



# 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 has functionality that lets it interact with a set-back box (SBB/STB) and with other TVs in a computer controlled system for hotels and other hospitality businesses.

Interactive: When the TV is powered-up initially, it sends a command to identify the connected SBB/STB. If it identifies the SBB/STB, the TV switches to ONLINE mode which gives full control of the TV to the SBB/STB.

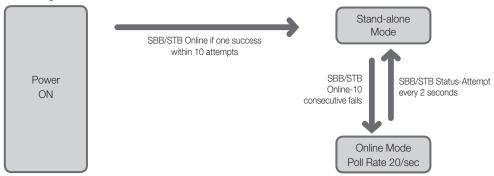
When the TV is in ONLINE mode, it stops accepting IR (Samsung remote) commands and acts according to the interface protocol.

Stand-Alone: If you are not using an SBB/STB and the TV cannot or does not identify an SBB/STB, you should switch the TV to STAND-ALONE mode with restricted operation.

## **Operational Modes**

When this TV is in Hotel mode and is operated with an SBB/STB, it is in one of two states: ONLINE or STAND-ALONE

In the STAND-ALONE state, the TV will act as a Hotel TV, but without active communication. This is to prevent guests from trying to cheat the system by disconnecting the SBB/STB.



To set the options for Stand-alone or Interactive (Online) mode, refer to pages 19-23 (Setting the hotel option data: Menu Items.)

- You can restrict all (or some) operations to prevent guests from "cheating" the TV system.
- You can can set Volume limits and lock or unlock the Panel buttons.

## 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.
- Use all TV features designed to reduce image retention and screen burn-in. Refer to the proper user manual section for details.

## Securing the Installation Space

When you install the TV, maintain the distances shown below between the TV and other objects ((walls, cabintet 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 serioius 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.



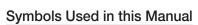




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Indicates that you can press the TOOLS button on the remote control to use this function.

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 parts for the stand are listed under Stand Components on the following page.
- Remote Control (AA59-00628A) & Batteries (AAA x 2)
- Owner's Instructions
- Safety Guide / Quick Setup Guide (Not available in all locations)

- Hotel Mount Kit
- Power Cord
- Data Cable (BN39-00865B, BN39-01011C: except 478/578 model)



- Security Screws
- Requires 5/32" tamper resistant hex wrench. (Sold separately)





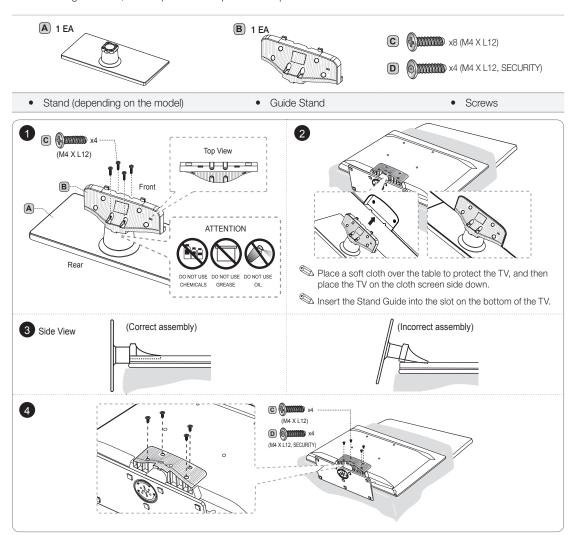


## **Installing the LED TV Stand**

The 32" and larger LED TVs have swivel stands. You can set 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 7.

## Components

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



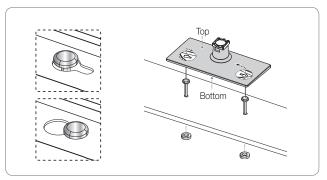






## **Hotel Mount Kit**





To affix the stand to a flat surface such as a dresser top, desk top, or entertainment center, use the Hotel Mount Kit as shown.



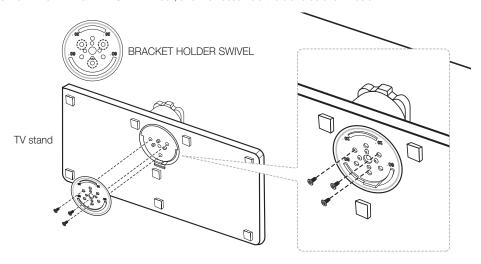


## **(**

## Assembling the swivel (32 inch TVs or larger)

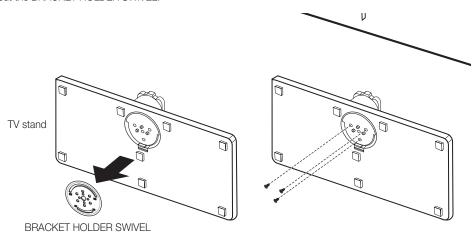
## 60° swivel

Leaving the BRACKET HOLDER SWIVEL unchanged lets the TV swivel 20° left and right. To let the TV swivel 60° left and right, rotate the BRACKET HOLDER SWIVEL 180°, and then assemble the stand as shown below.



## 90° swivel

To let the TV swivel 90° left and right, remove the BRACKET HOLDER SWIVEL and assemble the stand as shown below without the BRACKET HOLDER SWIVEL.





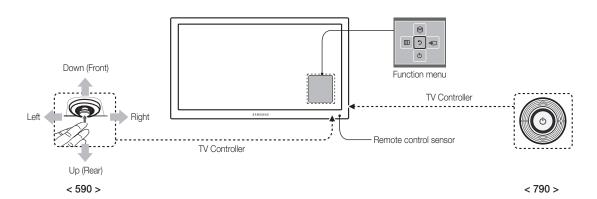




## **Using the TV's Controller**

 $\ensuremath{ \ensuremath{ \begin{tabular} \$ 

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.



