

LED TV

user manual

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.

Still image warning

Avoid displaying still images (like jpg picture files) or still image element (like TV programme logo, panorama or 4:3 image format, stock or news bar at screen bottom etc.) on the screen. Constant displaying of still picture 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.

For India Only

This marking on the product, accessories or literature indicates that the product and its electronic accessories should not be disposed of with other household waste at the end of their working life. To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate these items from other types of waste and recycle them responsibly to promote the sustainable reuse of material resources.

For more information on safe disposal and recycling visit our website www.samsung.com/in or contact our Helpline numbers - 18002686282, 18003000822.

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Important Safety Instructions

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 SERVICES 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 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 (kettle etc.) on this apparatus, as this can result in a risk of fire or electric shock.
- Do not expose the 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 overheat wall outlets, extension cords, or adapters 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 adapters, 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 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 hang 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 shelf, seat, a slanted floor, or a location exposed to vibration.
- Do not drop or impact 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, dry cloth. Do not use any chemicals such as wax, benzene, alcohol, thinners, insecticides, 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.
- 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

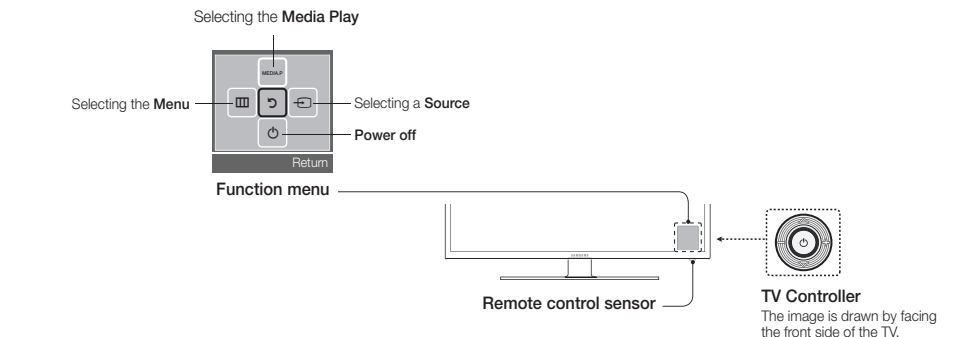
- Remote Control & Batteries (AAA x 2)
 - Owner's Instructions
 - Warranty Card / Regulatory Guide (Not available in some locations)
 - Power Cord
-

- Cable manager
-

Input Cables (Sold Separately)

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

TV Controller (Panel Key)

