



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

### Important Warranty Information Regarding Television Format Viewing

Wide screen format LED Displays with aspect ratios of 16:9 (the ratio of the screen width to screen height) are primarily designed to display wide screen format full-motion video. The images displayed on them should primarily be in the wide screen 16:9 ratio format, or expanded to fill the screen if your model offers this feature and the images are constantly moving. Displaying stationary graphics and images on screen, such as the dark sidebars on 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 crawls, video game displays, station logos, web sites or computer graphics and patterns, should be limited as described above for all televisions. Displaying stationary images that exceed the above guidelines can cause uneven aging of LED Displays that leave subtle, but permanent burned-in ghost images in the LED picture. To avoid this, vary the programming and images, and primarily display full screen moving images, not stationary patterns or dark bars. On LED models that offer picture sizing features, use these controls to view different formats as a full screen picture. Be careful in the selection and duration of television formats you use for viewing. Uneven LED aging as a result of format selection and use, as well as burned-in images, are not covered by your Samsung limited warranty.

### SAMSUNG ELECTRONICS NORTH AMERICAN LIMITED WARRANTY STATEMENT

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

The above described warranty repairs must be performed by a SAMSUNG Authorized Service Center. Along with this Statement and the Original Limited Warranty Statement, 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. Exclusions include, but are not limited to, 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

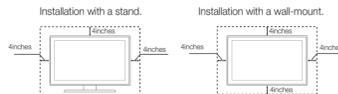
Avoid displaying still images (such as jpeg picture files) or still image elements (such as TV channel logos, panorama or 4:3 image format, stock or news bars at screen bottom etc.) on the screen. Constant displaying of still pictures can cause ghosting of LED screen, which will affect image quality.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

- Avoid displaying the same TV channel for long periods.
- Always try to display any image on full screen, use TV set picture format menu for best possible match.
- Reduce brightness and contrast values to minimum required to achieve desired picture quality, exceeded values may speed up the burnout process.
- Frequently use all TV features designed to reduce image retention and screen burnout, refer to proper user manual section for details.

### Securing the Installation Space

Keep the required distances between the product and other objects (e.g. walls) to ensure proper ventilation. Failing to do so may result in fire or a problem with the product due to an increase in the internal temperature of the product.

- When using a stand or wall-mount, use parts provided by Samsung Electronics only.
- If you use parts provided by another manufacturer, it may result in a problem with the product or an injury due to the product falling.
- The appearance may differ depending on the product.
- Be careful when you contact the TV because some parts can be somewhat hot.



### Contact SAMSUNG WORLD WIDE

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

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



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## Warning! Important Safety Instructions

Please read the safety instructions below before installing and using the product.

**CAUTION**

**RISK OF ELECTRIC SHOCK. DO NOT OPEN.**

CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). THERE ARE NO USER SERVICEABLE PARTS INSIDE. REFER ALL SERVICING TO QUALIFIED PERSONNEL.

This symbol indicates that high voltage is present inside. It is dangerous to make any kind of contact with any internal part of this product.

This symbol indicates that important literature concerning operation and maintenance has been included with this product.

