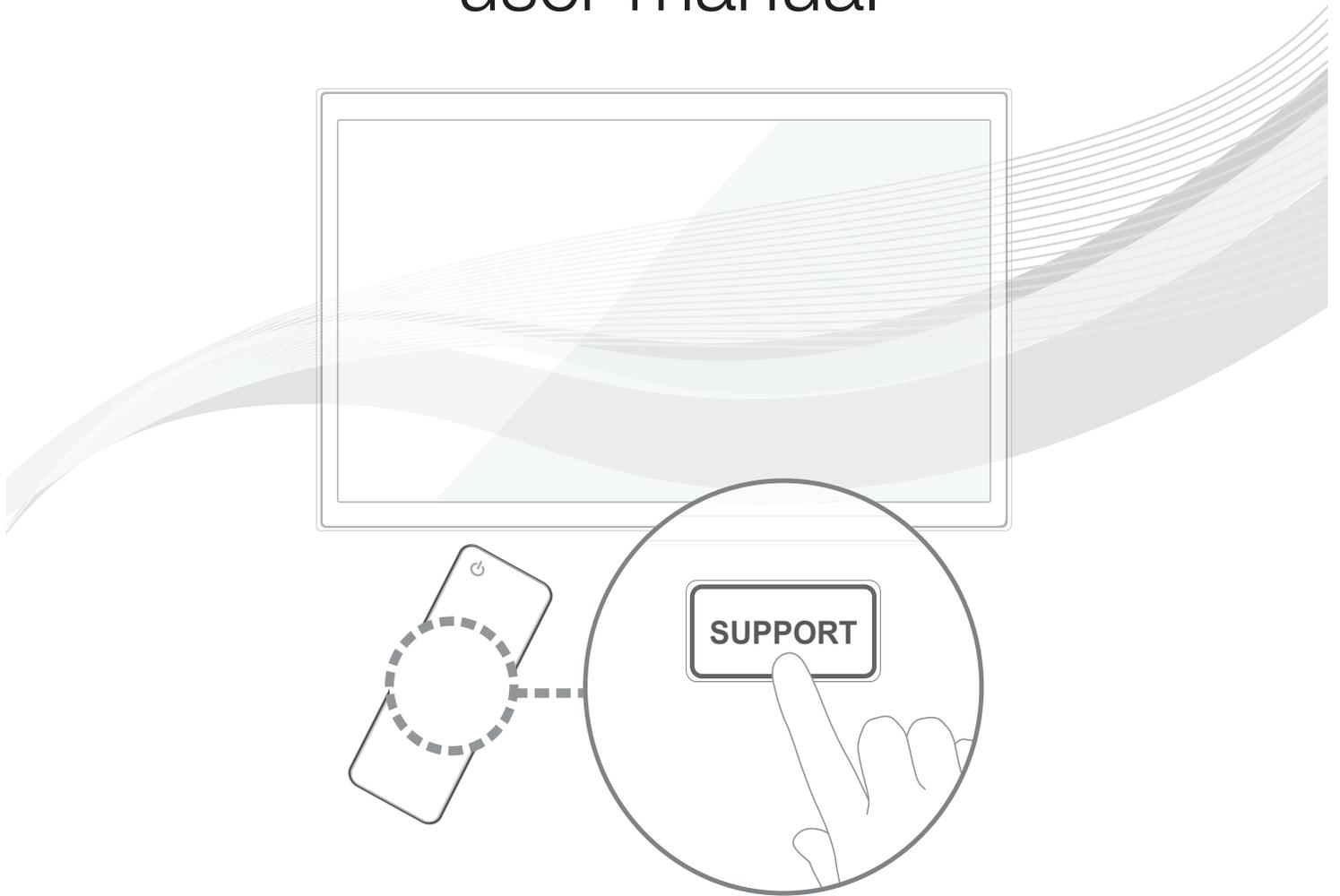




SERIES **8**
8000

LED TV

user manual



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

Model _____ Serial No. _____

 If you have any questions, please call us at 1-800-SAMSUNG (1-800-726-7864) for assistance.

A detailed User's Manual is built into your TV. For more information about how to view this e-Manual see page 47.

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

Important Warranty Information Regarding

 See the warranty card for more information on warranty terms.

Wide screen format LED Displays (with 16:9 aspect ratios, the 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, with the images constantly in motion. Displaying stationary graphics and images on the screen, such as the dark sidebars on non-expanded 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 about the television formats you select and the length of time you view them. 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 : 1-800-SAMSUNG (1-800-726-7864)
- In Canada : 1-800-SAMSUNG

Still image warning

Avoid displaying still images (such as jpeg picture files), still image elements (such as TV channel logos, stock or news bars at the screen bottom etc.), or programs in panorama or 4:3 image format on the screen. Constantly displaying still pictures can cause image burn-in on the LED screen, which will affect image quality. To reduce risk of this effect, please follow the recommendations below:

- Avoid displaying the same TV channel for long periods.
- Always try to display any image in full screen. Use the TV set's picture format menu for the best possible match.
- Reduce brightness and contrast to avoid the appearance of after-images.
- Use all TV features designed to reduce image retention and screen burn. Refer to the e-Manual for details.

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List of Features

- **3D:** This exciting new feature enables you to view 3D content.
- **SMART HUB:** Your gateway to all your content, integrated in one place.
 - Provides diverse entertainment choices.
 - Lets you control your entertainment life with an easy-to-use, user friendly user interface.
 - Gives you easy access to diverse apps, with more being added every day.
 - Lets you customize your TV by grouping and sorting apps to your taste.
- **AllShare Play:** Lets you access, view, or play photos, videos, or music located on USB devices, digital cameras, cell phones, and PCs. PCs and cell phones can be accessed wirelessly, through your wireless network.
- **Anynet+ (HDMI-CEC):** Allows you to control all connected Samsung devices that support Anynet+ with your Samsung TV's remote.
- **e-Manual:** Provides a detailed, on-screen user's manual that's built into your TV. (page 47)
- **SMART Interaction:** Using this function, you can access and control menu options and functions using speech or motions. (page 26)

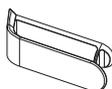
Accessories and Cables

- ✎ Please make sure the following items are included with your TV. If any items are missing, contact your dealer.
- ✎ The items' colors and shapes may vary depending on the model.
- ✎ Make sure that there are no accessories hidden behind or under packing materials after you open the box.

- | | |
|--|---|
| <ul style="list-style-type: none"> • Smart Touch Control (AA59-00626A) & Batteries (AA x 2) • IR Blaster (BN96-22897A) & Batteries (AA x 4) • Remote Control (AA59-00637A) & Batteries (AAA x 2) • User Manual | <ul style="list-style-type: none"> • Cleaning Cloth (BN63-01798B) • Warranty Card / Safety Guide • 3D Active Glasses • Power Cord |
|--|---|



AV Adapter
(BN39-01154H)

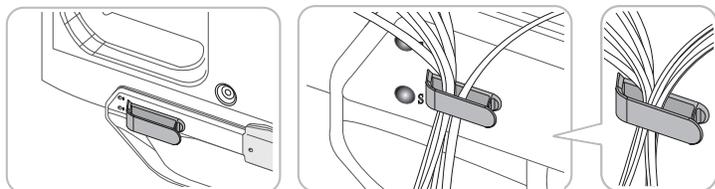


Holder-Wire stand
(BN61-08391A)



Holder-Ring x 4
(BN96-18153A)

Assembling the Stand Wire Holder



Input Cables (Sold Separately)

You will need one or more of these cables to connect your TV to your antenna or cable outlet and your peripheral devices (Blu-ray players, DVD players, etc.)

To purchase the RS232 cable, contact www.SamsungParts.com.



RS232 (AA39-00311A)



HDMI



HDMI-DVI



Audio



Component

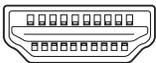
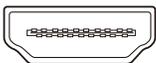
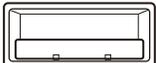
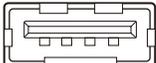


Composite (AV)



Coaxial (RF)

- ✎ Make sure you have the correct cable before plugging it in. Illustrations of common plugs and jacks are below.

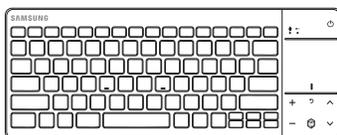
	Cable Plugs	Ports / Jacks
HDMI		
USB		
Optical		



Warning

Do not plug cables in upside down.
Be sure to check the orientation of the plug before plugging it in.

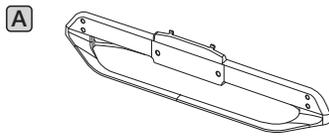
Wireless Keyboard (Sold Separately)



Wireless Keyboard

Installing the Stand

Stand Parts:

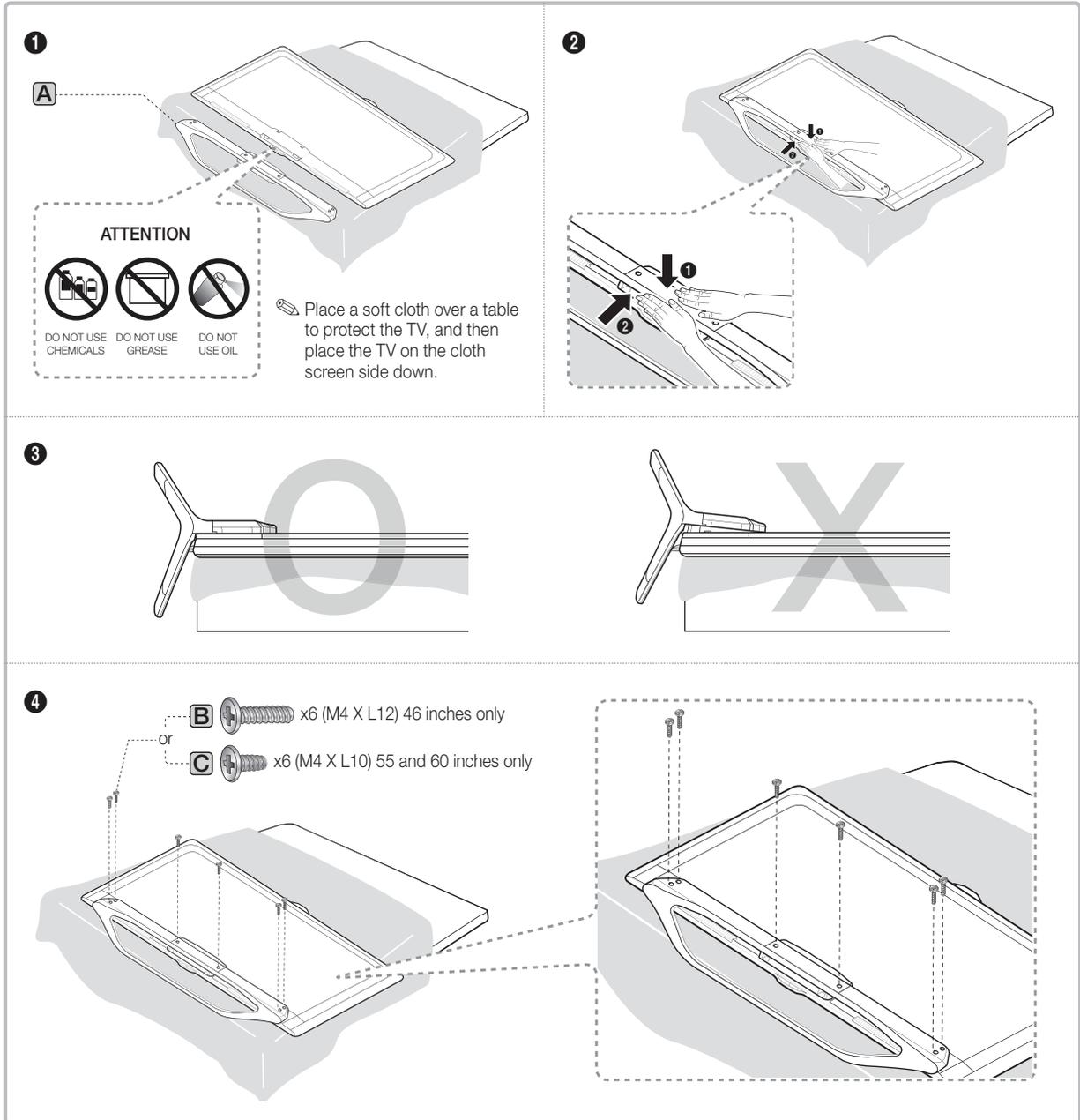


Stand x 1

Screws x 6 (46 inches only)

Screws x 6 (55 and 60 inches only)

Follow the steps below to connect the TV to the stand. For more detailed instructions, see the separate stand installation guide.



 **NOTE**

- Make sure to distinguish between the front and back of each component when assembling them.
- Make sure that at least two people lift and move the TV.
- Stand the product up before you tighten the screws. If you tighten the screws with the TV lying down, it may lean to one side when you stand it up.

 **Do not insert your fingers into the stand base slot of the TV when installing the stand base.**

Installing the Wall Mount (Optional)



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.

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. We recommend you contact a technician for assistance when installing the wall mount bracket. We do not advise you to do it yourself. 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 kit, contact Samsung Customer Care at 1-800-SAMSUNG (1-800-726-7864).

VESA Wall Mount Kit Notes and Specifications

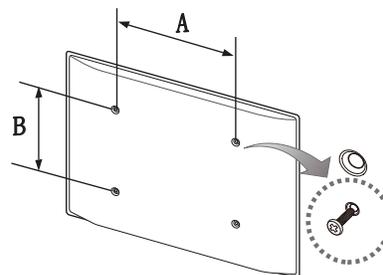
 Install your wall mount on a solid wall perpendicular to the floor. Before attaching the wall mount to surfaces other than plaster board, please contact your nearest dealer for additional information. If you install the TV on a ceiling or slanted wall, it may fall and result in severe personal injury.

 **NOTE**

- Standard dimensions for wall mount kits are shown in the table below.
- Samsung wall mount kits contain a detailed installation manual and 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 length or do not comply with the VESA standard screw specifications. Screws that are too long may cause damage to the inside of the TV set.
- For wall mounts that do not comply with the VESA standard screw specifications, the length of the screws may differ depending on the wall mount specifications.
- Do not fasten the screws too firmly. This may damage the product or cause the product to fall, leading to personal injury. Samsung is not liable for these kinds of accidents.

- Samsung is not liable for product damage or personal injury when a non-VESA or non-specified wall mount is used or the consumer fails to follow the product installation instructions.
- Do not mount the TV at more than a 15 degree tilt.
- Always have two people mount the TV on a wall.

Product Family	TV size in inches	VESA screw hole specs (A * B) in millimeters	Standard Screw	Quantity
LED-TV	26	100 X 100	M4	4
	32 - 40	200 X 200	M6	
	46 - 60	400 X 400	M8	



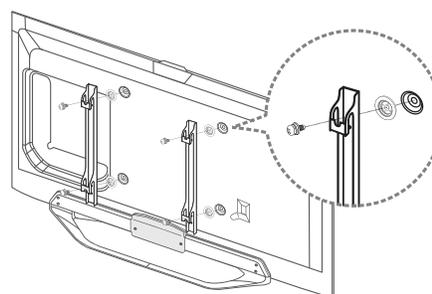
 Remove the screws in the mounting holes before you install the wall mount.



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

Installing a Wall Mount from Another Manufacturer

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



Providing Proper Ventilation for Your TV

When you install your TV, maintain a distance of at least 4 inches between the TV and other objects (walls, cabinet sides, etc.) to ensure proper ventilation. Failing to maintain proper ventilation may result in a fire or a problem with the product caused by an increase in its internal temperature.

- ✎ Whether you install your TV using a stand or a wall-mount, we strongly recommend you use parts provided by Samsung Electronics only.
 - If you use parts provided by another manufacturer, it may cause difficulties with the product or result in injury caused by the product falling.



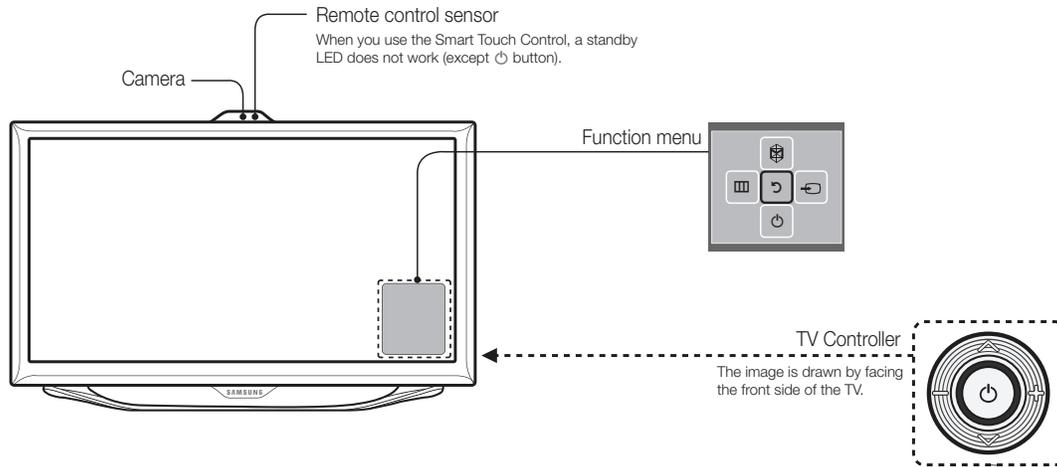
Other Warnings

- ✎ The actual appearance of the TV may differ from the images in this manual, depending on the model.
- ✎ Be careful when you touch the TV. Some parts can be somewhat hot.

Using the TV's Controller (Panel Key)

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.



-  Follow these instructions facing the front of your TV.
-  When selecting the function by moving the controller to the up/down/left/right directions, be sure not to press the controller. If you press it first, you cannot operate it to move the up/down/left/right directions.
-  When you use a TV camera, you should check whether a tape attached or not in rear of the TV camera, and then you can use a TV camera after adjust a camera angle. When you don't want to use a TV camera, we recommend to use after a camera lens fixes to upwards. In this case, **Face recognition** and **Motion Control** are not available.

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 upwards and downwards 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 SMART HUB 	With the Function menu visible, select SMART HUB  by moving the Controller upwards. The SMART HUB main screen appears. Select an application by moving the Controller, and then pressing the Controller.

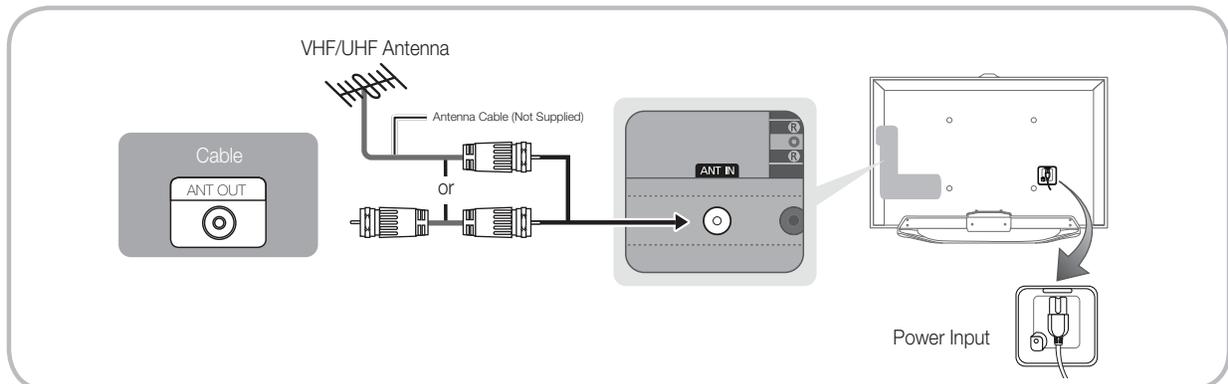
Selecting the MENU (III)	With the Function menu visible, select the MENU (III) by moving the Controller to the left. The OSD (On Screen Display) Menu appears. Select an option by moving the Controller to the right. Move the Controller to the right or left, or upwards and downwards to make additional selections. To change a parameter, select it, and then press the Controller.
Selecting a Source (+)	With the Function menu visible, open the Source (+) list by moving the Controller to the right. The Source list screen appears. To select a source, move the Controller upwards and downwards. When the source you want is highlighted, press the Controller.
Power Off (⏻)	With the Function menu visible, select Power Off (⏻) by moving the Controller downwards, 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.

Connecting the Power Cord and the Antenna or Cable Connection

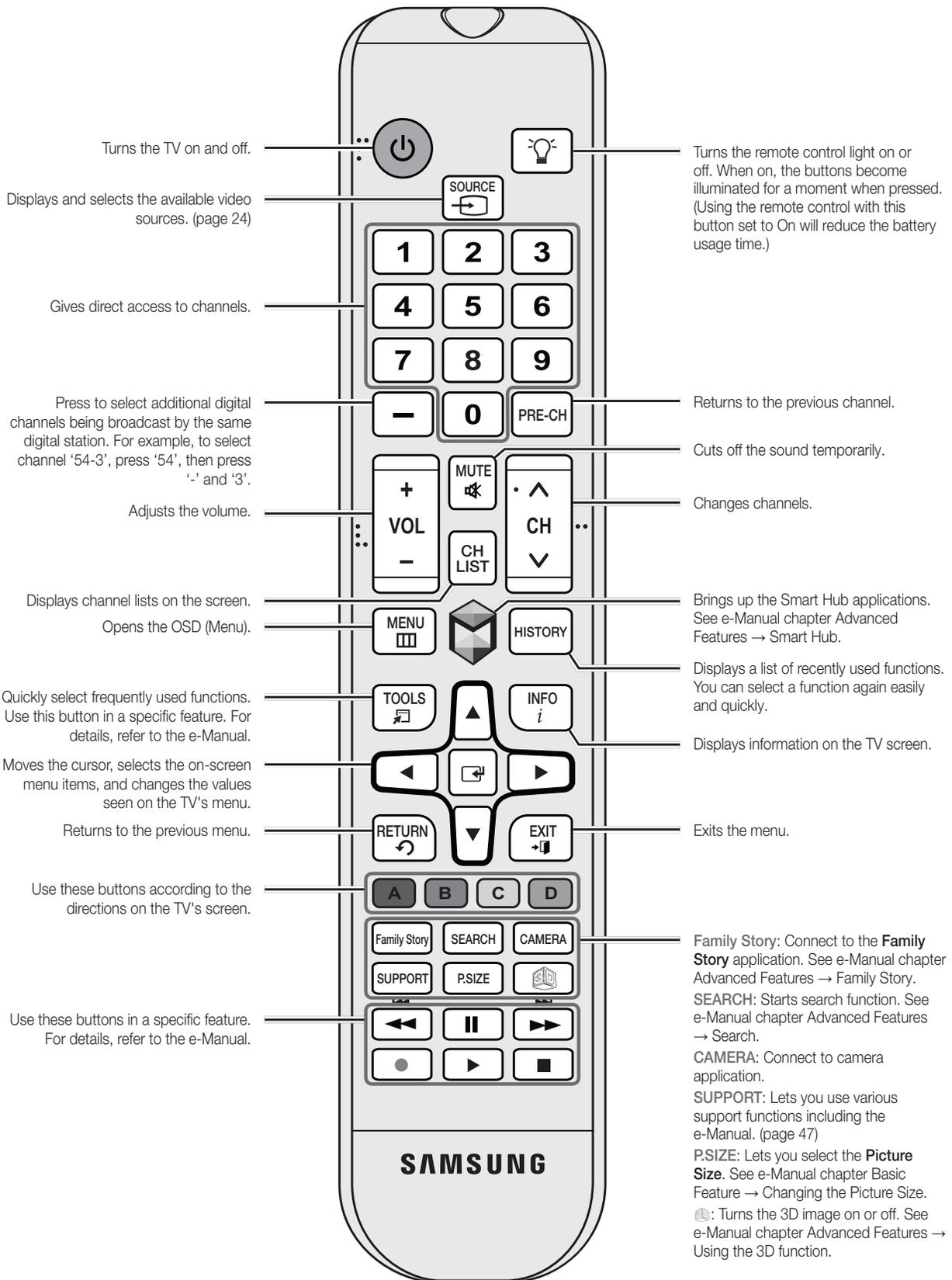


- ✎ Plug the power cord into a wall outlet only after you have made all other connections.
- ✎ If you are connecting your TV to a cable or satellite box using HDMI, Component, or Composite connections, you do not need to connect the ANT IN jack to an antenna or a cable connection.
- ✎ Use caution when you move or swivel the TV if the antenna cable is tightly connected. You could break the antenna jack off the TV.

The Standard Remote Control

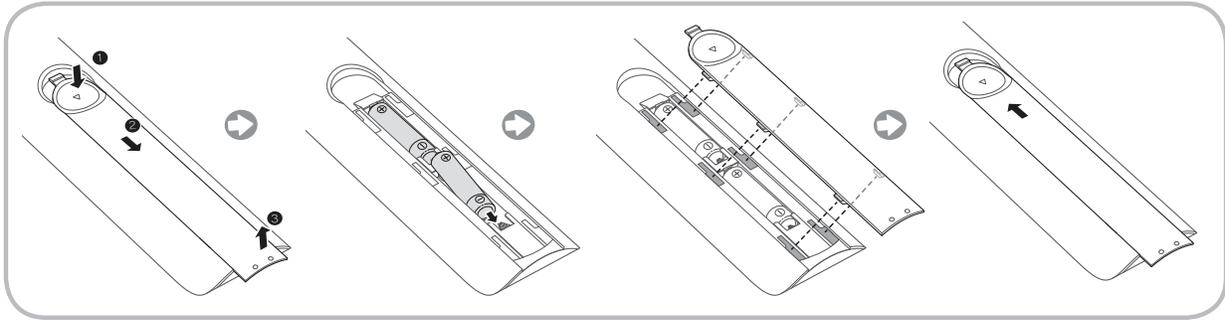
Learn where the function buttons are on your remote. Especially note **SOURCE**, **MUTE**, **VOL**, **CH**, **MENU**, **TOOLS**, **INFO**, **CH LIST**, **RETURN**, and **EXIT**.

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



Installing batteries (Battery size: AAA)

Match the polarity of the batteries to the symbols in the battery compartment.



 Your TV also comes with a Smart Touch Control. For information about the Smart Touch Control, see page 38.

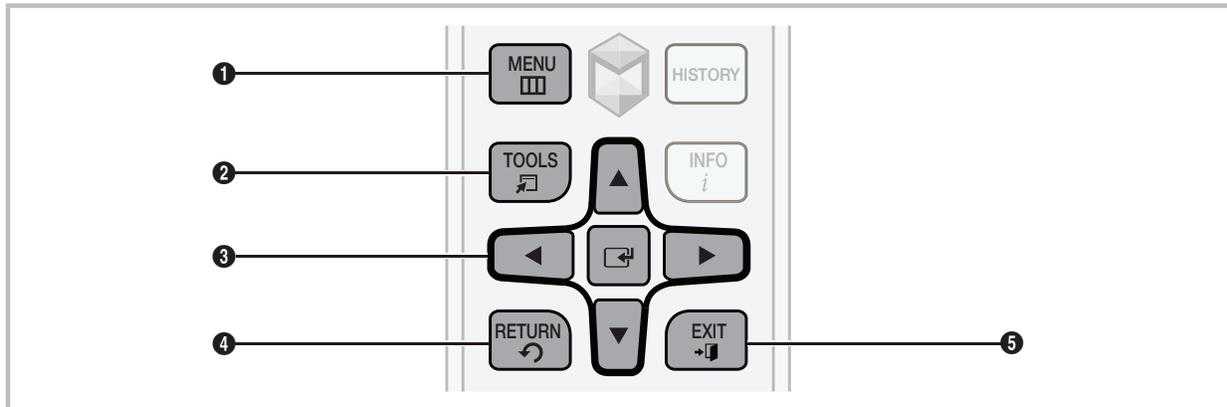
NOTE

- Install the batteries so that the polarity of the batteries (+/-) matches the illustration in the battery compartment.
- Use the remote control within 23 feet of the TV.
- Bright light may affect the performance of the remote control. Avoid using it near fluorescent lights or neon signs.
- The color and shape of the remote may vary depending on the model.

How to Navigate Menus

Your TV's Main and Tools menu contains functions that let you control the TV's features. For example, in the Main menu you can change the size and configuration of the picture, its brightness, its contrast and so on. There are also functions that let you control the TV's sound, channel configuration, energy use, and a host of other features. To access the main, on-screen menu, press the **MENU** button on your remote. To access Tools menus, press the **TOOLS** button. Tools menus are available when the **TOOLS** menu icon is displayed on the bottom right of the screen

The illustration below displays the buttons on the standard remote you use to navigate the menus and select and adjust different functions. For information about using the Smart Touch Control, see page 38.



- 1 **MENU** button: Displays the main on-screen menu.
- 2 **TOOLS** button: Displays the Tools menus when available.
- 3 **↔** and Direction buttons: Use the Direction buttons to move the cursor and highlight an item. Use the Enter button to select an item or confirm the setting.
- 4 **RETURN** button: Returns to the previous menu.
- 5 **EXIT** button: Exits the on-screen menu.

How to Operate the Main Menu (OSD - On Screen Display) Using the Standard Remote

The access steps may differ depending on the menu option you select.

1	MENU	The main menu options appear on the screen: Picture, Sound, Channel, Network, System, Support.
2	▲ / ▼	Select a main menu option on the left side of the screen with the ▲ or ▼ button.
3	↔	Press ↔ to access the sub-menus.
4	▲ / ▼	Select the desired submenu with the ▲ or ▼ button.
5	▲ / ▼ / ◀ / ▶	Adjust the value of an item with the ◀, ▶, ▲, or ▼ button. The adjustment in the OSD may differ depending on the selected menu.
6	↔	Press ↔ to confirm the selection.
7	EXIT	Press EXIT .

Configuring the Basic Settings in Initial Setup

When you turn the TV on for the first time, a sequence of screens and on-screen prompts will assist you in configuring the TV's basic settings. Plug the power cord into a wall outlet, and then press the  button to turn on the TV.

-  Use the standard remote to run the Initial Setup.
-  **Setup** is available only when the input source is set to TV. See "Changing the Input Source" (page 24).
-  To return to the previous step in the **Setup** sequence, select **Previous**.
-  If you are not using a cable box or satellite box, make sure you have connected the TV to an antenna or cable connection before you turn on the TV. See page 12 for instructions.
-  If you want to configure a wired network connection during **Setup**, make sure you've connected a LAN cable to your TV. See pages 35 for instructions. If you want to configure a wireless network connection during **Setup**, make sure your wireless modem or router is on and working.

1 **Menu Language:** Select a Language.

After you press the  button, the Start screen appears. Select **Next** to continue. The Menu Language screen appears. Select the menu language you want using your remote, and then select **Next**. The TV will display on-screen menus using the language you select beginning with the next step in the **Setup** process.

2 **Use Mode:** Select the Home Use Mode.

On the **Use Mode** screen, select the **Home Use** using your remote, and then select **Next**. The Network Settings screen appears.

 **Store Demo** is for retail environments only. If you select **Store Demo**, some functions will not work, and the TV will reset all functions to their factory default after a certain period of time. For more information about **Store Demo**, go to the end of this section.

3 **Network Settings:** Configure the network settings

-  To configure later, select **Skip**. You can set up the network connection later using the on-screen **Network** menu.

To configure your network settings, select **Start** using your remote, and then go to 3A - **Wireless Network** or 3B - **Wired Network** on the next page.

If you do not know your network configuration information or want to configure the settings later, or do not have a network, select **Skip**, and then go to 6 - **Auto Program** (1) on page 18.

To configure network settings later, refer to "Setting up the Wired or Wireless Network" in the e-Manual or see the Network Connection sections in this manual (pages 34 and 36).

3A

Wireless Network

1. The TV searches for and then displays all the wireless networks within range. When done, it displays a list of the networks. In the list of networks, move the Highlight to select a network, and then select **Next**. If the selected network requires a Security Key, the Security Key screen appears.
 - ✎ If you have a WPS(PBC) compatible router, select **WPS(PBC)** instead, and then follow the directions on the screen. When done, go to Step 4.
2. Enter your network security key or WPS PIN using your remote.
 - ✎ Enter numbers and letters using your remote.
 - If you are using the standard remote, you can enter numbers by pressing the number buttons on the remote.
 - To enter a letter, move the Highlight to the letter, and then select it. You can enter numbers in the same fashion if you choose.
 - ✎ To display capital letters (or redisplay small letters if capital letters are displayed), select **Caps** or **Shift**.
 - ✎ To display symbols and punctuation, select **★**. To redisplay letters, select **★** again.
3. When done, select **Next** if you have entered a security key or **WPS PIN** if you have entered a WPS PIN.
4. The TV checks the wireless connection. If the connection is successful, the **You are connected to the Internet. If you have any problems using online services, please contact your Internet Service Provider.** message appears. Select **Next**, and then go to 4 **Software Upgrade** Step.
 - ✎ If the connection fails, select **Previous**, repeat Step 1 and 2, carefully re-enter your security key or WPS PIN, then repeat Steps 3 and 4. If it fails again, select **Next** on the "Connection Failed" screen, and then go to 6 - **Auto Program** (1) on the next page. Configure your network later through **Network Settings** in the TV's Menu. For more information, refer to "Setting up the Wired or Wireless Network" in the e-Manual or see the Network Connection sections in this manual (pages 34 and 36).

3B

Wired Network

The TV checks the network connection, then displays the **You are connected to the Internet. If you have any problems using online services, please contact your Internet Service Provider.** message appears. Select **Next**. The **Software Upgrade** screen appears.

<p>4</p>	<p>Software Upgrade: Update the software to the latest version</p> <p> To update later, select Skip.</p>	<p>When Network Settings is complete, your TV will check for a new software version automatically. If new software is available, the TV downloads and installs the new software. When the download is complete, select Next.</p> <p> If you want to upgrade later, select Skip. For more information, refer to Software Update (Preference Features → Support Menu) in the e-Manual.</p> <p> This may take some time, depending on your network status.</p> <p> You can only upgrade software if your TV has an active network connection.</p> <p> If no new update software is available, a no new updates message appears on the screen. Select OK.</p>
<p>5</p>	<p>Terms of Service Agreement</p>	<p>The Terms of Service Agreement screen appears.</p> <p> The screen can take a few seconds to display.</p> <p>The General Disclaimer screen appears. Select Agree. The Privacy Policy screen appears. Select Agree.</p> <p> To use Smart Hub, you must select Agree for the Terms of Service Agreement.</p>
<p>6</p>	<p>Auto Program (1): Select where your TV signal comes from.</p>	<p>Select the appropriate option for your TV using your remote, and then select Next.</p> <ul style="list-style-type: none"> • I use an antenna cable connection to the TV.: Select if you have an antenna or a cable connection without a set-top box. If you select this option, go to 7 - Auto Program (2) Step. • I use a set-top box.: Select if you have a satellite or cable set-top box. You do not need to run Auto Program. If you select this option, go to 9 - Clock on the next page.
<p>7</p>	<p>Auto Program (2): Select the search options.</p>	<ol style="list-style-type: none"> 1. Select Air or Cable using your remote. A check appears on your selection. When done, select Next. You can check both if you have both connected. 2. If you selected Air, go to 8 - Auto Program (3). 3. If you selected Cable, you'll go to the cable system screen. Select Digital Cable System. The option window appears. Select the correct cable signal format; STD, HRC, or IRC. Most cable systems use STD (Standard). Repeat the same process with Analog Cable System. 4. When done, select Next.

8	Auto Program (3): Channel memorization	<p>Channel memorization starts. Channel memorization can take up to 45 minutes, depending on your cable system.</p> <p>For more information, refer to Auto Program (Channel Menu → Memorizing Channels) in the e-Manual.</p> <p> Select Stop at any time to halt the memorization process.</p>
9	Clock: Set the Clock	<p>Select Auto or Manual, and then select Next.</p> <p> If you selected I use a set-top box. in 6 - Auto Program (1), you can only set the current time and date manually, using your remote.</p> <p>Auto</p> <p>If you selected Auto, the TV will automatically download the correct time from a digital channel. The Time Zone screen will appear. Select your Time Zone, and then select Next. The DST (Daylight Savings Time) screen will appear. The DST function sets the time ahead one hour to adjust the clock for Daylight Savings Time. Select On if you want to turn the DST adjustment on. Select Off to turn off the DST adjustment. You can also turn the DST function on through the TV's on screen menu (Menu → System → Time → Clock → DST).</p> <p>Manual</p> <p>If you selected Manual, you'll go to the Clock screen. Select Date or Time. You can set the current date and time using your remote. When done setting the Date and Time, select Next.</p>
10	Voice and Motion Control: Setting the Voice and Motion Control function.	<p>You can turn the Voice and Motion Control function on or off. Select Off or On, and then select Next.</p>
11	Setup Complete	<p>Review the Setup data, and then select Close to finish.</p> <p> The completed settings are displayed.</p>

If You Want to Rerun Setup...

Menu → **System** → **Setup**

If You Want to Turn the Store Demo Mode On or Off.

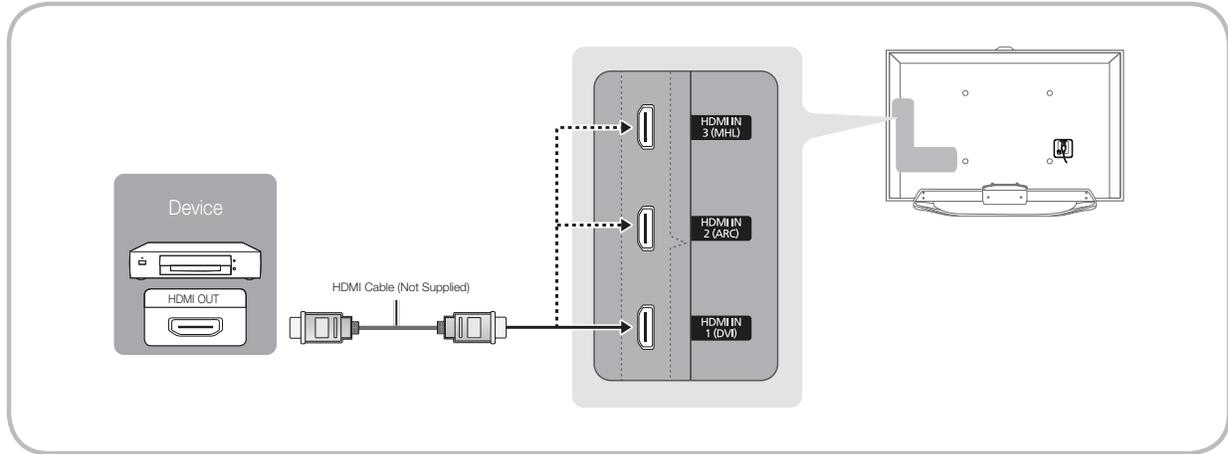
To set or unset **Store Demo** mode outside of **Setup**, press and release the Controller when the power is on. The Function menu screen appears. Push the Controller to the left (to **MENU** (III)) and hold for more than 5 seconds. The **Store Demo** mode is set. To cancel **Store Demo**, bring up the Function menu using the Controller, push the Controller to the right (to **Source** (→)) and hold for more than 5 seconds. See page 11 for information about the Controller.

Connecting to AV Devices (Blu-ray Players, DVD Players, etc.)

Using an HDMI Cable for an HD connection (up to 1080p, HD digital signals)

For the best quality HD picture, we recommend using an HDMI connection.

Use with DVD players, Blu-ray players, HD cable boxes, and HD Set-Top-Box satellite receivers.