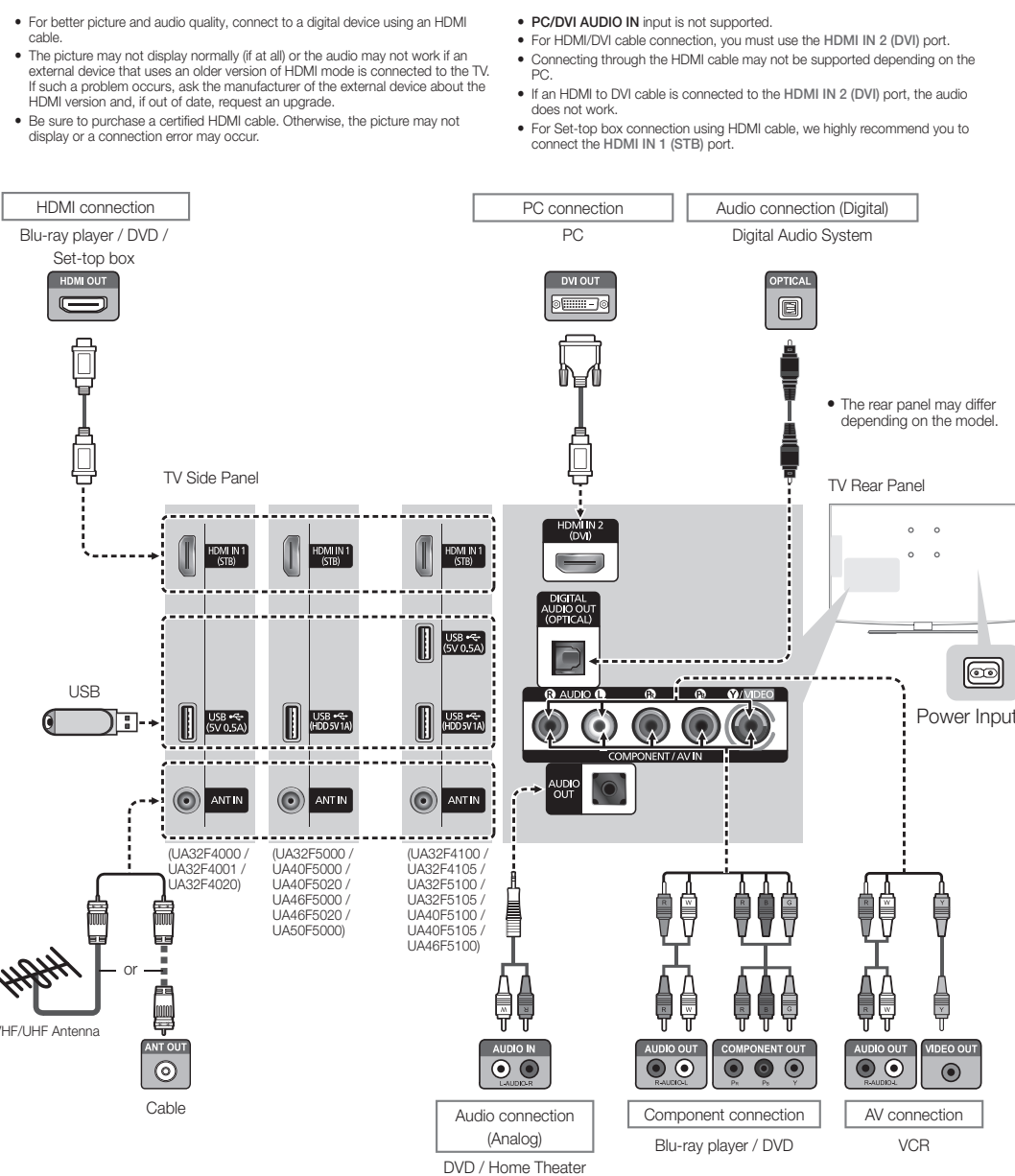


- ☞ To close the **Menu**, **Media Play** List, or **Source** List, press the Controller for more than 1 second.
- ☞ When selecting the function by moving the controller to the up/down/left/right directions, be sure not to press the controller. If you press it first, you cannot operate it to move the up/down/left/right directions.

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. Plug the power cord into a wall outlet, and then press the POWER button to turn on the TV. Set the initial setup following instructions that the TV guides.
- ☞ If you are not using a cable box or satellite box, make you sure have connected the TV to an Aerial or cable connection before you turn on the TV.
 - ☞ Connecting the power cord and antenna. (refer to 'Connections')

Connections



Changing the Input Source

Source List

- Use to select TV or other external input sources such as DVD / Blu-ray players / cable box / STB satellite receiver connected to the TV.
1. Press the **SOURCE** button.
 2. Select a desired external input source.
- **TV / AV / Component / HDMI / HDMI/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.

