution changing app downloaded from App Store and then change the resolution to 1440 x 900 or lower.
    - If you do not change the resolution in Mac OS, the previous image may appear while connecting a remote computer.

2. Enter the required settings for connecting the computer remotely.

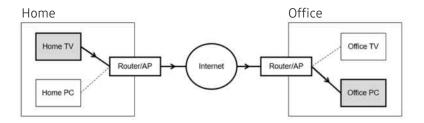


The image on your Product may differ from the image above depending on the model and geographical area.

## 1 PC/Profile

Enter the IP address or profile of the PC you want to connect to.

- In case of Windows, when the computer to connect is within the same network (router/AP), run "cmd" command
  in Settings > Network and Internet > View Network Properties or in Start > Run, and then run "ipconfig" to
  check the IPv4 address of the computer.
- In case of Mac, you can check the IP address in Settings > Remote Access.
- When the Product and computer are not within the same network, it is required to know the public IP and configure the router and AP. Check whether the router connected to the computer supports port forwarding. When the company provides additional security features such as firewall, seek help from a security officer.



# 2 Username

Enter the Username of the computer. How to check the Username:

- Windows OS: Control Panel > User Account Control
- Mac OS: System Preferences > Users & Groups

## 3 Password

Enter the password for the login account.

For use of PIN, do not enter PIN but the specified password of the computer.

### Playing Multimedia Content on a Remote PC

When you move the mouse cursor to the top of the screen after accessing a remote computer, the top bar appears. When the sharing folder icon is clicked in the top bar, the folders shared on Windows or Mac OS appear. You can play back any media content in a folder.

For more information, refer to "Playing pictures/video/music."

To use this function, the folder sharing option on the computer to access must have been enabled as shown below:

- Windows OS:
  - 1. Run Windows Explorer and then move to the folder to share.
  - 2. Right-click the folder and then click Properties.
  - 3. After the Properties window appears, click the Sharing tab and then click Advanced Sharing.
  - 4. After the **Advanced Sharing** window appears, select the **Share this folder** check box.
- Mac OS:
  - 1. Select Menu > System Preferences and then click Sharing.
  - 2. Select the File Sharing check box.
  - 3. To add a folder to share, click the Add+ button at the bottom.
  - 4. Select a folder and then click Add+.
- It is recommended to connect the wired network because the screen or sound may be interrupted depending on the network condition.
- When playing a video file via a remote computer, the screen or sound breaking may be encountered.

## **Using Samsung DeX**

Run Samsung DeX on your mobile device to connect the software to the Product.

Follow the on-screen instructions to connect Samsung DeX. Some models may not be searched when connecting the Product from a mobile device through Samsung DeX. If that is the case, follow the instructions shown on the mobile device screen to connect the software.

This function is available only on mobile devices that support the wireless Samsung DeX.

### **Using Microsoft 365**

You can read or create a document after accessing the Microsoft 365 website.

- Run the site in full-screen mode.
- URL modification is impossible in the Microsoft 365 page.

### Adding the Web Service

Select the Add Web Service icon. Use the bookmarking function of the Workspace browser, you can add or delete the web service link to or from Workspace.

- To add the web service, you must be signed in to your Samsung account.
- The number of web services that can be added to **Workspace** is limited.
- Workspace browser not share data with Internet. (Web browser outside from Workspace)

### **Using Web Service**

You can access the web service by selecting the web service icon added to Workspace.

- The screen on the webpage may differ from that of a computer.
- You can copy or paste any text. Some image formats are supported.
- For easy and secured login in Web Service, Workspace Pass is additionally supported as well as Samsung Pass.

Setting Samsung Pass or Workspace Pass.

Set Samsung Pass or Workspace Pass to Use in > = (left directional button) > % Connected Devices > Workspace > Run the Workspace browser (Additionally select Microsoft 365 or Add Web Service) > Internet Menu > Settings > General.

**Workspace Pass** allows you to easily manage the web service ID and password without biometric authentication on mobile devices. For this purpose, you must be signed in to your Samsung account. The password is encrypted to be safely stored on your Product.

However, the log in to Workspace Pass may not work depending on the site policy.

Workspace Pass only working on Workspace.

- To securely access the web service, you can use the Workspace browser's automatic shutdown or clear the history logs.
- Before accessing the web service, refer to "Read Before Using the Internet Function."
- **Workspace** browser not share data with Internet. (Web browser outside from **Workspace**)

The web service supports the following keyboard shortcuts:

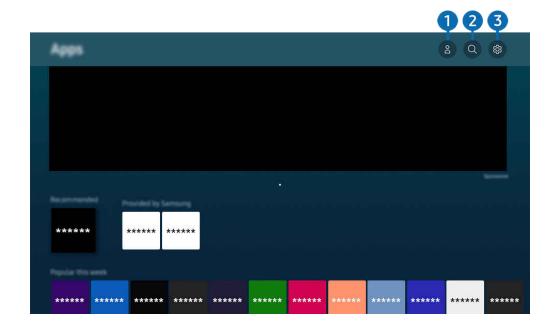
- F1: Returns to Workspace's Home Screen.
- F5: Refresh.
- F8: Mutes the sound.
- F9/F10: Adjusts the volume.
- F11: Switches between full screen or default screen.

# Using the Apps Service

Download and run various apps from Smart Hub.

You can enjoy a wide range of content, including video, music, sports and game apps by installing the corresponding apps on your Product.

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



- The image on your Product 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 want to download new apps using Apps, first sign in to your Samsung account.
- 2 Q 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 complete, the Open menu appears.
- 3. Select Open to run the app immediately.
- You can view installed apps on the Settings screen.
- If the Product'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 Product. 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 Product.

## Launching an app

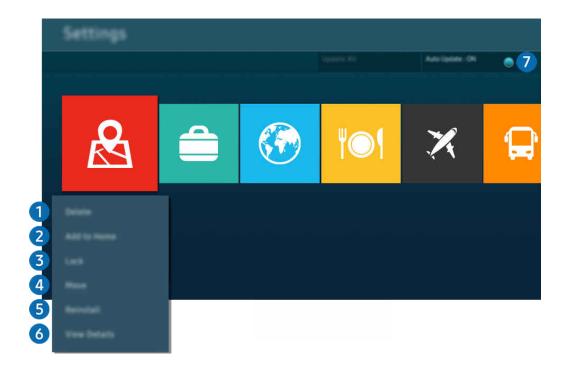
You can run the app desired from Downloaded App.

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

- ①: The app is installed on a USB device.
- 📵 : The app has a password.
- ②: The app supports the mirroring function.

# Managing installed apps

Select & Settings on Apps. You can manage installed apps.



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

## Removing an app

- 1. Select 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. Select 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.

- 3 Locking and unlocking apps
- 1. Select an app to lock or unlock.
- 2. Select Lock/Unlock.

The selected app is locked or unlocked.

- Change PIN may not be supported depending on the model or geographical area.

# 4 Moving apps

- 1. Select an app to move.
- 2. Select Move.
- 3. Move the 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.

## 6 Reinstalling an app

- 1. Select the app to install again.
- 2. Select Reinstall.

Reinstallation starts.

# 6 Checking the app information details

- 1. Select the app to check.
- 2. Select View Details.

The app information screen appears.

You can rate an app on the View Details screen.

# Automatically updating apps

To automatically update the installed apps, set Auto Update to ON.

Automatic update is enabled only when the Product is connected to the network.

# Using the e-Manual

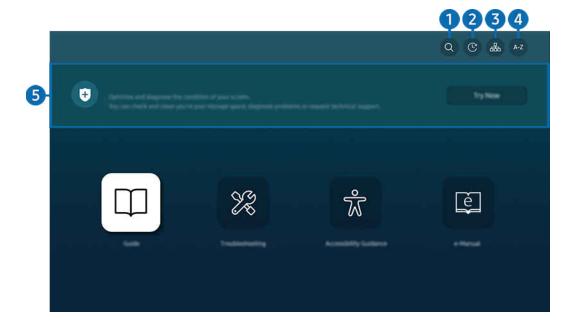
Control and read the manual embedded in your Product.

## Launching the e-Manual

You can view the embedded e-Manual that contains information about your Product'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 (https://www.samsung.com).
- Some menu screens cannot be accessed from the e-Manual.

# Using the buttons in the e-Manual



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

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

2 (Recently Viewed Topics)

Select a topic from the list of recently viewed topics.

**3** 器(Sitemap)

It displays the lists for each item in e-Manual.

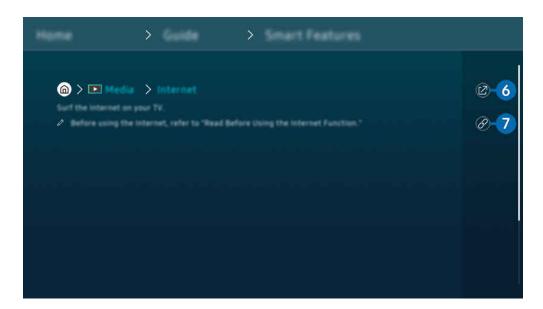
# 4 A-Z (Index)

Select a keyword to navigate to the relevant page.

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

## **5** Device Care

Optimize and diagnose the condition of your Product. You can check and clean your storage space, diagnose problems or request technical support.



- Words in blue (e.g., Internet) indicate a menu item.
- The image on your Product may differ from the image above depending on the model and geographical area.
- 6 (Try Now)

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

# 7 ⊗ (Link)

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

# Using the Internet

Surf the Internet on your Product.

♠ > left directional button > ▶ Media > Internet

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

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

With Samsung Pass, you can log into the website easily and securely. When you visit the website again, you can log in with Samsung Pass Biometrics Authentication on your mobile device without entering your ID and password.

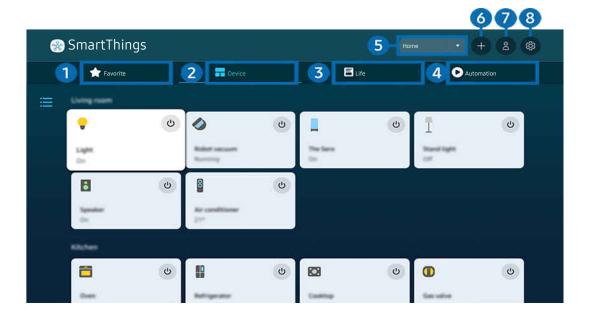
However, this **Samsung Pass** login may not work depending on the website policy. For this purpose, you must have been logged in the mobile device with a Samsung account registered in **Samsung Pass**.

# Using SmartThings

It allows the Product to connect and control the detected various devices in the same space.

You can control the devices registered to the SmartThings cloud and devices directly connected to this product with a remote control.

- This function may not be supported depending on the product or model.
- Functions that can be controlled by remote control may not work depending on the location of the device. In this case, move the location of the device.



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

# Favorite

View devices or features that have been set as favorites from the Device/Life/Automation tab.

## 2 Device

View devices connected to SmartThings, and use the remote control to select and control any of the connected devices. In Map View, you can move the position of a device to create a custom map and check the device status.

If you log in with the same account used for the mobile SmartThings app, you can view devices, registered through SmartThings, more intuitively from Map View.

### List of devices compatible with the Product

Туре	Description Detail
Devices for IR remote control (IR Sniffing)	Air conditioner, air purifier, robot vacuum cleaner, electric fan, humidifier
Bluetooth devices	Bluetooth speaker, headset, Soundbar, keyboard, mouse, game pad
SmartThings devices	For details on SmartThings devices, access https://www.smartthings.com/products.  SmartThings devices can also be controlled from the mobile app.

- For a detailed list of supported devices, visit www.samsung.com.
- This function may not be available depending on the external device.

# 3 Life

Displays recommended Life services that can be viewed or controlled from SmartThings.

Only Life services supported by the Product are displayed.

# 4 Automation

View or run scenes created from the Automation tab in the mobile SmartThings app.

## 5 Location or Device near Product

Place

Displays all places connected via the SmartThings app.

#### Devices near MICRO LED

Displays all the detected devices that can be connected and controlled.

You can run the control options after selecting a desired device.

Available options may differ depending on the device.

## 6 Add Device

Displays the list of devices that can be registered on your Product. You can register any by selecting a device.

# 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.

# 8 Settings

Edit devices connected to SmartThings, or configure notification settings for the devices. You can also turn on the TV sensor or the SmartThings hub feature.

## SmartThings Quick access

Control most used devices by accessing the of Connected Devices menu, without having to access SmartThings.

# Use the SmartThings Hub features (Try Now)

Use the SmartThings Hub features on various Samsung products to connect IoT devices (e.g., light bulbs, plugs, or sensors) that are supported by SmartThings.

- MNA76, MNA89, MNA101 model: SmartThings Dongle required to connect Zigbee/Thread.
- Make sure to log in to the same Samsung account on your Product as your mobile SmartThings app.
- This function may not be supported depending on the connected device type.

### Register and manage devices via SmartThings (ry Now)

#### Registering peripheral devices of the Product

- 1. When there is a device detected near the Product, a registration pop-up appears on the Product screen.
  - When there is no device detected, the pop-up may not appear.
  - To connect a Bluetooth device, make sure that the device has been paired.
- 2. Select **Register** to register the device.
  - To register an appliance, make sure that it uses IR and is detectable in the area around the Product. Supported devices and options may differ depending on the model.
  - ✓ Select Close. Then the device registration pop-up does not appear.
     You can register a device in > ≡ (left directional button) > Connected Devices > SmartThings > Add Device.

Supportable options may differ depending on the device.

#### Registering a Product / Smart Appliance / IoT device from the mobile app

Use the mobile SmartThings app to register your Product, smart appliances or various IoT devices. Some IoT devices can only be registered using this mobile app. In the mobile app, tap the + (Add Device) to register a device.

Connect a doorbell to your Product, to receive a notification of the doorbell video and speak with the visitor while watching Product.

Only WWST (Works with SmartThings) certified doorbells are supported. Supported options may vary, depending on the device.

# Use the screen's sensors via SmartThings (fry Now)

When you activate the sensor, you can see the sensor device on the SmartThings Device tab. You can create various IoT scenarios with Product without purchasing a separate IoT sensor.

- Each sensor can be activated with user consent.
- Each sensor may not be supported depending on the model.
- The sound sensor is supported when the microphone switch at the bottom of the Product is turned on. The Product microphone may not be supported, depending on the model or geographical area.

# Control SmartThings with Bixby (Try Now)

With Bixby on the product, you can control devices connected to SmartThings, as well as the Product, using voice commands.

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

# Control the display device from the mobile SmartThings app fry Now

From the mobile SmartThings App, use the Product remote control functionality, such as On/Off, Channel, Volume, and four directional buttons. You can also use Search, APPS, Mobile Cam, and other functions from the mobile app.

Automation (mode/routine) in the mobile SmartThings app allows you to automatically run apps installed on the Product.

With automation, you can turn on the Product at your desired time and automatically run frequently used apps.

# Playing pictures/video/music

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

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

- You cannot play media content if the content or the storage device is not supported by the Product. 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.

• Filter By

Filters the media content by type of media.

Sort By

Sorts the content list.

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

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

# Playing multimedia content on a PC or mobile device

- 1. Select a device with media content in a >  $\equiv$  (left directional button) >  $\checkmark$  Connected Devices > Sources. 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 Product via your network may not play smoothly due to 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. There is a content list browser shown directly.
- 3. Select a content item to play from the list.

The selected content is played.

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

Enjoy listening to music in your living space. Visualizations are generated on your Product that alter and respond to the frequency of your music.

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

The selected media is played through the Product speaker.