HDMI IN 1 (DVI), HDMI IN 2 (ARC), HDMI IN 3 (MHL)

- For the best picture and audio quality, connect digital devices to the TV using HDMI cables.
- An HDMI cable supports digital video and audio signals, and does not require an audio cable.
 - To connect the TV to a digital device that does not support HDMI output, use an HDMI to DVI cable and audio cables.
- If you connect an external device to the TV that uses an older version of HDMI, the video and audio may not work. If this occurs, ask the manufacturer of the device about the HDMI version and, if it is out of date, request an upgrade.
- Be sure to purchase a certified HDMI cable. Otherwise, the picture may not display or a connection error may occur.
- We recommend using a basic high-speed HDMI cable or an HDMI cable that is Ethernet compatible. Note that this product does not support the Ethernet function via HDMI.
- This product supports the 3D and ARC (Audio Return Channel) functions via an HDMI cable. Note that the ARC function is supported by the **HDMI IN 2 (ARC)** port only.
 - If **3D Auto View** is set to **On**, some functions such as SMART HUB may be disabled. In this case, set **3D Auto View** or **3D Mode** to **Off**.
- The ARC function allows digital audio to output via the **HDMI IN 2 (ARC)** port on the TV. It can be enabled only when the TV is connected with an audio receiver that supports the ARC function.

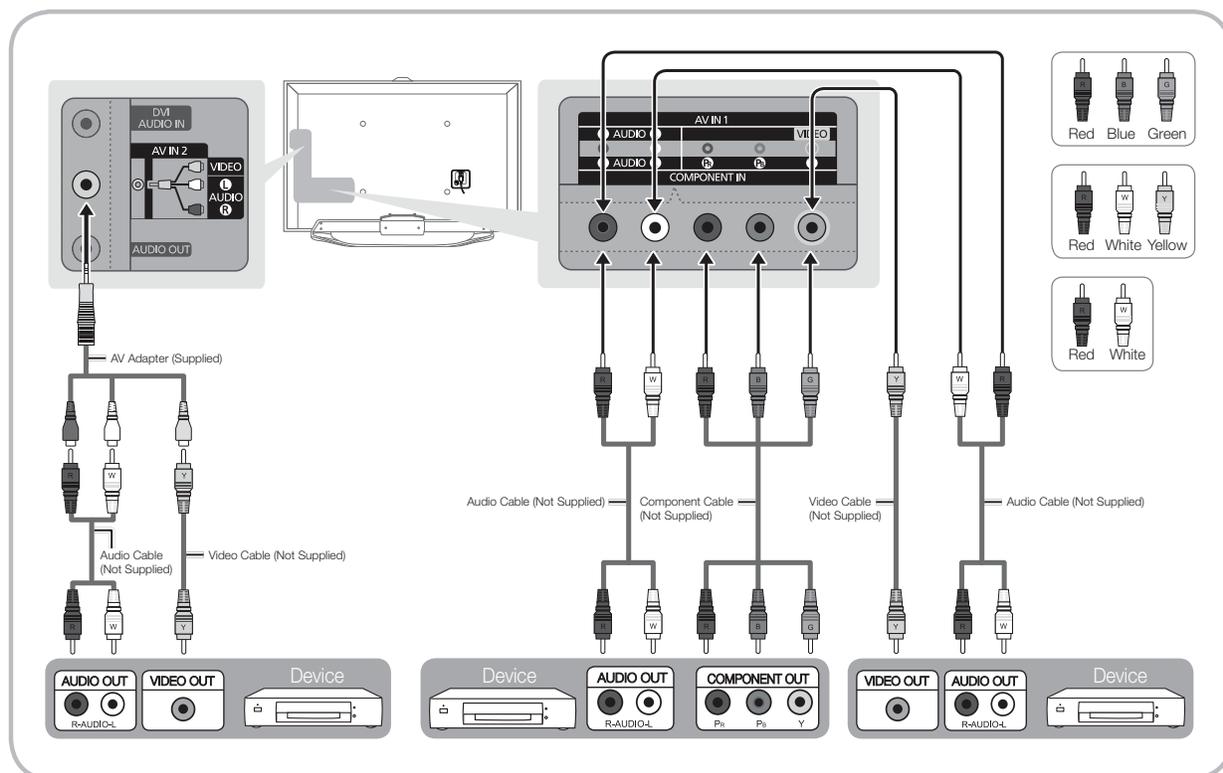
- This product supports the Mobile High-Definition Link (MHL) function via an HDMI-MHL cable. Note that the MHL function is supported by the **HDMI IN 3 (MHL)** port only.
- The MHL function lets you display a mobile device's screen via the **HDMI IN 3 (MHL)** port on the TV. It can be enabled only when the TV is connected with a mobile device that supports the MHL function. For more detailed information, see "Using the MHL function" in e-Manual.
- When you use MHL devices via a MHL cable, **Picture Size** is set to **Screen Fit** automatically. But if you use MHL devices via an HDMI cable, **Picture Size** is not set to **Screen Fit** automatically. To view an original size, select **Screen Fit** in the **Picture Size** menu (**Menu** → **Picture** → **Picture Size**).
- If you use MHL devices via an HDMI cable, The TV will be recognized as the HDMI input. In this case, the TV may work differently than when you use MHL devices via a MHL cable.

✎ For the best cable connection to this product, use cables no thicker than the cable illustrated below:



Using a Component Cable (up to 1080p HD signals) or an Audio/Video Cable (480i analog signals only)

Use with DVD players, Blu-ray players, cable boxes, STB satellite receivers, VCRs.

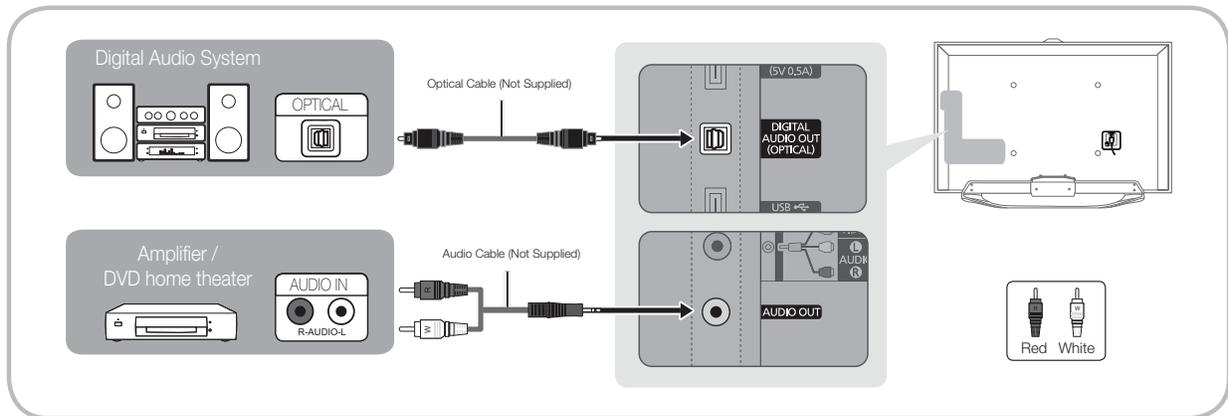


- ✎ For better picture quality, we recommend the Component connection over the A/V connection.
- ✎ When you connect a Video cable to **AV IN 1**, the color of the **AV IN 1 [VIDEO]** jack (green) will not match the video cable (yellow).

Connecting to Audio Devices

Using an Optical (Digital) Cable Connection and a Standard Stereo Cable Connection

Use with Digital Audio Systems, Amplifiers, and Home Theaters.



DIGITAL AUDIO OUT (OPTICAL)

- When you connect a Digital Audio System to the **DIGITAL AUDIO OUT (OPTICAL)** jack, decrease the volume of both the TV and the system.
- 5.1 CH (channel) audio is available when you connect the TV to an external device supporting 5.1 CH.
- When the receiver (or home theater) is set to on, you can hear sound output from the TV's optical jack. When the TV is receiving a DTV signal, the TV will send 5.1 CH sound to the home theater receiver. When the source is a digital component such as a DVD player / Blu-ray player / cable box / STB (Set-Top-Box) satellite receiver and you connected it to the TV via HDMI, you will only hear 2 CH audio from the home theater receiver. If you want to hear 5.1 CH audio, connect the digital audio out jack from your DVD / Blu-ray player / cable box / STB satellite receiver directly to an amplifier or home theater.

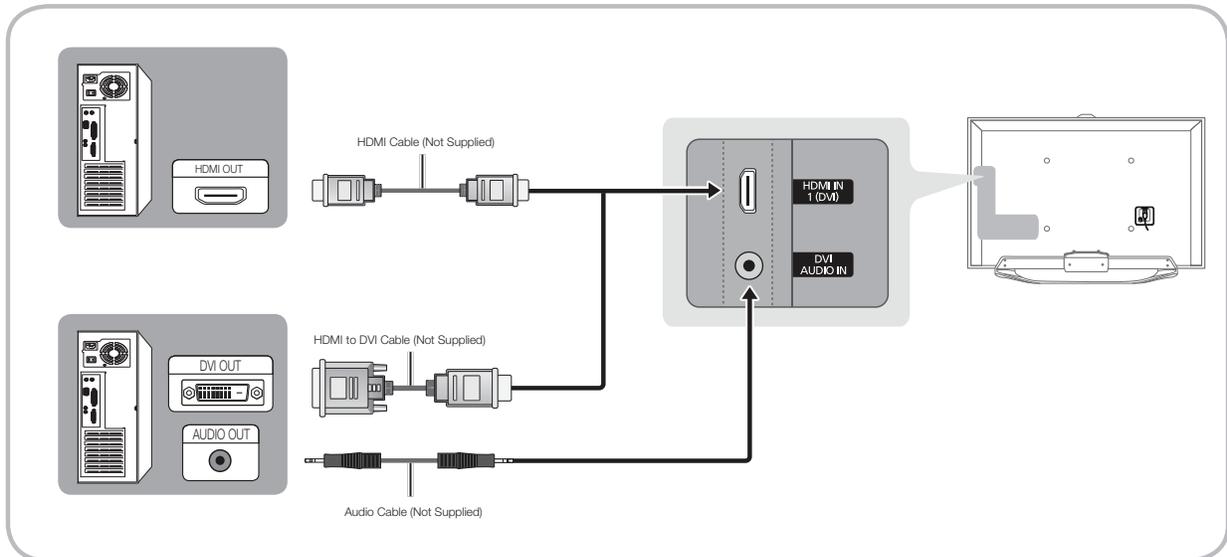
AUDIO OUT: Connects to the audio input jacks on your amplifier/DVD home theater.

- When connecting, use the appropriate connector.
- When you connect an audio amplifier to the **AUDIO OUT** jacks, decrease the volume of the TV and adjust the volume level with the amplifier's volume control.

Connecting to a PC

Using an HDMI cable or an HDMI to DVI cable

- ✎ Your PC may not support an HDMI connection.
- ✎ Use your PC speakers for audio.



The optimal resolution is 1920 X 1080 @ 60 Hz. See the Display Resolution page for all available resolutions (page 57).

NOTE

- For an HDMI to DVI cable connection, you must use the **HDMI IN 1 (DVI)** jack.
- For PCs with DVI video out jacks, use an HDMI to DVI cable to connect the DVI out on the PC to the **HDMI IN 1 (DVI)** jack on the TV. Use the PC's speakers for audio.
- PC (D-Sub) input is not supported.

The EX-Link Cable Connection



The **EX-LINK** connection is for service only.

Source

 → **Source**

When you are watching TV and you want to watch a movie on your DVD player or Blu-ray player or switch to your cable box or STB satellite receiver, you need to change the Source.

■ TV / HDMI1/DVI / HDMI2 / HDMI3 / AV1 / AV2 / Component

1. Press the  button on your remote. The **Smart Hub** screen appears.
 2. Select **Source**. The **Source** screen appears.
 3. Select a desired external input source.
-  Alternatively, you can access the **Source** screen by selecting the **SOURCE**  button on your standard remote or selecting **Source** with the Smart Touch Control (see page 38).
 -  You can only choose external devices that are connected to the TV. In the displayed **Source** list, connected inputs are highlighted.

How to Use Edit Name

Edit Name lets you associate a device name to an input source. To access **Edit Name**, open the **Tools** menu when the **Source** list is displayed. The following selections appear under **Edit Name**:

- **VCR / DVD / Cable STB / Satellite STB / PVR STB / AV Receiver / Game / Camcorder / PC / DVI PC / DVI Devices / TV / IPTV / Blu-ray / HD DVD / DMA**: Select an input jack, and then select the name of the device connected to that jack from the list that appears. For example, if you have your Blu-ray player attached to **HDMI IN 2 (ARC)**, select **Blu-ray** for that input.
-  If you connect a PC to the **HDMI IN 1 (DVI)** port with an HDMI cable, assign **PC** to **HDMI1/DVI** in **Edit Name**.
-  If you connect a PC to the **HDMI IN 1 (DVI)** port with an HDMI to DVI cable, assign **DVI PC** to **HDMI1/DVI** in **Edit Name**.
-  If you connect an AV device to the **HDMI IN 1 (DVI)** port with an HDMI to DVI cable, assign **DVI Devices** to **HDMI1/DVI** in **Edit Name**.

Information

You can see detailed information about the selected external device.

Refresh

If the external devices are not displayed in the **Source** list, open the **Tools** menu, select **Refresh**, and then search for the connected devices.

-  Alternatively, you can refresh the **Source** list by selecting **A** using your remote.

Using Smart Hub

Smart Hub provides easy, on-screen access to five functions that let you manage and access channels, set favorite channels, access photos, videos, or music on USB devices, cameras, and PCs, select video sources, and set the TV to turn on automatically when a show you want to watch is on. The five functions are listed below:

- **Channel:** Lets you manage channels, select favorite channels, add channels to and delete channels from the **Added Ch.** list (the channels that appear when you press the **▼ CH ▲** button.)
- **Web Browser:** Lets you browse the Internet.
- **Schedule Manager:** Lets you schedule shows and channels for viewing.
- **Source:** Lets you select a connected external video source to view.
- **AllShare Play:** Lets you access, view, or play photos, videos, or music located on USB devices, digital cameras, cell phones, and PCs. PCs and cell phones can be accessed wirelessly, through your wireless network.

Smart Hub also provides an easy-to-use gateway to a host of on-line media and entertainment including apps from the Samsung Apps store, streaming videos and movies, kids sites, and more.

 To access **Smart Hub**, press the  button on your remote.

 For more information about **Smart Hub**, see the e-Manual.

Using this function, you can access and control menu options and functions using speech, motions or face recognition.

INFORMATION BOOKLET DISCLAIMER

- **Face recognition Log-in**

In order for **Face recognition** to function, a thumbnail image of your face will be stored in your TV for logging-in purposes.

Logging into the **Smart Hub** using **Face recognition** may be less secure than using an ID and password.

- **TV Camera Usage**

Before using the TV Camera, you should be aware that under some circumstances and under certain legal conditions your misuse of the TV Camera can result in legal liability for you. By using the TV Camera, you agree that you will not use the camera (i) in locations where cameras are generally prohibited (such as bathrooms, locker rooms or changing rooms), (ii) in any manner that will result in an invasion of a person's privacy or (iii) in violation of any applicable laws, regulations or statutes.

When you use a TV camera, you should check whether a tape attached or not in rear of the TV camera, and then you can use a TV camera after adjust a camera angle. When you don't want to use a TV camera, we recommend to use after a camera lens fixes to upwards. In this case, **Face recognition** and **Voice and Motion Control** are not available.

Voice Control

Menu → System → Voice and Motion Control → Voice Control

Enable or disable the voice recognition function. Lets you access and control menu options and functions by speaking letters or words.

 For accurate voice recognition, refer to the Standard Voice Command list at the Samsung web site (www.samsung.com → support → Manuals & Downloads).

 **Voice Control** function can be affected recognition by unclear pronunciation, voice level, or surrounding noise.

 To use **Voice Control**, you must pronounce words and phrases clearly and correctly in the language you selected in **Language**.

 Ambient noise may cause **Voice Control** to malfunction. (Appropriate surrounding noise: Below 40dB)

Your TV can "hear" your voice commands in two ways:

– Using the TV's microphone. (Distant Recognition)

 We are recommended using **Voice Control** function within about 13 ft with your TV. You can check the usable distance by using **Voice Control Environment Test (System → Voice and Motion Control → Voice Control → Voice Control Environment Test)**.

- Using the **VOICE**  button on your remote. (Close Proximity Recognition)
 -  When you use the TV's microphone, the words may not be recognized because of ambient noise. If this occurs, try using the **VOICE**  button on your remote. The TV will be able to recognize a voice command more easily.
 -  The **VOICE**  button on your remote is always activated. If you want to use the TV's microphone, turn on **Voice Control** (**System** → **Voice and Motion Control** → **Voice Control**).
 -  Say a voice command to proper volume into the microphone of your remote within 0.3 – 0.9 ft. If voice level is too small or large, voice command may not be recognized.
-  If a menu option or function is not supported by the **Voice Control** function, we suggest trying the **Motion Control** function. To use the **Motion Control**, raise your hand while opening it toward the screen, hold it for a moment and then wave it 3~4 time to the left and right. **Motion Control** starts. If the **Motion Control** starts, the cursor is displayed at the center of the screen and the **Motion Guide Bar Size** is at the bottom of the screen.
- **Voice Control**

Turns the **Voice Control** function on or off.

 -  The **VOICE**  button on your remote is always activated.
- **Language**

Select the recognition language you want to use.
- **Trigger Words**

You can select the **Trigger Words** that start the **Voice Control** function. Alternatively you can turn on your TV using the **Trigger Words** if **Voice Control** function is set to **On**.

 - If the **Trigger Words** is set to **Hi TV**, say **Hi TV Power On**.
 - If the **Trigger Words** is set to **Smart TV**, say **Smart TV Power On**.
- **Voice Command Bar Size**

Set the **Voice Command Bar Size** mode to **Minimum** or **Full**. **Minimum** displays the least number of words and phrases you can use. **Full** displays all the words and phrases.
- **Voice Sensitivity**

You can configure the sensitivity of Voice recognition.

 - **Howling**: Select howling levels.
 - **Recognition responsiveness**: Select the responsiveness level of Voice recognition.

■ Voice Control Environment Test

You can test the amount of ambient noise level detected by the TV microphone.

- **Noise Test:** This test checks the amount of ambient noise detected by the TV microphone. Too much ambient noise will prevent Voice Command from functioning. To run, select **Next** using your remote. The test starts and takes a few seconds. Please keep as quiet as possible during the test.
- **Mic & Speaker Test:** Determines if the sound from the TV speakers picked up by the TV microphone will disrupt Voice Command. To run, select **Start** using your remote. The test starts and takes a few seconds. Please keep as quiet as possible during the test.
 - 📎 Available only when **Speaker Select** is set to **TV Speaker**.
- **Voice Control Test:** This test checks the volume level and clarity of your voice for use with **Voice Control**. Select **Start** using your remote. After the test starts, say the test words listed in the instructions as loudly and clearly as you can.
 - 📎 If the test is not successful, select **Retest**, and then say the words loudly and clearly again.

To use the Voice Control function, follow these steps:

- 📎 If **Voice Control** function is set to **On**, the TV may be turned on automatically by effect of the ambient environment.
1. Speak the **Trigger Words** that you selected into the microphone embedded in the TV or press the **VOICE** button on your remote. The TV displays the **Voice Command Bar Size**.
 - 📎 When you use the **Voice Control**, the volume is set to 5 automatically.
 2. Say a word or phrase listed in the **Voice Command Bar Size**.
 - 📎 Pronounce the word or phrase clearly and correctly in the language you selected in **Language**.
 3. Wait until recognition is complete, and then say the next command in the same fashion
 - 📎 To exit the **Voice Control** mode, speak the **Trigger Words** or "Cancel" using the TV's microphone, or press the **RETURN** button.

Using the Voice Text Input Mode

1. Say "Search All" while in the **Voice Control** mode.
 - 📎 When you use a **QWERTY** keypad screen, you can use the Voice Text Input Mode. Say the **Trigger Words** that you selected into the microphone embedded in the TV or press the **VOICE** button on your remote. You cannot use it for some UIs such as URL input boxes
 2. Say the word or phrase you wish to search for.
 3. The TV executes the spoken function.
- 📎 Voice Control performance levels will vary based on the language spoken.

Motion Control

Menu → System → Voice and Motion Control → Motion Control

Enable or disable the **Motion Control** function. Lets you control your TV by moving the TV cursor using specific motions.

-  **Motion Control** function can be affected recognition by motion posture, or ambient brightness conditions.
-  Some applications may not support **Motion Control**.
-  You may experience physical fatigue when you use the **Motion Control** for a long time.
-  To use the **Motion Control**, please avoid direct sunlight.
-  We are recommended using **Motion Control** function within about 5 - 13 ft with your TV. TV Camera's recognition range may differ depending on the angle of camera or other conditions. You can check the recognition range of TV camera by using **Motion Control Environment Test (System → Voice and Motion Control → Motion Control → Motion Control Environment Test)**.

■ Motion Control

Turns the **Motion Control** function on or off.

■ Motion Guide Bar Size

Set the **Motion Guide Bar Size** mode between **Minimum** or **Full**.

■ Motion Control Environment Test

You can test the brightness of room and the camera angle.

- **Brightness Test:** This test checks to see if your room is bright enough for **Motion Control** to work properly. Select **Start** using your remote. The test will starts and should take only a few seconds. (Appropriate ambient brightness: 50 ~ 500 Lux)
 -  Do not illuminating a sunlight or lights directly into the camera lens.
 -  Make sure that the camera lens is cloaked by an object.
- **Camera Angle Test:** On the **Camera Angle Test** screen, select **Start** using your remote. A rectangle appears on the screen. Move yourself into the rectangle by adjusting the camera or moving yourself in front of the camera. If you are not within the rectangle position, the test may not work properly. After aligning your body with the TV, raise your hand while opening it toward the screen, hold it for a moment and then wave it 3~4 times to the left and right.

To use the Motion Control function, follow these steps:

1. You use the **Motion Control**, raise your hand unfolding it toward the screen, hold it for a moment and then wave it 3~4 time to the left and right. **Motion Control** starts. If the **Motion Control** starts, the cursor is displayed at the center of the screen and the **Motion Guide Bar Size** is at the bottom of the screen.
2. Control the TV using your hands.
 -  Note that the **Motion Control** function closes if your hands go out of the camera range.
 -  While using the **Motion Control**, if you use the other devices (i.e. remote control, keyboard, etc.), **Motion Control** closes.

Controlling the TV with your hands using motions

■ **Access Motion Control**

- **Action:** Spread your hand in the direction of the camera, and shake it three or four times from a side to side.

■ **Pointing Navigation**

Moves the cursor to the position you want.

- **Action:** Spread your hand and guide the cursor to position you want.

■ **Run**

Selects an item or executes a command that is indicated by the cursor or is highlighted.

- **Action:** Clench your fist.

 When you watch some page or some image, you can move the page or image to direction you want if it can be moved. In this case, use and keep the **Run** motion, and then move it to direction you want. To move a page, clench your fist, keep it clenched, and then move it in the direction you want the page to move. Note that not all pages can be moved.

■ **Return**

Return to the previous menu.

- **Action:** Spread your hand and rotate it counterclockwise.

■ **Channel / Volume Control**

Changes the channel or adjust the volume.

 If you use the **Motion Control** function while watching a channel, the channel / volume control screen appears.

- **Action:** Use the **Pointing Navigation** motion to move the cursor to the channel or volume controller, and then uses the **Run** motion to adjust the channel or volume.

 If you use the **Run** motion once, it has the same effect as pressing a button on your remote. If you hold the **Run** motion, it has the same effect as pressing and holding a button on your remote.

■ **Scroll**

Scroll the page in the direction you want. For example, suppose that you want to scroll down.

 Some applications may not support this function.

1. Move the cursor to the bottom of the screen (page scroll zone) using the **Pointing Navigation** motion.
2. Move the cursor to the center of the screen using the **Pointing Navigation** motion.
3. The page will move down.

Face recognition

 → **Tools** → **Settings** → **Account Manager** → **Face recognition**

Enable or disable the Face recognition function. Face recognition lets you register your face with your Samsung account. Also, you can log in to the Samsung account using the **Face recognition** function without inputting your account ID or your account password.

 You can register your face in only one account.

To register your face in your Samsung account, follow these steps:

-  To use this function, you must log into **Smart Hub**. If you don't have a **Samsung Account**, you should create one before using this function. To create your **Samsung Account**, refer to "Creating an Account" (Advanced Features → Smart Hub) in the e-Manual.
1. On the **Smart Hub** screen, open the **Tools** menu using your remote, and then select **Settings**.
 2. Select **Account Manager**. The **Account Manager** screen appears.
 3. Select **Face recognition**. The **Face recognition** screen appears.
 4. Move your face into the square in the center of the screen, and then wait until the square changes from red to green.

 If **Face recognition** fails, select **Retry** and then try again.
 5. When done, your face is now registered in your Samsung account. The Continue to Register Service window appears.

 To close the window, select **OK**. You can register services later using **Link to other accounts** in the **Smart Hub** menu (**Settings** → **Account Manager** → **Link to other accounts**).

To log in to your Samsung account using Face recognition, follow these steps:

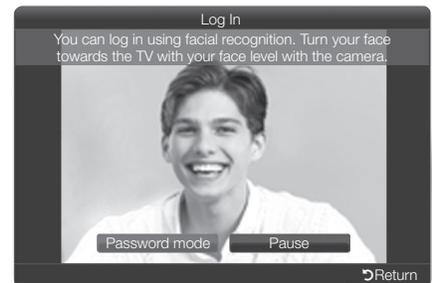
 If you use **Face recognition** to log into **Smart Hub**, it may be less secure than logging in with a password.

1. With the **Smart Hub** screen displayed, select **A** using your remote. The **Samsung Account** screen appears.



2. Select **Face Recognition Mode**. The **Face recognition** screen appears.

 To return to the **Samsung Account** screen, select **Password mode**.



3. The TV starts **Face recognition**. Face the front of the TV screen. The TV will recognize your face automatically.

 A Green square indicates a registered face. A red-square indicates an unregistered face.

 If the TV fails to recognize your face, try again.

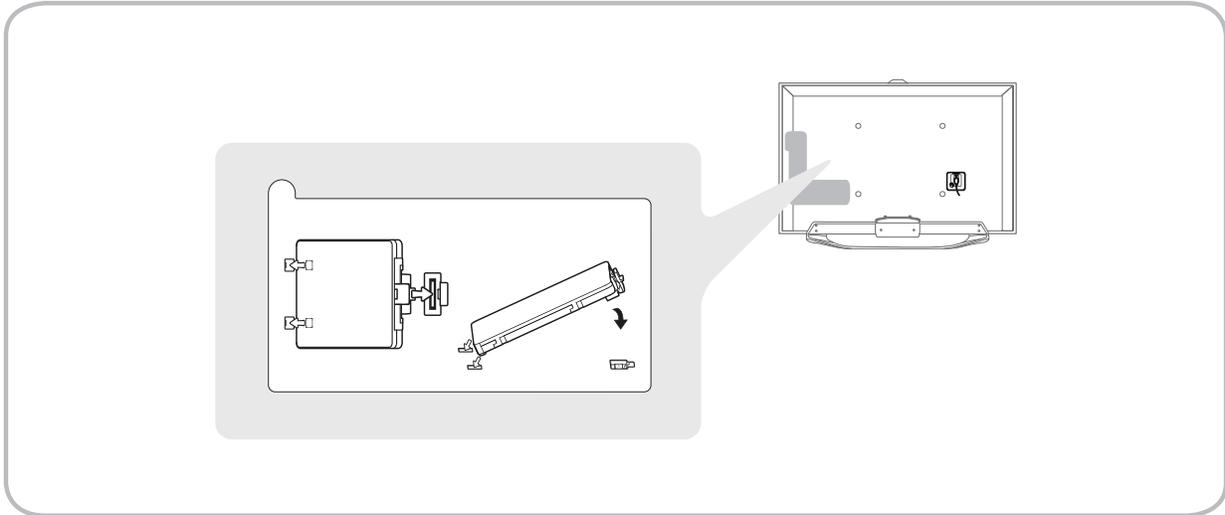
4. The TV logs you into your Samsung account automatically.

 If the TV recognizes two or more registered faces, the Samsung account list appears. Select your account to log in.

 If your face is unregistered, you can register your face in your Samsung account. Follow steps 4 through 5 in the “To register your face to your Samsung account:” procedure above.

 If you have no account, you can create one. For more detailed information, refer to “Creating an Account” (Advanced Features → Smart Hub) in the e-Manual.

The Evolution Kit Slot (Kit Sold Separately)



This socket is designed to accept an extension device called the Evolution Kit. The Evolution Kit enables the TV to run a variety of the latest applications for a better user experience.

The Evolution Kit, which may not be available depending on the product, will be sold separately in 2013 or later.

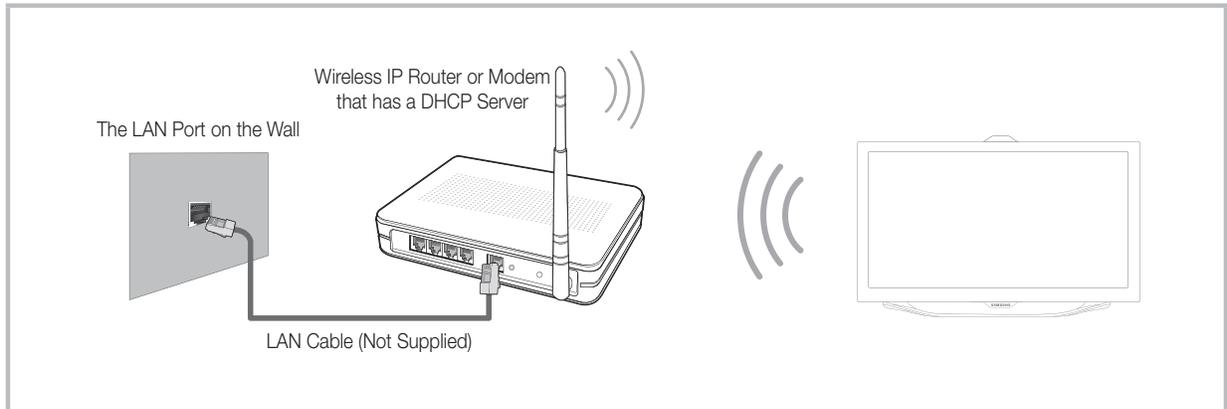
Connecting to a Network

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 16) or after the Initial Setup process, through the TV’s menu (see page 36).

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. If you play video using IEEE 802.11a, b, or g, 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 router or modem) to transmit an encrypted security code called an access key.

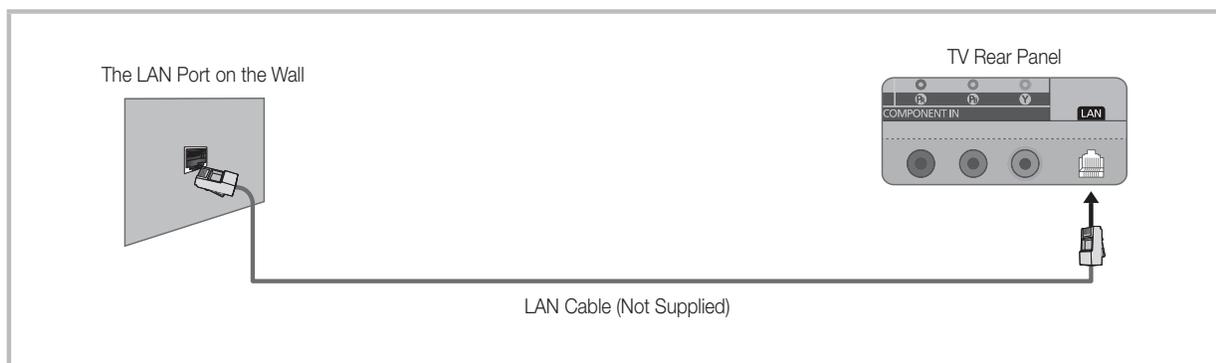
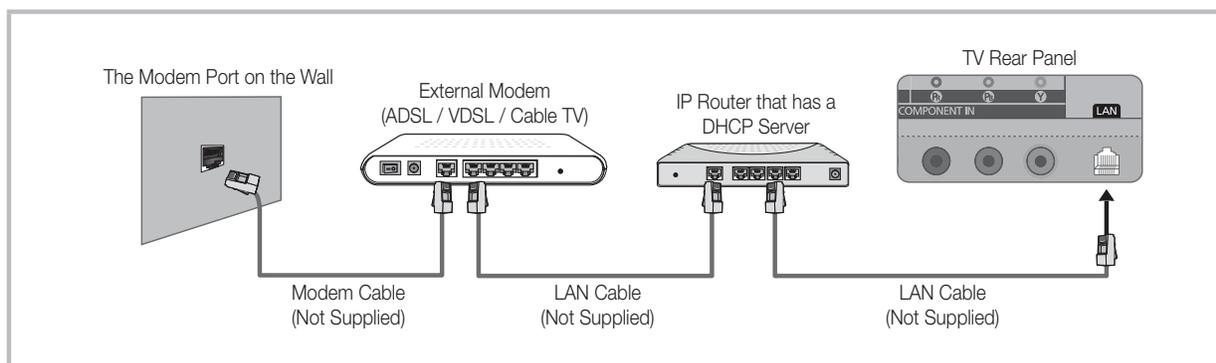
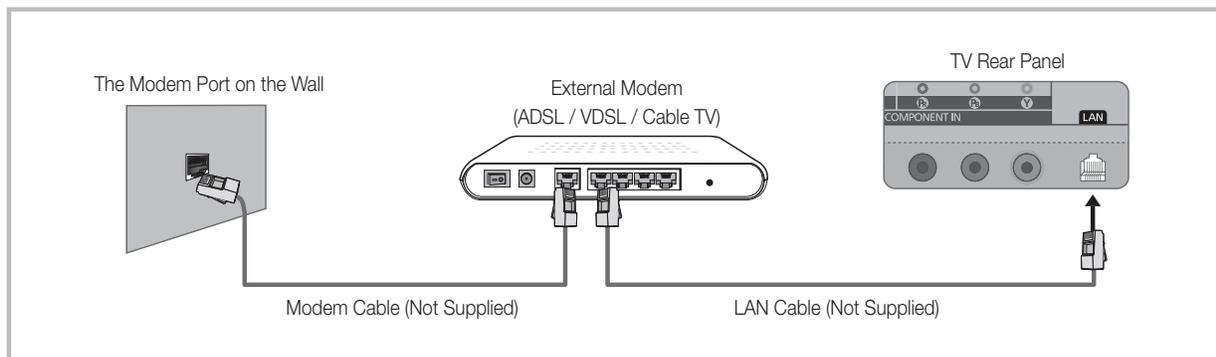
Your TV is compatible with the following security protocols:

- 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 starting below:



- 🔗 The TV does not support network speeds less than or equal to 10Mbps.
- 🔗 Use Cat 5 or 6 (STP Type*) cable for the connection. (*Shielded Twisted Pair)

Configuring Network Connections

After you have run the initial setup, you can configure or reconfigure the network connections through the TV's menu.

Configuring a Wireless Network Connection

The instructions below are for networks that use the Dynamic Host Configuration Protocol (DHCP) to configure network connections automatically. Most wireless networks use DHCP. If you have a Static IP network, see the e-Manual for configuration instructions.

To configure the network connection for a network that uses DHCP, follow these steps:

1. Connect your TV to your network as shown in the illustration on page 34.
2. Turn on your TV, and then go to the **Network Settings** screen. (**Menu** → **Network** → **Network Settings**)
3. Select **Start**. The Network function searches for available wireless networks. When done, it displays a list of the available networks.
4. In the list of networks, move the highlight to select a network, and then select **Next**.
 - ✎ If you have a WPS(PBC) compatible router, select **WPS(PBC)** instead, and then follow the directions on the screen.
5. Enter your network security key or WPS PIN using your remote.
 - ✎ Enter numbers and letters using your remote.
 - If you are using the standard remote, you can enter numbers by pressing the number buttons on your remote.
 - To enter a letter, move the Highlight to the letter, and then select it. You can enter numbers in the same fashion if you choose.
 - ✎ To display capital letters (or redisplay small letters if capital letters are displayed), select **Caps** or **Shift**.
 - ✎ To display symbols and punctuation, select **★**. To redisplay letters, select **★** again.
6. When done, select **Next** if you have entered a security key or **WPS PIN** if you have entered a WPS PIN.
7. The TV checks the wireless connection. If the connection is successful, the "**You are connected to the Internet. If you have any problems using online services, please contact your Internet Service Provider.**" message appears. Select **Next** using your remote.
 - ✎ For more detailed information, see "Setting up the Wireless Network" in the e-Manual.
 - ✎ If you want to configure the connection manually, select **IP Settings** on the Network Connection screen. Set **IP Mode** to **Manual**, and then enter the **IP Address**, **Subnet Mask**, **Gateway**, and **DNS Server** manually.

Configuring a Wired Network Connection

Most home networks use the Dynamic Host Configuration Protocol (DHCP) to configure network connections. Home networks that support DHCP automatically provide the IP address, subnet mask, gateway, and DNS values your TV needs to access the Internet so you don't have to enter them manually. If you have a Static IP network, see your user's manual for configuration instructions.

To configure the network connection for a wired network that uses DHCP, follow these steps:

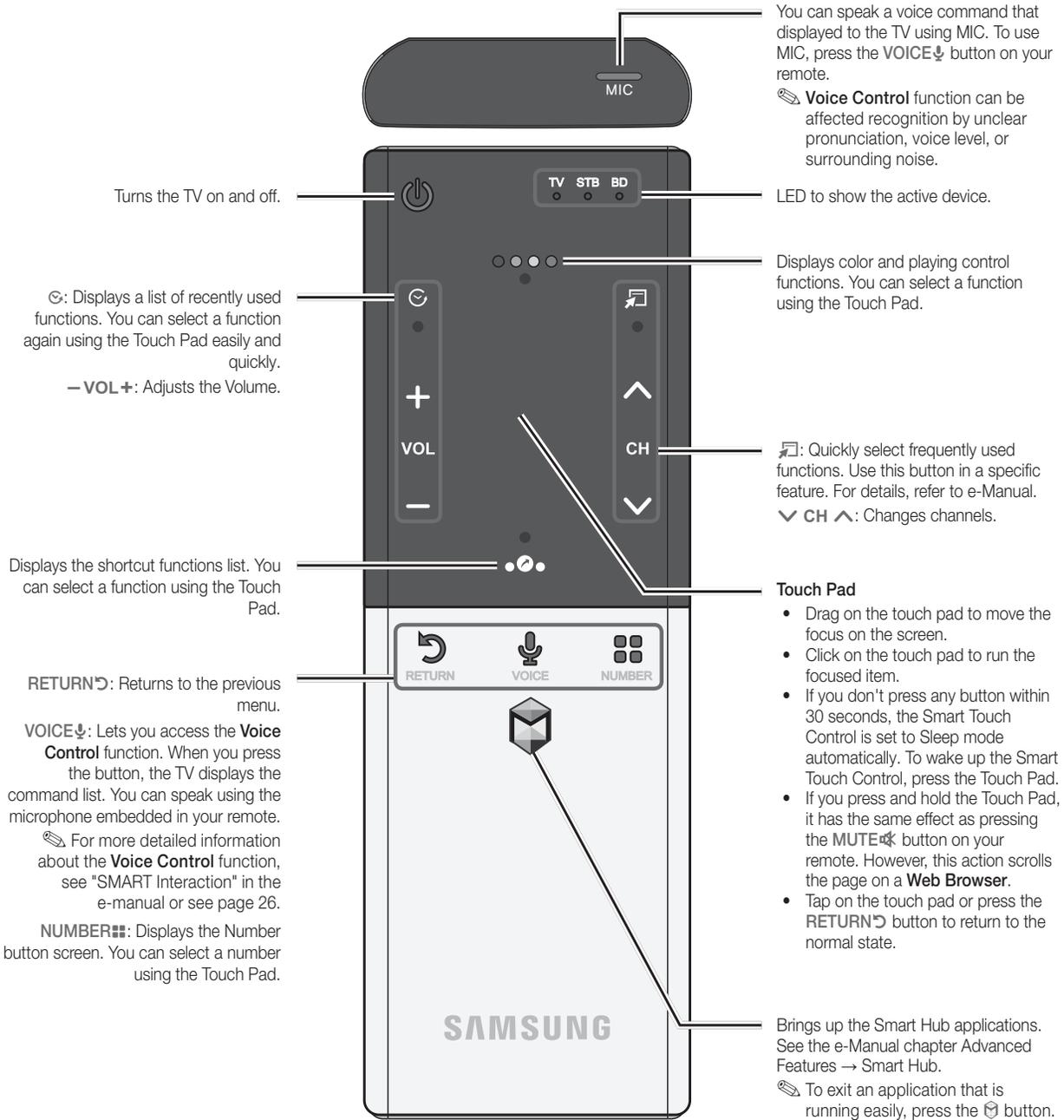
1. Connect your TV to your network as shown in one of the illustrations on page 35.
 2. Turn on your TV, and then go to the **Network Settings** screen. (**Menu** → **Network** → **Network Settings**)
 3. Select **Start**.
 4. The Network Connection screen appears, and verifies the network connection. When the connection has been verified, the "**You are connected to the Internet. If you have any problems using online services, please contact your Internet Service Provider.**" message appears. Network set up is completed.
- 📌 If your TV cannot acquire network the connection values automatically or if you want to set the connection manually, select **IP Settings** on the network connection screen. Set **IP Mode** to **Manual**, and then enter the **IP Address**, **Subnet Mask**, **Gateway**, and **DNS Server** manually.
 - 📌 For more detailed information, refer to "Setting up the Wired Network" in the e-Manual.