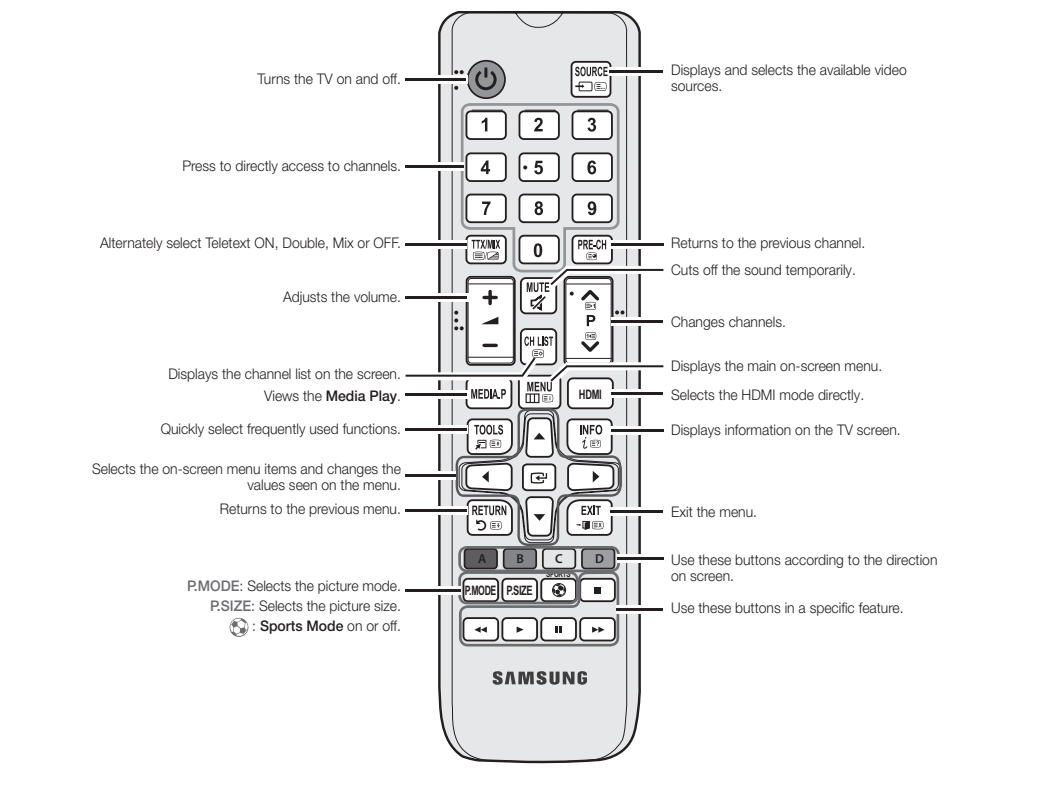
- ☞ When connecting a PC to the HDMI IN 2 (DVI) port with HDMI cable, you should set the TV to **PC** mode under **Edit Name**.
- ☞ When connecting a PC to the HDMI IN 2 (DVI) port with HDMI to DVI cable, you should set the TV to **DVI PC** mode under **Edit Name**.
- ☞ When connecting an AV devices 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 selected external device.
- ☞ Information only available for the current connected source.

Remote Control

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

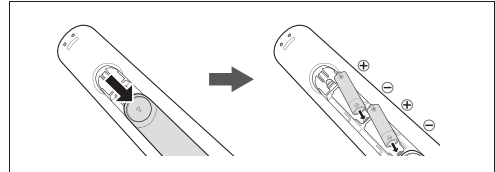


Display Modes (HDMI/DVI Input)

Optimal resolution
4 series: 1366 x 768@60Hz / 5 series: 1920 x 1080@60Hz

Mode	Resolution	Horizontal Frequency (kHz)	Vertical Frequency (Hz)	Pixel Clock (MHz)	Sync. Phase (H/V)	1366 x 768	1920 x 1080
IBM	720 x 480	31.469	70.087	28.322	+/-	✓	✓
	640 x 480	35.000	60.000	30.240	-/-	✓	✓
MAC	832 x 624	49.728	74.551	57.284	-/-	✓	✓
	1152 x 864	66.667	75.000	108.000	-/-	✓	✓
	640 x 480	31.469	59.940	25.175	-/-	✓	✓
	640 x 480	37.861	72.809	31.500	-/-	✓	✓
	640 x 480	37.500	72.000	30.000	-/-	✓	✓
	800 x 600	37.879	60.317	40.000	+/-	✓	✓
	800 x 600	48.000	72.000	48.000	-/-	✓	✓
	800 x 600	46.875	72.000	46.500	-/-	✓	✓
	1024 x 768	46.369	60.004	65.000	-/-	✓	✓
	1024 x 768	46.478	75.000	75.000	-/-	✓	✓
	1024 x 768	60.000	75.000	75.750	+/-	✓	✓
VESA DMT	1152 x 864	67.500	75.000	108.000	-/-	✓	✓
	1280 x 720	45.000	60.000	74.250	-/-	✓	✓
	1280 x 800	49.702	59.810	63.500	-/-	✓	✓
	1280 x 1024	63.667	75.000	108.000	-/-	✓	✓
	1280 x 1024	75.000	75.000	135.000	+/-	✓	✓
	1280 x 768	47.712	60.750	65.500	-/-	✓	✓
	1440 x 900	45.000	60.000	108.000	-/-	✓	✓
	1600 x 900(50)	60.000	60.000	108.000	+/-	✓	✓
	1680 x 1050	65.290	59.954	146.250	-/-	✓	✓
	1920 x 1080	67.500	60.000	148.500	-/-	✓	✓