- The slots and openings in the cabinet and in the back or bottom are provided for necessary ventilation. To ensure reliable operation of this apparatus, and to protect it from overheating, these slots and openings must never be blocked or covered.
  - Do not cover the slots and openings with a cloth or other materials.
  - Do not block the slots and openings by placing this apparatus on a bed, sofa, rug or other similar surface.
  - Do not place this apparatus in a confined space, such as a bookcase or built-in cabinet, unless proper ventilation is provided.
- Do not place this apparatus near or over a radiator or heat register, or where it is exposed to direct sunlight.
- Do not place a vessel containing water (vases etc.) on this apparatus, as this can result in a risk of fire or electric shock.
- Do not expose this apparatus to rain or place it near water (near a bathtub, washbowl, kitchen sink, or laundry tub, in a wet basement, or near a swimming pool etc.). If this apparatus accidentally gets wet, unplug it and contact an authorized dealer immediately.
- Make sure to pull out the power cord from the outlet before cleaning.
- This apparatus uses batteries. In your community, there might be regulations that require you to dispose of these batteries properly to protect the environment. Please contact your local authorities for disposal or recycling information.
- Do not overload wall outlets, extension cords, or adaptors beyond their capacity, since this can result in fire or electric shock.
- Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them. Pay particular attention to cords at the plug end, where connected to adaptors, and at the point where they exit from the apparatus.
- To protect this apparatus from a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the antenna or cable system. This will prevent damage to the set due to lightning and power line surges.
- Before connecting the AC power cord to the DC adaptor outlet, make sure the voltage designation of the DC adaptor corresponds to the local electrical supply. (depending on the model)
- Never insert anything metallic into the open parts of this apparatus. Doing so may create a danger of electric shock.
- To avoid electric shock, never touch the inside of this apparatus. Only a qualified technician should open this apparatus.
- Make sure to plug the power cord in until it is firmly inserted. Pull on the plug, not the cord, when removing the power cord from the outlet. Do not touch the power cord with wet hands.
- If this apparatus does not operate normally - in particular, if there are any unusual sounds or smells coming from it - unplug it immediately and contact an authorized dealer or service center.
- Be sure to pull the power plug out of the outlet if the TV is to remain unused or if you are to leave the house for an extended period of time (especially when children, elderly or disabled people will be left alone in the house).
  - Accumulated dust can cause an electric shock, an electric leakage, or a fire by causing the power cord to generate sparks and heat, or cause the insulation to deteriorate.
- Be sure to contact an authorized service center, when installing your set in a location with heavy dust, high or low temperatures, high humidity, chemical substances or where it will operate for 24 hours a day such as in an airport, a train station, etc. Failure to do so may cause serious damage to your set.
- Use only a properly grounded plug and receptacle.
  - An improper ground may cause electric shock or equipment damage. (Class I Equipment only)
- To turn off the apparatus completely, you must pull the power plug out of the wall socket. Consequently, the power plug should be readily accessible at all times.
- Do not allow children to handle onto the product.
- Store the accessories (batteries, etc.) in a location safely out of the reach of children.
- Do not install the product in an unstable location such as a shaky shelf, a slanted floor, or a location exposed to vibration.
- Do not drop or impart a shock to the product. If the product is damaged, disconnect the power cord and contact a service center.
- To clean the product, unplug the power cord from the power outlet and wipe the product using a soft cloth dipped in a small amount of water. Do not use any chemicals such as wax, benzene, alcohol, thinners, insecticide, air freshener, lubricant or detergent. This may damage the appearance or erase the printing on the product.
- Do not expose the apparatus to dripping or splashing.
- Do not dispose of batteries in a fire.
- Do not short circuit, disassemble, or overheat the batteries.
- There is a danger of explosion if you replace the batteries with the wrong type of battery. Replace only with the same or equivalent type.
- WARNING - TO PREVENT THE SPREAD OF FIRE, KEEP CANDLES OR OTHER OPEN FLAMES AWAY FROM THIS PRODUCT AT ALL TIMES.

### Getting Started

#### Accessories

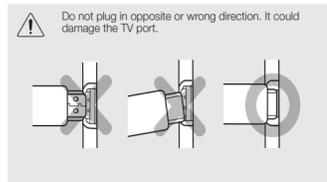
- Remote Control & Batteries (AAA x 2)
- Warranty Card / Regulatory Guide
- Owner's Instructions
- Power Cord
- Cable Guide

#### Input Cables (Sold Separately)

- Audio
- Composite (AV)
- Component
- Coaxial (RF)
- HDMI
- HDMI-DVI

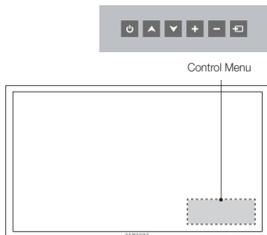
Make sure you have the correct cable before plugging it in. Illustrations of common plugs and jacks are shown below.

Cable Plugs	Ports/Jacks
HDMI	
USB	
Optical	



### TV Controller

The TV's Controller on the bottom right side of the TV, lets you control the TV without the remote control.



- Turns the TV on or off.
- Changes channels.
- Adjusts the volume.
- Displays and selects the available video sources.

Remote control sensor/TV Controller

- The product color and shape may vary depending on the model.
- You cannot input the numbers by pressing the TV's controller.
- If you press it first, the control menu appears. You can select the function by pressing and holding the TV's controller.
- With the TV's Controller, you cannot perform other operations except for turning the TV on or off, changing the channel, adjusting the volume, and switching the input source.

### Plug & Play (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. Press the POWER button. **Plug & Play** is available only when the input source is set to TV. Set the initial setup following instructions that the TV guides. Connecting the power cord and antenna. (refer to 'Connections')

### Channel Menu

#### Seeing Channels

##### Channel List

- Add, delete or set Favorite channels and use the program guide for digital broadcasts. Select a channel in the **All Channels**, **Added Channels**, **Favorite** or **Programmed** screen by pressing the **▲/▼** buttons, and pressing the **ENTER** button. Then you can watch the selected channel.
  - **All Channels**: Shows all currently available channels.
  - **Added Channels**: Shows all added channels.
  - **Favorite**: Shows all favorite channels.
  - **Programmed**: Shows all currently reserved programs.
- Using the remote control buttons with the **Channel List**
  - **Green (Zoom)**: Enlarges or shrinks a channel number.
  - **Yellow (Select)**: Selects multiple channel lists. Select desired channels and press the Yellow button to set all the selected channels at the same time. The **✓** mark appears to the left of the selected channels.
  - **Tools**: Displays the **Channel List** option menu. (The Options menu may differ depending on the situation.)