Power on	Turn the TV on by pressing the Controller when the TV is in standby mode.
Adjusting the volume	Adjust the volume by moving the Controller from side to side when the power is on.
Selecting a channel	Select a channel by moving the Controller backwards and forwards when the power is on.
Using the Function menu	To view and use the Function menu, press and release the Controller when the power is on. To close the Function menu, press and release the Controller again.
Selecting the MENU (III)	With the Function menu visible, select the <b>MENU</b> (III) by moving the Controller to the left. The OSD (On Screen Display) Menu appears. Select an option by moving the Controller to the right. Move the Controller to the right or left, or backwards and forwards to make additional selections. To change a parameter, select the it, and then press the Controller.
Selecting Content Home ( <sup>⊕</sup> )	With the Function menu visible, select <b>Content Home</b> (CONTENT) by moving the Controller backwards. The <b>Content Home</b> main screen appears. Select an application by moving the Controller, and then pressing the Controller.
Selecting a Source (+)	With the Function menu visible, open the <b>Source screen</b> (-) by pushing the Controller to the right. The <b>Source</b> screen appears. To select a source, move the Controller back and forth. When the source you want is highlighted, press the Controller.
Power Off (🖰)	With the Function menu visible, select <b>Power Off</b> (也) by pulling the Controller forwards, and then press the Controller.

To close the Menu, Smart Hub, or Source, press the Controller for more than 1 second.

#### 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.

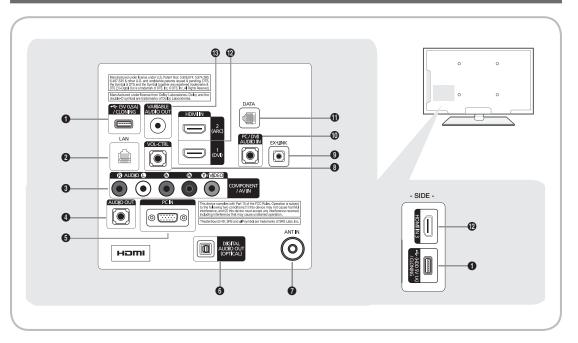








## **The Connection Panel**



- 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.
- USB (5V 0.5A), (HDD 5V 1A) / CLONING
  - Connector for software upgrades and Media Play, etc.
  - Service connection.
- 2 LAN: Connect to a wired LAN using CAT 5 cable.
- 3 COMPONENT IN / AV IN
  - Connect audio cables to "R-AUDIO-L" on your TV and the other ends to corresponding audio out jacks on an AV device.
  - Connects Component video / audio.
  - The COMPONENT IN jack is also used as the VIDEO 1 jack.
  - Connect component video cables (optional) 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.
  - If you want to connect both the 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.
  - Connect RCA audio cables (optional) to "R AUDIO L" on the rear of the TV set and the other ends to corresponding audio out jacks on the external device.
  - When connecting to AV IN, the color of the AV IN [Y/VIDEO] jack (Green) does not match the color of the video cable (Yellow).
- 4 AUDIO OUT: Connects to the audio input jacks on an Amplifier/Home Theater.
- 5 PC IN: Connect to the video output jack on your PC.
- 6 DIGITAL AUDIO OUT (OPTICAL): Connects to a Digital Audio component.











- ANT IN
  - 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
- VOL-CTRL: Used to control the volume of the Bathroom speaker. Connect the Bathroom Wall Box and the VOLCTRL port.
- EX-LINK: Connect this jack to the jack on the optional RJP (Remote Jack Pack). This will allow you to connect external devices (Camcoder, PC, DVD players etc) easily.
- PC / DVI AUDIO IN: Connect to the audio output jack on your PC.
- DATA
  - Used to support data communication between the TV and the SBB.
  - Connects using RJ-12 TV type plugs.
- PDMI IN 1 (DVI), 2 (ARC), 3: Connects to the HDMI jack of a device with an HDMI output.
  - No sound connection is needed for an HDMI to HDMI connection. HDMI connections carry both audio and video.
  - Use the HDMI IN 1 jack for a DVI connection to an external device. Use a DVI to HDMI cable or DVI-HDMI adapter (DVI to HDMI) for the video connection and the PC/DVI AUDIO IN jacks for audio.
- (8) VARIABLE AUDIO OUT: Used for the audio output to the Bathroom speaker. Connect the Bathroom Wall Box and the Variable port (RCA).

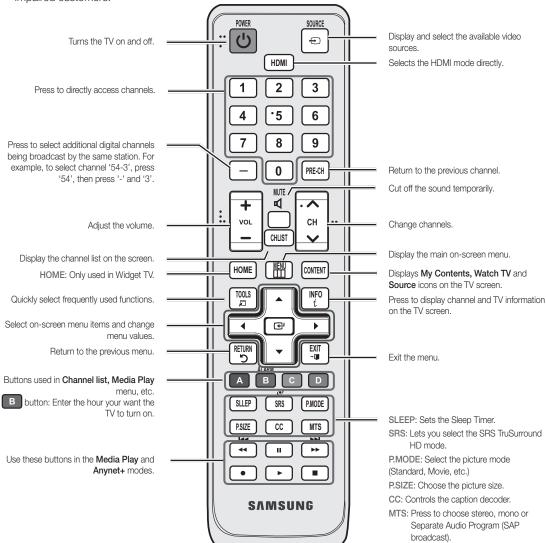
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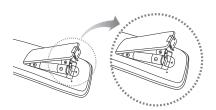


## The Remote Control

This remote control has Braille points on the Power, Channel, and Volume buttons and can be used by visually impaired customers.