Installing batteries (Battery size: AAA)



- ☞ **NOTE**
 - Use the remote control within 23 feet from TV.
 - Bright light may affect the performance of the remote control. Avoid using nearby special fluorescent light or neon signs.
 - The Colour and shape may vary depending on the model.

Channel Menu

Seeing Channels

Channel List

- Select a channel in the **All Channels**, **Added Channels**, **Favourites** 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.
 - **Favourites**: Shows all favourite channels.
 - **Programmed**: Shows all currently reserved Programmes.
- ☞ 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 (Tools)**: Displays the **Channel List** option menu. (The Options menus may differ depending on the situation.)

Channel Status Display icons

Icons	Operations
✓	A channel selected.
♥	A channel set as a favourites.
■	A locked channel.
Ⓢ	A reserved programme.

Channel Mode

- Channels will be switched within the favourite or memorised channel list.
- **Added Channels**: Shows all added channels.
 - **Favourite Ch.**: Shows all favourite channels.

Fine Tune

- 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 banner.
 - ☞ To reset the fine-tuning, select **Reset**.

Picture Menu

Mode **TOOLS**

- Select your preferred picture type.
- **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.
- ☞ It is only available when connecting a PC.

Backlight / Contrast / Brightness / Sharpness / Colour / Tint (G/R)

- Your television has several setting options for picture quality control.
- ☞ In analogue **TV**, **AV** modes of the PAL system, the **Tint (G/R)** function is not available.
 - ☞ When connecting a PC, you can only make changes to **Backlight**, **Contrast**, **Brightness** and **Sharpness**.
 - ☞ Settings can be adjusted and stored for each external device connected to the TV.
 - ☞ Lowering picture brightness reduces power consumption.

Advanced Settings

- (available in **Standard** / **Movie** mode)
Compared to previous models, new Samsung TVs have a more precise picture.
- **Dynamic Contrast**: Adjusts the screen contrast.
 - **Black Tone**: Select the black level to adjust the screen depth.
 - **Flesh Tone**: Emphasize pink "Flesh Tone".
 - **Colour Space**: Adjusts the range of colours available to create the image.
 - **White Balance**: Adjust the colour temperature for a more natural picture.
 - **R-Offset / G-Offset / B-Offset**: Adjust each colour's (red, green, blue) brightness.
 - **R-Gain / G-Gain / B-Gain**: Adjust each colour's (red, green, blue) brightness.
 - **Gamma**: Adjusts the primary colour intensity.
 - **Motion Lighting**: Reduce power consumption by brightness control adapted motion.
- ☞ Only available in **Standard** mode.