The Smart Touch Control

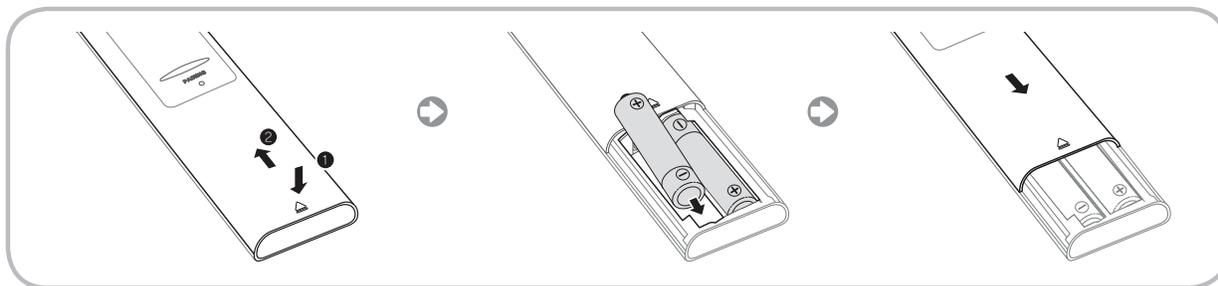
Improved user convenience has been provided so that you can switch the channel and adjust the volume with just your fingertips while focusing on the TV screen. In addition, the built-in touch pad removes the need for a mouse when you change the menu settings and search for something on the Internet.

✎ For more detailed information about Smart Touch Control, see "Using the Smart Touch Control" in e-Manual.

Smart Touch Control



Installing batteries (Battery size : AA)

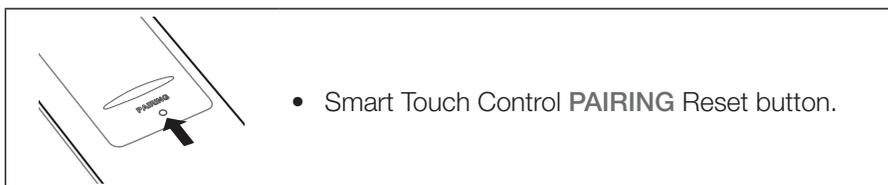


1. Press the back of the remote at the very bottom with both thumbs, and then slide the battery cover up in the direction of the arrow.
2. Install two batteries so that the polarity of the batteries (+/-) matches the illustration in the battery compartment.
3. Slide the cover down in the direction of the arrow to close the battery cover.

Initial Pairing for Smart Touch Control

After you have run the Initial Setup on your TV, you should connect your Smart Touch Control to your TV.

1. Point the Smart Touch remote control toward the TV's IR Blaster and press any key on the Smart Touch remote control.
 2. The connection icon appears at the bottom left of the screen and the Smart Touch remote control is automatically connected to the TV.
- 🔧 If you want to perform the pairing process again, press the reset button in the center of the back cover using a pin or the tip of an unbent paper clip. The Smart Touch Control will be initialized.



Calibrating the Touch Pad

To calibrate the touch pad on the Smart Touch Control, follow these steps:

1. Press the **NUMBER** button for 3 seconds. The calibration starts.
 2. When done, all the LEDs on the top of the Smart Touch Control blink twice simultaneously.
- 🔧 While calibrating, don't touch the touch pad.
- 🔧 If the touch pad loses accuracy, re-calibrate the touch pad by repeating Steps 1 and 2.

Using the Touch Pad

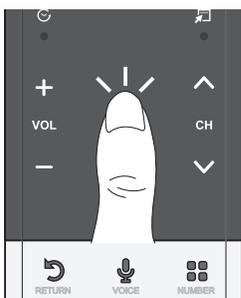
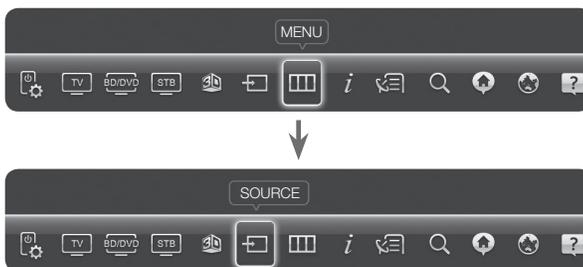
To display the shortcut functions list on the bottom of the screen, press the  button at the bottom of the touch pad. This list includes **Menu, Source, Ch List, 3D, Support**, and a number of other functions.

To display the color and playing control functions on the top of the screen, press the  button on the top of the touch pad.



To Move the Highlight: Rest your finger on the touch pad, and then slide it from one side to the other, from top to bottom, or bottom to top.

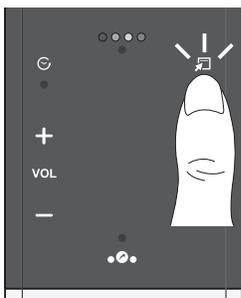
 To move the Highlight continuously, flick your finger across the touch pad from right to left, left to right, top to bottom, or bottom to top.



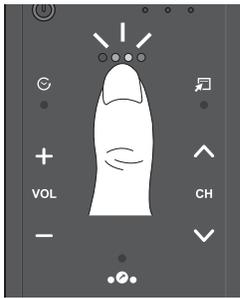
To Select an item: Press the Touch Pad.



Open the History screen.: Press the  button in the left of the Touch Pad. Displays a list of recently used functions. You can select a function again using the Touch Pad easily and quickly.



Open the Tools menu.: Press the  button in the right of the Touch Pad. Quickly select frequently used functions.



Open the color, playing control and exit buttons.: To display the color, exit and play control buttons at the top of the screen, press the button at the ●●●● top of the touch pad.



→ []: Close all menus shown on the screen.



Open the shortcut functions screen.: Press the ●●● button in the bottom center of the Touch Pad.

Quickly select frequently used functions:



Using the Scroll mode

If you press and hold the Touch Pad when using **Web Browser**, the Touch Pad switches to the Scroll mode.

In the Scroll mode, slide your finger in the Touch Pad from one side to the other, the highlight moves page units.

📌 To return to the general mode of the Touch Pad, press the Touch Pad or **RETURN** button on your Smart Touch Control.

To Enter a channel number through Smart Touch Control

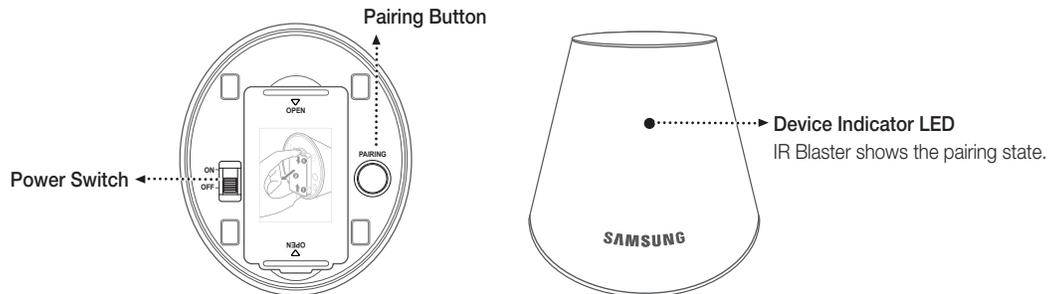
1. While watching a broadcast, press the **NUMBER** button on the Smart Touch Control. The TV displays the number button screen.
 2. Using the touch pad, highlight a number, and then press the touch pad. The TV displays a list of channels that start with the number you selected.
 3. Using the touch pad, highlight the channel in the list you want, and then press the touch pad.
- 📌 You can also change the channel by touching the up or down channel icon on the touch pad. If you touch the touch pad immediately after, the TV displays the list of memorized channels. Select a channel by moving or flicking your finger up or down, and then pressing the touch pad.
- 📌 If you change a channel by entering the channel number, that channel number is memorized and added to the **Added Ch.** list automatically. You can change channels using the memorized channel list easily and quickly.

The IR Blaster

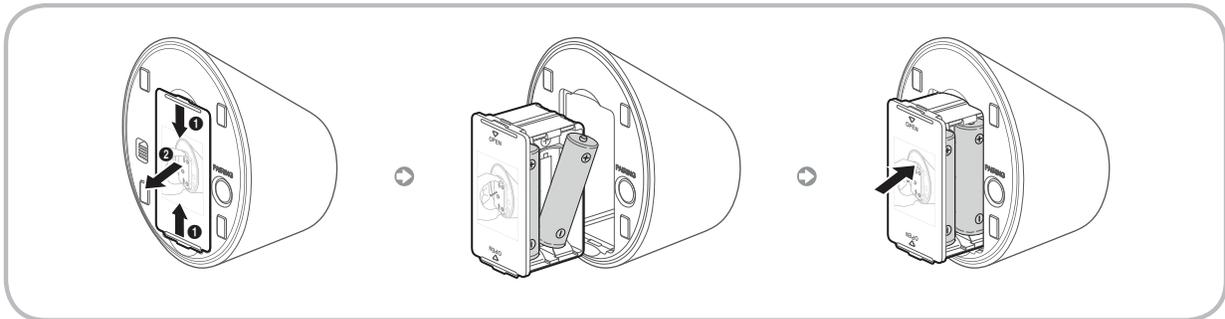
When you connect an IR Blaster with your TV, you can control connected external devices with your TV using the Smart Touch Control.

- Install the IR Blaster within 50 cm and 45 degrees of the up, down, left and right directions of the IR sensor of the external device.

IR Blaster



Installing batteries (Battery size : AA)



1. Hold the both sides of the battery holder and pull it out.
2. Install four batteries so that the polarity of the batteries (+/-) matches the illustration in the battery compartment.
3. Push it back.

IR Blaster Pairing

1. Turn the IR Blaster on, and if the LED blinks, connect the IR Blaster to the TV.
 2. Briefly point the IR Blaster toward the IR sensor of the TV and press the **PAIRING** button at the bottom.
 3. The connection icons appear on the bottom left of the screen, and the TV connects to IR Blaster automatically.
- 🔗 If the connection process failed, please turn off and on the IR Blaster, try again from step 2.



Precautions for Using an IR Blaster

To use an IR Blaster, the IR Blaster must be located nearby with external devices connected to the TV. Note that it should be no obstacle between the external device's IR receiver and an IR Blaster.

Setting up the Universal Remote Control

Lets you control a Set-Top-Box (STB) or a BD player or both connected to the TV using your Smart Touch Control. After you connect the device to the TV, the Smart Touch Control can control the navigation, number, and other keys needed to operate and control the device.

To connect the external device to your Smart Touch Control, follow these steps:

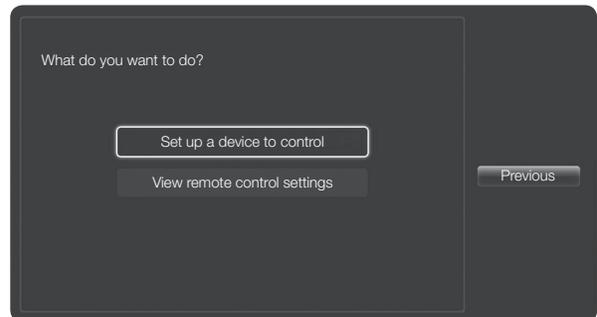
1. When you connect IR Blaster for the first time, a pop-up appears. Select **Yes** to set IR Blaster and Smart Touch Control, and then press the touch pad.



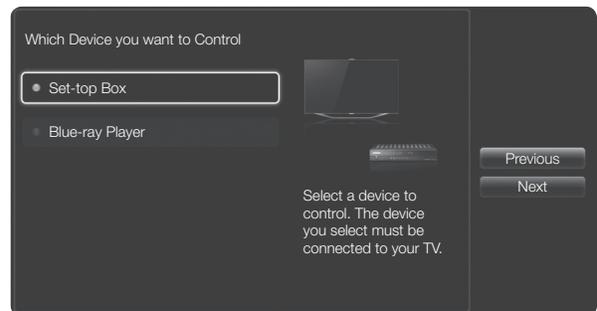
2. To reset IR Blaster and Smart Touch Control, press the  button on Smart Touch Control, and then select **Set Up Universal Remote** .



3. Select **Set up a device to control**, and then press the Touch Pad.

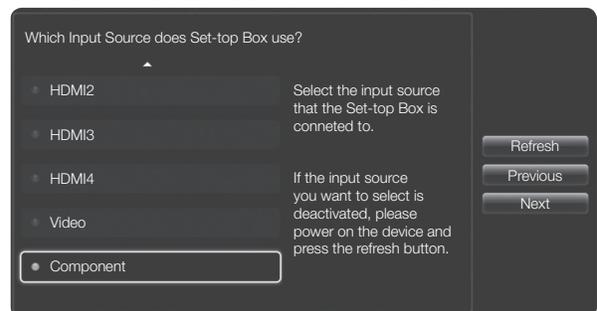


4. Select an external device from the connected devices, and then press the Touch Pad.



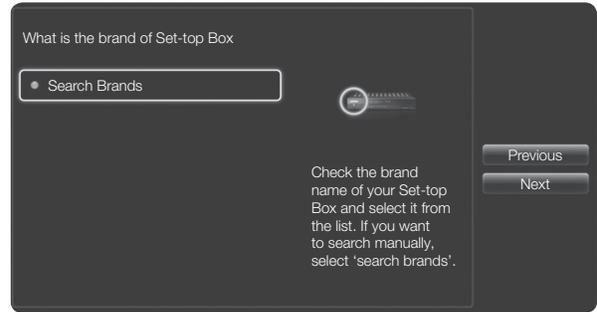
5. Select the port used to connect the external device, and then press the Touch Pad.

-  Make sure that the selected device is on. If it is turned off, turn the power on and press **Refresh**.



6. Select **Search Brands**, and then press the Touch Pad. A keyboard and an entry field appear. Enter the first few letters of the brand name of your device using the Smart Touch Control, and then select **Done** at the bottom of the keyboard. In the list that appears below the entry field, select the brand name of your device, and then press the Touch Pad.

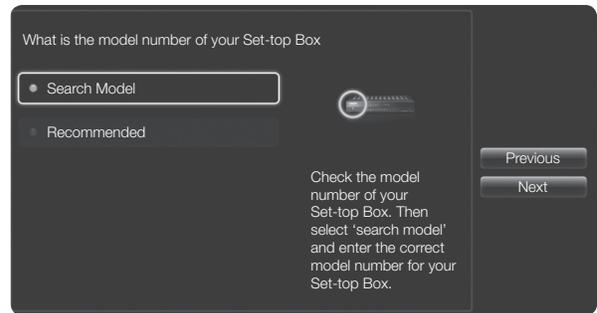
 If you want to search the brand of STB (Set-Top box), you can search the STB by using the brand name or a cable provider.



7. Select **Search Model**, and then press the Touch Pad. A keyboard and an entry field appear. Enter the first few letters and numbers of the model name of your device using the Touch Control, and then select **Done** at the bottom of the keyboard. In the list that appears below the entry field, select the model name of your device, and then press the Touch Pad.

 If the search for model name does not work properly, search with a part of the model name or use the Search for recommended model code.

 For more information on the Search for recommended model code function, refer to page 46.



8. Select **Download**, and then press the Touch Pad. Download the configuration data for the IR Blaster in the same way.

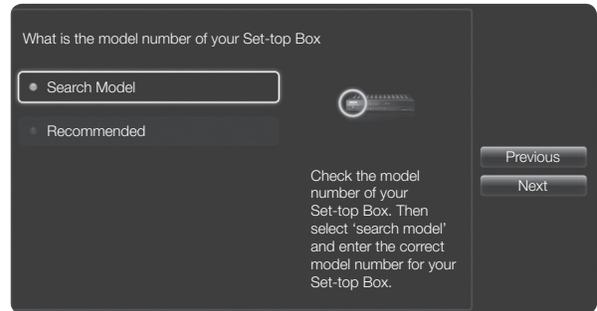


9. When all the settings are complete, select the **Done** button and press the touch pad.



Using the Search for Recommended Model Code

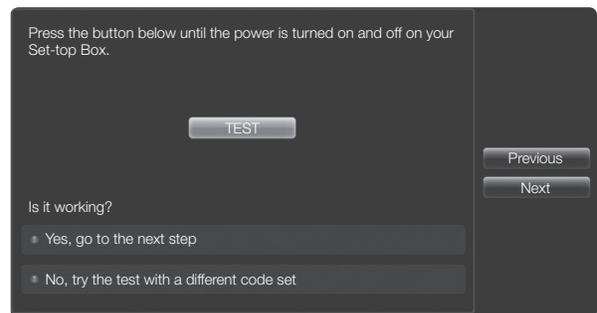
1. In the Search for model name step in the integrated remote control setup, select the **Recommended** and press the touch pad.



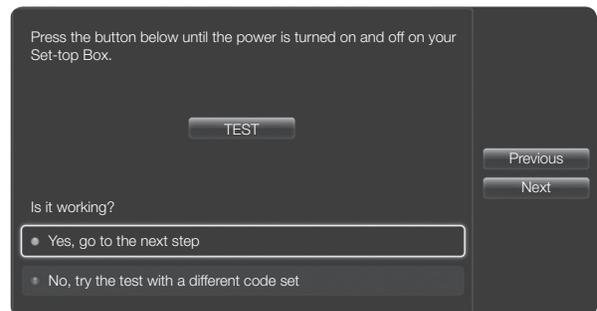
2. Select **Download** to download the recommended model code.



3. Point the Smart touch remote control forward to the TV's IR sensor and press the touch pad to test if the device works.



4. If the downloaded recommended model code does not work, repeat the steps from step 3.



-  When you use the BD home theater by using Universal Remote, some buttons may not be supported. In this case, we recommend to use **Anynet+ (HDMI-CEC)** function.

How to view the e-Manual

You can find instructions for your TV's features in the e-Manual. To open the e-Manual, press the **SUPPORT** button on your standard remote or select **Support** using the Smart Touch Control.

You can also access it through the menu:

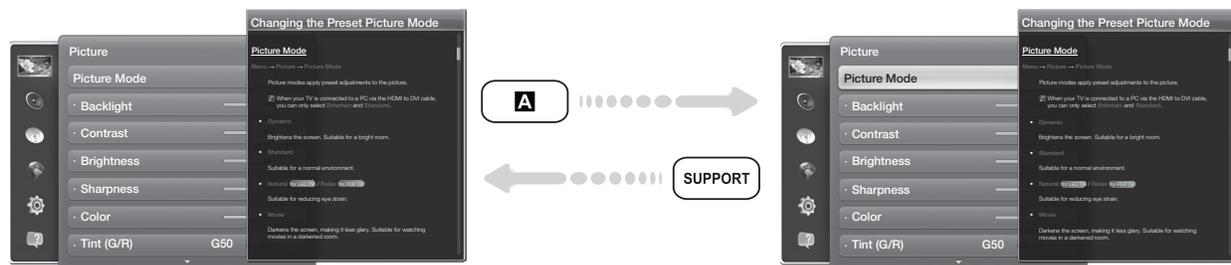
Menu → Support → e-Manual

Access the e-Manual

To use the e-Manual, follow these steps:

1. When you need help, select **Support** using your remote. The **Support** screen appears.
 2. Select **e-Manual** using your remote. The **e-Manual** screen appears.
 3. Select a desired category.
 4. Select a desired topic. The e-Manual displays the page you want to see.
- 📎 Blue words in e-Manual signify menu options or selections on TV screen.
 - 📎 Green icons in the e-Manual signify a button on your remote.
 - 📎 Arrow steps (e.g. **Menu → Support → e-Manual**) in the e-Manual signify the sequence of steps required to access an option or activate a function.

How to toggle between an e-Manual topic and the corresponding OSD menu(s).



- 📎 This function is not enabled in some menus.
 - 📎 You can't use the **Try Now** function if the menu is not available.
1. To go to the topic's corresponding menu option, select **A** using your remote.
 2. To return to the e-Manual screen, select **Support** using your remote.

Using the colored and function buttons with the e-Manual

- **Scroll bar:** Scroll the e-Manual screen up or down.
- **◀ / ▶:** Moves to the previous or next chapter.
- **▲ Try Now:** Move to the OSD menu that corresponds to the topic. To return to the e-Manual screen, select **Support** using your remote.
- **🏠 Home:** Moves to the e-Manual home screen.
- **📄 Position:** Each time you select **📄**, you change the position of the e-Manual screen.
- **📖 Index:** Displays the Index screen.
- **↩ Return:** Return to the previous screen.

How to search for a topic on the index page

1. Select **📖** using your remote. The Index screen appears.
2. To search for a topic, select a letter. The Index displays a list of topics and keywords that begin with the letter you selected.
3. Select a topic or keyword you want.
4. The e-Manual page with the topic appears.
 - ✎ To close the **Index** screen, press the **RETURN** **↩** button.

To Change the screen position of the e-Manual

If the e-Manual screen is not invisible well because the OSD Menus screen, you can change the e-Manual screen's position.

1. Move the Highlight to the e-Manual screen by pressing the **SUPPORT** button on your standard remote or select **Support** using the Smart Touch Control.
2. Press the **📄** button on your standard remote, or select **📄** using the Smart Touch Control. Each time you select **📄**, the position of the e-Manual will change.

Troubleshooting

If the TV seems to have a problem, first review this list of possible problems and solution. Also review the Troubleshooting Section in the e-Manual. If none of the troubleshooting tips apply, visit www.samsung.com/support or call Samsung Customer Service at 1-800-SAMSUNG (1-800-726-7864).

Issues	Solutions and Explanations
Flickering and Dimming	<p>If your Samsung Television is flickering or dimming sporadically, you may need to disable some of its energy efficient features such as the Eco Sensor or the Energy Saving feature. Follow the steps below with your remote to turn these features off or on.</p> <ul style="list-style-type: none"> • Energy Saving: User Menu → System → Eco Solution → Energy Saving • Eco Sensor: User Menu → System → Eco Solution → Eco Sensor
Component Connections / Screen Color	<p>If you find that the color on your Samsung television's screen is not correct or black and white, first run a Self Diagnosis on the TV to make sure there are no device issues.</p> <ul style="list-style-type: none"> • Self Diagnosis: User Menu → Support → Self Diagnosis → Picture Test <p>If the problem does not appear in the Picture test, make sure:</p> <ul style="list-style-type: none"> • Your connections are all consistent. For example, if you've used the AV In jack on your TV, make sure you have used the AV Out jack on your video source. • You have connected your devices to the correct jacks. For example, if you use the Component jacks, labeled Pb, Pr, and Y, to connect your TV and video source, make sure you have connected the blue Pb jack on the video source to the blue Pb jack on the TV, and the yellow Y jack on the source to the yellow Y jack on the TV.
Screen Brightness	<p>If you find that the colors on your Samsung TV are correct but just a little too dark or bright, try adjusting the following settings in the Picture menu option of the Main menu:</p> <ul style="list-style-type: none"> • Backlight, Contrast, Brightness, Sharpness, Color, Tint (G/R) and so on.
Blur	<p>If you find that there is a blur or "ghostlike" appearance to the images on your television's screen, you might be able to correct the blurring using Auto Motion Plus.</p> <ul style="list-style-type: none"> • Auto Motion Plus: User Menu → Picture → Picture Options → Auto Motion Plus

Issues	Solutions and Explanations
Unwanted Powering Off	<p>If your Samsung TV appears to turn off by itself, there may be an issue with either your Timer settings or your Eco friendly No Signal Power Off feature.</p> <p>First make sure Sleep Timer is not accidentally set. The Sleep Timer turns off the TV automatically after a certain period of time has passed.</p> <ul style="list-style-type: none"> • Sleep Timer: User Menu → System → Time → Sleep Timer <p>If the Sleep Timer is not activated, you may have engaged the No Signal Power Off or Auto Power Off feature.</p> <ul style="list-style-type: none"> • No Signal Power Off: User Menu → System → Eco Solution → No Signal Power Off • Auto Power Off: User Menu → System → Eco Solution → Auto Power Off
Trouble Powering On	<p>Press the Power on button on the TV or remote. The light should blink about 5 times before the TV turns on.</p> <p>If you find that you are having trouble powering on your Samsung television, there are a number of things to check before making a call to the service department.</p> <p>If you're sure your power cord, remote control, and PC are functioning properly, you may be having a cable issue. If you have a cable or satellite box, your TV may appear to be off because the cable or satellite box is not outputting a signal. To test the signal output of your cable or satellite box, press the guide or info button on the cable or satellite box remote control. If the screen displays the guide or info data, the problem is caused by the box.</p>
Stand Assembly	<p>If you have any trouble assembling the stand first, review "Install the Stand" in the paper manual.</p>
Cannot Find a Channel	<p>Re-run Setup (Go to User Menu → System → Setup) or run Auto Program. (Go to User Menu → Channel → Auto Program).</p>

 For detailed troubleshooting information, watch the troubleshooting videos at www.samsung.com/spsn.

Issues	Solutions and Explanations
The TV won't turn on.	<ul style="list-style-type: none"> • Make sure the AC power cord is securely plugged in to the wall outlet and the TV. • Make sure the wall outlet is working. • Try pressing the  button on the TV to make sure the problem is not the remote. If the TV turns on, refer to "Remote control does not work" below.
There is no picture/video.	<ul style="list-style-type: none"> • Check the cable connections. Remove and reconnect all cables connected to the TV and external devices. • Set the video outputs of your external devices (Cable/Sat Box, DVD, Blu-ray etc) to match the TV's input connections. For example, if an external device's output is HDMI, it should be connected to an HDMI input on the TV. • Make sure your connected devices are powered on. • Be sure to select the correct input source • Reboot the connected device by unplugging it, and then reconnecting the device's power cable.
The remote control does not work.	<ul style="list-style-type: none"> • Replace the remote control batteries. Make sure the batteries are installed with their poles (+/-) in the correct direction. • Clean the sensor's transmission window on the remote. • Try pointing the remote directly at the TV from 5~6 feet away.
The cable/set top box remote control doesn't turn the TV on or off, or adjust the volume.	<ul style="list-style-type: none"> • Program the Cable/Set remote control to operate the TV. Refer to the Cable/Set-Top-Box user manual for the SAMSUNG TV code.

 This TFT LED panel uses a panel consisting of sub pixels which require sophisticated technology to produce. There may be, however, a few bright or dark pixels on the screen. These pixels will have no impact on the performance of the product.

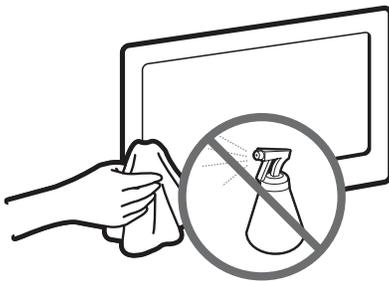
 To keep your TV in optimum condition, upgrade to the latest firmware on the Samsung web site by USB (samsung.com → Support → Downloads).

Licenses

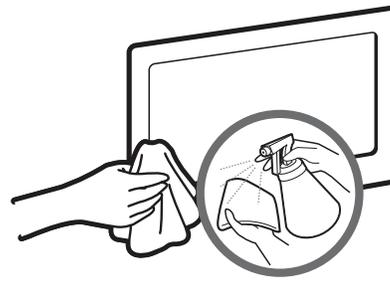


Storage and Maintenance

- ✎ If a sticker was attached to the TV screen, some debris can remain after you remove the sticker. Please clean the debris off before watching TV.
- ✎ The exterior and screen of the product can get scratched during cleaning. Be sure to wipe the exterior and screen carefully using the cloth provided or a soft cloth to prevent scratches.



Do not spray water directly onto the product. Any liquid that goes into the product may cause a failure, fire, or electric shock.



Clean the product with a soft cloth dampened with a small amount of water. Do not use a flammable liquid (e.g. benzene, thinners) or a cleaning agent.

Securing the TV to the Wall



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

The TV-Holder Kit (Sold Separately):

The parts below are included in the TV Holder kit. In addition, you need to provide a wood screw, screw and molly, or other screw appropriate for the wall or cabinet you intend to secure the TV-Holder string to. We recommend a size M4xL20 wood screw.



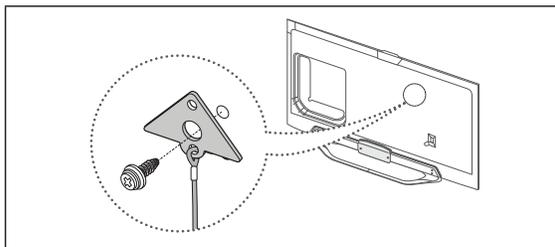
TV-Holder (BN96-15753A)



Screw (M8 X L19)

Installing the TV-Holder

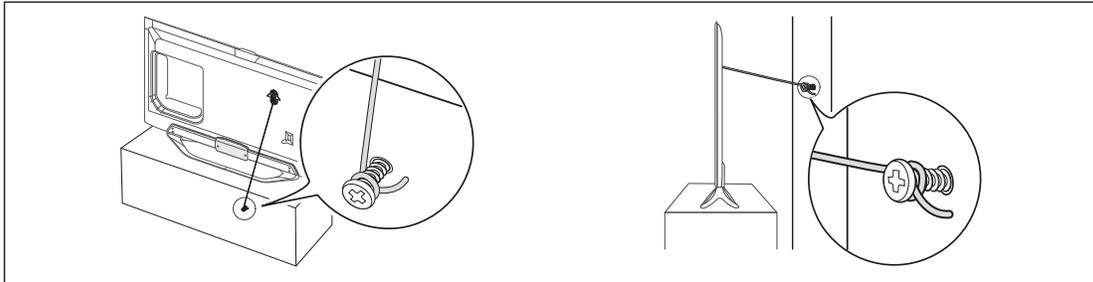
1. Remove the screw attached to the back of your TV, and then connect the TV-Holder to the TV with the screw included in the TV-Holder Kit that is designated for your TV.
 - 🔧 Make sure to use only the appropriate supplied screw. If you use a different screw, you can damage your TV.



2. Firmly fasten the screw you provided (size M4xL20 or similar) to the wall or cabinet where the TV is to be installed.
 - 🔧 If you fasten the screw to the wall, we recommend you drive the screw into a stud. If that is not possible, use a molly to anchor the screw.

3. Tie the TV-Holder cord to the screw fastened to the wall or cabinet so that the TV is fixed. See the illustrations below.

- ✎ Install the TV close to the wall so that it does not fall.
- ✎ When attaching the TV-Holder cord to the wall, tie the cord level with the ground or slanted downwards for safety purposes.
- ✎ Check the cord occasionally to make sure it is secure.
- ✎ Before moving the TV, separate the connected cord first.



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

To purchase the TV-Holder Kit, contact Samsung Customer Care

- In the United States: 1-800-SAMSUNG (1-800-726-7864)
- In Canada: 1-800-SAMSUNG (1-800-726-7864)

Specifications - Smart Touch Control

Model Name		RMCTPE1
Power	Source	Battery (AA x 2)
		To extend the battery life, use of alkaline battery is recommended
Compatibility	LED TV	Above LED E7500
	PDP TV	E8000
Dimension (W x H x D)		2.0 x 6.1 x 0.7 inches (52.0 x 154.0 x 19.5 mm)
Weight	Without Batteries	0.1 lbs (84.0 g)
	Including Batteries	0.2 lbs (130.0 g)

Specifications - IR Blaster

Model Name		VG-IRB2000
Power	Source	Battery (AA x 4)
		To extend the battery life, use of alkaline battery is recommended
Compatibility	LED TV	Above LED E7500
	PDP TV	E8000
Dimension (W x H x D)		3.7 x 2.6 x 3.1 inches (95.0 x 65.0 x 79.0 mm)
Weight	Without Batteries	0.1 lbs (86.5 g)
	Including Batteries	0.3 lbs (178.5 g)

Specifications

Display Resolution	1920 x 1080	
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	
Stand Swivel (Left / Right)	0°	
Model Name	UN46ES8000	UN55ES8000
Screen Size (Diagonal)	46" Class (45.9" measured diagonally)	55" Class (54.6" measured diagonally)
Sound (Output)	10 W X 2	
Dimensions (W x H x D)		
Body	40.8 x 24.2 x 1.2 inches (1038.7 x 614.7 x 30.8 mm)	48.4 x 28.4 x 1.2 inches (1230.3 x 722.3 x 30.8 mm)
With stand	40.8 x 25.7 x 8.2 inches (1038.7 x 653.7 x 210.0mm)	48.4 x 29.9 x 8.2 inches (1230.3 x 761.6 x 210.0 mm)
Weight		
Without Stand	26.4 lbs (11.9 kg)	36.5 lbs (16.6 kg)
With Stand	32.1 lbs (14.6 kg)	42.5 lbs (19.3 kg)
Model Name	UN60ES8000	
Screen Size (Diagonal)	60" Class (60.0" measured diagonally)	
Sound (Output)	10 W X 2	
Dimensions (W x H x D)		
Body	53.8 x 31.8 x 1.2 inches (1368.5 x 808.8 x 31.5 mm)	
With stand	53.8 x 33.3 x 8.2 inches (1368.5 x 847.9 x 210.0 mm)	
Weight		
Without Stand	45.3 lbs (20.5 kg)	
With Stand	51.8 lbs (23.5 kg)	

- ✎ Design and specifications are subject to change without prior notice.
- ✎ The actual appearance of the TV may differ from the images in this manual, depending on the model.
- ✎ This device is a Class B digital apparatus.
- ✎ For information about the power supply, and more about power consumption, refer to the label attached to the product.
- ✎ Typical power consumption is measured according to Energy Star Program requirements for Televisions.

Dispose unwanted electronics through an approved recycler.

To find the nearest recycling location, go to our website:

www.samsung.com/recyclingdirect or call, (877) 278 - 0799

Display Resolution

If you have attached the TV to your PC, you can 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	+/-
	720 x 400	31.469	70.087	28.322	-/+
MAC	640 x 480	35.000	66.667	30.240	-/-
	832 x 624	49.726	74.551	57.284	-/-
	1152 x 870	68.681	75.062	100.000	-/-
VESA DMT	640 x 480	31.469	59.940	25.175	-/-
	640 x 480	37.861	72.809	31.500	-/-
	640 x 480	37.500	75.000	31.500	-/-
	800 x 600	37.879	60.317	40.000	+/+
	800 x 600	48.077	72.188	50.000	+/+
	800 x 600	46.875	75.000	49.500	+/+
	1024 x 768	48.363	60.004	65.000	-/-
	1024 x 768	56.476	70.069	75.000	-/-
	1024 x 768	60.023	75.029	78.750	+/+
	1152 x 864	67.500	75.000	108.000	+/+
	1280 x 720	45.000	60.000	74.250	+/+
	1280 x 800	49.702	59.810	83.500	-/+
	1280 x 1024	63.981	60.020	108.000	+/+
	1280 x 1024	79.976	75.025	135.000	+/+
	1366 x 768	47.712	59.790	85.500	+/+
	1440 x 900	55.935	59.887	106.500	-/+
	1600 x 900RB	60.000	60.000	108.000	+/+
1680 x 1050	65.290	59.954	146.250	-/+	
1920 x 1080	67.500	60.000	148.500	+/+	

NOTE

- The interlaced mode is not supported.
- The set might operate abnormally if you select a non-standard video format.

Video Codec

File Extension	Container	Video Codec	Resolution	Frame rate (fps)	Bit rate (Mbps)	Audio Codec
*.avi	AVI MKV ASF MP4 3GP VRO VOB PS TS	DIVX 3.11/4.x/5.x/6.1	1920 x 1080	6 - 30	30	AC3 LPCM ADMPCM(IMA, MS) AAC HE-AAC WMA DD+ MPEG(MP3) DTS Core DRA
*.mkv		MPEG4 SP/ASP				
*.asf		H.264 BP/MP/HP				
*.wmv		Motion JPEG				
*.mp4		Window Media Video v9				
*.mov		MPEG2				
*.3gp		MPEG1	640 x 480	4		
*.vro		VP6				
*.mpg		SVAF	1920 x 1080	24 / 25 / 30	40	
*.mpeg		MVC				
*.ts						
*.tp						
*.trp						
*.m2ts						
*.mts						
*.divx						
*.webm	WebM	VP8		6 - 30	8	Vorbis

Other Restriction

- 🔍 Video content will not play, or not play correctly, if there is an error in the content or the container.
- 🔍 Sound or video may not work if the contents have a standard bit rate/frame rate above the compatible Frame/sec listed in the table above.
- 🔍 If the Index Table is damaged, the Seek (Jump) function is not supported.
- 🔍 When you play video over a network connection, the video may not be played smoothly.
- 🔍 The menu may take longer to appear if the video's bit rate exceeds 10Mbps.
- 🔍 Some USB/digital camera devices may not be compatible with the player.

Video decoder

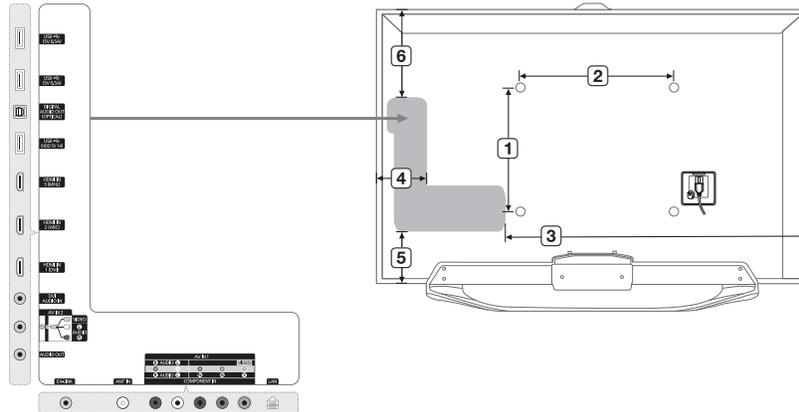
- Supports up to H.264, Level 4.1
- H.264 FMO / ASO / RS, VC1 SP / MP / AP L4 and AVCHD are not supported.
- For all Video codecs except MVC, VP8, VP6:
 - Below 1280 x 720: 60 frame max
 - Above 1280 x 720: 30 frame max
 - GMC 2 over is not supported.
- Supports only SVAF Top/Bottom and Side by Side.
- Supports only BD MVC Spec.