#### Channel Status Display icons

- **✓**: A channel selected.
- **♥**: A channel set as a Favorite.
- **○**: A reserved program.
- **□**: A program currently being broadcast.

#### Memorizing channels

##### Antenna (Switch to Cable / Switch to Air **TOOLS**)

Before your television can begin memorizing the available channels, you must specify the type of signal source that is connected to the TV (i.e. an Air or a Cable system).

#### Auto Program

- When selecting the Cable TV system: Selects the cable system. **STD**, **SHC** and **IRC** identify various types of cable TV systems. Contact your local cable company to identify the type of cable system that exists in your particular area. At this point, the signal source has been selected.
- After all the available channels are stored, it starts to remove scrambled channels. The **Auto Program** menu then reappears.
- Press the **ENTER** button to stop the channel store during **Auto Program**.

#### How to Stop Auto Programming

1. Press the **ENTER** button.
2. A message will ask **Stop Auto Program?** Select **Yes** by pressing the **▲** or **▶** button.
3. Press the **ENTER** button.

#### Other Features

##### Clear Scrambled Channel

- This function filters out scrambled channels after **Auto Program** is completed. This process may take up to 20-30 minutes.
- Press the **ENTER** button to stop the **Clear Scrambled Channel**.
- This function is only available in **Cable** mode.

### Channel List

#### Channel List Option Menu

- Set each channel using the **Channel List** menu options. Option menu items may differ depending on the channel status.
  - **Add / Delete**: Delete or add a channel to display the channels you want.
    - All deleted channels will be shown on the **All Channels** menu.
    - A gray-colored channel indicates the channel has been deleted.
    - The **Add** menu only appears for deleted channels.
    - Delete a channel from the **Added Channels** or **Favorite** menu in the same manner.
  - **Add to Favorite / Delete from Favorite**: Set channels you watch frequently as Favorites.
  - **Timer Viewing**: You can set a desired channel to be displayed automatically at the set time; even when you are watching another channel. Set the current time first to use this function.
    - Only memorized channels can be reserved.
    - Reserved programs will be displayed in the **Programmed** menu.
    - When a digital channel is selected, press the **Next Program** button to view the digital program. If you select the **ENTER** button to view the digital program, you can set **Timer** (Schedule) button on the next program, you can set **Timer Viewing** directly.
  - **Channel Name Edit** (analog channels only) Assign your own channel name.
    - **Select All**: Select all the channels in the channel list.
    - **Deselect All**: Deselect all the selected channels.
      - You can only select **Deselect All** when one or more channels are selected.
    - **Auto Program**: Scans for a channel automatically and stores in the TV.

#### Programmed

##### (in Channel List)

- **Channel List** → **Programmed** → **TOOLS**
  - You can view, modify or delete a show you have reserved to watch.
  - **Change Info**: Change a show you have reserved to watch.
  - **Cancel Schedules**: Cancel a show you have reserved to watch.
  - **Information**: Display a show you have reserved to watch. (You can also change the reservation information.)
  - **Select All / Deselect All**: You can select or deselect all channels in the channel list.

#### Channel Mode

Change the channel mode directly between **Added Channels** and **Favorite Channels**.

- The **Favorite Channels** is enabled only when you set **Add to Favorite**.

#### 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.
  - Fine tuned channels that have been saved are marked with an asterisk on the right-hand side of the channel number in the channel name.
  - To reset the fine-tuning, select **Reset**.

### Picture Menu

#### Mode **TOOLS**

- Select your preferred picture type.
  - When connecting a PC, you can only select **Entertain** and **Standard**.
  - **Dynamic**: Suitable for a bright room.
  - **Standard**: Suitable for a normal environment.
  - **Movie**: Suitable for watching movies in a dark room.
  - **Entertain**: Suitable for watching movies and games.
    - Only available when connecting a PC.

#### Backlight / Contrast / Brightness / Sharpness / Color / Tint (G/R)

Your television has several setting options for picture quality control. When connecting a PC, you can only make changes to **Backlight**, **Contrast**, **Brightness** and **Sharpness**.