## Installing the batteries (Battery size: AAA)



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

## 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 to a Network

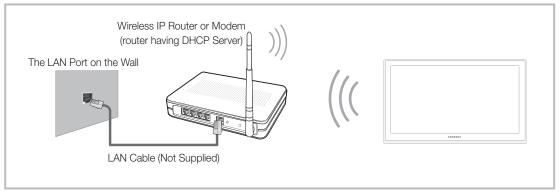
You can set up your TV so that it can access SMART TV applications through your local area network (LAN) using a wired or wireless connection.



🖎 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 during the Initial Setup process (see page 30) or after the Initial Setup process, through the TV's menu.

## **Network Connection - Wireless**

You can connect your TV to your local area network (LAN) through a standard wireless router or modem.



This TV supports the IEEE 802.11a/b/g and n communication protocols. Samsung recommends using IEEE 802.11n. When you play video over a network connection, the video may not play smoothly.

Most wireless network systems incorporate a security system that requires devices that access the network through an access point or AP (typically a wireless IP Sharer - router or modem) to transmit an encrypted security code called an access key.

Your TV is compatible with the following security protocols:

- Authentication Mode: OPEN, SHARED, WPAPSK, WPA2PSK
- Encryption Type: WEP, TKIP, AES

If you select Pure High-throughput (Greenfield) 802.11n mode and the Encryption type is set to WEP or TKIP on your AP or wireless router, Samsung TVs will not support a connection in compliance with new Wi-Fi certification specifications.

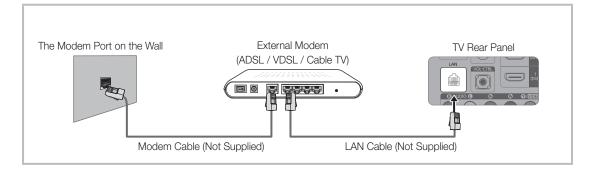


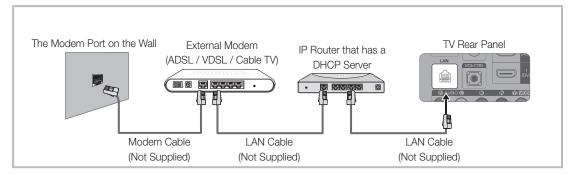


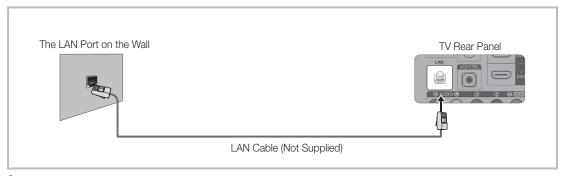


## Network Connection - Wired

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 of 10Mbps or less.

Use Cat 6 (STP Type\*) cable for the connection. (\*Shielded Twisted Pair)

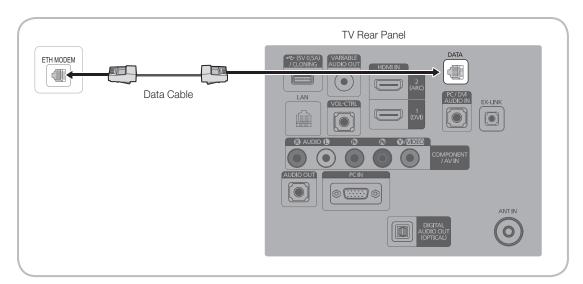








## Connecting the TV to an SBB or STB



- $\textbf{1.} \quad \text{Connect the DATA jack of the TV to the ETH MODEM jack of the STB (SBB) with the Data cable.}$ 
  - Data cables are polarized. Make sure you attach the end marked TV Side to the TV and the end marked STB Side to the STB. Also make sure you use the correct data cable for your vendor.



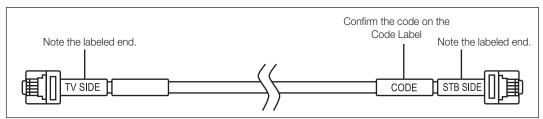


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## List of Vendors and Compatible Data Cables Supplied with the TV

• Confirm you are using the correct data cable for your vendor. Refer to the code label on the data cables.



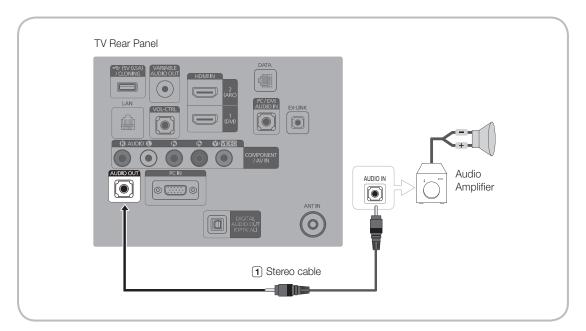
Vendor	Cable code	Pin assign	Remark
OCC	BN39-00865B	CON A CON B  CON A CON B  CON	Provided
NXTV	BN39-01011B	CON A CON B  6: IR 5: GND 4: TN 2: RX 2: RX 1: NC  CON A CON B  1: NC 2: TT 3: NC 3: NC 4: TN 6: IR 6: IR 6: GND 6: IR	
nStreams	BN39-01110A	CON A CON B  6: IR  6: GVD  4: TX  2: NC  3: GVD  4: GVD  4: GVD  4: GVD  4: GVD  6: NC  7: NC  6: NC	
МТІ	BN39-01011C	CON A CON B  6 : IR 5: GND 4: TX 2: NX 2: NX 2: NX 2: NX 2: TX 4: TX 2: TX 2: CND 4: NX 3: NX 4: NX 6: CLK 5: CLK 6: CLK	LodgeNet MTI Provided







## 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.

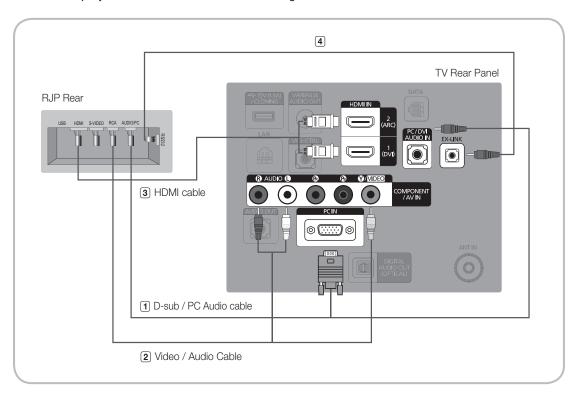






## Connecting the RJP (Remote Jack Pack)

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 PC IN / PC/DVI AUDIO IN port of the TV to the PC/AUDIO port of the RJP.
- 2. Connect the AV IN [VIDEO]/[R-AUDIO-L] port of the TV to the RCA port of the RJP.
- 3. Connect the [HDMI] port of the TV and the HDMI port of the RJP.
- 4. Connect the EX-LINK port of the TV and the RS/232 port of the RJP.