- This function may not be supported depending on the model.
- In some models, the image of the played content may differ depending on the mode.

# Buttons and functions available while playing multimedia content

Press the Select button while playing any video, or photo. 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.

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.

If video playback time is 3 seconds or shorter and you press the 5 button, the video starts from the beginning.

#### 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.

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

#### 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.
- This function may not be supported for some resolutions.
- This function may not be supported depending on the model.

#### • 360 Auto Rotation

Automatically adjusts the video's viewing angle by analyzing 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:

- − GGG General
- D Dynamic
- − N Natural
- This function is only available when **360 Mode** is selected.
- When **360** Auto Rotation is activated, automatic adjustment is followed. The adjustment position may differ depending on the image.
- The video's viewing angle is manually 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.
- This function may not be supported for some resolutions.
- This function may not be supported depending on the model.

#### 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.

#### • Screen Fit

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 Product displays photos.

This function is available after enabling the **Background Music** option.

# • Options

The available options may differ with the model and content.

Function	Description
Slideshow Speed	Sets the slideshow speed.
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 Product displays photos.
	The music files must be saved in the same USB device as the photo files.
	To pause the background music, select <b>Background Music</b> on the playback screen bottom.
Subtitles	You can set the detailed subtitle options, such as the language, sync, size, and color.
	If subtitles are not displayed correctly, check the encoding setting.
Rotate	Rotates the video.
Audio Language	Changes the audio language.
	This function is only available if the video supports multi-track sound.
Information	Displays detailed information about the current multimedia content.

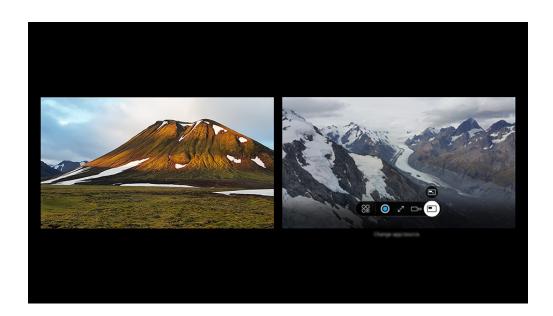
# Using Multi View

You can view multiple content items through Multi View.

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

To start Multi View, navigate to <a> → □ (left directional button) → ⊕ Settings → □ Multi View. Next, Select the item you want from the Add View list. Or select Make My Own to configure a custom layout and screen. You can add or delete a screen in the current Multi View screen by pressing the down directional button on the Samsung Smart Remote.

With Multi View, external devices, connected to HDMI ports 1 through 4, can be viewed all together.



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

When Multi View is running, press the Select button to configure the following menus.

- This function and the provided options for each menu icon may not be available depending on the model and region.
- Content

You can view the currently displayed app or source.

- After selecting a content item, you can control the screen or change the app and source.
- Sa App/Source

You can select from the content list displayed above.

□□ Screen Size

Selects the desired size of Multi View.

You can shrink or expand the size of the selected screen.

### • Picture-in-Picture

Selects the position of a small screen on the full screen. The focusing left or right screen appears as small window.

# Double Audio

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

#### • \* Bluetooth Speaker

You can hear the sound by connecting the Bluetooth speaker.

#### • X Delete

You can delete the selected screen.

#### ✓ Full Screen

Multi View is ended and then the full screen appears.

To close Multi View, press and hold the button or press the button on the Samsung Smart Remote.

- The start and stop of this function can also be voice-controlled by pressing the 🕡 button on the Samsung Smart Remote.
- This function operates only by contents, external devices, or apps that support Multi View.
- While running Multi View, app casting from your mobile device is run on Multi View. This function is not available in some apps.
- Q-Symphony is not supported by Multi View.
- When an external device that connects to a receiver or Soundbar is used in **Multi View**, sound outputs from the Product speaker, not from the receiver or Soundbar.

# **Using Bixby**

Set Voice Assistant to Bixby. Speak into the microphone on your Samsung Smart Remote or Product to control your Product.

- Bixby is available only when the Product is connected to the network.
- 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 Product screen is activated in Listen mode. Continue speaking.

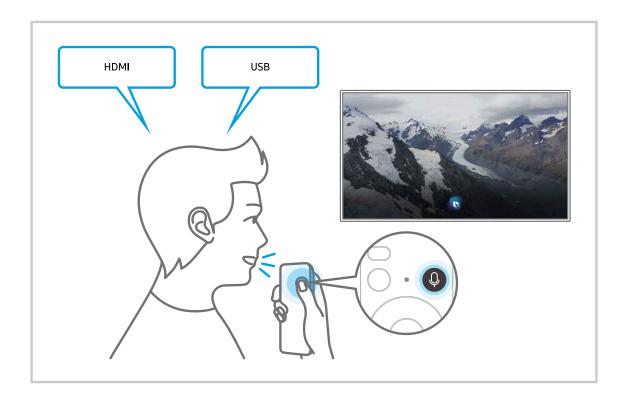
- For best results, you need to be within 10 feet (3-4 m) of your Product. If Bixby does not answer, refer to "I spoke "Hi, Bixby/ Alexa" but Bixby/Alexa does not answer." in "Troubleshooting."
- These functions may not be supported depending on the model or geographical area.

# Starting Bixby using buttons on the Samsung Smart Remote

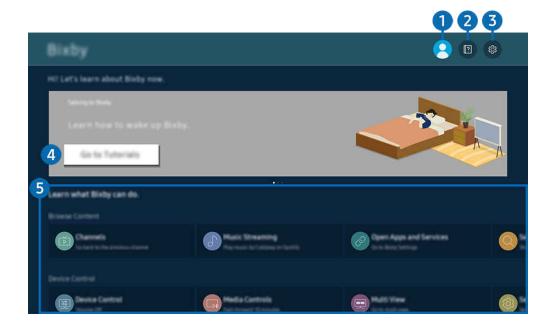
You can have conversation with Bixby using the Samsung Smart Remote buttons. Press and hold the **(**9) button on your Samsung Smart Remote, say a command, and then release the **(**9) button.

For details on how to use Bixby, press the **①** button once:

• When you press the ① 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 Product may differ from the image above depending on the model and geographical area.
- 1 & My Profile

Log out after going to the My Profile screen.

- If you are signed out of your Samsung account, select \( \triangle \) My Profile to sign in.
- 2 Tutorials

View tutorials related to the Bixby.

You can change the settings for using Bixby.

- These functions may not be supported depending on the model or geographical area.
- Language and voice style

You can change Bixby's language and voice style.

- The languages of the Product and other apps will not change.
- Bixby only supports some languages.
- This feature may not be supported in Bixby depending on the language selected.

#### Voice Wake-up

Configure settings on how to wake up Bixby with your voice. You can configure the following settings: Use Samsung Soundbar to interact with Bixby., Bixby wake-up options, and Wake-Up Sensitivity. ( > Explore Now > \$\ointig{S}\$ Settings > Voice Wake-up).

- The Voice Wake-up function may not be supported depending on the model or geographical area.
- This function can be used only when the microphone switch at the bottom of the Product is active.
- For best results, you need to be within 10 feet (3-4 m) of your Product. If Bixby does not answer, refer to "I spoke "Hi, Bixby/Alexa" but Bixby/Alexa does not answer." in "Troubleshooting."

#### Sound feedback

Play a sound when Bixby starts and stops listening.

This function may not be supported depending on the model.

#### Privacy

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

#### About Bixby

Displays the detailed terms and conditions.

# 4 Recommended commands

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

If you do not want to see the recommended commands, set Voice Hint to Off ( $\bigcirc$ )  $\equiv$  (left directional button) >  $\bigcirc$  Settings > All Settings > General & Privacy > Voice > Voice Hint). (ry Now)

### 5 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 Product with various voice commands.

### 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 Product is connected to the network.
- Even if the Product is connected to the network, 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 Products 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.

If the settings for the service provider are not configured yet, configure them in  $\bigcirc$  >  $\equiv$  (left directional button) >  $\bigcirc$  Settings > All Settings > General & Privacy > Reset. Try Now

- Service provider settings in initial setup may not be supported on geographical area.
- 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 (Product sound and ambient noise).

# Using the Game Bar

Control the Game Settings Monitoring and Game Enhancer Settings easily by using the Game Bar.

This function may not be supported depending on the model.

# Starting the Game Bar

When Game Mode (♠ > ≡ (left directional button) > ❷ Settings > All Settings > Connection > Game Mode Settings > Game Mode) is On or Auto, press and hold the ▶ button on your Samsung Smart Remote to start the Game Bar. Iry Now

# Learning about the Game Bar



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

# **1** Game Picture Mode

Specify the Game Picture Mode according to the current game genre. To customize the picture quality, select Custom.

# 2 Screen Ratio

You can change the screen ratio from 16:9 (previous setting) to Ultra wide (21:9 or 32:9).

- You have to set the resolution from your PC only once at first time.
- The Game Bar's Screen Ratio can be changed only when the Ultra Wide resolution is supported in a game or PC. Whether or not to support the screen ratio of 21:9 and 32:9 depends on the title of the game so be sure to consult the game company.

# 3 Minimap Zoom

Use the directional buttons and Select button on the remote control to zoom in on specific areas of the game screen and adjust the zoom rate.



• For the Minimap supported resolution, refer to the table below.

Game Bar Screen Ratio	Resolution set in PC
16:9	3840 x 2160 (60/*120 Hz)
21:9	2560 x 1080 (60/*120 Hz)
2117	3840 x 1600 (60/*120 Hz)
32:9	3840 x 1080 (60/*120 Hz)

\*: The refresh rate may not be supported depending on the model.

# 4 Game Motion Plus

Turn on this function to obtain a softer and clearer picture quality when playing a role-playing game (RPG) or adventure game which involves many dynamic scenes.

# **5** Game Settings

Moves the menu to Game Mode Settings.

# 6 Virtual Aim Point

You can see the virtual aim point on the screen.

# Sound Output

Change the sound output device. (e.g. Soundbar, Bluetooth headset, etc.)

# 8 Help Guide

View details on how to use each menu item.

# Ourrent status display

- Input Lag: Shows the status of game input lag.
- Resolution: Shows the resolution of the currently running game.
- FPS: Shows the number of frames per second in real time. If VRR is active, the frame rate changes.
- HDR: Shown as On when an HDR game is running.
- VRR: Shows the variable refresh rate.

### **Using VRR**

The VRR feature allows you to play seamless games without video interruption or delay. To use the VRR feature, activate the VRR feature from the external device.

For the VRR supported resolution, refer to "Supported Resolutions for VRR."

# Setting the Super Ultra Wide Game View

Set your PC Screen resolution to match the selected Screen Ratio in the Game Bar before activating the **Super Ultra Wide Game**.

If the Product is connected to a computer and Game Mode is set to either ON or Auto, the wide screen (21:9 or 32:9) is activated from the Game Bar.

- This function may not be supported depending on the model.
- Check if the game supports Ultra Wide resolution (21:9 or 32:9).
- If you set the resolution on your PC for the first time, you can change the Screen Ratio through the **Game Bar** on your Product.

Game Bar Screen Ratio	Resolution set in PC
	3840 x 1600 (60 Hz)
21:9	*3840 x 1600 (120 Hz)
Z1:A	2560 x 1080 (60 Hz)
	2560 x 1080 (120 Hz)
72.0	3840 x 1080 (60 Hz)
32:9	3840 x 1080 (120 Hz)

- \*: The resolution may not be supported depending on the model.
- The supportable resolutions may differ depending on the model or HDMI port connected to the PC.
- After setting the resolution, check if the PC's Window or Mac screen changes when you change the Screen Ratio on the Game Bar of your Product.
- This function may not be supported depending on the OS or device.
- If the connected external device is a gaming device, the function does not work even if you change the name of Source to "PC."
- Mhile you are playing a game, the screen ratio cannot be changed. Before running a game, first Select the desired screen ratio on the Game Bar and then run the game.

For some games, you need to match the game resolution with the selected screen ratio in the Game Bar.

### Changing the Super Ultra Wide Screen position

When playing a game at the Super Ultra Wide resolution, you can adjust the game screen position to the height of your eyes.

At the Super Ultra Wide resolution, use the  $^/\sim$  (channel) buttons to move the screen position to the top, center, or bottom.

# Configuring 144 Hz game settings

If the Product is a model that supports 144 Hz, you can play 144 Hz games.

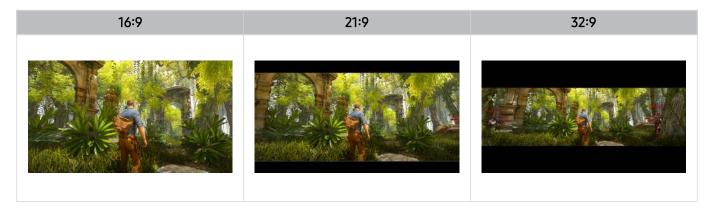
• Resolutions that support 144 Hz are as follows:

Game Bar Screen Ratio	Resolution set in PC
14.0	1920 x 1080p @ 144
16:9	3840 x 2160p @ 144
21.0	2560 x 1080p @ 144
21:9	3840 x 1600p @ 144
32:9	3840 x 1080p @ 144

# Troubleshooting of the game screen and audio problems

After changing the Screen Ratio on the Game Bar, if the game screen and sound are not output properly, try to solve the problems as shown below.

- Check to see if the game supports Ultra Wide or your PC supports the Ultra Wide resolution.
- Restart the game after exiting it.
- Select the same resolution as that of the Game Bar.
- When the Screen Ratio changes properly, the screen appears as shown below.



# **Using Auracast**

You can listen to the Product's audio by connecting to a Bluetooth audio device that supports Auracast.

- This function may not be supported depending on the model or geographical area.
- This feature may not be supported depending on the models of the mobile device and Bluetooth audio device.

### **Using Auracast**

You can connect a Bluetooth device that supports Auracast to the Product.

Connect a Bluetooth audio device to the Product via the mobile device that is connected to the Bluetooth audio device. This can be done by using the Broadcast menu in the Bluetooth settings in the mobile device.

- The location of the Broadcast menu may differ depending on the mobile device model.
- This function may not be supported depending on the model or geographical area.
- This feature can connect the Product to two or more Bluetooth devices that support Auracast, simultaneously.
- This feature cannot connect the Product to a Bluetooth audio device that supports **Auracast** and a Bluetooth audio device that does not support **Auracast** simultaneously.
- The Auracast feature may not be supported depending on the mobile device model.
- Audio volume can be adjusted from the mobile device that is connected to the audio device.
- When this feature is turned on, audio cannot be played from the Bluetooth audio device that is already connected to the Product and does not support Auracast.

#### Using a password

If you set a password, you should enter the password when you connect an audio device to the Product via a mobile device, before using Auracast.

### Changing your password

Change the password you use when connecting to Auracast.

# **Product Viewing**

Use a variety of convenience features offered by your Samsung Product while watching Product. You can also edit your list of channels and create a list of favorite channels.

# Using the Guide

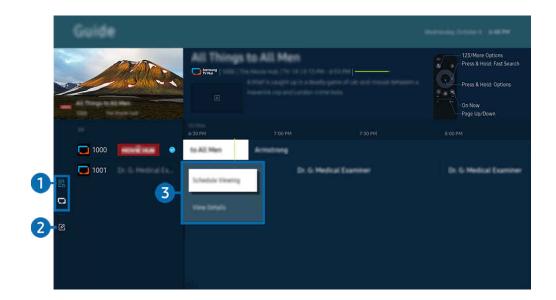
See the programming schedules of different channels on a single screen.

Press the ^/∨ (channel) button to access the Guide.

