

# SAMSUNG 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 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 product is RoHS compliant.

**Correct Disposal of This Product**  
(Waste Electrical & Electronic Equipment)  
This marking on the product & accessories literature indicates that the product and its electronic accessories (e.g. charger, headset, USB cable) 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. House hold users should contact either the retailer where they purchased this product, or their local government office, for details of where and how they can take these items for environmentally safe recycling. Business user should contact their supplier and check the terms and conditions of the purchase contract. This product and its electronic accessories should not be mixed with other commercial wastes for disposal.

For more information on safe disposal and recycling visit our website [www.samsung.com/in](http://www.samsung.com/in) or contact our helpline number - 18002668282, 180030008282

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Usage is subject to following the guidelines in the User Manual and may not be available in all regions.



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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.

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

The symbol alerts you 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 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 centre.
- Be sure to plug 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 centre, 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 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 centre.
- 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, 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.**

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### 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.

- Press the SOURCE button.
- Select a desired external input source.

**TV / AV / Component / HDMI1 / HDMI2/DVI**

- You can only choose external devices that are connected to the TV. In the Source List, connected inputs will be highlighted.

#### Information

Press INFO (i), 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.

- Turns the TV on and off.
- Displays and selects the available video sources.
- Press to directly access to channels.
- Alternately select Teletext ON, Double, Mix or OFF.
- Adjusts the volume.
- Displays the channel list on the screen.
- Views the Media Play.
- Quickly select frequently used functions.
- Selects the on-screen menu items and changes the values seen on the menu.
- Returns to the previous menu.
- E-MANUAL: Not available.
- Provides a way to capture the images and audio.
- Turns the Cricket Mode on or off.
- Returns to the previous channel.
- Outs off the sound temporarily.
- Changes channels.
- Displays the main on-screen menu.
- Provides an optimal picture and sound for the popular content in your geographical area.
- Displays information on the TV screen.
- Exit the menu.
- Use these buttons according to the direction on screen.
- Use these buttons in a specific feature.

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### Display Modes (HDMI/DVI Input)

Optimal resolution  
4 series: 1366 x 768@60Hz, 1600 x 900@60Hz / 5 series: 1920 x 1080@60Hz

| Mode         | Resolution  | Horizontal Frequency (Hz) | Vertical Frequency (Hz) | Pixel Clock Frequency (MHz) | Sync Polarity (H/V) | 1366 x 768 | 1600 x 900 |
|--------------|-------------|---------------------------|-------------------------|-----------------------------|---------------------|------------|------------|
| EM           | 720 x 400   | 31.469                    | 70.067                  | 28.322                      | -/+                 | ✓          |            |
|              | 640 x 480   | 35.000                    | 66.667                  | 30.240                      | -/+                 | ✓          |            |
|              | 800 x 600   | 49.726                    | 74.551                  | 37.284                      | -/+                 | ✓          |            |
|              | 1152 x 870  | 66.661                    | 75.062                  | 100.000                     | -/+                 | ✓          | ✓          |
|              | 640 x 480   | 31.469                    | 59.940                  | 25.175                      | -/+                 | ✓          | ✓          |
|              | 640 x 480   | 37.861                    | 72.809                  | 31.500                      | -/+                 | ✓          | ✓          |
| VESA DMT     | 640 x 480   | 37.500                    | 75.000                  | 31.500                      | -/+                 | ✓          | ✓          |
|              | 800 x 600   | 37.879                    | 60.317                  | 40.000                      | +/+                 | ✓          | ✓          |
|              | 800 x 600   | 48.077                    | 72.188                  | 50.000                      | +/+                 | ✓          | ✓          |
|              | 800 x 600   | 49.675                    | 75.000                  | 49.500                      | -/+                 | ✓          | ✓          |
|              | 1024 x 768  | 48.360                    | 60.004                  | 60.000                      | -/+                 | ✓          | ✓          |
|              | 1024 x 768  | 56.476                    | 75.000                  | 75.000                      | -/+                 | ✓          | ✓          |
|              | 1024 x 768  | 60.003                    | 75.029                  | 78.750                      | +/+                 | ✓          | ✓          |
|              | 1152 x 864  | 67.500                    | 75.000                  | 108.000                     | +/+                 | ✓          | ✓          |
|              | 1280 x 720  | 45.000                    | 60.000                  | 74.250                      | -/+                 | ✓          | ✓          |
|              | 1280 x 800  | 49.702                    | 59.910                  | 83.500                      | -/+                 | ✓          | ✓          |
|              | 1280 x 1024 | 63.981                    | 60.000                  | 108.000                     | +/+                 | ✓          | ✓          |
|              | 1280 x 1024 | 79.916                    | 75.000                  | 135.000                     | +/+                 | ✓          | ✓          |
| 1366 x 768   | 47.712      | 59.790                    | 85.500                  | -/+                         | ✓                   | ✓          |            |
| 1440 x 900   | 55.935      | 59.867                    | 106.500                 | -/+                         | ✓                   | ✓          |            |
| 1600 x 900@B | 60.000      | 60.000                    | 108.000                 | -/+                         | ✓                   | ✓          |            |
| 1680 x 1080  | 65.590      | 58.964                    | 146.250                 | -/+                         | ✓                   | ✓          |            |
| 1920 x 1080  | 67.500      | 60.000                    | 148.500                 | +/+                         | ✓                   | ✓          |            |

### Installing batteries (Battery size: AAA)

**NOTE**

- Use the remote control within 7 m 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.

