

SERIES **6**
670/677/678

LED TV

Installation manual

imagine the possibilities

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

www.samsung.com/register

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 17 to 21.

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 to prevent the occurrence of after-images.
- Frequently 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 a distances of at least 4 inches between the TV and other object (walls, cabinet sides, etc.) to ensure proper ventilation. Failing to maintain proper ventilation may result in a fire or problems with the product caused by an increase in its internal temperature.

 When using a stand or wall-mount, use parts provided by Samsung Electronics only.

 Using parts provided by another manufacturer may cause difficulties with the product or result in injury caused by the product falling.



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 the you touch the TV. Some parts can be hot.

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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.
-  The parts for the stand are listed under Stand Components on the following page.

List of Parts



- Remote Control (AA59-00817A) & Batteries (AAA x 2)



- Power Cord



- Safety Guide / Quick Setup Guide
(Not available in all locations)



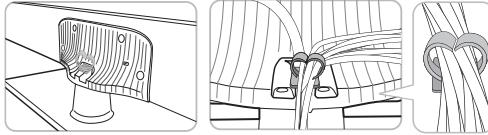
- Data Cable (depending on the model)
(BN39-00865B, BN39-01011C)
(Only HC670/HC677 have)



- Hotel Mount Kit



- Holder-Wire stand 1(EA)



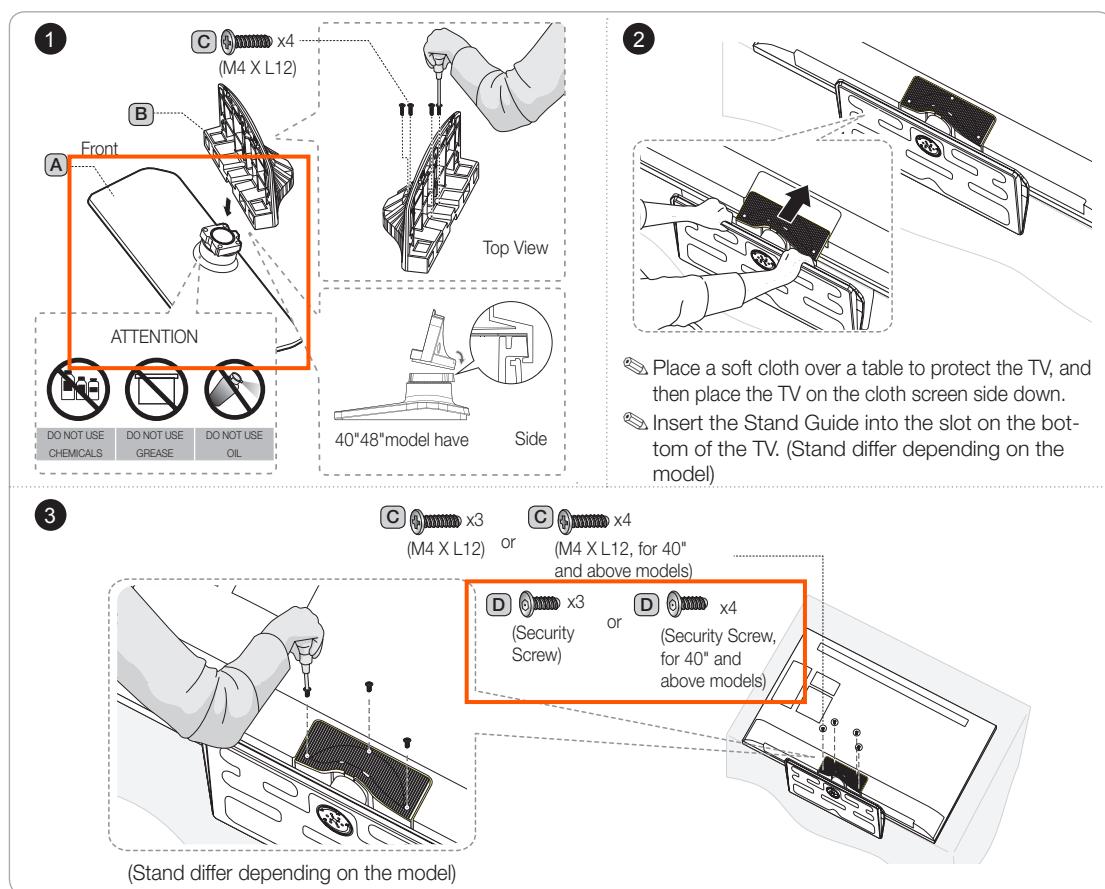
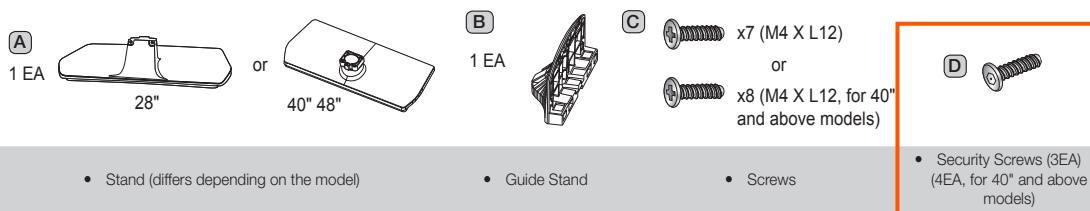
- Assembling the Holder Wire Stand

Installing the LED TV Stand

The 40" and larger LED TVs have swivel stands. You can configure these stands so that the TVs swivel 20 degrees left and right, 60 degrees left and right, or 90 degrees left and right. See page 6.

Components

When installing the stand, use the provided components and parts.



NOTE

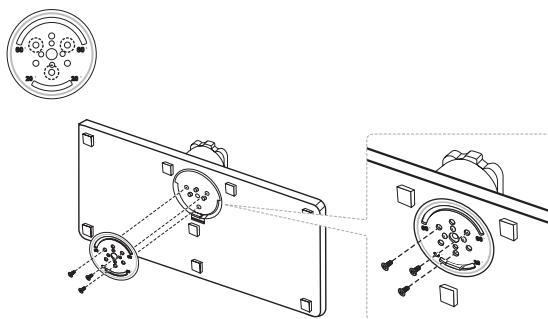
- Make sure to distinguish between the front and back of the Stand and Stand Guide when connecting them.
- Make sure that at least two people lift and move the LED TV.
- The number of screws may differ depending on the model.

Assembling the swivel stand (40 inch TVs or larger)

The 40" and larger LED TVs have swivel stands. You can configure these stands so that the TVs swivel 20 degrees left and right, 60 degrees left and right, or 90 degrees left and right using the BRACKET HOLDER SWIVEL.

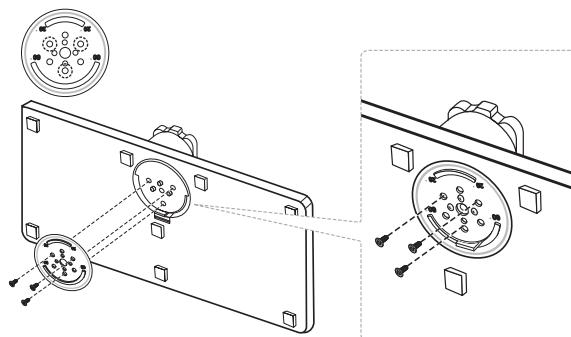
20° swivel

To configure the TV so that it swivels 20° left and right, insert the prong on the bottom of the stand through the curved hole in the Bracket Holder Swivel marked 20°. Then, fix the Bracket Holder Swivel to the stand using the three supplied screws as shown to the left.



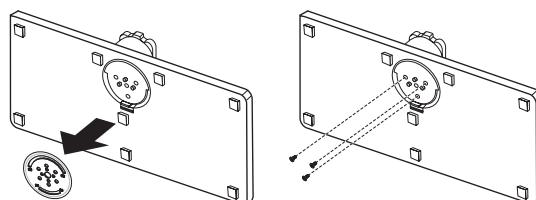
60° swivel

To configure the TV so that it swivels 60° left and right, insert the prong on the bottom of the stand through the curved hole in the Bracket Holder Swivel marked 60°. Then, fix the Bracket Holder Swivel to the stand using the three supplied screws as shown to the left.

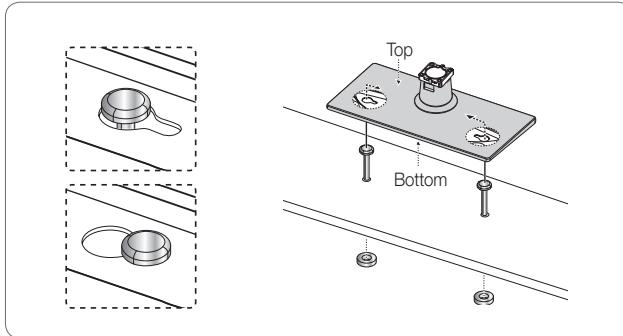


90° swivel

To configure the TV so that it swivels 90° left and right, remove the Bracket Holder Swivel, and then screw the three supplied screws into the stand as shown to the left.



Hotel Mount Kit



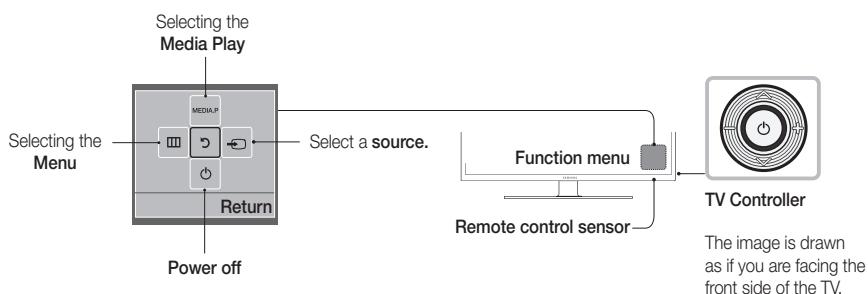
Affix the stand to a flat surface such as a dresser top, desk top, or entertainment center as shown.



WARNING: To prevent injury, you must attach this TV securely to the floor, a table, a dresser top, etc. with the Hotel Mount Kit as described in these instructions.

Using the TV's Controller

The TV's Controller, a small joy stick like button on the rear right side of the TV, lets you control the TV without the remote control.