#### Picture Options

- When connecting a PC, you can only make changes to the **Color Tone**, **Size**, and **HDMI Black Level**.
- **Color Tone**
  - **Warm** will be deactivated when the picture mode is **Dynamic**.
  - **Size**: Your cable box/satellite receiver may have its own set of screen sizes as well. However, we highly recommend you use 16:9 mode most of the time.
  - **16:9**: Sets the picture to 16:9 wide mode.
    - **Zoom1**: Use for moderate magnification.
    - **Zoom2**: Use for a stronger magnification.
    - **Wide Fit**: Enlarges the aspect ratio of the picture to fit the entire screen.
  - **4:3**: Sets the picture to basic (4:3) mode.
  - Do not watch in 4:3 format for a long time. Traces of borders displayed on the left, right and center of the screen may cause image retention (screen burn) which are not covered by the warranty.
- **Screen Fit** (DTV) Displays the full image without any cut-off when HDMI (720p / 1080i / 1080p) or Component (1080i / 1080p) signals are inputted.
- **HD (High Definition)**: 16:9 - 1080i/1080p (1920x1080), 720p (1920x720)
- Settings can be adjusted and stored for each external device you have connected to an input on the TV.
- Picture Sizes available by Input Source:

Input Source	Picture Size
ATV, AV, Component (480i, 480p)	16:9, Zoom1, Zoom2, 4:3
DTV (1080i), Component (1080i, 1080p), HDMI (720p, 1080i, 1080p)	16:9, Wide Fit, 4:3, Screen Fit

**Custom**: Magnifies or shrinks 16:9 pictures vertically and/or horizontally. A magnified or shrunk picture can be moved left, right, up, and down.

#### Digital Clean View

If the broadcast signal received by your TV is weak, you can activate the **Digital Clean View** feature to reduce any static and ghosting that may appear on the screen.

- When the signal is weak, try other options until the best picture is displayed.
- **HDMI Black Level**: Selects the black level on the screen to adjust the screen depth.
  - Available only in **HDMI** mode (RGB signals).
- **Film Mode**: Sets the TV to automatically sense and process film signals from all sources and adjusts the picture for optimum quality.
  - Available in **ATV**, **DTV**(interface), **AV**, **COMPONENT** (480i / 1080i) and **HDMI** (480i / 1080i).
- **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.

#### Picture Reset

Resets your current picture mode to its default settings.

- **Reset Picture Mode**: Returns all picture values in the currently selected mode to the default settings.

### Sound Menu

#### Mode **TOOLS**

- **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.

#### Equalizer

(standard sound mode only)

- **Balance L/R**: Adjusts the balance between the right and left speaker.
- **100Hz / 300Hz / 1KHz / 3KHz / 10KHz (Bandwidth Adjustment)**: Adjusts the level of specific bandwidth frequencies.
- **Reset**: Resets the equalizer to its default settings.

#### DTS TruSurround

(standard sound mode only)

**DTS TruSurround** is a patented DTS technology that solves the problem of playing 5.1 multichannel content over two speakers. TruSurround delivers a compelling, virtual surround sound experience through any two-speaker playback system, including internal television speakers. It is fully compatible with all multichannel formats.

#### Preferred Language

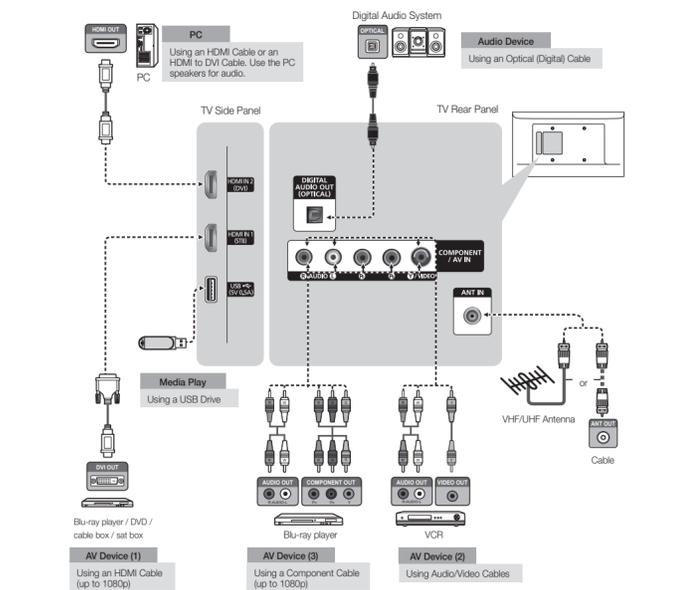
(digital channels only)

Digital-TV broadcasts are capable of simultaneous transmission of 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.

