

SAMSUNG

LED TV

Installation manual



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

www.samsung.com

Model

Serial No.

Figures and illustrations in this User Manual are provided for reference only and may differ from actual product appearance. Product design and specifications may be changed without notice.

Introduction

This TV B2B (Business to Business) model is designed for hotels or the other hospitality businesses, supports a variety of special functions, and lets you limit some user (guest) controls.

Operational Modes

This TV has two modes: Interactive and Stand-alone mode.

- **Interactive mode:** In this mode, the TV communicates with and is fully or partially controlled by a connected Set Back Box (SBB) or Set Top Box (STB) provided by a hospitality SI (System Integration) vendor. When the TV is initially plugged in, it sends a command that attempts to identify the SSB or STB connected to it. If the TV identifies the SBB or STB and the SBB or STB identifies the TV, the TV gives full control to the SBB or STB.
- **Stand-alone mode:** In this mode, this TV works alone without an external SBB or the STB.

The TV has a Hotel (Hospitality) Menu that lets you easily set its various hospitality functions. Please see pages 16 to 22.

The Menu also lets you activate or de-activate some TV and hospitality functions so you can create your optimal hospitality configuration.

Still image warning

Avoid displaying still images (such as jpeg picture files) or still image elements (such as TV channel logos, panorama or 4:3 format images, stock or news bars or crawls) on the screen. Displaying still pictures continually can cause uneven screen wear, which will affect image quality. To reduce the chance that this effect will occur, please follow the recommendations below:

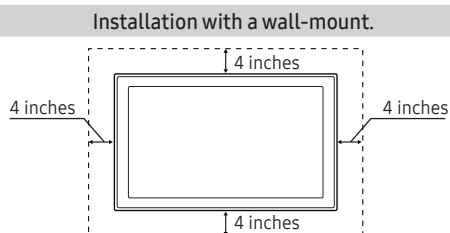
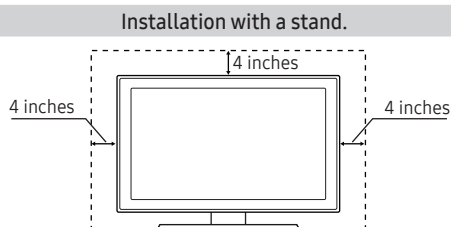
- Avoid displaying the same TV channel for long periods.
- Always try to display a full screen image.
- Reduce brightness and contrast to help prevent the occurrence of after-images.
- Use all TV features designed to reduce image retention and screen burn-in. Refer to the proper user manual section for details.

Ensuring Proper Ventilation

When you install the TV, maintain the distances shown below between the TV and other objects (walls, cabinet sides, etc.) to ensure proper ventilation.

Failing to do so may result in a fire or problems with the TV caused by an increase in its internal temperature.

- 🔧 When using a stand or wall-mount, use parts provided by Samsung Electronics only.
 - If you use parts provided by another manufacturer, it may cause a problem with the product or cause the product to fall, leading to serious injury.



Additional Information

- 🔧 The appearance of the TV and its accessories may differ from the illustrations in this manual, depending on the TV.
- 🔧 Be careful when you touch the TV if it is on or has been on for a period of time. Some parts can be hot.

Contents

- Accessories..... 4
- Using the TV's Controller..... 5
- The Connection Panel..... 6
- Connecting to the Network..... 8
- Connecting the TV to an SBB or STB..... 10
- Connecting a Pillow Speaker..... 12
- Connecting the RJP (Remote Jack Pack)..... 14
- Setting the Hotel Option Data..... 16
- Installing the Wall Mount..... 39
- Anti-theft Kensington Lock..... 41
- Specifications..... 42
- Display Resolution..... 43
- Dimensions..... 44

Symbols Used in this Manual

TOOLS 



Indicates that you can press the TOOLS button on the remote control to use this function.



NOTE



One-Touch Button

Accessories

- Please make sure the following items are included with your LED TV. If any items are missing, contact your dealer.
- The items' color and shape may vary, depending on the model.

List of Parts



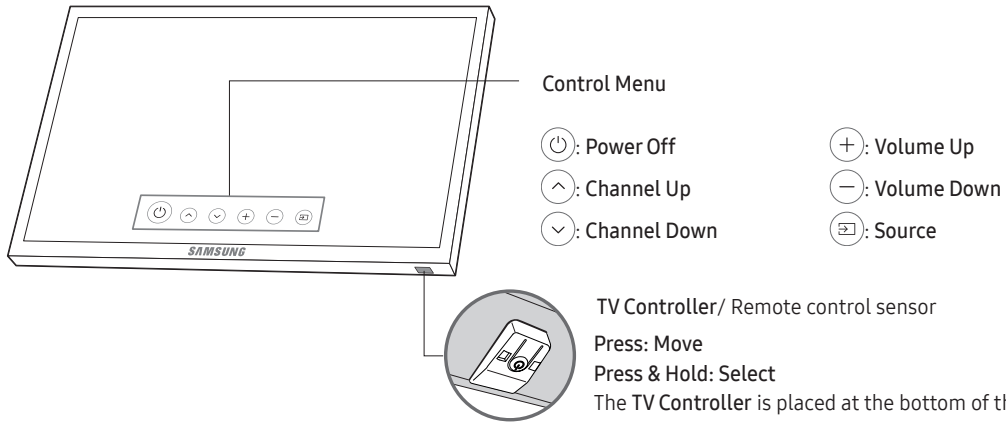
Power Cord



Safety Guide / Quick Setup Guide / Regulatory Guide
(Not available in some locations)

Using the TV's Controller

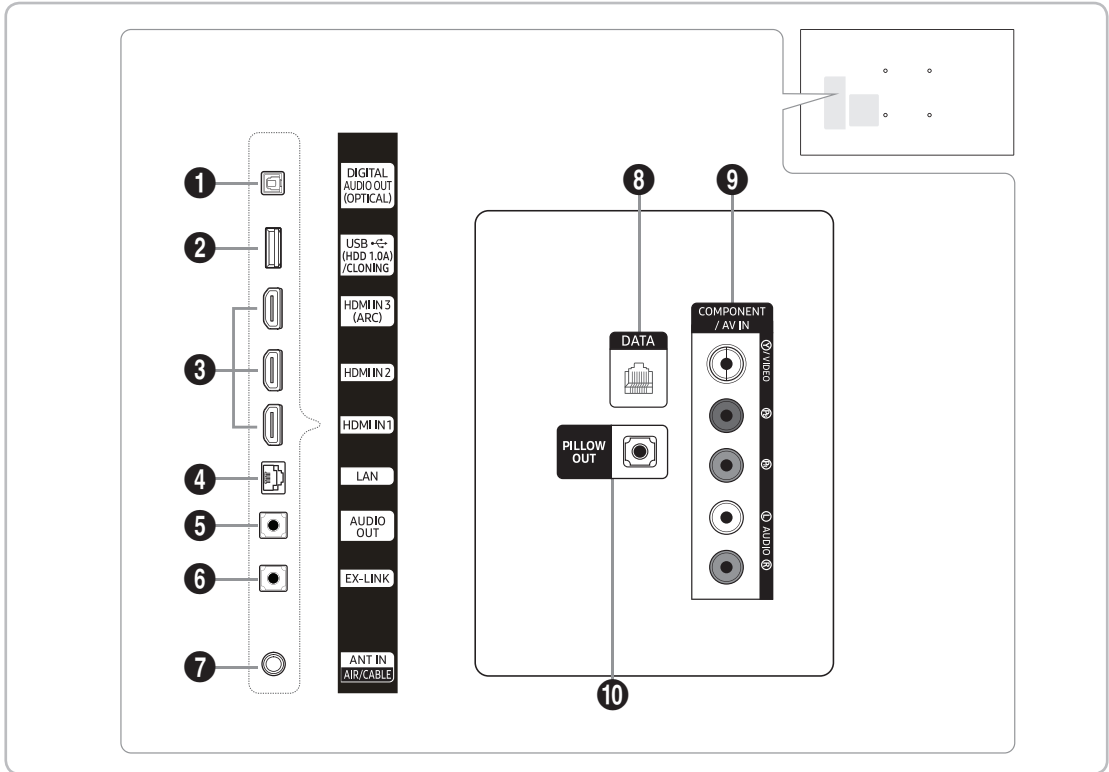
- The color and shape of the TV Controller may vary depending on the model.
- The TV's Controller, a small joy stick like button on the bottom right side of the TV, lets you control the TV without the remote control.



Standby mode

Your TV enters Standby mode when you turn it off, and continues to consume a small amount of electric power. To be safe and to decrease power consumption, do not leave your TV in standby mode for long periods of time (when you are away on vacation, for example). It is best to unplug the power cord.

The Connection Panel



- ✎ Whenever you connect an external device to your TV, make sure that power on the TV and the device is turned off.
- ✎ When connecting an external device, match the color of the connection terminal to the cable.

1 DIGITAL AUDIO OUT (OPTICAL)

Connects to a Digital Audio component.

2 USB (HDD 1.0A)/CLONING

- Connector for software upgrades and Media Play, etc.
- Service connection.

3 HDMI IN 1, 2, 3 (ARC)

Connects to the HDMI jack of a device with an HDMI output.

- ✎ No separate sound connection is needed for an HDMI to HDMI connection. HDMI connections carry both audio and video.

✎ It is recommended that the external device of the HDMI 1.3 or 1.4 version will be used with this TV. If you meet the compatible problem like no sound or the abnormal screen or etc with the device of the HDMI 1.2 version, contact to the Samsung customer care center. Refer to page 46 for the information of the Samsung customer care center.

4 LAN

Connect to a wired LAN using CAT 7 cable.

5 AUDIO OUT

Connects to the audio input jacks on an Amplifier/Home Theater.

6 EX-LINK

Connect this jack to the jack on the optional RJP (Remote Jack Pack). This will allow you to connect external devices (Camcorder, PC, DVD players etc.) easily.

7 ANT IN (AIR/CABLE)

- To view television channels correctly, the TV must receive a signal from one of the following sources:
- An outdoor antenna / A cable television system / A satellite receiver

8 DATA

- Used to support data communication between the TV and the SBB or STB.
- Connects using RJ-12 TV type plugs.

9 COMPONENT / AV IN

- Use to connect to Component video / audio devices such as DVD players and AV (Composite) devices such as VCRs.
- Connect audio cables to "R-AUDIO-L" on your TV and the other ends to corresponding audio out jacks on A/V or Component devices.
- The COMPONENT jack is also used as the VIDEO 1 jack.
- Connect component video cables (not supplied) to the component jacks ("PR", "PB", "Y") on the rear of your TV and the other ends to corresponding component video out jacks on a DVD player. Match the colors on the jacks and cables.
- If you want to connect both a Set-Top Box and a DVD player, you should connect the Set-Top Box to the DVD and connect the DVD to the component jacks ("PR", "PB", "Y") on your TV.
- The PR, PB and Y jacks on your component devices (DVD) are sometimes labeled Y, B-Y and R-Y or Y, Cb and Cr.
- For AV devices, connect RCA audio cables (not supplied) to "R - AUDIO - L" on the rear of the TV set and the other ends to corresponding audio out jacks on an external device.
- When you are connecting a composite (AV) device to AV IN [Y/Video], connect the video cable (Yellow) to the AV IN [Y/VIDEO] jack (Green/Yellow).

10 PILLOW OUT

- Connect the pillow speaker. Refer to page 12 for more information.

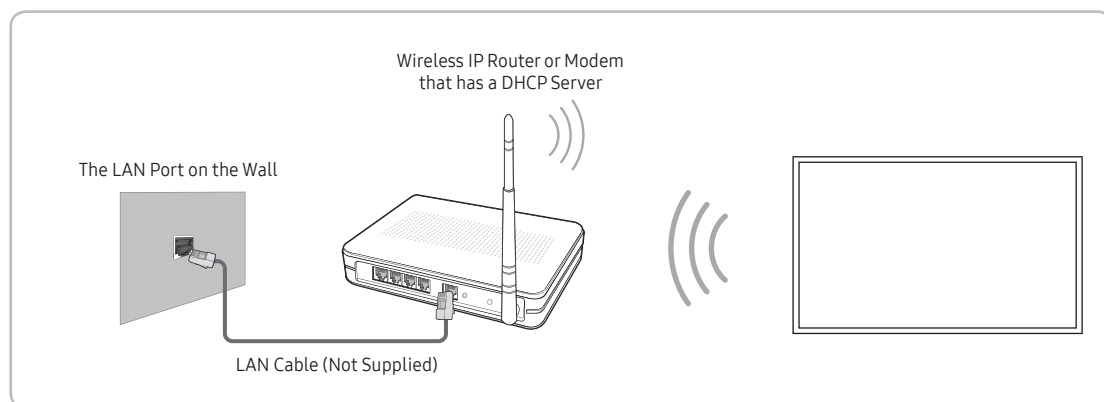
Connecting to the Network

You can set up your TV so that it can access the SMART TV applications through your local area network (LAN) using a wired or wireless connection.

- After you have “physically” connected your TV to your network, you must configure the network connection to complete the process. You can configure the connection after the Initial Setup process, through the TV’s menu.