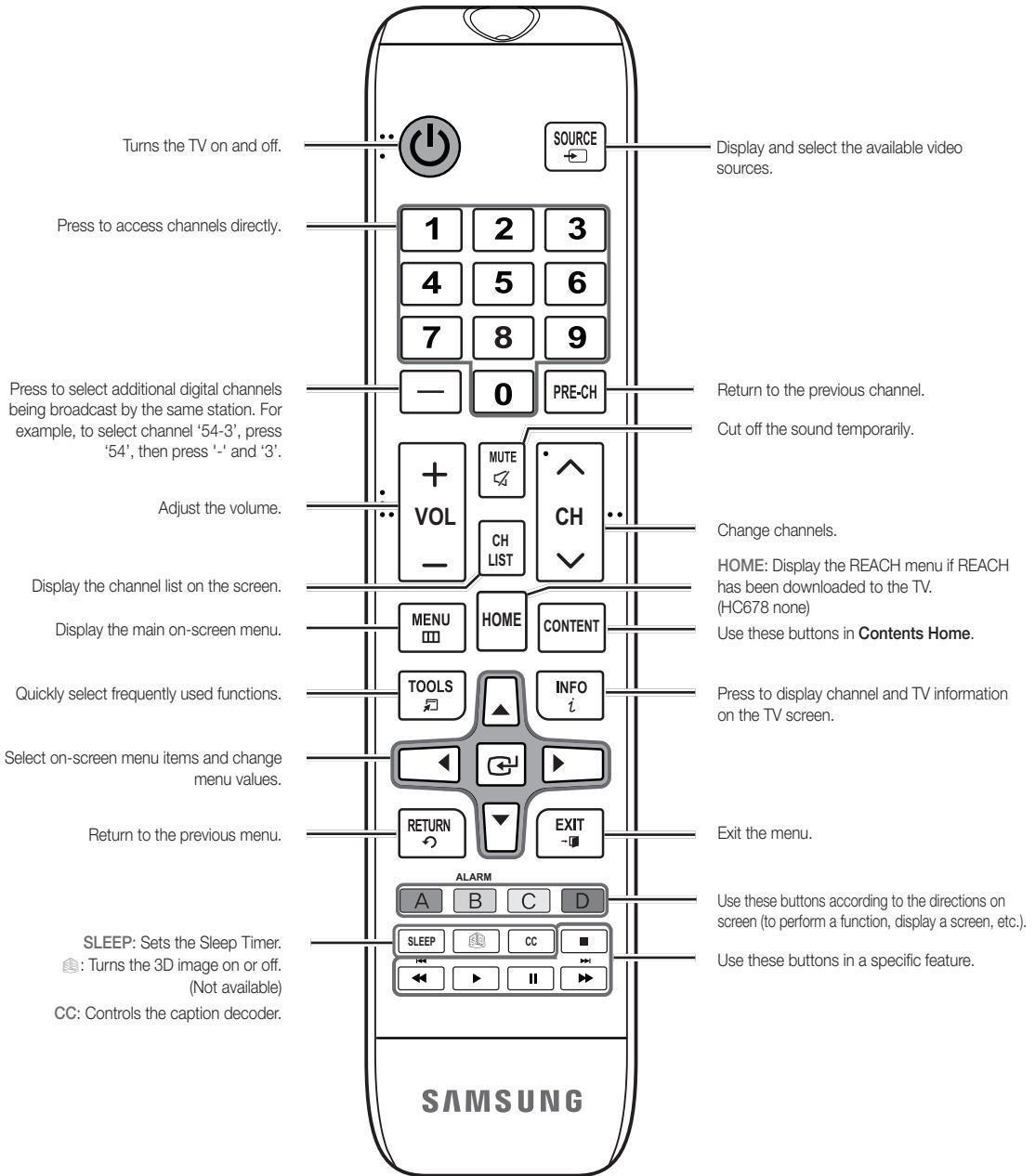


- The product color and shape may vary depending on the model.
- To exit the menu, press the Controller for more than 1 second.
- When selecting a function by moving the controller backwards/forwards/left/right, be sure not to press up on the controller. If you press up first, it will not operate correctly.

Standby mode

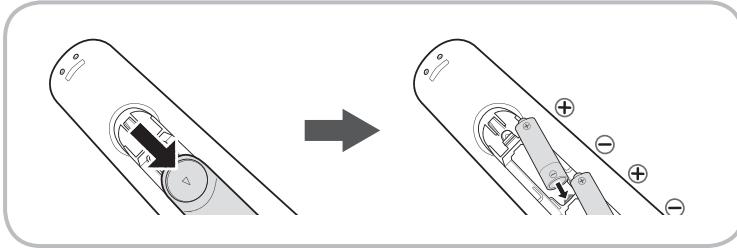
Your TV enters Standby mode when you turn it off and continues to consume a small amount of electric power. To be safe and to decrease power consumption, do not leave your TV in standby mode for long periods of time (when you are away on vacation, for example). It is best to unplug the power cord.

Using the TV's Controller



Installing the batteries (Battery size: AAA)

Rear of the Remote



✎ After you have installed the batteries, use a screwdriver to screw in the screw that holds the battery cover closed.

Installing Batteries into the Remote (battery size: AAA)

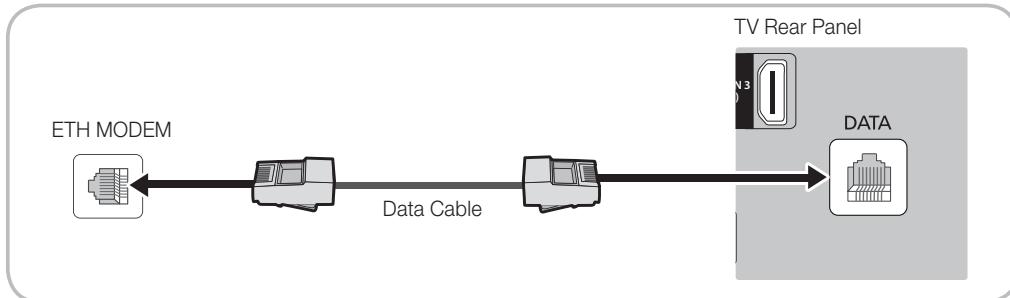
Match the polarity of the batteries to the symbol in the batter compartment.

✎ **NOTE**

- Use the remote control within 23~33 feet of the TV.
- Bright light may affect the performance of the remote control. Avoid using near fluorescent lights or neon signs.
- The color and shape of the remote may vary depending on the model.

Connecting the TV to the Lodgenet game controller or a STB of a SI vendor

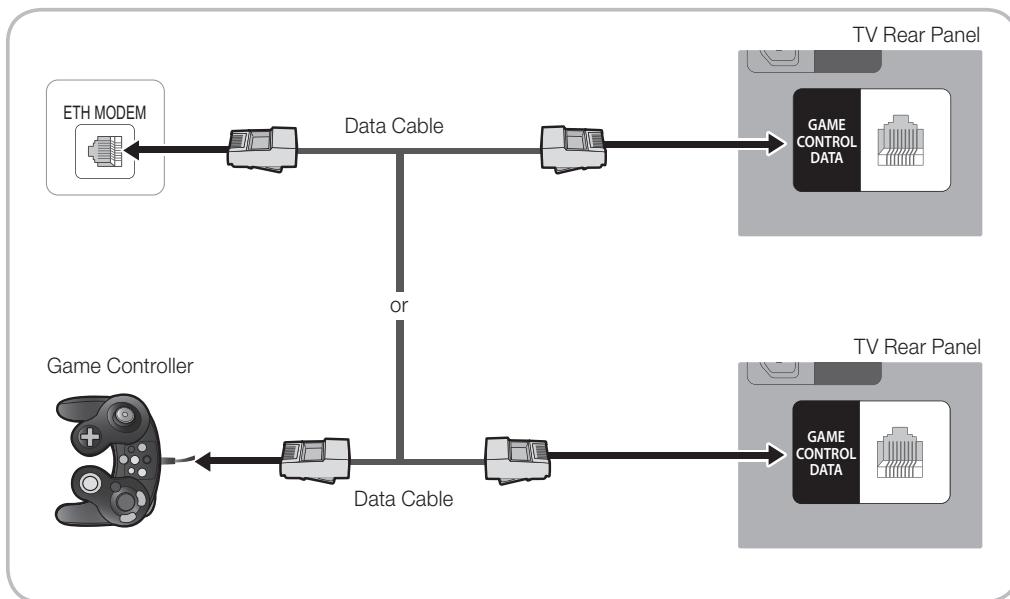
HC670/HC677 MODEL



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.

HC678 MODEL

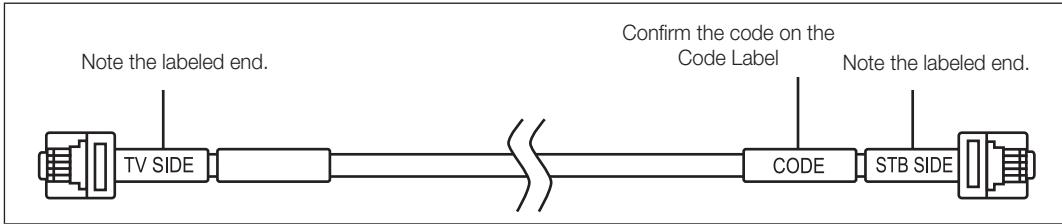


1. Connect the LodgeNet game controller to the TV's **GAME CONTROLLER/DATA** jack of the TV.
2. Connect the **GAME CONTROL DATA** jack of the TV to the **ETH MODEM** jack of the STB (SBB) with the data cable.

The "ETH MODEM" jack name that you connect the Data Cable to may differ depending on the SBB or STB type.

