

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 pic picture files) or still image element (like TV programme logo, panorama or 4:3 image format, stick 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:

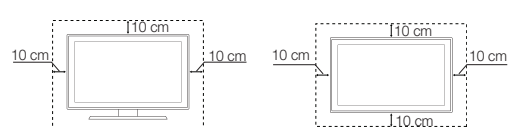
- Avoid displaying the same TV channel for long periods.
- Always try to display any image on full screen, use TV set picture format menu for best possible match.
- Reduce brightness and contrast values to minimum required to achieve desired picture quality, exceeded values may speed up the burnout process.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

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 failing.
- The appearance may differ depending on the product.
- Be careful when you contact the TV because some parts can be somewhat hot.

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



Contact SAMSUNG WORLDWIDE		
If you have any questions or comments relating to Samsung products, please contact the SAMSUNG customer care Centre.		
Country	Customer Care Centre ☎	Web Site
AUSTRALIA	1300 362 603	www.samsung.com
NEW ZEALAND	0800 SAMSUNG (0800 726 786)	www.samsung.com
CHINA	400-810-5858	www.samsung.com
HONG KONG	(852) 3698-4698	www.samsung.com/hk_en/
INDIA	1800 1100 11 3030 8282 1800 3000 8282 1900 266 8282	www.samsung.com
INDONESIA	0800-112-8888 021-5699-7777	www.samsung.com
JAPAN	0120-327-527	www.samsung.com
MALAYSIA	1800-88-9999	www.samsung.com
PHILIPPINES	1-800-10-SAMSUNG(726-7864) for PLOT 1-800-3-SAMSUNG(726-7864) for Digital 1-800-8-SAMSUNG(726-7864) for Globe 02-5805777	www.samsung.com
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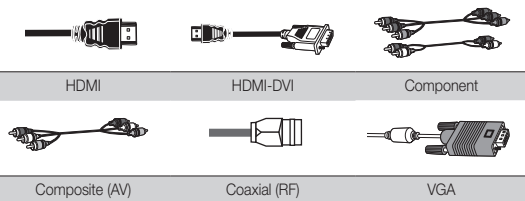
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Getting Started

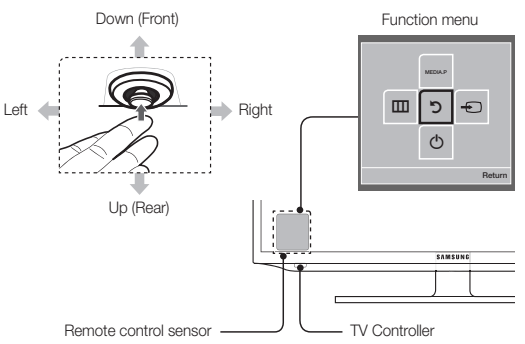
Accessories

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

Input Cables (Sold Separately)



TV Controller (Panel Key)