Picture Options

- ☞ **Colour Tone**
 - **Warm1** or **Warm2** 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.
- **Wide Zoom**: Magnifies the picture size more than 4:3.
- **Adjusts the Position** by using **▲, ▼** buttons.
- **Zoom**: Magnifies the 16:9 wide pictures vertically to fit the screen size.
- **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 centre of the screen may cause image retention (screen burn) which are not covered by the warranty.
- **Screen Fit**: Displays the full image without any cut-off when HDMI (720p / 1080i / 1080p) or Component (1080i / 1080p) signals are inputted.
- ☞ **NOTE**
 - After selecting Screen Fit in HDMI (1080i / 1080p) or Component (1080i / 1080p) mode: Adjusts the **Position** or **Size** by using **▲, ▼, ◀, ▶** button.
 - Depending on the input source, the picture size options may vary.
 - The available items may differ depending on the selected mode.
 - Settings can be adjusted and stored for each external device connected to an input on the TV.
 - If you use the **Screen Fit** function with HDMI 720p input, 1 line will be cut at the top, bottom, left and right as in the overscan function.
- **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.
- **MPEG Noise Filter**: Reduces MPEG noise to provide improved picture quality.
- **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 adjust the picture for optimum quality.
- ☞ Available in TV mode, **AV**, **COMPONENT** (480i / 1080i) and **HDMI** (480i / 1080i).
- **LED Back Motion**: Removes drag from fast scenes with a lot of movement to provide a clear picture.
- **Analogue Clean View**: Reduces diagonal noise in picture caused by the crosstalk of signals.

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

Equalizer

- (standard sound mode only)
- **Balance**: 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 **TOOLS**

- (standard sound mode only)
This function provides a virtual 5.1 channel surround sound experience through a pair of speakers using HRTF (Head Related Transfer Function) technology.

Auto Volume

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

SPDIF Output

- SPDIF Output is used to provide digital sound, reducing interference going to speakers and various digital devices such as a DVD player.
- **Audio Format**: You can select the Digital Audio output format. The available Digital Audio output format may differ depending on the input source.
 - ☞ By connecting to 5.1ch speakers in a Dolby Digital setup, maximize your interactive 3D sound experience.
 - **Audio Delay**: Correct audio-video sync problems, when watching TV or video, and when listening to digital audio output using an external device such as an AV receiver (0ms ~ 250ms).

Speaker Select

- A sound echo may occur due to a difference in decoding speed between the main speaker and the audio receiver. In this case, set the TV to **External Speaker**.
- ☞ When you set **Speaker Select** to **External Speaker**, the TV's speakers are turned off. You will hear sound through the external speakers only. When you set **Speaker Select** to **TV Speaker** both the TV's speakers and the external speakers are on. You will hear sound through both.
 - ☞ When **Speaker Select** is set to **External Speaker**, the volume and **MUTE** buttons will not operate and the sound settings will be limited.
 - ☞ If there is no video signal, both speakers will be mute.

Security

☞ The PIN input screen appears before the setup screen.

☞ Enter your 4-digit PIN, the default of which is "0-0-0-0". Change the PIN using the **Change PIN** option.

☞ **Channel Lock:** Lock channels in **Channel List**, to prevent unauthorized users, such as children, from watching unsuitable programme.

☞ Only available when the Input source is set to **TV**.

☞ **Change PIN:** Change your password required to set up the TV.

☞ 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).

Eco Solution

■ **Energy Saving** **[ECO]** This 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 volume button to turn on the screen.

■ **Eco Sensor** **[For S-Series]** To enhance your power savings, the picture settings will automatically adapt to the light in the room.

☞ If you adjust the **Backlight**, the **Eco Sensor** will be set to **Off**. **Min. Backlight:** When **Eco Sensor** is **On**, the minimum screen brightness can be adjusted manually.

☞ If **Eco Sensor** is **On**, the display brightness may change (become slightly darker in most cases) depending on the surrounding light intensity.

■ **No Signal Power Off:** To avoid unnecessary energy consumption, set how long you want the TV to remain on if it's not receiving a signal.

☞ Disabled 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

■ **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.

General

■ **Game Mode:** When connecting to a game console such as PlayStation™ or Xbox™, you can enjoy a more realistic gaming experience by selecting the game mode.

- Precautions and limitations for game mode
 - To disconnect the game console and connect another external device, set **Game Mode** to **Off** in the setup menu.
 - If you play the TV menu in **Game Mode**, the screen shakes slightly.
 - Game Mode** is not available in **TV mode**.
 - After connecting the game console, set **Game Mode** to **On** to prevent poor picture quality. Unfortunately, you may notice reduced picture quality.