Network Connection - Wireless

Connect the TV to the Internet using a standard wireless router or modem.



- This Smart TV supports the IEEE 802.11a/b/g/n communication protocols. Samsung recommends using IEEE 802.11n. Otherwise, when you play video over a network connection, the video may not play smoothly.
- To use a wireless network, the TV must be connected to a wireless router or modem. If the wireless router supports DHCP, the TV can use a DHCP or static IP address to connect to the wireless network.
- Select a channel that is not currently in use for the wireless router. If the channel set for the wireless router is currently being used by another device, the result is usually interference and/or a communications failure.
- Most wireless networks have an optional security system. To enable a wireless network's security system, you need to create a security key using characters and numbers, and then enter that key into the router through its menu. You then must enter this security key into any other devices you want to connect to the wireless network.

Network Security Protocols

The TV only supports the following wireless network security protocols:

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

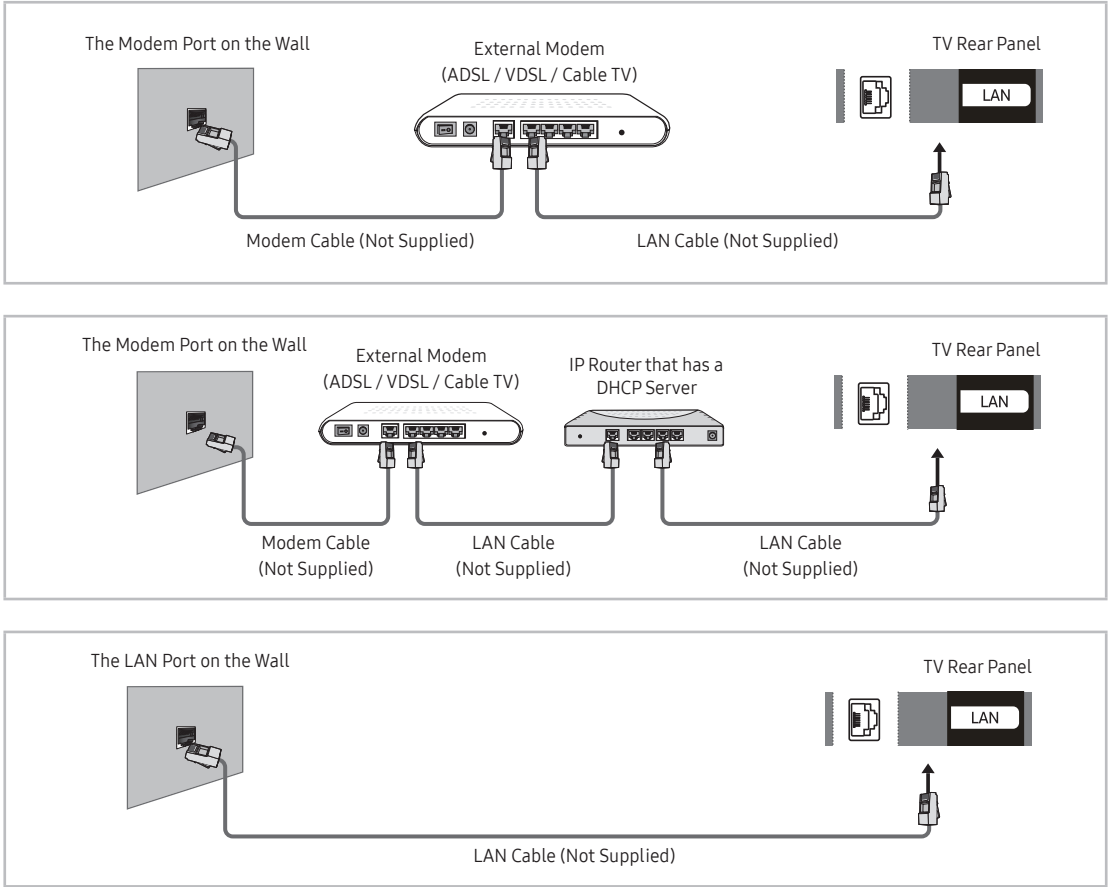
In compliance with the newest Wi-Fi certification specifications, Samsung TVs do not support WEP or TKIP security encryption in networks running in the 802.11n mode.

If the wireless router supports WPS (Wi-Fi Protected Setup), you can connect the TV to your network using PBC (Push Button Configuration) or a PIN (Personal Identification Number). WPS automatically configures the SSID and WPA key settings.

Your Smart TV cannot connect to uncertified wireless routers.

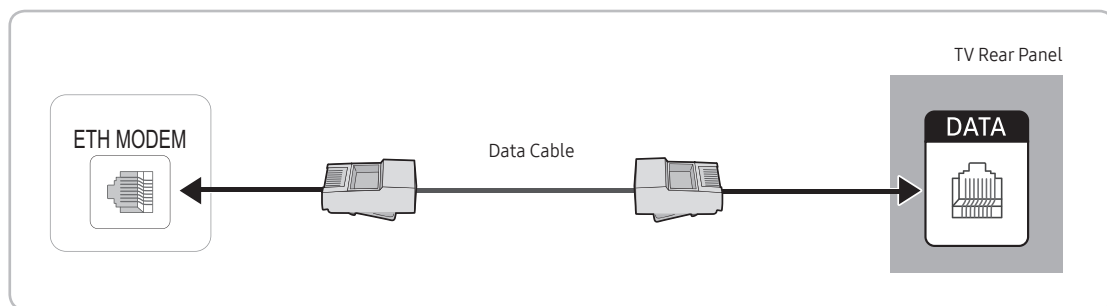
Network Connection - Wired

There are three main ways to connect your TV to your network using cable, depending on your network setup. They are illustrated below:



- 🔧 The TV does not support network speeds less than or equal to 10Mbps.
- 🔧 Use Cat 7 cable for the connection.

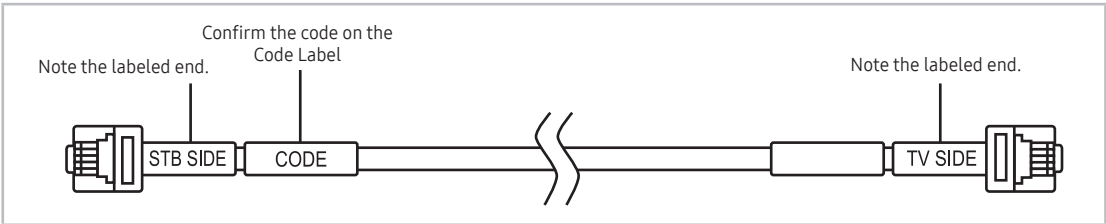
Connecting the TV to an SBB or STB



1. Connect the DATA jack of the TV to the ETH MODEM jack of the STB (SBB) with the Data cable.
 - 🔧 The "ETH MODEM" jack name that you connect the Data Cable to may differ depending on the SBB or STB type.

List of Hospitality SI Vendors and Compatible Data Cables Supplied with the TV

- Confirm you are using the correct data cable for your SI vendor. Refer to the code label on the data cables.
- Contact your nearest dealer or your SI Vendor to buy the data cable not included in the TV.

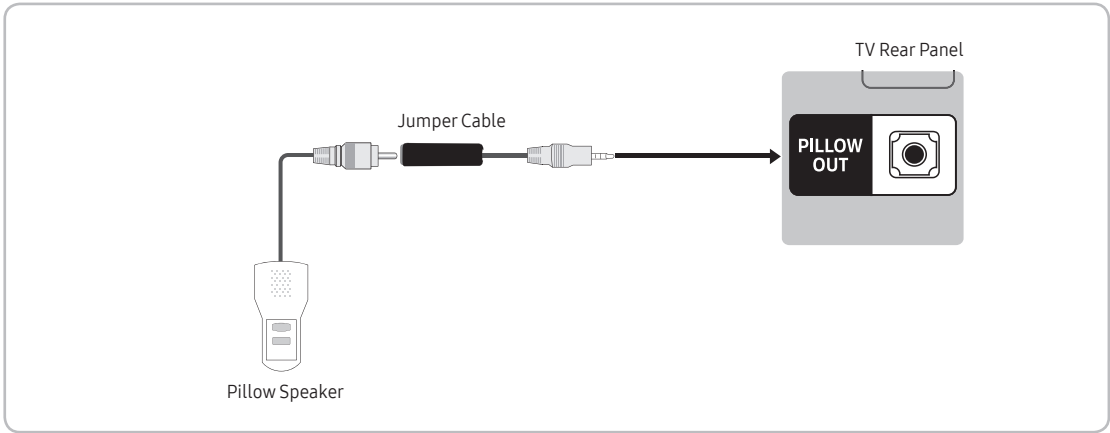


SI Vendor	Cable code	Pin assign	Remark
Samsung OCC Enseo Guest-Tek	BN39-00865B	<div><div><CON A></div><div>6: IR 5: GND 4: Tx 3: NC 2: Rx 1: NC</div></div> <div><div>CON A</div><div>CON B</div><div>6 • 1 5 • 2 2 • 5 4 • 6</div></div> <div><div><CON B></div><div>1: IR 2: GND 3: NC 4: NC 5: Tx 6: Rx</div></div>	
NXTV	BN39-01011B	<div><div><CON A></div><div>6: IR 5: GND 4: Tx 3: NC 2: Rx 1: NC</div></div> <div><div>CON A</div><div>CON B</div><div>6 • 6 5 • 5 2 • 2 4 • 4</div></div> <div><div><CON B></div><div>1: NC 2: Tx 3: NC 4: Rx 5: GND 6: IR</div></div>	
nStreams	BN39-01110A	<div><div><CON A></div><div>6: IR 5: GND 4: Tx 3: NC 2: Rx 1: NC</div></div> <div><div>CON A</div><div>CON B</div><div>6 • 3 5 • 4 2 • 1 4 • 5</div></div> <div><div><CON B></div><div>1: Tx 2: NC 3: IR 4: GND 5: Rx 6: NC 7: NC 8: NC</div></div>	
Sonifi	BN39-01011E	<div><div><CON A></div><div>6: IR 5: GND 4: Tx 3: NC 2: Rx 1: CLK</div></div> <div><div>CON A</div><div>CON B</div><div>6 • 1 5 • 2 4 • 3 3 • 4 2 • 5 1 • 6</div></div> <div><div><CON B></div><div>1: IR 2: GND 3: Rx 4: NC 5: Tx 6: CLK</div></div>	

🔗 Operation Specification of Data Cable(RJ12): TTL

Connecting a Pillow Speaker

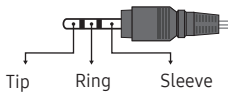
You can connect a pillow speaker to the TV in the hospital using a jumper cable. The speaker functions as a remote control and speaker.



1. Connect the pillow speaker jumper cable (cable sold separately) from the television's PILLOW SPEAKER Port to the pillow speaker jack on the wall behind the television.

Pillow Speaker Jack Specifications

- Output jack: RCA type
- Input jumper pin: 1/8" 3-conductor stereo phone pin.
- Signal specifications: Tip-Audio, Ring-Data/Channel change, Sleeve-Common



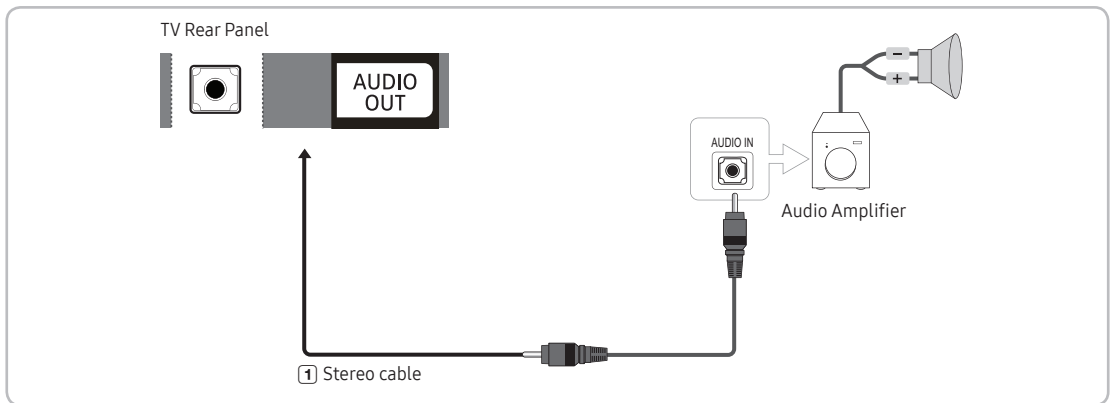
How to Use the Pillow Speaker

- 🔧 To use Pillow Speaker, be sure to set the Pillow Speaker Mode item to on in the Hospital mode setup menu.
- Analog type speaker: The pillow speaker has one key.
 - Power On: press the key when the TV is in standby mode.
 - Channel Up: press the key when the speaker is on.
 - Power Off: press and hold the key for more than 3 seconds when the speaker is on.
 - An Analog type speaker always works regardless of the Pillow Speaker Type value set in the Hospital mode setup menu.
- Digital type speaker: The TV supports the Samsung, Philips, or Zenith code.
 - This speaker is only compatible with a specified IR code. You can change the code in the Hospital mode setup menu.
 - The TV gives priority to the Samsung remote control over the pillow speaker's wired remote control.
 - Option: Channel Menu Display.