Audio decoder

- WMA 10 Pro supports up to 5.1 channel. WMA lossless audio is not supported.
- RealAudio 10 lossless is not supported.
- QCELP, AMR NB/WB are not supported.
- If Vorbis is only in Webm container, supports up to 2 channel.

Dimensions

■ Jack panel detail / Rear view



(Unit: inches)

Model name	1	2	3	4	5	6
UN46ES8000	15.7	15.7	27.7	4.9	4.7	3.8
UN55ES8000	15.7	15.7	33.1	6.2	4.6	7.3
UN60ES8000	15.7	15.7	35.8	8.9	6.0	9.3

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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Federal Communication Commission Interference Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

For product available in the USA/Canada market, only channel 1~11 can be operated. Selection of other channels is not possible.

This device and its antenna(s) must not be co-located or operation in conjunction with any other antenna or transmitter.

FCC Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

This Class B digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe B conforme à la norme NMB-003 du Canada.

This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

For product available in the USA/Canada market, only channel 1~11 can be operated. Selection of other channels is not possible.

This device and its antenna(s) must not be co-located or operation in conjunction with any other antenna or transmitter.

Under Industry Canada regulations, this radio transmitter may only operate using an antenna of a type and maximum (or lesser) gain approved for the transmitter by Industry Canada. To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (e.i.r.p.) is not more than that necessary for successful communication.

IC Radiation Exposure Statement:

This equipment complies with IC RSS-102 radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.



Contact SAMSUNG WORLDWIDE

If you have any questions or comments about Your Samsung TV, please contact the SAMSUNG customer care center.

Country	Customer Care Center ☎	Web Site	Address
CANADA	1-800-SAMSUNG (726-7864)	www.samsung.com	Samsung Electronics Canada Inc., Customer Service 55 Standish Court Mississauga, Ontario L5R 4B2 Canada
U.S.A	1-800-SAMSUNG (726-7864)	www.samsung.com	Samsung Electronics America, Inc. 85 Challenger Road Ridgefield Park, NJ 07660





SMART TV QUICK SETUP GUIDE



Smart Touch Control

Improved user convenience has been provided so that you can switch the channel and adjust the volume with just your fingertips while focusing on the TV screen. In addition, the built-in touch pad removes the need for a mouse when you change the menu settings and search for something on the Internet.

- ✎ For more detailed information about using the Smart Touch Control, refer to Smart Touch Control Guide (🔍 → Support ? → Smart Touch Control Guide).
- ✎ Voice Control performance levels will vary based on the language spoken.
- ✎ Install the IR Blaster within 50 cm and 45 degrees in up, down, left and right from the IR sensor of the external device.

MIC: You can use **MIC** to instruct a Voice Control command. To activate **MIC**, simply press the **VOICE** button.

TV STB BD: LED to show the active device.

Color buttons: Shows the color button, exit button and play control buttons.

Exit/Play buttons: Quickly select frequently used functions.

CH: Changes channels.

Touch Pad

- Scratch on the Touch Pad to move the focus on the screen.
- Click on the Touch Pad to run the focused item.
- Tap on the Touch Pad and hold to select the function the same as the **MUTE** button of the remote control. However, this action scrolls the page on a Web Browser.
- Tap on the Touch Pad or press the **RETURN** button to return to the normal state.

✎ If no button is pressed for 30 seconds, the Touch Pad is automatically turned off.

✎ To use the Touch Pad again, press any button.

Power: Turns the TV on and off.

Recent Functions: Displays a list of recently used functions.

VOL: Adjusts the Volume.

Shortcut Functions List: Displays the shortcut functions list.

RETURN: Go to previous menu screen.

VOICE: Take your voice command and enter a text using your voice.

NUMBER: Displays the Number button screen. Select a digit using the touch pad.

Smart Hub: Brings up the Smart Hub applications.

● Installing batteries (Battery size : AA)



- 1 Press the back of the remote at the very bottom with both thumbs, and then slide the battery cover up in the direction of the arrow.
- 2 Install two batteries so that the polarity of the batteries (+/-) matches the illustration in the battery compartment.
- 3 Slide the cover down in the direction of the arrow to close the battery cover.

● Initial Pairing



- 1 Press any buttons on the Smart Touch Control toward the Remote receiver of TV's.
 - 2 The connection icons appear on the bottom left of the screen, and the TV connects to your Smart Touch Control automatically.
- ✎ If you want to perform the pairing process again, press the **PAIRING** button in the center of the back cover. The Smart Touch Control will be initialized.

SMART Interaction (Voice and Motion Control)

Using this function, you can access and control menu options and functions using speech or motions.

- For more detailed information about Smart Interaction, see "Smart Interaction" in e-Manual or User manual.
- The illustration of the manual may vary from the actual shape partially.

Voice Control Environment

- We are recommended using **Voice Control** function within about 13 ft with your TV.
You can check the usable distance by using **Voice Control Environment Test** (System → Voice and Motion Control → Voice Control → Voice Control Environment Test).
- Voice Control function can be affected recognition by unclear pronunciation, voice level, or surrounding noise.

Motion Control Environment

We are recommended using **Motion Control** function within about 5 - 13 ft with your TV. TV Camera's recognition range may differ depending on the angle of camera or other conditions.
You can check the recognition range of TV camera by using **Motion Control Environment Test** (System → Voice and Motion Control → Motion Control → Motion Control Environment Test).

Voice Control

You can use only your voice to switch the channel or adjust the volume level while focusing on the TV screen, which removes the need for the conventional remote control.

Menu → System → Voice and Motion Control → Voice Control



- Set **Voice Control** to On.
- If you set **Trigger Words** to **Hi TV**, say "Hi TV", and then basic available commands such as **TV Power Off** are displayed on the screen.
- To adjust the volume, simply say "Volume up" or "Volume down".
- To see more commands, say "More Commands".

You can select the **Trigger Words** that start the **Voice Control** function. Alternatively you can turn on your TV using the **Trigger Words** if **Voice Control** function is set to On.

- If the **Trigger Words** is set to **Hi TV**, say **Hi TV Power On**.
- If the **Trigger Words** is set to **Smart TV**, say **Smart TV Power On**.

Motion Control

Use a specific motion to switch the channel or adjust the volume level as well as to move the mouse pointer to a desired position while in web surfing with Smart Hub.

Menu → System → Voice and Motion Control → Motion Control



- Set **Motion Control** to On.
- You use the **Motion Control**, raise your hand unfolding it toward the screen, hold it for a moment and then wave it 3~4 times to the left and right. **Motion Control** starts. If the Motion Control starts, the cursor is displayed at the center of the screen and the Motion Guide Bar is at the bottom of the screen.
- To switch the channel, point your hand to the channel up or down icon on the screen, and make a fist. If you hold the Run motion at the channel icon position, the channel will be changed continuously.

Motion Control function can be affected recognition by user's location, motion posture, or ambient brightness conditions.

If it doesn't work, adjust the angle of TV camera by using **Motion Control Environment Test** (System → Voice and Motion Control → Motion Control → Motion Control Environment Test).

Smart Hub

Using Smart Hub, you can stream movies, videos, and music from the Internet, access various for pay or free of-charge applications and view them on your TV.

Application content includes news, sports, weather forecasts, stock market quotes, maps, photos, and games.

For more detailed information about Smart Hub, see "Smart Hub" in e-Manual.

 The illustration of the manual may vary from the actual shape partially.

Method 1 [Menu](#) → [Support](#) → [Smart Hub](#)

Method 2 Press the  button on the remote control.

Main Features

You can search for various types of content that can be used on your TV.

Displays the current input source screen.

You can experience various service provided by Samsung.



Displays the recommended service by Samsung.

Displays notices, new applications, and advertisements brought to you by Samsung product introductions.

Displays the installed applications in the TV.

Operation button

- The displayed image may differ depending on the model.

Creating Your Samsung Account

If you have Samsung account, you can use Smart Hub easily.



- 1 Press the  button on the remote control, Press the red  button on the remote control to display the Login window.
 When using the Smart Touch Control, press the **Return** button to close the button screen and use.
- 2 When the Login window appears, select the **Create Account** button.
- 3 Move to the Samsung account field, and then press the  button. A window appears with an entry screen and a keypad. The ID must be a valid e-mail address in the following format: sample@sample.com or sample@sample.net. The same password in the confirm password field in the same fashion.
 If you have a Bluetooth or USB keyboard connected to the TV, enter your e-mail address using a Bluetooth or USB keyboard. When done, enter the password in the same way.
- 4 After entering all items, move to the **Create Account** item, and then the  button. Your account will be created.

Downloading an app from Samsung Apps

Samsung Apps is a store from which you can download applications to use on Samsung TV/AV equipment.



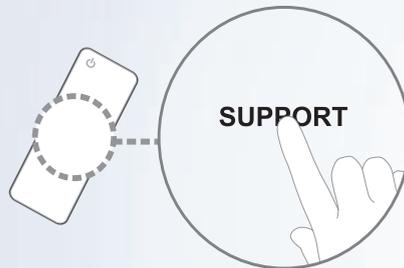
- 1 Press the  button on the remote control, and select **Samsung Apps** on the screen.
- 2 Go to your desired category, and select an app.
- 3 In the information screen for the selected app that appears, choose **Download** to install it.
- 4 After it is downloaded, choose **Run** to launch and enjoy it.
 You can find the icon of the newly installed app on the SMART HUB screen.
 Paid App in Samsung Apps Account registration is required.



BN68-04374A-04

SAMSUNG

E-MANUAL



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

Model _____ Serial No. _____

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Using the Channel Menu

Channel

 → Channel

Using this function, you can add or delete channels, set favorite channels, edit the channel name for analog broadcasts.

 The American Academy of Pediatrics discourages television viewing for children younger than two years of age.

- All

Shows all channels.

- **Added Ch.**

Shows all added channels. These are the channels that appear when you select **CH List** **for Smart Touch Control** or press the **CH LIST** button. **for Standard Remote Control**

- **Favorites 1 – Favorites 5**

Shows all favorite channels, in up to five groups. Each group has separate channels.

 The TV displays Favorites only if you have added favorites using **Edit Favorites**.

 If the Highlight located in the **Favorites 1 – Favorites 5** category, you can change the name of category by selecting **B**

using your remote.

- **Recently Viewed**

Shows the most recently viewed channels.

- **Mostly Viewed**

Shows the most frequently viewed channels.

Using the colored and function buttons with the Channel

- When the Highlight located in the category, you can use these options:

- **A** Air / Cable

Switches the mode and display between **Air** and **Cable**.

 Appears only if your TV stored both **Air** and **Cable**.

–  **Return**

Return to the previous menu.

● When the Highlight located in the channel list, you can use these options:

–  **Air / Cable**

Switches the mode and display between **Air** and **Cable**.

 Appears only if your TV stored both

Air and Cable.

-  Delete

Delete the selected channel(s).

- *i* Information

Displays details of the selected channel.

-  Page

Scrolls the channel list to the next or previous page.

-  Select / Deselect

Select or deselect a channel.

-  Tools

Displays the option menu.

– ↶ Return

Return to the previous menu.

Using the Tools menu with Channel

- Add / Delete

Delete a channel from or add a channel to the Channel list.

To delete a channel in Channel, follow these steps:

1. If you want to delete a channel, select a category of the channel.

2. Select a channel in the category. A ✓ mark appears to the left of the channel.

 You can select more than one channel.

 If you select the selected channel again, a ✓ mark disappears.

3. Open the **Tools** menu using your remote.

4. Select the **Delete**. The message **Deleted the selected channel(s)**. appears, and then select **OK**.

 You can delete the selected channel immediately by selecting **B** using your remote.

 When you delete a channel in the **Recently**

Viewed or **Mostly Viewed** category, the channel will disappear from the category list. But, the channel is not deleted.

To add a channel in Channel, follow these steps:

1. On the **Channel** screen, select the **All** category.
2. Select a grayed out channel in the **All** category. A ✓ mark appears to the left of the channel.
 -  You can select more than one channel.
 -  If you select the selected channel again, a ✓ mark disappears.

 A gray colored channel indicates the channel has been deleted.

3. Open the **Tools** menu using your remote.

4. Select the **Add**. The message **Added the selected channel(s)**. appears, and then select **OK**.

 The **Add** menu option only appears for deleted channel.

 All deleted channels will be shown on the **All** category. You add channels back to the **Added Ch.** category on the **All** category.

- **Edit Favorites**

Sets channels you watch frequently as

favorites, or removes a channel from list of favorites using the **Tools** menu.

To set channels as favorites, follow these steps:

1. Select the **All** or **Added Ch.** category.
2. Select a channel in the category. A  mark appears to the left of the channel.
 -  You can select more than one channel.
 -  If you select the selected channel again, a  mark disappears.
3. Open the **Tools** menu using your remote.
4. Select the **Edit Favorites**. The **Edit**

Favorites screen appears.

5. Select **A** using your remote. The selected channel will be moved to the favorite group.

 Also, you can select a channel in the **Edit Favorites** screen.

 You can add a favorite channel to any one of the groups. To change favorites group, select **D** using your remote. Each time you select **D**, a favorites group will be changed.

6. When done, select **OK**. The channel is made as a favorite and is assigned to the favorite group you selected.

- ☑ The TV displays the “★” symbol next to the channel, indicating it is a favorite.

Using the colored and function buttons with the Edit Favorites

- When the Highlight located in the **Added Ch.**, you can use these options:
 - **A** **Add**
Add selected channels to the favorites group.
 - **D** **Change Fav.**
Change the favorites group. Each time you select **D** using your remote, a

favorites group will be changed.

-  **Go To**

Move to the Highlight to a channel number immediately by pressing the number button using your remote.

-  **Return**

Return to the previous menu.

- When the Highlight located in the favorites group, you can use these options:

-  **Delete**

Delete the selected channel.

- **B** Change order

Change the favorites group list order.

- **C** Copy

Copy a selected channel to other favorites groups.

- **D** Change Fav.

Change the favorites group. Each time you select **D** using your remote, a favorites group will be changed.

- **0~9** Go To

Move to the Highlight to a channel number immediately by pressing the number button using your remote.

–  Return

Return to the previous menu.

To remove a channel from the list of favorites, follow these steps:

1. Select the favorites group category.

2. Select a channel in the selected favorites group. A  mark appears to the left of the channel.

 You can select more than one channel.

 If you select the selected channel again, a  mark disappears.

3. Open the **Tools** menu using your remote.

4. Select **Delete**. The message **Do you want to delete the selected item(s)?** appears.

5. Select **OK**. The message **Deleted the selected item(s).** appears.

 You can delete the selected channel from the list of favorites group immediately by selecting **B** using your remote.

- **Rename Channel**

(Appears only if you have selected an analog channel.)

Lets you assign a name of up to five characters to an analog channel. For example, Food, Golf, etc. This makes it easier

to find and select a channel.

- **Select All / Deselect All**

Select all channels in the list. / Deselect all channels you selected.

Display Icons Used in the Channel screens

: An analog channel.

: A favorite channel.

: A locked channel.

Schedule Manager

 → Schedule Manager

Using this function, you can set the TV to display a desired channel automatically on a day and at a time of your choice.

 You must set the current time first using the **Time** → **Clock** function in **System** menu to use this function.

To use the Schedule Viewing, follow these steps:

1. On the **Schedule Manager** screen, select **A** using your remote.

2. Set **Antenna**, **Channel**, **Repeat**, and **Start Time**.

- **Antenna**

You can view an antenna source. If your TV has digital broadcasts, you can change a source from analog to digital.

If you want to change an antenna source between **Air** and **Cable**, select an antenna source you want in **Antenna** menu (**Channel** → **Antenna**).

- **Channel**

Select the desired channel.



You can only select memorized

channels.

- **Repeat**

Select **Once**, **Manual**, **Sat~Sun**, **Mon~Fri** or **Everyday**. If you select **Manual**, you can set the day you want.

 The  mark indicates a day you've selected.

Date: You can set a desired date.

 The **Date** is available only when you select **Once** in **Repeat**.

- **Start Time**

You can set the start time you want.

3. When done, select **OK**. The selected channel is scheduled for viewing.

 On the **Schedule Manager** screen, you can check a list of **Schedule Viewing**.

To delete an item in a list of scheduled viewing, follow these step:

1. On the **Schedule Manager** screen, highlight an item you want to delete.

2. Open the **Tools** menu using your remote.

3. Select **Cancel Schedule**. The **Cancel selected list(s)?** message appears.

4. Select **Yes**. The selected schedule will be

anceled.

- ☞ If you press the **INFO** button **for Standard Remote Control** or select **Info for Smart Touch Control** after highlighting an item, the Information screen appears. On the **Information** screen, you can change or cancel the **Schedule Viewing**.

Cancel Schedule: Cancel the **Schedule Viewing**.

Edit Schedule: Change the **Schedule Viewing**.

Return: Return to the previous screen.

Channel List

Using this function, you can view channel list, program information, favorite channel, and manage schedules of timer viewing.

1. Press the **CH LIST** button **for Standard Remote Control** or select **CH List** **for Smart Touch Control**. The **Channel List** screen is displayed immediately.
2. Change a channel or channel list mode.
 - **Added Ch.**
Shows all added channels.
 - **Favorites 1 – Favorites 5**

Shows all favorite channels, in up to five groups. Each group has a separate screen.

-  The TV displays favorite groups only if you have added favorites using **Edit Favorites**.

Using the colored and function buttons with the Channel List

-  If you press the **INFO** button **for Standard Remote Control** or select **Info for Smart Touch Control**, the TV displays details of the selected program.

- **A** Antenna

Switches the mode and display between **Air** and **Cable**.

 Appears only if your TV stored both **Air** and **Cable**.

- **C** Program View / Channel View

For digital channels, switches the display between **Program View** and **Channel View**.

When you select a digital channel in **Channel List**, select once to display a list of programs on that channel. select again to re-display the **Channel View**.

- ◀▶ CH Mode / Channel

On Channel View screen, Toggles between the Favorites list (if you have added favorites using Edit Favorites) and the Added Ch. list. / On Program View screen, change a channel.

- 📺 Watch / Information

Displays the channel you selected. / Displays details of the selected channel.

- ⏪ Page

Scrolls the Channel List to the next or previous page.

Display Icons Used in the Channel List screens

: An analog channel.

: A reserved program.

: A locked channel.

Using the Schedule Viewing in Channel List (digital channels only)

You can use the [Schedule Viewing](#) in [Channel List](#) to schedule a digital channel program for viewing. The TV will turn on and display the digital channel program when the program begins.

1. Press the **CH LIST** button **for Standard Remote Control** or select **CH List** **for Smart Touch Control**. The **Channel List** screen appears.
2. Select a desired digital channel.
3. Select **C** using your remote. The TV displays program list of the selected channel.
4. Select a desired program in the program list, and then select **Information** using your remote.
5. On the **Information** screen, select the **Schedule Viewing**. The selected program is set to **Schedule Viewing**.



If you want to cancel the **Schedule Viewing**, follow Steps 1 through 4, and then select the **Cancel Schedule**.

Memorizing Channels

Antenna

Menu → Channel → Antenna

Before your television can memorize the available channels, you must select your TV's signal source, **Air** (using an antenna) or **Cable**. Select **Air** or **Cable**. After you have selected the signal source, go on to the **Auto Program** function.

- ☑ Selecting the signal source using the **Antenna** function also determines the signal source the TV is tuned to. For

example, if you receive your TV signal over the air, and you select **Cable**, you will see only snow. You must select **Air** to see a picture.

Auto Program

Menu → Channel → Auto Program

The **Auto Program** function memorizes all channels that are available over the air or through your cable system and adds them to the **Channel** list.

To start the Auto Program, follow these steps:

1. Go to the **Auto Program** menu.

2. Select **Air** or **Cable** or both, and then select **Next**. A ✓ mark appears in the check box.

 If you selected **Air** or **Cable** in the **Antenna** menu, your choice will already be selected.

3. If you selected the **Cable**, the cable system screen appears. Select the **Digital Cable System**.

 If you selected the **Air** only, the **Auto Program** starts.

4. Select the correct cable signal format - **STD, HRC** or **IRC**.

 Most cable systems use **STD** (Standard).

5. Repeat for **Analog Cable System**.

6. Select **Next**. The **Auto Program** starts.

 After all the available channels are stored, the **Auto Program** removes scrambled channels. When done, the **Auto Program** menu then reappears. This process can take up to 30 minutes.

Other Features

Clear Scrambled Channel

Menu → Channel → Clear Scrambled Channel

This function filters out scrambled channels after the **Auto Program** is completed. This process may take up to 30 minutes.

 This function is only available in **Cable** mode.

How to Stop the Clear Scrambled Channel function

1. To stop the **Clear Scrambled Channel** function, select **Stop**.
2. The message **Stop searching for scrambled channels?** appears. Select **Yes**.
3. The **Clear Scrambled Channel** function will be stopped.

Fine Tune

Menu → **Channel** → **Fine Tune**

(analog channels only)

If the reception is clear, you do not have to fine tune the channel, as this is done automatically during the search and store

operation. If the signal is weak or distorted, fine tune the channel manually. Scroll to the left or right until the image is clear.

-  Select the channel, and then select **Fine Tune**.
-  Fine tuned channels that have been saved are marked with an asterisk “*” on the right-hand side of the channel number in the channel banner.
-  To reset fine-tuning, select the channel, select **Fine Tune**, and then select **Reset** on the **Fine Tune** screen.

Crosstalk Noise Reduction

Menu → Channel → Crosstalk Noise Reduction

(analog channels only)

This function reduce diagonal noise in picture caused by the crosstalk of signals. If your TV displays with a noise while watching TV, turns on this function.

Changing the Preset Picture Mode

Picture Mode

Menu → Picture → Picture Mode

Picture modes apply preset adjustments to the picture.

 When your TV is connected to a PC via the HDMI to DVI cable, you can only select **Entertain** and **Standard**.

- **Dynamic**

Brightens the screen. Suitable for a bright room.

- **Standard**

Suitable for a normal environment.

- **Natural** for LED TV / **Relax** for PDP TV

Suitable for reducing eye strain.

- **Movie**

Darkens the screen, making it less glary.

Suitable for watching movies in a darkened room.

- **Entertain**

Sharpens the picture. Suitable for games.

 Only available when the TV is connected

to a PC via the HDMI to DVI cable.

Adjusting Picture Settings

Backlight **for LED TV** / Cell Light **for PDP TV**

Menu → Picture → Backlight / Cell Light

Adjusts the brightness of the screen by adjusting the brightness of the individual pixels.

Contrast

Menu → Picture → Contrast

Increases or decreases the contrast between dark and light areas of the picture.

Brightness

Menu → Picture → Brightness

Adjusts the brightness of the screen. Not as effective as **Backlight / Cell Light**.

Sharpness

Menu → Picture → Sharpness

Sharpens or dulls the edges of objects.

Color

Menu → Picture → Color

Adjusts the color saturation. The higher the

Color setting, the more intense the color.
Low settings remove color and the picture becomes black, white and gray.

Tint (G/R)

Menu → Picture → Tint (G/R)

Adjusts the amount of green and red in the picture. As you increase the amount of green, the amount of red decreases and vice versa.

To adjust picture quality, follow these steps:

1. Select an option you want to adjust.

When you select an option, a slider screen appears.

2. Adjust the option value using your remote.

- ☑ When you make change to option value, the OSD will be adjusted accordingly.
- ☑ When your TV is connected to a PC via the HDMI to DVI cable, **Color** and **Tint (G/R)** is not available.
- ☑ You can adjust and store Settings for each external device connected to the TV.
- ☑ Lowering picture brightness reduces power consumption.

Changing the Picture Size

Screen Adjustment

Menu → Picture → Screen Adjustment

Using this function, you can make change to various picture size and aspect ratio options.

- **Picture Size**

If you have a cable box or satellite receiver, it may have its own set of screen sizes as well.

However, we highly recommend you use your TV's 16:9 mode most of the time.

 If you have set Double (, ) mode in PIP (Picture-in-Picture), you cannot adjust the Picture Size.

16:9: Sets the picture to the 16:9 wide screen format.

Zoom1: Provides moderate magnification of the picture. Sides, top, and bottom are cut off.

Zoom2: Provides larger magnification of the picture. Sides, top, and bottom are cut off.

Wide Fit: Enlarges the aspect ratio of the picture so it fits the entire screen.

 Available with HD 1080i / 720p signals in

16:9 mode.

4:3: Sets the picture to basic (4:3) mode.

- ☒ Do not set your TV to 4:3 format for a long time. The borders displayed on the left and right, or top and bottom of the screen may cause image retention (screen burn) which is not covered by the warranty.

Screen Fit: When your TV inputs HDMI (720p / 1080i / 1080p) or Component (1080i / 1080p) signals, displays the full image without any cut-off.

Smart View 1: Reduces the 16:9 picture by 50%. **for LED TV**

Smart View 2: Reduces the 16:9 picture by 25%. **for LED TV**

- ☞ **Smart View 1** is enabled only in HDMI mode.
- ☞ **Smart View 2** is enabled only in HDMI or DTV mode.
- ☞ The picture size can vary depending on the input resolution when you play content from **Videos** in **AllShare Play**.

- **Position**

Adjusts the picture position. **Position** is only available if **Picture Size** is set to **Zoom1**, **Zoom2**, **Wide Fit**, or **Screen Fit**.

- ☞ In DTV mode, **Position** is not available when **Picture Size** is set to **Screen Fit**.

To use the **Position** function after selecting **Zoom1**, **Zoom2**, **Wide Fit** or **Screen Fit**, follow these steps:

1. Select the **Position**.
2. On the **Position** screen, select **Position**, and then move the picture to position you want using your remote.
3. When done, select **Position** again, and then select **Close**.

- ☞ To reset the picture position, select **Reset**.

Picture Sizes available by Input Source:

- ATV, AV: 16:9, Zoom1, Zoom2, 4:3
- Component (480i, 480p): 16:9, Zoom1, Zoom2, 4:3
- DTV (720p): 16:9, Wide Fit, 4:3, Smart View 2 **for LED TV**
- DTV (1080i, 1080p): 16:9, Wide Fit, 4:3, Screen Fit, Smart View 2 **for LED TV**
- Component(720p): 16:9, Wide Fit, 4:3
- Component(1080i, 1080p): 16:9, Wide Fit, 4:3, Screen Fit
- HDMI (720p, 1080i, 1080p): 16:9, Wide Fit, 4:3, Screen Fit, Smart View 1 **for LED TV**

, Smart View 2 for LED TV

- ☞ Depending on the input source, the picture size options may vary.
- ☞ The available items may differ depending on the selected mode.
- ☞ HD (High Definition): 16:9 - 1080i/1080p (1920x1080), 720p (1280x720)
- ☞ You can adjust and store settings for each external device you have connected to an input on the TV.

Changing the Picture Options

Advanced Settings

Menu → Picture → Advanced Settings

Using this function, you can configure advanced picture settings to create your preferred picture.

- ☞ **Advanced Settings** is available only when the **Picture Mode** is set to **Standard** or **Movie** mode.
- ☞ When connecting a PC using the HDMI-DVI cable, you can only make changes to

White Balance and Gamma.

- **Dynamic Contrast**

Adjusts the screen contrast.

- **Black Tone**

Darker settings make blacks look darker.

- **Flesh Tone**

Adjusts the amount of red in skin tones.

- **RGB Only Mode**

Displays the **Red**, **Green** and **Blue** colors so you can make fine adjustments to hue and saturation.

- **Color Space**

Adjusts the range and variety of colors (the color space) available to create images.

 To adjust **Color, Red, Green, Blue** and **Reset**, set the **Color Space** to **Custom**.

- **White Balance**

Adjusts the color temperature of the picture so that white objects look white (instead of, for example, slightly pink or slightly yellow) and the overall color of the picture looks natural.

R-Offset / G-Offset / B-Offset: Adjusts each color's (red, green, blue) darkness.

R-Gain / G-Gain / B-Gain: Adjusts each color's (red, green, blue) brightness.

Reset: Resets the White Balance to its default settings.

- **10p White Balance**

Controls the white balance in 10 point intervals by adjusting the red, green, and blue brightness.

 Available when the **Picture Mode** is set to **Movie** and when the external input is set to all input.

 Some external devices may not support this function.

Interval: Select interval to adjust.

Red: Adjust the red level.

Green: Adjust the green level.

Blue: Adjust the blue level.

Reset: Resets the **10p White Balance** to its default settings.

- **Gamma**

Adjusts the primary color intensity.

- **Expert Pattern**

Use the **Expert Pattern** function to calibrate the picture. If the OSD menu disappears or a

menu other than the **Picture** menu is opened, the TV saves the calibration and the **Expert Pattern** screen disappears.

Off: Turns the **Expert Pattern** function off.

Pattern1: This test screen demonstrates the effect of the display settings on shades of grey and black.

Pattern2: This test screen demonstrates the effect of the display settings on colors.

- ☒ After selecting **Pattern1** or **Pattern2**, you can adjust any of the advanced settings for desired effect.
- ☒ While the **Expert Pattern** is running, the

TV does not output sound.

 Only enabled in DTV, Component, and HDMI modes.

- **xvYCC**

Setting **xvYCC** on increases picture detail and enlarges the color space when you are watching movies input from an external device (e.g. BD/DVD player) connected to the TV's HDMI or Component IN jacks.

 Available only when you set the **Picture Mode** to **Movie** and the external input to HDMI or Component.

 Some external devices may not support

this function.

- **Motion Lighting**

When on, the TV automatically adjusts the brightness of the screen in response to the brightness of the room. In bright light, the screen brightens. In dim light, the screen dims.

- ☒ Only available in **Standard** mode.
- ☒ This feature is not supported in 3D mode.
- ☒ When you change the **Backlight** **for LED TV** / **Cell Light** **for PDP TV**, **Contrast** or **Brightness**, the TV sets the **Motion Lighting** to **Off**.

- **Black Enhancer** **for LED TV**

Enhance picture depth by adjusting black color depth.

 Available only when **Picture Mode** is set to **Movie**.

Picture Options

Menu → Picture → Picture Options

Using this function, you can configure additional picture settings to suit your preference.

 When your TV is connected to a PC via the HDMI to DVI cable, you can only make

changes to **Color Tone**.

- **Color Tone**

Cool makes the picture bluer (cooler).

Warm1 and **Warm2** make the picture redder (warmer).

 **Warm1** and **Warm2** are deactivated when the **Picture Mode** is set to **Dynamic**.

 You can adjust and store settings for each external device connected to an input on the TV.

- **Digital Noise Filter**

If the broadcast signal received by your TV

is weak, you can activate the **Digital Noise Filter** feature to reduce any static and ghosting that may appear on the screen.

Auto Visualization: When changing analog channels, displays signal strength.

- ☞ When the signal is weak, try all the options until the TV displays the best picture.
- ☞ Only available for analog channels.
- ☞ When the bar is green, you are receiving the best possible signal.

- **MPEG Noise Filter**

Reduces MPEG noise to provide improved

picture quality.

- **HDMI Black Level**

Lets you adjust the screen depth by selecting a black level.

 Available only in HDMI mode.

- **Film Mode**

Sets the TV so that it senses and then processes film signals from all sources automatically and adjusts the picture for optimum quality.

 Available in TV, AV, Component (480i / 1080i) and HDMI (1080i).

- **Auto Motion Plus** for LED TV

Removes blur and judder from scenes with larger amounts of rapid movement to provide a clearer picture.

Blur Reduction: Adjusts the blur reduction level for signals input from all video sources.

Judder Reduction: Adjusts the Judder reduction level for signals input from a video source through which you are playing a movie.

Reset: Reset the custom settings.

 The info screen on your TV displays the resolution and frequency of the incoming

video signal (60 Hz). This displayed frequency is not the frequency of the picture the TV is displaying when you have **Auto Motion Plus** on.

- ☞ If noise occurs on the screen, please set the **Auto Motion Plus** to **Off**. If the **Auto Motion Plus** is set to **Custom**, you can control **Blur Reduction** and **Judder Reduction** manually and use **Reset** to reset both to their default settings.
- ☞ If the **Auto Motion Plus** is set to **Demo**, you can compare the difference between a picture with **Auto Motion Plus On** and **Auto Motion Plus Off** modes.

- **LED Motion Plus** **for LED TV**

Removes blur and judder from scenes with large amounts of rapid movement to provide a clearer picture.

 Available only when **Picture Mode** is set to **Dynamic**, **Standard**, or **Movie**.

Reset Picture

Menu → **Picture** → **Reset Picture**

Resets your current picture mode to its default settings.

Using the TV with Your PC

Using Your TV as a Computer (PC) Display

Entering the Video Settings (Based on Windows 7)

For your TV to work properly as a computer display, you must enter the correct video settings.

- ☒ Depending on your version of Windows and your video card, the procedure on your PC will probably differ slightly from the procedure presented here.
- ☒ However, the same basic information will

apply in most cases. (If not, contact your computer manufacturer or Samsung Dealer.)

1. Click “Control Panel” on the Windows start menu.
2. Click “Appearance and Themes” in the “Control Panel” window. A display dialog box appears.
3. Click “Display”. Another display dialog box appears.
4. Click the “Settings” tab on the display dialog box.
 - On the Settings tab, set the correct

resolution (screen size). The optimal resolution for this TV is 1920 x 1080.

- If a vertical-frequency option exists on your display settings dialog box, select “60” or “60 Hz”. Otherwise, just click “OK” and exit the dialog box.

Changing the Preset Sound Mode

Sound Mode

Menu → Sound → Sound Mode

Sound modes apply preset adjustments to the sound.

 If **Speaker Select** is set to **External Speaker**, the **Sound Mode** is disabled.

- **Standard**

Selects the normal sound mode.

- Music

Emphasizes music over voices.

- Movie

Provides the best sound for movies.

- Clear Voice

Emphasizes voices over other sounds.

- Amplify

Increase the intensity of high-frequency sound to allow a better listening experience for the hearing impaired.

Adjusting Sound Settings

Sound Effect

Menu → Sound → Sound Effect

- ☒ If **Speaker Select** is set to **External Speaker**, the **Sound Effect** is disabled.
- ☒ Available only when the **Sound Mode** is set to **Standard**.

- **Virtual Surround**

This function provides a virtual 5.1 channel surround sound experience through a pair of speakers using HRTF (Head Related Transfer

Function) technology.

- **Dialog Clarity**

This function allows you to increase the intensity of a voice over background music or sound effects so that dialog can be heard more clearly.

- **Equalizer**

The **Equalizer** displays a series of sliders. Use the arrow buttons to select a slider, and change the slider's value. To **Reset** the **Equalizer**, select the **Reset**. A pop-up appears asking if you want to reset, select **Yes**. To exit, select **Close**.

Balance L/R: Adjusts the balance between the right and left speaker.

100Hz / 300Hz / 1kHz / 3kHz / 10kHz
(Bandwidth Adjustment): Adjusts the loudness of specific bandwidth frequencies.

Reset: Resets the equalizer to its default settings.

3D Audio

Menu → Sound → 3D Audio

3D audio technology provides the immersive sound corresponding to the pop-up effect of 3D video by audio depth control in

perspective.

 Available only when watching 3D image.

Broadcast Audio Options

Menu → Sound → Broadcast Audio Options

- Preferred Language

(digital channels only)

Digital-TV broadcasts can simultaneously transmit many audio tracks (for example, simultaneous translations of the program into foreign languages). You can only select a language from among the ones being

broadcasted.

- **Multi-Track Sound**

The broadcasts can transmit one or more audio tracks. You can select a sound you want to listen from among the ones being broadcasted.

- ☞ While watching TV, open the **Tools** menu using your remote, you can select the **Multi-Track Sound** in **Tools** menu immediately.
- ☞ **Multi-Track Sound** may differ depending on the program being broadcast or broadcast signal.

SPDIF Output

Menu → Sound → SPDIF Output

SPDIF (Sony Philips Digital Interface) provides digital audio output to speakers and various digital devices such as A/V Receivers and Home Theaters which reduces interference and distortion.

- **Audio Format**

You can select the Digital Audio output (SPDIF) format. The available Digital Audio output (SPDIF) format may differ depending on the input source.

- **Audio Delay**

Lets you correct timing mismatches between the audio track and the video when you are watching the TV and listening to digital audio output from the TV through an external device such as an AV receiver. When you select the **Audio Delay**, a slider screen appears. Adjust the option value using your remote (0ms ~ 250ms).

Speaker Settings

Menu → Sound → Speaker Settings

- **Speaker Select**

If you are listening to the sound track of a broadcast or movie through an external

receiver, you may hear a sound echo caused by the difference in decoding speed between the TV's speakers and the speakers attached to your audio receiver. If this occurs, set the TV to **External Speaker**.

- ☞ When the **Speaker Select** is set to **External Speaker**, the TV's speakers are turned off. You will hear sound through the external speakers only. When the **Speaker Select** is set to **TV Speaker**, both the TV's speakers and the external speakers are on. You will hear sound through both.
- ☞ When the **Speaker Select** is set to **External Speaker**, the volume buttons and mute function will not operate and the sound

settings will be limited.

 If there is no video signal, both the TV's speakers and the external speakers will be mute.

- **Auto Volume**

Because each station has its own broadcasting conditions, the volume may fluctuate each time you change the channel. This feature automatically adjusts the volume of a channel by lowering the sound output when the modulation signal is high or by raising the sound output when the modulation signal is low.

 To use the volume control of a connected

source device, set **Auto Volume** to **Off**. A change to the volume control of the connected source device may not be applied if **Auto Volume** is set to **Normal** or **Night**.

Reset Sound

Menu → Sound → Reset Sound

Reset all sound settings to the factory defaults.

Connecting to the Network

Wired Network Connection

There are three ways to attach your TV to your LAN using cable:

- ☞ If you want to view a illustration, see your user's manual. The network connection illustrated in your user's manual.
 - You can attach your TV to your LAN by connecting the LAN port on the back of your TV to an external modem using a LAN cable.
 - You can attach your TV to your LAN by

connecting the LAN port on the back of your TV to an IP Sharer which is connected to an external modem. Use LAN cable for the connection.

- Depending on how your network is configured, you may be able to attach your TV to your LAN by connecting the LAN port on the back of your TV directly to a network wall outlet using a LAN cable. Note that the wall outlet is attached to a modem or router elsewhere in your house.

 If your network requires a Dynamic IP address, you should use an ADSL modem or router that supports the Dynamic

Host Configuration Protocol (DHCP).

Modems and routers that support DHCP automatically provide the IP address, subnet mask, gateway, and DNS values your TV needs to access the Internet so you do not have to enter them manually. Most home networks use a Dynamic IP address.

- ☞ Some networks require a Static IP address. If your network requires a Static IP address, you must enter the IP address, subnet mask, gateway, and DNS values manually when you set up the network connection. To get the IP address, subnet mask, gateway, and DNS values, contact your Internet Service Provider (ISP). If you

have a Windows computer, you can also get these values through your computer.

- ☒ You can use ADSL modems that support DHCP if your network requires a Static IP address. ADSL modems that support DHCP also let you use Static IP addresses.

Wireless Network Connection

- ☒ If you want to view a illustration, see your user's manual. The network connection illustrated in your user's manual.

You can connect your TV to your LAN through a standard wireless router or modem.

This TV supports the IEEE 802.11 a/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.

- ☞ To use a wireless network, your TV must be connected to a wireless IP sharer (either a router or a modem). If the wireless IP sharer supports DHCP, your TV can use a DHCP or static IP address to connect to the wireless network.
- ☞ Select a channel for the wireless IP sharer that is not currently being used. If the channel set for the wireless IP sharer is currently being used by another device

nearby, this will result in interference and communication failure.