■ **Melody:** Set so that a melody plays when the TV is turned **Off**, **Low**, **Medium** and **High**.

☞ The **Melody** does not play.

- When no sound is output from the TV because the MUTE button has been pressed.
- When no sound is output from the TV because the volume has been reduced to minimum with the VOL – button
- When the TV is turned off by **Sleep Timer** function.

Problem	Possible Solution
Picture Quality	
The TV image does not look as good as it did in the store.	<ul style="list-style-type: none">If you have an analogue cable/set top box, upgrade to a digital set top box. Use HDMI or Component cables to deliver HD (high definition) picture quality. Cable/Satellite subscribers: Try HD stations from the channel line up. Antenna connection: Try HD stations after performing Auto tuning. Many HD channels are up scaled from SD(Standard Definition) contents. Adjust the Cable/Set top box video output resolution to 1080i or 720p. Make sure you are watching the TV at the minimum recommended distance based on the size and definition of the signal.
The picture is distorted: macroblock error, small block, dots, pixelation	<ul style="list-style-type: none">Compression of video contents may cause picture distortion especially in fast moving pictures such as sports and action movies. Low signal level or bad quality can cause picture distortion. This is not a TV issue. Mobile phones used close to the TV (cca up to 1m) may cause noise in picture on analogue and digital TV.
Colour is wrong or missing.	<ul style="list-style-type: none">If you're using a component connection, make sure the component cables are connected to the correct jacks. Incorrect or loose connections may cause colour problems or a blank screen.
There is poor colour or brightness.	<ul style="list-style-type: none">Adjust the Picture options in the TV menu. (go to Picture mode / Colour / Brightness / Sharpness) Adjust Energy Saving option in the TV menu. (go to MENU - Setup - Eco Solution - Energy Saving) Try resetting the picture to view the default picture settings. (go to MENU - Picture - Picture Reset)
There is a dotted line on the edge of the screen.	<ul style="list-style-type: none">If the picture size is set to Screen Fit, change it to 16:9. Change cable/satellite box resolution.
The picture is black and white.	<ul style="list-style-type: none">If you are using an AV composite input, connect the video cable (yellow) to the Green jack of component input 1 on the TV.
When changing channels, the picture freezes or is distorted or delayed.	<ul style="list-style-type: none">If connected with a cable box, please try to reset the cable box. Reconnect the AC cord and wait until the cable box reboots. It may take up to 30 minutes. Set the output resolution of the cable box to 1080i or 720p.
Sound Quality	
There is no sound or the sound is too low at maximum volume.	<ul style="list-style-type: none">Please check the volume the of external device connected to your TV.
The picture is good but there is no sound.	<ul style="list-style-type: none">Set the Speaker Select option to TV Speaker in the sound menu. If you are using an external device, make sure the audio cables are connected to the correct audio input jacks on the TV. 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 when you have a HDMI connected to your TV). If you are using a HDMI cable, a separate audio cable is required. If your TV has a headphone jack, make sure there is nothing plugged into it.
The speakers are making an inappropriate noise.	<ul style="list-style-type: none">Check the cable connections. Make sure a video cable is not connected to an audio input. For antenna or cable connections, check the signal strength. Low signal level may cause sound distortion.
No Picture, No Video	
The TV will not 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 POWER button on the TV to make sure the problem is not the remote. If the TV turns on, refer to "The remote control does not work" below.
The TV turns off automatically.	<ul style="list-style-type: none">Ensure the Sleep Timer is set to Off in the Time menu. If your PC is connected to the TV, check your PC power settings. Make sure the AC power cord is plugged in securely to the wall outlet and the TV. When watching TV from an antenna or cable connection, the TV will turn off after 10 ~ 15 minutes if there is no signal.
There is no picture/video.	<ul style="list-style-type: none">Check cable connections (remove and reconnect all cables connected to the TV and external devices). Set your external devices' (Cable/Set top Box, DVB, Blu-ray etc) video outputs to match the connections to the TV input. 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 TV's correct source by pressing the SOURCE button on the TV remote.