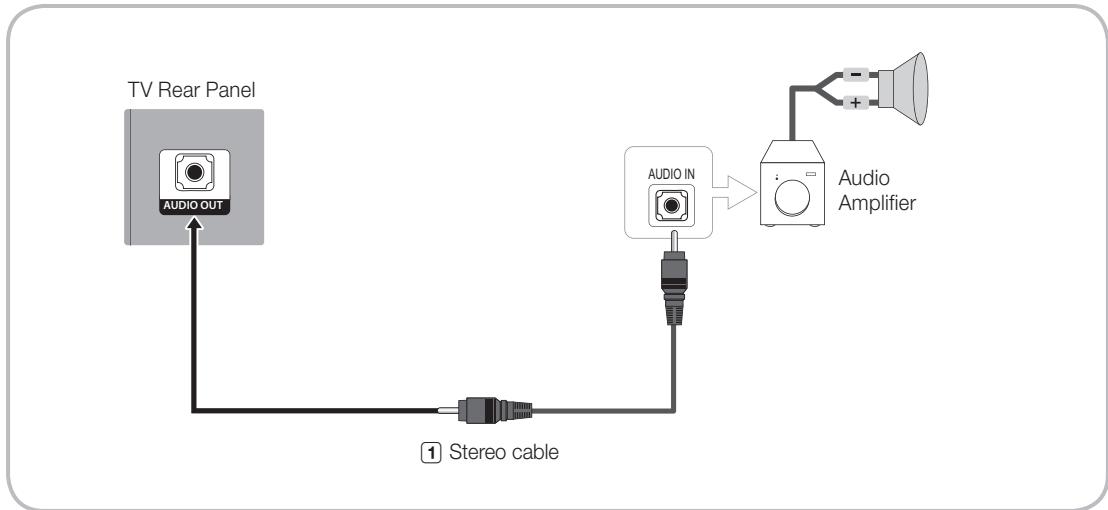
List of SI Vendors and Compatible Data Cables Supplied with the TV

- 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		
NXTV	BN39-01011B		
nStreams	BN39-01110A		
MTI	BN39-01011C		

Connecting the Audio Output to an Audio Amplifier

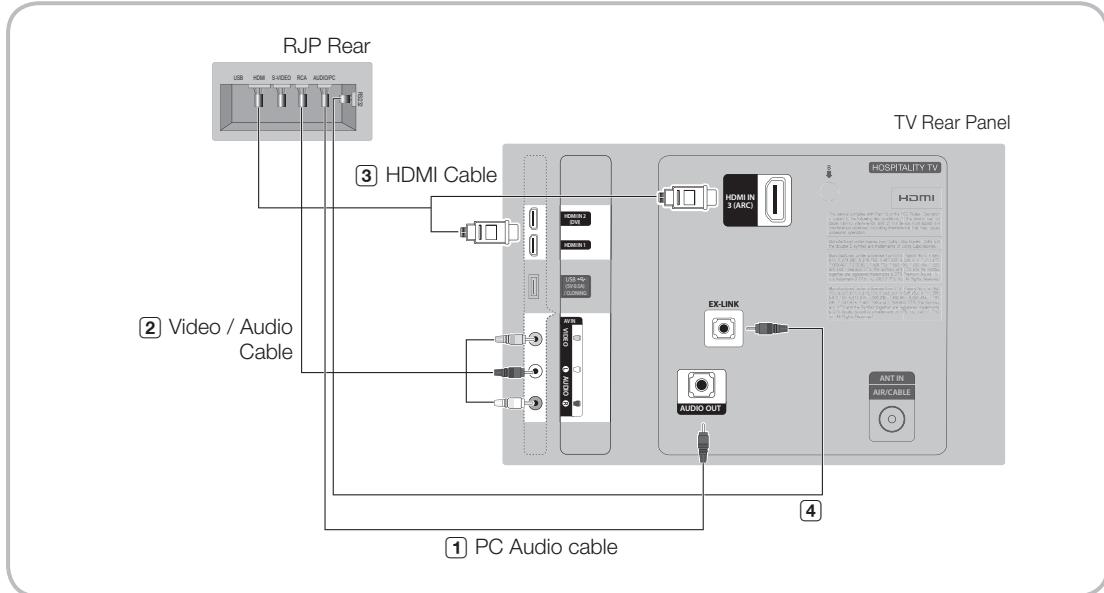


1. Connect the **AUDIO OUT** port of the TV to the Audio In port of an audio amplifier with a stereo cable. (Stereo cable not provide)

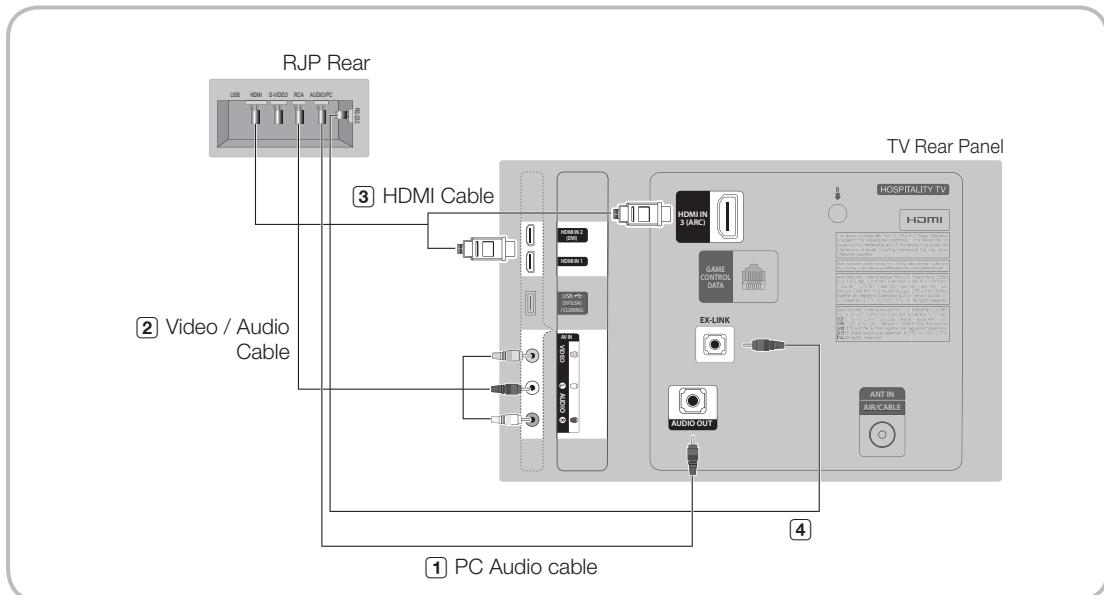
Connecting the RJP (Remote Jack Pack)

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

HC670/HC677 Model



HC678 Model



1. Connect the **AUDIO OUT** port of the TV to the PC/AUDIO port of the RJP.
2. Connect the **AV IN VIDEO/L-AUDIO-R** ports of the TV to the RCA port of the RJP.
3. Connect one of the **HDMI IN** ports of the TV to the HDMI port of the RJP.
4. Connect the **EX-LINK** port of the TV to the RS/232 port of the RJP.

 This Samsung TV is compatible with the Tele Adapt TA-7610 RJP only.

- **RJP (Remote Jack Pack):** The RJP is a hardware module that has different Audio Video inputs (AV, 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. (See page 19). 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.

 When you set up the RJP, connect the RJP to HDMI 1, 2, or 3 or AV 1 or 2.

- 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
PC	0.7 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
PC	0.7 Sec	0.7 Sec	1.4 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 (Ipdods, MP3 devices, etc.) through the RJP, you must turn Music Mode AV in the menu on. (See page 20)
- 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 menus 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 menus

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

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

- Use the Up and Down arrow buttons on the Samsung remote to move from menu item to menu item.
- Press the Enter or Left or Right arrow buttons 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 light to go off, and then plug the TV in again.

Hospitality Mode	Standalone	System
SI Vendor	OFF	
Power On		
Channel		
Menu OSD		
Clock		
Music Mode		
Remote Jack Pack		
External Source		
Eco Solution		
Logo/Message		
Cloning		
REACH Solution		
Security		
DRM		

Above: The Hotel mode menu

- <Depending on model and region, some menu items may not exist.>
(HC678 model not have Security)

To change menus, follow these steps:

1. Highlight the Hospitality Mode menu item in the top left corner of the menu.
2. Press the left or right arrow 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** → **ENTER** 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.

Menu	Item	initial Value	Description
Hospitality Mode	Hospitality Mode	Standalone	Select the Hospitality mode. <ul style="list-style-type: none"> Standalone mode: TV works alone, without an SI STB or SBB Interactive mode: TV works with an SI STB or SBB
	SI Vendor	OFF	<ul style="list-style-type: none"> Interactive mode : Samsung / OCC / MTI / Nstreams / NXTV / Enseio / Cardinal / Guestek / Seachange / EBL Stand-alone mode : OFF / Smoovie
Power On	Power On Channel	Last Saved	Set the default values that will be applied when the TV is turned on. <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 : AIR (analog air band), DTV (digital air band), CATV (analog cable band), CDTV (digital cable band)
	Power On Volume	Last Saved	<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	0	The minimum Volume Level the user can set in Stand Alone Hospitality mode.
	Max Volume	100	The maximum Volume Level the user in Stand Alone Hospitality mode.
	Power On Source	TV	Select the input source the TV displays when turns on.
	Power On Option	Last 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 OPT : Returns to its last Power state. If it was in Stand-by, it returns to Stand-by. 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	Channel Setup		Gives you direct, immediate access to some of the Channel menu functions on the user Channel menu such as Auto Program, Antenna selection, etc.
	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, and sort the channels in your desired channel number order. 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.
	Dynamic SI	ON	<ul style="list-style-type: none"> On : Check the DTV Program channel number. (If Dynamic SI is On, it is not available to edit DTV channels in Channel Editor.) Off : Does not check the DTV Program channel number. (If Dynamic SI is Off, it is available to edit DTV channels in Channel Editor, but additional DTV channel program number update is not supported.)