- ☞ Your TV supports only the following wireless network security protocols:
 - Authentication Mode : WEP, WPAPSK, WPA2PSK
 - Encryption Type : WEP, TKIP, AES

- ☞ If you select the Pure High-throughput (Greenfield) 802.11n mode and the Encryption type is set to WEP, TKIP or TKIP AES (WPS2Mixed) on your AP or wireless router, Samsung TVs will not support a connection in compliance with new Wi-Fi certification specifications.

- ☞ If your wireless router supports WPS (Wi-Fi Protected Setup), you can connect to the network via PBC (Push Button Configuration) or PIN (Personal Identification Number). WPS will automatically configure the SSID and WPA key in either mode.

- ☞ If your router, modem, or device is not certified, it may not connect to the TV.

- ☞ Connection Methods: You can set up the wireless network connection in four ways:
 - Auto Setup (Using the Auto Network Search function)

- Manual Setup
- WPS(PBC)
- Plug & Access

Setting up the Wired Network

Network Settings

Menu → Network → Network Settings

Set the wired or wireless network connection to use various Internet services such as [Smart Hub](#), [AllShare Play](#) and perform software upgrades.

Automatic Wired Network Setup

You can configure your TV's wired network connection automatically when connecting your TV to a network that supports DHCP.

- ☑ When connecting LAN cable, the screen pop-up appears directly to set wired network.

To set up your TV's wired network connection automatically, follow these steps:

1. Go to the **Network Settings** screen.
(**Network** → **Network Settings**)
2. Select **Start**. The network test screen appears and verifies the network connection.
3. When the connection has been verified, the **You are connected to the Internet**.
If you have any problems using online

services, please contact your Internet Service Provider. message appears.

- ☞ If the connection process fails, check the LAN port connection.
- ☞ If the automatic process cannot find the network connection values or if you want to set the connection manually, go to the next section, "Manual Network Setup."

Manual Wired Network Setup

You can configure your TV's wired network connection manually when connecting your TV to a network that requires a Static IP address.

Getting the Network Connection Values

To view the Network connection values on most Windows computers, follow these steps:

1. Right click the Network icon on the bottom right of the screen.
2. In the pop-up menu that appears, click Status.
3. On the dialog that appears, click the Support tab.
4. On the Support Tab, click the Details button. The Network connection values are displayed.

To set up your TV's wired network connection manually, follow these steps:

1. Go to the **Network Settings** screen.
(**Network** → **Network Settings**)
2. Select **Start**. The network connection screen appears and the verification process starts.
3. Select **Stop**. The verification process stops. Select **IP Settings** on network connection screen. The **IP Settings** screen appears.
4. Select the **IP Mode**, and then set the **IP Mode** to **Manual**.

5. Go to the **IP Address** entry field, and then select the **IP Address** using remote.
 6. Enter the first portion of the **IP Address** (for example, 105) into the first entry field using your remote. When done, go to the next field.
 7. Enter the next portion of the **IP Address**. When done, go to the next field.
 8. Repeat the entry process for each field in the **IP Address**.
-  If you make a mistake when entering a number, re-enter the number to correct it.

9. When done, go to the **Subnet Mask** fields.
10. Repeat the same entry process for **Subnet Mask, Gateway, and DNS Server**.
11. When done, select **OK**. The network test screen appears and the verification process starts. When the connection has been verified, the **You are connected to the Internet. If you have any problems using online services, please contact your Internet Service Provider.** message appears.

Network Status

Menu → Network → Network Status

You can check the current network and Internet status.

When the wired network connection failed...

- **No network cable found.**

Check that your network cable is plugged in. If it is connected, make sure that the router is turned on; if it is on, try turning it off and on again.

- **IP auto setting failed.**

Try the following to set your IP address automatically. Or set your IP address manually by selecting [IP Settings](#). - Ensure

DHCP server is enabled on router and unplug and re-plug-in the router. - Contact your Internet Service Provider for more information.

- **Unable to connect to the network.**

Try the following: check if your IP address is set correctly in [IP Settings](#). Contact your Internet Service Provider for more information.

- **Connected to your local network, but cannot connect to the Internet.**

Check the DNS settings in [IP Settings](#), or contact your Internet Service Provider to

access the Internet.

- **Network setup complete, but cannot connect to the Internet.**

Contact your Internet Service Provider to access the Internet.

Setting up the Wireless Network

Network Settings

Menu → Network → Network Settings

Set the wired or wireless network connection to use various Internet services such as [Smart Hub](#), [AllShare Play](#) and perform software upgrades.

Automatic Wireless Network Setup

Most wireless networks have an optional security system that requires devices that access the network to transmit an encrypted

security code called an Access or Security Key. The Security Key is based on a Pass Phrase, typically a word or a series of letters and numbers of a specified length you were asked to enter when you set up wireless security for your wireless network.

If you use this method of setting up the network connection, and have a Security Key for your wireless network, you will have to enter the Pass Phrase during the automatic or manual setup process.

To set up your TV's wireless network connection automatically, follow these steps:

1. Go to the [Network Settings](#) screen.

([Network](#) → [Network Settings](#))

2. Select [Start](#). The network function searches for available wireless networks. When done, it displays a list of the available networks.
3. In the list of networks, select a network you want to connect, and then select [Next](#).
 -  If the wireless router is set to Hidden (Invisible), you have to select [Add Network](#) and enter the correct [Network Name](#) (SSID) and Security Key to establish the connection.
4. If the Enter security key screen appears,

go to step 5. If you select a wireless router that does not have wireless security, go to step 7.

5. To set wireless security for the router, enter the Security Key (Security key or PIN).

 You can enter the Security Key (Security key or PIN) using a keyboard screen. Enter the Security Key using your remote.

 You should be able to find the Pass Phrase on one of the set up screens you used to set up your router or modem.

6. When done, select **Next**. The network connection screen appears and the verification process starts.
 7. When the connection has been verified, the **You are connected to the Internet. If you have any problems using online services, please contact your Internet Service Provider.** message appears.
-  If the network does not accept the Security Key (Security key or PIN), select **Retry** or select **IP Settings** to enter the settings manually.
 -  If you want to set up the connection manually, select **IP Settings**. Then, go

to the next section, “Manual Network Setup”.

Manual Wireless Network Setup

You can configure your TV's wireless network connection manually when connecting your TV to a network that requires a Static IP address or if the automatic connection process has failed.

Getting the Network Connection Values

To view the Network connection values on most Windows computers, follow these steps:

1. Right click the Network icon on the bottom right of the screen.
2. In the pop-up menu that appears, click Status.
3. On the dialog that appears, click the Support tab.
4. On the Support Tab, click the Details button. The Network connection values are displayed.

To set up your TV's wireless network connection manually, follow these steps:

1. Go to the [Network Settings](#) screen.
([Network](#) → [Network Settings](#))

2. Select **Start**. The network function searches for available wireless networks. When done, it displays a list of the available networks.

3. In the list of networks, select a network you want to connect, and then select **Next**.
 -  If the wireless router is set to Hidden (Invisible), you have to select **Add Network** and enter the correct **Network Name** (SSID) and Security Key to establish the connection.

4. If the Enter security key screen appears, go to step 5. If you select a wireless router that does not have wireless security, go

to step 7.

5. To set wireless security for the router, enter the Security Key (Security key or PIN).

 You can enter the Security Key (Security key or PIN) using a keyboard screen. Enter the Security Key using your remote.

 You should be able to find the Pass Phrase on one of the set up screens you used to set up your router or modem.

6. When done, select **Next**. The network connection screen appears and the

verification process starts.

7. Select **Stop**. The verification process stops. Select **IP Settings** on the network connection screen. The **IP Settings** screen appears.
- 8 Select **IP Mode**, and then set the **IP Mode** to **Manual**.
9. Go to the **IP Address** entry field, and then select the **IP Address** using remote.
10. Enter the first portion of the **IP Address** (for example, 105) into the first entry field using your remote. When done, go to the next field.

11. Enter the next portion of the **IP Address**.
When done, go to the next field.
12. Repeat the entry process for each field in the **IP Address**.
 -  If you make a mistake when entering a number, re-enter the number to correct it.
13. When done, go to the **Subnet Mask** fields.
14. Repeat the same entry process for **Subnet Mask, Gateway, and DNS Server**.
15. When done, select **OK**. The network connection screen appears and the verification process starts. When the

connection has been verified, the **You are connected to the Internet. If you have any problems using online services, please contact your Internet Service Provider.** message appears.

WPS(PBC) Network Setup

If your router has a WPS(PBC) button, you can configure your TV's wireless network connection using the WPS(PBC) button more easily.

To set up your TV's wireless network connection using WPS(PBC), follow these steps:

1. Go to **Network Settings** screen. (**Network** → **Network Settings**)
2. Select **Start**. The network function searches for available wireless networks. When done, it displays a list of the available networks.
3. Select the **WPS(PBC)**.
4. Press the WPS(PBC) button on your router within 2 minutes. Your TV automatically acquires all the network setting values it needs and connects to your network.
5. The network connection screen appears, and network setup is done.

Plug & Access Network Setup

The **Plug & Access** function lets you easily connect your Samsung TV to your Samsung wireless router (sold separately) by using a USB memory stick to transfer the setup information from the router to the TV. If your non-Samsung wireless router does not support **Plug & Access**, you must connect using one of the other methods.

-  You can check for equipment that supports **Plug & Access** on www.samsung.com.

To set up your TV's wireless network connection using **Plug & Access**, follow these

steps:

1. Turn on the Samsung wireless router and your TV.
2. Insert a USB memory stick into the USB port in your Samsung wireless router. Check the router's LED's to make sure it is on (Blinking → on).
3. Take the USB memory stick out of the router, and then insert it into a USB port on your Samsung TV. The memory stick downloads the connection information.
4. Wait until the connection is automatically established.

 If **Plug & Access** does not connect your TV to your wireless router, a popup screen appears on the screen notifying you of the failure. If you want to try using **Plug & Access** again, disconnect the USB memory stick, reset the AP, and then try again from Step 1. You can also choose one of the other connection setup methods.

5. The network connection screen appears, and the network setup is done.

6. Place the wireless router in a desired location.

 If the wireless router's settings change

or you install a new wireless router, you must perform the **Plug & Access** procedure again, beginning from Step 1.

Network Status

Menu → Network → Network Status

You can check the current network and Internet status.

When the wireless network connection failed...

- **Wireless network connection failed.**

No wireless router selected. Go to [Network Settings](#) to select your router.

- **Unable to connect to wireless router.**

Try the following: check that the router is turned on, and if it is try turning it off and on again. Check if you need to enter a security key to use the router.

- **IP auto setting failed.**

Try the following to set your IP address automatically. Or set your IP address manually by selecting [IP Settings](#). - Ensure DHCP server is enabled on router and unplug and re-plug-in the router. - Contact

your Internet Service Provider for more information.

- **Unable to connect to the network.**

Try the following: check if your IP address is set correctly in [IP Settings](#). Contact your Internet Service Provider for more information.

- **Connected to your local network, but cannot connect to the Internet.**

Check the DNS settings in [IP Settings](#), or contact your Internet Service Provider to access the Internet.

- **Network setup complete, but cannot connect to the Internet.**

Contact your Internet Service Provider to access the Internet.

Managing the Network Connected Devices

Wi-Fi Direct

Menu → Network → Wi-Fi Direct

Set to connect the TV to wireless mobile devices. Using this function, you can connect wireless mobile devices with your TV directly without a router.

 To use this function, your mobile device should be supported by the [Wi-Fi Direct](#).

To connect your mobile device with your TV using Wi-Fi Direct, follow these steps:

1. Go to **Wi-Fi Direct** screen (**Network** → **Wi-Fi Direct**). The TV starts to search devices.
 2. Turn on the Wi-Fi Direct function on your device. Select the desired Wi-Fi device.
 - **PBC**: Press the WPS(PBC) button on your Wi-Fi device within 2 minutes. Your TV automatically acquires all the network setting values it needs and connects to your network.
 - **PIN**: Input the displayed PIN on your device.
-  If you want to disconnect the device, select the connected Wi-Fi device, and

then select **Disconnect**.

Soft AP

Menu → Network → Soft AP

Using this function, you can connect the TV on your mobile devices if your mobile devices do not support **Wi-Fi Direct**. Set the options for connection of Wi-Fi device.

- **Soft AP**

Turns on or off the **Soft AP**. When **Soft AP** is set to **On**, your mobile devices can find the TV name in Wi-Fi connection list.

- **Security key**

Set the **Security key** manually using the remote control.

- If the security key does not meet the required digit number, **Done** is not available.
- Input the generated security key into the device you want to connect.
- If network does not operate normally, check the security key again. An incorrect security key may cause a malfunction.

AllShare Settings

Menu → Network → AllShare Settings

Selects whether to use media functions on the network. For details on set up options, refer to the “AllShare Settings” in the [AllShare Play](#) section.

Device Name

Menu → Network → Device Name

Enter a name for this TV. This name will be shown on network remote controls and devices using [AllShare Play](#).

- A keyboard appears on the screen and you can key in a name for your TV manually using your remote control. For example, if you want to change the name

to Samsung TV, select each character using your remote. When done, select **Done**.

Setting the Time

Time

Menu → System → Time

 The time you set will appear when you press the **INFO** button **for Standard Remote Control** or select **Info** **for Smart Touch Control**

- **Clock**

Set the clock to use the various timer features of the TV.

 If you disconnect the power cord, you

have to set the clock again.

To set the clock, follow these steps:

1. Go to **Clock** screen (**System** → **Time** → **Clock**).

2. Select **Auto** or **Manual**.

♦ If you selected **Auto**:

The TV will automatically download the correct time from a digital channel.

- Select **Time Zone**, and then select your Time Zone.
- Select **DST** (Daylight Savings Time).
Select **On** if you want to turn the **DST**

adjustment on and off manually. Select **Off** to turn off the **DST** adjustment.

 **DST** and **Time Zone** function are only available when the **Clock Mode** is set to **Auto**.

◆ If you selected **Manual**:

– The **Clock Set** screen appears. Set the **Date** and **Time** manually. You can set the current date and time using your remote.

 Available only when **Clock Mode** is set to **Manual**.

- **Sleep Timer**

Automatically shuts off the TV after a preset period of time. (30, 60, 90, 120, 150 and 180 minutes).

- ☑ Select a period of time using your remote. To cancel the **Sleep Timer**, select **Off**.

- **On Timer**

Set **On Timer** so that your TV turns on automatically at a time and on a day of your choosing. You can set up three separate **On Timer** configurations. (**On Timer 1**, **On Timer 2**, **On Timer 3**)

- ☑ You must set the clock before you can use

the **On Timer**.

Setup: Select **Off**, **Once**, **Everyday**, **Mon~Fri**, **Mon~Sat**, **Sat~Sun** or **Manual**. If you select **Manual**, you can select the days you want to activate the timer.

 The  mark indicates days you've selected.

Time: Set the time that the TV turns on automatically.

Volume: Set the desired loudness.

Source: To select what will be turned on when the timer setting is activated. You can set the TV to turn on a specific channel

or play back contents such as video, photo or audio files located in an external device connected to the TV.

 The USB device must be connected to your TV before you can select **USB**.

Antenna (when the **Source** is set to **TV**):
Select **Air** or **Cable**.

Channel (when the **Source** is set to **TV**):
Select the desired channel.

Music / Photo (when the **Source** is set to **USB**): Select a folder in the USB device containing music or photo files you want played when the TV turns on automatically.

- ❏ If there is no music file on the USB device or you don't select a folder containing a music file, the Timer function does not operate correctly.
- ❏ If there is only one photo file in the USB, the slide show will not play.
- ❏ If a folder name is too long, the folder cannot be selected.
- ❏ Each USB you use is assigned its own folder. When using more than one of the same type of USB, make sure the folders assigned to each USB have different names.
- ❏ We recommend that you use a USB

memory stick and a multi card reader when using the **On Timer**. The **On Timer** function may not work with USB devices with a built-in battery, MP3 players, or PMPs made by some manufacturers because the TV can take too long to recognize these devices.

 If you set the **On Timer** to play a file saved on a USB HDD, it may take up to 40 seconds or more to play the file after the TV is turned on.

- **Off Timer**

Set **Off Timer** so that your TV turns off automatically at a time and on a day of your

choosing. You can set up three separate **Off Timer** configurations. (**Off Timer 1**, **Off Timer 2**, **Off Timer 3**)

 You must set the clock before you can use the **Off Timer**.

Setup: Select **Off**, **Once**, **Everyday**, **Mon~Fri**, **Mon~Sat**, **Sat~Sun** or **Manual**. If you select **Manual**, you can choose the days you want **Off Timer** to turn off your TV.

 The  mark indicates days you've selected.

Time: Set the time that the TV turns off automatically.

Blocking Programs

Security

Menu → System → Security

Using this function, you can configure channel related security options. Every time you access the Security functions, the PIN screen will appear and you must enter that PIN. The PIN screen closes and the Security menu appears.

- Program Rating Lock

The Program Rating Lock feature lets you

block programs you've determined are inappropriate for your children based on their ratings. To access the Program Rating Lock feature and make any changes, you must enter a PIN (personal identification number). To watch a blocked program, you must also enter the same PIN.

- ☞ The **Program Rating Lock** is not available in HDMI, Component mode.
- ☞ The default PIN number for a new TV set is “0-0-0-0”.

TV Rating: You can block TV programs based on their ratings. This function allows you to control what your children can watch.

The **TV Rating** displays a grid with locks. The following categories are on the left side:

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

The following categories are on top:

- **ALL**: Lock all TV ratings.
- **FV**: Fantasy violence
- **V**: Violence

- **S**: Sexual situation
- **L**: Adult Language
- **D**: Sexually Suggestive Dialog

 To block certain content, select an entry field to lock (That is, you “click it”). For example, click the lock at the intersection of **V** and **TV-MA**, and you block all programs that are rated violent and for mature adults.

 To unblock a category, click the lock icon. To unblock all the categories in a row, click the lock under **ALL**.

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

Movie Rating (MPAA): You can block movies based on their MPAA rating. The Motion Picture Association of America (MPAA) has implemented a rating system that provides parents or guardians with advanced information on which films are appropriate for children.

Movie Rating (MPAA) displays a column with locks and the following ratings categories:

- **G:** General audience (no restrictions).
- **PG:** Parental guidance suggested.
- **PG-13:** Parents strongly cautioned.
- **R:** Restricted. Children under 17 should be accompanied by an adult.

- **NC-17**: No children under age 17.
- **X**: Adults only.
- **NR**: Not rated.

 To block certain content, select an entry field to lock (That is, you “click it”). For example, click the **X** lock and you block all X-rated movies.

 The rating categories are also grouped so that clicking one category blocks all the categories a parent would block along with it. For example, if you block the **PG-13** category, then **R**, **NC-17** and **X** will automatically be blocked also.

 To unblock a category, click the lock icon.

Canadian English Rating: You can block TV programs based on their Anglophone Canadian ratings.

Canadian English Rating displays a column with locks and the following ratings categories:

- **C:** Programming intended for children under age 8.
- **C8+:** Programming generally considered acceptable for children 8 years and over to watch on their own.
- **G:** General programming, suitable for all audiences.
- **PG:** Parental Guidance.

- **14+**: Programming contains themes or content which may not be suitable for viewers under the age of 14.
 - **18+**: Adult programming.
-  To block certain content, select an entry field to lock (That is, you “click it”). For example, click the **18+** lock and you block all TV programs rated 18+.
-  The rating categories are also grouped so that clicking one category blocks all the categories a parent would block along with it. For example, if you block the **G** category, then **PG**, **14+** and **18+** will automatically be blocked.

 To unblock a category, click the lock icon.

Canadian French Rating: You can block TV programs based on their French Canadian ratings.

Canadian French Rating displays a column with locks and the following ratings categories:

- **G:** General
- **8 ans+:** Programming generally considered acceptable for children 8 years and over to watch on their own.
- **13 ans+:** Programming may not be suitable for children under the age of 13.

- **16 ans+**: Programming is not suitable for children under the age of 16.
- **18 ans+**: Programming restricted to adults.

 To block certain content, select an entry field to lock (That is, you “click it”). For example, click the **18 ans+** lock and you block all TV programs rated 18 ans+.

 The rating categories are also grouped so that clicking one category blocks all the categories a parent would block along with it. For example, if you block the **8 ans+** category, then **13 ans+**, **16 ans+** and **18 ans+** will automatically be blocked also.

 To unblock a category, click the lock icon.

Downloadable U.S. Rating: Parental restriction information you can use while watching DTV channels.

 If information is not downloaded from the broadcasting station, the **Downloadable U.S. Rating** menu is deactivated.

 Parental restriction information is automatically downloaded while you watch DTV channels. It may take several seconds.

 The **Downloadable U.S. Rating** menu is available for use after information is downloaded from the broadcasting

station. However, depending on the information from the broadcasting station, it may not be available for use.

-  Parental restriction levels differ depending on the broadcasting station. The default menu name and the **Downloadable U.S. Rating** change depending on the downloaded information.
-  Even if you set the on-screen display to another language, the **Downloadable U.S. Rating** menu will appear in English only.
-  Blocking one rating level will automatically block other categories that deal with

more sensitive material.

 The rating titles (For example: Humor Level..etc) and TV ratings (For example: DH, MH, H..etc) may differ depending on the broadcasting station.

- **Change PIN**

The **Change PIN** screen will appear. Choose any 4 digits for your PIN and enter them in **Enter New PIN** fields. Re-enter the same 4 digits in **Confirm New PIN** fields. When the Confirm screen disappears, select **Close**. The TV has memorized your new PIN.

How to watch a restricted program or movie

If the TV is tuned to a restricted program or movie, the **Program Rating Lock** will block it.

The screen will go blank and a pop-up message appears. Enter the PIN to unblock the program or movie using your remote.



The Smart Touch Control is not available. If you forget the PIN code, press the remote control buttons in the following sequence in Standby mode, which resets the PIN to “0-0-0-0”: **MUTE**  → **8** → **2** → **4** →  (power on).

Economical Solutions

Eco Solution

Menu → System → Eco Solution

- **Energy Saving**

Lets you adjusts the brightness of the TV in order to reduce power consumption. If you select **Picture Off**, the screen is turned off, but the sound remains on. Press any button except the volume button to turn on the screen.

- **Eco Sensor**

To enhance power savings, the picture settings will automatically adapt to the light in the room.

 If you adjust **Backlight for LED TV** / **Cell Light for PDP TV** in the **Picture** menu, the **Eco Sensor** will be set to **Off** automatically.

Min. Backlight for LED TV / **Min Cell Light for PDP TV**: When the **Eco Sensor** is set to **On**, you can manually adjust the minimum screen brightness.

 If the **Eco Sensor** is set to **On**, the display brightness may change (become slightly darker or brighter) depending on the light

intensity in your room. You can control the screen's minimum brightness with the **Min. Backlight / Min Cell Light** function.

- **No Signal Power Off**

To avoid unnecessary energy consumption, you can set how long you want the TV to remain on if it's not receiving a signal.

 Disabled when an attached PC is in power saving mode.

- **Auto Power Off**

The TV will automatically turned off when no user operation is detected for 4 hours.

Picture In Picture (PIP)

PIP

Menu → System → PIP

You can watch a program whose signal has passed through the TV's tuner and video from one external video source simultaneously.

For example, if you have a cable box connected to the Cable In jack, you can use PIP to watch programs from the cable box and a movie from a Blu-ray player attached to the HDMI In jack.

 While **Smart Hub** or **Program Rating Lock** is on, you cannot use the **PIP**.

- **PIP**

Activate or deactivate the **PIP** function.

- **Air/Cable**

Select either **Air** or **Cable** as the input source for the sub-picture screen.

- **Channel**

Select the channel for the sub-picture screen.

- **Size**

Select a size for the sub-picture screen.

- **Position**

Select a position for the sub-picture screen.

 In Double (, ) mode, you cannot select **Position**.

- **Sound Select**

You can choose to listen to the sound from the main picture or the sub picture.

 If you turn the TV off while watching in the **PIP** mode, the **PIP** function is reset to **Off**. When you turn your TV on, you

must turn **PIP** on again to watch in the **PIP** mode.

- ☞ You may notice that the picture in the **PIP** screen becomes slightly unnatural when you use the main screen to view a game or karaoke.
- ☞ The **PIP** is not supported in **3D** function.
- ☞ **PIP** Settings: The picture from the external video source will be in the main screen and the picture from the TV's tuner will be in the **PIP** sub-picture screen.
 - Main picture: Component, HDMI
 - Sub picture: TV

Using the TV with a Keyboard and a Mouse

Device Manager

Menu → System → Device Manager

Using this function, you can set up input devices to use with the TV. You can check your device list and adjust the settings in this menu.

- ⓘ Depending on the model of the USB HID keyboard and mouse may not be compatible with your TV.

- **Keyboard Settings**

Lets you use a USB or Bluetooth keyboard with your TV. If you want to use a USB keyboard, connect it on the USB port. If you want to use a Bluetooth keyboard, connect it using the Bluetooth function.

 Available only when the **QWERTY** keypad screen appears in the **Web Browser**.

Select Keyboard

Select which keyboard to use from your keyboard list. you can only use one keyboard, even if several are connected.

Add Bluetooth Keyboard

You can add the Bluetooth keyboard.

Keyboard Options

Sets the default options for the keyboard language and type.

- **Keyboard Language:** Set a language for your keyboard.
- **Keyboard Type:** Set what a type a keyboard you're using to enter text.
- **Switch Input Language:** Select a key sequence to change switching input language.

- **Mouse Settings**

Lets you use a USB or Bluetooth mouse with your TV. If you want to use a USB mouse, connect it on the USB port. If you want to use a Bluetooth mouse, connect it using the Bluetooth function.

Using your TV to use a mouse, you can use the TV's menu in the same way as on a PC.

Select Mouse

Select which mouse to use from your mouse list. you can only use one mouse, even if several are connected.

Add Bluetooth Mouse

You can add the Bluetooth mouse.

Mouse Options

Sets the default options for the mouse buttons.

- **Primary Button:** Select the main button you want to use click and select on screen.
- **Pointer Size:** Set the size of the on-screen mouse pointer.
- **Pointer Speed:** Select the speed of the mouse pointer.

Using the TV's menu with a mouse

1. Connect a USB or Bluetooth mouse on your TV.
2. Click a primary button you selected. The **Go To** screen appears.
3. Click a menu you wish, and then you can use the menu to same way as on a PC.

Other Features

Menu Language

Menu → System → Menu Language

Set the menu language.

1. Select the **Menu Language**.
2. Choose a language you want to use.

Caption

(On-Screen Text Dialogue)

Menu → System → Caption

- **Caption**

You can switch the caption function on or off. If captions are not available, they will not be displayed on the screen.

 The **Caption** feature does not work with devices connected to the TV through the Component, HDMI jacks.

- **Caption Mode**

You can select the desired caption mode.

 The availability of captions depends on the program being broadcast.

Default / CC1 – CC4 / Text1 – Text4: (analog channels only) The analog caption function

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

Default / Service1 – Service6 / CC1 – CC4 / Text1 – Text4: (Digital channels only) The digital caption function works with digital channels.

-  **Service1 – Service6** may not be available in digital caption mode depending on the broadcast.

- **Digital Caption Options**

(Digital channels only)

Adjusts the each option.

Size: Options include **Default**, **Small**, **Standard** and **Large**. The default is **Standard**.

Font Style: Options include **Default** and **Style0** to **Style7**. The default is **Style0**.

Foreground Color: You can change the color of the letters.

Options include **Default**, **White**, **Black**, **Red**, **Green**, **Blue**, **Yellow**, **Magenta** and **Cyan**. The default is **White**.

Background Color: You can change the background color of the captions. Options include **Default, White, Black, Red, Green, Blue, Yellow, Magenta** and **Cyan**. The default is **Black**.

Foreground Opacity: This adjusts the opacity of text. Options include **Default, Transparent, Translucent, Solid** and **Flashing**.

Background Opacity: This adjusts the opacity of the caption background. Options include **Default, Transparent, Translucent, Solid** and **Flashing**.

Return to Default: This option sets each **Size, Font Style, Foreground Color, Background**

Color, Foreground Opacity and Background Opacity to their default.

- ☞ Digital Caption Options are available only when you can select Default and Service1 – Service6 in Caption mode.
- ☞ The availability of captions depends on the program being broadcast.
- ☞ The Default setting follows the standards set by the broadcaster.
- ☞ You cannot set both the Foreground Color and the Background Color to the same color.
- ☞ You cannot set both the Foreground

Opacity and the Background Opacity to the same color.

Screen Burn Protection for PDP TV

To reduce the possibility of screen burn, this unit is equipped with Pixel Shift screen burn prevention technology. Pixel Shift moves the picture slightly on the screen.

The Pixel Shift Time setting allows you to program the time between movements of the picture in minutes.

Your TV also has the following additional screen burn protection functions:

- Pixel Shift
 - Auto Protection Time
 - Scrolling
 - Side Gray
- Pixel Shift

Using this function, you can set the TV to move pixels minutely on the PDP screen in a horizontal or vertical direction to minimize after images on the screen.

Available Pixel Shift settings and optimum settings:

Horizontal

- Available Settings: 0 – 4 (pixels)
- Optimum settings for TV/AV/Component/HDMI: 4

Vertical

- Available Settings: 0 – 4 (pixels)
- Optimum settings for TV/AV/Component/HDMI: 4

Time (minute)

- Available Settings: 1 – 4 min

– Optimum settings for TV/AV/
Component/HDMI: 4 min

 The **Pixel Shift** value may differ depending on the monitor size (inches) and mode.

 This function is not available in the **Screen Fit** mode.

- **Auto Protection Time**

If the screen displays a still image for a certain period of time you define, the TV activates the screen saver to prevent the formation of burnt in ghost images on the screen.

- **Scrolling**

This function removes after-images on the screen by illuminating all the pixels on the PDP according to a pattern. Use this function when there are after images or symbols on the screen, especially when you displayed a still image on the screen for a long time.

 The after-image removal function has to be executed for a long time (approximately 1 hour) to effectively remove after-images on the screen. If the after-image is not removed after you apply the function, repeat the function again.

 Press any button to cancel this feature.

- **Side Gray**

Lets you select the color of the sidebars your TV displays when you set the screen size to 4:3.

Auto Protection Time for LED TV

If the screen displays a still image for a certain period of time you define, the TV activates the screen saver to prevent the formation of burnt in ghost images on the screen.

General

Menu → System → General

- **Game Mode**

When you have connected a game console such as a PlayStation™ or Xbox™ to the TV, you can enjoy a more realistic gaming experience by turning on the **Game Mode** function.

Precautions and limitations for Game Mode

- Before you disconnect the game console and connecting another external device, set **Game Mode** to **Off**.

– If you display the TV menu in **Game Mode**, the screen shakes slightly.

 **Game Mode** is not available when the input source is set to TV.

 Set **Game Mode** to **On** only after connecting a game console. If you turn **Game Mode** on before you have attached the game console, you may notice slightly reduced picture quality.

 If the **Game Mode** is set to **On**, the **Picture Mode** is set to **Standard** and the **Sound Mode** is set to **Movie** automatically.

- **BD Wise**

Provides the optimal picture quality for Samsung DVD, Blu-ray and Home Theater products which support **BD Wise**. When the **BD Wise** is set to **On**, the picture mode is automatically changed to the optimal resolution.

 Available when you connect Samsung products that support **BD Wise** through an HDMI cable to the TV.

- **Menu Transparency**

Adjust transparency of menu box.

- **Sound Feedback**

Your TV gives sound feedback when you use TV. **Sound Feedback** is enabled by default. Turn off **Sound Feedback** or adjust its volume.

- **Panel Lock**

Lock or unlock all the keys on the front panel at once. When **Panel Lock** is on, none of the keys on the front panel operate.

- **Boot Logo**

Displays the Samsung logo when the TV is turned on.

- **Light Effect** **for LED TV**

You can turn the LED on the TV's front panel on or off. Turn it off to save power or if the LED is too bright for you.

- ☑ Set the **Light Effect** to **Off** to reduce the power consumption.
- ☑ The color of light may vary depending on the model.

Anynet+ (HDMI-CEC)

Menu → System → Anynet+ (HDMI-CEC)

Allows you to control all connected Samsung devices that support anynet+ with your

Samsung TV's remote. For details on set up options, refer to the "Anynet+ (HDMI-CEC)" instructions.

DivX® Video On Demand

Menu → System → DivX® Video On Demand

Shows the registration code authorized for the TV. If you connect to the DivX web site and register with 10-digit registration code, you can download the VOD activation file. Once you play it using AllShare Play, the registration is completed.

- ☞ For more information on DivX(R) VOD, visit <http://vod.divx.com>.

Support Menu

e-Manual

Menu → Support → e-Manual

The e-Manual is built into your TV. Open the e-Manual to learn how to use your TV's many features.

- ☞ For the detailed information about the e-Manual Screen, refer to “How to view the e-Manual” in the User's Manual.

Self Diagnosis

Menu → Support → Self Diagnosis

- **Picture Test**

Use to check for picture problems. **Picture Test** displays a high definition picture that you can examine for flaws or faults.

Yes: Select **Yes** if the test picture does not appear or there is noise or distortion in the test picture. There may be a problem with the TV. Contact Samsung's Call Center for assistance.

No: Select **No** if the test picture displays properly. There may be a problem with

your external equipment. Please check your connections. If the problem persists, refer to the external device's user manual.

- **Sound Test**

Use the built-in melody to check for sound problems.

 If you hear no sound from the TV's speakers, before performing the sound test, make sure **Speaker Select** is set to **TV Speaker** in the **Sound** menu, and then try the speakers again.

 You will hear the melody during the test even if you have set **Speaker Select** to **External Speaker** or have muted the

sound.

Yes: Select **Yes** if you can hear sound from only one speaker or from neither speaker during the sound test. There may be a problem with the TV. Contact Samsung's Call Center for assistance.

No: Select **No** if you can hear sound from the speakers. There may be a problem with your external equipment. Please check your connections. If the problem persists, refer to the external device's user manual.

- **Signal Information**

(digital channels only)

The reception quality of over-the-air HD channels is either perfect or the channels are unavailable. Signal Information displays HD channel signal strength so you can adjust your antenna to increase signal strength and receive HD channels.

- **Reset**

Reset all setting to factory defaults except for your network settings.

To reset your TV to default setting, follow these steps:

1. Go to the **Reset** menu. (**Support** → **Self Diagnosis** → **Reset**)
2. The PIN input screen appears. Enter the PIN using your remote.
3. When done, the PIN screen disappear automatically. The message **All the settings will return to factory defaults.** appears.
4. Select **Yes**. All settings have been reset. The TV will turn off and on again automatically. The **Setup** screen appears. For more information about **Setup**, see

user manual.

- [Troubleshooting](#)

If your TV seems to be having a problem, access the troubleshooting guide for a solution.

[Software Update](#)

[Menu](#) → [Support](#) → [Software Update](#)

The [Software Update](#) menu lets you upgrade your TV's software to the latest version.

Current Version: This is the software version already installed in the TV.

Upgrading to the Latest Version

You can upgrade in four ways:

- By USB
- Online
- Alternative Software
- Standby Mode Upgrade

The four methods are explained in the following pages.

-  Be careful not to turn off the power until the upgrade is complete. The TV will turn off and on automatically after completing the software upgrade. When you upgrade software, all video and audio settings you

have made will return to their default settings. We advise you to write down your settings so that you can easily reset them after the upgrade.

- **By USB**

To upgrade the By USB, follow these steps:

1. Visit www.samsung.com.
2. Download the latest USB software upgrade exe archive to your computer.
3. Extracts the exe archive to your computer. You should have a single folder with the same name as the exe file.

4. Copy the folder to a USB flash drive.
5. Turn on the TV, and then insert the USB flash drive into the USB port of the TV.
6. In the TV's menu, go to **Support** → **Software Update**.
7. Select **By USB**.

 Please be careful not to remove the USB drive until the upgrade is complete.

- **Online**

The **Online** function lets you download the upgrade software directly from the Internet into your TV and then upgrade the software

in one operation. To use **Online**, you must have configured your TV to connect to your network and the TV must be connected to the Internet. See the "Setting up the Wired or Wireless Network" instructions.

To upgrade using the **Online**, follow these steps:

1. Select the **Online**. The Connecting to Server message appears.
2. If there is a download available, the Download pop-up appears with a progress bar and the download starts.
3. When the download is complete, the

Upgrade Query screen appears with three choices: [Upgrade Now](#), [Upgrade Later](#), or [Don't Upgrade](#).

- If you select the [Upgrade Now](#), the TV upgrades the software, turns off, and then turns on automatically.
- If you do not make a selection in one minute or select the [Upgrade Later](#), the TV stores the new upgrade software. You can upgrade the software later using the Alternative Software function.
- If you select the [Don't Upgrade](#), the TV cancels the upgrade.

- **Alternative Software**

The **Alternative Software** option lets you upgrade using a file the TV downloaded earlier, but you decided not to install immediately, or a file downloaded by the TV in Standby Mode (See **Standby Mode Upgrade** on the next section).

To upgrade using **Alternative Software**, follow these steps:

1. If upgrade software has been downloaded, you will see the software version number to the right of **Alternative Software**.
2. Select **Alternative Software**.

3. The TV displays a message asking if you want to upgrade. Select **Yes**. The TV begins the upgrade.

4. When the upgrade is complete, the TV turns off automatically, and then turns on.

- **Standby Mode Upgrade**

You can set the **Standby Mode Upgrade** function so that the TV downloads new upgrade software when it is in Standby mode.

In Standby mode, the TV is off, but its Internet connection is active. This allows the TV to download upgrade software

automatically, when you are not using it. Because the TV is turned on internally, the screen may glow slightly. This phenomenon may continue for more than 1 hour until the software download is complete.

To set Standby Mode Upgrade, follow these steps:

1. Select the Standby Mode Upgrade.
2. Select On or Off.
 - Off: If you select Off, the TV will notify you with a pop up message when new upgrade software is available.
 - On: If you select On, the TV will

automatically download new upgrade software when it is in Standby mode with the power off. If it downloads new upgrade software, the TV will ask you if you want to install it when you turn the TV on.

-  To use the [Standby Mode Upgrade](#) function, your TV must be connected to the Internet.

[Contact Samsung](#)

[Menu](#) → [Support](#) → [Contact Samsung](#)

View this information when your TV does not work properly or when you want

to upgrade the software. You can find information regarding our call centers and how to download products and software.

Remote Management

[Menu](#) → [Support](#) → [Remote Management](#)

The Call Center will access your Samsung Product remotely to check internal information. Remote Management can control user settings and troubleshoot a problem.

Smart Hub

Menu → Support → Smart Hub

Smart Hub lets you connect to the Internet and enjoy variety of Internet and multimedia contents. For more information on how to use the Smart Hub, see “**Smart Hub**” in the e-Manual.

Using the 3D function

3D

Menu → Picture → 3D

This exciting new feature enables you to view 3D content. To fully enjoy this feature, you must need a pair of Samsung 3D Active Glasses to view 3D video.

IMPORTANT HEALTH AND SAFETY INFORMATION FOR 3D PICTURES.

Read and understand the following safety information before using the TV's 3D function.

Warning

- ◆ Some viewers may experience discomfort while viewing 3D TV such as dizziness, nausea and headaches. If you experience any such symptom, stop viewing 3D TV, remove the 3D Active Glasses and rest.
- ◆ Watching 3D images for an extended period of time may cause eye strain. If you feel eye strain, stop viewing 3D TV, remove your 3D Active Glasses and rest.