Pillow Sound Control

Speaker Selection Menu	TV Speaker	Pillow Speaker
TV Speaker	Sound	Sound
External Speaker	No Sound	Sound

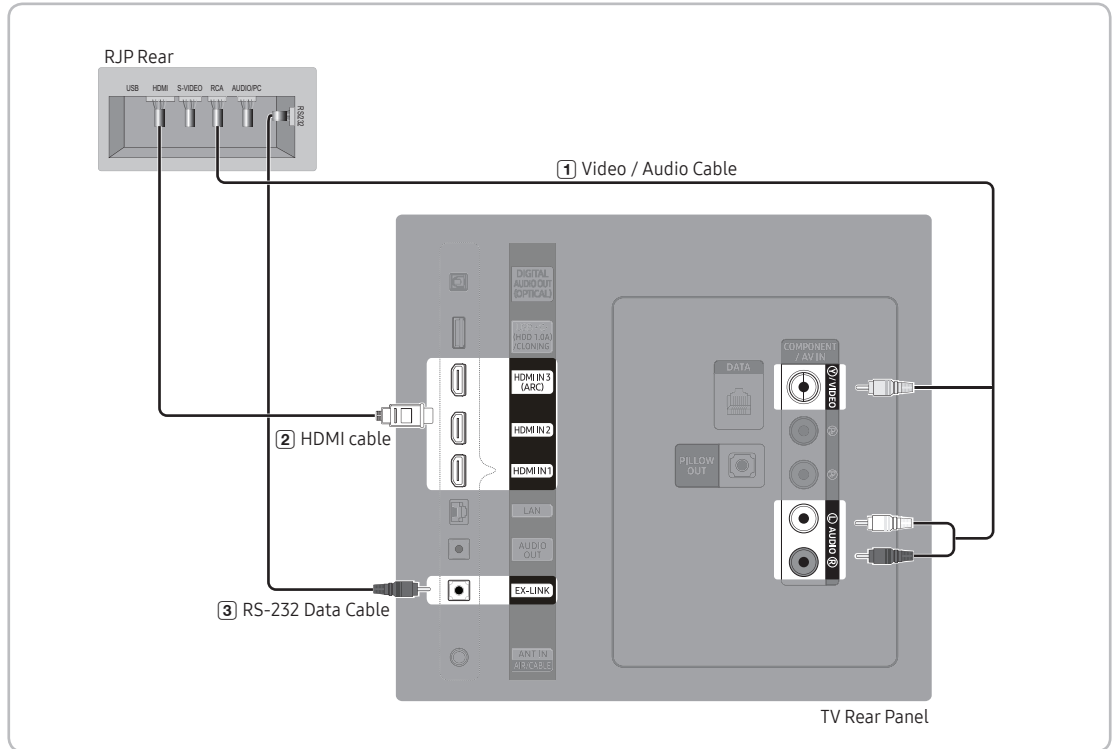
Connecting the Audio Output to an Audio Amplifier



1. Connect the AUDIO OUT port of the TV to the Audio In port of an audio amplifier with a stereo cable.

Connecting the RJP (Remote Jack Pack)

Connect the input jacks on the TV to the RJP. The RJP lets guests connect audio and video sources to the TV.



1. Connect the COMPONENT [VIDEO] / [R-AUDIO-L] port of the TV to the RCA port of the RJP.
2. Connect the [HDMI] port of the TV to the HDMI port of the RJP.
3. Connect the EX-LINK port of the TV to the RS/232 port of the RJP.

🔑 This Samsung TV is compatible with the TeleAdapt TA-7610 RJP only.

- **RJP (Remote Jack Pack):** The RJP is a hardware module that has various Audio and Video inputs (A/V Video, A/V Audio, PC and HDMI) and corresponding outputs. The corresponding outputs are connected from the RJP to the TV. The RJP communicates with the TV via RS232. The RJP communicates with the TV by sending messages regarding Active/Inactive sources.
 - A group of hotel menu items let you assign numbered priorities to the jacks of the RJP. 1 is the highest priority and 3 is the lowest. When a guest connects external sources to the RJP jacks, the TV will automatically switch between sources based on the priority you have assigned them in the Menu. For example, lets say AV is set to 1 and HDMI to 2. If a guest has attached a device to the HDMI jack, and then plugs a device into the AV jack, the TV automatically switches to the device plugged into the AV jack (the jack with the higher priority). Note that a guest can also switch between devices manually by pushing a button on the RJP.
- To reset the RJP to its factory default state, press the AV and HDMI buttons simultaneously for 10 seconds. When all button LEDs blink 5 times, the RJP reset is complete.
- The RJP will automatically turn off any LEDs after 5 minutes to avoid unnecessary light pollution in the hotel room. The LEDs that were turned off will turn on again if the guest touches any of the buttons and the 5 minute timer will restart. If the guest then touches another source button, the TV will change to the selected source and the corresponding LED will be lit.
- After an RJP Reset or a TV Power OFF/ON, it takes approximately 10 seconds to establish communications between the TV and the RJP.
- The following table shows the approximate time in seconds it takes to switch from the TV to an input source, based on assigned or default priorities.

🔑 Scenario 1: When no inputs are connected.

Source	To Connect
AV	2 Sec
HDMI	3.9 Sec

🔑 Scenario 2: When two or more inputs are connected to the RJP and one of the input sources is disconnected and then reconnected.

Source	Disconnect	To Connect	Total
AV	4.5 Sec	2 Sec	6.5 Sec
HDMI	3.9 Sec	3.9 Sec	7.8 Sec

🔑 An example: If the RJP has all its live sources (AV, PC, and HDMI) connected, AV has been assigned the highest priority, the RJP is in HDMI mode, and a guest removes and reconnects the AV source, the minimum time required to switch to the AV source is 6.5 seconds.

- To play audio devices (Ipods, MP3 devices, etc.) through the RJP, you must turn Music Mode AV in the menu on.
- Music mode in the TA-7610 RJP is supported by the AV jack only. HDMI Music mode is available for the Guestlink RJP only.

Setting the Hotel Option Data

To let you control how the TV functions when in Hotel mode, the TV has two Hotel mode menus, the Stand-alone mode menu and the Interactive mode menu. The menu items that differ between the modes are listed below.


Menu items in the Stand-alone mode only:

- SI Vendor: Smoovie
- REACH Server and its submenus.


Menu items in the Interactive mode only:

- SI Vendor: Samsung and other vendors.

All other items appear in both modes.

To access the menus, press MUTE → 1 → 1 → 9 → Select  on your Samsung remote.



After a menu appears, follow these general directions to navigate and change values:

- Use the directional buttons on the Samsung remote to move from menu item to menu item.
- Press the Select  to select a menu item. The screen displays that menu item only.
- Press the Left or Right arrow button to change a value. The Right arrow button increases numerical values. The Left arrow button decreases numerical values.
- When the screen is displaying one menu item, you can press the Up or Down arrow button to display the next or previous menu item.
- Press the RETURN or MENU button to exit the current menu item and go to a higher menu level or the Main menu.
- To exit a Hotel mode menu, turn off the TV, and then turn it on again. Any changes you made are saved except changes to SI Vendor. For changes to SI Vendor, you must turn the TV off, wait until the Standby light glows steadily, then unplug the TV, wait for the Standby LED to go off, and then plug the TV in again.


Hospitality Mode	Standalone	Security
SI Vendor	OFF	DRM
Power On		System
Channel		Home Menu
Menu OSD		REACH Solution
Clock		H.Browser Solution
Music Mode		HMS
Remote Jack Pack		Virtual Standby
External Source		Room Number ...
Pillow Speaker		
Eco Solution		
Logo/Message		
Cloning		
Network		
System Manager		

Above: The Hotel mode menu

To change menus between the interactive mode and the standalone mode, follow the steps below:


1. Highlight the Hospitality Mode menu item in the top left corner of the menu.
 2. Press the Select  button on the Samsung remote. Only the Hospitality Mode menu item is displayed.
 3. Press the left or right arrow button to change the Hospitality Mode item from Standalone to Interactive or from Interactive to Standalone.
 4. Press the Return or Menu button on the remote. The entire menu re-appears with your selection displayed in the Hospitality Mode field.
-  After you have set the values in one TV, you can clone those values to multiple TVs. See USB Cloning on page 25.

Menu Items


To Enter this menu: Press the MUTE → 1 → 1 → 9 → Select  buttons in order.

To exit from this menu: Power Off (or Power Off and unplug if you have changed SI Vendor), and then turn on again. Any changes you made are saved.

 The menu item does not support depending on the models.

Hotel TV Function		Description
Category	Item	
Hospitality Mode	Hospitality Mode	Select Hospitality Mode. <ul style="list-style-type: none"> Interactive mode: TV works with an SI STB or SBB. Standalone mode: TV works alone, without an SI STB or SBB.
SI Vendor	SI Vendor	<ul style="list-style-type: none"> Interactive mode: Samsung / Telehealth / MTI / Innvue Standalone mode: OFF / SSCP
Power On	Power On Channel	Set the Power On values that will be applied when the TV is turned. <ul style="list-style-type: none"> User Defined: Lets you set Power On Channel and Channel Type manually. See Power On Channel and Channel Type below. Last Saved: If you select this item, when the TV is turned on, it displays the channel it was displaying when it was turned off.
	Power On Channel Num	When the TV is turned on, it switches automatically to this channel.
	Power On Channel Type	<ul style="list-style-type: none"> Select channel band: ATV (analog air band), DTV (digital air band), CATV (analog cable band), CDTV (digital cable band), IPTV (Ip Channels).
	Power On Volume	<ul style="list-style-type: none"> User Defined: Lets you set the Power On Volume manually. See Power On Volume below. Last Saved: When the TV is turned on, it returns to the volume that had been set when the power had been turned off.
	Power On Volume Num	The TV turns on with this Volume Level in Stand Alone Hospitality mode.
	Min Volume	The minimum Volume Level the user can set in Stand Alone Hospitality mode.
	Max Volume	The maximum Volume Level the user in Stand Alone Hospitality mode.
	Power On Source	Select the input source the TV displays when turns on.
Channel	Power On Option	Determines the TV's state when power returns after a power failure or after you have unplugged the TV and then plugged it in again. <ul style="list-style-type: none"> Last Option: Returns to its last Power state. If it was in Stand-by, it returns to Standby. If it was on, it turns on. Power ON: When the power returns, the TV turns on. Standby: When the power returns, the TV enters the Standby mode.
	Channel Editor	The Channel Editor lets you edit the channels stored in the TV's memory. Using Channel Editor you can: <ul style="list-style-type: none"> Change the channel numbers and names, manage genre and language groups and delete channels. Apply the video mute to channels you select. The video mute blanks out the video from a channel and outputs only audio. The Channel Editor also lets you view information about each channel easily, without your having to display each channel directly.
	Channel Bank Editor	Channel Bank Editor edits channels, with 3 different Bank options. Depending on the Bank card, there are specific channels Hotel customers can enjoy.  This function only available when set to Hospitality Mode: Standalone, SI Vendor: Smoovie.
	Channel Bank Service Level	Set the limitation of access to the TV channels that the patient (or the guest) can watch with this item. <ul style="list-style-type: none"> Normal: All the channels available on the TV are accessible to the patient. Bank1/2/3: Only the channels assigned to the selected channel bank in the Channel Bank Editor are accessible to the patient. None: Channels cannot be changed by the patient. (The patient can watch only one channel set when TV is turned on.)