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

- To view Guide, you must first configure Clock (♠ > ≡ (left directional button) > � Settings > All Settings > General & Privacy > System Manager > Time > Clock). Try Now
- For details on how to use the remote control, refer to the image guide at the top right.

#### About the Guide screen



- The image on your Product may differ from the image above depending on the model and geographical area.
- 1 Channel Filter

View channels and programs classified by type.

2 Edit Channels

Edit channels stored on the Product.

For more information, refer to "Using the channel edit function."

# **3** Additional options related to contents

Navigate to the desired program and press and hold the Select button to access the following options:

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

#### • Schedule Viewing

You can schedule the viewing of a broadcast scheduled program.

#### · Cancel Scheduled Viewing

You can cancel scheduled viewings.

#### View Details

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

# Using additional features from the Guide

From the Guide, press either the 🔞 button to use additional features.

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

#### Channel Filter

You can view channels and programs categorized by the types defined in Channel List.

#### • Schedule Manager

You can see the Schedule Manager screen.

For more information, refer to "Setting Up Schedule Viewing."

# Setting Up Schedule Viewing

Configure the Product to show a specific channel or program at a specific time and date.

- The Pappears next to programs that have been configured for a scheduled viewing.
- To set up a schedule viewing, you must first set the Product's clock (♠ > ≡ (left directional button) > ♥ Settings > All Settings > General & Privacy > System Manager > Time > Clock) and set the time. (Try Now)

### Using the schedule viewing options from the guide screen

On the **Guide** screen, select a program 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 program

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

### Using the viewing schedule management screen

- 1. On the Samsung Smart Remote, press the 🗓 button.
- 2. Use the directional buttons to navigate to the control pad.
- 3. Select either Schedule Manager to access the Schedule Manager screen.
- Displayed menu options may vary depending on the model.
- Schedule Viewing

Navigate to Schedules and press Schedule Viewing. Add, edit, or cancel a program viewing schedule.

Ensure that the Product's Clock (♠ > ≡ (left directional button) > ❷ Settings > All Settings > General & Privacy > System Manager > Time > Clock) setting is correct. (Try Now)

- Edit

You can set the start time of a scheduled viewing. If you choose a program from the Guide, the Start Time can be set to up to 10 minutes before the program.

Delete

You can delete scheduled viewings.

- View Details

You can view detailed information about scheduled viewings.

# Using the Channel List

Change the channel or check programs on other digital channels.

Use the **Channel List** screen to change channels or see what programs are being broadcast on other digital channels.

### Accessing the channel list

Press and hold the ^/∨ (Channel) button to open the Channel List.

# Using the functions on the channel list screen

The Channel List screen icons indicate the following:

• **\Pi**: A favorite channel.

Press the left button while in the Channel List screen to access the following options:

• All Channels

Displays all saved channels.

#### Samsung TV Plus

While the Product is connected to the Internet, you can watch popular programs or highlights for each theme through a virtual channel at any time. As with regular channels, the Product provides the daily program schedules for Samsung TV Plus.

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

#### Favorites

Displays favorite channels from Favorites 1 through Favorites 5.

It displays only the Favorites that includes the favorite channel.

# Using the channel edit function

Edit the channels stored on your Product.

# Accessing the channel edit screen

- 1. Access the Channel List or Guide.
- 2. Press Edit Channels to access the channel edit screen.

# Using the channel edit functions

The Edit Channels screen icons indicate the following:

• **\Psi**: A favorite channel.

Select a channel from the Edit Channels screen to access the following options:

• Delete / Restore

Remove or recover a registered channel.

Once a channel is removed, it will not appear on Channel List. On the Edit Channels screen, the removed channel will appear in grey. A recovered channel will once again be visible on Channel List.

Save and Exit

Save the changes made under Edit Channels and exit.

# Using a Personal Favorites List

Create frequently watched channels as favorite channels.

On the Edit Channels and Channel List screens, the ♥ icon appears next to favorite channels.

# Creating a Favorites List

- 1. Access the Edit Channels screen.
  - For details on how to access the channel edit screen, refer to "Accessing the channel edit screen."
- 2. Press the left directional button on the remote control to select the desired Favorites.
- 3. Press the right directional button to select Add Channels.
- 4. Select the desired channel in the list on the screen.
- 5. Press Add to add the selected channel to the favorites list.

Select Favorites 1 - Favorites 5 on the Edit Channels screen and the following functions are available.

Dp to five Favorites can be created, which allows each member of the family to create their own favorites list.

#### Add Channels

In the channel list, select one or more channels to add in the favorite list and then select Add Channels.

#### Remove

Removes one or more channels from a favorites list.

#### Change order

Changes the order of one or more channels selected in a favorites list.

#### Rename Favorites

Renames a favorites list.

#### Save and Exit

Saves and closes the Edit Channels screen.

# **Product-Viewing Support Functions**

Use the functions that are available while watching Product.

### **Using Program Rating Lock**

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

Program Rating Lock Settings does not, however, block programs originating from external sources, such as Blu-ray players, DVD players, or USB files.

Every time you access Program Rating Lock Settings, you must enter the security PIN. You must also enter this PIN to watch a blocked program. The default PIN is "0000." To change the PIN, go to (left directional button) > Settings > All Settings > General & Privacy > System Manager > Change PIN. (ry Now)

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

#### Watching blocked / restricted programs

To watch a blocked program, enter the PIN when requested.

When initially showing a restricted program or movie, the screen is blank because the **Program Rating Lock**Settings blocks it. Enter the PIN to unblock the program when a message appears requesting the code.

### Configuring advanced broadcasting audio settings

Audio Options functions differently for channels.

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

This is the language you will hear while watching Product if the language is included in the broadcast signal.

Multi-Track Sound

You can select the multi-track sound function depending on broadcasting signal.

• Preferred Object Audio

Configure the audio properties of the broadcast to your preferred configuration.

# Setting the functions for the service provider

♠ > ≡ (left directional button) > ⊗ Settings > All Settings > Broadcasting > Service Provider
(ry Now)

Enable or disable the broadcast service provider feature.

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

# Viewing broadcast service provider info

♠ > = (left directional button) > 
Settings > All Settings > Broadcasting > Service Provider Info & Settings
If y Now

Find out who the current broadcast service provider is and look up related information.

These settings can be configured only for available Service Provider.

# Picture and Sound

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

# Using Intelligent Mode

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

⑥ > ≡ (left directional button) > ፡ Settings > All Settings > General & Privacy > Intelligent Mode Settings > Intelligent Mode <a href="#ref">Iry Now</a>

In Intelligent Mode, the Product recognizes and analyzes the surroundings, noise, 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.

- This function may not be supported depending on the model.
- Adaptive Picture Try Now
  - Optimized

Optimizes brightness and provides the best picture quality in real time, based on the lighting condition and the content you're viewing.

- EyeComfort

**EyeComfort** syncs the sunrise/sunset times and ambient light intensity. After sunset, the mode provides warmer colors and lower brightness. The sunrise and sunset times can manually be changed.

- This function may not be supported by some models, modes or apps (e.g., Art Mode, and Game Mode).
- To use EyeComfort, first you need to set the current time. Configure the Clock(♠ > ≡ (left directional button) > ♦ Settings > All Settings > General & Privacy > System Manager > Time > Clock) setting.
  Try Now
- The sunrise/sunset time sync function provided in **EyeComfort** may work differently, depending on the area and network connection.

#### • EyeComfort Mode Settings

This function is available only when Adaptive Picture is set to EyeComfort.

#### EyeComfort Mode Duration

Set the sunrise and sunset time automatically. Or you can manually select the schedule.

#### - Start Time

Set the Start Time manually.

This function is available only when **EyeComfort Mode Duration** is set to **Custom**.

#### - End Time

Set the End Time manually.

This function is available only when **EyeComfort Mode Duration** is set to **Custom**.

#### EyeComfort Mode Level

Adjust the level of the EyeComfort Mode screen.

### Active Voice Amplifier Try Now

Analyzes ambient noise and provides optimal sound depending on the noise.

- This function is available only when the microphone switch at the bottom of the Product is active and the sound output is set to MICRO LED Speaker. The location of the microphone switch may vary depending on the model or geographical area.
- While using this function, the Product does not save the data.
- This function may not be supported by some modes or apps (e.g., Game Mode).

#### Adaptive Sound Pro Try Now

Provides optimized sound quality by analyzing the viewing space and the acoustic components of the content.

- This function can be used only when the microphone switch at the bottom of the Product is active and the sound output is set to MICRO LED Speaker.
- This function may not be supported by some modes or apps (e.g., **Game Mode**, **Art** Mode, and apps that control the Product sound).
- While using this function, the Product does not save the data.
- This function may not be supported depending on the model.
- The name of this function may appear differently depending on the model.

### Adaptive Volume Try Now

Automatically adjusts to a specific volume level while you are watching Product. The Product analyzes 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 Product is set to MICRO LED 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

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

- Entertain and Graphic are supported only when you change the external device name to PC in PC mode.
- Dynamic

Makes the picture brighter and clearer in bright viewing environments.

• Eco

This screen is provided to save energy.

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

Standard

Is the default mode suitable for general viewing environments.

Movie

Is suitable for watching Product or movies in a dark room.

# Configuring advanced picture settings

(left directional button) > ⊕ Settings > All Settings > Picture > Expert Settings (Try Now)

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

Brightness (Try Now)

Adjust the overall picture brightness. The closer to 50, the brighter the picture.

Contrast Try Now

Adjust the difference between the darkest and brightest areas between objects and their background. The closer to 50, the larger the difference.

Sharpness (Try Now)

Adjust the outline sharpness of objects. The closer to 20, the sharper the object outlines.

• Color (Try Now)

Adjust the chroma of a video. The closer to 50, the deeper the colors.

Tint (G/R) (Try Now)

Adjust the color tone. The higher either value, the redder or greener the video.

• Apply Picture Settings Try Now

Apply the selected picture settings to the current input source or all input sources.

• Picture Clarity Settings (Try Now)

Optimize a video that has many dynamic scenes.

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

· Peak Brightness

Adjust the maximum peak brightness for a brighter screen.

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

Contrast Enhancer (Try Now)

Automatically adjust the contrast to prevent excessive brightness differences between brighter and darker areas.

#### HDR Tone Mapping (Try Now)

Automatically adjusts the brightness with tone mapping processing according to the HDR content information.

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

#### Film Mode (Try Now)

Touch up an old video to improve the picture quality for a better viewing experience.

This function is only available when the input signal is Product or HDMI (1080i). The terminals and inputable signals may differ depending on the model.

### Color Tone (Try Now)

Select an appropriate color tone, according to the viewing situation.

#### • White Balance (Try Now)

Adjust the brightness of the colors red, green and blue so that the brightest area of the picture becomes white.

### Gamma Try Now

Adjust the medium brightness of a video.

#### Shadow Detail Try Now

Adjust the brightness of a dim picture. The closer to 5, the brighter the dim picture.

#### Color Space Settings (Try Now)

Select a range of colors that can be expressed on the picture.

#### Smart Calibration (Try Now)

Automatically adjust the picture quality of a movie to obtain the quality intended by the movie producer.

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

To use this function, use a Smartphone that is compatible with the function. The list of compatible models is shown below.

- Galaxy models: Galaxy S, Galaxy Note, Galaxy Fold, and Galaxy Flip series models that were released after January 2019.
- iPhone models: Models with a Face ID function that were released after January 2019.
- Supported models may differ depending on the situation.

# Reset Picture Try Now

Reset the picture settings to the default values.

# Changing the Picture Size and Position

Change the picture size and position for your Product.

# Changing the picture size settings

- These functions may not be available on Samsung TV Plus and some applications.
- This function may not be supported depending on the broadcast signals.
- Picture Size Try Now

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

- 🙋 Supported picture sizes differ with the input signal. For more information, refer to "Picture sizes and input signals."
- Fit to Screen (Try Now)

Fitting the picture to the screen.

- This function may not be supported depending on the Picture Size setting.
- Zoom and Position (Try Now)

Adjusting the picture size and/or position.

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

# Setting the Viewing Environment for External Devices

You can optimize the Product for viewing specific video formats.

### Playing games on an optimized screen

> ≡ (left directional button) > ⊗ Settings > All Settings > Connection > Game Mode Settings
 > Game Mode (Try Now)

You can set the Game Mode to optimize the Product screen for better gaming performance.

When you connect a video game console such as PlayStation and Xbox, Game Mode is set to Auto. When you connect the other game source such as PC, set the Game Mode to On through the above path. You can also set the Game Mode quickly from Home Screen (  $\bigcirc$  )  $\equiv$  (left directional button) >  $\bigcirc$  Settings > Game Mode  $\bigcirc$ ).

- This function may not be supported depending on the model.
- The game mode is not available for normal Product viewing.
- The screen may shake somewhat.
- When you press and hold the button on the Samsung Smart Remote for 1 second or more in Game Mode, the Game Bar appears. This function may not be supported depending on the model.
- 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 a different 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

- These functions may not be supported depending on the model or geographical area.
- Virtual Aim Point (Try Now)

You can see the virtual aim point on the screen.

Surround Sound (Try Now)

You can make your games more immersive by using intense, three-dimensional sound optimized for games.

Dynamic Black Equalizer (Try Now)

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

#### Game Motion Plus Settings (Try Now)

You can configure the Game Motion Plus settings.

This function may not be supported depending on the model.

#### - Game Motion Plus

Turn on this function to obtain a softer and clearer picture quality when playing a role-playing game (RPG) or adventure game which involves many dynamic scenes.

#### - Blur Reduction

Reduce game screen blur to optimize fast-moving images.

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

#### Judder Reduction

Remove flicker from a game video to play the game with a clearer picture quality.

#### Clear motion

Turn on this function to make dynamic scenes look clearer.

This function may not be supported depending on the model.

#### Game Picture Expert

You can adjust the options for specific picture quality features of your game.

#### HDR10+ GAMING

Basic mode provides the most accurate representation of the game's original creative intent. Advanced mode provides enhanced representation of game content to maximize visual impact.

#### - Game HDR

In accordance with the HGiG (HDR Gaming Interest Group) standard, it sets the optimal image quality for HDR games according to the brightness information of the contents.

When HDR sources are input in Game Mode, this menu is activated.

#### Using Cable Box IP Remote

Set the cable box that supports IP control to be controlled with Samsung remote control.

This function may not be supported depending on the model.

#### Automatically turn off the power of cable/satellite box

Turning off MICRO LED's power with the universal remote can also turn off the cable/satellite box automatically.

This function may not be supported depending on the model.

### **Using Input Signal Plus**

Expands the input signal range for HDMI connections.

- If the Input Signal Plus feature is turned off, HDR signals sent from an external device cannot be received.
- When you select the HDMI connector you want to use for **Input Signal Plus**, and then press the Select button to set the **Input Signal Plus** function to **On**, the Product screen may flicker.
- When you connect the Product 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."

#### Using HDMI Black Level

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

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

# Configuring a Sound Mode and Expert Settings

Change the Sound Mode and adjust Expert Settings.

### Choosing a sound mode

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

- When an external device is connected, **Sound Mode** may change accordingly.
- This function may not be supported depending on the model.

#### Configuring advanced sound settings

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

- Supported menu options may vary depending on the Sound Output setting.
- Balance (Try Now)

Adjust the volumes of the left and right speakers to balance the sound levels.

Equalizer (Try Now)

Customize the Product sound by adjusting the volume of high-pitched and low-pitched sounds.