- ◆ A responsible adult should frequently check on children who are using the 3D function. If there are any reports of tired eyes, headaches, dizziness, or nausea, have the child stop viewing 3D TV and rest.
- ◆ Do not use the 3D Active Glasses for other purposes (such as general eyeglasses, sunglasses, protective goggles, etc.)
- ◆ Do not use the 3D function or 3D Active Glasses while walking or moving around. If you use the 3D function or 3D Active Glasses while walking or moving around you can injure yourself by running into objects, tripping, or falling.

- **3D Mode**

Select the 3D input format.

 If you want to experience the 3D effect fully, put the 3D Active Glasses on first, and then select the **3D Mode** from the list below that provides the best 3D viewing experience.

: Turns the 3D function off.

: Changes a 2D image to 3D.

: Displays two images next to each other.

: Displays one image above another.

: Displays the images for the left and right

eye alternately in rows. **for LED TV**

: Displays the images for the left and right eye alternately in columns. **for LED TV**

: Displays the images for the left and right eye alternately in pixels. **for LED TV**

: Displays the images for the left and right eye alternately in frames. **for LED TV**

 The **3D Mode** may differ depending on the input signal.

 Some file formats may not support the  2D→3D

 The ,  and  are available when your PC is connected through an HDMI/

DVI cable.

 The  displays the frequency (60Hz only) when the TV's resolution is 1920 x 1080.

- **3D Effect** for LED TV

Adjust 3D effects like perspective and depth for your preferred 3D viewing experience.

3D Effect: Adjust the perspective and depth settings. If you select **Auto**, adjust the perspective and depth settings automatically in accordance with the 3D input source. If you select **Manual**, you can adjust the perspective and depth you want.

3D Perspective: Adjust the overall 3D perspective of the on-screen image.

Depth: Adjust the overall depth.

- **3D Perspective** for PDP TV

Adjust the overall 3D perspective of the on-screen image.

- **Depth** for PDP TV

Adjust the overall depth.

- **L/R Change**

Swap the left and right pictures.

- **3D Auto View** for LED TV

If you set the **3D Auto View** to **On**, TV will switch the TV to 3D automatically. If you set the **3D Auto View** to **Message Notice**, a message screen appears when the TV receives a 3D signal. Then you can view a 3D image by selecting **3D** using your remote.

 When you access some application (such as **Smart Hub**, etc.), TV will do not switch to 3D. In this case, you should to use the 3D, after exiting the application.

- **3D Optimize** for LED TV

Automatically adjusts the picture overall to provide an optimal 3D effect.

Support resolution (16:9 only)

HDMI

3D Format	Resolution	Frequency (Hz)
	1280 x 720p	59.94 / 60 Hz
	1920 x 1080i	59.94 / 60 Hz
	1920 x 1080p	23.98 / 24 / 29.97 / 30 / 59.94 / 60 Hz
Frame Packing	1280 x 720p	59.94 / 60 Hz
	1920 x 1080i	59.94 / 60 Hz
	1920 x 1080p	23.98 / 24 / 29.97 / 30 Hz

Component

Resolution	Frequency (Hz)
1280 x 720p	59.94 / 60 Hz
1920 x 1080i	59.94 / 60 Hz
1920 x 1080p	23.98 / 24 / 29.97 / 30 / 59.94 / 60 Hz

DTV

Resolution	Frequency (Hz)
1280 x 720p	59.94 / 60 Hz
1920 x 1080i	59.94 / 60 Hz

Videos / Photos (In AllShare Play)

- ☞ Refer to "Supported Subtitle and AllShare Play file formats" in the Other Information section.

Resolution supported for HDMI PC mode

for LED 7500 series and above

The optimal resolution for the HDMI PC mode is 1920 x 1080.

If the input resolution is not 1920 x 1080, the TV may not display images properly in 3D display or full screen mode.

How to watch the 3D images

Some 3D modes may not be available depending on the format of the image source.

To watch in 3D, you must wear 3D Active Glasses and turn the glasses on by pressing the power button.

1. Go to the **3D** screen. (**Picture** → **3D**)
2. Select the **3D Mode**. The **3D Mode** screen appears.
3. Set the **3D Mode** of the image you want to view.

Read These Notes Before Using the 3D Function...

- ◆ The **3D Mode** is set to **Off** automatically when you access **Smart Hub** function.
- ◆ The **3D Mode** is set to its memorized configuration value automatically when you change the input source.
- ◆ Some **Picture** functions are disabled in **3D** mode.
- ◆ **PIP** is not supported in **3D** mode.
- ◆ 3D Active Glasses from Samsung's previous product (IR type) or other manufacturers are not be supported.
- ◆ When the TV is initially powered on, it

may take some time until the 3D display is optimized.

- ◆ The 3D Active Glasses may not work properly if there is any other 3D product or electronic devices turned on near the glasses or TV. If there is a problem, keep other electronic devices as far away as possible from the 3D Active Glasses.
- ◆ Be sure to stay within the viewing angle and optimum TV viewing distance when watching 3D pictures. Otherwise, you may not be able to see 3D effects properly.
- ◆ The ideal 3D viewing distance is three times or more the height of the screen. For example, if your screen is two feet

high, you should sit at least six feet from the screen. We recommend sitting so that your eyes are level with the screen.

Smart Hub

Menu → Support → Smart Hub

Using this function, you can stream movies, videos, and music from the Internet, access various for pay or free-of-charge applications and view them on your TV.

Application content includes news, sports, weather forecasts, stock market quotes, maps, photos, and games.

-  You can also start this function by pressing the  button on the remote control.

Notice

- ◆ Samsung Electronics takes no legal responsibility for any interruption of the Smart Hub service caused by the service provider for any reason.
- ◆ Application services may be provided in English only and the contents available may vary, depending on your area.
- ◆ For more information about a Smart Hub service, visit the web site of the applicable service provider.
- ◆ The Smart Hub service downloads and processes data via the Internet so that you can enjoy the Internet contents on your TV screen. If the Internet connection

is unstable, the service may be delayed or interrupted. Furthermore, the player may turn off automatically in response to conditions on the Internet. If this occurs, check the Internet connection and try again.

- ◆ The services provided are subject to change by the Smart Hub service provider without notice.
- ◆ The Smart Hub service contents may differ depending on the player's firmware version.
- ◆ For pay DivX contents with copy protection can only be played through a composite, a component or an HDMI

cable.

- ◆ If the TV displays these icons at the bottom left of the screen, you can use corresponding functions:

: Voice Control (System → Voice and Motion Control → Voice Control)

: Motion Control (System → Voice and Motion Control → Motion Control)

: An USB or Bluetooth Mouse (the device must be connected to the TV).
(System → Device Manager → Mouse Settings)

To start Smart Hub for the first time, follow these steps:

1. Press the  button.
2. The **Smart Hub** screen appears. In a few cases, the **Country** screen appears immediately after.
3. If the **Country** screen has appeared, select your country using your remote.
 -  Some applications are available only in certain countries.
4. The **General Disclaimer** screen appears. Select **Agree**.
 -  Screens can take a few seconds to

appear.

5. The **Privacy Policy** screen appears. Select **Agree**.
6. The **Service Update** screen appears and installs a number of services and applications. When done, it closes. The applications and services downloaded are displayed on the **Smart Hub** screen. This may take some time.
 -  **Smart Hub** may close momentarily during the installation process.
 -  A number of screens may appear after installation. You can close them or let them close on their own.

7. To start an application, select an application using your remote.

Using the Numeric Keypad

Selecting – using your remote while you are using the Screen Keypad enables you to change the text fields to lower case, capitalized case, upper case, numbers and icons.

You can use this Screen Keypad in a several **Smart Hub** applications.

Method 1: Using the keypad of ABC type.

1. For example, suppose that you want to

input “105Chang”.

2. Select – 3 times using your remote to change the input mode from lower case to numbers.
3. Select 1, 0 and 5 in numerical order.
4. Select – 3 times using your remote to change the input mode from numbers to upper case.
5. Select 2 3 times using your remote to input C.
6. Select – 3 times using your remote to change the input mode from upper case to lower case.

7. Input the rest of “Chang” using your remote in the same way. When done, select **OK**.

Method 2: Using the Keypad of XT9 type.

1. For example, suppose that you want to input “105Chang”
2. Select – 3 times using your remote to change the input mode from lower case to numbers.
3. Select **1**, **0** and **5** in numerical order.
4. Select – 3 times using your remote to change the input mode from numbers to capitalized case.

5. Select in sequence: 2, 4, 2, 6, 4. A window will appear displaying a list of words that can be entered using the selected numbers. Select “Chang” from the list by selecting **D** using your remote.

-  If “Chang” cannot be found in the list, select + to create your own dictionary. Add your own word to your dictionary.

Using the QWERTY Keypad

You can use this Screen Keypad in a several **Smart Hub** applications in same way as a keyboard.

Using the colored and function buttons with the QWERTY Keypad

- **A** Delete All

Delete all inputted character.

- **B** Numeric / QWERTY

Toggles the keypad mode between Numeric mode and QWERTY mode.

- ☑ When the keypad is set to QWERTY mode, you can input a character using a USB or Bluetooth keyboard connected on the TV.

-  Settings

Displays the options menu.

Input Language: select a input language.

XT9 Text Input: Turns on or off the recommended word function.

-  **Enter**

Enter the selected character.

-  **Return**

Return to the previous menu.

-  **Prev Page**

Move to the previous keypad.



Available only when the keypad screen

is icon mode.

-  Next Page

Move to the next keypad.

-  Available only when the keypad screen is icon mode.

Creating an Account

To establish your own, exclusive, configuration of Smart Hub, create your own Samsung account.

-  You must use an e-mail address as an ID.
-  You can register up to 10 User Accounts.

- ☞ You do not need an account to use the [Smart Hub](#).

To create an account, follow these steps:

1. On the [Smart Hub](#) screen, select **A** using your remote. The [Login](#) screen appears.
2. Select [Create Account](#) using your remote. The [Create Account](#) screen appears.
3. Select [Samsung Account](#). An entry screen and keypad appear.
4. Use the keypad to enter your e-mail address. This will serve as your ID.
5. When done, select [OK](#). The [Login](#) screen

reappears.

6. Select **Password**. The **Password** screen and a keypad appear.
7. Use the keypad to enter a password. The password can be any combination of letters, numbers, and symbols.
 -  If you select **A** using your remote, the TV show or hide the password as you enter it.
8. When done, select **OK**.
9. Select **Confirm password**. The **Password** screen and a keypad re-appear.
10. Repeat Steps 7 and 8.

11. When done, select **Create Account**. The Confirmation window appears.

12. Select **OK**. The Continue to register service ID window appears.

13. Select **OK**.

 If you don't have existing provider accounts or do not want to register existing accounts at this time, select **Cancel**. You can also let the window close on its own in about a minute.

14. The **Register Service Account** window appears.

 If you have existing accounts with

any of the listed providers, you can associate the provider account and the provider account password with your Samsung account. Registration makes it easier to access the providers web site. For registration instructions, go to Step 2 in [Account Manager](#) under [Settings](#) in the “Configuring the Smart Hub with Settings” section of this manual.

Customizing the Home Screen

- **A** Login / Logout

To log in to your Samsung account, follow these steps:

1. With the **Smart Hub** main screen displayed on your TV, select **A** using your remote. The **Login** screen appears.

2. Select the next to the **Samsung Account**.

If you want to input the **Samsung Account**. The keypad screen appears. Then you can input your **Samsung**

Account manually.

 When you select **Face Recognition Mode**, you can log in to the Samsung account using the **Face recognition** function without input your account. For more detailed information about the **Face recognition**, refer to "SMART Interaction" section in the e-Manual.

3. Select your ID from the list that appears. The **Login** screen re-appears.
4. Select **Password**. The **Password** window and a keypad appears.
5. Enter your password using your remote. When done, select **OK**.

- ☞ If you want **Smart Hub** to enter your password automatically, select **Remember my password** after you have entered your password. A ✓ mark appears. The **Smart Hub** will now enter your password automatically when you select or enter your ID.
- ☞ If you want to log in the **Smart Hub** automatically when the **Smart Hub** function starts, select **Sign me in automatically**. A ✓ mark appears.
- ☞ When you forgot password, you can reset your Samsung account password. Select **B** using your remote. A pop-up message appears, and the select **OK**. The guide to

resetting your password will be sent to your e-mail.

- **B** [WallPaper](#)

You can change a background image the Smart Hub home screen.

- **C** [Account Manager](#)

Lets you register your service provider accounts, delete or deactivate your Samsung account, and register or reset your face recognition. For more information about [Account Manager](#), refer to "Configuring the Smart Hub with Settings" in this section.

 Available only when you logged in the

Smart Hub.

Using the Tools menu with Smart Hub

- **Login / Logout**

Log in or log out to your Samsung account.

- **WallPaper**

You can change a background image the Smart Hub home screen.

- **Move**

The **Move** function lets you change the screen position of an application or a folder.

To use the Move function, follow these steps:

1. Select an application or a folder, and then open the **Tools** menu using your remote.
2. Select **Move**. A position change screen appears.
3. Move the icon using your remote. When the icon is in the position of your choice, select the icon. The application moves to its new location.

- **Move to Folder**

The **Move to Folder** function lets you move an application to a folder.

To use the Move to Folder function, follow these steps:

1. Select an application, and then open the **Tools** menu using your remote.
 2. Select the **Move to Folder**. The **Move to Folder** window opens.
 3. Select a folder using your remote. A move finished message appears, and then closes. The application has been moved to the folder.
-  Also, if you select an application in a folder, the application can be moved to the **Smart Hub** screen.

To access an application in a Folder

1. On the **Smart Hub** screen, select a folder.
The folder opens.
2. Select an application you want to execute.
The application service starts.

- **Delete**

The **Delete** function lets you delete application from the **Smart Hub**.

To use the **Delete** function, follow these steps:

1. Select an application, and then open the **Tools** menu using your remote.

2. Select **Delete**. The message **Do you want to delete selected item(s)?** appears.

3. Select **OK**. The application is deleted.

- **New Folder**

The **New Folder** function lets you create and name new folders. Once you have created a folder, you can move applications into it.

To use the **New Folder** function, follow these steps:

1. Open the **Tools** menu using your remote.

2. Select **New Folder**. The **New Folder** window and a keypad screen appears.

3. Enter the name of the folder using your remote.
4. When done, select **OK**. The **New Folder** screen closes and the **New Folder** appears on the **Smart Hub** screen.

- **Rename Folder**

The **Rename Folder** function lets you rename folders.

To use the **Rename Folder** function, follow these steps:

1. Select a folder, and then open the **Tools** menu using your remote.

2. Select **Rename Folder**. The **Rename Folder** window and a keypad screen appears.
3. Enter a new name using your remote.
4. When done, select **OK**. The **Rename Folder** window closes and the new name appears below the folder.

- **Lock**

The **Lock** function lets you lock some application in **Smart Hub** so they cannot be opened without entering the password.

-  Depending on the application, this function may not be supported.

To use the Lock function, follow these steps:

1. Select an application, and then open the **Tools** menu using your remote.
2. Select **Lock**. The Security window appears.
3. Enter your password using your remote. If you do not changed a password, enter “0-0-0-0”.
4. A confirming message screen appears. A lock symbol appears left to the application.

- **Unlock**

 Depending on the application, this function may not be supported.

To use the **Unlock** function, follow these steps:

1. Select an application, and then open the **Tools** menu using your remote.
2. Select **Unlock**. The Security window appears.
3. Enter your password using your remote. If you do not changed a password, enter “0-0-0-0”.
4. A confirming message screen appears. A lock symbol disappears.

- **Information**

You can view the detailed information about the selected application.

- ☑ Depending on the application, you can also lock or unlock the application in the **Detailed Information** screen.

Configuring the Smart Hub with Settings

The **Settings** menu gives you access to **Account Manager**, **Service Manager**, **Reset**, and **About Smart Hub** functions.

To access the **Settings** menu, and then select a menu item, follow these steps:

1. Open the **Tools** menu using your remote.
2. Select **Settings**. The **Settings** window appears.
3. Select a menu item using your remote.

- **Account Manager**

The **Account Manager** menu contains functions that let you register your service provider accounts, change your Smart Hub password, and delete or deactivate your Samsung account.

Link to other accounts: If you have existing accounts with any of the providers listed by the **Link to other accounts** function,

you can associate the provider account and the provider account password with your Samsung account. If you associate the account, you will be able to log onto the account through Smart Hub easily, without entering your account name or password.

 Before register your site account, corresponding application should be installed in the [Smart Hub](#).

To use the [Link to other accounts](#) function, follow these steps:

1. In the [Account Manager](#) menu, select the [Link to other accounts](#). The [Link to other accounts](#) window appears.

2. Select an application you want to associate with your Samsung account.
3. Enter your site ID and password using your remote. When done, select **OK**.
 -  This is the ID and password you normally use to access your account on this application.
4. If you have entered the ID and password correctly, the **Registered successfully.** message appears.
5. If want to add another service application, and then repeat Steps 2 through 4 to associate another service application.

6. When done, select **OK**.

Remove from TV Account List: Cancels all your current registered Service Accounts that you registered on the **Register Service Account** screen.

Deactivate Account: Deactivates your **Samsung Account** and deletes it and all your account settings entirely from the **Smart Hub**.

Face recognition: Register your face in your Samsung account. For more information about Face registration, refer to "**Face recognition**" in the SMART Interaction

section.

Remove recognized face: Delete registered your face in your Samsung account.

- **Service Manager**

Auto Ticker: You can set **Auto Ticker** to come on when powering on the TV.

 The Ticker application provides useful News, Weather, and Stock Market information. The Ticker application on **Smart Hub** must be downloaded to use this feature.

 Depending on your country, the Ticker application may have a different service or not be supported.

Push Notification Settings: When on, Push Notification that displays a notification message when an event takes place in an application installed on **Smart Hub**. The TV will display the notification message and allow you to view details of the event even while you are viewing TV.

- **Reset**

The **Reset** function initializes all downloaded applications, erases all user accounts and settings from the TV, and resets all **Smart**

Hub settings to the factory default settings. It then restarts **Smart Hub** as if it were starting for the first time.

Your account, however, remains on the Smart Hub server. To log into your account, enter your ID and password on the **Login** screen.

To use the **Reset** function, follow these steps:

1. In the **Settings** menu, select **Reset**. The **Reset** screen appears.
2. Enter the your security password using your remote.



The default password set is “0-0-0-0.”



The Smart Touch Control is not available.

If you forget the PIN code, press the remote control buttons in the following sequence in Standby mode, which resets the PIN to “0-0-0-0”:

MUTE  → 8 → 2 → 4 →  (Power on).

3. After a few moments, the **Smart Hub** automatically resets. The screen may go black, then **Smart Hub** re-appears. In a few moments, it starts the reinitialization procedure.
4. To complete the re-initialization, go to Step 2 in "To start Smart Hub for the first time, follow these steps:" section of this

manual.

- **About Smart Hub**

The **About Smart Hub** menu contains functions that display information about Smart Hub.

Detail: Lists information about Smart Hub including version number, memory usage, and the unique product ID.

Terms of Service Agreement: Display the **Terms of Service Agreement**.

Using the Samsung Apps

Samsung Apps

 → [Samsung Apps](#)

Samsung Apps is a store from which you can download applications to use on Samsung TV/AV equipment.

You can enjoy a variety of contents such as videos, music, photos, games, useful information etc. using the downloaded applications.

New applications are added regularly.

Using the colored and function buttons with the Samsung Apps

- **A** Login / Logout

Log in or log out to your Samsung account.

- **B** Filter by Price

To toggle the view between **All**, **Paid** and **Free**.

- **C** Sort

To sort the applications by **Recommended**, **Name**, **Date**, or **Downloaded**.

 You can sort all categories except **Most**

Popular.

- **D View Mode**

Each time you select **D** using your remote, the **View Mode** toggles between basic mode and thumbnail mode.

-  **Previous**

Move to previous page.

-  **Next**

Move to next page.

-  **Tools**

Displays the option menu.

- ↶ Return

Moves to previous menu.

Using the Samsung Apps by category

The following categories are available:

- What's New?

User can easily find newly (latest) registered application.

- Most Popular

Displays the most popular applications for users.

- **Videos**

Includes apps that provide video media such as movies, TV shows and short length videos.

- **Games**

Includes various game apps such as sudoku and chess.

- **Sports**

Includes apps that provide sports content such as game results, images and short length video.

- **Lifestyle**

Includes apps that provide lifestyle media

services such as music, personal photo management tools, and social networking such as Facebook and Twitter.

- **Information**

Includes apps that provide information content such as news, financial information, stock quotes, weather, etc.

- **Education**

Includes apps that provide education contents such as story book, dictionary, VOD (Video on Demand) for kids etc.

- **My Apps**

My Apps offers information about your available App cash coupon, purchased app list or already installed applications on your TV like detailed information, download contents etc.

 You can purchase App cash that you can use to buy applications through tv.samsungapps.com.

- **Help**

If you have questions about the **Samsung Apps**, check this section first.

To search an application in Samsung Apps, follow these steps:

1. On the **Samsung Apps** screen, select **Search Samsung Apps**. The **Search** window appears.
2. Enter a keyword you want to search using your remote.
3. When done, select an entry field.
4. Wait until the search result screen displays. Then you can select an application you want in the search result screen.

 You can find the keyword in the search

history If you searched a keyword before.

Search

 → Search

(May not be available, depending on your country.)

Easily search for and access content from diverse sources (e.g. applications, [Your Video](#), [AllShare Play](#))

1. On the [Smart Hub](#) screen, select [Search](#).
2. If you want to input a search term directly, select an entry field. A keypad screen appears. Enter the search term

using your remote.

- ☞ If you want to search by category, select a category using your remote.

Using the Search function by category

- **Your Video**

Personalize your movie-watching with a customized video on demand (VOD) recommendation service.

- **Most Searched**

You can search by selecting a key word in the key word list. The key word list displays

words you frequently use for searches.

- **Top Application**

You can search applications and services in the application list. The application list displays apps that users download frequently.

- **Search History**

You can find the keyword in the search history if you searched a keyword before.

Using the colored and function buttons with the Search

-  Refresh

Refresh the Search function.

-  Tools

You can set a general setting for Search function or delete the search history.

-  Return

Return to the previous menu.

Using the Tools menu with Search

- **General Settings**

Keyword Recommendation: Turns on or off the Keyword Recommendation function.

Search Scope: Sets a search scope. The default is allowed all application.

To customize a search scope you want, follow these steps:

1. On the **Search** screen, open the **Tools** menu using your remote.
2. Select **General Settings**.

3. Select an application in the **Search Scope**.

A ✓ mark disappears in the check box.

4. When done, Press the **RETURN** button.

- **Search History**

You can delete the keyword in the search history. Also, If you select **Delete All**, delete all your search history.

Your Video

 → **Your Video**

(May not be available, depending on your country.)

Using this service from the Smart Hub, you can get video recommendation and search for movies from multiple providers.

Using the Your Video

1. On the **Smart Hub** screen, select **Your Video**.
2. Enjoy your movie watching with a

customized video on demand (VOD)
recommendation service.

Family Story



→ Family Story

Family Story feature allows you to share photos, messages, and events with your family.

- **Create Group**

If you are starting **Family Story** for the first time among your family members, you can create a group and invite members.

- **Invite Members**

After creating a group, you can invite your family members who you want to share your

family's photos and events with.

- **Join Group**

If you were invited to this service from your family member, you can select **Join Group** to enjoy **Family Story** service.

To create a family group, follow these steps:

1. On the **Smart Hub** screen, select **Family Story**. The **Family Story** screen appears.
2. Select **Create Group**. The **Create Group** screen appears.
3. Select **AGREE**. It is required to agree with the terms prior to using **Family Story**.

4. Enter a [Group Name](#), [Your Name](#) and [Your Phone Number](#) using your remote.

 If you want to add a group image, select an image box. (An external device containing photos must be connected to your TV via USB.)

 * Fields marked with an asterisk are required.

5. When done, select [Done](#). The group creation is completed.

 If you want to invite members to your group, select [Invite Members](#). If you want to go your Family Story, select [Go to Family Story](#).

To invite members to your Family Story, follow these steps:

1. From the starting menu of **Family Story**, open the **Tools** menu using your remote, and then select **Group Members**. The **Group Members** screen appears.
2. Select **Invite Members**. The Invite Members for your Family Story screen appears.
3. Select **Select to enter Name..** The keypad screen appears.
4. Enter member's name using your remote. When done, select **Done**.

5. Select **Phone number or Samsung account ID**. The keypad screen re-appears.
6. Enter member's phone number or Samsung account ID using your remote. When done, select **Done**.
7. When done, select **Done**.
 -  If you want to add more members, select **Add member**, and repeat the Step 3 and 7.
8. New member invitation has been completed.
9. If invited by phone number, 4-digit invite code will be generated and the code need

to be shared with the member. If invited by Samsung Account, the member will be notified about the invitation via e-mail. Select **OK** to finish.

To join a group using the received invite code, follow these steps:

1. Start **Family Story** and accept the terms.
2. You will see a pop-up message asking about invitation type. If you were invited by phone number, please select **Invite Code**, or if you were invited by Samsung account, please select **Samsung Account**.
3. If joining by **Samsung Account**, a list of

invitation from your family groups will be displayed. Select **Accept** to join. You can select **Deny** if you don't want to join the invited group.

4. If joining by **Invite Code**, firstly enter your phone number using your remote. When done, select **Done**. Then you will see a list of invitations from your family groups. Select **Accept** to join. You can select **Deny** if you don't want to join the invited group. Enter the 4-digit invite code shared by your family member, and then select **Done** to finish.
5. Select **OK**. Joining your family group has been completed.

Fitness

 → Fitness

Using this function provided by **Smart Hub**, Lets you manage **Fitness** using the exercise-related application downloaded in the **Samsung Apps**.

 To use the **Fitness**, you should be logged in Smart Hub.

Read these note before exercising...

 Please do a warm-up or stretch before exercising.

- ☞ Stop exercising immediately if you feel pain, or dizzy, exhausted, or short of breath.

Create Your Profile

When you start **Fitness** for the first time, you should create your own profile. On **Fitness** screen, select **Create Your Profile**. A pop-up message appears. Select **Create Your Profile**.

- ☞ To go to next step, move to right side using your remote.

1. **Name**: Select **First Name** and **Last Name** to put in a new user name. The keypad

screen appears. Enter your name using the remote. When done, select **OK**.

2. **Gender**: Select your gender.
3. **Birthdate**: Enter your birthdate using your remote. It will be used to personalize some things for you.
4. **Units**: Select your preferred units. The selected units will be applied all over **Fitness**.
5. **Height**: Enter your height. This will be used to calculate your body mass index (BMI).
6. **Weight**: Enter your weight. This will be

used to calculate your body mass index (BMI).

7. **Complete:** Creation of your profile is finished. The TV displays the information of your profile and BMI. To start the **Fitness**, select **Enjoy Fitness**.

Using the Fitness with categories

- **Exercise**

Provide information on your exercise goal, current status and recommended contents.

- **Progress**

Provide information on your basic body profile, exercise progress, achievements for your goals, etc..

Kids



Using this function provided by [Smart Hub](#), lets you provides a quick launcher and the recommended list to access the kids or education-related application or contents easily and quickly. Also, it helps user (parents) to manage your kids.

Using the Kids with categories

- [Playground](#)

Displays recommended contents and applications. When you select an application

or content, the TV executes an application or contents immediately.

- ☞ The maximum number of contents list is 40.
- ☞ The contents list can be edited by user (parents). For more detailed information, refer to "[My Choice](#)" in this section.

- [Sticker Book](#)

Displays the Sticker Books collected stickers which your kids received. Also, it can be share with your [Family Story](#).

Your kids can receive the sticker through these methods:

- **By User (parent):** Presents a sticker using the **Present Sticker** function in the **Parents** menu.
- **Automatically:** Presents a sticker when watching content.

Creating a Sticker Book

1. If you want to create a new **Sticker Book**, select **Create a New Sticker Book**. The **Create a New Sticker Book** screen appears.
2. Enter the Sticker Book's name using your

remote. When done, select [Next](#).

3. Select a color of the Sticker Book. When done, select [Next](#).
4. Check the created sticker book. If you want to change a name, select [Edit](#). If you want to change a color, select [Back](#).
5. When done, select [Done](#). A new Story Book is created.

-  You can create a new sticker book. Maximum number of books is 10.
-  You can check arrived stickers in the [Get New Stickers](#). A new sticker will be saved only 10 stickers which recently received.

- **Browse All**

Displays the kids or education-related applications list and all contents list.

- ☑ When you select an application or contents, if the application or contents were not installed to the TV, the TV displays the corresponding download screen in the **Samsung Apps** screen.

To use the Browse All, follow these steps:

1. On the **Browse All** screen, select a character you wish. The selected character screen appears.
2. Select a contents you want play.

Videos: Displays the video contents of the corresponding character.

Games: Displays the game contents of the corresponding character.

Stories: Displays the e-book contents of the corresponding character.

3. The detailed information screen of the selected contents appears. You can play the contents, share with your **Family Story**, add to **Playground**, and give a rating.



If you were purchased already, you can play the contents. If you are not purchased, you can download the

contents in the [Samsung Apps](#).

- [Parents](#)

Lets you can edit the [Playground](#), give stickers to your kids, check a usage time, and set to alarm.

[My Choice](#)

You can add or delete the contents in the [Playground](#). The [Playground](#) displays the added contents only.

To add or delete the contents in the [Playground](#), follow these steps:

1. On the [Parents](#) screen, select [My Choice](#).

The **My Choice** screen appears.

2. Select contents you want to add or delete in the list. A pop-up message appears.
3. Select **Yes**.
4. The selected contents will be added or deleted.

Present Sticker

When your kids did a good job today, you can present a sticker to your kids.

To present a sticker to your kids, follow these steps:

1. On the **Parents** screen, select **Present Sticker**. The **Present Sticker** screen appears.
 2. Select a sticker you want to present. A pop-up message appears.
 3. Select **Yes**.
 4. Select a sticker book you want to present, and then select **Present**.
-  If you want to check a sticker book, select **Check Now**. You can check the sticker in the selected sticker book.

5. The selected sticker will be presented to your kids.

History

Lets you check a usage time of the application of your kids through a graph. Also, you can check a usage time of the each contents of your kids. Change a date or content title using your remote.

Set Alarm

Lets you can set the watching time of your kids. When the time is ended, the alarm window appears.

To set the watching time, follow these steps:

1. On the **Parents** screen, select **Set Alarm**.
The **Set Alarm** screen appears.
2. Select **Timer**.
3. Select time you wish. The alarm will be set.

Web Browser

 → **Web Browser**

(May not be available, depending on your country.)

Using this function provided by the **Smart Hub**, you can surf the Internet on your TV.

1. On the **Smart Hub** screen, select **Web Browser**. The **Web Browser** screen appears.
2. Surf the Internet in the same way as on a PC.

Using the colored and function buttons with the Web Browser

- **B** Control Panel

Shows or hides the control panel in the top of the screen.

- **C** Link Browsing / Pointer Browsing

You can change the cursor to **Link Browsing** mode or **Pointer Browsing** mode.

- **D** PIP

Turns **PIP** on or off. With **PIP** on, you can watch TV while using the **Web Browser**.

-  **Tools**

Displays the **Tools** menu.

Control Panel: Shows or hides the control panel in the top of the screen.

Link Browsing / Pointer Browsing: You can change the cursor to **Link Browsing** mode or **Pointer Browsing** mode.

PIP: Turns **PIP** on or off.

Add to Bookmark: Add to current page to the **Bookmarks**.

Enable Grabbing / Disable Grabbing: You can move to the direction you want a current web page. To move a web page, select a web

page. Then move to direction you wish using your remote.

 Available only when cursor is set to [Pointer Browsing](#).

-   [Scroll up/down](#)

You can scroll the page up or down.

 Available only when cursor is set to [Link Browsing](#).

-  [Return](#)

Close the [Web Browser](#).

Using the Control Panel with Web Browser

The **Web Browser** has a series of icons across the top of the screen. With these icons, you can easily use the **Web Browser**. The icons are described below, starting with the icon on the far left of the screen.

- **Back**

Moves to the previous web page.

 If there is no saved previous web page, this icon will not work.

- **Forward**

Moves to the next web page if there are

saved URLs.

 If there is no saved next web page, this icon will not work.

- **Refresh / Stop**

Refreshes the current page or stops the current connection from loading.

- **Home Page**

Goes to the URL you specified as your the home page.

- **Zoom**

You can select a zoom level of **50%**, **75%**,

100%, 125%, 150%, 200%, 300%, and **Fit to screen**.

- **Bookmarks**

Displays the **Bookmarks** screen. You can set the current page as a bookmark or select a favorite page to visit from the bookmark list. You can also sort by **Date**, **Name**, or **Times Visited**. To sort, select the **Sort**. When you select **Enter URL**, you can enter in a new URL address directly using your remote.

When you highlight a page, the **Option** appears on the right. In the **Option** pop-up, you can edit the selected page or delete the selected page from bookmark list.

Using the Tools menu with Bookmarks

- **Delete All**

Delete all bookmark lists.

- **Add to Bookmark**

Sets the current page as a bookmark.

- **Import bookmarks**

You can import a bookmark file saved in the other device like a PC.

- **Export bookmarks**

You can export a bookmark file from your TV to the other device connected your TV.

- **History**

Displays the **History** screen. You can select a web page to visit in the **History** list. You can also sort by **Date**, **Name**, or **Times Visited**. To sort, select the **Sort**. When you select **Enter URL**, you can enter in a new URL address directly using your remote.

When you highlight a page, the **Option** appears on the right. In the **Option** pop-up you can delete the selected page from the history list or add the selected page to bookmark.

 If you want to delete all history list, open the **Tools** menu using your remote, and then select **Delete All**.

- **URL Field**

Shows the URL of the current page. If you select the URL field, the URL pop-up appears. Using your remote, you can enter in a new URL directly.

- **Windows List**

Displays list or images of open windows (the **Windows List**). You can open a new page to the list (using **Open new window**), select and access a page in the list, select and close a page in the list, or close all pages. When you select **Enter URL**, you can enter in a new URL address directly using your remote.

Using the Tools menu with Windows List

- **Open new window**

Open the new web browser. A new web browser automatically displays the home page.

- **Close all windows**

Close the currently opened all **Windows List**. After closing all **Windows List**, TV opens a new web browser automatically. A new web browser automatically displays the home page.

- **Search**

Lets you search the web. When you select

the **Search** entry field, the **Search** screen appears.

To search the web by word input, follow these steps:

1. On the **Search** screen, select the search engine. Also, you can select a different search engine.
2. Select **Please enter a keyword**.. The keypad screen appears.
3. Enter the word you want to search using your remote. The TV searches the word by search engine.

- **Share**

Share the current web page to your **Family Story**.

- **Options**

You can configure the **Web Browser** settings.

Setting up the Web Browser

Move the cursor to the top of the screen, and then select the **Options** icon.

- **Reading Tools**

Provides an easy-to-read page by enlarging the main text.

- [Approved Sites](#)

Allows to restrict your children's access to inappropriate web pages. Therefore, this function allows access of only the registered web sites.

 Every time you access the [Approved Sites](#), the PIN screen appears and you should enter the PIN.

[Approved Sites Feature](#): Turns on or off the [Approved Sites](#).

[Reset password for Approved Sites](#): Change the [Approved Sites](#) password.

[Add current site](#): Lets you add the currently displayed web site to the [Approved Sites](#) list.

Manage Approved Sites: Lets you key in URLs to add to the Approved Sites List and delete sites from the Approved Sites list.

 If you turn **Approved Sites** on and have not added any sites to the Clean site list, you will not be able to access any Internet sites.

- **Private Browsing On / Private Browsing off**

Enable or disable the Privacy mode. When the Privacy mode is enabled, the browser does not retain the URLs of sites you visit. If you want to enable Privacy mode, select **Yes**.

If the Privacy mode is running, the “Stop” icon appears in front of the URL at the top of

the screen. To disable Privacy mode, select it again when Privacy mode is enabled.

- **PIP Settings**

Lets you configure the **PIP** function.

PIP Position: Select a position for the PIP sub-picture.

Sound: Select the audio source you will hear - Main or Sub - when PIP is on.

- **Web Browser Setting**

You can configure **Web Browser** options.

Set as homepage: You can set the home page.

- **Most visited:** Set the most frequently visited URL as the home page.
- **Current Page:** Sets the current page as the home page.
- **Bookmarks:** Sets the bookmarks URL as the home page.
- **Enter URL:** Lets you key in the URL of the page you want for your home page. The keyboard works like a cell phone texting keyboard.

Pop-up Block settings: Turns the **Pop-up Block** on or off.

Ad Block Settings: You can determine whether to block advertisements and select

the URLs for which advertisements are blocked.

- **Ad Blocker:** Turns the **Ad Blocker** on or off.
- **Block current page:** Adds the current page to the blocked list.
- **Manage blocked sites:** You can add a website for which advertisements should be blocked by directly keying in the URL, or you can delete a website from the list.

General: You can delete your personal information.

- **Delete history:** Deletes the website history.

- **Delete browsing data:** Deletes Internet access information such as cookies.
- **Reset Settings:** Reset all web browser settings to the factory defaults.
- **Hide Menu:** Turns on or off the control panel auto-hide.

Encoding: You can set the Encoding setting for web pages to Automatic or Manual.

- **Auto select:** Turns on or off the Encoding setting for web pages automatically.
- **Setting:** Select the Encoding settings for web pages manually. Select an encoding format from the encoding format list.

Pointer: You can set the speed of the cursor

when the cursor is set to **Pointer Mode**.

- **Pointer Speed**: Select a pointer speed.

Browser Information: You can check the version information about the **Web Browser**.



Skype created a little piece of software that makes communicating with people around the world easy and fun.

With Skype you can say hello or share a laugh with anyone, anywhere. And if both of you are on Skype, it's free. Communicate with people around the world!

- ☞ For more information, download the Skype user's manual from "www.samsung.com."

[Legal Statement]

Due to the various capabilities of products featuring the Samsung Smart Hub - Content Service, as well as limitations in the available content, certain features, applications, and services may not be available on all devices or in all territories.

Some features on Smart Hub may also require additional peripheral devices or membership fees that are sold separately. Please visit <http://www.samsung.com> for more information on specific device information and content availability. The services and availability of content through Smart Hub are subject to change from time to time without prior notice.

SMART Interaction

for LED 7500 series and above, PDP 8000 series

Using this function, you can access and control menu options and functions using speech, motions or face recognition.

INFORMATION BOOKLET DISCLAIMER

- Face recognition Log-in

In order for **Face recognition** to function, a thumbnail image of your face will be stored in your TV for logging-in purposes.

Logging into the **Smart Hub** using **Face**

recognition may be less secure than using an ID and password.

- TV Camera Usage

Before using the TV Camera, you should be aware that under some circumstances and under certain legal conditions your use/ misuse of the TV Camera can result in legal liability for you. By using the TV Camera, you agree that you will not use the camera (i) in locations where cameras are generally prohibited (such as bathrooms, locker rooms or changing rooms), (ii) in any manner that

will result in an invasion of a person's privacy or (iii) in violation of any applicable laws, regulations or statutes.

When you use a TV camera, you should check whether a tape attached or not in rear of the TV camera, and then you can use a TV camera after adjust a camera angle. When you don't want to use a TV camera, we recommend to use after a camera lens fixes to upwards. In this case, **Face recognition** and **Motion Control** are not available.

Voice Control

Menu → System → Voice and Motion Control → Voice Control

Enable or disable the voice recognition function. Lets you access and control menu options and functions using speech.

-  For accurate voice recognition, refer to the Standard Voice Command list at the Samsung web site (www.samsung.com → support → Manuals & Downloads).
-  **Voice Control** function can be affected recognition by unclear pronunciation, voice level, or surrounding noise.