Hotel TV Function		Description
Category	Item	
Channel	Mixed Channel Map	<p>This Feature enables showing/browsing all antenna type (Air/Cable) channels at the same time.</p> <ul style="list-style-type: none"> • ON: When ON, guests can access the complete Channel Map irrespective of the selected antenna type. The Channel list will also populate Air as well Cable type channels. • OFF: When OFF, guest can access the Channel Map corresponding to the selected antenna type [AIR/CABLE or Satellite] only. The Channel list/Editor will only show the selected antenna type channels.
	Dynamic SI	<ul style="list-style-type: none"> • ON: Check the DTV Programme channel number. (the TV channel editor is inaccessible) • OFF: Do not check the DTV Programme channel number. (the DTV channel editor is accessible, but additional channel Programme number update is not supported)
	Channel Auto Store	Gives you direct, immediate access to Auto Program for searching channels.
	MyChannel	Enable or disable the My Channel feature.
	Mute On CC	<ul style="list-style-type: none"> • ON: If the Closed Caption feature is working, TV sound is automatically mute. • OFF: TV sound is outputted regardless the Closed Caption feature.
Menu OSD	Picture Menu Lock	Enable or disable the Picture Menu.
	Menu Display	<ul style="list-style-type: none"> • ON: The Main Menu is displayed. • OFF: The Main Menu is not displayed.
	Channel Menu Display	<ul style="list-style-type: none"> • OFF: Broadcasting submenu is disable for guest. • ON: Broadcasting subMenu is enable for guest.
	Panel Button Lock	<p>Turning the front panel (local key) operations on/off.</p> <ul style="list-style-type: none"> • Unlock: Unlocks all panel keys. • Lock: Locks all panel keys. • OnlyPower: Locks all panel keys except the Power panel key.
Clock	Local Time	<p>Select the way to update the clock data</p> <ul style="list-style-type: none"> • Auto: The year, date, and time are received from the Hospitality Server and applied to the LED segment clock, Time menu, and other functions. When set to Auto, the user cannot manually change the time information using the Time menu. • Manual: The clock is set automatically from the DTV channel or manually by the user when the TV is in stand-alone mode. • Time Channel: The clock is set from the selected channel.
	Timer Type	<p>Enable or disable the alarm function.</p> <ul style="list-style-type: none"> • WakeUp: Enable the alarm function to turn on the device at the specified time. • OnOff: Disable the alarm function and enable on or off timer.
Music Mode	Music Mode AV	<p>Allows music output from an mp3/audio player connected to an AV Input Source on the TV. When on, you can hear sound from the player through the TV whether there is a video signal or not. Also mutes the video so the TV does not display a picture when a guest is playing music. The TV's backlight, however, remains on.</p>
	Music Mode Comp	<p>Allows music output from an mp3/audio player connected to an Component Input Source on the TV. When on, you can hear sound from the player through the TV whether there is a video signal or not. Also mutes the video so the TV does not display a picture when a guest is playing music. The TV's backlight, however, remains on.</p>
	Music Mode Backlight	<p>When set to Off, the TV's backlight is turned off entirely when a guest uses the Music mode. To save energy, set to Off.</p>

Hotel TV Function		Description
Category	Item	
Remote Jack Pack	Priority AV	Lets you set the priority of the 7610 RJP AV jack. You can choose 1, 2, with 1 being the highest and 2 the lowest. The TV automatically displays the source with the higher priority. For example, lets say AV is set to 1 and HDMI is set to 2. If a guest has attached a device to the HDMI jack, and then plugs a device into the AV jack, the TV will automatically switch to the device plugged into the AV jack (the jack with the higher priority). Note that a guest can also switch devices manually by pushing a button on the 7610 RJP.
	Priority HDMI	Lets you set the priority of the 7610 RJP HDMI jack. You can choose 1, 2, with 1 being the highest and 2 the lowest. The TV automatically displays the source with the higher priority. See above for a more detailed explanation.
	HDMI Option	Select which HDMI source of the TV is connected to the RJP jack. (HDMI1/HDMI2/HDMI3)
Remote Jack Pack	HDMI Music Mode	Allows music output from an mp3/audio player connected to an HDMI Input Source. When on, you can hear sound from the player through an HDMI input of the RJP whether there is a video signal or not. (This option is only compatible with the Guest link RJP.)
External Source	USB Pop-up Screen	When USB is connected to the TV: <ul style="list-style-type: none"> • Default: a popup window appears. • Automatic: This enters the USB content menu automatically. • Disable: Neither the popup window nor the menu appears.
	External Source Banner	If set to On, the TV displays the External Source Banner (information) when you change the TV source to another external input, press the Info key, or turn the TV on. <ul style="list-style-type: none"> • ON: The External Source information is displayed on the TV screen. • OFF: The External Source information is not displayed on the TV screen.
	Auto Source	<ul style="list-style-type: none"> • ON: When an external input source is connected to the TV, the TV identifies the input source, and then automatically switches to that input source. • OFF: Auto Source function is Off.
	Anynet+Return Source	Select the return TV source after stopping an Anynet+(HDMI-CEC) connection. (This function is especially useful for the Guestlink RJP.)
Pillow Speaker	Pillow Speaker Mode	Select whether to use the Pillow Speaker function. (To use Pillow Speaker, be sure to set this item to On.) <ul style="list-style-type: none"> • ON: The Pillow Speaker function is used. • OFF: The Pillow Speaker function is not used. (When set to Off, Pillow Speaker does not operate.)
	Pillow Speaker Type	Select the type of Pillow Speaker. You must select the type of Pillow Speaker currently connected for it to operate properly. <ul style="list-style-type: none"> • CZ: the type of Zenith IR Code and 12V Vcc • CP: the type of Philips IR Code and 5V Vcc • CS: the type of Samsung IR Code and 12V Vcc
	Speaker Select	Select the speaker where the TV sound is outputted. <ul style="list-style-type: none"> • Main: The TV sound is outputted in all of the TV speaker and Pillow Speaker. • External: The TV sound is outputted in Pillow Speaker only.
	Pillow Volume	You can control the volume level of Pillow Speaker. <ul style="list-style-type: none"> • High: The volume level of Pillow Speaker is high. • Normal: The volume level of Pillow Speaker is normal. • Low: The volume level of Pillow Speaker is low.
Eco Solution	Power Saving Mode	Adjusts the brightness of the TV to reduce power consumption. <ul style="list-style-type: none"> • OFF: Turns off the energy saving function. • Low: Sets the TV to low energy saving mode. • Medium: Sets the TV to medium energy saving mode. • High: Sets the TV to high energy saving mode.
Logo/Message	Welcome Message	Displays the welcome message for 60 seconds when the TV turns on.
	Edit Welcome Message	Edits the Welcome Message.
	Hospitality Logo	Turns the Hospitality logo feature OFF, BMP, AVI, BOTH. If not OFF, when the TV is turned on, the Logo is displayed, before the signal from the initial source, for the amount of time set in "Logo Display Time".  The DivX codec is not supported.
	Hospitality Logo DL	Downloads the Hospitality logo. Hospitality logo file requirements: <ul style="list-style-type: none"> • Image or video files only. • Max file size: AVI - 50 MB / BMP - 10MB • File can only be named "samsung_image.*", "samsung_video.*"
	Logo Display Time	Hospitality Logo Display Time (3/5/7 seconds).

Hotel TV Function		Description
Category	Item	
Cloning	Clone TV to USB	Clone the current TV options to a USB memory device.
	Clone USB to TV	Clone the saved TV options on a USB memory device to the TV.
	Setting Auto Initialize	If you set Setting Auto Initialize to On, and the TV's power is turned off and on, TV menu items are restored again to their values cloned initially.
Network	Network Setup	<p>If this item is entered into, network setup menu is displayed. The network setup menu is used for setting network like access internet.</p> <p>Soft AP: Using this function, you can connect the TV on your mobile devices. Set the options for connection of Wi-Fi device.</p> <ul style="list-style-type: none"> Soft AP: Turns on or off the Soft AP. When Soft AP is set to On, your mobile devices can find the TV name in Wi-Fi connection list. Security key: Set a security key that you need to enter on other devices so they can connect to the TV. <ul style="list-style-type: none"> Input the generated security key into the device you want to connect. If network does not operate normally, check the security key again. An incorrect security key may cause a malfunction. <p>🔗 Soft AP may not be available if it is not supported by the model.</p> <p>🔗 Maximum number of devices that can be connected: 4 devices.</p> <p>🔗 Bitrate: 10 Mbps/device.</p> <p>🔗 The specifications above are based on our in-house testing. Actual performance may vary depending on your wired/wireless network environment.</p>
	Apps ID Setting	Set SmartHub Model.
	Apps Setting	Set up SmartHub.
	Service Discovery	Can use this feature to enable Service Discovery Features like DLNA.
	ARP Interval	<p>Adjust the ARP (Address Resolution Protocol) Interval value.</p> <ul style="list-style-type: none"> Setting value: 2 / 5 / 10 / 30 / 60 / 120 / 180 sec (default: 60 sec)
System Manager	System Manager	<p>Gives you direct, immediate access to System Manager functions such as Time, Language, View Notifications, Device Name.</p> <p>System Manager allow you to Adjust your TV's system and customise settings for your viewing environment.</p>
Security	Factory Lock	<p>Disable entry to Hotel menu.</p> <ul style="list-style-type: none"> ON: The password is needed before entering factory menu. OFF: disable this feature.
	Password Popup	Enable/disable Password Popup. If this option is set to OFF, the TV will not display the password input popup window when entering the Factory menu. If set to ON, the password input popup window appears.
	Password Input	If this option is enabled, a popup input box appears which asks for an 8-character security password. The admin must enter a password before applying or updating security preferences. After the correct password is entered, options such as Password Setting, Password Reset and Security Mode are available.
	Password Setting	User can change the password.
	Password Reset	Password is reset to "00000000".
	Security Mode	Security Mode provides password protected administrative functionality to enable or disable features of Hospitality TV, such as HDMI, USB and TTX. Use this option to turn security mode on or off. After turning on security mode, options such as "USB," "HDMI" and "TTX Security" are automatically enabled in the security sub-menu. "USB to TV cloning" and "TV Reset" will be disabled in the Hospitality Menu.
	USB	Enable/disable USB access. When disabled, access to USB media is blocked.
DRM	HDMI	Enable/disable HDMI access. If disabled, Anynet, HDMI source, HDMI type External Channels will not be accessible to the user.
	DRM Mode	<p>Configures DRM support.</p> <p>OFF: Turns off DRM support.</p> <p>LYNK DRM: Select to turn on S-LYNK DRM CAS support only.</p> <p>Pro:Idiom: Select to turn on Pro:Idiom CAS support only.</p> <p>LYNK DRM,PI: Select to have the TV support S-LYNK DRM CAS and Pro:Idiom CAS.</p>
	PI AES Data	Displays the current state of Pro:Idiom AES

Hotel TV Function		Description
Category	Item	
System	Self Diagnosis for TV	<p>Enter Self Diagnosis Menu.</p> <ul style="list-style-type: none"> • Start Picture Test: Use this test when you experience a problem with your TV's picture. • Start Sound Test: Use this test when you experience a problem with your TV's sound. • Signal Information: Show digital broadcasting signal information. • Reset Smart Hub: Reset the Smart Hub and Samsung account settings stored on your TV. • Reset: Restore all TV settings, excluding network settings, to the factory defaults.
	Self Diagnosis for HTV	Lets you check the state of Pro:Idiom and its communication with the SI STB or SBB. If you have any problems with the Pro:Idiom encryption channel or the communications with the SI STB or SBB, use this diagnosis function. If "Pro:Idiom DTV Channel Key Loss" appears to have failed and the Pro:Idiom encryption channel has failed to play content, first check the broadcasting systems related to Pro:Idiom encryption. If your broadcasting system does not have a problem, contact Samsung Service. If STB SI Vendor Setting appears to have failed and communication with the SI STB or SBB has failed, first check your SI STB or SBB. If your SI STB or SBB does not have a problem, contact to Samsung Service.
	Software Update	Lets you upgrade the TV SW with a USB memory stick.
	Sound Bar Out	<p>If the Samsung Sound Bar device is connected to this TV, this item lets you to select where the TV sound is outputted when the TV is turned on.</p> <ul style="list-style-type: none"> • ON: When the TV is turned on, the TV sound is automatically outputted in the Sound Bar device only. • OFF: When the TV is turned on, the TV sound is automatically outputted in the TV speaker device only.
	Contact Samsung	Display the web site of related Samsung service center, software version, and Mac address information.
	Standby LED	<p>When the TV is in standby mode, you can configure the settings of external LED.</p> <ul style="list-style-type: none"> • ON: The LED is on. • OFF: The LED is off.
	TV Reset	Returns all settings on the TV to their factory defaults.
Home Menu	Home Menu Display	<p>Activate Home Menu standalone solution for user.</p> <ul style="list-style-type: none"> • ON: Home Menu Enabled. • OFF: Home Menu Disabled. <p>Home Menu feature is standalone hotel solution which provides quick access to various features such as Alarm, Media Play etc and settings such as Picture Size, Language etc.</p>
	Home Menu Editor	Using this feature you can edit and manage TV feature to be used from Home Menu.
	Home Menu Auto Start	<p>This option allows you to set Home Menu as first screen for user.</p> <ul style="list-style-type: none"> • ON: Home menu is shown as first screen. • OFF: Do not show Home menu as first screen.