The RJP (Remote Jack Pack) compatible with this Samsung TV is the TeleAdapt TA-7610.







RJP (Remote Jack Pack): RJP stands for Remote Jack Pack. The RJP is a hardware module that has different Audio
Video inputs (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. A Hot Plug & Play function allows hotel guests to connect
an external source to the RJP. The RJP communicates with the TV by sending messages regarding Active/Inactive
sources.

A group of menu items, RJP Priority AV, RJP Priority PC, and RJP Priority HDMI, 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.

- You connect the RJP to HDMI 1, 2, or 3 or AV 1 or 2.
- When the TV is on, connect the TV and the RJP within 10 seconds.
- The RJP can be returned to the factory default settings by pressing the A/V and HDMI buttons simultaneously for 10 seconds. All LEDs blink 5 times, acknowledging that the reset has been performed
- 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 and an Input source 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 connect audio (Ipod or Mp3), Music mode should be ON.
- AV, PC, and HDMI input sources are supported.





## **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,

Items in the Standalone menu only:

- SIRCH Update Time
- Manual SIRCH
- SIRCH Channel
- SIRCH Version

Items in the Interactive menu only:

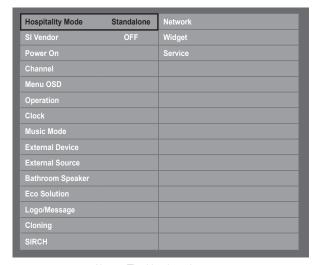
- SI Vendor
- Lodgenet Remote (If you selected MTI or EBL as your SI Vendor)

All other items appear in both menus.

To access the menus, press MUTE  $\rightarrow$  1  $\rightarrow$  1  $\rightarrow$  9  $\rightarrow$  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 standard 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 button to exit a menu item and return to 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.



Above: The Hotel mode menu.

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.
- 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 26.







## Menu Items

To Enter this menu: Press the MUTE  $\rightarrow$  1  $\rightarrow$  1  $\rightarrow$  9  $\rightarrow$  ENTER buttons in order.

To Exit from this menu: AC Power off, 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.  • Standalone  • Interactive	
SI Vendor	SI Vendor	Samsung	Available in the Interactive menu only.  Select the SI Vendor.  Samsung / OCC / MTI / Nstreams / NXTV / Enseo / Cardinal / Guestek / SeaChange / EBL	
	Power On Channel EN	Last Saved	Set the default values, which will be applied when the TV is turned on.  User Defined: Refers to the settings configured for Power On Channel, Channel Type.  Last Saved: Refers to the last saved settings.	
	Power On Channel	3	When the TV is turned on, it switches automatically to this channel when in Stand Alone Hospitality mode.	
	Channel Type		Channel search CABLE and AIR.  ATD, DTV: ON-AIR  CATV (Cable Analog TV), CDTV (Cable Digital TV): CABLE TV	
	Power On Volume EN	Last Saved	Set the default volume values which will be applied when the TV is tu on.  User Defined: Uses the settings configured for Power On Volume Last Saved: Uses the last saved settings.	
Power On	Power On Volume		TV will switch on at this Volume Level in Stand Alone Hospitality mode.	
	Min Volume	0	Minimum Volume Level user can set in Stand Alone Hospitality mode.	
	Max Volume	100	Maximum Volume Level user can set in Stand Alone Hospitality mode.	
	Panel Button Lock	Unlock	Front panel (Local key) operation on/off.  Unlock: Unlock all panel keys  Lock: Lock all panel keys  Power: Lock all panel buttons except Power  Menu/Source: Lock Menu and Source	
	Power On Source	TV	Select the input source the TV displays when it is turned 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.  - 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.	
	Channel Setup		You can use the Channel menu option in the OSD.	
	Channel Editor		Edit channel numbers and names.	
Channel	Dynamic SI	ON	On: Check the DTV Program channel number. (DTV channel editor is inaccessible)  Off: No check of the DTV Program channel number. (DTV channel editor is accessible, but additional channel program number update is not supported)	