- ☞ To use **Voice Control**, you must pronounce words and phrases clearly and correctly in the language you selected in **Language**.
- ☞ Ambient noise may cause **Voice Control** to malfunction. (Appropriate surrounding noise: Below 40dB)

Your TV can "hear" your voice commands in two ways:

- Using the TV's microphone. (Distant Recognition)

- ☞ We are recommended using **Voice Control** function within about 13 ft with your TV. You can check the

usable distance by using **Voice Control Environment Test** (System → Voice and Motion Control → Voice Control → **Voice Control Environment Test**).

– Using the **VOICE**  button on your remote. (Close Proximity Recognition)

 When you use the TV's microphone, the words may not be recognized because of ambient noise. If this occurs, try using the **VOICE**  button on your remote. The TV will be able to recognize a voice command more easily.

 The **VOICE**  button on your remote is always activated. If you want to use the TV's microphone, turn on **Voice Control**

(System → Voice and Motion Control → Voice Control).

- ☞ Say a voice command to proper volume into the microphone of your remote within 0.3 – 0.9 feet. If voice level is too small or large, voice command may not be recognized.
- ☞ If a menu option or function is not supported by the Voice Control function, we suggest trying the Motion Control function. To use the Motion Control, raise your hand while opening it toward the screen, hold it for a moment and then wave it 3~4 time to the left and right. Motion Control starts. If the Motion

Control starts, the cursor is displayed at the center of the screen and the **Motion Guide Bar Size** is at the bottom of the screen.

- **Voice Control**

Turns the **Voice Control** function on or off.

 The **VOICE**  button on your remote is always activated.

- **Language**

Select the recognition language you want to use.

- **Trigger Words**

You can select the trigger words that start the **Voice Control** function. Alternatively you can turn on your TV using the **Trigger Words** if **Voice Control** function is set to **On**.

- If **Trigger Words** is set to **Hi TV**, say **Hi TV Power On**.
- If **Trigger Words** is set to **Smart TV**, say **Smart TV Power On**.

- **Voice Command Bar Size**

Set the **Voice Command Bar Size** mode to **Minimum** or **Full**. **Minimum** displays the least number of words and phrases you can use. **Full** displays all the words and phrases.

- **Voice Sensitivity**

You can configure the sensitivity of Voice recognition.

Howling: Select howling levels.

Recognition responsiveness: Select the responsiveness level of Voice recognition.

- **Voice Control Environment Test**

You can test the amount of ambient noise level detected by the TV microphone.

- **Noise Test:** This test checks the amount of ambient noise detected by the TV microphone. Too much ambient noise will prevent Voice Command from

functioning. To run, select **Next** using your remote. The test starts and takes a few seconds. Please keep as quiet as possible during the test.

- **Mic & Speaker Test**: Determines if the sound from the TV speakers picked up by the TV microphone will disrupt Voice Command. To run, select **Start** using your remote. The test starts and takes a few seconds. Please keep as quiet as possible during the test.



Available only when **Speaker Select** is set to **TV Speaker**.

- **Voice Control Test**: This test checks the volume level and clarity of your voice for

use with **Voice Control**. Select **Start** using your remote. After the test starts, say the test words listed in the instructions as loudly and clearly as you can.

-  If the test is not successful, select **Retest**, and then say the words loudly and clearly again.

To use the **Voice Control** function, follow these steps:

-  If **Voice Control** function is set to **On**, the TV may be turned on automatically by effect of the ambient environment.

1. Say the **Trigger Words** that you selected

into the microphone embedded in the TV or press the **VOICE**  button on your Smart Touch Control. The TV displays the **Voice Command Bar Size**.

 When you use **Voice Control**, the TV's volume is set to 5 automatically.

2. Say a word or phrase listed in the **Voice Command Bar Size**.

 Pronounce the word or phrase clearly and correctly in the language you selected in **Language**.

3. Wait until recognition is complete, and then say the next command in the same fashion.

- ☞ To exit the **Voice Control** mode, say the **Trigger Words** or "Cancel" using the TV's microphone or press the **RETURN** ↩ button.

Using the Voice Text Input Mode

1. Say "Search All" while in the **Voice Control** mode.

- ☞ When you use a **QWERTY** keypad screen, you can use the Voice Text Input Mode. Say the **Trigger Words** that you selected into the microphone embedded in the TV or press the **VOICE** 🗣 button on your Smart Touch Control. You cannot use it for some

UIs such as URL input boxes.

2. Say the word or phrase you wish to search for.

3. The TV executes the spoken function.

 Voice Control performance levels will vary based on the language spoken.

Motion Control

Menu → System → Voice and Motion Control →
Motion Control

Enable or disable the **Motion Control** function. Lets you control your TV by moving the TV cursor using specific motions.

- ☞ **Motion Control** function can be affected recognition by motion posture, or ambient brightness conditions.
- ☞ Some applications may not support **Motion Control**.
- ☞ You may experience physical fatigue when you use the **Motion Control** for a long time.
- ☞ To use the **Motion Control**, please avoid direct sunlight.
- ☞ We are recommended using **Motion Control** function within about 5 – 13 ft with your TV. TV Camera's recognition range may differ depending on the angle

of camera or other conditions. You can check the recognition range of TV camera by using **Motion Control Environment Test** (**System** → **Voice and Motion Control** → **Motion Control** → **Motion Control Environment Test**).

- **Motion Control**

Turns the **Motion Control** function on or off.

- **Motion Guide Bar Size**

Set the **Motion Guide Bar Size** mode to **Minimum** or **Full**.

- **Motion Control Environment Test**

You can test the brightness of room and the camera angle.

- **Brightness Test:** This test checks to see if your room is bright enough for **Motion Control** to work properly. Select **Start** using your remote. The test starts and takes a few seconds. (Appropriate ambient brightness: 50 – 500 Lux)

- Do not illuminating a sunlight or lights directly into the camera lens.

- Make sure that the camera lens is cloaked by an object.

- **Camera Angle Test:** On the **Camera**

Angle Test screen, select **Start** using your remote. A rectangle appears on the screen. Move yourself into the rectangle by adjusting the camera or moving yourself in front of the camera. If you are not within the rectangle position, the test may not work properly. After aligning your body with the TV, raise your hand while opening it toward the screen, hold it for a moment and then wave it 3~4 times to the left and right.

To use the Motion Control function, follow these steps:

1. To use the **Motion Control**, raise your

hand while opening it toward the screen, hold it for a moment and then wave it 3~4 times to the left and right. **Motion Control** starts. If the **Motion Control** starts, the cursor is displayed at the center of the screen and the **Motion Guide Bar Size** is at the bottom of the screen.

2. Control the TV using your hands. For the useable motions, see below.

-  Note that the **Motion Control** function closes if your hands go out of the camera range.
-  While using the **Motion Control**, if you use the other devices (i.e. remote control,

keyboard, etc.), **Motion Control** closes.

Controlling the TV with your hands using motions

-  **Access Motion Control**
 - **Action:** Spread your hand in the direction of the camera, and shake it three or four times from a side to side.
-  **Pointing Navigation**

Moves the cursor to the position you want.

 - **Action:** Spread your hand and guide the cursor to position you want.

-  **Run**

Selects an item or executes a command that is indicated by the cursor or is highlighted.

– **Action:** Clench your fist.

 When you are viewing a page, you can use the **Run** motion to move the page in the direction you want. To move a page, clench your fist, keep it clenched, and then move it in the direction you want the page to move. Note that not all pages can be moved.

-  **Return**

Return to the previous menu.

- **Action:** Spread your hand and rotate it counterclockwise.

- **Channel / Volume Control**

Changes the channel or adjust the volume.

- ☞ If you use the **Motion Control** function while watching a channel, the channel / volume control screen appears.
 - **Action:** Use the **Pointing Navigation** motion to move the cursor to the channel or volume controller, and then uses the **Run** motion to adjust the channel or volume.
 - ☞ If you use the **Run** motion once, it has

the same effect as pressing a button on your remote. If you hold the **Run** motion, it has the same effect as pressing and holding a button on your remote.

-  **Scroll**

Scroll the page in the direction you want.

For example, suppose that you want to scroll down.

 Some applications may not support this function.

1. Move the cursor to the bottom of the screen (page scroll zone) using the **Pointing Navigation** motion.

2. Move the cursor to the center of the screen using the [Pointing Navigation](#) motion.
3. The page will move down.

Face recognition

 → [Tools](#) → [Settings](#) → [Account Manager](#) → [Face recognition](#)

Enable or disable the Face recognition function. Lets you register your face in your Samsung account. Also, you can log in to the Samsung account using the [Face recognition](#)

function without inputting your account ID or your account password.

- ☑ You can register your face in only one account.

To register your face in your Samsung account, follow these steps:

- ☑ To use this function, you must log into [Smart Hub](#). If you don't have a Samsung account, you should create one before using this function. To create your Samsung account, refer to “Creating an Account” in [Smart Hub](#).

1. On the [Smart Hub](#) screen, open the [Tools](#) menu using your remote, and then select

Settings.

2. Select **Account Manager**. The **Account Manager** screen appears.
3. Select **Face recognition**. The **Face recognition** screen appears.
4. Move your face into the square in the center of the screen, and then wait until a square changes from red to green.
 -  If Face recognition fails, select **Retry**, and then try again.
5. When done, your face is now registered in your Samsung account. The Continue to Register Service window appears.

- ☞ If you want to register service later, select **OK**. You can register services later using the **Link to other accounts** in the **Smart Hub** menu (**Tools** → **Settings** → **Account Manager** → **Link to other accounts**).

To log in to your Samsung account using Face recognition, follow these steps:

- ☞ If you use **Face recognition** to log into **Smart Hub**, it may be less secure than logging in with a password.
 1. With the **Smart Hub** screen displayed, select **A** using your remote. The **Samsung**

Account screen appears.

2. Select **Face Recognition Mode**. The **Face recognition** screen appears.

 To return to the **Samsung Account** screen, select **Password mode**.

3. The TV starts **Face recognition**. Face the front of the TV screen. The TV will recognize your face automatically.

 A Green square indicates a registered face. A red-square indicates an unregistered face.

 If the TV fails to recognize your face, try again.

4. The TV logs you into your Samsung account automatically.

-  If the TV recognizes two or more, the Samsung account list appears. Select your account to log in.
-  If your face is unregistered, you can register your face in your Samsung account. Follow steps 4 through 5 in the “To register your face to your Samsung account, follow these steps:” procedure above.
-  If you have no account, you can create one, you can create an account. For more detailed information, refer to “Creating an Account” in Smart Hub

section.

Specification for SMART Interaction

Voice Control

- **Wake On Voice**

Environmental and Evaluation Criteria	Condition	Evaluation Item	Management Specifications
Surrounding Noise	~ 40dB	Distance	1M – 4M
Required Voice Level	60 dB or higher	Angle	±30°
TV Volume(dB)	Step 0		
Supported Languages	3 languages	Supported languages may differ depending on the model or Voice Control setting.	

● Magic Word

Environmental and Evaluation Criteria	Condition	Evaluation Item	Management Specifications
Surrounding Noise	~ 40dB	Distance	1M – 4M
Required Voice Level	60 dB or higher	Angle	±30°
TV Volume(dB)	Step 10		
Supported Languages	3 languages	Supported languages may differ depending on the model or Voice Control setting.	

● Embedded Voice Recognition

Environmental and Evaluation Criteria	Condition	Evaluation Item	Management Specifications
Surrounding Noise	~ 40dB	Distance	1M – 4M
Required Voice Level	60 dB or higher	Angle	±30°
TV Volume(dB)	Step 5		
Supported Languages	3 languages	Supported languages may differ depending on the model or Voice Control setting.	



To view all commands list of desired language, refer to the Guide at the Samsung web site (www.samsung.com → Support → Manuals & Downloads).

Motion Control

● Conditions for Recognition

Environmental and Evaluation Criteria	Condition	Evaluation Item	Management Specifications
Operating Speed	Slow / Fast	Distance	1.5M — 4M
Environment [Illumination]	50Lux — 500Lux	Horizontal Angle	±15°
Background Recognition	White or Grey	Vertical Angle	±10°

Face recognition

● Conditions for Recognition

Environmental and Evaluation Criteria	Condition	Evaluation Item	Management Specifications
Skin Color	White, Yellow, Black, Indian, Hispanic	Distance	1.5M – 4M
Environment [Illumination]	50Lux – 500Lux	Horizontal Angle	$\pm 15^\circ$
Background Recognition	White or Grey	Vertical Angle	$\pm 10^\circ$
Response Time	2 sec (for 1 person) – 8 sec (for 5 persons)		

Smart Touch Control

- Touch

Environmental and Evaluation Criteria	Condition	Evaluation Item	Management Specifications
Response Time	Within 300 msec. (Connected State)	Distance	30cm
	Within 1.5 sec. (Disconnected State)		4M
		Vertical Angle	0° – 20°
		Horizontal Angle	0° – 85°

● Server Voice

Environmental and Evaluation Criteria	Condition	Evaluation Item	Management Specifications
Surrounding Noise	45 – 50dB	Voice Recognition Distance	10cm – 30cm
		Remote Control Operating Distance	30cm – 4M
Required Voice Level	60 dB or higher		
TV Volume (dB)	Step 50		
Supported Languages	3 languages		
Response Time	~ 5 sec		

● Hot Keys

Environmental and Evaluation Criteria	Condition	Evaluation Item	Management Specifications
	Connected State	Distance	30cm
	Disconnected State (IR)		4M
		Vertical Angle	0° – 20°
		Horizontal Angle	0° – 85°

● Pairing

Environmental and Evaluation Criteria	Condition	Evaluation Item	Management Specifications
Distance	30cm	Distance	30cm
Angle	0°		4M
Environment	The operation should not be effected.	Angle	0°
Response Time	1min.		45°

Panel Key

- Usability

Environmental and Evaluation Criteria	Condition	Evaluation Item	Management Specifications
Temperature/Humidity	0°C – 50°C 50% – 75%		

TV Camera

- Internal

Environmental and Evaluation Criteria	Condition	Evaluation Item	Management Specifications
Surrounding Noise	~ 40dB	Distance (AF Operation)	1M
Environment [Illumination]	30Lux – 500Lux		4M
Temperature/Humidity	0°C – 50°C 50% – 75%	Angle (AF Operation)	45°(Horizontal)
			20°(Vertical)

- External

Environmental and Evaluation Criteria	Condition	Evaluation Item	Management Specifications
Surrounding Noise	~ 40dB	Distance (AF Operation)	1M
Environment [Illumination]	30Lux – 500Lux		4M
Temperature/Humidity	0°C – 50°C 50% – 75%	Angle (AF Operation)	45°(Horizontal)
			20°(Vertical)

AllShare Play



→ AllShare Play

Enjoy photos, music and/or movie files saved on a USB Mass Storage Class (MSC) device and/or your PC.

-  To view content on a USB device, you should plug the device into a USB port on the TV.
-  If you want to use a USB HDD, we recommend to use a USB HDD that has a power adapter.

Connecting a USB Device

1. Turn on your TV.
 2. Connect a USB device containing photo, music and/or movie files to the USB port on the TV.
 3. When a USB device is connected to the TV, the **New device connected.** window appears. Select a category you want to play among **Videos**, **Photos** and **Music**.
-  The TV may display the files on the USB device automatically if it is the only device connected.

Disconnecting a USB Device

Method 1: Using the SOURCE button.

1. Press the SOURCE  button **for Standard Remote Control** or select a **Source** **for Smart Touch Control**.
2. Select a desired USB device, and then press the TOOLS  button **for Standard Remote Control** or  **for Smart Touch Control** button. The **Tools** menu appears.
3. Select **Safely Remove USB**, and then wait until the selected USB device is disconnected. You can remove a USB device from the TV.

Method 2: Using the AllShare Play home screen.

1. Go to **AllShare Play** home screen. ( → **AllShare Play**)
2. Select any category except **My List**, and then press the  button **for Standard Remote Control** or press the Touch Pad **for Smart Touch Control**.
3. Select a desired USB device, and then press the **TOOLS**  button **for Standard Remote Control** or  **for Smart Touch Control** button. The **Tools** menu appears.
4. Select **Safely Remove USB**, and then

wait until the selected USB device is disconnected. You can remove a USB device from the TV.

- ☞ To remove a USB device from the TV, we recommend use [Safely Remove USB](#) function.

Read this information before using AllShare Play with a USB device.

Restriction and Caution

- ◆ Before connecting your device to the TV, please back up your files to prevent them

from damage or loss of data. SAMSUNG is not responsible for any data file damage or data loss.

- ◆ Connect a USB HDD to the dedicated USB (HDD 5V 1A) port.
- ◆ Do not disconnect the USB device while it is loading.
- ◆ If you connect a USB device with a USB extension cable, the TV may not recognize the USB device or read the files on the device.
- ◆ If a USB device you connect to the TV is not recognized, the files on the device are corrupted, or a file in the list is not played, connect the USB device to a PC, format

the device and check the connection.

- ◆ If a file you deleted from the PC is still found when you run Smart Hub, use the “Empty the Recycle Bin” function on the PC to permanently delete the file.
- ◆ If the database of the saved file list cannot be constructed because there is no free space on the USB device, you may not be able to view a new file even if you have added the file to the USB device.

Supported Devices

- ◆ Certain types of USB Digital camera and audio devices may not be compatible with this TV.

- ◆ AllShare Play supports only USB Mass Storage Class (MSC) devices. MSC is a Mass Storage Class Bulk-Only Transport device. Examples of MSC are Thumb drives, Flash Card Readers and USB HDD (USB HUB are not supported). Devices should be connected directly to the TV's USB port.
- ◆ More than 3TB USB HDD is not supported.
- ◆ If more than 2 PTP devices are connected, you can only use one at a time.
- ◆ If more than two MSC devices are connected, some of them may not be recognized. A USB device that requires high power (more than 500mA or 5V)

may not be supported.

- ◆ If the TV has no input during the time set in Auto Protection Time, the Screensaver will run.
- ◆ The power-saving mode of some external hard disk drives may be released automatically when you connect them to the TV.

File system and formats

- ◆ The USB function might not work properly with unlicensed multimedia files.
- ◆ MTP (Media Transfer Protocol) is not supported.

- ◆ The file system supports FAT16, FAT32 and NTFS.
- ◆ AllShare Play supports only the Sequential jpeg format. It does not support the Progressive jpeg format.
- ◆ The higher the resolution of the image, the longer it takes to display on the screen.
- ◆ The maximum supported JPEG resolution is 15360 X 8640 pixels.
- ◆ If a file is corrupted or the TV does not support the file type, the **Not Supported File Format.** message appears.
- ◆ If the files are sorted by **Folder view**, the

TV can display the names of up to 1000 files in each folder.

- ◆ If the number of files and folders saved on a USB storage device is approximately over 8000, the files and folders may not appear and some folders may not be opened.
- ◆ The TV cannot play MP3 files with DRM that have been downloaded from a for pay site. Digital Rights Management (DRM) is a technology that supports the creation, distribution, and management of digital content in an integrated and comprehensive way, including protecting the rights and interests of content

providers, preventing illegal copying of contents, and managing billings and settlements.

- ◆ Even if the file to be played is encoded by a supported format, an error message may appear due to a sub container or profile problem.

Connecting to a PC through a network

You can play pictures, music, and videos saved in your PC through a network connection in the **AllShare Play** mode.

- ☑ For more information on how to configure your TV and connect it to

your network, refer to “Setting up the Network” in this manual.

- ☞ To view content located on your PC, you must have connected your TV and your PC to your LAN and downloaded and installed AllShare PC Software on your PC.
- ☞ We recommend you locate both your TV and PC in the same network subnet. IP addresses have four parts, separated by periods (111.222.333.444). If your TV and PC are in the same subnet, the first 3 parts of the TV IP address and the PC IP address (111.222.333) will be the same and only the last part (the host address)

will be different.

The following AllShare Play functions are not supported when you are playing media from a PC connected through a network:

- ❏ The **Background Music** and **Background Music Setting** functions.
- ❏ Sorting files by preference in the **Photos**, **Music**, and **Videos** folders.
 - The ◀ or ▶ function while a movie is playing.
- ❏ DivX DRM are not supported.
- ❏ Set your PC firewall program so that AllShare PC Software is a permitted

program.

- ☒ Depending on the Internet server, when you use **AllShare Play** through a network connection:
 - The sorting method may vary.
 - The **Scene Search** function may not be supported.
 - The **Resume** function, which resumes playing of a video, may not be supported.
 - The **Resume** function does not support multiple users. (It memorizes only the point where the most recent user stopped playing a video.)

- The search function may not work depending on the content information.

- ☒ You may experience file stuttering while playing a video in AllShare Play through a network connection.

Using the AllShare Play

AllShare Play enables you to enjoy the following services. You need to log in to your Samsung account to use web storage or social services.

AllShare Play can play various contents in three ways:

- Using USB Device: You can play videos, photos, or music from a connected USB device.
- Using DLNA or Web storage: You can play various contents from devices connected to your home network or web storage.

– Using Social Services: You can play some content from social services such as Family Story, Facebook or Picasa.

 Before using Facebook or Picasa, it should be installed in the Smart Hub.

 To use SugarSync, Facebook, or Picasa, you should log in to corresponding application. Alternatively, you can register your application account in to your Samsung account. To register your application account, refer to "Configuring the Smart Hub with Settings" in the Smart Hub section.

 To use Family Story, you should log in

to your Samsung account. Before using Family Story, you should join a group at least one more.

-  You can transfer a desired content to other device connected to the TV.

Contents Type	Supported transfer device
USB	DLNA, SugarSync, Family Story, Picasa, Facebook
Camera	DLNA
DLNA	USB
SugarSync	USB
Family Story	USB
Picasa	USB
Facebook	USB
Mobile device	USB

My List (In AllShare Play)

 → AllShare Play → My List

Using this function, you can access the content easily and quickly.

- **Recently Played**

Displays the videos, photos or music file list of recently played. If you have a file you want to play again, use this category.

- ☐ When you play a file from the **Recently Played** list, and the USB device is not connected or the file is not found, the **"Cannot find the file you're looking for."**

message appears.

- ☞ Up to 48 files are listed in descending order of playing time on the basis of the time configured on the TV so that the last played file comes first.
- ☞ When you try to play a file on a mobile phone, the file may not be played.

- **What's New**

Displays the newly updated videos, photos or music file saved on the USB device or your PC. If you have a newly updated file you want to play, use this category.

- **Playlist**

Displays the Playlist files saved on the USB device or your PC. If you want to play a playlist, select the playlist. The selected playlist will play immediately.

- ☑ You can create up to 12 playlists.

- ☑ You can add up to 100 files to a single playlist.

- ☑ You can only add one type of content to a single playlist. For example, you can only add music files to a playlist that includes music files.

Creating the Playlist

1. Select the desired file in the **Videos**, **Photos**, or **Music** file list.
2. Open the **Tools** menu using your remote, and then select **Add to Playlist**.
3. Select a file you want to add. The  mark appears in the check box.
4. Repeat Step 3 to select additional files.
 -  To select all the files in the list, select **Select All**. To cancel a selection, select the file again.
5. When done, select **Add**. The **Add to Playlist** screen appears.

6. Select **Create New**. The **Create a new playlist** screen appears.
7. Enter playlist name using your remote.
8. When done, select **Done**. The newly playlist is created.

To add files to playlist, follow these steps:

1. Follow Steps 1 through 4 in the “Creating the Playlist” procedure.
2. Select a playlist to add files. The files will be added to playlist you selected.

To delete one or more files in the Playlist, follow these steps:

1. Select a playlist you want to edit.
2. Open the **Tools** menu using your remote, and then select **Edit Playlist**. The **Edit Playlist** screen appears.
3. Select a file you want to delete. The  mark appears in the check box.
4. Repeat Step 3 to select additional files.
 -  To select all the files in the list, select **Select All**. To cancel a selection, select the file again.
5. When done, select **Remove**. A pop-up

message appears.

6. Select **Yes**. The selected file(s) be removed in the Playlist.

Videos (In AllShare Play)

 → AllShare Play → Videos

You can play video files saved on USB device and/or your PC.

-  For more information about the subtitle formats and codec formats, refer to "Supported Subtitle and AllShare Play file formats" in the Other Information section.

Playing a Video

1. On the AllShare Play screen, select Videos.
2. Select the device you want to play.

3. Select the desired video in the file list.

- ☞ If you stop the playing, you can play the video later from the point where you stopped it.
- ☞ The file name appears on the top with its playing time.
- ☞ If video time information is unknown, the playing time and progress bar are not displayed.

Playback control button with Videos

- ◀ / ▶

Each time you select ◀ or ▶ using your

remote, the playback speed change as follows. (◀◀ 1 / ◀◀ 2 / ◀◀ 3 / ▶▶ 1 / ▶▶ 2 / ▶▶ 3)

- ◀, ▶ **Standard remote control** / Slide to left or right direction **Smart Touch Control**

Jump to backward or forward from current position.

- ||

Pause the scene.

- In pause mode, select ▶▶. Each time you select ▶▶ using your remote, the playback speed is reduced to ▶▶ 1/8 / ▶▶ 1/4 / ▶▶ 1/2.
- In pause mode, select ||. Each time

you select **||** using your remote, a new frame will be appear.

-  To return to normal speed playback, select **▶** using your remote.
-  The product does not play sound in stop mode.
-  Stop motion operates only in the forward direction.

Using the Tools menu with Videos

- On the file list screen, you can use the following these options:

- [View](#)

You can sort the file list by selecting a sort criteria you want.

- [Selection Play](#)

You can play by selecting the desired music file in the file list.

- [Send](#)

Lets you send your video files with your [Family Story](#) or other devices.



If you want to use this function, you should log in the [Smart Hub](#).

- [Login / Logout](#)

You can login or logout your Smart Hub account.

- [Add to Playlist](#)

Lets you make your own playlist. When you use the playlist, you can play music you want to listen easily and quickly.

- [Go to playlist](#)

Moves to Playlist screen.

- [Information](#)

Displays detailed information about the selected file.

- During playback, you can use the following these options:

- [Go to Videos List](#)

Moves to the file list screen.

- [Play from the Beginning](#)

You can restart a video file from the beginning.

- [Scene Search](#)

You can use the [Scene Search](#) function during playback to view or start a movie from the scene of your choice.

 If the index information is damaged or unsupported, you will not be able to

use the **Scene Search** function.

- **Title Search**

You can move directly to another title.

- **Time Search**

Search the video or input the play time directly using your remote.

- **Repeat Mode**

You can play movie files repeatedly.

- **Picture Size**

You can adjust the picture size to your preference.

- **Picture Mode**

You can change the **Picture Mode**.

- **Sound Mode**

You can change the **Sound Mode**.

- **Audio Language**

You can enjoy video in one of supported languages. The function is enabled only when you play stream-type files which support multiple audio formats.

- **Subtitle**

You can view a subtitle. You can select a specific language if the subtitle file contains multiple languages.

- **Subtitle Settings**

Displays the **Subtitle Settings**. You can set up a subtitle option.

- **Information**

Displays detailed information about the selected file.

Viewing the file lists

-  When you use the **AllShare Play** function with **Family Story**, Facebook or Picasa rather than a USB device, **View** is not supported.

1. To sort files in the file lists, select **D** using

your remote. The **View** screen appears.

2. Select a sort criteria you want.

- **Folder view**

Displays the whole folder. You can view the file name and thumbnail by selecting the folder.

- **Title**

Sorts and displays the file title in Symbol / Number / Alphabet / Special order.

- **Latest Date**

Sorts and shows files by the latest date.

- **Earliest Date**

Sorts and shows files by the earliest date.

Send your video files

Lets you send your video files with your **Family Story** or other devices.

 If you want to use this function, you should log in the **Smart Hub**.

1. For example, suppose that you want to send with your **Family Story**.
2. To send video files in the file list, open the **Tools** menu using your remote, and then select **Send**.

3. Select a video file you want to send. The  mark appears in the check box.
4. Repeat Step 3 to select additional tracks.
 -  To select all the files in the list, select **Select All**. To cancel a selection, select the file again.
5. When done, select **Send**. The **Send** screen appears.
6. Choose the destination device to send.
7. Choose the family group to share. A pop-up window appears.
8. Enter a message to send to family group you selected.

 In the **QWERTY** keypad screen, you can use the keyboard connected to the TV.

9. When done, select **Send**.

Photos (In AllShare Play)

 → AllShare Play → Photos

Viewing a photo (or slide show)

-  For more information about the subtitle formats and codec formats, refer to "Supported Subtitle and AllShare Play file formats" in the Other Information section.
- 1. On the [AllShare Play](#) screen, select [Photos](#).
- 2. Select the device you want to play.
- 3. Select the desired photo file in the file list.

The TV displays the selected photo file.

4. To start the slide show, select ► using your remote.

 To change a photo manually, press the

◀ or ▶ button. **Standard remote control**

/ To change a photo manually, slide to left or right direction in the Touch Pad. **Smart Touch Control**

 During the slide show, all files in the file list are displayed in order, starting from the file you selected.

 When watching a photo file or slide show, you can add background music if you have music files on same device.

- ☞ The background music cannot be changed until the BGM has finished loading.

Playback control button with Photos

- ◀ / ▶

The slide show speed change as follow (Slow, Normal, Fast).

- ◀, ▶ Standard remote control / Slide to left or right direction Smart Touch Control

Change a previous or next photo.

-

Return to the file list screen.



Start the slide show.



Pause the slide show.

Using the Tools menu with Photos

- On the file list screen, you can use the following these options:

- [View](#)

You can sort the file list by selecting a sort criteria you want.

- [Selection Play](#)

You can play by selecting the desired music file in the file list.

- [Send](#)

Lets you send your photos with your [Family Story](#) or photo-related application.

 If you want to use this function, you should log in the [Smart Hub](#).

- [Login / Logout](#)

You can login or logout your Smart Hub account.

- [Add to Playlist](#)

Lets you make your own playlist. When you use the playlist, you can play music you want to listen easily and quickly.

- **Go to playlist**

Moves to Playlist screen.

- **Information**

Displays detailed information about the selected file.

- When playing a photo file, you can use the following these options:

- **Go to Photos List**

Moves to the file list screen.

- **Start Slide Show / Stop Slide Show**

You can start or stop a slide show.

Alternatively, select ► or || using your remote.

- **Slide Show Speed**

You can select the slide show speed

during the slide show. Alternatively, select

◀◀ or ▶▶ using your remote.

- **Slide Show Effect**

You can set various slide show effects.

- **Background Music On / Background Music Off**

You can start or stop background music.

- **Background Music Setting**

You can set and select background music when watching a photo file or slide show.

- **Picture Mode**

You can change the **Picture Mode**.

- **Sound Mode**

You can change the **Sound Mode**.

 Available only when the background music is set to on.

- **Zoom**

You can zoom into images in full screen mode.

- Rotate

you can rotate images.

- Information

Displays detailed information about the selected file.

Viewing the file lists

- ☒ When you use the **AllShare Play** function with **Family Story**, Facebook or Picasa rather than a USB device, **View** is not supported.
1. To sort files in the file lists, select **D** using your remote. The **View** screen appears.

2. Select a sort criteria you want.

- **Folder view**

Displays the whole folder. You can view the file name and thumbnail by selecting the folder.

- **Title**

Sorts and displays the file title in Symbol / Number / Alphabet / Special order.

- **Latest Date**

Sorts and shows files by the latest date.

- **Earliest Date**

Sorts and shows files by the earliest date.

- **Monthly**

Sorts and shows photo files by month.

Send your photos

Lets you send your photos with your **Family Story** or other devices.

 If you want to use this function, you should log in the **Smart Hub**.

1. For example, suppose that you want to send with your **Family Story**.

2. To send photo files in the file list, open the **Tools** menu using your remote, and then select **Send**.
3. Select a photo file you want to send. The  mark appears in the check box.
4. Repeat Step 3 to select additional tracks.
 -  To select all the files in the list, select **Select All**. To cancel a selection, select the file again.
5. When done, select **Send**. The **Send** screen appears.
6. Choose the destination device to send.
7. Choose the family group to share. A pop-

up window appears.

8. Enter a message to send to family group you selected.

 In the **QWERTY** keypad screen, you can use the keyboard connected to the TV.

9. When done, select **Send**.

Music (In AllShare Play)

 → AllShare Play → Music

Playing Music

 For more information about the subtitle formats and codec formats, refer to "Supported Subtitle and AllShare Play file formats" in the Other Information section.

1. On the [AllShare Play](#) screen, select [Music](#).
2. Select the device you want to play.
3. Select the desired music file in the file list or select ► using your remote.

- ☞ To move a previous page, select **B** using your remote. To move a next page, select **C** using your remote.
- ☞ When the music is playing, you can search the music file by selecting ◀ or ▶ using your remote.
- ☞ If the sound is abnormal when you play MP3 files, adjust the **Equalizer** in the **Sound** menu. (An over-modulated MP3 file may cause a sound problem.)

Playback control button with Music

During playback, you can use additional functions at the bottom right of the screen.

- **Play / Pause**

You can start or pause a music file.

Alternatively, you can select ► or || using your remote.

- **Repeat Mode**

You can play movie files repeatedly.

- **Shuffle Mode**

You can play the music sequentially or randomly.

- **Sound Mode**

You can change the **Sound Mode**.

Using the Tools menu with Music

- You can use the following these options:

- **View**

You can sort the file list by selecting a sort criteria you want.

- **Selection Play**

You can play by selecting the desired music file in the file list.

- **Send**

Lets you send your music files with your **Family Story** or other device.



If you want to use this function, you

should log in the [Smart Hub](#).

- [Login / Logout](#)

You can login or logout your Smart Hub account.

- [Add to Playlist](#)

Lets you make your own playlist. When you use the playlist, you can play music you want to listen easily and quickly.

- [Go to playlist](#)

Moves to Playlist screen.

- [Encoding](#)

You can select an encoding format from

the encoding format list.

– **Information**

Displays detailed information about the selected file.

Playing selected music files using Music

1. Select the desired music file in the file list.
2. Open the **Tools** menu using your remote, and then select **Selection Play**.
3. Select the tracks you want to add. The  mark appears in the check box.
4. Repeat Step 3 to select additional tracks.

 To select all the files in the list, select **Select All**. To cancel a selection, select the file again.

5. When done, select **Play**. The selected music files will play.

Viewing the file lists

 When you use the **AllShare Play** function with **Family Story**, Facebook or Picasa rather than a USB device, **View** is not supported.

1. To sort files in the file lists, select **D** using your remote. The **View** screen appears.

2. Select a sort criteria you want.

- **Folder view**

Displays the whole folder. You can view the file name and thumbnail by selecting the folder.

- **Title**

Sorts and displays the file title in Symbol / Number / Alphabet / Special order.

- **Artist**

Sorts the music file by artist in alphabetical order.

- **Album**

Sorts the music file by album in alphabetical order.

- **Genre**

Sorts music files by the genre.

Send your music files

Lets you send your music files with your **Family Story** or other devices.

 If you want to use this function, you should log in the **Smart Hub**.

1. For example, suppose that you want to send with your **Family Story**.

2. To send music files in the file list, open the **Tools** menu using your remote, and then select **Send**.
3. Select a music file you want to send. The  mark appears in the check box.
4. Repeat Step 3 to select additional tracks.
 -  To select all the files in the list, select **Select All**. To cancel a selection, select the file again.
5. When done, select **Send**. The **Send** screen appears.
6. Choose the destination device to send.
7. Choose the family group to share. A pop-

up window appears.

8. Enter a message to send to family group you selected.

 In the **QWERTY** keypad screen, you can use the keyboard connected to the TV.

9. When done, select **Send**.

Using the DLNA Function



→ AllShare Play

You can play media contents including videos, photos, and music saved on your mobile phones or the other devices (such as your PC) by controlling them on the TV via the network.

For more information, visit “www.samsung.com” or contact the Samsung call center.

Mobile devices may need additional software installation. For details, refer to each device’s user’s guide.

 If your Samsung TV connects to a non-

Samsung DLNA server, a compatibility issue may occur during video playback.

- ☑ By connecting your Samsung TV to a network via AllShare Play, you can use Samsung's original functions as follows:
 - Playback of various video formats (DivX, MP4, 3GPP, AVI, ASF, MKV, etc.)
 - Video thumbnail feature
 - Bookmark function (to resume video playback)
 - Auto-chaptering (scene navigation)
 - Digital content management
 - Compatibility with various subtitle

formats (SRT, SMI, SUB, TXT, TTXT)

- Search with file names
- And many others

 To use the original DLNA functions of Samsung fully, it is recommended that you use the AllShare™ software provided with your TV.

AllShare Settings

Menu → Network → AllShare Settings

Shows a list of mobile phones or connected devices which have been set up to use AllShare Settings with this TV.

 The **AllShare Settings** function is available in all devices which support DLNA DMC.

- **Allowed / Denied:** Allows/Blocks the devices.
- **Delete:** Deletes the devices from the list.
-  This function only deletes the name of the device from the list. If the deleted device is turned on or tries to connect to the TV, it may appear on the list again.

To play the media contents of the devices connected to DLNA function, follow these steps:

1. On the **AllShare Play** screen, select desired menu (**Videos, Photos, Music**).

2. Select **DLNA**. The TV displays the file list of the connected device using the DLNA function.
3. Select the desired file in the file list. The selected file will play.

Playing the media contents saved on the devices

1. Connect the mobile phone or other devices which support **AllShare Play** function, and then play the media contents of each device. The popup screen appears on the bottom of your TV.
2. Select the **Allow** to accept the connected devices. The media contents of the

devices can be playing on your TV.

 You can find the allowed devices on the [AllShare Settings](#).

 An alarm window appears informing you that media contents (videos, photos, music) sent from a mobile phone will be displayed on your TV. The contents are played automatically 3 seconds after the alarm window appears.

– If you close the alarm window using your remote when the alarm window appears, the media contents are not played.

 The first time a device accesses your TV

through the media function, a warning pop up window appears. Select [Allow](#). This permits the phone to access the TV freely and use the [Media](#) function to play content.

- ☞ To turn off media contents transmissions from a mobile phone, set a device to [Denied](#) in the [AllShare Settings](#).
- ☞ Contents may not play on your TV depending on their resolution and format.
- ☞ The some buttons may not work depending on the type of media content.
- ☞ Using the mobile device, you can control the media play. For details, refer to each

mobile's user's guide.

Using the MHL function

You can enjoy videos, photos and music files on your TV when connecting it with a mobile device that supports Mobile High-Definition Link (MHL) function.

- ☞ To use the MHL function, you need an MHL-certified mobile device. You can check if your mobile device is MHL certified on the device manufacturer's website. To find a list of MHL-certified devices, visit the official MHL website (<http://www.mhlconsortium.org>).

To use the MHL function, follow these steps:

1. With an MHL cable, connect the USB port of the mobile device and the **HDMI IN 3 (MHL)** port of the TV.

 You can also connect the HDTV adapter.

2. Select **Source** using your remote. The **Source** screen appears.

3. Select **HDMI3**.

 To use the MHL function, you must upgrade the software to the latest version.

 When you use a MHL cable, only the

HDMI IN 3 (MHL) port of the TV supports the MHL function.

- ☞ This product is officially MHL-certified. If you encounter any problem when using the MHL function, please contact the manufacturer of the mobile device.
- ☞ Some mobile devices (products) may not support the function depending on the performance or the function of the device.
- ☞ Since the TV screen is wider than the mobile device screen, the visual quality may seem degraded.
- ☞ When you use a MHL cable, you can

charge the connected mobile device even if the TV is in standby state.

- ☑ The TV remote control supports the following buttons:

for Standard Remote Control

▲ / ▼ / ◀ / ▶ (Menu navigation)

◀◀ (REW), ▶▶ (FF), ◻◀ (select)

▶ (play), || (pause), (stop)

→◻ (Move to previous menu)

for Smart Touch Control

Menu navigation: Slide your finger in the Touch Pad from one direction to the

opposite direction.