Hotel TV Function		Description
Category	Item	
REACH Solution	REACH RF Mode	You can turn on or off the REACH RF Mode. When set to On, the TV can operate with the REACH Server (Modulator) through the RF channel (DTV cable).
	REACH IP Mode	You can turn on or off the REACH IP Mode. When set to On, the TV can operate with the REACH IP Server through the IP network.
	Server URL Setting	You can enter the REACH IP Server's address. (Example: http://192.168.1.2:443)
	REACH Channel	This is a DTV Cable Channel PTC Number for receiving REACH Data when the REACH RF Mode is on. The value must be same as the value set on the REACH Server (Modulator).
	Group ID	You can set the TV's Group ID to manage TVs in groups on the REACH Server (Modulator).
	REACH Update Time	You can set the specific time to receive and update REACH Data from the REACH Server (Modulator). (Operates when the AC power cord is plugged in and the power is off.) <ul style="list-style-type: none"> • OFF: You can turn off the REACH Update Time function. • 1hour: 1 hour after the TV's power is off • 2hours: 2 hours after the TV's power is off • 12:00 am: 12:00 am • 2:00 am: 2:00 am everyday • 12:00 pm: 12:00 pm everyday • 2:00 pm: 2:00 pm everyday
	REACH Update Immediate	When set to On, the TV will receive and update REACH Data from the REACH Server (Modulator) right after the power is off. (Operates when the AC power cord is plugged in and the power is off.)
	REACH Config Version	Displays the TV Configuration Data version received from the REACH Server.
H.Browser Solution	H.Browser Mode	You can turn on or off the H.Browser Mode and run the H.Browser Web App.
	URL Launcher Setting	H.Browser Solution settings menu <ul style="list-style-type: none"> • Install Web App: Enter the H.Browser Server URL where Web App and sssp_config.xml files are located. • Uninstall: You can delete the installed Web App. • Timeout Setting: Set the timeout period for connecting to the URL. • Developer Mode: If you used Tizen Studio (SDK) for development, you can connect to the Host PC (which SDK is installed) to use the development tool.
HMS	HMS Mode	You can turn on or off the HMS Mode. When set to On, the TV can operate with the HMS Server through the IP network.
	HMS Server URL Setting	You can enter the HMS Server's address. (Example: http://192.168.1.2:8080)
	HMS Gateway Role	When there is one TV per room, set to 'Master'. When there are more than one TVs per room, set the main TV to 'Master' and the others to 'Slave'.
	HMS HalfTicker Display	Set to On if you want to use the HalfTicker UI. When set to Off, the HalfTicker UI will not be displayed. However, all the hot keys (except for Room Control key) on the HMS remote control will work normally without the HalfTicker UI display.
Virtual Standby	Virtual Standby Mode	When the AC power cord is plugged in and the power is off, this option maintains the TV's important features even after the screen is off. When the TV is in Virtual Standby Mode, it consumes about 9 W to 20 W. – Electricity consumption may vary depending on the environment.
	Reboot Time	After the TV power is off (in Virtual Standby Mode) if there is no input from the user within the set Reboot Time, the TV will reboot and enter Virtual Standby Mode again.
Room Number	Room Number	You can set the room number of the TV's location.

- ☞ Refer to the manual of each solution for details about functions and settings of the solutions such as REACH, HMS, and H.Browser.
- ☞ REACH (Remote Enhanced Active Control for Hospitality) is a professional, interactive remote controller that lets you deliver TV firmware updates, cloning data, channel mapping changes, REACH contents, and TICKER contents through RF/IP DTV to several hundred hospitality TVs simultaneously. The REACH functions are available only in standalone mode. The REACH Server is sold separately. Refer to the REACH server manual enclosed with the REACH server product for more operating information.

Welcome Message

The Welcome Message feature displays a custom message on the TV every time it is turned on.

- Welcome message settings are in the Hotel Option Menu.
- Set Welcome Message to ON to display the message when the TV is powered on.

Welcome Message	OFF
Edit Welcome Message	
Hospitality Logo	OFF
Hospitality Logo DL	...
Logo Display Time	...

- You can make the Welcome Message and edit it in the Hotel Service menu.
- You can edit the Welcome Message by using using on screen keyboard in the “Edit Welcome Message” OSD (See the illustration below.)

Edit Welcome Message

Edit the Welcom message shown on the TVs in the guest rooms.

Welcome Guest

We are delighted that you have selected our hotel.

Save

Cancel

- Use the directional buttons on the remote control to enter the title and message, and select **Save**.

Hotel Logo

The Hospitality Logo function displays the Hotel's picture image when the TV is powered on.

- Hospitality Logo settings are the Hotel mode menus.
- The Logo Download and Logo Display Menu items are enabled when you turn the Hospitality Logo option on.
- If there is a logo image stored in memory and the Hospitality Logo option is on, the Hospitality logo is displayed when the TV is turned on.
- The Hospitality logo is not displayed when the Hospitality found Logo option is off, even if the logo image has been loaded into the TV.






- **Hospitality Logo**
 - This option lets you choose whether the Hospitality Logo image is displayed or not.
 - Initial value is OFF.
 - Can be set to BMP, AVI, BOTH.
 - When set to BMP, AVI, BOTH, the Logo Download and Logo Time Display menu items become accessible.
 - The DivX codec is not supported.
- **Logo Download**
 - This option lets you download the logo image to the TV's memory from a USB device.
 - A wait message appears while the image is being copied to the TV.
 - A "completed" message appears when the copy operation finishes successfully.
 - The word "failed" appears if the copy operation was unsuccessful.
 - **No USB** appears if no USB device is connected.
 - **No File** appears if there is no file to copy on the USB device or the file is in the wrong format (must be a BMP or AVI file). If No File appears and there is a logo file on the USB device, check the file format.
- **Logo File Format**
 - TV Supports all file formats.
 - File name must be "samsung_image.*" and "samsung_video.*"
 - Maximum file size can be 50MB for Smart models.
 - The TV does not change the size or scale of the image.

USB Cloning

The USB Cloning function lets you download user-configured settings (Picture, Sound, Channel, Setup, and Hotel Setup) from one TV to a USB device, and then upload these settings from the USB device to other TV sets. This lets you create a standard file of settings and distribute that standard file to all the TVs in your facility.

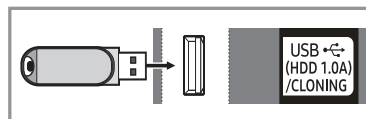
✎ After cloning, certain features are applied when the TV is turned on again.

- **Cloning TV to USB:** Copies stored menu settings from a TV to a USB device.

1. Insert a USB drive into the USB port on the rear of the TV.
2. Enter the hotel option menu by pressing buttons in order.
MUTE → 1 → 1 → 9 → Select 
3. Press the ▲ or ▼ button to select **Cl one: TV to USB**, and press the Select  button.
4. When the message **Clone: TV to USB** is displayed. Press the Select  button.
5. The TV displays one of the following messages:
 - **Completed:** Copy was successful.
 - **Failed:** Copy was not successful.
 - **No USB:** USB is not connected.

The clone folder will be labeled T-KTMAKUCB.




✎ The cloned values include the values on the Guest side menu (brightness, picture size, contrast, etc.) and the Hotel side menu.

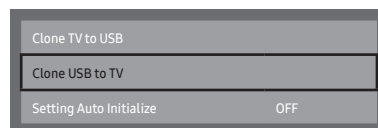


Cloning USB to TV: Copies menu settings and channel data in a USB device to a TV.

✎ **Shortcut:** Turn the TV off, insert the USB device, turn the TV on, and then press the Select  button for 5 seconds.

To clone data to the TV using the Hotel menu, follow these steps:

1. Turn the TV off.
2. Insert the USB drive into the USB port on the rear of the TV.
3. Turn the TV on.
4. Enter the Hotel menu by pressing these buttons in order.
MUTE → 1 → 1 → 9 → Select 
5. Press the ▲ or ▼ button to select "Clone USB to TV", and then press the Select  button.
6. The message **Clone: USB to TV** is displayed. Press the Select  button.
7. The TV displays one of the following messages:
 - **Completed:** Copy was successful.
 - **Failed:** Copy was not successful.
 - **No USB:** USB is not connected
 - **No File:** There is no file to copy on the USB device. If you get a No File message, check the folder on your USB device. The folder name should be T-KTMAKUCB.



✎ Tables that list the settings that are cloned in the Interactive and Standalone Hotel Menus begin on the next page.

Pre-condition for cloning (check point)

- Cloning should be done between same model (same version).
- Before cloning, all displays should be updated at the latest version (same version).

Settings Cloned in the Hotel Menu

 The menu item does not support depending on the models.

Menu Item		Sub Item	Cloned or not
Hospitality Mode		Standalone / Interactive Default: Standalone	Yes
SI Vendor		Interactive mode: Samsung / Telehealth / MTI / Innvue Standalone mode: OFF / SSCP	Yes
Power On	Power On Channel	User Defined / Last Saved	Yes
	Power On Channel Num	***	Yes
	Power On Channel Type	ATV / DTV / CATV / CDTV / IPTV	Yes
	Power On Volume	User Defined / Last Saved	Yes
	Power On Volume Num	0~100	Yes
	Min Volume	0~100	Yes
	Max Volume	0~100	Yes
	Power On Source	TV / HDMI1 / HDMI2 / HDMI3 / AV / COMP / Last Saved	Yes
	Power On Option	Power On / Standby / Last Option	Yes
Channel	Channel Editor	—	No
	Channel Bank Editor	—	No
	Channel Bank Service Level	Normal / Bank1 / Bank2 / Bank3 / None	Yes
	Mixed Channel Map	On / Off	Yes
	Dynamic SI	On / Off	Yes
	Channel Auto Store	—	No
	MyChannel	On / Off	Yes
	Mute On CC	On / Off	Yes
Menu OSD	Picture Menu Lock	On / Off	Yes
	Menu Display	On / Off	Yes
	Channel Menu Display	On / Off	Yes
	Panel Button Lock	Unlock / Lock / OnlyPower	Yes
Clock	Local Time	Standalone: Manual / Time Channel Interactive: Manual / Auto / Time Channel	Yes
	Timer Type	WakeUp/OnOff	Yes
Music Mode	Music Mode AV	On / Off	Yes
	Music Mode Comp.	On / Off	Yes
	Music Mode Backlight	On / Off	Yes
Remote Jack Pack	Priority AV	1~2	Yes
	Priority HDMI	1~2	
	HDMI Option	HDMI1 / HDMI2 / HDMI3	Yes
	HDMI Music Mode	On / Off	
External Source	USB Pop-up Screen	Default / Automatic / Disable	Yes
	External Source Banner	On / Off	Yes
	Auto Source	On / Off	Yes
	Anynet+Return Source	Power On Src / Last Source / Each model source list (AV, COMP, PC, HDMI1...)	Yes
Pillow Speaker	Pillow Speaker Type	CZ / CP / CS	Yes
	Speaker Select	Main / External	
	Pillow Volume	High / Normal / Low	
	Pillow Speaker Power	On / Off	Off
Eco Solution	Power Saving Mode	Off / Low / Medium / High	Yes

Menu Item		Sub Item	Cloned or not
Logo / Message	Welcome Message	On / Off	Yes
	Edit Welcome Message	—	Yes
	Hospitality Logo	Off / BMP	Yes
	Hospitality Logo DL	—	Yes
	Logo Display Time	3 second / 5 second / 7 second	Yes
Cloning	Clone TV to USB	—	No
	Clone USB to TV	—	No
	Setting Auto Initialize	On / Off	Yes
Network	Network Setup	—	No
	Apps ID Setting	—	Yes
	Apps Setting	—	No
	Service Discovery	On / Off	Yes
	ARP Interval	2s / 5s / 10s / 30s / 60s / 120s / 180s	Yes
System Manager		—	No
Security	FactoryLock	On / Off	Yes
	Password Popup	On/Off	Yes
	Password Input	—	No
	Password Setting	—	Yes
	Password Reset	—	No
	Security Mode	On/Off	Yes
	USB	Enable/Disable	Yes
	HDMI	Enable/Disable	Yes
DRM	DRM Mode	PI Model - OFF/LYNK DRM/Pro:idiom/LYNK DRM, PI Non PI Model - OFF/LYNK DRM	Yes
	PI AES Data	0x0000	No
System	Self Diagnosis for TV		No
	Self Diagnosis for HTV	PI DTV Channel Key Loss	No
		STB SI Vendor Setting	
		RTC	
	Software Update	—	No
	Sound Bar Out	On / Off	Yes
	Contact Samsung	—	No
	Standby LED	On/Off	Yes
Home Menu	TV Reset	—	No
	Home Menu Display	On / Off	Yes
	Home Menu Editor	—	Yes
	Home Menu Auto Start	On / Off	Yes
REACH Solution	REACH RF Mode	On/Off	Yes
	REACH IP Mode	On/Off	Yes
	Server URL Setting	—	Yes
	REACH Channel	***	Yes
	Group ID	ALL, 1 - 511	No
	REACH Update Time	OFF / 1hour / 2hour / 12:00 am / 2:00 am / 12:00 pm / 2:00 pm	Yes
	REACH Update Immediate	On/Off	Yes
	REACH Config Version	—	No
H.Browser Solution	H.Browser Mode	On / Off	Yes
	URL Launcher Setting	—	Yes
HMS	HMS Mode	On/Off	Yes
	HMS Server URL Setting	—	Yes
	HMS Gateway Role	Master/Slave	Yes
	HMS HalfTicker Display	On / Off	Yes
Virtual Standby	Virtual Standby Mode	On / Off	Yes
	Reboot Time	OFF / 5 / 15 / 30 / 60	
Room Number		—	No

Multi Code Remocon

A Multi Code Remocon is a special remote which is designed to control multiple TVs.

This function is useful where there is more than one TV in a location.

You can control up to 10 TVs with a different ID code of each remote with no conflicts between the TVs. ID numbers are displayed on each TV's OSD.

The Initial ID code for each TV is "0".