Menu	Item	initial Value	Description
Menu OSD	Picture Menu Lock	OFF	Enable or disable the Picture Menu.
	Menu Display	ON	<ul style="list-style-type: none"> On : The Main Menu is displayed. Off : The Main Menu is not displayed.
	Panel Button Lock	Unlock	Turning the front panel (local key) operations on/off. <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. Menu/Source : Locks the Menu and Source panel keys.
	Home Menu Display	ON	OFF:The Home Menu is not displayed. ON:The Home Menu is displayed. (HC678 model not have)
	Home Menu Editor		<ul style="list-style-type: none"> Home Menu is displayed. (HC678 model not have)
	Home Menu Auto Start	ON	OFF:The Home Menu is Auto Start. ON:The Home Menu is not Auto Start. (HC678 model not have)
Clock	Clock Type	OFF	OFF:Close SW Clock. SW Clock:Open SW Clock .
	Local Time	Manual	Select the way to update clock data. Use clock data from a DTV channel to set the clock automatically or set the clock manually when the TV is in stand-alone mode.
	Time Channel Type	...	Use clock data from which DTV channel to set the clock
	Time Channel Num	...	DTV channel Number
Music Mode	Music Mode AV	OFF	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.
	Music Mode Backlight	OFF	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.
Remote Jack Pack	Priority AV	1	If the jack priority is set, the corresponding source is automatically set when a jack is inserted according to the jack priority
	Priority HDMI	2	If the jack priority is set, the corresponding source is automatically set when a jack is inserted according to the jack priority.
	AV Option	AV	Select RJP AV Source (Source selection depends on Model).
	HDMI Option	HDMI 1	Select which HDMI source of the TV is connected to the RJP jack. (HDMI1/HDMI2/HDMI3)
	HDMI Music Mode	OFF	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	Default	When a USB device is connected to the TV : <ul style="list-style-type: none"> Default : A popup window appears. Automatic : Opens the USB contents menu automatically. Disable : Neither the popup window nor the menu appears.
	External Source Banner	ON	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	OFF	<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	Power On Src	Select the return TV source after stopping an Anynet+(HDMI-CEC) connection. (This fuction is especially useful for the Guestlink RJP)

Menu	Item	initial Value	Description
Eco Solution	Energy Saving	Off	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.
	Welcome Message	OFF	Displays a the Welcome Message for 5 seconds when the TV turns On.
Logo/ Message	Edit Welcome Message		Edits the Welcome Message.
	Hospitality Logo	OFF	Turns the Hospitality logo feature On or Off, If On, 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".
	Hospitality Logo DL	...	Downloads the Hospitality logo. Hospitality logo file requirements: <ul style="list-style-type: none"> BMP or AVI files only. Max file size : BMP - 960 X 540. AVI - 30MB. The file can only be named samsung.bmp or samsung.avi.
	Logo Display Time	...	Hospitality Logo Display Time (3/5/7 seconds).
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	OFF	If you set Setting Auto Initialize to On, and the TV's power is turned off and on, the guest side menu items are restored to their cloned values. See page 29.
REACH Solution	REACH 3.0	OFF	OFF:Close REACH 3.0 ON:Open REACH 3.0
	REACH 2.0	OFF	OFF:Close REACH 2.0 ON:Open REACH 2.0
	REACH Channel	...	87:Assign a DTV channel number to carry the update REACH data. This channel number must be the same as the number set on the Reach server.
	Group ID	...	All:Select the group ID of the REACH server. (Refer to the REACH server manual for more details)
	IPG Room Type	...	You can receive up to 3 EPG information headed to the Americas according to Room Type from SI, and it displays the appropriate channel list and EPG information according to the value set on TV.For IPG Room Type, there are Default / Public / Roomtype3 within the hotel Factory Install menu, and its default value is Default.
	Ticker	...	<ul style="list-style-type: none"> On : The TICKER content is displayed. Off : The TICKER content is not displayed.
	REACH Update Time	...	Lets you set when data such as updated SW, cloning files, and S-LYNC REACH contents is downloaded from the REACH server to the TV : <ul style="list-style-type: none"> 1hour : Every hour 2hour : Every 2 hours 12:00 am : every 12:00 a.m. 12:00 pm : every 12:00 p.m. 2:00 pm : every 2:00 p.m.
	REACH Update Immediate	...	<ul style="list-style-type: none"> On : Whenever the TV enters standby mode (the power cord is plugged in and the power is off), the REACH data is updated on the TV. Off : The REACH data is only updated on the TV at the REACH server update time.
	Room Number	...	Setting Room Number.
	REACH 2.0 TV Sound	...	OFF:Close REACH 2.0 TV Sound ON:Open REACH 2.0 TV Sound
REACH 2.0 Server Version	...	0000:Displays the current REACH data version.	

Menu	Item	initial Value	Description
Security	Password Input		Input Password 00000000.(HC678 model none)
	Password Setting	...	Set new Password.(HC678 model none)
	Password Reset	...	Reset Password to 00000000.(HC678 model none)
	Security Mode	...	Security Mode ON or OFF.(HC678 model none)
	USB	...	USB Disable or Enable.(HC678 model none)
	HDMI	...	HDMI Disable or Enable.(HC678 model none)
DRM	DRM Mode	Pro:idiom	Configures CAS support. Applies to only the NB673, NB677, and NB678 models. OFF : Turns off CAS support. LYNK DRM : Select to turn on S-LYNK DRM CAS support only. Pro:idiom : Select to turn on Pro:Idim CAS support only. LYNK DRM,PI : Select to have the TV support S-LYNK DRM CAS and Pro:Idiom CAS.
	PI AES Data	0xD279	Displays the current state of Pro:Idiom AES
	PI AES Log	OFF	PI AES Log consists of Pro:Idiom AES diagnostic register, here after referred as AESD, values. These register log will help us diagnose PI key loss issue in the field and provide solution for it.
	View PI AES Log	...	Displays Pro:Idiom AES Log OSD
System	Self Diagnosis for TV		Lets you check the state of the TV picture and sound. • Picture Test : Use to check for picture problems. If the problem appears in the test picture, select YES, and then follow the directions on the screen. • Sound Test : Use to check for sound problems. If the problem occurs during the test, select YES, and then follow the directions on the screen.
	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:Idim 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.
	SW Upgrade		Lets you upgrade the TV SW with a USB memory stick. See Page 32.
	Service Pattern	OFF	Lets you check the state of the TV picture by displaying picture test patterns. Press the Menu button to turn off the test patterns and exit.
	ATV Cable AGC Gain	Default	Lets you control the AGC gain of the analog cable channels. Don't change the default value unless problems occur.
	DTV OpenCable AGC Gain	Default	Lets you control the AGC gain of the digital cable channels. Don't change the default value unless problems occur.
	Sound Bar Out	OFF	ON: TV speaker sound will be mute. Sound will come out through HDMI. You must connect the Sound Bar to hear the sound. OFF: Sound will come out through TV speakers normally.
	Contact Samsung		Samsung Contact information
	TV reset		Returns all settings on the TV to their factory defaults.

 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, S-LYNK REACH contents, and TICKER contents through RF DTV to several hundred hospitality TVs simultaneously. The REACH functions are available only in stand-alone mode. The REACH Server is sold separately. Refer to the REACH server manual enclosed with the REACH server product for more operating information.

Using the Soccer Mode

Soccer Mode (only Mexico have)

 MENU  → Applications → Soccer Mode → ENTER 

This mode provides optimized condition for watching sports games.

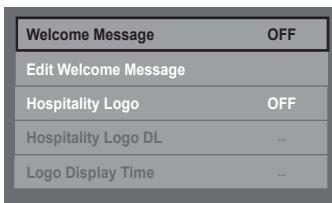
- **A (Zoom)**: Pause playback and divide the picture into 9 parts. Select a part to zoom it in. Press this button again to resume.

 If you turn the TV off while watching **Soccer Mode**, the **Soccer Mode** will be disable.

Welcome Message

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

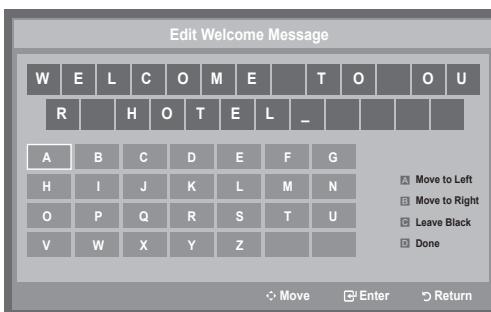
- Welcome message settings are in the Hotel Option Menu.
- Set Welcome Message to ON to display the message when the TV is powered on.



- You can make the Welcome Message up to 25 characters long and edit it in the Hotel Service menu.
- Welcome Message supports the following characters:

 Capital Letters from A to Z.

- You can edit the Welcome Message by using the remote's navigation, color, and Enter buttons in the **"Edit Welcome Message"** OSD (See the illustration below.)



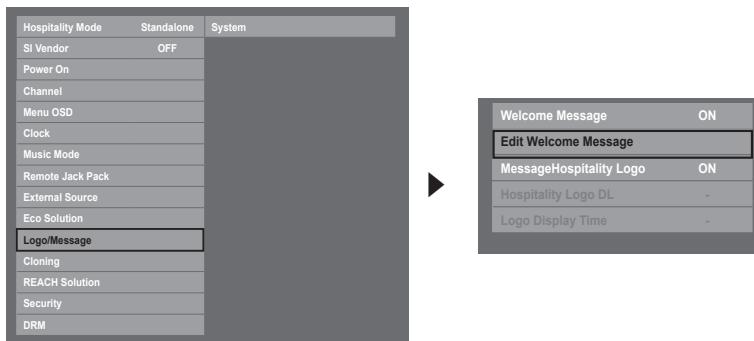
Below are the general directions for navigating and changing letters on the Edit Welcome Message screen:

- Press the **A** button on the remote to move to the left in the message.
- Press the **B** button to move to the right.
- After you have selected a position in the message, use the arrow buttons on your remote to select a letter in the alphabet below the message.
- Press **Enter** to place a letter into the position you selected.
- Press the **C** button to erase a letter in a position or enter a blank.
- Press **Return** or the **D** button to exit.

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.



- <Depending on model and region, some menu items may not exist.>
(HC678 model not have Security)
- **Hospitality Logo**
 - This option lets you choose whether the Hospitality Logo image is displayed or not.
 - Initial value is OFF.
 - Can be set to OFF or ON.
 - When set to ON, the Logo Download and Logo Time Display menu items become accessible.
- **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**
 - The TV supports only BMP and AVI format.
 - The file name must be samsung.bmp or samsung.avi.
 - The maximum resolution of the BMP format is 960 x 540.
 - The maximum file size for AVI format is 30MB.
 - 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, Input, 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 array of settings and distribute that standard array to all the TVs in your facility.

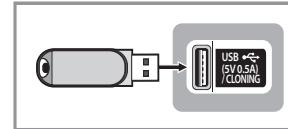
- **Cloning from TV to USB:** Copies stored menu settings from a TV to a USB device.

1. Insert a USB drive into the **USB** port on the rear of the TV
2. Enter the hotel option menu by pressing these buttons in order. **MUTE** → **1** → **1** → **9** → **ENTER** 
3. Press the **▲** or **▼** button to select **Clone TV to USB**, and then press the **ENTER**  button.
4. The message **Clone TV to USB** is displayed. Press the **ENTER**  button.
5. The TV displays one of the following messages:

- **In Progress:** Copying data to USB.
- **Completed:** Copy operation was successful.
- **Failed:** Copy operation was not successful.
- **No USB:** USB is not connected.