Press the button in the top center of Touch Pad. The TV displays these control functions:

- ◀◀ (REW), ▶▶ (FF), ◻↩ (select), ▶ (play), || (pause), (stop), →◻ (Move to previous menu)

Anynet+ (HDMI-CEC)

Menu → System → Anynet+ (HDMI-CEC)

Anynet+ is a function that enables you to control all connected Samsung devices that support Anynet+ with your Samsung TV's remote. The Anynet+ system can be used only with Samsung devices that have the Anynet+ feature. To be sure your Samsung device has this feature, check if there is an Anynet+ logo on it.

- ☒ You can only control Anynet+ devices using the TV's remote control, not the buttons on the TV.

- ④ The TV remote control may not work under certain conditions. If this occurs, reselect the Anynet+ device.
- ④ The Anynet+ functions do not operate with other manufacturers' products.
- ④ For instructions explaining how to connect Anynet+ external devices, refer to the device's user manual. You must connect an Anynet+ device using an HDMI cable. Some HDMI cables may not support Anynet+ functions.
- ④ Anynet+ works when the AV device supporting Anynet+ is in the standby or on status.

- ☞ Anynet+ supports up to 12 AV devices in total. Note that you can connect up to 3 devices of the same type.

- ☞ However, you can connect only one Anynet+ Home Theater. To connect an Anynet+ Home Theater, connect the Home Theater to the TV using an HDMI cable then:
 - To hear sound from the Home Theater's front, left and right speakers and the subwoofer only, connect a digital optical cable between the **DIGITAL AUDIO OUT (OPTICAL)** port on your TV and the Digital Audio Input on the Home Theater.

- To hear 5.1 channel audio, connect HDMI cables to your Anynet+ DVD player, satellite box, etc. Then, connect the DIGITAL AUDIO OUT (OPTICAL) port on your DVD player, Satellite Box, etc. (i.e. Anynet + Device 1 or 2) directly to the Home Theater, not the TV.

Anynet+ (HDMI-CEC) Menu

The Anynet+ menu changes depending on the type and status of the Anynet+ devices connected to the TV.

- **View TV**

Changes Anynet+ mode to TV broadcast mode.

- **Device List**

Shows the Anynet+ device list.

- (device_name) **Menu**

Shows the menu of the connected device menus. E.g. if a DVD player is connected, the disc menu of the DVD player will appear.

- (device_name) **Tools**

Shows the tools menu of the connected

device. E.g. if a DVD player is connected, the tools menu of the DVD player will appear.

 Depending on the device, this menu may not be available.

- (device_name) **Title Menu**

Shows the title menu of the disc in the connected device. E.g. If a DVD player is connected, the title menu of the movie in the DVD player will appear.

 Depending on the device, this menu may not be available.

- Receiver

Sound is played through the receiver.

Setting up Anynet+ (HDMI-CEC)

- Anynet+ (HDMI-CEC)

To use the Anynet+ Function, **Anynet+ (HDMI-CEC)** must be set to **On**.

- ☒ When the **Anynet+ (HDMI-CEC)** function is disabled, all the Anynet+ related operations are deactivated

- Auto Turn Off

Set an Anynet+ Device to turn off

automatically when the TV is turned off.

- ☞ If the **Auto Turn Off** is set to **Yes**, running external devices will turn off at the same time as the TV powers off.
- ☞ May not be enabled depending on the device.

- **Receiver**

You can listen to sound through a receiver (i.e. Home Theater) instead of the TV Speaker.

Switching between Anynet+ Devices

1. Open the **Tools** menu using your remote, and then select **Anynet+ (HDMI-CEC)**.

2. Select **Device List**. The **Device List** screen appears.

 If you cannot find a device you want, select **Refresh** to refresh the list.

3. Select a device, and then wait until switch to the selected device.

 The **Device List** menu appears only when you set **Anynet+ (HDMI-CEC)** to **On** in the **System** menu.

 Switching to the selected device may

take up to 2 minutes. You cannot cancel the switching operation while switching is in progress.

- ✎ If you have selected an Anynet+ device using **Source** function and then selecting its input source, you cannot use the Anynet+ function. Make sure to switch to an Anynet+ device by using the **Device List**.

Listening through a Receiver

You can listen to sound through a receiver (i.e. Home Theater) instead of the TV Speaker. To listen to sound through a receiver, go to **Receiver** screen (**System** →

Anynet+ (HDMI-CEC) → Receiver). Then select Receiver and set to On.

- ☑ If your receiver supports audio only, it may not appear in the device list.
- ☑ The receiver will work when you have properly connected the optical in jack of the receiver to the **DIGITAL AUDIO OUT (OPTICAL)** port of the TV.
- ☑ When the receiver (i.e. Home Theater) is set to On, you can hear sound output from the TV's Optical jack. When the TV is displaying a DTV (air) signal, the TV will send out 5.1 channel sound to the receiver. When the source is a digital

component such as a DVD player and it is connected to the TV via HDMI, you will hear only 2 channel sound from the receiver.

Using the ARC function

You can listen to sound through a receiver connected using an HDMI cable without connecting a separate optical cable. To listen to sound through a receiver using the ARC function, go to **Receiver** screen (**System** → **Anynet+ (HDMI-CEC)** → **Receiver**). Then select **Receiver** and set to **On**.

 To use the ARC function, a receiver which supports the HDMI-CEC and ARC features

must be connected to the **HDMI IN 2 (ARC)** port.

- ☞ To disable the ARC function, set the **Receiver** to **Off**. Even if the TV transmits the ARC signal continuously, the receiver will be blocked from receiving the signal.

Troubleshooting

 To view a list of all troubleshooting items, go to e-Manual home screen ([Menu](#) → [Support](#) → [e-Manual](#) → Other Information) or press the **SUPPORT** button, and then search a desired item by selecting a chapter.

[Menu](#) → [Support](#) → [Self Diagnosis](#) → [Troubleshooting](#)

If the TV seems to have a problem, first review this list of possible problems and solution. Also review the Troubleshooting Section in the e-Manual. If none of the troubleshooting tips apply, visit www.samsung.com/support or call Samsung

customer Service at 1-800-SAMSUNG (1-800-726-7864).

SMART Interaction

When you use a SMART Interaction function, check whether the corresponding menu turned on. (**Menu** → **System** → **Voice and Motion Control**)

- ◆ **Voice Control** function can be affected recognition by unclear pronunciation, voice level, or surrounding noise. For accurate voice recognition, refer to the Standard Voice Command list at the Samsung web site (www.samsung.com → support → Manuals & Downloads).

- ◆ **Voice Control** performance may vary depending on the language.
- ◆ **Motion Control** function can be affected recognition by brightness of room and brightness of recognized face. Alternatively, recognition rate of **Motion Control** may differ depending on the TV camera's angle or the operating speed. Therefore, we recommend to adjust an ambient brightness and TV camera's angle before using **Motion Control**.
- ◆ If you have other questions, visit www.samsung.com/support or call Samsung customer Service at 1-800-SAMSUNG (1-800-726-7864).

Flickering and Dimming

If your Samsung Television is flickering or dimming sporadically, you may need to disable some of its energy efficient features such as the **Eco Sensor** or the **Energy Saving** feature. Follow the steps below with your remote to turn these features off or on.

- ◆ **Energy Saving: System** → **Eco Solution** → **Energy Saving**
- ◆ **Eco Sensor: System** → **Eco Solution** → **Eco Sensor**

Component Connections / Screen Color

If you find that the color on your Samsung television's screen is not correct or black and white, first run a [Self Diagnosis](#) on the TV to make sure there are no device issues.

- ◆ [Self Diagnosis](#) : [Support](#) → [Self Diagnosis](#) → [Picture Test](#)

If the problem does not appear in the Picture test, make sure:

- ◆ Your connections are all consistent. For example, if you've used the AV In jack on your TV, make sure you have used the AV Out jack on your video source.
- ◆ You have connected to your devices to

the correct jacks. For example, if you use the Component jacks, labeled Pb, Pr, and Y, to connect your TV and video source, make sure you have connected the blue Pb jack on the video source to the blue Pb jack on the TV, the red Pr jack on the source to the red Pr jack on the TV.

Screen Brightness

If you find that the colors on your Samsung TV are correct but just a little too dark or bright, try adjusting the following settings in the Picture option in the Main menu:

- ◆ Backlight **for LED TV** / Cell Light **for PDP TV**, Contrast, Brightness, Sharpness, Color,

Tint (G/R) and so on. Go in to **Picture** on user Menu then try adjusting options mentioned above.

Blur

If you find that there is a blur or “ghostlike” appearance to the images on your television’s screen, you might be able to correct the blurring using **Auto Motion Plus**.

- **Auto Motion Plus: Picture** → **Picture Options** → **Auto Motion Plus**

Unwanted Powering Off

If your Samsung TV appears to turn off by itself, there may be an issue with either your Timer settings or your Eco friendly No Signal Power Off feature.

First make sure Sleep Timer is not accidentally set. The Sleep Timer turns off the TV automatically after a certain period of time has passed.

- ◆ **Sleep Timer: System → Time → Sleep Timer**

If the Sleep Timer is not activated, you may have engaged the No Signal Power Off or Auto Power Off feature.

- ◆ No Signal Power Off: System → Eco Solution → No Signal Power Off
- ◆ Auto Power Off: System → Eco Solution → Auto Power Off

Trouble Powering On

Press the power on button on the TV or remote and the light should blink about 5 times before the TV turns on.

If you find that you are having trouble powering on your Samsung television, there are a number of things to check before making a call to the service department.

If you're sure your power cord, remote

control, and PC are functioning properly, you may be having a cable issue. If you have a cable or satellite box, your TV may appear to be off because the cable or satellite box is not outputting a signal. To test the signal output of your cable or satellite box, press the guide or info button on the cable or satellite box remote control. If the screen displays the guide or info data, the problem is caused by the box.

Stand Assembly

If you have any trouble assembling the stand, visit www.samsung.com/spsn.

Cannot Find a Channel

Re-run **Setup** (Go to **System** → **Setup**) or run **Auto Program**. (Go to **Channel** → **Auto Program**).

-  Watch these troubleshooting on video at www.samsung.com/spsn

Picture (Troubleshooting)

First, perform the [Picture Test](#) and to see if your TV is properly displaying the test image (go to [Support](#) → [Self Diagnosis](#) → [Picture Test](#)).

If the test image is properly displayed, the poor picture may be caused by the source or signal.

The TV image does not look as good as it did in the store.

Store displays are all tuned to digital, HD (high definition) channels.

If you have an analog cable/set top box, upgrade to a digital set top box. Use HDMI or Component cables to deliver HD (high definition) picture quality.

- ☑ Many HD channels are up scaled from SD (Standard Definition) contents. Look for a channel that is broadcasting true HD content.
- ◆ Cable/Satellite subscribers: Try HD channels from the channel line up.
- ◆ Air/Cable Antenna connection: Try HD channels after performing an Auto Program.

Adjust the Cable/Sat box video output

resolution to 1080i or 720p.

The picture is distorted: macro block error, small block, dots, pixelization

The compression of video contents may cause picture distortion especially in fast moving pictures such as sports and action movies.

A weak or bad quality signal can cause picture distortion. This is not a TV issue.

Mobile phones used close to the TV (within 3.3 ft) may cause noise in the picture on analog and digital channels.

Color is wrong or missing.

If you're using a Component connection, make sure the component cables are connected to the correct jacks. Incorrect or loose connections may cause color problems or a blank screen.

The color is poor or the picture is not bright enough.

Adjust the **Picture** options in the TV menu (go to **Picture Mode** / **Color** / **Brightness** / **Sharpness**)

Adjust the **Energy Saving** option in the TV menu (go to **System** → **Eco Solution** →

Energy Saving)

Try resetting the picture to view the default picture settings (go to **Picture** → **Reset Picture**).

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

If the **Picture Size** is set to **Screen Fit**, change it to **16:9**.

Change the cable/satellite box resolution.

The picture is black and white.

If you are using an AV composite input, connect the video cable (yellow) to the

Green jack of Component on the TV.

When changing channels, the picture freezes or is distorted or delayed.

If the TV is connected to a cable box, try to reset the box. (Disconnect and then reconnect the AC cord and wait until the cable box reboots. It may take up to 20 minutes.)

Set the output resolution of the cable box to 1080i or 720p.

Sound (Troubleshooting)

First, perform the [Sound Test](#) to determine if your TV audio is operating properly. (Go to [Support](#) → [Self Diagnosis](#) → [Sound Test](#)).

If the audio is OK, the sound problem may be caused by the source or signal.

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

Please check the volume of the device (Cable/ Sat Box, DVD, Blu-ray etc.) connected to your TV.

The picture is good but there is no sound.

Set the **Speaker Select** option to **TV Speaker** in the **Sound** menu.

If you are using an external device, check the device's audio output option. (Ex. You may need to change your cable box's audio option to HDMI if you have the box connected to your TV using an HDMI cable.)

If you are using a DVI to HDMI cable, a separate audio cable is required.

If your TV has a headphone jack, make sure there is nothing plugged into it.

Reboot the connected device by

disconnecting, and then reconnecting device's power cable.

The speakers are making an inappropriate noise.

Check cable connections. Make sure a video cable is not connected to an audio input.

For antenna or cable connections, check the signal information. A low signal level may cause sound distortion.

Perform the [Sound Test](#) feature. ([Support](#) → [Self Diagnosis](#) → [Sound Test](#))

RF (Cable / Antenna) Connection (Troubleshooting)

The TV is not receiving all channels.

Make sure the coaxial cable is connected securely.

Run **Auto Program** to add available channels to the channel list. Go to **Channel** → **Auto Program** then select **Cable** and make sure to select the correct Cable TV signal type. There are 3 options, **STD**, **HRC** and **IRC**. Most cable systems use **STD**.

Verify the antenna is positioned correctly.

No caption on digital channels.

Check the **Caption Setup** menu. Try changing **Caption Mode Service1** to **CC1**.

Some channels may not have caption data.

The picture is distorted: macro block error, small block, dots, pixelization.

The compression of video contents may cause picture distortion, especially with fast moving pictures such as sports and action movies.

A weak signal can cause picture distortion. This is not a TV problem.

PC Connection (Troubleshooting)

A Mode Not Supported message appears.

Set your PC's output resolution so it matches a resolution supported by the TV.

The video is OK but there is no audio.

If you are using an HDMI connection, check the audio output setting on your PC.

Network Connection (Troubleshooting)

The wireless network connection failed.

Make sure the TV is connected to a wireless IP sharer (router).

Software Update over the network fails.

Run **Network Status** in **Network** menu to confirm the connection.

If you have latest Software (SW) version, SW upgrade will not proceed.

Others (Troubleshooting)

Purple/green rolling horizontal bars and buzzing noise from the TV speakers with a Component cable connection.

Remove the left and right audio connections from the Set-Top box. If the buzzing stops, this indicates that the Set-Top box has a grounding issue. Replace the Component video cables with an HDMI connection.

The picture won't display in full screen.

HD channels will have black bars on either

side of the screen when displaying up scaled SD (4:3) contents.

Black bars will appear on the top and bottom of the screen when you watch movies that have aspect ratios different from your TV.

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

A Mode Not Supported message appears.

Check the supported resolution of the TV, and adjust the external device's output resolution accordingly. Refer to the resolution settings on User manual.

Caption on TV menu is grayed out.

You cannot select the **Caption** menu if you have selected a source connected to the TV via HDMI or Component.

The external device's **Caption** function must also be activated.

There is a plastic smell from the TV.

This smell is normal and will dissipate over time.

The TV Signal Information is unavailable in the Self Diagnosis menu.

This function is only available for digital channels the TV receives from an Antenna / RF /Coax connection.

The TV is tilted to the side.

Remove the base stand from the TV and reassemble it.

The channel menu is grayed out (unavailable).

The **Channel** menu is only available when you select the TV source.

Your settings are lost after 30 minutes or every time the TV is turned off.

If the TV is in the **Store Demo** mode, it will reset audio and picture settings every 30 minutes. Change the settings from **Store Demo** mode to **Home Use** mode using the **Setup** procedure. Select **TV** in the **Source** using your remote, and go to **System** → **Setup**.

You have intermittent loss of audio or video.

Check the cable connections and reconnect them.

Loss of audio or video can be caused by using

overly rigid or thick cables. Make sure the cables are flexible enough for long term use. If mounting the TV to a wall, we recommend using cables with 90 degree connectors.

You see small particles when you look closely at the edge of the frame of the TV.

This is part of the product's design and is not a defect.

The PIP menu is not available.

PIP functionality is only available when you are using an HDMI, or Component source.

POP (TV's internal banner ad) appears on the screen.

Select **Home Use** under **Setup** mode. For details, refer to the **Setup** Feature.

Plasma TV is making humming noise.

for PDP TV Plasma TVs typically make a soft humming sound. This is normal. It's caused by the electrical charges that are used to create the images on the screen.

If the humming sound is loud, you may have set the brightness on the TV too high. Try setting the brightness lower.

You can also have loud humming if the back of your Plasma TV is too close to a wall or other hard surface. Also, try rerouting your connection cables.

An improperly installed wall mount can also create excessive noise.

Image Retention (Burn In) Issue.

for PDP TV To minimize the possibility of screen burn, this unit is equipped with Pixel Shift screen burn reduction technology. Pixel Shift lets you set the picture so it moves slightly up and down (Vertical Line) and side to side (Horizontal Dot). The regular, slight movement of the picture reduces screen

burn in.

3D (Troubleshooting)

The 3D Active Glasses are not working correctly

Make sure the glasses are turned on.

The 3D Active Glasses may not work properly if there is any other 3D product or electronic devices turned on near the glasses or TV.

If there is a problem, keep other electronic devices as far away as possible from the 3D Active Glasses.

The 3D images don't look quite right.

The ideal viewing distance is three times or more the height of the screen.

We also recommend sitting with viewer's eyes on a level with the screen.

The batteries in the 3D glasses don't last

Turn off 3D glasses while not using them. If you leave 3D glasses on, battery lifespan is shortened.

Anynet+ (HDMI-CEC) (Troubleshooting)

Anynet+ does not work.

Check if the device is an Anynet+ device. The Anynet+ system supports Anynet+ devices only.

You can connect only one receiver (home theater).

Check if the Anynet+ device power cord is properly connected.

Check the Anynet+ device's Video/Audio/HDMI cable connections.

Check whether **Anynet+ (HDMI-CEC)** is set to **On** in the Anynet+ setup menu.

Check whether the TV remote control is in TV mode.

Check whether the remote control is Anynet+ compatible.

Anynet+ doesn't work in certain situations. (Searching channels, operating **Smart Hub** or **Setup**, etc.)

If you have removed and then reconnected the HDMI cable, please make sure to search devices again or turn your TV off and on again.

I want to start Anynet+.

Check if the Anynet+ device is properly connected to the TV and check if the **Anynet+ (HDMI-CEC)** is set to **On**. (**System** → **Anynet+ (HDMI-CEC)**)

Open the **Tools** menu using your remote and then select **Anynet+ (HDMI-CEC)**. Then select a menu you want.

I want to exit Anynet+.

Select **View TV** in the Anynet+ menu.

Go to **Source** screen using your remote and select a non-Anynet+ device.

The message **Connecting to Anynet+ device ...** appears on the screen.

You cannot use the remote control when you are configuring Anynet+ or switching to a view mode.

Use the remote control after the TV has completed Anynet+ configuration or has finished switching to Anynet+.

The **Anynet+ device does not play.**

You cannot use the play function when **Setup** is in progress.

The connected device is not displayed.

Check whether or not the device supports Anynet+ functions.

Check whether or not the HDMI cable is properly connected.

Check whether **Anynet+ (HDMI-CEC)** is set to **On**. (**System** → **Anynet+ (HDMI-CEC)**)

Search Anynet+ devices again.

Anynet+ requires an HDMI connection. Make sure the device is connected to your TV with an HDMI cable.

Some HDMI cables may not support Anynet+

functions.

If the connection is terminated because there has been a power failure or the HDMI cable has been disconnected, please repeat the device scan.

The TV sound is not output through the receiver.

Connect the optical cable between TV and the receiver.

The ARC function enables digital output of sound using the **HDMI IN 2(ARC)** port and can only be operated when the TV is connected to an audio receiver that supports the ARC function.

AllShare Play (Troubleshooting)

This file may not be playable properly.

This may appear because of high bit rate of content. Content generally will play but could experience some playability issue.

Smart Hub (Troubleshooting)

Some application contents only appear in English. How can I change the language?

The Application content language may be different from the application user interface language.

The ability to change the language depends on the service provider.

Some application services do not work.

Check with the service provider.

Refer to the help website for application service provider information.

When a network error occurs, I can only use the setting menu.

If network connection doesn't work, your service might be limited, as all functions except the setting menu are needed to connect to the internet.

Web Browser (Troubleshooting)

1. To open **Web Browser**, select **Web Browser** in the **Smart Hub**. The **Web Browser** may be displayed differently with PC.
2. The **Web Browser** is not compatible with a Java application.
3. When attempted to download a file, but the file could not be saved and an error message appeared.
4. Access may be blocked to some websites or to web browsers operated by certain businesses.

- 5.** Playback of Flash video may be restricted.
- 6.** E-commerce, for purchasing products online, is not supported.
- 7.** Scrolling a web page that allows only part (and not the whole) of the page to be scrolled may cause corrupted characters.
- 8.** ActiveX is not supported.
- 9.** Some options cannot be accessed in Tab mode. (To access such options, switch to Pointer mode.)
- 10.** Some text may appear corrupted because the number of supported fonts is limited.

- 11.** The response to a command on the remote or the screen display may be delayed temporarily if a web page is currently loading.
- 12.** The loading of a web page may delay or stop with some operating systems.
- 13.** Copy and Paste are not supported.
- 14.** When writing emails or posting messages, some functions (Such as changing the size or colors.) may not be supported.
- 15.** The number of bookmarks and logs that can be saved is limited.
- 16.** The maximum number of windows that

can open at the same time may vary depending on the browsing condition or TV model.

17. The web browsing speed depends on the network conditions.

18. PIP will automatically be deactivated if a video is played in the browser. Videos may not commence playback after PIP interruption and a possible refresh for the page may be required.

19. The Web Browser can play MP3 audio files only.

20. The function for importing or

exporting bookmarks is compatible with bookmark files in a particular file format only. (Compatible format: Netscape-bookmarkfile- 1)

21. When you import or export the bookmark, the folder tree is not included.
22. If you import the bookmark file to a Computer from a TV, the bookmark file will be saved in “Samsung SmartTV Bookmark” folder.
23. If the time is not set in the menu (**System** → **Time** → **Clock**), the history information may not be saved.

24. Visited web site history is saved in chronological order and It will be removed from the list according to oldest page accessed.
25. Some video or audio content may not play during Flash playback depending on the video/audio codec supported.
26. A sudden change in the picture brightness inside the video window may affect the brightness of the surrounding stationary picture. **for PDP TV**
27. If you use **QWERTY** keyboard screen when you use **Web Browser** with **PIP** function, the **PIP** function turns off automatically

except inputting a URL address.

Using the Smart Touch Control

for LED 7500 series and above, PDP 8000 series

Improved user convenience has been provided so that you can switch the channel and adjust the volume with just your fingertips while focusing on the TV screen. In addition, the built-in touch pad removes the need for a mouse when you change the menu settings and search for something on the Internet.

Smart Touch Control at a Glance



- : Turns the TV on and off.
-  / : Adjusts the Volume.
-  / : Changes channels.

- **RETURN** : Returns to the previous menu.
- **VOICE** : Lets you access the **Voice Control** function. When you press the button, the TV displays the command list. You can speak using the microphone embedded in your remote.
 -  For more detailed information about the **Voice Control** function, see "SMART Interaction" in the e-manual.
- **NUMBER** : Displays the Number button screen. You can select a number using the Touch Pad.
- : Brings up the Smart Hub applications.

See e-Manual chapter Advanced Features
→ Smart Hub. To exit an application that is
running easily, press the  button.

-  If you don't press any button within 30 seconds, the Smart Touch Control is set to Sleep mode automatically. To wake up the Smart Touch Control, press the Touch Pad.

Initial Pairing

After you have run the Initial Setup on your TV, you should connect your Smart Touch Control to your TV.

1. Point the Smart Touch Control toward the TV's IR Blaster and press any key on the Smart Touch Control.
 2. The connection icon appears at the bottom left of the screen and the Smart Touch Control is automatically connected to the TV.
- ☞ If you want to perform the pairing process again, press the reset button in the center of the back cover using a pin or the tip of an unbent paper clip. The Smart Touch Control will be initialized.



Smart Touch Control **PAIRING** Reset button.

Calibrating the Touch Pad

To calibrate the touch pad on the Smart Touch Control, follow these steps:

1. Press the **NUMBER**  button for 3 seconds. The calibration starts.
 2. When done, all the LEDs on the top of the Smart Touch Control blink twice simultaneously.
-  While calibrating, don't touch the touch pad.
 -  If the touch pad loses accuracy, recalibrate the touch pad by repeating Steps 1 and 2.

Using the Touch Pad

To display the shortcut functions list on the bottom of the screen, press the  button at the bottom of the touch pad. This list includes [Menu](#), [Source](#), [CH List](#), [3D](#), [Support](#), and a number of other functions.

To display the color and playing control functions on the top of the screen, press the button on the top of the touch pad.

- To Move the Highlight



Rest your finger on the touch pad, and then slide it from one side to the other, from top to bottom, or bottom to top.

- ☞ To move the Highlight continuously, flick your finger across the touch pad from right to left, left to right, top to bottom, or bottom to top.

- To Select an item



Press the Touch Pad.

- Open the **History** screen.



Press the 🔄 button in the left of the Touch Pad. Displays a list of recently used functions. You can select a function again using the Touch Pad easily and quickly.

- Open the **Tools** menu.



Press the  button in the right of the Touch Pad. Quickly select frequently used functions.

- Open the color, playing control and exit buttons.



To display the color, exit and play control buttons at the top of the screen, press the  button at the top of the touch pad.



→ : Close all menus shown on the screen.

- Open the shortcut functions screen.



Press the  button in the bottom center

of the Touch Pad. Quickly select frequently used functions:



- Using the Scroll mode

If you press and hold the Touch Pad when using [Web Browser](#), the Touch Pad switches to the Scroll mode.

In the Scroll mode, slide your finger in the Touch Pad from one side to the other, the highlight moves page units.

 To return to the general mode of the

Touch Pad, press the Touch Pad or **RETURN**  button on your Smart Touch Control.

To Enter a channel number through Smart Touch Control

1. While watching a broadcast, press the **NUMBER**  button on the Smart Touch Control. The TV displays the number button screen.
2. Using the touch pad, highlight a number, and then press the touch pad. The TV displays a list of channels that start with the number you selected.

3. Using the touch pad, highlight the channel in the list you want, and then press the touch pad.

 You can also change the channel by touching the up or down channel icon on the touch pad. If you touch the touch pad immediately after, the TV displays the list of memorized channels. Select a channel by moving or flicking your finger up or down, and then pressing the touch pad.

 If you change a channel by entering the channel number, that channel number is memorized and added to the **Added Ch.** list automatically. You can change the channels using a memorized channel list

easily and quickly.

Using the Smart Touch Control with IR Blaster



When you connect an IR Blaster with your TV, you can control connected external devices with your TV using the Smart Touch Control.

IR Blaster Pairing

1. Turn the IR Blaster on, and if the LED blinks, connect the IR Blaster to the TV.
2. Briefly point the IR Blaster toward the IR sensor of the TV and press the **PAIRING** button at the bottom.

3. The connection icons appear on the bottom left of the screen, and the TV connects to IR Blaster automatically.

 If the connection process failed, please turn off and on the IR Blaster, try again from step 2.

Precautions for Using an IR Blaster

 To use an IR Blaster, the IR Blaster must be located nearby with external devices connected to the TV.

 Note that it should be no obstacle between the external device's IR receiver and an IR Blaster.

- ☑ Install the IR Blaster within 50 cm and 45 degrees of the up, down, left and right directions of the IR sensor of the external device.

Setting up Universal Remote Control

Lets you control a Set-Top Box (STB) or a BD player or both connected to the TV using your Smart Touch Control. After you connect the device to the TV, the Smart Touch Control can control the navigation, number, and other keys needed to operate and control the device.

To connect the external device to your

Smart Touch Control, follow these steps:

1. When you connect IR Blaster for the first time, a pop-up appears. Select **Yes** to set IR Blaster and Smart Touch Control, and then press the touch pad.
2. To reset IR Blaster and Smart Touch Control, press the  button on Smart Touch Control, and then select **Set Up Universal Remote**.
3. Select **Set up a device to control**, and then press the touch pad.
4. Select an external device from the connected devices, and then press the touch pad.

5. Select the port used to connect the external device, and then press the touch pad.

 Make sure that the selected device is on. If it is turned off, turn the power on and press **Refresh**.

6. Select **Search brands**, and then press the Touch Pad. A keyboard and an entry field appear. Enter the first few letters of the brand name of your device using the Smart Touch Control, and then select **Done** at the bottom of the keyboard. In the list that appears below the entry field, select the brand name of your device, and then press the touch pad.

 If you want to search the brand of STB (Set-Top box), you can search the STB by using the brand name or a cable provider.

7. Select **Search Model**, and then press the touch pad. A keyboard and an entry field appear. Enter the first few letters and numbers of the model name of your device using the Smart Touch Control, and then select **Done** at the bottom of the keyboard. In the list that appears below the entry field, select the model name of your device, and then press the touch pad.

 If the search for model name does not

work properly, search with a part of the model name or use the Search for recommended model code.

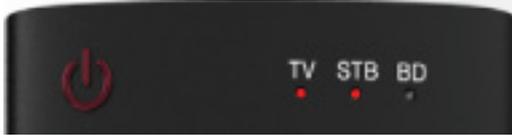
8. Select **Download**, and then press the touch pad. Download the configuration data for the IR Blaster in the same way.
 9. When all the settings are complete, select the **Complete** button and press the touch pad.
-  When you use the BD home theater by using Universal Remote, some buttons may not be supported. In this case, we recommend to use **Anynet+ (HDMI-CEC)** function.

Using the Search for Recommended Model Code

1. In the **Search Model** step in the integrated remote control setup, select the **Recommended** and press the touch pad.
2. Select **Download** to download the recommended model code.
3. Point the Smart Touch Control forward to the TV's IR sensor and press the touch pad to test if the device works.
4. If the downloaded recommended model code does not work, repeat the steps from step 3.

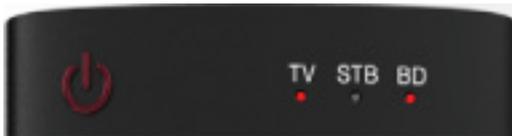
LED Indicator Status

- **Watch TV (TV + STB)**



You can control the TV and Set-Top box using universal remote for viewing the Set-Top box. (e.g. Volume button: Adjust the TV volume. / Channel button: Change the STB channels.)

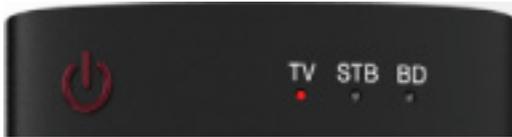
- **Watch Movie (TV + BD Player)**



You can control the TV and BD player using universal remote for viewing the BD player.

(e.g. Volume button: Adjust the TV volume. /
TOOLS button: Open the BD players option
menu.)

- **TV**



You can only control the TV using universal
remote.

Supported Subtitle and AllShare Play file formats

Subtitle

External

- MPEG-4 timed text (.ttxt)
- SAMI (.smi)
- SubRip (.srt)
- SubViewer (.sub)
- Micro DVD (.sub or .txt)

- SubStation Alpha (.ssa)
- Advanced SubStation Alpha (.ass)
- Powerdivx (.psb)

Internal

- **Xsub**

Container: AVI

- **SubStation Alpha**

Container: MKV

- **Advanced SubStation Alpha**

Container: MKV

- **SubRip**

Container: MKV

– **MPEG-4 timed text**

Container: MP4

Supported image resolutions

File Extension	Type	Resolution
*.jpg	JPG	15360 x 8640
*.png	PNG	1920 x 1080
*.bmp	BMP	1920 x 1080
*.mpo	MPO	15360 x 8640

Supported music file formats

File Extension	Type	Codec	Comments
*.mp3	MP3	MPEG1 Audio Layer 3	
*.m4a *.mpa *.aac *.3ga	MPEG4	AAC	
*.flac	FLAC	FLAC	The Seek (jump) function is not supported. Supports up to 2 channel
*.ogg	OGG	Vorbis	Supports up to 2 channel
*.wma	WMA	WMA	WMA 10 Pro supports up to 5.1 channel. WMA lossless audio is not supported.

Video Codec

File Extension	Container	Video Codec	Resolution	Frame rate (fps)	Bit rate (Mbps)	Audio Codec		
*.avi *.mkv *.asf *.wmv *.mp4 *.mov *.3gp *.vro *.mpg *.mpeg *.ts *.tp *.trp *.m2ts *.mts *.divx	AVI MKV ASF MP4 3GP VRO VOB PS TS	DIVX 3.11/4.x/5.x/6.1	1920 x 1080	6 – 30	30	AC3 LPCM ADMPCM(IMA, MS) AAC HE-AAC WMA DD+ MPEG(MP3) DTS Core DRA		
		MPEG4 SP/ASP						
		H.264 BP/MP/HP						
		Motion JPEG						
		Window Media Video v9						
		MPEG2						
		MPEG1						
		VP6					640 x 480	4
		SVAF					30	
MVC	1920 x 1080	24 / 25 / 30	40					
*.webm	WebM	VP8		6 – 30	8	Vorbis		

Other Restriction

- ❏ Video content will not play, or not play correctly, if there is an error in the content or the container.
- ❏ Sound or video may not work if the contents have a standard bit rate/frame rate above the compatible Frame/sec listed in the table above.
- ❏ If the Index Table is in error, the Seek (Jump) function is not supported.
- ❏ When you play video over a network connection, the video may not be played smoothly.

- ☒ The menu may take longer to appear if the video's bit rate exceeds 10Mbps.
- ☒ Some USB/digital camera devices may not be compatible with the player.

Video decoder

- Supports up to H.264, Level 4.1
- H.264 FMO / ASO / RS, VC1 SP / MP / AP L4 and AVCHD are not supported.
- For all Video codecs except MVC, VP8, VP6:
 - Below 1280 x 720: 60 frame max
 - Above 1280 x 720: 30 frame max

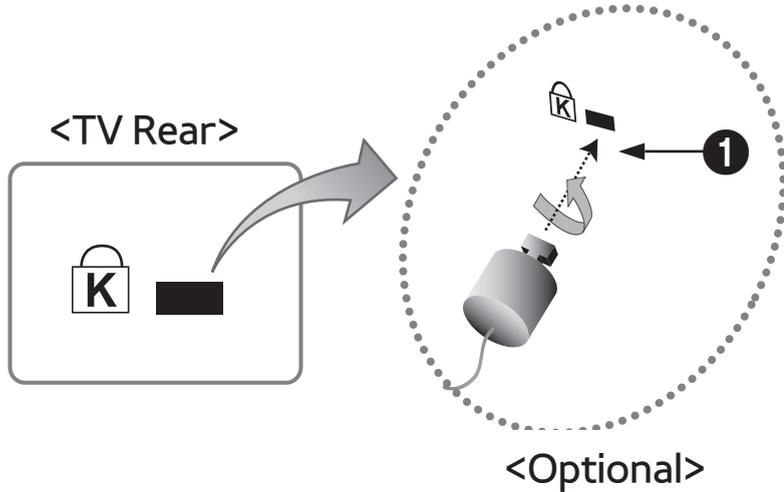
- GMC 2 over is not supported.
- Supports only SVAF Top/Bottom and Side by Side.
- Supports only BD MVC Spec.

Audio decoder

- WMA 10 Pro supports up to 5.1 channel.
WMA lossless audio is not supported.
- RealAudio 10 lossless is not supported.
- QCELP, AMR NB/WB are not supported.
- If Vorbis is only in Webm container, supports

up to 2 channel.

Anti-theft Kensington Lock



A Kensington Lock is a device you can use to physically fix your TV in place when using it in a public place.

You wrap the Kensington Lock's cable around a large, immobile object and then attach the lock to the Kensington slot on the

back of the TV.

The appearance and locking method may differ from the illustration below 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. The 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.

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.

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Categories	Parts	Labor	Size	Service
LCD/LED TV	1 Year	1 Year	40" and Larger	Carry-In or In Home
			37" and Smaller	Carry-In
Plasma Display	1 Year	1 Year	All	Carry-In or In Home
Projector (Excluding Lamp **)	2 Year	2 Year	All	Carry-In or Pick up
PICO & LED Pocket Projector	1 Year	1 Year	All	Carry-In or Pick up

** 180 Days after Purchasing and 600 Hours of Use Lamp on Projector

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SAMSUNG will repair or replace this product, at our option and at no charge as stipulated herein, with new or reconditioned parts or products if found to be defective during the limited warranty period specified above. All replaced parts and products become the property of SAMSUNG and must be returned to SAMSUNG. Replacement parts and products assume the remaining original warranty, or ninety (90) days, whichever is longer.

Certain products are eligible for In-home service at Samsung's discretion. To receive in-home service, the product must be unobstructed and accessible to service personnel. If during in-home service repair can not be completed, it may be necessary to remove, repair and return the product. If in-home service is unavailable, SAMSUNG may elect, at our option, to provide for transportation of our choice to and from a SAMSUNG authorized service center. Otherwise, and for 37" and smaller LCD/LED TV, transportation to and from the SAMSUNG authorized service center is the responsibility of the purchaser.

This limited warranty covers manufacturing defects in materials and workmanship encountered in normal, and except to the extent otherwise expressly provided for in this statement, noncommercial use of this product, and shall not apply to the following, including, but not limited to: damage which occurs in shipment; delivery and installation; applications and uses for which this product was not intended; altered product or serial numbers; cosmetic damage or exterior finish; accidents, abuse, neglect, fire, water, lightning or other acts of nature; use of products, equipment, systems, utilities, services, parts, supplies, accessories, applications, installations, repairs, external wiring or connectors not supplied or authorized by SAMSUNG which damage this product or result in service problems; incorrect electrical line voltage, fluctuations and surges; customer adjustments and failure to follow operating instructions, cleaning, maintenance and environmental instructions that are covered and prescribed in the instruction book; reception problems and distortion related to noise, echo, interference or other signal transmission and delivery problems; brightness related to normal aging, or burned-in images. SAMSUNG does not warrant uninterrupted or error-free operation of the product.

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1-800-749-0260 : Only Projector

IMPORTANT WARRANTY INFORMATION REGARDING TELEVISION FORMAT VIEWING

Standard screen format televisions (4:3, the aspect ratio of the screen width to height) are primarily designed to view standard format full-motion video. The images displayed on them should primarily be in the standard 4:3 ratio format and constantly moving. Displaying stationary graphics and images on screen, such as the dark top and bottom letterbox bars (wide screen pictures), should be limited to no more than 15% of the total television viewing per week.

Wide screen format televisions (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 constantly moving. Displaying stationary graphics and images on screen, such as the dark side-bars on non-expanded standard format television video and programming, should be limited to no more than 15% 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 any stationary images that exceed the above guidelines can cause uneven aging of Plasma Display Panels that leave subtle, but permanent burned-in ghost images in the television picture. To avoid this, vary the programming and images, and primarily display full screen moving images, not stationary patterns or dark bars. On television models that offer picture sizing features, use these controls to view the different formats as a full screen picture.

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



BP68-00263E-03