- You can set and reset the ID code in Analog TV mode or PC mode. (Not available in DTV mode.)
- You can set the ID code to any digit from 0 to 9.
- To set a TV's ID code, follow these steps:
 1. Aim the remote at the TV, and then press the MUTE button and the RETURN button simultaneously for more than 7 seconds. When you stop pressing the buttons, the TV displays the current ID in the middle of the screen and the words, "Remote control code is set to 0. If you want to change the Remote control code, enter the digit you want to change."
 2. Press the number on the remote you want to assign to the TV. The TV displays the following words:
"Remote control code is changed to x."

See the example below.



Remote control code is set to 0. If you want to change Remote control code, enter the digit you want to change.

Example: After you see the message above, if you press 1, the TV and Remote will be set to ID code 1. The TV then displays the following message: "Remote control code is changed to 1"

The TV can then only be controlled by a remote which has the same ID code (1).

- To reset the ID code, press the MUTE button and the EXIT button simultaneously for more than 7 seconds. When you stop pressing the buttons, the ID codes of the TV and Remote are reset to "0". "Remote control code is set to 0." appears on the TV

Setting Auto Initialize

When you clone settings from one TV to another, you clone both the guest side menu and hotel side menu settings: Picture, Sound, Input, Channel, Setup, and Hotel Setup. This lets you set nearly all of the menu values on your hospitality TVs to the same, standard settings. If you allow guests access to the guest side menus, for example the Picture menu, they can change the settings in those menus so they are no longer standard. If you set the Setting Auto Initialize function to on the TV automatically restores (initializes) any guest-side menu values to the cloned, standard values when the TV is turned off and then turned on again. Note that Setting Auto Initialize works on cloned guest side menu values only. Settings which have not been cloned are ignored.

The table below lists the settings that are restored to their cloned values when you set the Setting Auto Initialize function to On.

 The menu item does not support depending on the models.

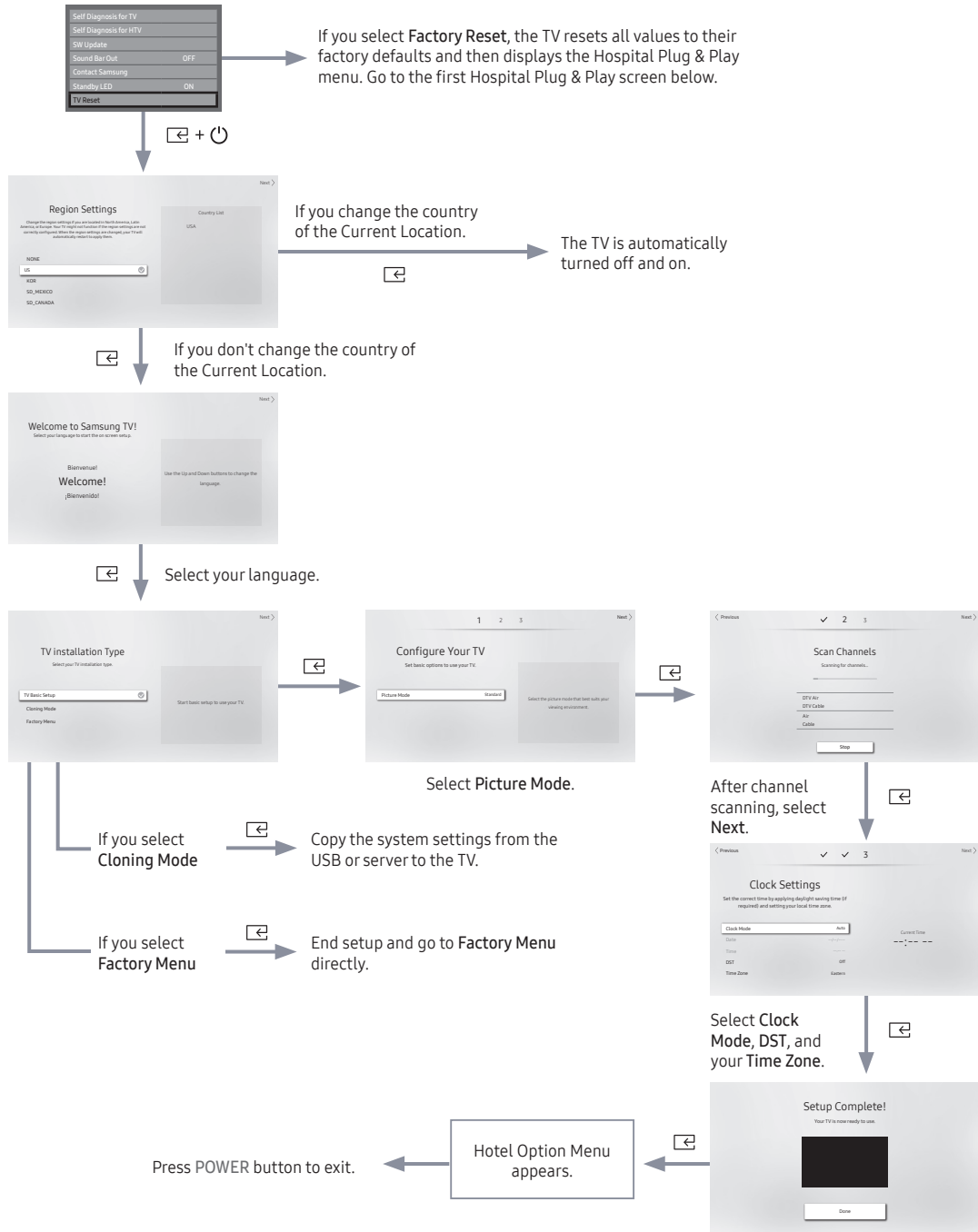
Menu Item			
Picture	Picture Mode		
	Picture Size Settings	Picture Size	
		Auto Wide	
		4:3 Screen Size	
	Expert Settings	Fit to Screen	
		Backlight	
		Cell Light	
		Brightness	
		Contrast	
		Sharpness	
		Color	
		Tint (G/R)	
		Apply Picture Settings	
		Digital Clean View	
		Auto Motion Plus Settings	Auto Motion Plus
			Blur Reduction
			Judder Reduction
			LED Clear Motion
		LED Clear Motion	
		Local Dimming	
		Contrast Enhancer	
		HDR+ Mode	
		Film Mode	
		Color Tone	
		White Balance	R-Gain
			G-Gain
			B-Gain
			R-Offset
			G-Offset
			B-Offset
		10 Point Settings	10 Point
			Interval
			Red
			Green
		20 Point Settings	Blue
			20 Point
			Interval
			Red
		Color Space Settings	Green
			Blue
			Gamma
			. HLG
			. ST.2084
			. BT.1886
			RGB Only Mode
			Color Space
			Color Gamut
			Color
			Red
			Green
			Blue

Menu Item					
Sound	Sound Output				
	Sound Mode				
	Expert Settings	Balance			
		Equalizer			
		HDMI Input Audio Format			
		Digital Output Audio Format			
		Audio Delay			
		Auto Volume			
		Sound Feedback			
Welcome Sound					
Broadcasting	Audio Options	Preferred Language			
	Auto Tuning Settings	Standby Auto Tuning			
	Expert Settings	Digital Text (MHEG)			
		Teletext Language Settings	Primary Teletext Language		
			Secondary Teletext Language	Primary Audio Language	
				Secondary Audio Language	
General	System Manager	Time	Clock	Clock Mode	
				Time Zone	
				DST	
				Time Zone	
				GMT	
				DST	
		Language			
		Auto Protection Time			
	External Device Manager	Anynet+(HDMI-CEC)			
		Game Mode			
		HDMI Black Level			
		Keyboard Manager	Keyboard Language		
		Keyboard Type			
	Eco Solution	Power Saving Mode			
		Motion Lighting			
		Auto Power Off			
	Accessibility	Audio Description Settings	Audio Description		
Audio Description Volume					
High Contrast					
Enlarge					

Hotel Plug & Play

The Hotel Plug & Play function, which automatically performs the Hotel mode selection, Country Setup, Clock Setup, and Picture Mode Setup, runs once, when power is first turned ON. Setup also runs automatically after you have executed a Service Reset.

• UI Scenario



- **Region Settings OSD**
 - Initially highlighted: **US**
 - If you press the Enter key after selecting Change, you can change the country.
 - If the country is changed, the TV automatically turns off and on.
 - If you select the incorrect country, execute TV Reset again after entering the System section of the Hotel Menu.
 - Before select country, refer to the country list information on the right.
- **Welcome to Samsung TV! OSD**
 - Initially highlighted: **Welcome (English)**
 - If you press the right directional button, the “**TV Installation Type**” OSD appears.
- **TV Installation Type OSD**
 - Initially highlighted: **TV Basic Setup**
 - If you press the right directional button, the “**Configure your TV**” OSD appears.
- **Configure Your TV OSD**
 - Initially highlighted: **Standard**.
 - The TV displays the **Picture Mode** OSD where you can choose the **Dynamic** or the **Standard** picture mode.
 - The country information for the TV settings may differ from the country list information in “**Region Settings OSD**”.
- **Scan Channels OSD**
 - Then press the right directional button, start scanning the channels.
 - After channel sanning is completed, select **Next**.
 - When the RF cable is not connected, the screen is skipped.
- **Set Clock Mode, DST(Daylight saving time), and Time Zone OSD**
 - Initially highlighted: **Clock Mode: Auto, DST: Off, Time Zone: Eastern**
 - If the TV will be tuned to digital broadcast channels, and these channels transmit date and time information, set the **Clock Mode** to **Auto**. The TV will set the date and time automatically.
 - If the TV will not be tuned to digital broadcast channels, set the **Clock Mode** to **Manual**, and then set the date and time on the TV manually.
 - Set **DST** to **On** or **Off** to apply or not apply daylight saving time to the TV.
 - Select your time zone on the map that appears.

USB Software Upgrade Method

Samsung may offer upgrades to the TV's SW in the future. Please contact the Samsung Hospitality Hot line at 1-866-894-0524 to receive information about downloading upgrades and using a USB drive to update the SW by connecting the USB drive containing the upgrade to the USB port located on the TV.

When the software is upgraded, video and audio settings you have made will return to their default (factory) settings. We recommend you clone the hospital settings so that you can easily reset them after the upgrade.

To upgrade the TV's software, follow these steps:

1. Insert a USB drive containing the SW upgrade into the USB port on the side of the TV.

2. Press the **MENU** button to display the menu.

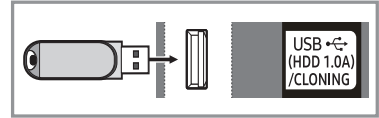
Press the ▲ or ▼ button to select **Support**, and then press the Select button.

3. Press the ▲ or ▼ button to select **Software Update**, and then press the Select button.

The message "Scanning for USB. This may take more than 1min." is displayed.

4. The message "Upgrade version XXXX to version XXXX? The system will be reset after upgrade." is displayed.

Press the ◀ or ▶ to select **OK**, and then press the Select button.




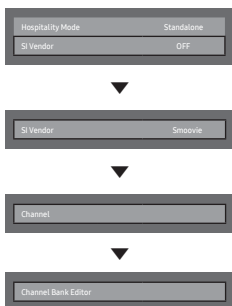
Please be careful to not disconnect the power or remove the USB drive while upgrades are being applied. The TV will turn off and turn on automatically after completing the SW upgrade. Please check the SW version after the upgrades are complete.

Channel Bank Editor (Smoovie TV Only)

The Channel Bank Editor in conjunction with the SMOOVIE remote lets you control the channels guests have access to. The Channel Bank Editor provides three Banks of channels and lets you select which channels will be available from each bank. SMOOVIE remotes have installable Bank Cards which correspond to the channel banks in the Channel Bank Editor. The remotes only allow access to channels in the channel bank that correspond to the installed card. Consequently, the channels a guest can access depend on the Bank Card installed in their SMOOVIE remote.

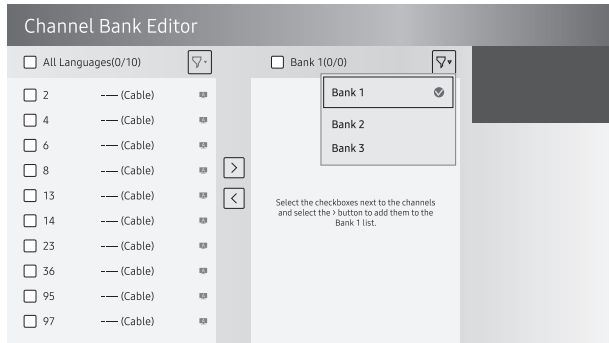
Setting the Channel Bank Editor under Stand-alone Mode

1. Press MUTE → 1 → 1 → 9 → Select  on the remote to enter the Hotel Standalone menu.
2. Go to SI vendor, and then select: "Smoovie"
3. Find the new menu option, "Channel" → "Channel Bank Editor".
4. Enter the "Channel Bank Editor".



⟨Depending on model and region, some menu items may not exist.⟩

5. Edit the Channel Bank. An example is below.
 - a. Bank1 (Free channel): Select the channels that will be accessible when a remote doesn't have a card.
 - b. Bank2 (Family Card - Green): Select the channels that will be accessible when a remote has a GREEN CARD.
 - c. Bank3 (Adult Card - Red): Select the channels that will be accessible when a remote has a RED CARD.