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### Getting Started

#### Accessories

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

#### Input Cables (Sold Separately)

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

#### TV Controller (Panel Key)

Selecting the Media Play  
Selecting the Menu  
Selecting a Source  
Power off  
Function menu

Remote control sensor  
TV Controller  
The image is drawn by facing the front side of the TV.

- 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")

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### Channel Menu

#### Seeing Channels

##### Channel List

Select a channel in the All Channels. Added Channels screen by pressing the ▲/▼ buttons, and pressing the ENTER/OK button. Then you can watch the selected channel.

Using the remote control buttons with the Channel List

##### Channel Status Display icons

| Icons | Operations         |
|-------|--------------------|
| [X]   | A channel deleted. |

#### Retuning Channels

You can change the desired area.

#### Auto Store

(Depending on the country)  
Scan mode for Southwest Asia: Full/Turbo  
Scans for a channel automatically and stores in the TV.

#### Manual Store

Scans for a channel manually and stores in the TV.

- 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 List Option Menu

Set each channel using the Channel List menu options (Add / Delete). 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 "X" beside the channel indicates the channel has been deleted.
  - The Add menu only appears for deleted 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.
- This is available for analogue broadcasts only.

#### Picture Menu

##### Picture Mode (TOOLS)

Select your preferred picture type.

- Standard:** Suitable for a bright room.
- Dynamic:** Suitable for a normal environment.
- Movie:** Suitable for watching movies in a dark room.

##### 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.

##### Picture Options

- Colour Temp:** Select the colour temperature.
  - 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.
- 4:3:** Sets the picture to basic (4:3) mode.
- Zoom1/Zoom2:** Zoom out 16:9 wide mode vertically to fit the screen size.
- Screen Fit:** Displays the full image without any cut-off when HDMI/23p/1080i/1080p signals are inputted.
- Custom:** Magnifies or shrinks 16:9 pictures vertically and/or horizontally. A magnified or shrunk picture can be moved left, right, up, and down.
  - 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.
- NOTE**
  - 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.
- Digital Clean View: (Auto / Off / Low / Medium / High)** 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: (Auto / Off)** Sets the TV to automatically sense and process film signals from all sources and adjust the picture for optimum quality.
  - Available in TV modes, AV, COMPONENT (480i / 1080i) and HDMI (480i / 1080i).
- Motion Lighting:** Reduce power consumption by brightness control adapted motion.
  - Only available in Standard mode.
- Analogue Clean View:** Reduces diagonal noise in picture caused by the crosstalk of signals.