Menu	Item	initial Value	Description
Mani: OCD	Picture Menu Lock	OFF	Enable or disable the Picture Menu.
Menu OSD	Menu Display	ON	<ul><li>On : Main Menu displays.</li><li>Off : Main Menu does not display.</li></ul>
Operation	Panel Button Lock	Unlock	Front panel (Local key) operation on/off.  Unlock: Unlock all panel keys  Lock: Lock all panel keys  Power: Lock all panel buttons except Power  Menu/Source: Lock Menu and Source
Clock	Local Time	Manual	Select the way to update clock data.  • Manual: Manual clock setting (without updating from TTX data)
	Music Mode AV	OFF	To get music output from an mp3/audio player through an AV Input Source. 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	Music Mode PC	OFF	To get music output from an mp3/audio player through a PC Input Source. 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 Comp	OFF	To get music output from an mp3/audio player through a Component Input Source. 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.
	7610 Priority AV	1	Lets you set the priority of the 7610 RJP AV jack. You can choose 1, 2, or 3, with 1 being the highest and 3 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.
	7610 Priority PC	2	Lets you set the priority of the 7610 RJP PC jack. You can choose 1, 2, or 3, with 1 being the highest and 3 the lowest. The TV automatically displays the source with the higher priority. See above for a more detailed explanation.
External Device	7610 Priority HDMI	3	Lets you set the priority of the 7610 RJP HDMI jack. You can choose 1, 2, or 3, with 1 being the highest and 3 the lowest. The TV automatically displays the source with the higher priority. See above for a more detailed explanation.
	7610 AV Option	AV1	Select RJP AV Source. (AV1/AV2)
	RJP HDMI Option	HDMI1/DVI	Select RJP HDMI Source. (HDMI1/HDMI2/HDMI3)
	HDMI Music Mode	OFF	To get music output from an mp3/audio player through an HDMI Input Source. When on, you can hear sound from the player through the TV whether there is a video signal or not. (This option is only compatible with the Guest link RJP.)
	Sound Bar Out	OFF	ON/OFF sound bar out. Refer to Page 33.







Menu	Item	initial Value	Description	
IVIOITU	ROTTI	Titla Value	When a USB device is connected to the TV:	
	USB Media Mode	Defalut	<ul> <li>Default : Popup window appears.</li> <li>Automatic : Enters the USB contents menu automatically.</li> <li>Disable : Neither the pop-up window or nor the menu appears.</li> </ul>	
External Source	External Source Banner	ON	Displays the External Source information when you change the TV source to external input. Press the info key and the TV turns on.  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	On: In stand-by mode, when an external source is connected to the TV, the TV automatically goes to AC Power On and Auto Ident external input mode.  PC: Auto Ident PC Input only.  Off: Auto Source is Off.	
	Anynet+ Return Source	Power On Src	Select Return Source for Guest-Link RJP (HDMI-CEC).	
Bathroom Speaker	Sub AMP mode	2	Determines the Sub AMP operation mode.  O: Turns the Sub AMP function off (PWM off).  1: Determines the Sub volume according to the main volume control That is, the sub volume is determined according to the Power On Volume, the Min Volume, and the Max  Determines the volume according to the bathroom control panel setting.	
	Sub AMP volume	6	Sub AMP Volume level at power on initial condition.	
Eco Solution	Energy Saving	OFF	This feature adjusts the brightness of the TV to reduce power consumption.  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	Display the Welcome Message for 5 seconds when the TV turns On.	
	Edit Welcome Message		Edit Welcome Message.	
Logo/ Message	Hospitality Logo	OFF	Turns the Hospitality logo feature on/off. The Logo is shown during the initial turn on for the amount of time set in "Logo Display Time"	
	Hospitality Logo DL		Hospitality Logo Download. (File name required: samsung.bmp/avi, Max file size: BMP 960 x 540 / AVI 30MB, File Type: BMP/AVI)	
	Logo Display Time		Hospitality Logo Display Time (3/5/7 seconds).	
	Clone TV to USB		Clone the current TV option values to a USB memory device.	
	Clone USB to TV		Clone the saved TV option values in a USB memory device to the TV.	
Cloning	Setting Auto Initialize	OFF	If you set Setting Auto Initialize to On, and the TV's power is turned off and on, guest side menu items are restored to their cloned values. See page 30.	







Menu	Item	initial Value	Description
	SIRCH update Time	12:00 PM	Available in the Standalone menu only.  SIRCH (Samsung Interactive Remote Control for Hospitality) is a professional interactive remote controller for DTV that lets you deliver TV firmware updates, cloning data, and channel mapping changes to several hundred hospitality TVs simultaneously.  SIRCH is sold separately.
SIRCH	SIRCH Update Immediate	On	On: Whenever TV goes to Stand-By mode, always runs SIRCH Update.      Off: Only runs SIRCH Update on selected SIRCH Update Time.
	Manual SIRCH		Upgrade SIRCH Clone / Binary by manual.
	SIRCH Channel	87	Select SIRCH Update Channel.
	SIRCH Version	0000	Display the current SIRCH Clone version.
	SIRCH Group ID	ALL	Select SIRCH Group ID.
	REACH	Off	REACH Display On/Off.
	IPG Room Type	Default	Select IPG Room Type.
	Network Setup		Set an IP address to establish an Internet connection.
Network	Hotel ID Setting		Set a Hotel ID.
	Smart Hub		Enter Smart Hub.
	Widget Mode	OFF	Widget Mode On/Off.
	Solution Type	H.Browser	Select type of solution (H.Browser/CMS).
	Server IP Setting		Setting server IP.
Widget	Server URL Setting		Setting server URL.
	External Source Browser	On	Source Menu On/Off.
	Virtual Standby	Off	Virtual Standby mode On/Off.
	IPTV Mode	Off	IPTV mode On/Off.
	CAS	Pro:idiom	Select CAS.
	PI AES DATA	0x0000	Displays the state of Pro:Idiom operation.
	Self Diagnosis		<ul> <li>Enter Self Diagnosis Menu.</li> <li>Picture Test: Use to check for picture problems. If the problem appears in the test picture, select Yes and follow the directions on the screen.</li> <li>Sound Test: Use the built-in melody sound to check for sound problems. If the problem occurs during the test, select Yes and follow the directions on the screen.</li> </ul>
Service	PI AES Log	OFF	Displays the state of Pro:Idiom AES operation.
	View PI AES Log		Display/Save Pro:idiom AES log.
	SW Upgrade		Upgrade the TV software. Refer to page 33.
	Service Pattern	Off	Display SVC pattern.
	ATV Calble AGC Gain	0	Control AGC Gain for ONLY SVC.
	DTV OpenCalble AGC Gain	0	Control AGC Gain for ONLY SVC.
	TV Reset		Reset the TV. Same as Factory Reset in Factory option.