Information About SMOOVIE Remote Controls

- If you select SMOOVIE as the SI vendor, you should also use SMOOVIE remotes in your facility.
- Guests with remotes that do not have a card can only view channels from Bank 1.
- Guests using the Numeric keys on the remote to change channels can only view channels from Bank 1.
- Guests with remotes that have Green or Red cards must use the channel up/down keys to change channels.
- Guests can only see channels from the Bank1 channel list In the Channel Guide or the Channel List.

Smoovie Set Up Sequence

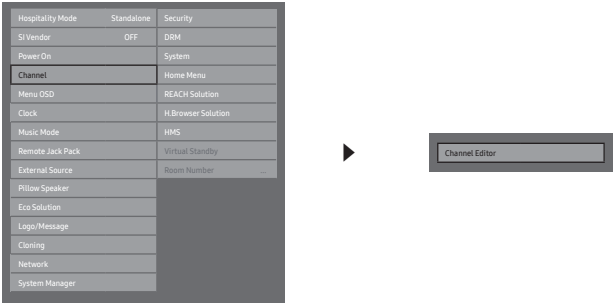
Step	Smoovie TV Setup (Air/ Cable)	
	Only Air or Cable used	Only Air or Cable used
	If the TV starts with Hotel Plug&Play	If Hotel Plug&Play already done
1	Do a complete P&P (including Air or Cable auto tune)	Enter the Hotel menu
2	After P&P, the TV displays the Hotel menu	Select the channel type - ATV or ADTV for Air - CATV or CDTV for cable
3	Select the channel type - ATV or ADTV for Air - CATV or CDTV for cable	Select Smoovie TV in the Hotel menu
4	Select Smoovie TV in the Hotel menu	Select Channel Setup
5	Select Channel Setup (Can be skipped)	Select "Air" or "Cable" to auto tune
6	Select "Air" or "Cable" to auto tune. (Can be skipped,)	Set up channels in the CH Bank Editor
7	Set up channels in the CH Bank Editor	After power off & on, guests can use the TV
8	After power off & on, guests can use the TV	

Channel Editor

The Channel Editor lets you edit the channels stored in the TV's memory. Using Channel Editor you can:

- Change the channel numbers and names, manage genre and language groups and delete channels.
- Apply the video mute to channels you select. The video mute blanks out the video from a channel and outputs only the sound while displaying a speaker icon on the screen.

The Channel Editor also lets you view information about each channel easily, without your having to display each channel directly.



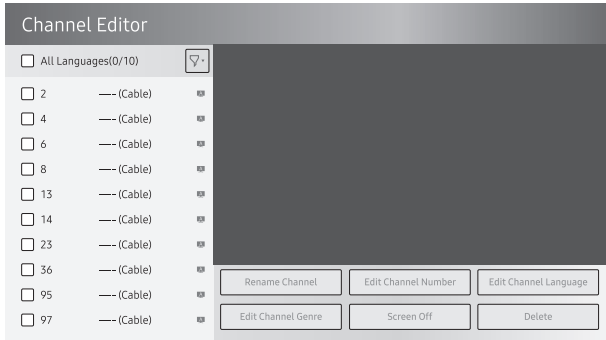
◁Depending on model and region, some menu items may not exist.▷

General Steps for Using the Channel Editor in Stand-alone Mode

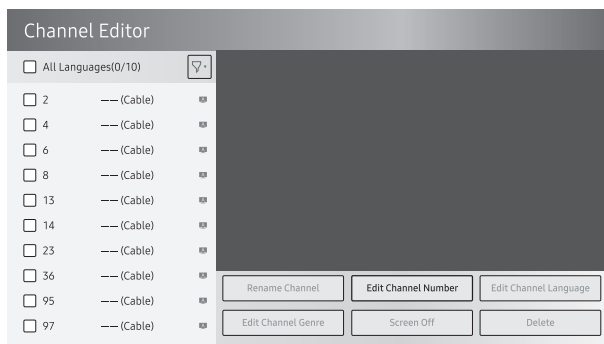
Step	Broad Outline
1	Run 'Channel Auto Store' in the Hotel Option Menu.
2	Enter 'Channel Editor' in the Hotel Option Menu.
3	On a piece of paper, compile a list of channels you want to have, arranged in the order you want.
4	Rearrange channels and edit channel names with the action bar menu items.
5	Press the EXIT or RETURN Button to exit.

◁For a detailed explanation of how Channel Editor works, see pages 36 through 38.▷

The picture below shows a sample **Channel Editor** screen.





- **A** Indicates an analog channel.
- Channels without an **A** are digital channels.
 - 🔑 If Dynamic SI in the Hospitality Option Menu is On, Channel Editor will display no digital channels. You must set Dynamic SI to Off before you can edit digital channels in Channel Editor.




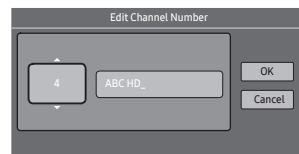
• Edit Channel Number

Use **Edit Channel Number** to change the channel number of a channel you select.

To change a channel number, follow these steps:

1. Select a channel on the **Channel Edit** screen.
2. Use the directional button to move **Edit Channel Number**, and Select  button.
3. Use the up or down arrow keys to change the channel number.
4. Select **OK** when done, and then press the Select  button.



 When you change the channel number, the channel information is not updated automatically.



• Rename Channel

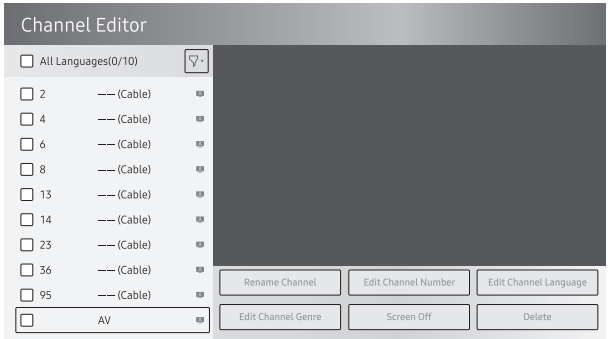
Use **Rename Channel** to change the name of a channel you select.

To change the name of a channel, follow these steps:

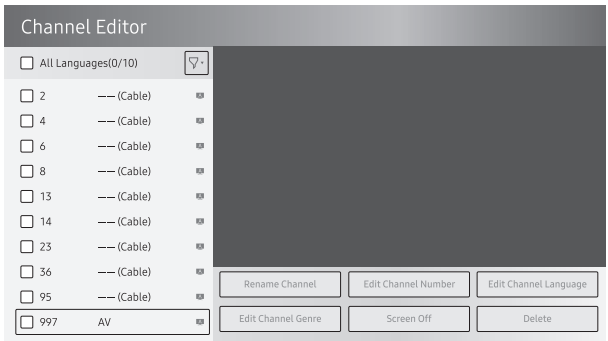
1. Select a channel on the **Channel Edit** screen.
2. Use the directional button to move **Rename Channel**, and Select  button.
3. Use the on-screen keyboard that appears to enter the new name for the channel. Use the arrow buttons on your remote to select a letter or number, and then press Enter. Repeat for each letter or number you want to select.
4. When finished, select **Done** on the bottom of the screen, and then press the Select  button.

The external sources of this TV are displayed in the last page of the Channel Editor menu as shown in the example below. In the example, there are two external sources connected to the TV, HDMI2 and AV.

- You can assign a new channel to an external source at end of list, selecting **Edit Channel Number**, and then using the directional buttons on the remote control to select the channel number of the channel.
- If you tune to a channel after assigning the channel to an external source, you can enter the external source without opening the TV source menu.



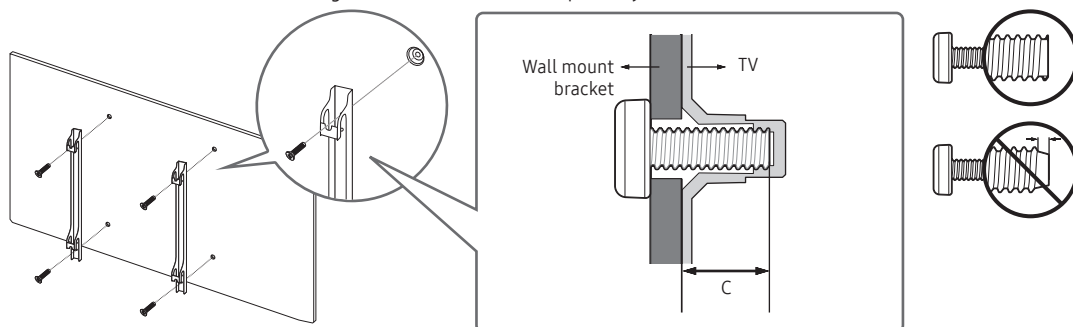
After assigning channel number 997 to the AV source.



Installing the Wall Mount

Installing the wall mount kit

You can mount the TV on the wall using a wall mount kit (sold separately).



 The Product shape may differ depending on the model.

Installing the Wall Mount Kit

The wall mount kit (sold separately) allows you to mount the TV on a wall.






For detailed information on installing the wall mount, see the instructions provided with the wall mount. Contact a technician for assistance when installing the wall mount bracket. Samsung Electronics is not responsible for any damage to the product or injury to yourself or others if you select to install the TV on your own.

Securing the TV to the Wall



Caution: Pulling, pushing, or climbing on the TV may cause the TV to fall. In particular, ensure your children do not hang on or destabilize the TV. Doing so may cause the TV to tip over, causing serious injuries or death. Follow all safety precautions provided in the Safety Flyer included with your TV. For added stability and safety, you can purchase and install the anti-fall device as described below.

To Prevent the TV from Falling

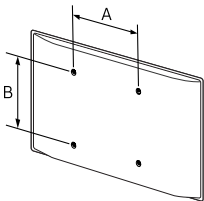
-  TV Holder Kits are sold separately. To purchase a TV Holder Kit, contact Samsung Customer Care.
- 1. Insert the screws into the wall brackets and firmly fasten them to the wall. Make sure the screws are firmly fixed to the wall.
-  We strongly recommend you drive the screws into a stud.
- 2. Insert the screws into the wall brackets and firmly fasten the screws to the top VESA screw holes on the back of the TV.
- 3. Connect the brackets on the TV and the brackets on the wall with a strong string or cable, and then tie the string or cable tightly to the brackets.
-  Verify all connections are properly secured. Periodically check the connections for any sign of fatigue or failure. If you have any doubt about the security of your connections, contact a professional installer.
-  Install the TV close to the wall so that it does not fall.
-  Connect the string or cable so that the brackets on the wall are at the same height or lower than the brackets on the TV. Untie the string or cable before moving the TV.

Wall Mount Kit Specifications (VESA)

The wall mount kit is not supplied, but sold separately.

Install your wall mount on a solid wall perpendicular to the floor. If you are attaching the wall mount to building materials other than plaster board, contact your nearest dealer. If installed on a ceiling or slanted wall, the TV may fall and cause severe personal injury.

- NOTE**
- Standard dimensions for wall mount kits are shown in the table below.
 - Samsung wall mount kits contain a detailed installation manual. All parts necessary for assembly are provided.
 - Do not use screws that do not comply with the VESA standard screw specifications.
 - Do not use screws that are longer than the standard dimension or do not comply with the VESA standard screw specifications. Screws that are too long may cause damage to the inside of the TV set.
 - For wall mounts that do not comply with the VESA standard screw specifications, the length of the screws may differ depending on the wall mount specifications.
 - Do not fasten the screws too firmly. This may damage the product or cause the product to fall, leading to personal injury. Samsung is not liable for these kinds of accidents.
 - Samsung is not liable for product damage or personal injury when a non-VESA or non-specified wall mount is used or the consumer fails to follow the product installation instructions.
 - Do not mount the TV at more than a 15 degree tilt.
 - Always have two people mount the TV onto a wall.

TV size in inches	VESA screw hole specs (A * B) in millimeters	C (mm)	Standard Screw (Length*Pitch in mm)	Quantity	
32	100 x 100	20.9 ~ 21.9	M4	4	
40 ~ 43	200 x 200	20 ~ 21	M8		
49		20			





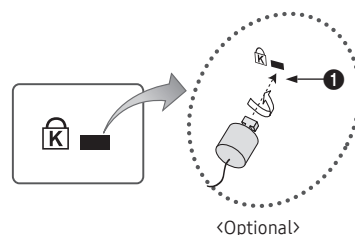
Do not install your Wall Mount Kit while your TV is turned on. It may result in personal injury due to electric shock.

Anti-theft Kensington Lock




The Kensington Lock is a device you can use to physically fix a TV to a location when you use it in a public place. The appearance and locking method may differ from the illustration at right, depending on the manufacturer. Refer to the manual provided with the Kensington Lock for additional information on proper use.

The Kensington Lock is not supplied by Samsung.

- Please find the “” icon on the rear of the TV. A Kensington slot is beside the “” icon.



To lock the product, follow these steps:

1. Wrap the Kensington lock cable around a large, stationary object such as desk or chair.
 2. Slide the end of the cable with the lock attached through the looped end of the Kensington lock cable.
 3. Insert the locking device into the Kensington slot on the product **1**.
 4. Lock the lock.
-  These are general instructions. For exact instructions, see the User manual supplied with the locking device.
 -  The locking device has to be purchased separately.
 -  The location of the Kensington slot may be different depending on the TV model.