### Connections

- For the best picture and audio quality, connect digital devices using an HDMI cable.
- 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.
- **PC/DVI AUDIO IN** input is not supported.
- For an HDMI to DVI cable connection, you must use the HDMI IN 2 (DVI) port.
- Connecting through the HDMI cable may not be supported depending on the PC.
- If an HDMI to DVI cable is connected to the HDMI IN 2 (DVI) port, the audio does not work.
- For Set-top box connection using HDMI cable, we highly recommend you to connect the HDMI IN 1 (STB) port.



### Changing the Input Source

#### Source List

- Use to select TV or an external input source such as a DVD player / Blu-ray player / cable box / STB satellite receiver.
  1. Press the **SOURCE** button.
  2. Select a desired external input source.
- **TV / AV / Component / HDMI / HDMI2/DVI**
  - You can only choose external devices that are connected to the TV. In the **Source List**, connected inputs will be highlighted.

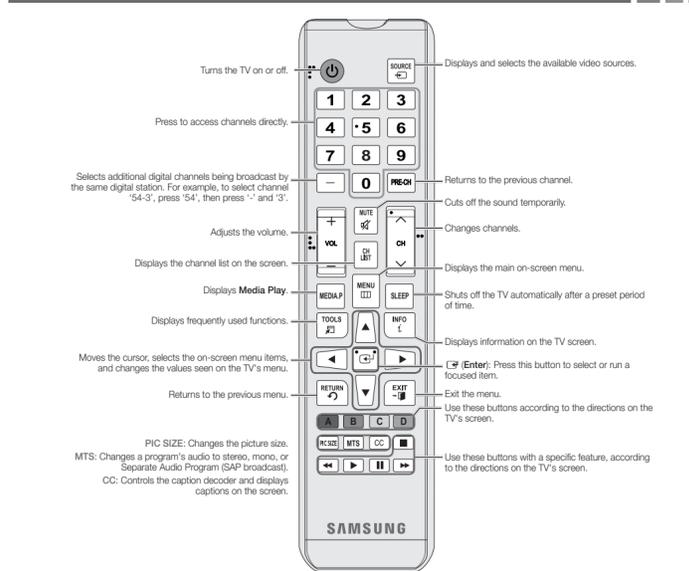
### How to use Edit Name

- Edit Name lets you associate a device name to an input source. To access **Edit Name**, press the **TOOLS** button in **Source List**. Name the device connected to the input jacks to make your input source selection easier.
  - When connecting a PC to the HDMI IN (DVI) port with HDMI cable, you should set the TV to **PC** mode under **Edit Name**.
  - When connecting a PC to the HDMI IN (DVI) port with HDMI to DVI cable, you should set the TV to **DVI PC** mode under **Edit Name**.
  - When connecting an AV device to the HDMI IN 2(DVI) port with HDMI to DVI cable, you should set the TV to **DVI** mode under **Edit Name**.

#### Information

You can see detailed information about the connected external device.

### Remote Control



- The button names above may differ from the actual names.
- Some buttons on the remote control may not be available.
- This remote control has Braille points on the Power, Channel, Volume, and Enter buttons and can be used by visually impaired persons.

#### Display Modes (HDMI/DVI Input)

Optimal resolution: 1920 x 1080/60Hz

Mode	Resolution	Horizontal Frequency (Hz)	Vertical Frequency (Hz)	Pixel Clock Frequency (MHz)	Sync Polarity (H/V)	1920 x 1080
IBM	640 x 350	31.465	70.060	25.175	-/+	✓
	720 x 400	31.469	70.067	28.322	-/+	✓
	640 x 480	31.500	69.667	25.240	-/+	✓
MAC	800 x 600	49.726	74.951	57.284	-/+	✓
	1152 x 870	68.681	75.062	100.000	-/+	✓
	640 x 480	31.469	69.940	25.175	-/+	✓
	640 x 480	31.861	70.000	31.500	-/+	✓
	640 x 480	37.500	75.000	31.500	-/+	✓
	800 x 600	37.879	69.317	40.000	-/+	✓
	800 x 600	48.077	72.188	60.000	-/+	✓
	800 x 600	48.				

## Program Rating Lock

The **Program Rating Lock** feature automatically locks out programs that are deemed inappropriate for children. The user must enter a PIN (personal identification number) before any of the Program Rating Lock restrictions are set up or changed.

ⓘ **Program Rating Lock** is not available in **HDMI** or **Component** mode.

ⓘ The default PIN number of a new TV set is "0-0-0-0".

ⓘ **Program Rating Lock**. You can block rated TV programs.

ⓘ **TV Parental Guidelines**. You can block TV programs depending on their rating. This function allows you to control what your children are watching.

ⓘ **MPAA Rating**: You can block movies depending 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.

ⓘ **Canadian English**: You can block TV programs depending on their Anglophone Canadian.

ⓘ **Canadian French**: You can block TV programs depending on their French Canadian rating.