- This function is not available when the Adaptive Sound Pro or Active Voice Amplifier function is turned on.
- This function is not available when the **Sound Mode** function is set to **Adaptive Sound**, **Game**, or **Amplify**.
- The name and properties of this function may appear differently depending on the connected external device.
- HDMI-eARC Mode (Try Now)

You can connect an audio device that supports eARC via HDMI-eARC. Muting occurs temporarily during device connection.

- This function may not be supported depending on the model.
- Digital Output Audio Format Try Now

Select a digital audio output format. If you select **Auto**, the audio output mode automatically changes to the mode supported by the connected soundbar or A/V receiver.

If you select the Pass-Through option, audio data is output with no processing.

- This function is available when the input source is HDMI and the receiver is connected via HDMI-eARC.
- This function may not be supported depending on the model.

#### Digital Output Audio Delay (Try Now)

Adjust the output delay time for digital audio.

- This function is available when the input source is HDMI and the receiver is connected via HDMI-ARC or HDMI-eARC. When the receiver can't process the input source, it may operate in the **Auto** option.
- This function may not be supported depending on the model.

#### Dolby Atmos (Try Now)

When watching Product using the embedded speakers, the virtual surround sound effect of Dolby Atmos can be turned on or off.

This function may not be supported depending on the model.

#### Auto Volume Try Now

Automatically adjusts the sound to a certain level when changing channels or switching to another external input.

#### Sound Feedback (Try Now)

Plays the notification sound when manipulating a menu or selecting an option.

#### • Simultaneous Optical Output

The device connected via optical always outputs sound.

#### Auracast

You can listen to the Product's audio by connecting to a Bluetooth audio device that supports Auracast.

- This function may not be supported depending on the model or geographical area.
- Some models support the Auracast feature. For more information about Auracast, refer to "Using Auracast."

#### Reset Sound (Try Now)

Reset changed sound settings.

# **Using the Sound Support Functions**

Configure the sound settings for your Product.

### Selecting speakers

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

- If the soundbar is connected to the Product via both HDMI and Optical, HDMI may be selected first even if you select Optical.
- External speakers may not be controlled with the Samsung Smart Remote. When an external speaker is enabled, some sound menus are not supported.

Samsung Product supports the Q-Symphony function.

- This function works synchronized with the Samsung Soundbar that supports Q-Symphony so that your Product speaker and Soundbar simultaneously output the sound for best surround effects.
- When a Samsung Soundbar that supports Q-Symphony is connected, the menu name such as "Product + Soundbar" appears under Sound Output (♠ > ≡ (left directional button) > ⊗ Settings > All Settings > Sound > Sound Output). Select the menu. (Fry Now)

Example) Product + Soundbar Series name (HDMI) or Product + Soundbar Series name (Optical)

- It works based on the Codec supported by your Product. For more information about Codec information, refer to "Read Before Playing Photo, Video, or Music Files."
- This function is supported only when connected via HDMI, optical or Wi-Fi.
- This function may not be supported depending on the Product or Soundbar model.
- Refer to the soundbar's user manual when connecting it to the Product.

- You can watch the center channel of the A/V receiver through the Product. First, connect the speaker cable between the center channel of the A/V receiver and the Product.
  - When the optical cable is connected between the Product and the A/V receiver, select MICRO LED + Optical
    (♠ > ≡ (left directional button) > ♦ Settings > All Settings > Sound > Sound Output).
  - When the HDMI (ARC, eARC) cable is connected between the Product and the A/V receiver, select MICRO
     LED + AV Receiver ( > ≡ (left directional button) > ⊕ Settings > All Settings > Sound > Sound Output).
- This function may not be supported depending on the model or geographical area.
- This feature may not be supported depending on the channel configuration of the sound source.
- Maximum wattage AV receiver that can be connected to Product is 150 W with 8-ohm.
- While watching the center channel of the A/V receiver through the Product, when you turn off the A/V receiver, noise may occur. Change the Sound Output to Product speaker, and then turn off the power.

### Listening to the Product through Bluetooth devices

You can connect Bluetooth audio devices to the Product. They must be paired using the Product's Bluetooth function. Refer to the user manual for your audio device such as Bluetooth speaker, soundbar, and headphones for detailed connection and usage.

- If the Product fails to find a Bluetooth audio device, place the device closer to the Product, and then select Refresh.
- When you turn on a paired Bluetooth audio device, the Product detects it automatically, and then displays a pop-up window. Use this pop-up window to activate or 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."
- On some models, you can connect and use two Bluetooth devices simultaneously.
- If multiple BT audio devices and BT input devices are simultaneously connected, sound from the audio devices may be choppy or key data from the input devices may be dropped.
  - The number of BT audio devices for connection can be limited to one device, for a stable game service.
- Some models support the Auracast feature. For more information about Auracast, refer to "Using Auracast."

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

♠ > = (left directional button) > @ Settings > All Settings > Sound > Wi-Fi Speaker Surround Setup (ry Now)

If you've connected one or more Samsung wireless audio devices that support the Wi-Fi function to the Product, 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 soundbar.

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 support the Wi-Fi function must be connected to the same wireless network as the Product.
- For more information about how to connect and use a Samsung audio device that supports the Wi-Fi function, refer to its user manual.
- Surround sound configurations with a soundbar may not be supported depending on the product.
- If you activate the Screen Mirroring function while using Samsung audio devices that support the Wi-Fi function, the Wi-Fi connection is disconnected.
- Mismatched video and audio lip-syncing may occur depending on the device type.

# System and Support

You can configure system and support settings, such as clock, timers, energy usage and software updates.

# Using the Time Functions and the Timers

Set the current time and use the timer function.

You can set the Clock manually or automatically. Once the Clock is set, you can view the current time on the Product anytime.

You must set the clock in the following cases:

- The power cord is disconnected and then connected.
- The Clock Mode is changed from Auto to Manual.
- The Product is not connected to the network.

### Setting the clock automatically

- This function works only when the Product is connected to the network.
- If you get your Product signal from a cable broadcast receiver/set-top box or a satellite receiver/satellite set-top box connected to an HDMI port, you must set the current time manually.

#### Changing the current time

Time Offset adjusts the time through a network connection.

This function is available only when **Clock Mode** is set to **Auto**, the Product fails to receive time information through normal broadcast signals, and the Product is connected to a network.

### Setting the clock manually

When Clock Mode is set to Manual, you can directly enter the current date and time. Select the Date and Time by using the directional buttons on the remote control.

### Using the sleep timer

You can use this function to automatically shut off the Product after a pre-set period of time. You can set the sleep timer for up to 180 minutes after which it will turn off the Product.

This function may not be supported in some viewing modes.

## Turning off the Product using the off timer

You can set Off Timer to shut off the Product automatically at a specific time. Off Timer is only available if the Clock has been set.

- To use this function, first set the Clock (♠ > ≡ (left directional button) > ❷ Settings > All Settings > General & Privacy > System Manager > Time > Clock). [Try Now]
- This function may not be supported in some viewing modes.
- This function may not be supported depending on the model or geographical area.

# Using the Power and Energy Saving Functions

Use the power saving functions to reduce the Product power consumption.

### Reducing the power consumption of the Product

Reduce energy consumption by changing your power preferences and other energy-saving options.

• Brightness Optimization Try Now

Automatically adjust the picture brightness based on the ambient light level.

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

Minimum Brightness Try Now

When Brightness Optimization is turned on, you can manually adjust the minimum brightness of the Product screen. This function acts only when the value is less than the setting in  $\bigcirc$  >  $\equiv$  (left directional button) >  $\otimes$  Settings > All Settings > Picture > Expert Settings > Brightness. Try Now

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

Energy Saving Solution (Try Now)

Reduce power consumption by adjusting brightness settings.

• Motion Lighting (Try Now)

Adjusts the brightness in response to on-screen movements to reduce power consumption.

This function is not available when the **Adaptive Picture** or **Game Mode** function is turned on.

#### Screen Saver Try Now

Activate a screensaver when your Product displays a still image for two hours or more.

This function may not be supported depending on the model.

### Auto Power Saving Try Now

When the Product is connected to Wi-Fi, this feature checks Wi-Fi signals and remote control usage data to determine whether the Product is used. If the Product is left idle, the feature automatically switches off the screen.

- This feature may not be supported, depending on the Wi-Fi router.
- This function may not be supported depending on the model.

#### Auto Power Off Try Now

Automatically turns off the Product to reduce unnecessary power consumption if the Product Controller and the remote control are not used for the set period of time.

In some regions, the **Auto Power Off** function may not be supported when **Samsung TV Plus** is operating.

#### Available Remote Battery (Try Now)

You can check the Samsung Smart Remote's remaining amount of the battery.

This function may not be supported depending on the model.

# Updating the Product's Software

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

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

### Updating through the network

- Updating from the network requires an active network connection.

### Updating through a USB device

After downloading the update file from the Samsung website and storing it on a USB device, connect the USB device to the Product 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 Product will not be able to locate the update package.

### Updating the Product automatically

If the Product is connected to the network, you can have the Product's software update itself automatically while you are watching the Product. When the background update is completed, it is applied the next time the Product 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 a network connection.

# Using the Parental Settings function

Configure content or app security settings.

♠ > = (left directional button) > ⊕ Settings > All Settings > General & Privacy > Parental Settings (Iry Now)

Restrict access to content or apps that require parental guidance. Locked content or apps can be accessed by entering the password.

Parental Lock (Try Now)

Enable or disable all Parental Settings.

Program Rating Lock Settings (Try Now)

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

- For more information, refer to "Using Program Rating Lock."
- This function may not be supported depending on the model or geographical area.
- App Lock Settings (Try Now)

Set the installed app to lock or unlock.

# Using the Gesture function

Use your custom Gesture to easily control the Product.

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

Connect a camera to the Product, and use your custom Gesture to easily save and load services or settings.

• Gesture Interaction

Enable or disable the gesture interaction feature. To enble this, an optical recognition device, such as a USB camera, is required.

- This may not work for some functions.
- Gesture Guide

Enable or disable to display the Gesture Guide.

• Delete Saved Gesture

Delete the Gesture you saved.

• Learn Gesture Functions

Check out how to use Gesture functions.

# Audio and Video Functions for the Visually or Hearing Impaired

You can configure the functions for the visually or hearing impaired.

## Running the accessibility functions

♠ > = (left directional button) > @ Settings > All Settings > General & Privacy > Accessibility
(ry Now)

### **Running Accessibility Shortcuts**

The Accessibility Shortcuts provide easy access to the accessibility functions. To display the Accessibility Shortcuts, press and hold the +/— (Volume) button for 2 seconds or more. You can easily turn on or turn off the functions, such as Voice Guide, Magnification, Caption, Sign Language Zoom, Sign Language Guide, Learn Remote, Learn Menu Screen, Picture Off, Multi-output Audio, High Contrast, Zoom Menu and Text, Grayscale, Color Inversion, Slow Button Repeat, Accessibility Settings, etc.

- Fiven if the Voice Guide is set to Off or muted, the voice guide for Accessibility Shortcuts is enabled.
- The shortcut menus may not appear depending on the model or geographical area.
- The menu name may differ depending on the model.

### Enabling voice guides for the visually impaired

You can activate voice guides that describe the menu options aloud to aid the visually impaired. To activate this function, set Voice Guide to On. With Voice Guide on, the Product provides voice guides for channel change, volume adjust, information on current and upcoming programs, schedule viewing, other Product functions, and various content in the Internet, and in Search.

You can go to Voice Guide, and then press the Select button to turn the function on or off.

- The **Voice Guide** is provided in the language that is specified on the Product **Language**. However, some languages are not supported by **Voice Guide** even though they are listed in the Product **Language**. **English** is always supported.
- For more information about the Product Language settings, refer to "Changing the menu language."

## Changing the volume, speed, pitch, and the MICRO LED Background Volume of the Voice Guide

You can configure the Volume, Speed, Pitch, and the MICRO LED Background Volume of the voice guide.

## **Showing captions**

Set Caption to On to watch programs with the captions displayed.

- Captions are not displayed by programs that do not support captions.
- This function has no relationship with the features for controlling subtitles of DVD or Blu-ray players. To control DVD or Blu-ray subtitles, use the subtitle feature of the DVD or Blu-ray player and the player's remote control.

#### Selecting the caption language

• Default / CC1 ~ CC4 / Text1 ~ Text4

Operates in either analog Product channel mode or when a signal is supplied from an external device to the Product. (Depending on the broadcast signal, the analog caption function may or may not work with digital channels.)

Default / Service1 ~ Service6 / CC1 ~ CC4 / Text1 ~ Text4

Works with digital channels. These functions may not be available in digital caption mode depending on the broadcast.

#### Setting the digital caption related options

You can change the font color, background color, size settings, and position, etc.

- The foreground and background colors and opacity settings cannot be the same.
- The **Position** function is activated only for programs that support broadcast captions.

#### Enlarging the sign language screen for the hearing impaired

You can zoom in the sign language screen when the program you are watching provides it. First, set Sign Language Zoom to On, and then select Edit Sign Language Zoom to change the position and magnification of the sign language screen.

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

### Configure Sign Language Guide options

You can configure the size, speed, position, and mode of the sign language guide.

## Learning about the remote control (for the visually impaired)

This function helps individuals with a visual impairment to learn the positions of the buttons on the remote control. When this function is activated, you can press a button on the remote control and the Product will tell you its name. Press the button twice to exit Learn Remote.

#### Learning about the Product menu

Learn the menus on the Product screen. Once enabled, your Product will tell you the information and features of the menus you select.

#### The Product screen is turned off but audio continues

Turn off the Product screen and provide only sound to reduce overall power consumption. When you press a button on the remote control other than Volume and Power while the screen is off, the Product screen turns back on.

### Enlarge the screen

Enlarge the screen to make the picture or text bigger. You can adjust the zoom level or move the zoom area by following the displayed instructions.

 $\ensuremath{\cancel{\ell}}$  This function may not be supported depending on the model or geographical area.

### Listening to the Product through Bluetooth devices (for the hearing impaired)

You can turn on both the Product speaker and Bluetooth headphone at the same time. When this function is active, you can set the volume of the Bluetooth headphone higher than the volume of the Product speaker.

- This function may not be supported depending on the model or geographical area.
- For more information, refer to "Listening to the Product through Bluetooth devices."

## White text on black background (high contrast)

You can change Smart Hub and setting menu screens to white text on a black background and change the transparent Product menus to opaque automatically so that text can be more easily read.

If High Contrast is on, some Accessibility menus are not available.

#### Enlarging the font (for the visually impaired)

You can enlarge the size of the font on the screen. To activate, set **Zoom Menu and Text** to **On**.

### Setting the screen to black and white

You can change the color of the Product screen to black and white to sharpen blurred edges caused by colors.

- If Grayscale is on, some Accessibility menus are not available.
- This function may not be supported depending on the model or geographical area.

#### Inverting the screen color

You can invert the colors of the text and background for the setting menus displayed on the Product screen to make it easier to read them.

- f Color Inversion is on, some Accessibility menus are not available.
- This function may not be supported depending on the model or geographical area.

#### Configuring the repeat settings for remote control buttons

You can configure the operation speed of the remote control buttons so that they slow down when you continually press and hold them. First, set Slow Button Repeat to On, and then adjust the operation speed in Repeat Interval.

#### Setting the color correction feature for users with color blindness

This feature helps users with color blindness experience richer colors.

Use this feature to customize the colors for your unique viewing conditions, to experience richer colors on the screen.

- When SeeColors Mode is in use, some menus are disabled.
- This function may not be supported depending on the model.

# Using Voice Assistants on the Product

You can change the settings of a Voice Assistant after selecting it.

#### Select the Voice Assistant

Select which Voice Assistant you would like to help control your Product.