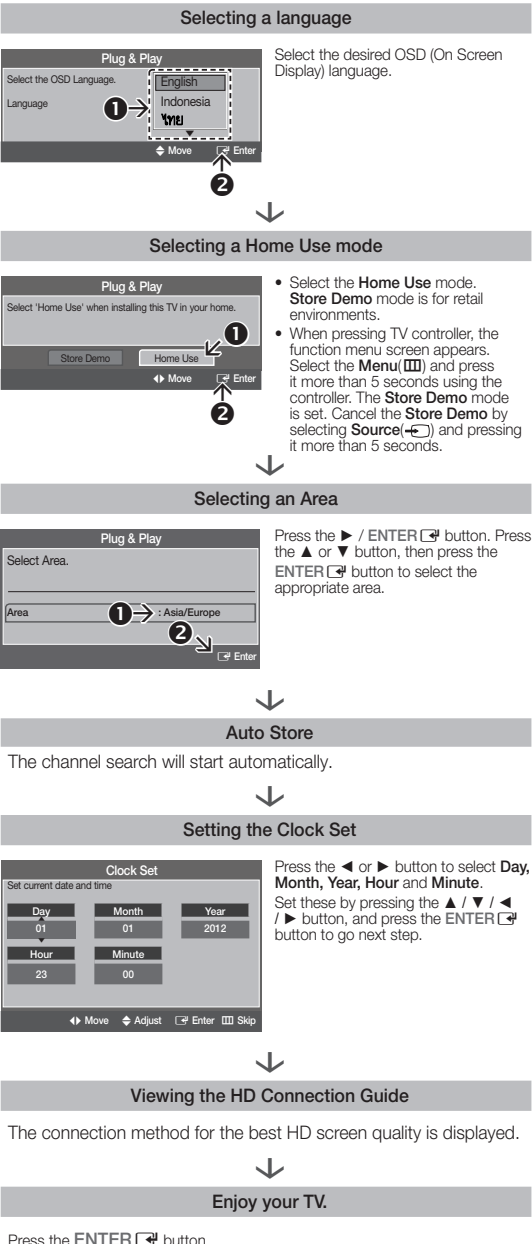
Power on	Turns the TV on by pressing the controller in standby mode.
Adjusting the volume	Adjusts the volume by moving the controller from side to side when the power is on.
Selecting a channel	Selects a channel by moving the controller up and down when the power is on.
Using the function menu	Press the controller when the power is on, then the function menu screen appears. If you press it again, the function menu screen disappears.
Using the Menu (M)	Selects the Menu (M) by moving the controller in the function menu screen. The OSD(On Screen Display) of your TV's feature appears.
Selecting the Source (SRC)	Selects the Source (SRC) by moving the controller in the function menu screen. The Source List screen appears.
Selecting the Media Play	Selects the MEDIA P by moving the controller in the function menu screen. The Media Play main screen appears.
Power Off (O)	Selects the Power Off (O) to turn the TV off by moving the controller in the function menu screen.

- Exits the menu when pressing the controller 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

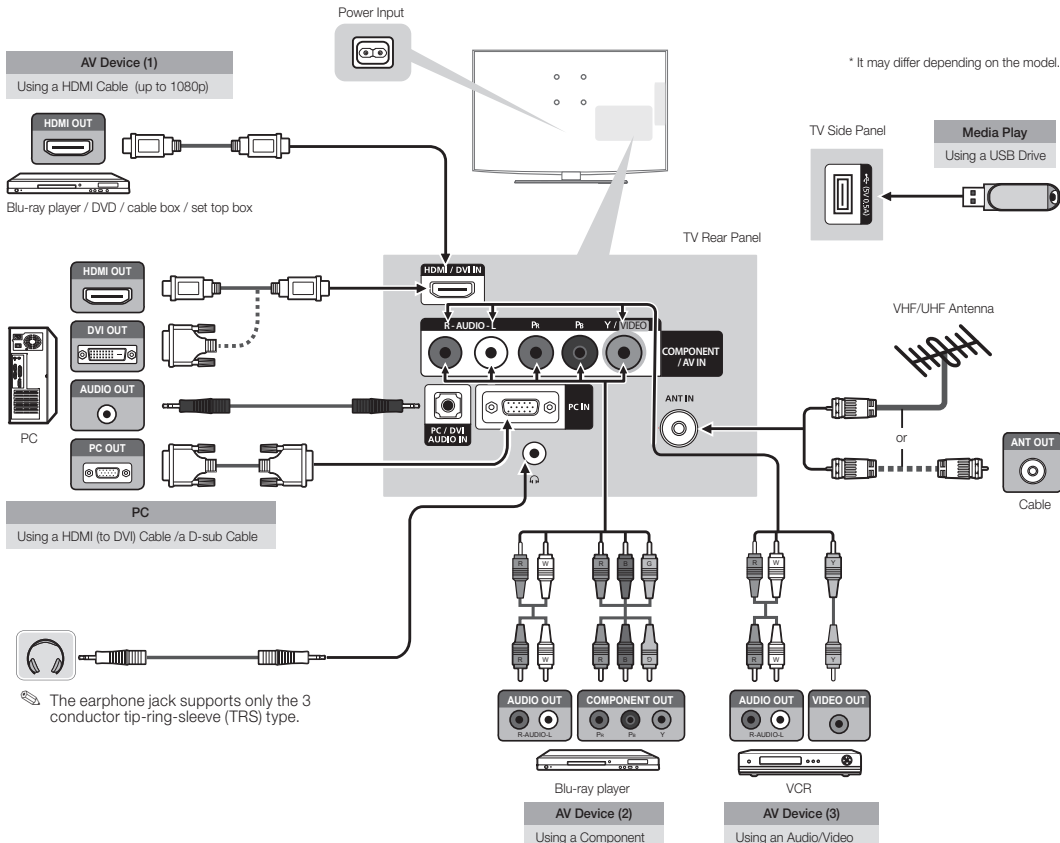
When you turn the TV on for the first time, a sequence of on-screen prompts will assist in configuring basic settings. Press the **POWER** button. **Plug & Play** is available only when the Input source is set to TV.