ⓘ **Downloadable U.S. Rating**: Parental restriction information can be used while watching DTV channels.

ⓘ **Change PIN**. The Change PIN screen will appear. Choose any 4 digits for your PIN and enter it in **Enter New PIN**. Re-enter the same 4 digits in **Confirm New PIN**. When the Change PIN screen disappears, press the OK button. The TV has been changed your new PIN.

ⓘ If you forget the PIN, press the remote-control buttons in the following sequence, which resets the pin to "0-0-0-0": **POWER** (off) → **MUTE** → **8** → **2** → **4** → **POWER** (on)

### Caption

(On-Screen Text Messages)

ⓘ **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 in **Component** or **HDMI** mode.

ⓘ **Caption Mode**: You can select the desired caption mode.

**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 Captions function works with digital channels.

ⓘ **Service1-6** may not be available in digital caption mode depending on the broadcast.

ⓘ **Digital Caption Options**: (digital channels only)
**Size**: Options include Default, Small, Standard and Large. The default is Standard.
**Font Style**: Options include Default and Styles 0 to 7. The default is Style 0.

**Foreground Color**: Options include Default, White, Black, Red, Green, Blue, Yellow, Magenta and Cyan.

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

ⓘ **Digital Caption Options** are available only when **Default** and **Service1-Service6** can be selected in **Caption Mode**.

ⓘ The Foreground and Background cannot be set to have the same color.

### Boot Logo

Enable/disable displaying the logo while the TV starts up.

### Eco Solution

ⓘ **Energy Saving**: This adjust 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 volume button to turn on the screen.

ⓘ **No Signal Power Off** : Sets how quickly the TV switches to standby mode, if no picture is being received.

ⓘ **Display Off**: When the PC is in power saving mode.

ⓘ **Auto Power Off**: The TV will be automatically turned off when no user operation is received for 4 hours.

### Auto Protection Time

If the screen remains idle with a still image for a certain period of time defined by the user, the screen saver is activated to prevent the formation of ghost images on the screen.

## Support Menu

### Self Diagnosis

ⓘ **Picture Test**: Use to check for picture problems. If the problem continues to occur, check the color pattern.

ⓘ **Sound Test**: Use the built-in melody sound to check for sound problems.

ⓘ **Signal Strength**: (digital channels only) An HD channel's reception quality is either perfect or the channels are unavailable. Adjust your antenna to increase signal strength.

ⓘ **Reset**: Reset all settings to the factory defaults.

ⓘ The PIN input screen appears before the setup screen.

ⓘ Enter your 4-digit PIN. Change the PIN using the **Change PIN** option.

### Software Upgrade

**Software Upgrade** can be performed by downloading the latest firmware from samsung.com to a USB memory device.

### Use Mode

You can turn the TV into a display model for retail environments by setting Use Mode to **Store Demo**.

ⓘ For all other uses, select **Home Use**.

ⓘ With **Store Demo**, some functions are disabled, and the TV automatically resets itself after a preset amount of time.

### HD Connection Guide

Refer to this information when connecting external devices to the TV.

### 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.

## Media Play

Enjoy photos, music and/or movie files saved on a USB Mass Storage Class (MSC) device.

### Using the Media Play Button

1. Press the **MENU** button. Press the **▲** or **▼** button to select **Applications**, then press the ENTER **↵** button.

2. Press the **▲** or **▼** button to select **Media Play (USB)**, then press the ENTER **↵** button.

3. Press the **◀** or **▶** button to select an icon (**Videos**, **Music**, **Photos**, **Settings**), then press the ENTER **↵** button.

ⓘ It might not work properly with unlicensed multimedia files.

ⓘ Need-to-Know List before using **Media Play (USB)**

- Supported file systems are FAT and NTFS.
- Certain types of USB Digital camera and audio devices may not be compatible with this TV.
- Media Play** only supports USB Mass Storage Class (MSC) devices. MSC is a Mass Storage Class Bulk-Only Transport device. Examples of MSC are Thumb drives and Flash Card Readers. Devices should be connected directly to the TV's USB port. USB HDD is not supported.

• 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.

• A USB device that requires high power (more than 0.5A) may not be supported.

• Do not disconnect the USB device while it is loading.

• 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.

• 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.

• PTP device is not supported.

• If an over-power warning message is displayed while you are connecting or using a USB device, the device may not be recognized or may malfunction.

• 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.

• If you use a USB extension cable, the TV may not recognize the USB device or may not be able to read the files on the device.

If a USB device connected to the TV is not recognized, the list of files on the device is 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 **Media Play**, use the "Empty the Recycle Bin" function on the PC to permanently delete the file.

• **Photos** only supports sequential jpeg format.