- To use this function, the Product must be connected to the network.
- This function and Voice Recognition Solution Partner may not be supported depending on the model or geographical area.
- Voice Assistant only supports some languages, and the supported functions may differ depending on the geographical area
- The Voice Wake-up function may not be supported depending on the model, Voice Assistant or geographical area.
- Bixby / Amazon Alexa
  - To use the Voice Assistant, follow the instructions on the Product screen to enable the selected Voice Assistant.

  - To enable the Settings menus for each Voice Assistant, log in each Voice Assistant.
  - For an example of Voice command, see the Settings menus for each Voice Assistant.

# **Using Other Functions**

You can view other functions.

### Changing the menu language

### Setting up a password

The PIN input window appears. Enter a PIN. Enter it again to confirm it. The default PIN is "0000."

- This function may not be supported depending on the model or geographical area.
- If you forget your PIN, you can reset it with your remote control. With the Product turned on, press the following buttons on the remote control in the order shown to reset the PIN to "0000."

Press +/- (Volume) button. > Volume Up >  $\bigcirc$  > Volume Down >  $\bigcirc$  > Volume Up >  $\bigcirc$ .

### Selecting Usage or Retail Mode

You can set the Product for retail environments by setting Usage Mode to Retail Mode.

- For all other uses, select Home Mode.
- Use **Retail Mode** only in a store. With **Retail Mode**, some functions are disabled, and the Product settings automatically reset after a preset amount of time.
- This function may not be supported depending on the model.

#### Managing External Devices

When you connect external devices, such as mobile devices or tablets connected to the same network as the Product so you can share content, you can view the list of allowed devices and connected devices.

#### • Access Notification

Set whether to display a notification when an external device such as a mobile device or tablet attempts to connect to the Product.

#### Device List

Manage a list of external devices registered to the Product.

### Restoring the Product to the factory settings

You can restore all Product settings to the factory defaults.

- 1. Select Reset. The security PIN entry window appears.
- 2. Enter the security PIN, and then select **Reset**. All settings are then reset. The Product turns off and on again automatically and displays the Initial Setup screen.
- For more information on **Reset**, refer to the user manual that came with the Product.

# **Precautions and Notes**

Instructions and information that you must read after are available for you.

# **Read Before Using Apps**

Read this information before using Apps.

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

# Read Before Using the Internet Function

Read this information before using the Internet function.

- File download is not supported.
- The Internet function may not be able to access certain websites, including websites operated by certain companies.
- The Product does not support playback of flash videos.
- E-commerce for online purchases is not supported.
- ActiveX is not supported.
- Only a limited number of fonts are supported. Certain symbols and characters may not be displayed properly.
- The response to remote commands and the resulting on-screen display may be delayed while a webpage is loading.
- Loading a webpage may be delayed or suspended completely depending on the status of the participating systems.
- Copy and paste operations are not supported.
- When composing an email or a simple message, certain functions such as the font size and color selection may not be available.
- There is a limit to the number of bookmarks and the size of the log file that can be saved.
- The number of windows that can be opened concurrently is limited.
- Web browsing speed will differ with the network environment.
- Browsing history is saved from latest to oldest, with the oldest entries being overwritten first.
- Depending on the types of video/audio codecs supported, you may not be able to play certain HTML5 video and audio files.
- Video sources from PC-optimized streaming service providers may not play properly on our proprietary Internet browser.

### Read before setting up a wireless network connection

#### Precautions for wireless network

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

#### Wireless security protocols

The Product only supports the following wireless network security protocols. The Product cannot connect to non-certified wireless access point.

- Authentication Modes: WEP, WPAPSK, WPA2PSK
- Encryption Types: WEP, TKIP, AES

In compliance with the Wi-Fi certification specifications, Samsung Products do not support WEP or TKIP security encryption in networks running in the 802.11n mode. If the wireless access point supports WPS (Wi-Fi Protected Setup), you can connect the Product to your network using PBC (Push Button Configuration) or a PIN (Personal Identification Number). WPS automatically configures the SSID and WPA key settings.

# Read Before Playing Photo, Video, or Music Files

Read this information before playing media content.

### Limitations to the use of photo, video, and music files (ry Now)

- The Product supports Mass Storage Class (MSC) USB devices only. MSC is a class designation for mass storage
  devices. Types of MSC devices include external hard drives, flash card readers, and digital cameras. (USB hubs
  are not supported.) These kinds of devices must be connected directly to the USB port. The Product may not be
  able to recognize a USB device or read the files on the device if it is connected with a USB extension cable. Do
  not disconnect USB devices while they are transferring files.
- When connecting an external hard drive, use the USB (HDD 5V 1A) port. We recommend that you use an external hard drive with its own power adapter.
  - USB (HDD 5V 1A) port is supported by some models.
- Certain digital cameras and audio devices may not be compatible with the Product.
- If there are multiple USB devices connected to the Product, the Product might not be able to recognize some or all the devices. USB devices that use high-power input should be connect to the USB (HDD 5V 1A) port.
  - USB (HDD 5V 1A) port is supported by some models.
- The Product supports the FAT, exFAT, and NTFS file systems.
- In the media contents list, the Product can display up to 1,000 files per folder. If the USB device contains more than 8,000 files and folders, however, some files and folders might not be accessible.
- Certain files, depending on how they are encoded, may not play on the Product.
- Certain files are not supported on all models.
- The DivX and DTS codecs are not supported by the Samsung Product models released in 2023.

# Supported subtitles

## Subtitle formats

Name	Format
MPEG-4 Timed text	.ttxt
SAMI	.smi
SubRip	.srt
SubViewer	.sub
Micro DVD	.sub or .txt
SubStation Alpha	.ssa
Advanced SubStation Alpha	.ass
SMPTE-TT Text	.xml

### Video formats with subtitles

Name	Container
Xsub	AVI
SubStation Alpha	MKV
Advanced SubStation Alpha	MKV
SubRip	MKV
VobSub	MKV
MPEG-4 Timed text	MP4
TTML in smooth streaming	MP4
SMPTE-TT TEXT	MP4
SMPTE-TT PNG	MP4

# Supported image formats and resolutions

File extension	File extension Format	
*.jpg *.jpeg	JPEG	16320 x 12240
*.png	PNG	4096 x 4096
*.bmp	ВМР	4096 x 4096
*.mpo	MPO	15360 x 8640
*.heic	HEIF	16320 x 12240

The MPO format is supported partly.

# Supported music formats and codecs

File extension	Format	Codec	Note
*.mp3	MPEG	MPEG1 Audio Layer 3	
*.m4a *.mpa *.aac	MPEG4	AAC	
*.flac	FLAC	FLAC	Supports up to 16/24 Bit, 48/96/192 kHz, 5.1 channel
*.ogg	OGG	Vorbis	Supports up to 2 channels
*.wma	WMA	WMA	WMA is supported up to 10 Pro 5.1 channels.  WMA lossless audio is not supported.
*.wav	wav	wav	
*.mid *.midi	midi	midi	Supports type 0 and type 1.  Seek is not supported.  Supports USB device only.
*.ape	ape	ape	
*.aif *.aiff	AIFF	AIFF	
*.m4a	ALAC	ALAC	

The HEIF format is may not be supported depending on the model or geographical area.

HEIF supports only the single image of grid type (grid) and its minimum resolution must be at least 512 pixels in width or height.

# Supported video codecs

File format	Container	Video codecs	Resolution	Frame rate (fps)	Bitrate (Mbps)	Audio codecs
*.avi *.mkv *.asf		H.264 BP/MP/HP	4096 x 2160	4096 x 2160: 60 3840 x 2160: 60 1920 x 1080: 120	60	
*.wmv *.mp4 *.mov	AVI MKV	HEVC (H.265 - Main, Main10)	4096 x 2160	4096 x 2160: 60 3840 x 2160: 120	80	Dolby Digital LPCM
	ASF	Motion JPEG	3840 x 2160	30	80	ADPCM(IMA, MS)
*.3gp *.vro	MP4 3GP	MVC MPEG4 SP/ASP				AAC HE-AAC
*.mpg *.mpeg	MOV	Window Media Video v9 (VC1)		60		WMA Dolby Digital+
*.ts	FLV	MPEG2				
*.tp	VRO	MPEG1				MPEG(MP3)
*.trp	VOB PS	Microsoft MPEG-4 v1, v2, v3	1920 x 1080		20	AC-4 G.711(A-Law, μ-Law)
*.flv *.vob	TS	Window Media Video v7 (WMV1), v8 (WMV2)	30	30		OPUS
*.svi		H.263 Sorenson	-			
*.m2ts		VP6				
*.mts		AV1	3840 x 2160	120	80	
		VP8	1920 x 1080	60	20	
*.webm	WebM	VP9 (Profile 0, profile 2 supported)	3840 x 2160	60	80	Vorbis
		AV1	3840 x 2160	120	80	
*.rmvb	RMVB	RV8/9/10 (RV30/40)	1920 x 1080	60	20	RealAudio 6

#### Other restrictions

- Codecs may not function properly if there is a problem with the content.
- Video content does not play or does not play correctly if there is an error in the content or container.
- Sound or video may not work if they have standard bit rates/frame rates above the Product's compatibility ratings.
- If the Index Table is has an error, the Seek (Jump) function will not work.
- When playing video over a network connection, the video may not play smoothly because of data transmission speeds.
- Some USB/digital camera devices may not be compatible with the Product.
- HEVC codec is only available in MKV / MP4 / TS containers.

#### Video decoders

- H.264 UHD is supported up to Level 5.1.
  - Product does not support FMO / ASO / RS
  - Resolution is changed during video playback (Up to 3840 x 2160 is supported)
- H.264 FHD is supported up to Level 4.2.
  - Product does not support FMO / ASO / RS
- HEVC UHD is supported up to Level 5.2.
  - Resolution is changed during video playback (Up to Level 5.1 3840 x 2160 is supported)
- HEVC FHD is supported up to Level 4.1.
- VC1 AP L4 is not supported.
- GMC 2 or above is not supported.

#### Audio decoders

- WMA is supported up to 10 Pro 5.1 channels, M2 profile.
- WMA1, WMA lossless / Voice are not supported.
- QCELP and AMR NB/WB are not supported.
- Vorbis is supported for up to 5.1 channels.
- Dolby Digital+ is supported for up to 5.1 channels.
- The supported sample rates are 8, 11.025, 12, 16, 22.05, 24, 32, 44.1, and 48 KHz, and differ with the codec.

# Read After Installing the Product

Read this information after installing the Product.

### Picture sizes and input signals

The Picture Size is applied to the current source. The applied Picture Size will remain in effect whenever you select that source unless you change them.

Input signal	Picture size
Digital channel (720p)	16:9 Standard, Custom, 4:3
Digital channel (1080i, 1080p)	16:9 Standard, Custom, 4:3
* Digital channel (3840 x 2160p @ 24/30 Hz)	16:9 Standard, Custom
* Digital channel (3840 x 2160p @ 50/60 Hz)	16:9 Standard, Custom
* Digital channel (4096 x 2160p)	16:9 Standard, Custom
HDMI (720p)	16:9 Standard, Custom, 4:3
* HDMI (1080i, 1080p)	16:9 Standard, Custom, 4:3
* HDMI (3840 x 2160p)	16:9 Standard, Custom
* HDMI (4096 x 2160p)	16:9 Standard, Custom
*HDMI (7680 x 4320p)	16:9 Standard, Custom
USB (720p)	16:9 Standard, Custom, 4:3
USB (1080i/p @ 60 Hz)	16:9 Standard, Custom, 4:3
* USB (3840 x 2160p @ 24/30 Hz)	16:9 Standard, Custom
* USB (3840 x 2160p @ 60 Hz)	
* USB (4096 x 2160p @ 24/30/60 Hz)	16:9 Standard, Custom
*USB (7680 x 4320p @ 24/30/60 Hz)	16:9 Standard, Custom

<sup>\*:</sup> This input signal may differ depending on the model and geographical area.

### Installing an anti-theft lock

An anti-theft lock is a physical device that can be used to protect the Product against theft. Look for the lock slot on the back of the Product. The slot has a 🖻 icon next to it. To use the lock, wrap the lock cable around an object that is too heavy to carry and then thread it through the Product's lock slot. The lock is sold separately. The method of using an anti-theft lock may differ for each model. Refer to the lock's user manual for more information.

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

The input ports for external devices may differ depending on the model and geographical area.

# Supported Resolutions for UHD Input Signals

Check the supported resolution for UHD input signals.

• Resolution: 3840 x 2160p, 4096 x 2160p

This function may not be supported depending on the model.

# If Input Signal Plus is set to Off

Frame rate (fps)	Color Depth / Chroma Sampling	RGB 4:4:4	YCbCr 4:4:4	YCbCr 4:2:2	YCbCr 4:2:0
50 / 60	8 bit	-	-	_	0

# If Input Signal Plus is set to On

Frame rate (fps)	Color Depth / Chroma Sampling	RGB 4:4:4	YCbCr 4:4:4	YCbCr 4:2:2	YCbCr 4:2:0
50 / 60	8 bit	0	0	0	0
30 / 60	10 bit	0	0	0	0
120	8 bit	0	0	0	0
	10 bit	0	0	0	0

# Supported Resolutions for VRR

Check the supported resolutions for the VRR signal.

When Game Mode is set to On or Auto, the VRR function is activated.

VRR is only available in select models. For models that support VRR, refer to "Using VRR."

Resolution (Dots x lines)	Display format	Horizontal frequency (KHz)	Vertical frequency (Hz)	Clock frequency (MHz)	SCAN
1920 x 1080	120 Hz	135.000	120	297.000	progressive
**1920 x 1080	144 Hz	166.587	144	346.500	progressive
2560 x 1080	120 Hz	150.000	120	495.000	progressive
**2560 x 1080	144 Hz	172.339	144	470.830	progressive
2560 x 1440	120 Hz	150.000	120	495.000	progressive
3840 x 2160	120 Hz	270.000	120	1188.000	progressive
**3840 x 2160	144 Hz	323.677	144	1424.180	progressive
3840 x 1080	120 Hz	137.250	120	549.000	progressive
**3840 x 1080	144 Hz	166.607	144	653.100	progressive
3840 x 1600	120 Hz	99.419	120	521.750	progressive
**3840 x 1600	144 Hz	246.569	144	1035.590	progressive
4096 x 2160	120 Hz	270.000	120	1188.000	progressive
*7680 x 4320	60 Hz	264.000	60	2376.000	progressive

<sup>\*:</sup> The resolution may not be supported depending on the model.

<sup>\*\*:</sup> Only models that support 144 Hz are supported.

# Read Before Connecting a Computer (Supported Resolutions)

Check the resolutions supported for PC input signals.

When you connect your Product to a computer, set the computer's video card to one of the standard resolutions listed in the tables below. The Product will automatically adjust to the resolution you choose. Note that the optimal and recommended resolution is 3840 x 2160 @ 60 Hz. Choosing a resolution not included in the tables can result in a blank or flickering screen or can turn on only the receiver of the remote control. Refer to the user manual of your graphics card for compatible resolutions.

The native resolution is 3840 x 2160 @ 60 Hz with the Input Signal Plus set to On. The native resolution is 3840 x 2160 @ 30 Hz with the Input Signal Plus set to Off.