- Connecting the power cord and antenna. (refer to 'Connections')



Connections

- For better picture and audio quality, connect to a digital device using an HDMI cable.
- The picture may not display normally if at all or the audio may not work if an external device that uses an older version of HDMI mode is connected to the TV. If such a problem occurs, ask the manufacturer of the external device about the HDMI version and if it 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.
- For HDMI/DVI cable connection, you must use the HDMI (IN/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/DVI) port, the audio does not work.



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 / PC / AV / Component / 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**. The following selections appear under **Edit Name**:

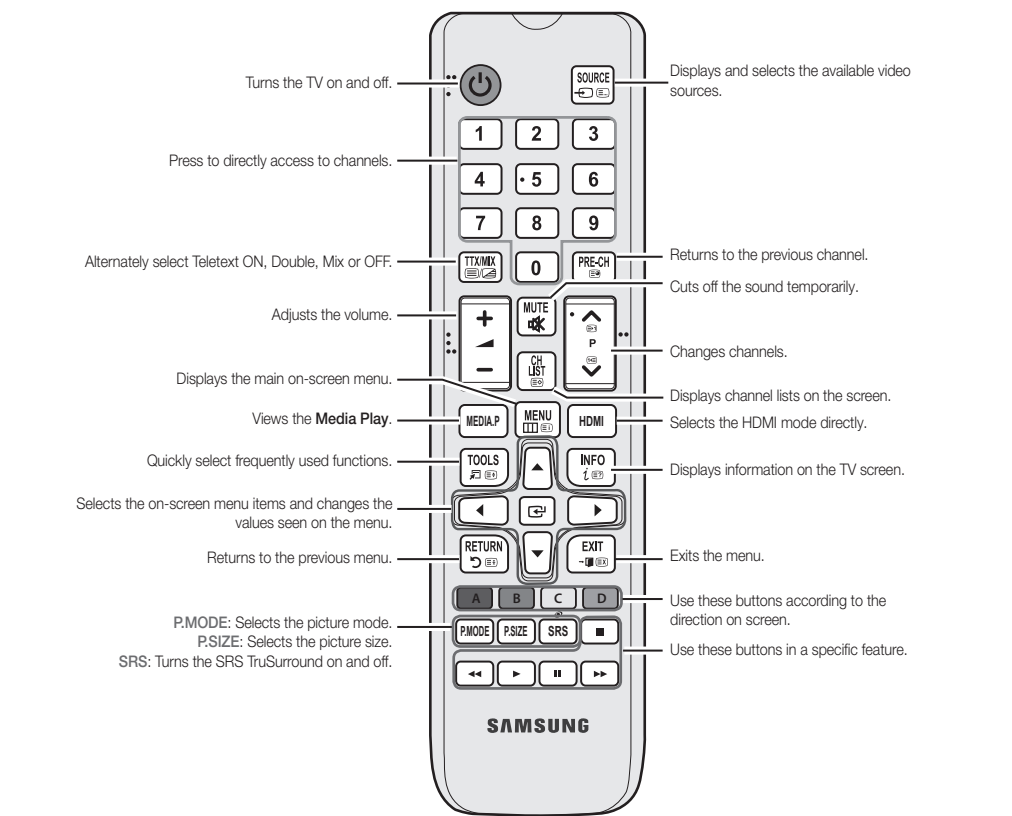
- **VCR / DVD / Cable STB / Satellite STB / PVR STB / AV Receiver / Game / Camcorder / PC / DVI PC / DVI / TV / IPTV / Blu-ray / HD DVD / DMA**: Name the device connected to the input jacks to make your input source selection easier.
- When connecting a PC to the HDMI (IN/DVI) port with HDMI cable, you 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 devices to the HDMI (IN/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.