• The scene search and thumbnail functions are not supported in the **Videos**.

• If the number of files and folders saved on a USB storage device is approximately over 4000, the files and folders may not appear and some folders may not be opened.

• The maximum displayed number of files, including sub folders, in one folder of USB storage device is 2000.

• The media may not be playing smoothly when using the device lower than USB 2.0.

### Videos

1. Press the **◀/▶** buttons to select **Videos**, then press the ENTER **↵** button in the **Media Play** menu.

2. Press the **◀/▶/▲/▼** buttons to select the desired video in the file list. Press the ENTER **↵** button.

3. Press the ENTER **↵** button or **[▶]** (Play) button.

- The selected file is displayed on the top with its playing time.

- If video time information is unknown, playing time and the progress bar are not displayed.

- During video playback, you can search using the **◀/▶** buttons.

ⓘ In this mode, you can play movie clips contained in a game, but you cannot play the game itself.

• Supported Subtitle Formats

- External

Name	File extension
MPEG-4 timed text	.txt
SAMI	.smi
SubRip	.srt
SubViewer	.sub
Micro DVD	.sub or .txt
SubStation Alpha	.ssa
Advanced SubStation Alpha	.ass
- Internal	

Name	Container	Format
Xsib	AVI	Picture Format
SubStation Alpha	MKV	Text Format
Advanced SubStation Alpha	MKV	Text Format
SubRip	MKV	Text Format
MPEG-4 Timed text	MP4	Text Format

• Supported Video Formats

File Extension	Container	Video Codec	Resolution	Frame rate(fps)	Bit rate (Mbps)	Audio Codec
*.avi		Motion JPEG	640x480		8	
*.mkv		H.264 BP/ MP18				
*.ast		H.264 BP/ MP18				
*.wmv	AVI	MKV	Dxv.3.11 / 4 / 5 / 6			AC3 LPCM AOPCM (IMA, MS) AAC HE-AAC
*.mp4	MKV	ASF	MPEG4 SP/ ASP			
*.mov	MKV	ASF	MPEG4 SP/ ASP			
*.3gp	NP4	S2P	Window Media Video v9VC1	1920x1080	MAX.30	30 WMA DD+ MPEG4MP3 DTS (core, LBR)
*.vro	MOV	FLV				G.711(A-Law, µ-Law)
*.mpg	VOB	TS	MPEG2			
*.tp	VOB	TS	MPEG2			
*.trp	VOB	TS	MPEG2			
*.mov	TS	MPEG2				
*.vob	TS	MPEG2				
*.avi		MPEG1				
*.divx						
*.webm	WebM	VP8	1920x1080	6-30	20	Vorbis

### Other Restrictions

• Codex may not function properly if there is a problem with the content.

• Video content does not play or does not play correctly if there is an error in the content or container.

• Sound or video may not work if they have standard bit rates/frame rates above the TV's compatibility ratings.

• If the Index Table is has an error, the Seek (Jump) function will not work.

• When playing video over a network connection, the video may not play smoothly because of transmission speeds.

• Some USB/digital camera devices may not be compatible with the TV.

• While the TV is playing a video at the bit rate of 10 Mbps or higher, the menu screens may be displayed slowly.

Video Decoder
Supports up to H.264, Level 4.1
H.264 FMO / ASO / RS, VC1 / AP L4 are not supported.
GMC 2 or above is not supported.

Audio Decoder
WMA 10 Pro supports up to 5.1 channels. Supports up to the M2 profile. WMA lossess audio is not supported.
QCPEL and AMR NB/WB are not supported.
Vorbis is supported for up to 2 channels.
Dolby Digital Plus is supported for up to 5.1 channels.
The DTS LBR codec is only available for MKV / MP4 /TS containers.

### Music

1. Press the **◀/▶** buttons to select **Music**, then press the ENTER **↵** button in the **Media Play** menu.

2. Press the **◀/▶/▲/▼** buttons to select the desired Music in the file list.

3. Press the ENTER **↵** button or **[▶]** (Play) button.

ⓘ During music playback, you can search using the **◀/▶** buttons.

ⓘ **[◀]** (REW) and **[▶]** (FF) buttons do not function during play.

ⓘ Only displays the files with MP3 file extensions. Other file extensions are not displayed, even if they are saved on the same USB device.

ⓘ If the sound is abnormal when playing MP3 files, adjust the **Equalizer** in the **Sound menu**. (An over-modulated MP3 file may cause a sound problem.)

### Photos

1. Press the **◀/▶** buttons to select **Photos**, then press the ENTER **↵** button in the **Media Play** menu.

2. Press the **◀/▶/▲/▼** buttons to select the desired photo in the file list.

3. Press the ENTER **↵** button or **[▶]** (Play) button.

ⓘ NOTE

- While a photo list is displayed, press the **[▶]** (Play) / ENTER **↵** button on the remote control to start the slide show.