#### **IBM**

Resolution (Dots x lines)	Display format	Horizontal frequency (KHz)	Vertical frequency (Hz)	Clock frequency (MHz)	Polarity (horizontal / vertical)
720 x 400	70 Hz	31.469	70.087	28.322	-/+

#### MAC

Resolution (Dots x lines)	Display format	Horizontal frequency (KHz)	Vertical frequency (Hz)	Clock frequency (MHz)	Polarity (horizontal / vertical)
640 x 480	67 Hz	35.000	66.667	30.240	-/-
832 x 624	75 Hz	49.726	74.551	57.284	-/-
1152 x 870	75 Hz	68.681	75.062	100.000	-/-

## **VESA DMT**

Resolution (Dots x lines)	Display format	Horizontal frequency (KHz)	Vertical frequency (Hz)	Clock frequency (MHz)	Polarity (horizontal / vertical)
640 x 480	60 Hz	31.469	59.940	25.175	-/-
640 x 480	72 Hz	37.861	72.809	31.500	-/-
640 x 480	75 Hz	37.500	75.000	31.500	-/-
800 x 600	60 Hz	37.879	60.317	40.000	+/+
800 x 600	72 Hz	48.077	72.188	50.000	+/+
800 x 600	75 Hz	46.875	75.000	49.500	+/+
1024 x 768	60 Hz	48.363	60.004	65.000	-/-
1024 x 768	70 Hz	56.476	70.069	75.000	-/-
1024 x 768	75 Hz	60.023	75.029	78.750	+/+
1152 x 864	75 Hz	67.500	75.000	108.000	+/+
1280 x 720	60 Hz	45.000	60.000	74.250	+/+
1280 x 800	60 Hz	49.702	59.810	83.500	-/+
1280 x 1024	60 Hz	63.981	60.020	108.000	+/+
1280 x 1024	75 Hz	79.976	75.025	135.000	+/+
1440 x 900	60 Hz	55.935	59.887	106.500	-/+
1600 x 900	60 Hz	60.000	60.000	108.000	+/+
1680 x 1050	60 Hz	65.290	59.954	146.250	-/+
1920 x 1080	60 Hz	67.500	60.000	148.500	+/+

## **VESA CVT**

Resolution (Dots x lines)	Display format	Horizontal frequency (KHz)	Vertical frequency (Hz)	Clock frequency (MHz)	Polarity (horizontal / vertical)
2560 x 1440	60 Hz	88.787	59.951	241.500	+/-
2560 x 1440	120 Hz	192.996	119.998	497.750	+/-

The resolution may not be supported depending on the model.

### CTA-861

Resolution (Dots x lines)	Display format	Horizontal frequency (KHz)	Vertical frequency (Hz)	Clock frequency (MHz)	Polarity (horizontal / vertical)
1920 x 1080i	50 Hz	28.125	50.000	74.250	+ / +
1920 x 1080i	60 Hz	33.750	60.000	74.250	+ / +
*1920 x 1080	100 Hz	112.500	100.000	297.000	+/+
*1920 x 1080	120 Hz	135.000	120.003	297.000	+ / +
3840 x 2160	30 Hz	67.500	30.000	297.000	-/-
*3840 x 2160	60 Hz	135.000	60.000	594.000	-/-
*3840 x 2160	100 Hz	225.000	100.000	1188.000	+/+
*3840 x 2160	120 Hz	270.000	120.000	1188.000	+ / +
4096 x 2160	24 Hz	54.000	24.000	297.000	+/+
4096 x 2160	30 Hz	67.500	30.000	297.000	+ / +
*4096 x 2160	50 Hz	112.500	50.000	594.000	+ / +
*4096 x 2160	60 Hz	135.000	60.000	594.000	+ / +
*4096 x 2160	100 Hz	225.000	100.000	1188.000	+ / +
*4096 x 2160	120 Hz	270.000	120.000	1188.000	+/+
*7680 x 4320	24 Hz	108.000	24.000	1188.000	+/+
*7680 x 4320	30 Hz	132.000	30.000	1188.000	+ / +
*7680 x 4320	50 Hz	220.000	50.000	2376.000	+ / +
*7680 x 4320	60 Hz	264.000	60.000	2376.000	+/+

<sup>\*:</sup> The resolution may not be supported depending on the model.

 <sup>2560</sup> x 1440 @ 60 Hz resolution is not supported in Game Mode.

# Supported Resolutions for Video Signals

Check the resolutions supported for video signals.

# CTA-861

Resolution (Dots x lines)	Display format	Horizontal frequency (KHz)	Vertical frequency (Hz)	Clock frequency (MHz)	Polarity (horizontal / vertical)
720 (1440) x 576i	50 Hz	15.625	50.000	27.000	-/-
720 (1440) x 480i	60 Hz	15.734	59.940	27.000	-/-
720 x 576	50 Hz	31.250	50.000	27.000	-/-
720 x 480	60 Hz	31.469	59.940	27.000	-/-
1280 x 720	50 Hz	37.500	50.000	74.250	+/+
1280 x 720	60 Hz	45.000	60.000	74.250	+/+
1920 x 1080i	50 Hz	28.125	50.000	74.250	+/+
1920 x 1080i	60 Hz	33.750	60.000	74.250	+/+
1920 x 1080	24 Hz	27.000	24.000	74.250	+/+
1920 x 1080	25 Hz	28.125	25.000	74.250	+/+
1920 x 1080	30 Hz	33.750	30.000	74.250	+/+
1920 x 1080	50 Hz	56.250	50.000	148.500	+/+
1920 x 1080	60 Hz	67.500	60.000	148.500	+/+
*1920 x 1080	100 Hz	112.500	100.000	297.000	+/+
*1920 x 1080	120 Hz	135.000	120.003	297.000	+/+
3840 x 2160	24 Hz	54.000	24.000	297.000	+/+
3840 x 2160	25 Hz	56.250	25.000	297.000	+/+
3840 x 2160	30 Hz	67.500	30.000	297.000	+/+
*3840 x 2160	50 Hz	112.500	50.000	594.000	+/+
*3840 x 2160	60 Hz	135.000	60.000	594.000	+/+
*3840 x 2160	100 Hz	225.000	100.000	1188.000	+/+
*3840 x 2160	120 Hz	270.000	120.000	1188.000	+/+

Resolution (Dots x lines)	Display format	Horizontal frequency (KHz)	Vertical frequency (Hz)	Clock frequency (MHz)	Polarity (horizontal / vertical)
4096 x 2160	24 Hz	54.000	24.000	297.000	+/+
4096 x 2160	30 Hz	67.500	30.000	297.000	+/+
*4096 x 2160	50 Hz	112.500	50.000	594.000	+/+
*4096 x 2160	60 Hz	135.000	60.000	594.000	+/+
*4096 x 2160	100 Hz	225.000	100.000	1188.000	+/+
*4096 x 2160	120 Hz	270.000	120.000	1188.000	+/+
*7680 x 4320	24 Hz	108.000	24.000	1188.000	+/+
*7680 x 4320	30 Hz	132.000	30.000	1188.000	+/+
*7680 x 4320	50 Hz	220.000	50.000	2376.000	+/+
*7680 x 4320	60 Hz	264.000	60.000	2376.000	+/+

<sup>\*:</sup> The resolution may not be supported depending on the model.

### **VESA CVT**

Resolution (Dots x lines)	Display format	Horizontal frequency (KHz)	Vertical frequency (Hz)	Clock frequency (MHz)	Polarity (horizontal / vertical)
2560 x 1440	60 Hz	88.787	59.951	241.500	+/-
2560 x 1440	120 Hz	192.996	119.998	497.750	+ / -

The resolution may not be supported depending on the model.

## Read Before Using Bluetooth Devices

Read this information before using a Bluetooth device.

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

### Restrictions on using Bluetooth

- You can't use Bluetooth devices and the Wi-Fi Speaker Surround Setup feature simultaneously.
- Compatibility issues may occur, depending on the Bluetooth device (A Mobile exclusive headphone may not be available, depending on the environment).
- Lip-sync errors may occur.
- The Product and Bluetooth device may disconnect, depending on the distance between them.
- A Bluetooth device may hum or malfunction:
  - When a part of your body is in contact with the receiving/transmitting system of the Bluetooth device or the Product.
  - When the device is subject to electrical variation from obstructions caused by a wall, corner, or office partitioning.
  - When the device is exposed to electrical interference from same frequency-band devices including medical equipment, microwave ovens, and wireless LANs.
- If the problem persists, we recommend you use a wired connection.
  - DIGITAL AUDIO OUT (OPTICAL) port
  - HDMI (eARC/ARC) port

# Blocking programs based on their TV Rating

Read this information before viewing a blocking program.

To block content in TV Rating, select a rating category to lock. All programs at that level and higher are blocked and require the PIN to watch. To unblock a category, select the lock icon. To unblock all the categories in a row, select the lock under ALL.

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

### Categories on the left:

- TV-Y: Young children.
- TV-Y7: Children 7 and over.
- TV-G: General audience.
- TV-PG: Parental guidance.
- TV-14: Viewers 14 and over.
- TV-MA: Mature audience.

### Categories on the top:

- ALL: Lock all TV ratings.
- FV: Fantasy violence.
- V: Violence.
- S: Sexual situations.
- L: Adult language.
- D: Sexually suggestive dialog.

### Blocking movies based on their Motion Picture Association of America (MPAA) rating

The Movie Rating (MPAA) system applies to all materials with supplied ratings in the U.S.A.

#### From the MPAA:

"The Motion Picture Association of America (MPAA) has implemented a rating system that provides parents or quardians with advanced information on which films are appropriate for children."

Select a lock beside one of the rating categories to block that category and all higher categories. To unblock a category, select the lock icon.

- G: General audience (no restrictions).
- PG: Parental guidance suggested.
- PG-13: Parents strongly cautioned.
- R: Restricted. Children under 17 should be accompanied by an adult.
- NC-17: No children under age 17.
- X: Adults only.
- NR: Not rated.

### Blocking programs based on their Canadian English Rating

The Canadian English Rating system applies to all rated material viewed on English-Canadian Product channels.

Select a lock beside one of the rating categories to block that category and all higher categories. To unblock a category, select the lock icon.

- C: Programming intended for children under age 8.
- C8+: Programming generally considered acceptable for children 8 years and over to watch on their own.
- G: General programming, suitable for all audiences.
- PG: Parental Guidance.
- 14+: Programming containing themes or content that may not be suitable for viewers under the age of 14.
- 18+: Adult programming.

### Blocking programs based on their Canadian French Rating

The Canadian French Rating system applies to all rated material viewed on French-Canadian Product channels.

Select a lock beside one of the rating categories to block that category and all higher categories. To unblock a category, select the lock icon.

- G: General.
- 8 ans+: Programming acceptable for children 8 years and over to watch on their own.
- 13 ans+: Programming that may not be suitable for children under the age of 13.
- 16 ans+: Programming not suitable for children under the age of 16.
- 18 ans+: Programming restricted to adults.

### Blocking Programs based on their Downloadable U.S. Rating

The Downloadable U.S. Rating system only applies to material originating from US DTV channels.

Parental restriction information is automatically downloaded while you watch DTV channels. This download may take several seconds. If the information is unavailable from the broadcasting station, the Downloadable U.S. Rating menu is deactivated.

Parental restriction levels differ with the broadcasting station. The default menu name and the **Downloadable U.S.**Rating name changes depending on the downloaded information.

Even when the on-screen display is set to another language, the **Downloadable U.S. Rating** menu appears only in English.

Select a lock beside one of the rating categories to block that category and all higher categories. To unblock a category, select the lock icon.

### Licenses & Other Information

Check the licenses and other information and trademarks applied in your Product.

# **Dolby** Atmos

Dolby, Dolby Atmos, and the double-D symbol are registered trademarks of Dolby Laboratories Licensing Corporation. Manufactured under license from Dolby Laboratories. Confidential unpublished works. Copyright © 2012-2021 Dolby Laboratories. All rights reserved.

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



The terms HDMI, HDMI High-Definition Multimedia Interface, HDMI trade dress and the HDMI Logos are trademarks or registered trademarks of HDMI Licensing Administrator, Inc.

### **Open Source License Notice**

Open Source used in this product can be found on the following webpage (https://opensource.samsung.com).

POWERED BY



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



#### (USA only)

Dispose unwanted electronics through an approved recycler.

To find the nearest recycling location, go to our website: www.samsung.com/recycling or call, 1-800-SAMSUNG

For battery recycling go to call2recycle.org or call 1-800-822-8837

# Troubleshooting

The following are troubleshooting solutions for each problem.

### Picture Issues

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

## The screen is flashing or has become dark

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

Disable Brightness Optimization, Energy Saving Solution, Motion Lighting, or Contrast Enhancer.

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

# The picture is not bright, or the picture colors do not look clear

If the screen appears too dim, try changing the settings under Reset Picture or disabling Brightness Optimization, Energy Saving Solution.

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

# The picture colors are black and white or do not look the way they should look

If the product's colors or absolute whites/blacks seem to be off, launch Picture Test.

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

When using the One Connect Box, confirm that its video input connectors are connected to the correct external device video output connectors.

Check whether Grayscale is set to On.

### The Product automatically turns off by itself

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

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

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

## Unable to power on

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

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

Make sure that the Product cable is firmly connected.

In case of a model that supports One Connect Box, check the One Connect Cable between the Product and One Connect Box.

### Unable to find a Channel

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

When the symptom persists, contact your service provider.

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

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

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

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

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

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

- Make sure that the set-top box or cable box supports the content or broadcast for UHD and set the resolution. For more information, contact your service provider.
- When using a **Samsung TV Plus** channel, check the network connection. When the network speed is slow, the app may not work or the image quality may be poor.

## Displayed video looks blurry

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

## The picture is distorted

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

Remove and reconnect the power cord, and check the remote control battery.

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

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

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

Change Picture Size to 16:9 Standard.

Change the output resolution of your external device.

## The picture won't display in full screen

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

Black bars are displayed at the top and bottom of the screen when watching a movie with a different aspect ratio from the Product screen or when using some apps.

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

## The Caption function in the Product menu is deactivated

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

## Captions appear on the Product screen

Turn off the Caption function in Caption Settings.

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

If the Input Signal Plus feature is turned on, the range of receiving HDMI input signals is expanded, allowing you to view HDR content sent from an external device.

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

## Sound and Noise Issues

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

### How can I connect an audio device to the Product?

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

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

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

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

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

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

Check the Sound Output setting. If it is set to MICRO LED Speaker, check the volume setting.

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

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

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

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

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

### HDMI (eARC/ARC) is connected, and there is no sound.

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

If a soundbar or A/V receiver that does not support Dolby Digital+ is used and Pass-Through is selected, there is no sound when a Dolby Digital+ source is received.

It is recommended to set Digital Output Audio Format to Auto if only limited audio format is supported depending on the performance of the connected soundbar or A/V receiver.

## The speakers are making an odd sound.

Run Sound Test.

• **(left directional button)** > **Settings** > **Support** > **Device Care** > **Self Diagnosis** > **Sound Test (ry Now)** 

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

### The sound is interrupted.

Sound quality may become affected if the wireless router is close to the Bluetooth speaker. Place the Bluetooth speaker as close as possible to the Product without obstacle between them. Do not place the wireless router close to the Bluetooth speaker body.

To minimize interruptions, we recommend a wireless access point that uses a 5 GHz frequency. 5 GHz may not be available depending on the model.

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

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

Turn off the Voice Guide function in Voice Guide Settings.

### The Product audio is not being played through the Soundbar or A/V receiver.

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

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

## The sound is not heard clearly.

Change to an appropriate sound mode.

When Intelligent Mode and Adaptive Sound Pro are turned on, the sound effects are automatically adjusted to the surroundings.

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

To optimize the sound depending on the surroundings, select Adaptive Sound Pro.