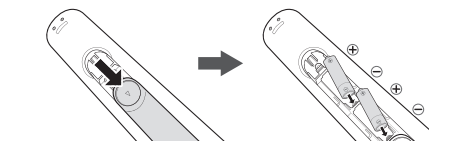


Display Modes (D-sub and HDMI/DVI Input)

Optimal resolution is 1920 X 1080 @ 60 Hz.

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	-/+
	640 x 480	38.000	66.667	30.240	-/-
	832 x 624	49.726	74.551	57.284	-/-
	1152 x 870	68.681	75.062	100.000	-/-
	640 x 480	31.469	59.940	25.175	+/-
	640 x 480	37.861	72.809	31.500	-/-
	640 x 480	37.500	75.000	31.500	-/-
	800 x 600	37.879	60.311	40.000	+/-
	800 x 600	48.077	72.188	50.000	+/-
	800 x 600	48.875	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	69.810	83.500	+/-
	1280 x 1024	63.981	60.020	108.000	+/-
	1280 x 1024	79.876	75.025	135.000	+/-
	1366 x 768	47.712	59.790	85.500	+/-
	1440 x 900	55.935	59.887	106.500	-/-
	1600 x 900	60.000	60.000	108.000	+/-
	1680 x 1050	65.290	59.964	146.250	-/-
	1920 x 1080	67.500	60.000	148.500	+/-

Installing batteries (Battery size: AAA)



NOTE

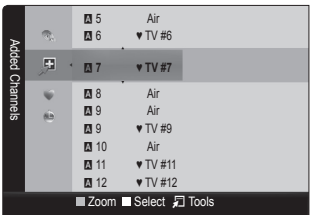
- Use the remote control within 23 feet from TV.
- Bright light may affect the performance of the remote control. Avoid using nearby special fluorescent light or neon signs.
- The Colour and shape may vary depending on the model.

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**: Displays the **Channel List** option menu. (The Options menu 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.

Returning Channels

Area

You can change the desired area.

Auto Store

(depending on the country)

- Scans for a channel automatically and stores in the TV.
- Automatically allocated programme numbers may not correspond to actual or desired programme numbers. If a channel is locked, the PIN input window appears.

Manual Store

Scans for a channel manually and stores in the TV.

- If a channel is locked, the PIN input window appears.
- According to channel source, **Manual Store** may be supported.

- Programme, Colour System, Sound System, Channel, Search, Store: If there is abnormal sound or no sound, reselect the sound standard required.
- Channel mode

- **P** (Programme): When tuning is complete, the broadcasting stations in your area have been assigned to position numbers from P0 to P99. You can select a channel by entering the position number in this mode.
- **C** (aerial channel mode) / **S** (cable channel mode): These two modes allow you to select a channel by entering the assigned number for each aerial broadcasting station or cable channel.

Channel List Option Menu

Set each channel using the **Channel List** menu options (**Add/Delete**, **Add to Favourite/Delete** from Favourite, **Timer Viewing**, **Lock/Unlock**, **Edit Channel Name**, **Sort**, **Select All/Deselect All**, **Auto Store**). Option menu items may differ depending on the channel status.

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-Coloured channel indicates the channel has been deleted.
- The **Add** menu only appears for deleted channels.
- Delete a channel from the **Added Channels** or **Favourites** menu in the same manner.

- **Add to Favourite / Delete from Favourite**: Set channels you watch frequently as favourites
- **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.

- **Edit Channel Name**: Assign your own channel name.
- **Sort**: This operation allows you to change the programme numbers of the stored channels. This operation may be necessary after using the auto store.

- **Lock / Unlock**: Lock a channel so that the channel cannot be selected and viewed.
- This function is available only when the **Channel Lock** is set to **On**.
- The PIN input screen appears. Enter your 4-digit PIN, the default of which is "0-0-0-0". Change the PIN using the **Change PIN** option.
- **Select All / Deselect All**: You can select or deselect all channels in the channel list.
- **Auto Store**: Scans for a channel automatically and stores in the TV.