## 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 Leters 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.







## Hospitality Logo

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

- Hospitality Logo settings are in 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 the memory and 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 Logo option is off, even if the logo image has been loaded into

## 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.
- Wait appears while the image is being copied to the TV.
- Completed appears when the copy operation has finished successfully.
- Failed appears when 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 file). If No File appears and you have a logo file on the USB device, check the file format.

## Logo File Format

- The TV supports only the BMP and AVI format.
- The file name must be samsung.bmp or samsung.avi.
- The maximum resolution of the BMP format is 1280 x 720.
- The maximum file size of AVI format is 50MB.
- 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  $\rightarrow$  1  $\rightarrow$  1  $\rightarrow$  9  $\rightarrow$  ENTER
- 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-MST10PAUSCB.

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 in a USB device to a TV.

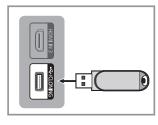
Shortcut: Turn the TV off, insert the USB device, turn the TV on, and then press the ENTER button for 5 seconds.

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.

26 English

- 4. Enter the Interactive menu by pressing these buttons in order. MUTE  $\rightarrow$  1  $\rightarrow$  9  $\rightarrow$  ENTER
- 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-MST10PAUSCB.
  - If you insert the USB device when the TV is on, a pop-up window may appear. If this occurs, press Exit, and then continue.
  - Tables that list Ithe settings that are cloned in the Interactive and Standalone Hotel Menus begin on the next page.





Clone USB to TV







## • 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 EN	Yes	All
Power On Channel	Yes	All
Channel Type	Yes	All
Power On Volume EN	Yes	All
Power On Volume	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
Channel Bank Editor	N/A	Smooovie SI and Hospital
Channel Bank Service Level	Yes	Hospital Models Only
Mixed Channel Map	Yes	EU
Dynamic SI	Yes	US and US Hsopital
Channel Rescan Message	Yes	EU and EU Hospital
Pan Euro MHEG	Yes	EU and EU Hospital
Channel Auto Store	N/A	Hospital Models Only
Mychannel En	Yes	EU and EU Hospital
Genre Editor	N/A	EU and EU Hospital
Picture Menu Lock	Yes	All
Menu Display	Yes	All
Channel Menu Display	Yes	ASIA Models only
Panel Button Lock	Yes	All
Mute On CC	Yes	US Hsopital Only
Subtitle Auto On	Yes	EU and EU Hospital
SW Clock	Yes	EU and EU Hospital
Local Time	Yes	EU and EU Hospital
Time Format	Yes	EU and EU Hospital
CLOCK Normal Dim.	Yes	EU
CLOCK Standby Dim.	Yes	EU
Music Mode AV	Yes	All
Music Mode PC	Yes	All
Music Mode Comp	Yes	All
Music Mode Backlight	Yes	All
7610 Priority AV	Yes	All
7610 Priority PC	Yes	All
7610 Priority HDMI	Yes	All
7610 AV Option	Yes	All









Menu Item	Cloning Support	Applicable Region
RJP HDMI Option	Yes	All
HDMI Music Mode	Yes	US and US Hsopital
Sound Bar Out	Yes	All
Video Out	Yes	ASIA Models only
USB Media Mode	Yes	US and EU
External Source Banner	Yes	All
Auto Source	Yes	All
Anynet+ Return Source	Yes	All Models except Hospital
Sub Amp Mode	Yes	All except US
Sub Amp Volume	Yes	All except US
Pillow Speaker Type	Yes	Hospital Models Only
Speaker Select	Yes	Hospital Models Only
Pillow Volume	Yes	Hospital Models Only
Energy Saving	Yes	All
Energy Saving Timer	Yes	EU
Welcome Message	Yes	All
Edit Welcome Message	N/A	All
Hospitality Logo	Yes	All
Hospitality Logo DL	N/A	All
Logo Display Time	Yes	All
Clone TV to USB	N/A	All
Clone USB to TV	N/A	All
Setting Auto Initialize	Yes	All
SIRCH Update Time	Yes	All except Brazil/ASIA_READY
SIRCH Update Immediate	Yes	All except Brazil/ASIA_READY
Manual SIRCH	N/A	All except Brazil/ASIA_READY
SIRCH Channel	Yes	All except Brazil/ASIA_READY
SIRCH Version	N/A	All except Brazil/ASIA_READY
SIRCH Group ID	No	US
REACH	Yes	All except Brazil/ASIA_READY
IPG Room Type	No	Guestek
CAS	Yes	US and US Hsopital
PI AES Data	N/A	US and US Hsopital
Self Diagnosis	N/A	All
PI AES Log	Yes	US and US Hsopital
View PI AES Log	N/A	US and US Hsopital
SW Upgrade	N/A	All
Service Pattern	Yes	All
ATV Cable AGC Gain	Yes	US and US Hsopital
DTV OpenCable AGC Gain	Yes	US and US Hsopital
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, each with a different ID code, with one remote. 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 Blue button on the remote for more than 7 seconds. The TV displays the current ID in the middle of the screen and displays 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."
    - Tierriote 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).

- $\,$  If the ID code of the remote and TV do not match, the TV displays the following message:
  - "TV ID x"(x is the TV's ID)
- To reset the ID code, press the Yellow button for more than 7 seconds. 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 guest side menu and hotel side menu settings (Picture, Sound, Input, Channel, Setup, and Hotel Setup). This lets you set nearly all 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 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 on.