Specifications

Environmental Considerations	50°F to 104°F (10°C to 40°C)	
Operating Temperature	10% to 80%, non-condensing	
Operating Humidity	-4°F to 113°F (-20°C to 45°C)	
Storage Temperature	5% to 95%, non-condensing	
Storage Humidity		
Model Name	HG32NF693	HG40NF693
Display Resolution	1920 x 1080	1920 x 1080
Screen Size (Diagonal)	32" Class (31.5 measured diagonally)	40" Class (39.5 measured diagonally)
Sound (Output)	10 W	20 W
Dimensions (W x H x D) Body	29.2 x 17.2 x 2.7 inches (741.0 x 436.2 x 69.0 mm)	36.3 x 20.9 x 2.9 inches (922.7 x 531.0 x 72.6 mm)
Weight Without Stand	9.2 lbs (4.2 kg)	15.0 lbs (6.8 kg)
Model Name	HG43NF693	HG49NF693
Display Resolution	1920 x 1080	1920 x 1080
Screen Size (Diagonal)	43" Class (42.5 measured diagonally)	49" Class (48.5 measured diagonally)
Sound (Output)	20 W	20 W
Dimensions (W x H x D) Body	38.8 x 22.6 x 2.9 inches (985.5 x 574.8 x 73.4 mm)	44.0 x 25.6 x 2.9 inches (1118.8 x 650.0 x 74.2 mm)
Weight Without Stand	17.2 lbs (7.8 kg)	21.8 lbs (9.9 kg)

- Design and specifications are subject to change without prior notice.
- This device is a Class B digital apparatus.
- For power supply and power consumption information, refer to the label attached to the product.

Display Resolution

When you use your TV as a computer monitor, you can also select one of the standard resolutions listed in the Resolution column. The TV will automatically adjust to the resolution you choose.

Mode	Resolution	Horizontal Frequency (KHz)	Vertical Frequency (Hz)	Pixel Clock Frequency (MHz)	Sync Polarity (H / V)
IBM	720 x 400	31.469	70.087	28.322	-/+
MAC	640 x 480	35.000	66.667	30.240	-/-
	832 x 624	49.726	74.551	57.284	-/-
	1152 x 870	68.681	75.062	100.000	-/-
VESA DMT	640 x 480	31.469	59.940	25.175	-/-
	640 x 480	37.861	72.809	31.500	-/-
	640 x 480	37.500	75.000	31.500	-/-
	800 x 600	37.879	60.317	40.000	+/+
	800 x 600	48.077	72.188	50.000	+/+
	800 x 600	46.875	75.000	49.500	+/+
	1024 x 768	48.363	60.004	65.000	-/-
	1024 x 768	56.476	70.069	75.000	-/-
	1024 x 768	60.023	75.029	78.750	+/+
	1152 x 864	67.500	75.000	108.000	+/+
	1280 x 720	45.000	60.000	74.250	+/+
	1280 x 800	49.702	59.810	83.500	-/+
	1280 x 1024	63.981	60.020	108.000	+/+
	1280 x 1024	79.976	75.025	135.000	+/+
	1366 x 768	47.712	59.790	85.500	+/+
	1440 x 900	55.935	59.887	106.500	-/+
	1600 x 900RB	60.000	60.000	108.000	+/+
	1680 x 1050	65.290	59.954	146.250	-/+
	1920 x 1080	67.500	60.000	148.500	+/+

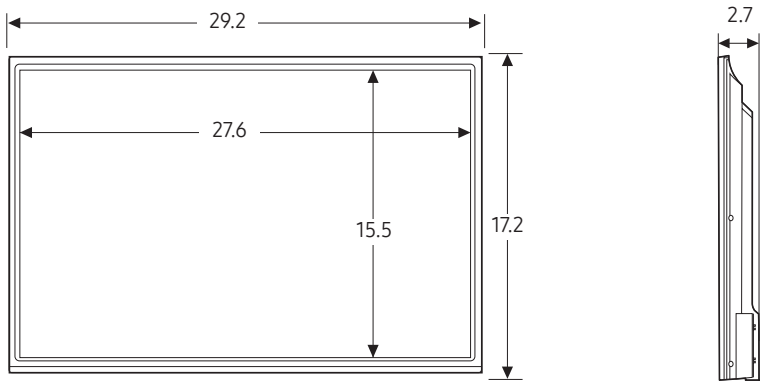
NOTE

- The interlaced mode is not supported.
- The set might operate abnormally if you select a non-standard video format.
- Separate and Composite modes are supported. SOG (Sync On Green) is not supported.

Dimensions

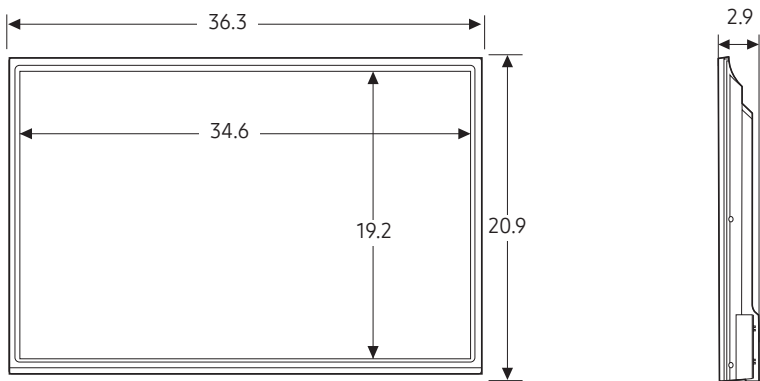
Front view / Side view

HG32NF693



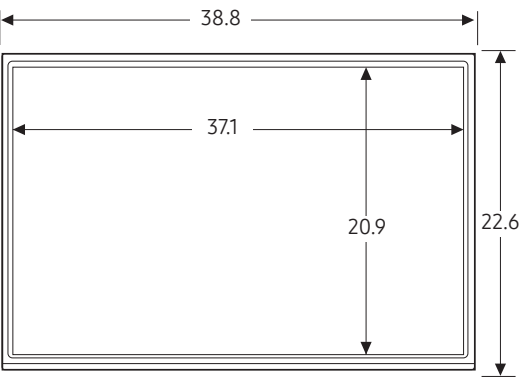
(Unit: inches)

HG40NF693



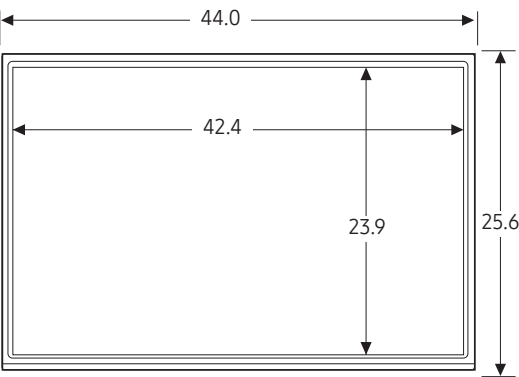
(Unit: inches)

HG43NF693



(Unit: inches)

HG49NF693



(Unit: inches)

Jack panel detail / Rear view

 Detailed dimensions can be checked at [Displaysolutions.samsung.com](https://displaysolutions.samsung.com).

Important Warranty Information Regarding Television Format Viewing

📄 See the warranty card for more information on warranty terms.

Wide screen format LED Displays (16:9, the aspect ratio of the screen width to height) are primarily designed to view wide screen format full-motion video. The images displayed on them should primarily be in the wide screen 16:9 ratio format, or expanded to fill the screen if your model offers this feature and the images are constantly moving. Displaying stationary graphics and images on screen, such as the dark sidebars on nonexpanded standard format television video and programming, should be limited to no more than 5% of the total television viewing per week.

Additionally, viewing other stationary images and text such as stock market reports, video game displays, station logos, web sites or computer graphics and patterns, should be limited as described above for all televisions. Displaying stationary images that exceed the above guidelines can cause uneven aging of LED Displays that leave subtle, but permanent burned-in ghost images in the LED picture. To avoid this, vary the programming and images, and primarily display full screen moving images, not stationary patterns or dark bars. On LED models that offer picture sizing features, use these controls to view different formats as a full screen picture.

Be careful in the selection and duration of television formats used for viewing. Uneven LED aging as a result of format selection and use, as well as burned-in images, are not covered by your Samsung limited warranty.

- **SAMSUNG ELECTRONICS NORTH AMERICAN LIMITED WARRANTY STATEMENT**

Subject to the requirements, conditions, exclusions and limitations of the original Limited Warranty supplied with Samsung Electronics (SAMSUNG) products, and the requirements, conditions, exclusions and limitations contained herein, SAMSUNG will additionally provide Warranty Repair Service in the United States on SAMSUNG products purchased in Canada, and in Canada on SAMSUNG products purchased in the United States, for the warranty period originally specified, and to the Original Purchaser only.


The above described warranty repairs must be performed by a SAMSUNG Authorized Service Center. Along with this Statement, the Original Limited Warranty Statement and a dated Bill of Sale as Proof of Purchase must be presented to the Service Center. Transportation to and from the Service Center is the responsibility of the purchaser. Conditions covered are limited only to manufacturing defects in material or workmanship, and only those encountered in normal use of the product.

Excluded, but not limited to, are any originally specified provisions for, in-home or on-site services, minimum or maximum repair times, exchanges or replacements, accessories, options, upgrades, or consumables.


For the location of a SAMSUNG Authorized Service Center, please call toll-free:

- In the United States: 1-866-sam4biz
- In Canada: 1-800-749-0205

License



Manufactured under license from Dolby Laboratories. Dolby, Dolby Audio, Pro Logic, and the double-D symbol are trademarks of Dolby Laboratories.




The terms HDMI and HDMI High-Definition Multimedia Interface, and the HDMI Logo are trademarks or registered trademarks of HDMI Licensing LLC in the United States and other countries.

Open Source License Notice

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

Open Source License Notice is written only English.



THIS PRODUCT IS SOLD WITH A LIMITED LICENCE AND IS AUTHORISED TO BE USED ONLY IN CONNECTION WITH HEVC CONTENT THAT MEETS EACH OF THE THREE FOLLOWING QUALIFICATIONS: (1) HEVC CONTENT ONLY FOR PERSONAL USE; (2) HEVC CONTENT THAT IS NOT OFFERED FOR SALE; AND (3) HEVC CONTENT THAT IS CREATED BY THE OWNER OF THE PRODUCT.

THIS PRODUCT MAY NOT BE USED IN CONNECTION WITH HEVC ENCODED CONTENT CREATED BY A THIRD PARTY, WHICH THE USER HAS ORDERED OR PURCHASED FROM A THIRD PARTY, UNLESS THE USER IS SEPARATELY GRANTED RIGHTS TO USE THE PRODUCT WITH SUCH CONTENT BY A LICENSED SELLER OF THE CONTENT.

YOUR USE OF THIS PRODUCT IN CONNECTION WITH HEVC ENCODED CONTENT IS DEEMED ACCEPTANCE OF THE LIMITED AUTHORITY TO USE AS NOTED ABOVE.

NOTE TO CABLE TV INSTALLER

This reminder is provided to call the cable TV system installer's attention to Article 820–40 of the National Electric Code (U.S.A.). The code provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of the cable entry as practical.

MAINTENANCE AND SERVICING

Never remove the back cover of the TV; this can expose you to high voltage and other hazards. If the TV does not operate properly, unplug it and call an authorized service center.

CLEANING AND DISINFECTING

Clean the exterior of this television by removing dust with a lint-free cloth.

CAUTION: To avoid damage to the surface of the television, do not use abrasive or chemical cleaning agents.



RAIN AND MOISTURE

WARNING: To avoid the hazards of fire or electrical shock, DO NOT expose this television to rain or moisture.



OXYGEN ENVIRONMENT

WARNING: Do not use in any oxygen tent or oxygen chamber. Such use may cause a fire hazard.



WET LOCATION

Apparatus shall not be exposed to dripping or splashing and no objects filled with liquids, such as vases, shall be placed on the apparatus.

SERVICE INSTRUCTIONS

CAUTION: These servicing instructions are for use by qualified service personnel only.

To reduce the risk of electric shock, do not perform any servicing other than contained in the operating instructions unless you are qualified to do so.

For 120 volt applications, use only a UL-Listed detachable power cord with NEMA configuration 5–15P type (parallel blades) plug cap.

For 240 volt applications, use only a UL-Listed detachable power supply cord with NEMA configuration 6–15P type (tandem blades) plug cap.

Warning - Wall Mounting

The product should be mounted to a wall only as recommended by the manufacturer. The product may slide or fall, causing serious injury to a child or adult, and serious damage to the product.



Contact SAMSUNG WORLD WIDE

If you have any questions or comments relating to Samsung products, please contact the SAMSUNG customer care center.

Samsung Hospitality Hotline 1-866-sam4biz (US)
1-800-749-0205 (CANADA)
1-800-726-7864 (MEXICO)

Web site: <http://www.samsung.com/us/business>