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

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

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

When connecting an external speaker such as home theater via HDMI, make sure it is connected to the HDMI (eARC/ARC) port on the Product. Make sure that the ⇒ = (left directional button) > ⊗ Settings > All Settings > Connection > External Device Manager > Anynet+ (HDMI-CEC) is active on your Product. Try Now

If a device is connected via Optical, volume control may not be possible, depending on the device.

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

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

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

## Channel and Broadcast Issues

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

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

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

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

### The captions are not provided on a digital channel.

Some channels may not have caption data.

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

# **External Device Connectivity Issues**

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

## The "Mode Not Supported" message appears.

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

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

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

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

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

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

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

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

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

• ♠ > ≡ (left directional button) > ♥ Connected Devices > Connection Guide > Smartphone > Screen Sharing (Smart View) (Try Now)

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

### No screen appears when connecting the Product to an external device.

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

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

• **(left directional button)** > **% Connected Devices** > Sources

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

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

## I want to connect to a Bluetooth speaker.

For more information on how to connect a Bluetooth speaker, see Audio Device > Bluetooth in Connection Guide.

## The PC screen does not appear or it flickers.

When the PC screen does not appear or the PC is not recognized, check the power supply of the PC and then reconnect the HDMI cable between the PC and Product. When the symptom persists, check that the PC is in Sleep mode and then set Input Signal Plus to On.

• ♠ > ≡ (left directional button) > ₺ Settings > All Settings > Connection > External Device Manager > Input Signal Plus (Try Now)

When the set resolution is not matched, it may cause a blank or flickering screen. For the PC supported resolution, refer to "Read Before Connecting a Computer (Supported Resolutions)."

### **Network Issues**

When the Product has difficulties connecting to the network, these steps may help resolve the problem.

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

Ensure that the network cable is connected and the router is powered on.

Connect your mobile device to the router via Wi-Fi.

Turn the router off and back on again. (Requires 2 to 3 minutes)

If a security key is required, make sure it has been entered correctly.

Unplug the Product's power cord and plug it back in or press and hold the power button for at least 3 seconds.

Make sure that there is no electromagnetic wave generating device placed between the Product and router.

If unable to establish a wireless internet connection, connect the Product to the wireless router via a LAN cable.

If the Product is able to connect to the internet normally via the cable connection, there might be a problem with the wireless router. In this case, try using a different wireless router.

Wired networks are not supported by some models.

### Wired network connection failed.

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

Wired networks are not supported by some models.

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

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

- Wired networks are not supported by some models.
- 1. Check if the Internet LAN cable is connected to the access point's external LAN port.
- 2. Check the DNS setting in IP Settings.
  - (left directional button) > ⊗ Settings > All Settings > Connection > Network > Network Status
     > IP Settings

# Anynet+ (HDMI-CEC) Issues

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

### What is Anynet+?

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

## Anynet+ does not work. The connected device is not displayed.

Make sure the device is an Anynet+ (HDMI-CEC) device. From the settings menu on the device, check and confirm that the HDMI-CEC option is enabled.

From the Product, check and confirm that the Anynet+ (HDMI-CEC) feature is set to On.

Check and confirm that the device's power cord is securely plugged in.

Check the device's HDMI cable connection.

Anynet+ (HDMI-CEC) cannot function under specific circumstances.

When connecting or disconnecting an HDMI cable, turn the Product off and then back on again.

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

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

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

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

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

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

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

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

# The Anynet+ device won't play.

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

### Remote Control Issues

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

### The remote control does not work.

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

Point the Samsung Smart Remote at the front of the Product, and then press and hold the and buttons simultaneously for 3 seconds or more.

Also, if the remote control does not work properly or its response is very slow, the battery might be low or dead.

- Charge the remote control by using the USB port (C-type) on the bottom, or turn over the remote to expose the solar cell.
- If the remote control has batteries, replace them with new ones.

## External devices cannot be operated with the Product remote control.

Check the cable connection between the Product and external devices.

When the symptom persists, set it manually in  $\bigcirc$  >  $\equiv$  (left directional button) >  $\checkmark$  Connected Devices > Universal Remote Setup.

## **Apps**

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

## I cannot find the app I want.

To use smart functions, you should connect to a network, agree to the terms and conditions, and log in with your Samsung account. If these settings were not configured during the initial setting process, you can configure Smart Hub settings by running APPS from the Home Screen.

If Smart Hub settings are complete but the app you want cannot be found on the Home Screen, you can find the app from  $\bigcirc$  Search or APPS. To add frequently used apps to the Home Screen, run the Add to Home feature from APPS.

• 🌀 > left directional button > 🔼 Media > 🕸 APPS > Settings > List of installed apps > Add to Home

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

Languages supported by an app may be different from the Product Language set in the menu.

The ability to change the language depends on the app's provider. Change the language from the settings menu in the app.

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

Check the network connection. When the network speed is slow, the app may not work or its image quality may be poor.

Uninstall and reinstall the app. For more information about app uninstallation, refer to "Managing installed apps."

The services of your application are not provided by the Product but by the application service provider.

Refer to the Help section on the application service provider's website.

# The Smart Hub Home Screen keeps appearing whenever you turn on the Product.

Turn off the Start with Smart Hub Home function in Start Screen Option.

# **Media Files**

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

# Some files are interrupted during playback.

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

# Some files can't be played.

Some files that use an unsupported codec may not be played back.

Make sure that the codec is supported by the Product. For more information, refer to "Read Before Playing Photo, Video, or Music Files."

## **Voice Assistant Issues**

When the Voice Assistant isn't working, these steps may help resolve the problem.

## The microphone is off.

Turn on the microphone switch at the bottom of the Product. Each time the switch is turned on or off, the screen displays a pop-up window showing whether the microphone is turned on or off.

- If the microphone is turned off, all voice recognition features and some sound features involving the microphone do not work.
- The position and appearance of the microphone switch may differ depending on the model.
- This function may not be supported depending on the model or geographical area.

### The voice commands do not work well.

Voice commands may differ depending on the Voice Assistant. Refer to the command examples for each Voice Assistant.

- Bixby: > Explore Now
- This function and Voice Recognition Solution Partner may not be supported depending on the model or geographical area.

# Bixby/Alexa answers although I did not call it.

The Product may recognize an ambient noise or everyday conversation as a call to Voice Assistant.

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

- This function and Voice Recognition Solution Partner may not be supported depending on the model or geographical area.

## I spoke "Hi, Bixby/Alexa" but Bixby/Alexa does not answer.

When the Product is far from you or the ambient noise is so loud, the Product may be unable to recognize your voice.

• For best results, you need to be within 10 feet (3-4 m) of your Product. Please look at your Product screen and speak.

Turn on the Voice Wake-up function.

- This function and Voice Recognition Solution Partner may not be supported depending on the model or geographical area.

# Voice recognition does not work with the Samsung Smart Remote unlike other features. There is no response even if the Voice Assistant button is pressed.

The connection between the remote control and the Product may be lost. Try pairing the remote control with the Product.

Point the Samsung Smart Remote at the front of the Product, and then press and hold the and buttons simultaneously for 3 seconds or more.

Also, if the remote control does not work properly or its response is very slow, the battery might be low or dead.

- Charge the remote control by using the USB port (C-type) on the bottom, or turn over the remote to expose the solar cell.
- If the remote control has batteries, replace them with new ones.

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

Unplug and then plug the Product power cord and then try again after 1 minute and 30 seconds. It may take a while if the voice recognition server is being inspected.

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

Say with the area name included.

## Other issues

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

### The Product is hot.

Watching Product for an extended period of time causes the panel to generate heat.

The heat from the panel is dissipated through internal vents running along the top of the Product.

The bottom, however, may feel hot to the touch after extended use.

Children watching Product need constant adult supervision to prevent them from touching the Product.

This heat, however, is not a defect and does not affect the Product's functionality.

## The Product smells like plastic.

This smell is normal and will dissipate over time.

## The settings are lost after 5 minutes or every time the Product is turned off.

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

## A POP (Product's internal banner ad) appears on the screen.

Change Usage Mode to Home Mode.

# The Product is making a popping noise.

The expansion and contraction of the Product's outer casing may cause a popping noise.

This does not indicate a product malfunction.

The Product is safe to use.

## The Product is making a humming noise.

Your Product utilizes high-speed switching circuits and high levels of electrical current. Depending on the Product's brightness level, the Product may seem slightly noisier than a conventional Product.

Your Product has undergone strict quality control procedures that meet our demanding performance and reliability requirements.

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

### The Product narrates the screen events in voice-over.

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

• Press and hold the  $\pm / \pm$  (Volume) button on your Samsung Smart Remote.

# Diagnosing Product operational issues

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

## Self Diagnosis

Check whether the product is displaying images and playing sounds normally. Check whether modules and sensors are working normally. You can also configure settings related to Smart Hub reset.

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

#### Power

View information on the power supply history.

#### SW Version Information

Check the currently installed software version, and update the software to the latest version, if necessary.

### Video Test

Play test videos to check for problems with the screen.

### Picture Test

Use test photos to check for problems with the screen.

#### Sound Test

Play test sounds to check the sound quality.

### Remote Control

Check for problems with the Remote Control connection or buttons.

### HDMI Troubleshooting

Select the HDMI port and check whether the HDMI cable is connected properly.

### HDMI Signal

Check the signals, signal records and connections of external devices.

#### HDMI-CEC Check

Check for an abnormally operating HDMI-CEC connection.

### • Smart Hub Connection Test

Check the network connection.

### • Wi-Fi

Check whether the Wi-Fi module is working normally. The result may appear to be a failure if there is no available access point (AP) in the vicinity.

### Bluetooth

Check whether the Bluetooth module is working normally.

### • IoT Module

Check whether the IoT Module is working normally.

### • Acceleration Sensor

Check whether the Acceleration Sensor is working normally.

### Light sensor

Check whether the light intensity sensor is working normally.

### Mic Test

Check whether the microphone module is working normally.

### • Broadcast Signal

Check the condition of the current broadcast signal.

### Reset Smart Hub

Reset the Smart Hub information.

### **Reset Smart Hub**

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

## Reset picture

Resets current picture settings to the default settings.

### Reset sound

Resets current sound settings to the default settings.

# **Getting Support**

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

## Getting support through Remote Management

After consenting to our service agreement, you can use **Remote Management** to access Remote Support and have a Samsung service technician diagnose your Product, correct problems, and update your Product's software remotely via the web. You can also turn **Remote Management** on and off.

This function requires a network connection.

## Finding the contact information for service

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

- You can also view information by scanning the QR code of your Product.
- You can also start this function by pressing and holding the button for 5 or more seconds. Continue holding the button until the customer information pop-up window appears.

## Requesting service

You can request service when you encounter a problem with the Product. Select the item matching the problem that you encountered, enter the required item, move the focus to Next, and then press the Select button. Select Request Now > Send or Schedule Appointment > Request > Send. Your service request will be registered. The Samsung Contact Center will contact you to set up or confirm your service appointment.

- You must agree to the terms and conditions for the service request.
- This function may not be supported depending on the geographical area.
- This function requires a network connection.

# **Accessibility Guidance**

Provides a menu and a remote control guide that aid the visually impaired.

### Learn Menu Screen

Learn the menus on the Product screen. Once enabled, your Product will tell you the information and features of the menus you select.

## Using the Samsung Smart Remote

You can see the description of the buttons on the Samsung Smart Remote.

The Samsung Smart Remote may not be supported depending on the model or geographical area.

### Orientation of the Samsung Smart Remote

Hold the remote control with the buttons facing towards you. The side with the button in the upper left is the top of the remote control.

### Description of the Samsung Smart Remote

The images, buttons, and functions of the remote control may differ with the model or geographical area.

From top to bottom and left to right:

- The **b**utton is at the top left.
- Of the 2 buttons below the **b**utton on the Samsung Smart Remote, the left one is the **b**utton and the right one is the **b**utton.
- There is a small LED (microphone) between the ① button and the ② button on the Samsung Smart Remote, but it cannot be felt by hand.

- Underneath these 2 buttons are a round button and a large outer circle button. The round button is the Select button, and the large outer circle button consists of 4 directional buttons (up / down / left / right).
- Underneath the directional button are 3 buttons, one on the left, one on the right, and one in the center. The one on the left is the button and the one on the right is the button. The round button in the middle is the button.
- If you press the button while watching a contents, the screen you are watching stops and a control bar appears. You can select Rewind, Play, Pause, Fast Forward, Go to Live TV, or Info. You can press the up directional button to go to the playback screen and check the time that the actual contents is running time.
  - You can use the **Slow Rewind** or **Slow Forward** functions when you select the **Pause** option.
  - This function may not be supported depending on the model or geographical area.
- Underneath the button are 2 thin horizontal buttons. These buttons protrude higher above the surface than the other buttons on the remote control. The one on the left is the volume button and the one on the right is the channel button. Push up from beneath or down from above to use these as rocker buttons to change the channel or volume.
  - Briefly press the +/- (Volume) button to mute the sound.
  - Press and hold the +/- (Volume) button to open the Accessibility Shortcuts menu.

  - Press and hold the ^/∨ (Channel) button to open the Channel List.
  - This function may not be supported depending on the model or geographical area.

## Using the Accessibility Menu

View how to use the Accessibility functions and descriptions on their functions.

 $\slash\hspace{-0.4em} \slash\hspace{-0.4em}$  This function may not be supported depending on the model or geographical area.

### Running the Accessibility Shortcuts menu

You can turn on or turn off the accessibility functions such as Voice Guide, Caption, Magnification, Sign Language Zoom, Sign Language Guide, Picture Off, High Contrast, Zoom Menu and Text, Grayscale, Color Inversion, Slow Button Repeat, and you can move to the Learn Remote, Learn Menu Screen, Multi-output Audio and Accessibility Settings pages.

- The menu name may differ depending on the model.
- Samsung Smart Remote

On the Samsung Smart Remote, there are 2 thin horizontal rocker buttons next to each other located slightly below the middle of the remote. The one on the left is the volume button. Press and hold the volume button to open the Accessibility Shortcuts menu.

Even if the **Voice Guide** is set to **Off** or muted, when you press and hold the volume button, the voice guide for **Accessibility Shortcuts** is enabled.

### Running the Accessibility menu functions using the General menu

You can also go to the Accessibility menu from the Product settings menu. This provides more options, for example, to change the speed of Voice Guide.

The Product will not verbalize this menu unless Voice Guide is already turned on.

- 1. Press the 6 button.
- 2. Press the left directional button to navigate to ≡ (left directional button), and then press the down directional button to navigate to ⊗ Settings.
- 3. Press the Select button, and press All Settings to open the menu. Press Select to load the Product's Set menu.
- 4. Press the down directional button to reach **General & Privacy**, and then press the Select button to open this menu.

- 5. Place the focus on Accessibility, and press the Select button to open the menu.
- 6. The menu will appear with Voice Guide Settings as the first selection. Highlight Voice Guide Settings, and then press the Select button.
- 7. A menu appears with the options to change Voice Guide, Volume, Speed, Pitch, and MICRO LED Background Volume.
- 8. Select the menu using the directional buttons, and then press the Select button.
  - The menus are activated when **Voice Guide** is on.

### Running the Accessibility menu functions using Bixby

- Bixby may not be supported depending on the model or geographical area.

To use Bixby, the Product must be set up and tuned and must be connected to the network. You can connect the Product to the network during the initial setup or do it later through the settings menu.

There are many commands you can say to control the Product. These can be used together with **Voice Guide** to give you voice input and voice output. You can use the Samsung Smart Remote but the Product must be connected to the network.