Menu	Menu Item	Menu	Menu Item
	Mode		srs thrater sound
	backlight	ļ	balance
	contrast		all frequency
	brightness	Sound Menu	srs trusound
	sharpness		srs trudialog
	color	ļ	virtual surround
	color tone		auto volume
	picture size	Channel menu	Area
	black tone		menu language
	dynamic contrast		menu transparency
	shadow detail	Set up menu	melody
	gamma		network set up
	rgb only mode		network type
	color space		
Picture Menu	color		
	red		
	blue		
	green		
	white balance		
	R-offset		
	G-offset		
	B-offset		
	R-gain		
	B-gain		
	G-gain		
	flesh tone		
	edge enhancement		
	led motion plus		
	min backlight	]	





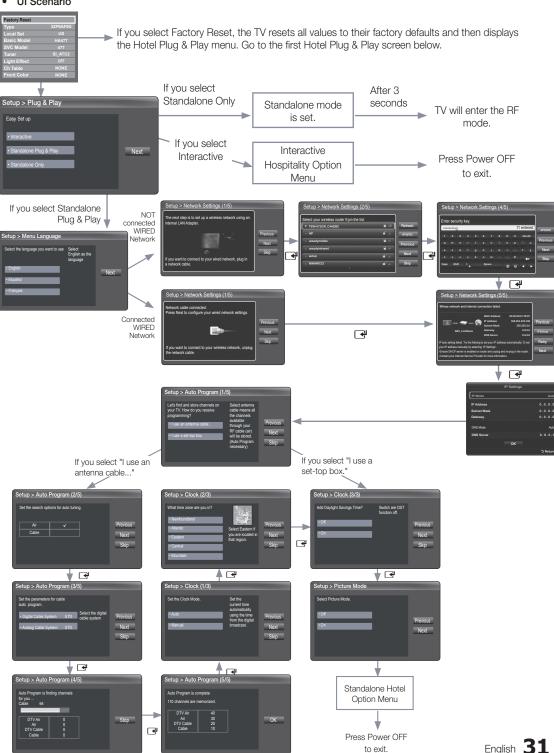




## Hotel Plug & Play

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

## • UI Scenario







to exit.



## Hotel Plug & Play OSD

- Initial Highlight: 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 into RF mode automatically after displaying "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
- If you select the Standalone Plug & Play mode, the "Select Menu Language" OSD appears.

#### Select Menu Language OSD

- If you select Standalone from the "Select Hotel TV Mode" OSD, the "Select Menu Language" OSD appears.
- Initial Highlight: English
- Display time: OSD timeout and operation are the same as Samsung's consumer TV models.
- If you press the Enter key, the "Select Country" OSD appears

#### Clock Mode OSD

- Initial Highlight: Auto.
- Display time: 30 seconds.
- The Clock Set item OSD appears if you select Manual.
- If you press the Enter key after setting the clock, or while in Auto clock set, the Picture Mode OSD appears.

## Set daylight saving time OSD

- Initial Highlight: Off
- If you press the Enter key, the Select the DST area OSD appears.

#### Picture Mode OSD

- Initial Highlight: Dynamic.
- The TV displays the Picture Mode OSD where you can choose the Dynamic or a Standard Picture mode.
- After you select the picture mode, the TV displays the Standalone Setup Menu OSD. Press power off to exit.

#### Auto Search Mode OSD

- If you select the Skip option, the TV displays the Clock Mode OSD.
- If you press the Enter key, the TV auto searches for channels.
- The OSD Display time, which starts at the time that Auto Store is completed and goes to the time Auto Sort starts, is 30 seconds.







## USB Software Upgrade Method

Samsung may offer upgrades to the TV's software (SW) in the future. Please contact the Samsung Hospitality Hotline 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:

- Insert a USB drive containing the SW upgrade into the USB port on the side of the TV.
- Press the MENU button to display the menu.
   Press the ▲ or ▼ button to select Support, and then press the ENTER button.
- 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.

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.



## Sound Bar

## · Samsung Sound-Bars and Hospitality TVs in 2012

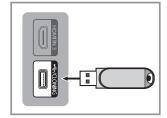
- Samsung Sound-Bars and hospitality TVs support the ARC feature in HDMI 1.4. If you connect a compatible Samsung Sound-Bar to a compatible Samsung hospitality TV using a single HDMI cable, guests can listen to the TV's sound through the Sound-Bar.
- Models supporting the ARC function are listed below:
  - Sound-Bars: HW-E350/E450/E550

#### 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 EN = User Defined.
  - Hotel option > Power On > Power On Volume > 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 Sound-Bar to the HDMI2 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 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 ½ 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.











## Installing the Wall Mount

## 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 elect to install the TV on your own.

## Wall Mount Kit Specifications (VESA)

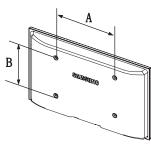
The wall mount kit is not supplied, but sold separately.

Install your wall mount on a solid wall perpendicular to the floor. When attaching to other building materials, please contact your nearest dealer. If installed on a ceiling or slanted wall, TV may fall and result in 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	19~22	75 X 75	M4	14	
	26	100 X 100	(10~15 * 0.7)		В
	32~40	200 X 200	M6 (10~15 * 1.0)		
	46	400 X 400	M8 (10~15 * 1.25)		





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

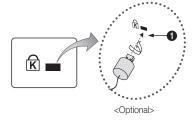


## **Anti-theft Kensington Lock**

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 a "\(\overline{\mathbb{R}}\)" icon on the rear of the TV. A Kensington slot is beside the "\(\overline{\mathbb{R}}\)" 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.