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

- Select your preferred picture type.
- When connecting a PC, you can only make changes to the **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.
- It is only available when connecting a PC.

Samsung MagicAngle

Adjust screen viewing Angle to optimize screen quality according to your viewing position.

- **Samsung MagicAngle**: When viewing the screen at an angle from below or above by setting the appropriate mode for each position you can obtain a similar picture quality as viewing the screen directly from the front.
- **Off**: Select when viewing from the front position.
- **Lean Back Mode**: Select when viewing from a slightly lower position.
- **Mode**: Adjust screen viewing angle.
- When **Samsung MagicAngle** is set to **Lean Back Mode** or **Standing Mode**, **Gamma** is not available.

- **Backlight / Contrast / Brightness / Sharpness / Colour / 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**.

- **Auto Adjustment**: Adjust frequency values/positions and fine tune the settings automatically.
- It is available in **PC** mode.
- Not available when connecting with an HDMI/DVI cable.

- **Screen**
- It is available in **PC** mode.
- **Coarse / Fine**: Removes or reduces picture noise. If the noise is not removed by Fine-tuning alone, then adjust the frequency as best as possible (Coarse) and Fine-tune again. After the noise has been reduced, readjust the picture so that it is aligned to the centre of screen.
- **PC Position**: Adjust the PC's screen positioning if it does not fit the TV screen. Press the **▲** or **▼** button to adjust the Vertical-Position. Press the **◀** or **▶** button to adjust the Horizontal-Position.
- **Image Reset**: Resets the image to default settings.

Advanced Settings

(available in **Standard** / **Movie** mode)

Compared to previous models, new Samsung TVs have a more precise picture.

- When connecting a PC, you can only make changes to **Gamma** and **White Balance**.
- **Colour Space (Auto / Native)**: Adjust 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) darkness.
- **R-Gain / G-Gain / B-Gain**: Adjust each colour's (red, green, blue) brightness.
- **Reset**: Resets the **White Balance** to its default settings.
- **Dynamic Contrast (Off / Low / Medium / High)**: Adjust the screen contrast.
- **Black Tone (Off / Dark / Darker / Darkest)**: Select the black level to adjust the screen depth.
- **Flesh Tone**: Emphasize pink "Flesh Tone".
- **Motion Lighting (Off / On)**: Reduce power consumption by brightness control adapted motion.
- Only available in **Standard** mode.

Picture Options

- When connecting a PC, you can only make changes to the **Colour Tone**, **Size**.
- **Colour Tone (Cool / Standard / Warm1 / Warm2)**
- **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.
- When connecting a PC, only 16:9 and 4:3 modes can be adjusted.
- 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 Noise Filter (Off / Low / Medium / High / Auto)**: 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.
- When the signal is weak, try other options until the best picture is displayed.

- **HDMI Black Level (Low / Normal)**: Selects the black level on the screen to adjust the screen depth.
- Available only in **HDMI** mode (RGB signals).
- **Film Mode (Off / Auto)**: 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 Motion Plus (Off / On)**: Removes drag from fast scenes with a lot of movement to provide a clear picture.

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

- **Standard**: Selects the normal sound mode.
- **Music**: Emphasizes music over voices.
- **Movie**: Provides the best sound for movies.
- **Clear Voice**: Emphasizes voices over high 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.

SRS TruSurround HD

(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.

Selecting the Sound Mode

When you set to **Dual II**, the current sound mode is displayed on the screen.

	Audio Type	Dual II	Default
A2 Stereo	Mono	Mono	Automatic change
	Stereo	Stereo ↔ Mono	
	Dual	Dual I ↔ Dual II	Dual I
NICAM Stereo	Mono	Mono	Automatic change
	Stereo	Mono ↔ Stereo	
	Dual	Mono ↔ Dual I Dual II ↔	Dual I

- If the stereo signal is weak and an automatic switching, occurs, then switch to the mono.
- Only activated in stereo sound signal.
- This function is available for all input sources.

Sound Reset

- **Reset All**: Reset all sound settings to the factory defaults.

Setup Menu

Setting the Time