Application Menu

Using the Media Play

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



Connecting a USB Device

- Turn on your TV.
- Connect a USB device containing photo, music and/or movie files to the USB jack on the side of the TV.
- When USB is connected to the TV, you can select **Media Play**.

Using the Media Play Menu

- Press the MENU button. Press the ▲ or ▼ button to select **Application**, then press the ENTER [↵] button.
- Press the ▲ or ▼ button to select **Media Play (USB)**, then press the ENTER [↵] button.
- 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.
 - If you want to view detailed information of the file or connected device, press TOOLS button in the file list, and then select **Detailed Information** or **Device Information**.
 - 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. (LED 4000, 4001, 4020 series 32" : 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 may not be supported. (LED 5 series / LED 4100, 4105, 5100, 5105 models 32" and above: 1A)
 - 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.
- If a USB extension cable is used, the USB device may not be recognized or the files on the device may not be read.
- 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 disks may be released automatically when you connect them to the TV.
- 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.
- If 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.
- The file name only works in supported menu language. The other language is not displayed properly.

Videos

- Press the ◀ or ▶ button to select **Videos**, then press the ENTER [↵] button in the **Media Play** menu.
- Press the ◀/▶/▲/▼ buttons to select the desired video in the file list.
- 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 ◀ and ▶ button.
 - You can use [◀&▶] (REW) and [▶&▶] (FF) buttons during playback.

☞ 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 direct text	.txt
SAMI	.smi
Subrip	.srt
SubViewer	.sub
Micro DVD	.sub or .txt
SubStation Alpha	.ssa
Advanced SubStation Alpha	.ass

- Internal

Name	Container	Format
Sub	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	Bit rate(Mbps)	Audio Codec
*.mp4	MP4	DxV3.11 AAC 1.0	1024x1080	6-30	30Mbps	MP3 / AC3M / AAC
		H264	1024x1080	6-30	30Mbps	
		AVC	1024x1080	6-30	30Mbps	
		MPEG5	944x640	6-30	10Mbps	
*.avi	*AVI	DxV3.11 AAC 1.0	1024x1080	6-30	30Mbps	MP3 / AC3 / LPCM / ADPCM / DTS Core
		MPEG4 SP / ASP	1024x1080	6-30	30Mbps	
		H264	1024x1080	6-30	30Mbps	
*.mkv		MPEG5	944x640	6-30	10Mbps	
*.wmv	ASF	DxV3.11 AAC 1.0	1024x1080	6-30	30Mbps	MP3 / AC3 / LPCM / ADPCM / WMA / VMA Pro
		H264	1024x1080	6-30	30Mbps	
*.ts	TS	MPEG2	1024x1080	6-30	30Mbps	AC3 / AAC / MP3 / DOL / HE-AAC
*.h264	H.264 FMO / MP / HP	1024x1080	944x560	30Mbps		AC3 / MP3 / LPCM / AAC
*.h265	MPEG1	1024x1080	944x560	30Mbps		
*.mpeg	PS	MPEG2	1024x1080	24/25/30	30Mbps	
*.m2p	H.264 SP / MP / HP	1024x1080	6-30	30Mbps		
*.m2ts	MPEG4 SP / ASP	1024x1080	6-30	30Mbps		
*.h264	H264	1024x1080	6-30	30Mbps		MP3
*.h265	H265	1024x1080	6-30	30Mbps		
*.h266	H266	1024x1080	6-30	30Mbps		MP3

Other Restrictions

- 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.
- The menu may take longer to appear if the video's bit rate exceeds 10Mbps.
- Video content can not be played, if there are many contents in one file.

Video Decoder
Supports up to H.264, Level 4.1
H.264 FMO / ASD / RS, VC1 SP / MP / AP L4 and AVCHD are not supported.
MPEG4 SP, ASP : <ul style="list-style-type: none">Below 1280 x 720: 60 frame max Above 1280 x 720: 30 frame max
H.264 SP / MP / HP : 100Mbps
GMC is not supported.
Audio Decoder
Supports up to WMAV7, 8, 9 STD, 9 PRO, 10 PRO
WMA 9 PRO and WMA 10 PRO support 5.1 channel, LBR mode of WMA Pro is not supported)
WMA Lossless is not supported.