	Specific	cations					
Display Resolution		1920 >	x 1080				
Environmental Considerations Operating Temperature Operating Humidity Storage Temperature Storage Humidity	50°F to 104°F (10°C to 40°C) 10% to 80%, non-condensing -4°F to 113°F (-20°C to 45°C) 5% to 95%, non-condensing						
Stand Swivel (Left / Right)		-20°	~ 20°				
Model Name	HG40NA590			HG46NA590			
Screen Size  Diagonal	40" Class (40.0" measured diago	nally)	(45.	46" Class 9" measured diagonally)			
Power Consumption Normal operation Standby	35W	35W 41W					
Sound (Output)		10W	/x2				
Dimensions (WxDxH) Body With stand	36.5 X 3.6 X 21.6 inc (927.6 X 93.0 X 551.0 36.5 X 8.9 X 23.8 inc (927.6 X 227.6 X 607.0	mm) hes	41.7 X 3.7 X 24.6 inches (1059.8 X 94.3 X 625.6 mm) 41.7 X 8.9 X 26.8 inches (1059.8 X 227.6 X 681.2 mm)				
Weight Without Stand With Stand	19.8 lbs (9.0 kg) 26.2 lbs (11.9 kg)		27.5lbs (12.5 kg) 33.9lbs (15.4 kg)				
Model Name	HG40NA790	HG46f	NA790	HG55NA790			
Screen Size Diagonal)	40" Class (40.0" measured diagonally)	46" ( (45.9" measur		55" Class (54.6" measured diagonally)			
Power Consumption Normal operation Standby	50W	50W		53W			
Sound (Output)		10W×2					
Dimensions (WxDxH) Body With stand	36.4 X 1.8 X 21.7 inches (926.8 X 46.9 X 553.4 mm) 36.4 X 9.0 X 23.9 inches (926.8 X 227.7 X 608.1 mm)	41.8 X 1.8 X 24.7 inches (1062.2 X 46.9 X 629.8 mm) 41.8 X 9.0 X 26.9 inches (1062.2 X 227.7 X 684.6 mm)		49.3 X 1.8 X 29 inches (1252.8 X 46.9 X 736.6 mm) 49.3 X 9.0 X 31.1 inches (1252.8 X 227.7 X 791.2 mm)			
Weight Without Stand With Stand	22.7 lbs (10.3 Kg) 29.0 lbs (13.2 Kg)	28.4 lbs 34.8 lbs		35.7 lbs (16.2 kg) 42.0 lbs (19.1 Kg)			







## **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	640 x 350	31.469	70.086	25.175	+/-
IDIVI	720 x 400	31.469	70.087	28.322	-/+
	640 x 480	35.000	66.667	30.240	-/-
MAC	832 x 624	49.726	74.551	57.284	-/-
	1152 x 870	68.681	75.062	100.000	-/-
	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	+/+
VESA DMT	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.



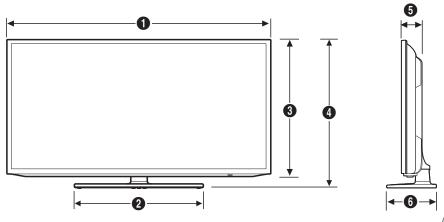




## Dimensions

## HG40NA590 / HG46NA590

• Front view / Side view

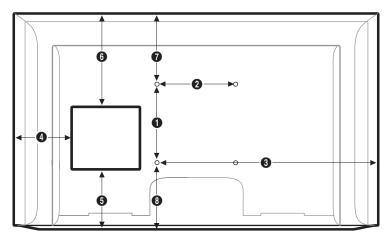


(Unit: inches)

	0	0	3	4	6	6
HG40NA590	36.5	20.3	21.6	23.8	3.6	8.9
HG46NA590	41.7	20.3	24.6	26.8	3.7	8.9

Jack panel detail / Rear view

**(** 



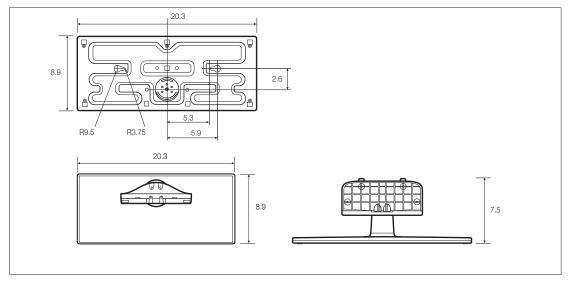
	0	0	3	4	6	6	0	8
HG40NA590	7.8	7.8	22.1	5.8	6.1	9.6	7.0	6.7
HG46NA590	15.7	15.7	28.6	5.2	7.6	11.6	5.2	3.6



## Base Stand detail

## HG40NA590/HG46NA590

(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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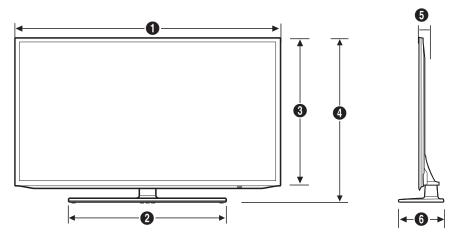






## HG40NA790 / HG46NA790 / HG55NA790

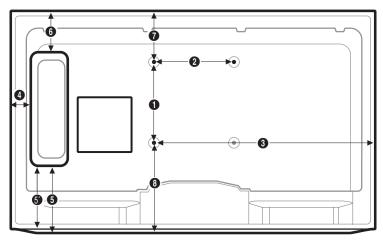
Front view / Side view



(Unit: inches)

	0	0	8	4	6	6
HG40NA790	36.4	21.6	21.7	23.9	1.8	9.0
HG46NA790	41.8	24.7	24.7	26.9	1.8	9.0
HG55NA790	49.3	24.7	29	31.1	1.8	9.0

Jack panel detail / Rear view



	0	0	3	4	<b>6</b> ( <b>6</b> )	6	0	8
HG40NA790	7.8	7.8	22.1	2.0	6.5 (6.0)	4.1	5.1	8.8
HG46NA790	15.7	15.7	28.7	1.8	8.0 (7.5)	5.6	3.8	5.2
HG55NA790	15.7	15.7	32.5	2.7	8.4 (8.0)	9.4	7.4	5.8



## 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 burnedin images, are not covered by your Samsung limited warranty.

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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

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