The clone folder will be labeled T-NVTF6AKUCB.

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



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

 **Shortcut:** Turn the TV off, insert the USB device, turn the TV on, and then press the **ENTER**  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 Interactive menu by pressing these buttons in order. **MUTE** → **1** → **1** → **9** → **ENTER** 
5. Press the **▲** or **▼** button to select “Clone USB to TV”, and then press the **ENTER**  button.
6. The message **Clone: USB to TV** is displayed. Press the **ENTER**  button.
7. The TV displays one of the following messages:

- **In Progress:** Copying data to TV.
- **Completed:** Copy operation was successful.
- **Failed:** Copy operation 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-NVTF6AKUCB.

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



- Settings Cloned in the Hotel Menu

Menu Item	Cloning Support	Applicable Region
Hospitality Mode	Yes	All
SI Vendor	Yes	All except Brazil
Power On Channel	Yes	All
Power On Channel Num	Yes	All
Power On Channel Type	Yes	All
Power On Volume	Yes	All
Power On Volume Num	Yes	All
Min Volume	Yes	All
Max Volume	Yes	All
Power On Source	Yes	All
Power On Option	Yes	All
Channel Setup	N/A	All except Hospital
Channel Editor	N/A	All
Dynamic SI	N/A	Smooovie SI and Hospital
Picture Menu Lock	Yes	Hospital Models Only
Menu Display	Yes	EU
Panel Button Lock	Yes	US and US Hospita
Home Menu Display	Yes	EU and EU Hospita
Home Menu Editor	Yes	EU and EU Hospita
Home Menu Auto Start	N/A	Hospital Models Only
Clock Type	Yes	EU and EU Hospital
Local Time	N/A	EU and EU Hospital
Time Channel Type	Yes	All
Time Channel Num	Yes	All
Music Mode AV	Yes	ASIA Models only
Music Mode Backlight	Yes	All
Priority AV	Yes	US Hsopital Only
Priority HDMI	Yes	EU and EU Hospital
AV Option	Yes	EU and EU Hospital
HDMI Option	Yes	EU and EU Hospital
HDMI Music Mode	Yes	EU and EU Hospital
USB Pop-up Screen	Yes	EU
External Source Banner	Yes	EU
Auto source	Yes	All
Anynet+Return Source	Yes	All
Energy saving	Yes	All
Welcome Message	Yes	All
Edit Welcome Message	Yes	All
Hospitality Logo	N/A	All

Menu Item	Cloning Support	
Hospitality Logo DL	Yes	All
Logo Display Time	Yes	All
Clone TV to USB	Yes	All
Clone USB to TV	Yes	US and US Hospital
Setting Auto Intialize	Yes	All
REACH 3.0	Yes	ASIA Models only
REACH 2.0	Yes	US and EU
REACH Channel	Yes	All
Group ID	Yes	All
IPG Room Type	No	All Models except Hospital
Ticker	No	All except US
REACH Update Time	Yes	Hospital Models Only
REACH Update Immediate	Yes	Hospital Models Only
Room Number	Yes	Hospital Models Only
REACH 2.0 TV Sound	Yes	All
REACH 2.0 Server Version	Yes	EU
Password Input	Yes	All
Password Setting	N/A	All
Password Reset	Yes	All
Security Mode	N/A	All
USB	Yes	All
HDMI	N/A	All
DRM Mode	N/A	All
PI AES Data	Yes	All
PI AES Log	Yes	All except Brazil/ASIA_READY
View PI AES Log	Yes	All except Brazil/ASIA_READY
Self Diagnosis for TV	N/A	All except Brazil/ASIA_READY
Self Diagnosis for HTV	Yes	All except Brazil/ASIA_READY
SW Upgrade	N/A	All except Brazil/ASIA_READY
Service Pattern	No	US
ATV Cable AGC Gain	Yes	All except Brazil/ASIA_READY
DTV OpenCable AGC Gain	No	Guestek
Sound Bar Out	Yes	US and US Hospital
Contact Samsung	N/A	US and US Hospita
TV reset	N/A	All

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 x. 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."
 -  The TV will display the OSD until you press the Exit button.

See the example below.



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).

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

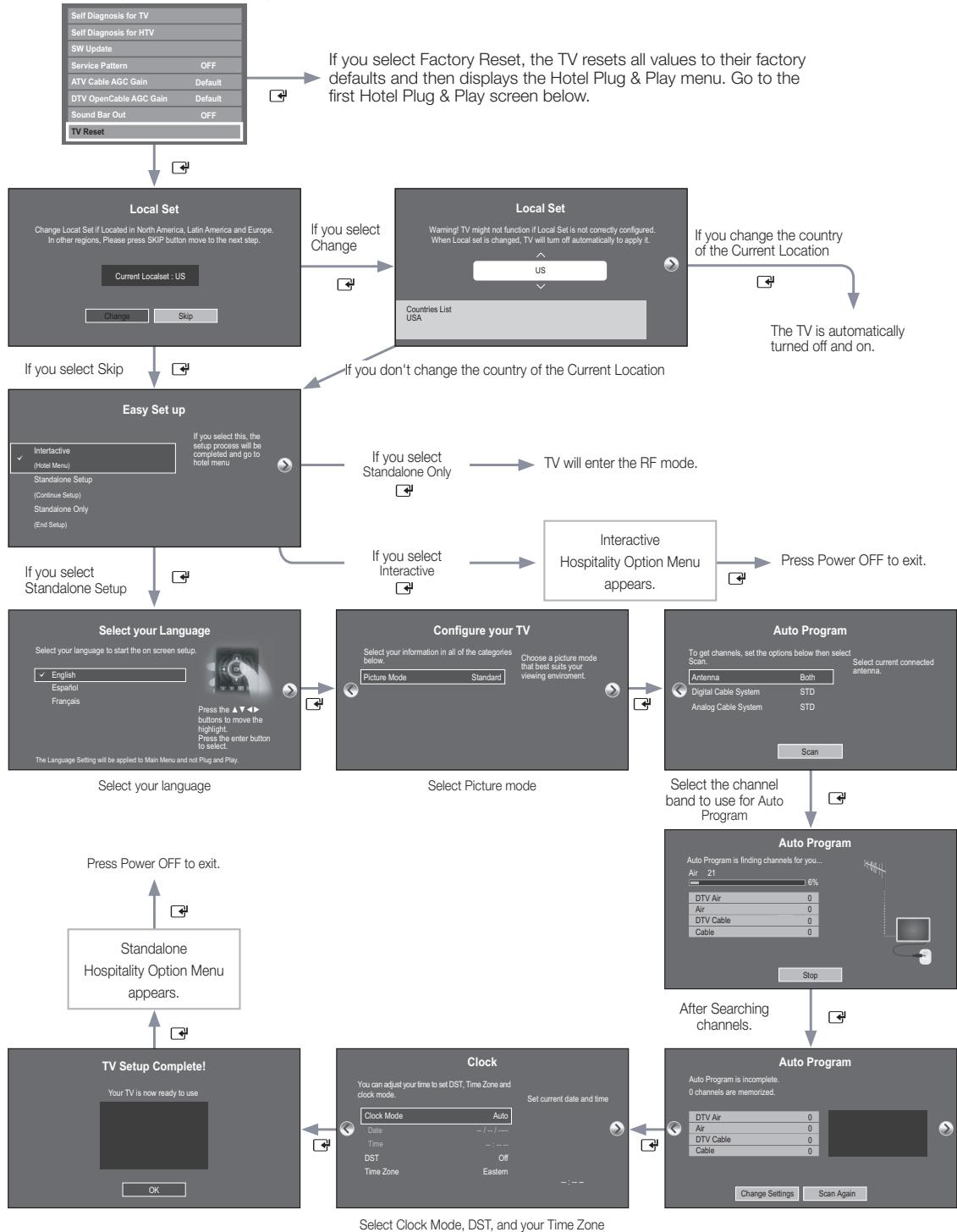
When you clone settings from one TV to another, you clone both the guest side menu and hotel side menu settings: Picture, Sound, Input, Channel, Setup, and Hotel Setup. This lets you set nearly all of the menu values on your hospitality TVs to the same, standard settings. If you allow guests access to 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.

Menu	Menu Item	Menu	Menu Item
Picture Menu	Picture Mode	Sound Menu	Sound Mode
	Backlight		Sound Effect
	Contrast		DTS TruSurround
	Brightness		DTS TruDialog
	Sharpness		Equalizer
	Color		Speaker Settings
	Tint (G/R)		Speaker Select
	Picture Size		Auto Volume
	Picture Size		Reset Sound
	Position		System Menu
	PIP	Menu Language	
	Advanced Settings	Time	
	Dynamic Contrast	Clock	
	Black Tone	Sleep Timer	
	Flesh Tone	Wake-up Timer	
	RGB Only Mode	Eco Solution	
	Color Space	Energy Saving	
	White Balance	Eco Sensor	
	Gamma	No Signal Power Off	
	Motion Lighting	Auto Power Off	
	Picture Option	Auto Protection Time	
	Color Tone	Change PIN	
	Digital Clean View	General	
	MPEG Noise Filter	Game Mode	
	HDMI Black Level	Boot Logo	
	Film Mode	Anynet+ (HDMI-CEC)	
Picture Off	Anynet+ (HDMI-CEC)		
Reset Picture	Auto Turn Off		
	DivX® Video On Demand		

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. (HC678 model none)



- **Hotel Plug & Play OSD**
 - Initially highlighted: Interactive
 - If you select the Standalone Only button, the Standalone hotel mode is set by default and the “Standalone mode is set” OSD appears for 3 seconds.
TV enters RF mode automatically after displaying the “Standalone mode is set” OSD for 3 seconds.
 - If you select the Interactive mode, the Interactive Setup Menu is displayed. Press the power off key to exit from the Interactive menu.
 - If you select the Standalone Plug & Play mode, the “Select Menu Language” OSD appears.
- **LocalSet**
 - 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 Interactive mode, the Interactive Setup Menu is displayed. Press the power off key to exit from the Interactive menu.
 - If you select the incorrect country, execute TV Reset again after entering the Service section of the Hotel Menu.
- **Select Menu Language OSD**
 - If you select Standalone from the “Select Hotel TV Mode” OSD, the “Select Menu Language” OSD appears.
 - Initially highlighted: English
 - Display time: OSD time out and operation are the same as Samsung’s consumer TV models.
 - If you press the Enter key, the “Picture Mode” OSD appears
- **Picture Mode OSD**
 - Initially highlighted: Standard.
 - The TV displays the Picture Mode OSD where you can choose the Dynamic or a Standard Picture mode.
- **Auto Search Mode OSD**
 - If you press the Enter key, the TV automatically searches for channels.
 - The OSD Display time, which starts when the Auto Store operation is completed and continues until the Auto Sort function starts, is 30 seconds.
- **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 On or Off to apply or not apply daylight saving time to the TV.
 - Select your time zone on the map that appears.