- All files in the file list section will be displayed in the slide show.

- During the slide show, files are displayed in order.

- During the slide show, you can adjust the slide show speed using **[◀]** (REW) or **[▶]** (FF) button.

- You can move to other file using the **◀/▶** buttons.

Image	Photo	Resolution
JPEG	Base-line	15360 x 8704
	Progressive	1024 x 768

### Other Restrictions

• CMYK and YCKC Color space JPEGs are not supported.

### Playing Multiple Files

ⓘ **Playing selected video/music/photo files**

1. Press the Yellow button in the file list to select the desired file.

2. Repeat the above operation to select multiple files.

ⓘ **NOTE**

- The **✓** /mark appears to the left of the selected files.

- To cancel a selection, press the Yellow button again.

- To deselect all selected files, press the TOOLS button and select **Deselect All**.

ⓘ Press the TOOLS button, and then select: **Play Selected Contents**.

ⓘ **Playing the video/music/photo file group**

1. While a file list is displayed, move to any file in desired group.

2. Press the TOOLS button, and then select **File Folder**.

### Media Play - Additional Functions

ⓘ **Videos/Music/Photos Play Option menus**

When playing a file, press the TOOLS button.

Category	Operation	Videos	Music	Photos
<b>Title</b>	You can move the other file directly.	✓		
<b>Repeat Mode</b>	You can play movie and music files repeatedly.	✓	✓	
<b>Picture Size</b>	You can adjust the picture size to your preference.	✓		
<b>Picture Mode</b>	You can adjust the picture setting.	✓		✓
<b>Sound Mode</b>	You can adjust the sound setting.	✓	✓	

<b>Subtitle Settings</b>	You can play the video with Subtitles. This function only works if the subtitles are the same file name as the video.			
<b>Audio Format</b>	You can select the digital audio output format.	✓		

ⓘ You can change the audio language if the video has more than one language.

ⓘ **NOTE**

• Standard dimensions for wall mount kits are shown in the table below.

• When purchasing our wall mount kit, 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 dimension or do not comply with the VESA standard screw specifications. Screws that are too long may cause damage to the inside of the TV set.

• For wall mounts that do not comply with the VESA standard screw specifications, the length of the screws may differ depending on the wall mount specifications.

• Do not fasten the screws too firmly. This may damage the product or cause the product to fall, leading to personal injury. Samsung is not liable for these kinds of accidents.

• Samsung is not liable for product damage or personal injury when a non-VESA or non-specified wall mount is used or the consumer fails to follow the product installation instructions.

• Do not mount the TV at more than a 15 degree tilt.
• Always have two people mount the TV on a wall.

### Settings

### Using the Setup Menu

ⓘ **DiX® Video On Demand**: Shows the registration code authorized for the TV. If you connect to the DiX web site and register with 10-digit registration code, you can download the VOD activation file. Once you play it using Media Play, the registration is completed.

ⓘ For more information on DiX® VOD, visit "http://vod.dix.com".

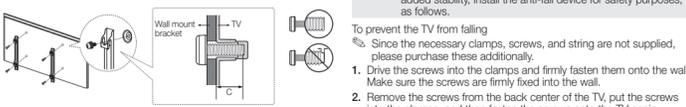
ⓘ **Information**: Select to view information on the connected device.

## Other Information

### Installing the Wall Mount Kit

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

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



### Wall Mount Kit Specifications (VESA)

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

Install your wall mount on a solid wall perpendicular to the floor. When attaching to other building materials, please contact your nearest dealer.

If 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.

• When purchasing our wall mount kit, 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 dimension or do not comply with the VESA standard screw specifications. Screws that are too long may cause damage to the inside of the TV set.

• For wall mounts that do not comply with the VESA standard screw specifications, the length of the screws may differ depending on the wall mount specifications.

• Do not fasten the screws too firmly. This may damage the product or cause the product to fall, leading to personal injury. Samsung is not liable for these kinds of accidents.

• Samsung is not liable for product damage or personal injury when a non-VESA or non-specified wall mount is used or the consumer fails to follow the product installation instructions.

• Do not mount the TV at more than a 15 degree tilt.
• Always have two people mount the TV on a wall.

### Kensington Lock

The Kensington Lock is not supplied by Samsung. It is a device used to physically fix the system when using it in a public place. Refer to the manual provided with the Kensington Lock for additional information on proper use.

ⓘ Please find a "🔒" icon on the rear of the TV. The Kensington slot is beside the "🔒" icon.

ⓘ The position and color may differ depending on the model.