Music

- Press the ◀ or ▶ button to select **Music**, then press the ENTER [↵] button in the **Media Play** menu.
- Press the ◀/▶/▲/▼ buttons to select the desired Music in the file list.
- Press the ENTER [↵] button or [▶] (Play) button.
 - During music playback, you can search using the ◀ and ▶ button.
 - [◀&▶] (REW) and [▶&▶] (FF) buttons do not function during play.

☞ Only displays the files with MP3 file extension. 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

- Press the ◀ or ▶ button to select **Photos**, then press the ENTER [↵] button in the **Media Play** menu.
 - Press the ◀/▶/▲/▼ buttons to select the desired photo in the file list.
 - 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 ◀ or ▶ button.
 - Music files can be automatically played during the Slide Show if the **Background Music** is set to **On**.
 - The **Mode** in **Background Music** cannot be changed until the BGM has finished loading.

• Supported Photo Formats

Image	Photo	Resolution
JPEG	Progressive	15360 x 8194
		1024 x 768

Other Restrictions

CMYK, YCKC Colour space JPEG are not supported.

Playing Multiple Files

Playing selected video/music/photo files

- Press the Yellow button in the file list to select the desired file.
 - 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**.

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

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

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

■ **Copying the files to the other USB device**
[For 4100 / 4105 / 5100 / 5105 models]

- Press the Yellow button in the file list to select the desired file.
 - When you press the green button, the selected files copy to the other USB device.
- ☞ Available only when both USB devices are connected to the TV.
- ☞ The FAT32 file system cannot copy the file which size is more than 4GB.

USB	Support File System
Play (Read)	NTFS, FAT, FAT32
Copy & Delete	FAT, FAT32
Format	FAT32 Only

Media Play - Additional Functions

Videos/Music/Photos Play Option menus

When playing a file, press the TOOLS button.

Category	Operation	Videos	Music	Photos
Title	You can move the file directly.			
Repeat Mode	You can play movie and music files repeatedly.	✓	✓	
Picture Size	You can adjust the picture size to your preference.	✓		
Picture Mode	You can adjust the picture setting.	✓		
Sound Mode	You can adjust the sound setting.	✓	✓	✓
Subtitle Setting	You can play the video with Subtitles. This function only works if the subtitles are the same file name as the video.	✓		
Audio Format	You can select the digital audio output format.	✓		
Audio Language	You can change the audio language if the video has more than one language.	✓		

Media Play - Additional Functions



Videos/Music/Photos Play Option menus

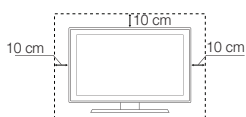
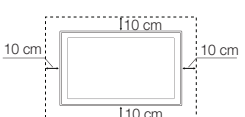




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Picture Mode	You can adjust the picture setting.	✓		
Sound Mode	You can adjust the sound setting.	✓	✓	✓
Subtitle Setting	You can play the video with Subtitles. This function only works if the subtitles are the same file name as the video.	✓		
Audio Format	You can select the digital audio output format.	✓		
Audio Language	You can change the audio language if the video has more than one language.	✓		

Storage and Maintenance

☞ If you remove the attached sticker on the TV screen, clean the residues and then watch TV.

	
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 in a small amount of water. Do not use a flammable liquid (e.g. benzene, thinner) or a cleaning agent.

Installation with a stand.	Installation with a wall-mount.
	
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Other Information

Installing the Wall Mount

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. Contact a technician for assistance when installing the wall mount bracket. Samsung Electronics is not responsible for any damage to the product or injury to yourself or others if you elect to install the TV on your own.

Wall Mount Kit Specifications (VESA)

☞ The wall mount kit is not supplied, but sold separately. Install your wall mount on a solid wall perpendicular to the floor. When attaching to other building materials, please contact your nearest dealer. If 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 longer than the standard dimension, as they 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	Models
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