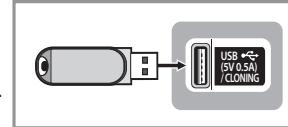
USB Software Upgrade Method

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 hotel 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 **ENTER** button.
3. Press the **▲** or **▼** button to select **SW Upgrade**, and then press the **ENTER** 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 the **OK**, and then press the **ENTER** 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.

Sound Bar

• Samsung Sound-Bars and Hospitality TVs in 2014

- Samsung Sound-Bars and hospitality TVs support the ARC feature in HDMI 1.4. If you connect a compatible Samsung Sound-Bar to a compatible Samsung hospitality TV using a single HDMI cable, guests can listen to the TV's sound through the Sound-Bar.
- The item of Sound bar Out in Hospitality Option Menu makes you control to where the TV sound is outputted when the TV is turned on.

If Sound bar Out is On, the TV sound is automatically outputted in the Sound Bar device only whenever TV is turned on.

If Sound bar Out is Off, the TV sound is automatically outputted in the TV speaker only whenever TV is turned on.

- Models supporting the ARC function are listed below:

- Sound-Bars: HW-E350/E450/E550
HW-F350/F355/FM35/F450/FM45/FM45C/F550/F551/FM55/FM55C/F750/F751

• Setting the Sound-Bars to Hotel Mode.

1. Set the following Hotel menu options:
 - Hotel option > External Device > Sound Bar Out = On.
 - Hotel option > Power On > Power On Volume = User Defined.
 - Hotel option > Power On > Power On Volume Num > Set greater than 0.
 - Hotel option > Power On > Max Volume > Set greater than 0.
2. Connect an HDMI cable from the HDMI OUT jack on the back of the Sound-Bar to the HDMI3 port (supporting ARC) on the hospitality TV.
3. After the Sound-Bar is connected to the hospitality TV, when the TV turns on, the Sound-Bar automatically detects the TV, and then automatically switches to Hotel Mode.

Sound Bar Hotel mode functional characteristics:

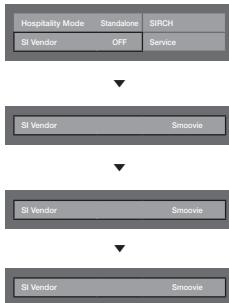
- Power On/Off is synchronized with the TV
- HDMI_CEC defaults set to On
- Functions through the "HDMI OUT" port only
- Disables the "Input mode" key on the VFD to prevent unexpected audio-source changes.
- Acquires adjustable Power On and Max Volume settings from the TV's Hotel option menu. The Sound-Bar's Power On Volume and Max Volume values, however, are 1/2 of the Power On Volume and Max Volume settings in the TV's Hotel option menu. Example: If the TV's Power On Volume=20 and Max Volume=90, then the Sound Bar's Power On Volume=10 and Max Volume=45.

Channel Bank Editor (Smovie 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 instalable 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+Enter**  on the remote to enter the Hotel Standalone menu.
2. Go to SI vendor, and then select : **"Smovie"**
3. Find the new menu option, **"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.

Channel Bank Editor			
	Bank1 (4)	Bank2 (6)	Bank3 (36)
All	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
1 ABC	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
2 CBS	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
3 FOX	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
4 NBC	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
5 CNN	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
6 CW	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
7 HBO	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
8 TNT	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

 Move
  Select/Deselect
  Return

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.

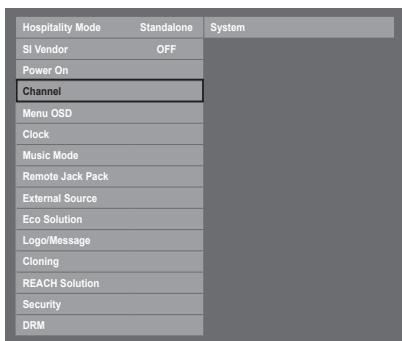
Smovie Set Up Sequence

Step	Smovie 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 Smovie TV in the Hotel menu
4	Select Smovie 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	
9		
10		

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, and sort the channels in your desired channel number order.
- 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.>
(HC678 model not have Security)

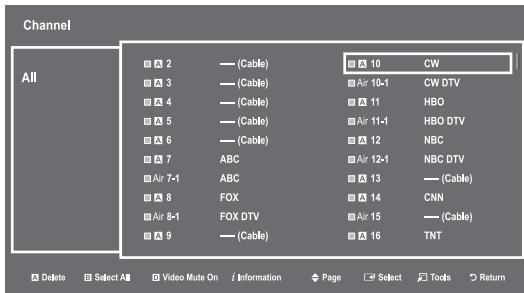
General Steps for Using the Channel Editor in Stand-alone Mode

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 TOOLS Button based on the list you compiled.
5	Press the EXIT or RETURN Button to exit.

<For a detailed explanation of how Channel Editor works, see pages 34 through 36.>

The picture below shows a sample Channel Editor screen.

34 English

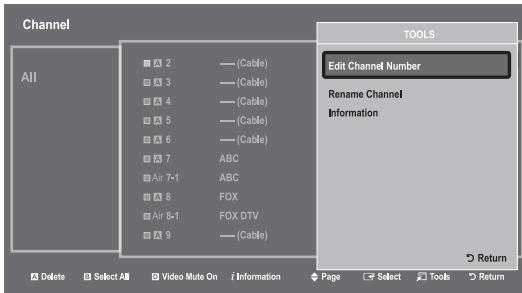


- **A** Indicates an analog channel.
- Channels without an **A** are digital channels.
- If Dynamic SI in the Hospitality Option Menu is On, Channel Editor will display no digital channels. You must set Dynamic SI to Off before you can edit digital channels in Channel Editor.
- The guide at the bottom of the Channel Editor menu displays the remote buttons you need to press to apply Channel Editor functions.
 - 1 Using the remote's up or down arrow key, highlight the channel that you want to edit.
 - To edit more than one channel, move the highlight to a channel, and then press the **ENTER** key. A check will appear in the check box next to the channel. Repeat for each channel you want to edit.
 - 2 To delete the channel or channels you selected from the channel list, press the red button on the remote.
 - To delete two or more channels simultaneously, select multiple channels in Step 1, and then press the red button on the remote.
 - 3 Press the green button on the remote to select all channels.
 - 4 To apply the video mute, press the yellow button on the remote.
 - To apply the video mute to two or more channels simultaneously, select multiple channels in Step 1, and then press the yellow button on the remote.
 - 5 To view information about a channel, including video mute set up, press the **INFO** button on the remote.
 - 6 Press the **TOOLS** button on the remote to rename a channel or change the channel number. See page 36.

Channel Editor Functions and Remote Button

- A** Red (**Delete**): Deletes a channel from the channel list.
- G** Green (**Select All**): Selects all channels at once.
- C** Yellow (**Deselect All**): Deselects all channels at once.
- D** Blue (**Video Mute On/Off**): You can set the **Video Mute On/Off**.
- ◆** (**Page**): Moves to next or previous page.
- i** (**Information**): Display details of the selected channel.
- ⌘** (**Tools**): Displays the option menu.
- ↶** (**Return**): Returns to the previous step or exits.

When you press the **TOOLS** button, the following menu is available.



- **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. Press the **TOOLS** button on your remote.
3. Select **Edit Channel Number** in the Tools menu.
4. Use the up or down arrow keys to change the channel number.
5. Select **OK** when done, and then press the **ENTER** 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. Press the **TOOLS** button on your remote.
3. Select **Rename Channel** in the Tools menu.
4. 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.
5. When finished, select Done on the bottom of the screen, and then press the **ENTER** button.

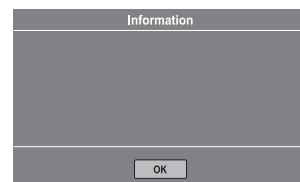


- **Information**

Use **Information** to view information about a channel you select.

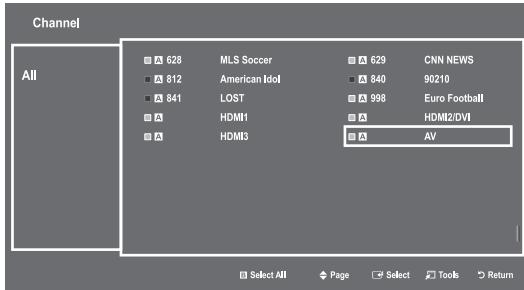
To view information about a channel, follow these steps:

1. Select a channel on the Channel Edit screen.
2. Press the **TOOLS** button on your remote.
3. Select **Information** in the Tools menu.
4. Select **OK**, and then press the **ENTER** button to close the Information screen.

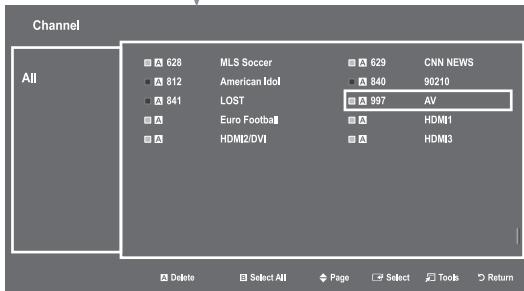


The external sources of this TV are displayed in the last page of the Channel Editor menu as shown in the example below. In the example, there are two external sources connected to the TV, **HDMI2 (DVI)** and **AV**.

- You can assign a new analog channel to an external source by selecting the source on the last page, pressing the **TOOLS** button, selecting **Edit Channel Number**, and then using the up or down arrow button on the remote to select the channel number of the analog 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.



HDMI3AllAfter assigning channel number 997 to the AV source.