To speak a command, press and hold the U button (located near the top right of the Samsung Smart Remote, directly right the button) and say the command, and then release the U button. The Product will confirm the command.

#### For example you can:

- Turn Voice Guide on
  - Press the button on the Samsung Smart Remote, and then say "Voice Guide on."
- Turn Audio (Video) Description on
  - Press the button on the Samsung Smart Remote, and then say "Video Description on" or "Audio Description on."
- Turn High Contrast on
  - Press the Dutton on the Samsung Smart Remote, and then say "High Contrast on."

# Learning about the Accessibility menu functions

### • Voice Guide Settings

Provides voice guides to make it easier for the visually impaired to use the Product. Voice guide supports basic operations such as changing channels and adjusting the volume, provides voice descriptions about the current broadcast and the following broadcast, and offers guidance on setting up Scheduled Viewing events. The feature also provides voice descriptions on Internet, Search, and other smart services.

Move to Voice Guide and press the Select button to enable/disable the feature.

## Caption Settings

You can view the caption in programs that provide broadcast captions.

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

## - Caption Mode

You can select a desired caption mode from the list.

# - Digital Caption Options

You can set the caption display details.

The **Position** function is available only in the programs that provide captions. Your Product supports the caption from the broadcaster. Using this function, the caption can be positioned on a desired location. It can be used by the hearing impaired for convenience.

## Sign Language Zoom Settings

You can zoom in the sign language screen when the program you are watching provides it. Set Sign Language Zoom to On and then adjust the window's position and aspect ratio under Edit Sign Language Zoom.

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

# • Sign Language Guide Settings

Provides a description of menu items with sign language.

### Learn Remote

Learn the names and functions of the buttons on remote control. On this screen, pressing the power button (top left button) will turn off the Product, but when any other button is pressed the Product will say the button name and briefly tell what that button does. This teaching mode helps you to learn the location and operation of the buttons on the remote without affecting normal Product operation. Press the button twice to exit Learn Remote.

#### Learn Menu Screen

Learn the menus on the Product screen. Once enabled, your Product will tell you the information and features of the menus you select.

### Picture Off

Turn off the Product screen and provide only sound to reduce overall power consumption. When you press a button on the remote control other than Volume and Power while the screen is off, the Product screen turns back on.

### Magnification

Enlarge the screen to make the picture or text bigger. You can adjust the zoom level or move the zoom area by following the displayed instructions.

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

## • Multi-output Audio

You can turn on both the Product speaker and Bluetooth headphone designed for the hearing impaired at the same time. The hearing impaired can then set the volume of their Bluetooth headphone higher than the volume of the Product speaker without affecting the volume of the Product speaker, allowing both the hearing impaired and their families to listen to the Product at comfortable sound levels.

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

### High Contrast

To display all menus with an opaque black background and a white font, providing maximum contrast.

If High Contrast is on, some Accessibility menus are not available.

# Zoom Menu and Text

You can enlarge important elements on the menu such as the names of programs.

# • Grayscale

You can change the color of the Product screen to black and white to sharpen blurred edges caused by colors.

- If Grayscale is on, some Accessibility menus are not available.
- This function may not be supported depending on the model or geographical area.

#### Color Inversion

You can invert the colors of the text and background displayed on the Product screen to make it easier to read the text.

- If Color Inversion is on, some Accessibility menus are not available.
- This function may not be supported depending on the model or geographical area.

# • Remote Button Repeat Settings

You can configure the operation speed of the remote control buttons so that they slow down when you continually press and hold them.

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

# Using the Product with Voice Guide on

Turn on Voice Guide that describes the menu options aloud to aid the visually impaired.

# Changing channel

There are 3 ways to change the channel. Every time you change channels, the new channel details will be announced. The ways to change the channel are below.

#### Channel List

Press and hold the  $^{/}$  (Channel) button to open the Channel List. Use the up or down directional button to move to a channel and press the Select button.

### • ^/∨(Channel) button

Of the 2 buttons that protrude from the center of the Samsung Smart Remote, the right one is the  $^{\prime}$  (Channel) button. Push up or pull down the  $^{\prime}$  (Channel) button to change the channel.

#### Number button

Use the button on the Samsung Smart Remote to open the virtual numeric pad, enter a number, and then select Done.

# Using on-screen number entry via the Samsung Smart Remote

Use the virtual numeric pad to enter numbers (e.g., to enter a channel number or to enter a PIN).

Press the button on the Samsung Smart Remote and the virtual numeric pad with 2 rows appears on screen. Voice Guide speaks "virtual numeric pad, 6" which indicates that the number strip is on screen and the focus is on the number 6. This strip has the following buttons:

- In the top row, a list of Most Watched Channel is shown.
- Press the button: On the bottom row: From the far left: 1, 2, 3, 4, 5, 6, 7, 8, 9, 0, -, Delete
- The options that you can select in the virtual numeric pad may vary depending on the viewing mode.

Use the left and right directional buttons to move along the row, and then press the Select button to choose the numeric pad. When you have finished selecting all the numbers you need (for example, 123), press the directional button to move to the **Done** option, and then press the Select button to finish.

When entering a channel number, you can enter the number, and then select the **Done** option on the top row or you can enter the channel number and wait. After a short while, the channel will change and the virtual numeric pad will disappear from the screen.

# Changing volume

Use the  $\pm$ /- (Volume) button on the left to change the volume. Every time you change the volume, the new volume level will be announced.

• Samsung Smart Remote

Of the 2 buttons that protrude from the center of the Samsung Smart Remote, the left one is the  $\pm$ / $\pm$  (Volume) button. Push up or pull down the  $\pm$ / $\pm$  (Volume) button to change the volume.

# Using program information

When watching Product, press the Select button to view program information which then appears at the top of the screen. Voice Guide will say program subtitles or audio descriptions if they are available. To view more detailed program information, press and hold the Select button. Voice Guide will say more details such as a synopsis of the program.

Press the left or right directional button to see what you can watch next on the same channel. Press the up or down directional button to move to other channels and see which programs are currently being broadcast on them.

Press to go back or close the program details.

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

# Using the guide

See an overview of each channel's program lineup.

When you want to know the program information for each channel while watching a contents, press the ^/~ (Channel) button on the Samsung Smart Remote. Use the directional buttons to view the program information.

You can see the daily program schedules for each channel and program information in the **Guide**. You can select programs to schedule for viewing.

You can also open the **Guide** using Bixby. Press and hold the **O** button on your Samsung Smart Remote, and then say "Guide."

- This function may not be supported depending on the model or geographical area.
- The information in the **Guide** is for digital channels only.
- If the Clock is not set, the Guide is not provided. Set the Clock first. (♠ > ≡ (left directional button) > ❷ Settings > All Settings > General & Privacy > System Manager > Time > Clock) (Try Now)

If you need to set the clock again, follow the steps below.

- 1. Press the **a** button and press the left directional button on the remote control.
- 2. Press the down directional button to move to the Settings.
- 3. Press the Select button, and press the right directional to move to the All Settings.
- 4. Press the Select button to open the Product's All Settings menu.
- 5. Use the up and down directional buttons to move to the **General & Privacy** menu, and then press the Select button.
- 6. Use the up and down directional buttons to move to the **System Manager** menu, and then press the Select button.
- 7. Select the Time menu, and then press the Select button.
- 8. Select the Clock menu, and then press the Select button.
- 9. Select the Clock Mode menu, press the Select button, and then select Auto or Manual.
  - f you select Manual, you can move to the Date or Time menu below to set the time or date.

When you open the **Guide**, a table grid of channels and programs is displayed. In the top rows, the selected filter type and the time are shown. Each row has a channel name on the left and programs on that channel on the right.

In the **Guide**, use the up and down directional buttons to move between channels and use the left and right directional buttons to move between programs at different times within a channel.

You can also use the button to enter a channel number and go to that channel directly. You can use the button to move to the program currently broadcasting.

When you move the focus to a program, you will hear detailed information about the selected program. When you move the focus to a different channel, you will hear the channel name and number, and the program details. If you move to a different day, you will hear the day announced for the first program you reach on that day. The day is not repeated, so if you are not sure what the day is, you can move forwards and backwards 24 hours and then the day will be announced.

# To view a program on now

In the **Guide**, move to the program currently broadcasting, and then press the Select button to go to live Product on the selected channel and program.

# Other options in the guide

In the **Guide**, move to a broadcast scheduled program, and then press the Select button. A pop-up menu listing the functions below appears.

Use the up and down directional buttons to move within this menu, and then press the Select button to choose an item. Press to close the menu and go back to the Guide.

For the program you are currently watching, press the Select button.

### Schedule Viewing

You can schedule the viewing of a broadcast scheduled program.

## Cancel Scheduled Viewing

You can cancel your scheduled viewings.

### View Details

You can see the detailed information on the selected program. The information may differ with the broadcast signal. If the information is not provided with the program, nothing appears.

Press the Select button on the View Details option. This will open the details pop-up window for that program which will display a synopsis. The details pop-up window contains detailed information and the OK option. After reading the detailed information, press the Select button on the remote control to close the pop-up window.

# Using Schedule Viewing

Configure the Product to show a specific channel or program at a specific time and date.

The  $\bigcirc$  icon appears next to programs that have been configured for a schedule viewing.

To set up a schedule viewing, you must first set the Product's clock (♠ > ≡ (left directional button) > ♦ Settings > All Settings > General & Privacy > System Manager > Time > Clock). (Try Now)

# Setting up a schedule viewing

You can set up a schedule viewing on two screens.

The Guide Screen

On the Guide screen, select a program you would like to view, and then press the Select button. Select Schedule Viewing on the pop-up menu that appears.

• The Program Info Screen

Press the Select button while watching the Product. The Program Info window appears. Select a broadcast scheduled program by using the left or right directional buttons, and then press the Select button. You can schedule a reminder to watch the program by selecting Schedule Viewing.

# Cancelling a scheduled viewing

You have 2 ways to cancel a scheduled viewing.

- Cancelling a scheduled viewing from the Guide
  - 1. Press the ^/∨ (channel) button to access the Guide.
  - 2. Move to to the program to cancel the viewing schedule, and press the Select button.
  - 3. Move to Cancel Scheduled Viewing, and then press the Select button.
  - 4. When a pop-up message asking you to cancel the selected scheduled viewing appears, select **Yes**. The scheduled viewing is canceled and the **Guide** screen appears.
- Cancelling a scheduled viewing from Schedule Manager.
  - 1. On the Samsung Smart Remote, press the 🗓 button.
  - 2. Use the directional buttons to move to the control pad.
  - 3. Press the Select button to open Schedule Manager.
  - 4. Press the up directional button to move to the Schedules option.
  - 5. Use the down directional button to move to the list of programs scheduled to view.
  - 6. Use the right directional button to move to the **Delete** option, and then press the Select button to delete the selected item.
  - This function may not be supported depending on the model or geographical area.

# Using the Channel List

See how to list the channels available on your Product.

Using Channel List, you can change the channel or check programs on other digital channels while watching Product.

Press and hold the ^/∨ (Channel) button to open the Channel List.

The focus is on the channel you are currently watching, and the name and number of the channel, along with the program title, are displayed.

Use the up and down directional buttons to move within the channel list (or use the  $^{/}$  (Channel) button to go up and down a page at a time). You can also use the b button to enter a channel number and go to that channel directly.

Press the left directional button in the Channel List to move to the Category List. Use the up and down directional buttons to move within this list. Press the Select button to choose a category you want from the Category List. The Category List contains All Channels, Favorites, Samsung TV Plus. Use the up and down directional buttons to move to a channel you want to view, and then press the Select button.

### All Channels

Displays the channels that have been automatically searched.

#### Favorites

Displays Favorites 1 to Favorites 5. Use the up and down directional buttons to move between the lists of favorites. Highlight the one you want, and then press the Select button. The channel list will now show only the channels in this list.

### Samsung TV Plus

While the Product is connected to the network, you can watch popular programs or highlights for each theme through a virtual channel at any time. As with regular channels, the Product provides the daily program schedules for Samsung TV Plus.

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

# **Using Smart Hub**

Learn how to use Smart Hub to access apps, games, movies, and more.

### **Smart Hub**

Use a variety of Smart Hub content offered by your Samsung Product.

- Some Smart Hub services are for pay services.
- To use smart functions, you should connect to a network, agree to the terms and conditions, and log in with your Samsung account.
- 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.

Press the button. You are redirected to the Home Screen of the content you are currently using. Press the left directional button, and try moving the focus to other items.

Use a variety of Smart Hub content, as follows: Privacy Choices, Samsung Account, Search, Art, Game, Media, Menu.

Supported Smart Hub content may vary depending on the model and geographical area.

# Using the Smart Hub Home Screen

On the leftmost part of the Smart Hub Home Screen is the static menu listed. You can quickly and easily use the listed menu items to access the main Product settings or external devices, search, and apps.

• 
 Privacy Choices

From your Product, easily manage the privacy policy regarding services related to Smart Hub and verify how personal information is protected.

- 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 ⇒ ≡ (left directional button) > ⊗ Settings > All Settings > General & Privacy > Terms & Privacy. (Try Now)
- Samsung Account

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

For more information, refer to "Using a Samsung Account."

# • Q Search

Search for channels, programs, movies, and apps offered by Smart Hub.

- To use the Search service, make sure the Product is connected to a network.
- This function may not be supported depending on the model or geographical area.

### Art

When you are not watching Product, you can use the Art mode function to edit image content, such as artworks, photos, or to display the content.

For more information, refer to "Using Art Mode."

### Game

Play games from the Product screen by connecting a Controller to the Product. Configure settings to optimize the Controller and audio device for playing games.

- This function may not be supported depending on the model or geographical area.
- For more information, refer to 'Using Samsung Gaming Hub.'

### Media

View a variety of contents. Install various apps offered by Smart Hub, such as video, music and sports apps, and use the apps from the Product.

For more information, refer to "About the Media Home Screen."

## ■ Menu

Manage external devices connected to the Product, and configure settings for various functions available on the Product.

For more information, refer to "About the Menu Home Screen."

# Launching the e-Manual

Open the user manual embedded in your Product.

You can view the embedded e-Manual containing information about your Product's key features.

- Alternatively, you can download a copy of the e-Manual from Samsung's website (https://www.samsung.com).
- Words in blue (e.g., Internet) indicate a menu item.

The e-Manual's Home Screen contains 1 row of menu icons. Use the left and right directional buttons to move within a row. Press the Select button to open the section you want to read.

You can use the directional buttons on the remote control to use the functions on the top such as **Search**, **Sitemap**, and **Index**.

The e-Manual contains a section called "Learn Remote" in "Accessibility Guidance". This is particularly useful for people who cannot easily see the buttons on the control or who are not clear what each button does. When you are viewing this section of the e-Manual, pressing the buttons on the remote control will not affect the Product.

# **Using Bixby**

Set Voice Assistant to Bixby. A guide to using Bixby to control your Product.

To use Bixby, your Product must be connected to the network and you must use the microphone on your Samsung Smart Remote.

To use Bixby, press and hold the **(** button on the Samsung Smart Remote, say a command into the microphone on the remote, and then release the button to run Bixby.

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

- The supported language may differ depending on the geographical area.

# **Running Bixby**

Press and hold the button on the Samsung Smart Remote. Bixby is activated in the listening mode, the Bixby icon appears at the bottom of the Product screen. Say a command, and then release the button. The Product provides feedback on how it understands the command, and then performs the commanded task.

- If the Product does not understand the command, try again with more precise pronunciation.
- This function may not be supported depending on the model or geographical area.
- You can find a detailed description of the voice commands at **Explore Bixby**. 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.