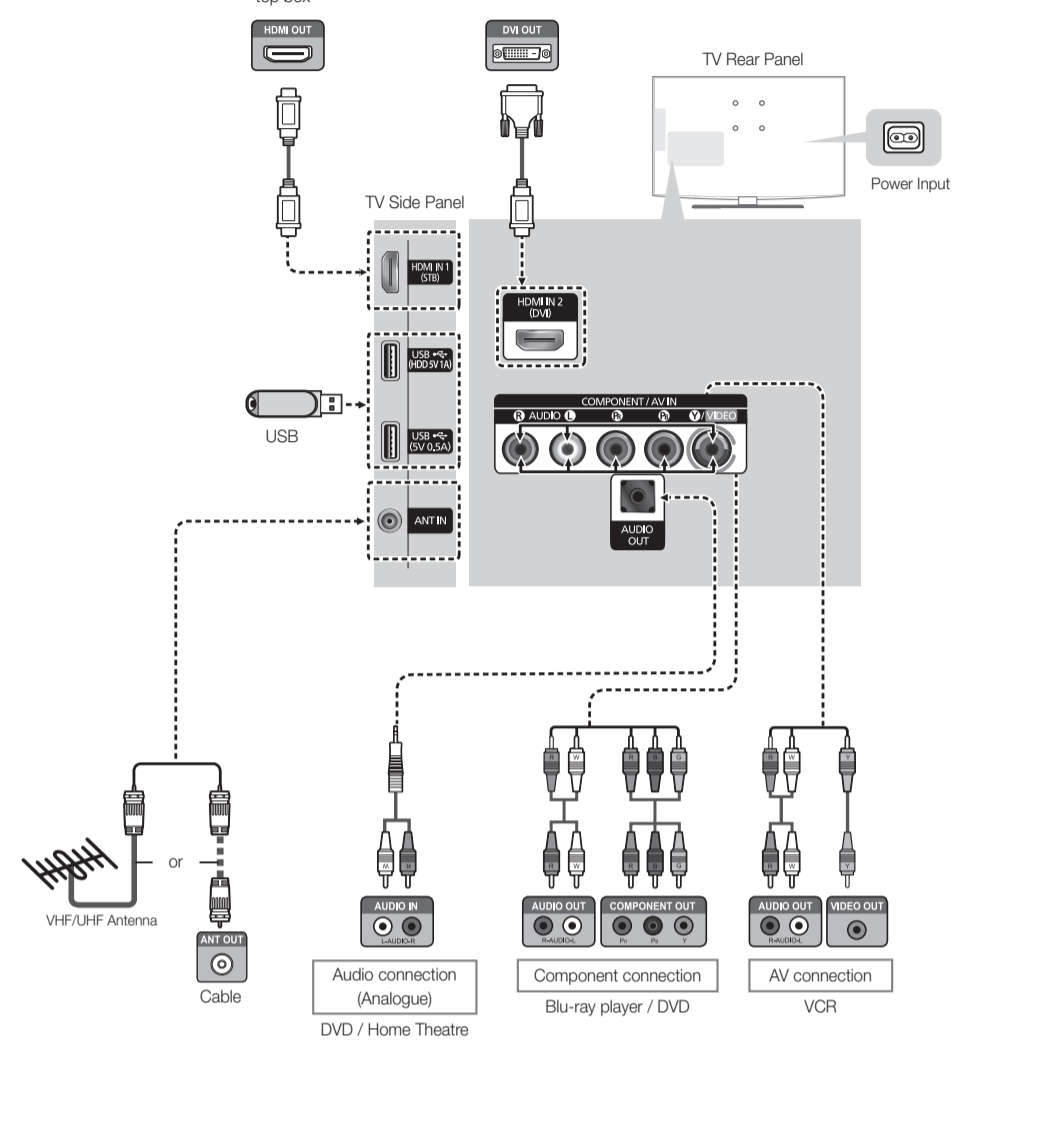
#### Picture Reset

Resets your current picture mode to its default settings.

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### Connections

- For better picture and audio quality, connect to a digital device using an HDMI cable.
- For HDMI/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.
- 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 HDMI/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.



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### Sound Menu

#### Sound Mode (TOOLS)

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

#### 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 HD (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.

#### 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.

#### Setup Menu

##### Language

Set the menu language.

- Press ▲ or ▼ button to select menu language. (According to the different areas, some countries have only one language.)

##### Time

- The current time will appear every time you press the INFO button.
- Clock Set:** Set the Year, Month, Day, Hour, Minute.
- On Time/Off Time**
  - Current time should be set first by Clock Set.
  - Repeat:** Set the timer to repeat by Once, Everyday, Mon-Fri, Mon-Sat, Sat-Sun, Sun.
  - Select Off:** to turn of Repeat.
  - Hour/Minute:** Enter the hour and minute for the TV to turn on or off.
  - Contents:** Select TV.
  - Channel:** Select the channel to be played when the TV turns on automatically.
  - Volume:** Select the volume level when TV turns on automatically.
  - Sleep Timer (TOOLS)**
    - Automatically shuts off the TV after a preset period of time. (Off, 30 min, 60 min, 90 min, 120 min, 150 min and 180 min)
    - To cancel Sleep Timer, select Off.
- Melody**
  - The Melody does not play.
    - 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.

##### Auto Power Off

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

- If the Auto Power Off option is set to Off, the TV will stay on even if no operation is performed on the TV.

##### Self Diagnosis

The Broadcast Signal Self Diagnosis menu provides Picture Test, Sound Test, and Signal Information functions to evaluate TV problems and to show the signal strength.

- Picture Test:** Use to check for picture problems.
- Sound Test:** Use the built-in melody sound to check for sound problems.
- Reset:** Reset all settings to the factory defaults except network settings.
  - Choose to restore factory Settings. TV will automatically shut down, and then restart.

#### Game Mode

Game Mode (Off / On): When you have connected a game console such as PlayStation™ or Xbox™ to the TV, you can enjoy a more realistic gaming experience if you set Game Mode on.

- Precautions and limitations for Game Mode
  - Before disconnecting a game console and connecting another external device, set Game Mode to Off.
  - If you display the TV menu in Game Mode, the screen shakes slightly.
  - Game Mode is not available when you've set the input source to TV.
  - Set Game Mode to On only after connecting a game console. If you turn Game Mode on before you have attached the game console, you may notice reduced picture quality.
  - Game Mode is On: Picture Mode is set to Game Mode and Sound Mode is set to Game Mode.

#### Audio Type

| Audio Type   | Dual Hi-L | Default          |
|--------------|-----------|------------------|
| A2 Stereo    | Mono      | Automatic change |
|              | Stereo    | Mono             |
| NICAM Stereo | Mono      | Automatic change |
|              | Stereo    | Mono             |
|              |           |                  |