Installing the Wall Mount



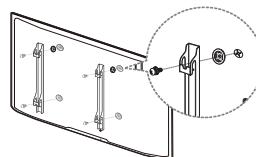
Wall or Ceiling Mounting

If you mount this product on a wall, it should be mounted only as recommended by the manufacturer. Unless it is correctly mounted, the product may slide or fall, causing serious injury to a child or adult, and serious damage to the product.

Preparing before installing Wall-Mount (48" only)

To install a wall-mount from another manufacturer, use the Holder-Ring.

The product shape may differ depending on the model.



Installing the Wall Mount Kit

The wall mount kit (sold separately) lets you mount the TV on the wall. For detailed information about 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 elect to install the wall mount on your own.

To order the wall mount, contact Samsung Customer Care at 1-800-SAMSUNG (1-800-726-7864).

Wall Mount Kit Specifications (VESA)

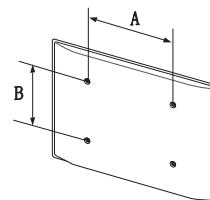
The wall mount kit is not supplied, but sold separately.

Install your wall mount on a solid wall perpendicular to the floor. When attaching to building materials other than plaster board, please contact your nearest dealer. If you install the wall mount on a ceiling or slanted wall, 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.
- Our 57" and 63" models do not comply with VESA Specifications. Use Samsung's dedicated wall mount kit for these models.
- Do not mount the TV at more than a 15 degree tilt.
- Always have two people mount the TV onto a wall.

Product Family	TV size in inches	VESA screw hole specs (A * B) in millimeters	Standard Screw (Length* Pitch in mm)	Quantity
LED-TV	28	100 X 100	M4	4
	40	200 X 200	M8	
	48	400 X 400		



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

Securing the TV to the Wall



Caution: Pulling, pushing, or climbing onto the TV may cause the TV to fall. In particular, ensure that your children do not hang over or destabilize the TV; doing so may cause the TV to tip over, resulting in serious injuries or death. Follow all safety precautions provided on the included Safety Flyer. For added stability, install the anti-fall device for safety purposes, as follows.

To Avoid the TV from Falling

1. Put the screws into the clamps and firmly fasten them onto the wall. Confirm that the screws have been firmly installed onto the wall.

 You may need additional material such as an anchor depending on the type of wall.

 Since the necessary clamps, screws, and string are not supplied, please purchase these additionally.

2. Remove the screws from the back center of the TV, put the screws into the clamps, and then fasten the screws onto the TV again.

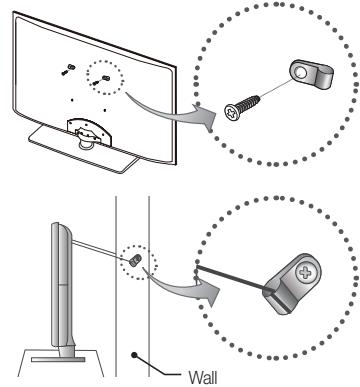
 Screws may not be supplied with the product. In this case, please purchase the screws.

3. Connect the clamps fixed onto the TV and the clamps fixed onto the wall with a strong string and then tie the string tightly.

 NOTE

- Install the TV near to the wall so that it does not fall backwards.
- It is safe to connect the string so that the clamps fixed on the wall are equal to or lower than the clamps fixed on the TV.
- Untie the string before moving the TV.

4. Verify all connections are properly secured. Periodically check connections for any sign of fatigue for failure. If you have any doubt about the security of your connections, contact a professional installer.



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 a “” icon on the rear of the TV. A Kensington slot is beside the “” icon.

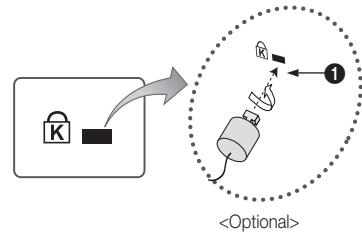
To lock the product, follow these steps:

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		
Operating Temperature	50°F to 104°F(10°C to 40°C)	
Operating Humidity	10% to 80%, non-condensing	
Storage Temperature	-4°F to 113°F(-20°C to 45°C)	
Storage Humidity	5% to 95%, non-condensing	
Model Name	HG28NC670 HG28NC677	
Display Resolution	1366 x 768	
Screen Size (Diagonal)	28" Class (28.0" measured diagonally)	
Sound (Output)	5W x 2	
Dimensions (WxHxD)		
Body	25.3 x 15.6 x 2.5 (inches) 643.4 x 396.5 x 62.9 (mm)	
With stand	25.3 x 17.1 x 6.4 (inches) 643.4 x 435.0 x 163.4 (mm)	
Weight		
Without Stand	8.6 lbs (3.9 kg)	
With Stand	9.5 lbs (4.3 kg)	
Stand Swivel (Left / Right)	0°	
Model Name	HG40NC670 HG40NC677 HG40NC678	HG48NC670 HG48NC677 HG48NC678
Display Resolution	1920 x 1080	
Screen Size (Diagonal)	40" Class (40.0" measured diagonally)	48" Class (47.6" measured diagonally)
Sound (Output)	10W x 2	
Dimensions (WxHxD)		
Body	35.7 x 21.0 x 2.6 inches (906.6 x 532.9 x 65.1 (mm))	42.3 x 24.7 x 2.6 inches 1075.1 x 627.5 x 65.5 (mm)
With stand	35.7 x 22.7 x 8.9 inches (906.6 x 577.6 x 226.5 (mm))	42.3 x 26.5 x 8.9 inches 1075.1 x 673.5 x 226.5 (mm)
Weight		
Without Stand	16.8 lbs (7.6kg)	24.0 lbs (10.9kg)
With Stand	23.1 lbs (10.5kg)	30.6 lbs (13.9kg)
Stand Swivel (Left / Right)	20° / 60° / 90°	

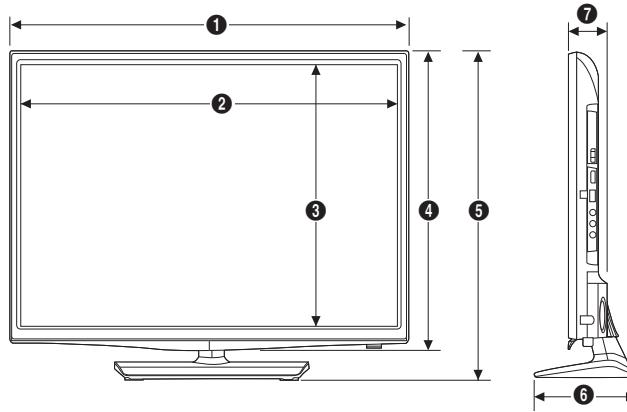
 Design and specifications are subject to change without prior notice.

 This device is a Class B digital apparatus.

Dimensions

HG28NC670 / HG28NC677

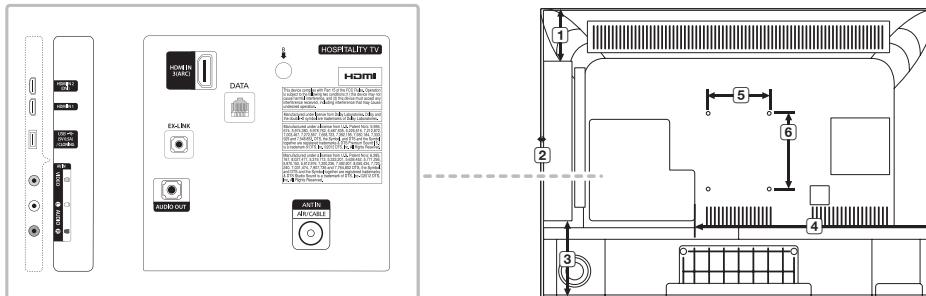
- Front view / Side view



(Unit: inches)

1	2	3	4	5	6	7
25.3	24	13.7	15.6	17.1	6.4	2.5

- Jack panel detail / Rear view

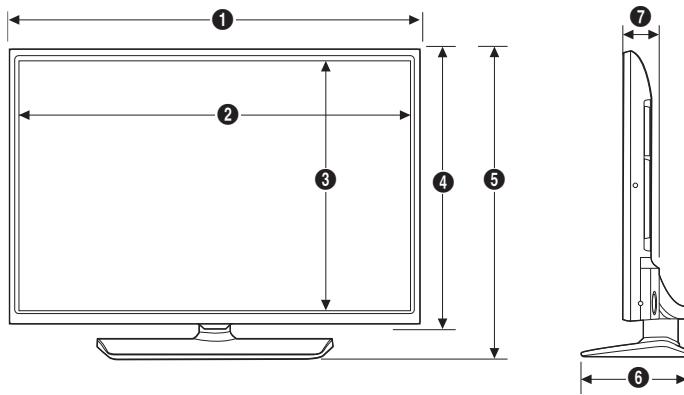


(Unit: inches)

1	2	3	4	5	6
2.8	0.2	4.0	15.5	3.9	3.9

HG40NC670/HG40NC677/HG40NC678

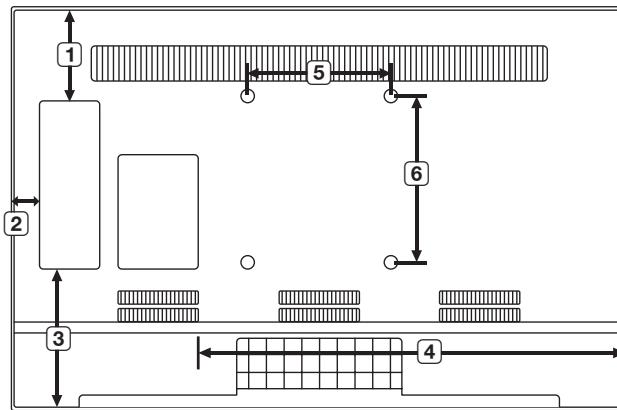
- Front view / Side view



(Unit: inches)

	1	2	3	4	5	6	7
HG40NC670	35.7	34.9	19.7	21	22.7	8.9	2.6

- Jack panel detail / Rear view

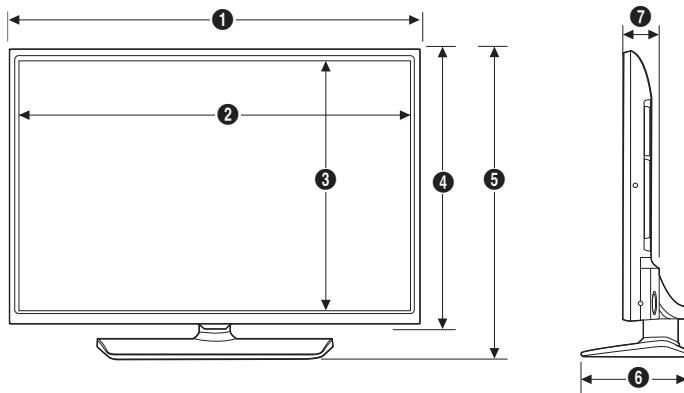


(Unit: inches)

1	2	3	4	5	6
4.6	1.3	7.7	24.4	7.9	7.9

HG48NC670/HG48NC677/HG48NC678

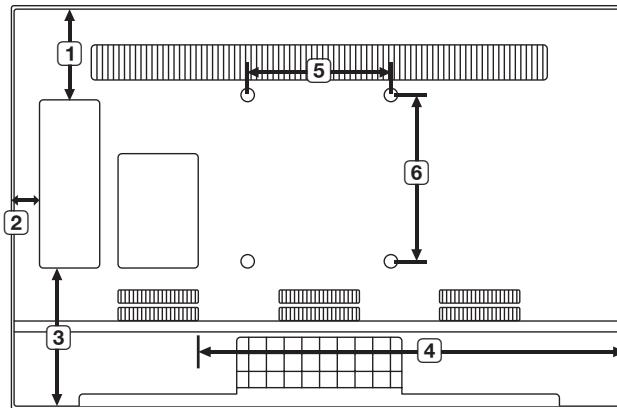
- Front view / Side view



(Unit: inches)

1	2	3	4	5	6	7
42.3	41.6	23.4	24.7	26.5	8.9	2.6

- Jack panel detail / Rear view



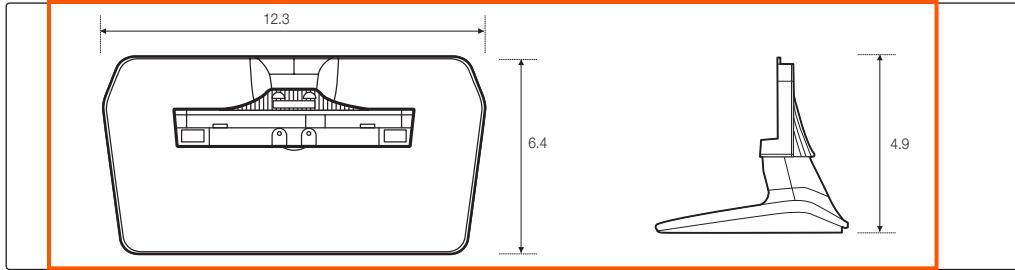
(Unit: inches)

1	2	3	4	5	6
7.3	1.6	8.7	30.2	15.7	15.7

▪ Base Stand detail

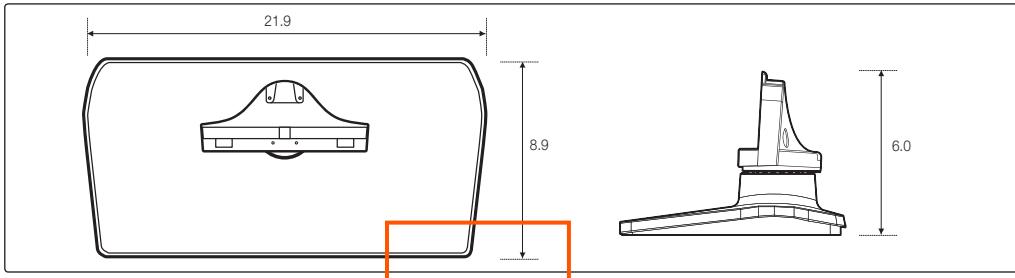
HG28NC670 / HG28NC677

(Unit: inches)



HG40NC670/HG40NV677/HG40NC678/HG48NC670/HG48NV677/HG48NC678

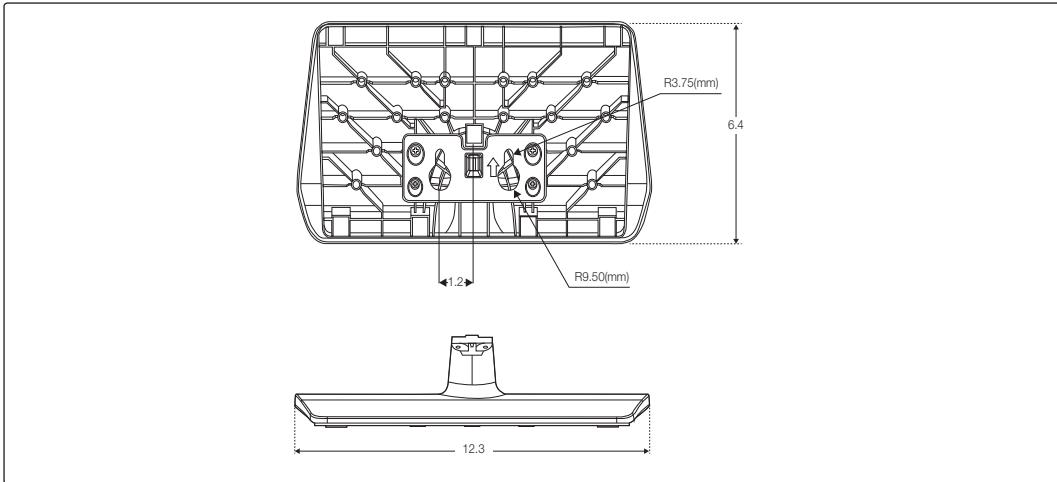
(Unit: inches)



▪ Base Stand detail

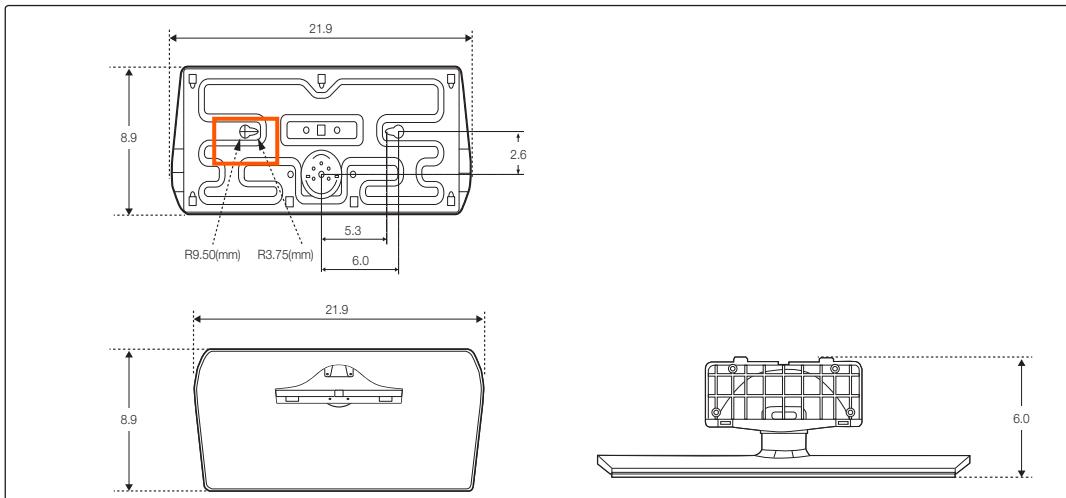
HG28NC670/HG28NC677

(Unit: inches)



HG40NC670/HG40NC677/HG40NC678/HG48NC670/HG48NC677/HG48NC678

(Unit: inches)



NOTE: All drawings are not necessarily to scale. Some dimensions are subject to change without prior notice. Refer to the dimensions prior to performing installation of your TV. Not responsible for typographical or printed errors.

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Correct Disposal of This Product (Waste Electrical & Electronic Equipment)

(Applicable in the European Union and other European countries with separate collection systems)

This marking on the product, accessories or literature indicates that the product and its electronic accessories (e.g. charger, headset, USB cable) should not be disposed of with other household waste at the end of their working life. To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate these items from other types of waste and recycle them responsibly to promote the sustainable reuse of material resources. Household users should contact either the retailer where they purchased this product, or their local government office, for details of where and how they can take these items for environmentally safe recycling. Business users should contact their supplier and check the terms and conditions of the purchase contract. This product and its electronic accessories should not be mixed with other commercial wastes for disposal.



Correct disposal of batteries in this product

(Applicable in the European Union and other European countries with separate battery return systems)

This marking on the battery, manual or packaging indicates that the batteries in this product should not be disposed of with other household waste at the end of their working life. Where marked, the chemical symbols Hg, Cd or Pb indicate that the battery contains mercury, cadmium or lead above the reference levels in EC Directive 2006/66. If batteries are not properly disposed of, these substances can cause harm to human health or the environment. To protect natural resources and to promote material reuse, please separate batteries from other types of waste and recycle them through your local, free battery return system.

Important Warranty Information Regarding Television Format Viewing

See the warranty card for more information on warranty terms.

Wide screen format LED Displays (with aspect ratios of 16:9, the ratio of the screen width to height) are primarily designed to display 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 crawls, 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 : 1-866-894-0524
- In Canada : 1-800-213-8513

Disconnecting Device Instructions

Worded: "To disconnect the apparatus from the mains, the plug must be pulled out from the mains socket, therefore the mains plug shall be readily operable" or equivalent.

Outdoor Use Marking - UL

Worded: "WARNING - To Prevent damage which may result in fire or electric shock hazard, do not expose this appliance to rain or moisture" or equivalent.

Wet Location Marking - c-UL

Worded: "Apparatus shall not be exposed to dripping or splashing" and "Do not place a vessel containing water on this apparatus as this can result in a risk of fire or electric shock" or equivalent.

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Contact SAMSUNG WORLD WIDE

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

Country	Customer Care Center ☎	Web Site	Address
CANADA	1-800-SAMSUNG (726-7864)	www.samsung.com/ca/support (English) www.samsung.com/ca_fr/support (French)	Samsung Electronics Canada Inc. 2050 Derry Road West, Mississauga, Ontario L5N 0B9 Canada
U.S.A	1-800-SAMSUNG (726-7864)	www.samsung.com/us/support	Samsung Electronics America, Inc. 85 Challenger Road Ridgefield Park, NJ 07660