



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

See the warranty card for more information on warranty terms. 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, TV shows or movies in panorama or 4:3 format, stock or news scroll bars, etc.) on the screen. The constant display of still pictures can cause ghosting or image burn-in (image retention) on the LED screen, which will affect image quality. To reduce the risk of this effect, please follow the recommendations below:

- Avoid displaying the same TV channel for long periods.
- Always try to display any image in full screen mode. Use the TV's Picture Options menu to select the optimal screen size.
- Reduce brightness and contrast values to the minimum required to achieve the desired picture quality. Values that exceed the minimum may speed up the burn-in process.
- Frequently use all TV features designed to reduce image retention and screen burn-in. Refer to proper user manual section for details.

Contact SAMSUNG WORLDWIDE If you have any questions or comments related to Samsung products, please contact the SAMSUNG customer care center.		
Country	CANADA	U.S.A
Address	Samsung Electronics Canada Inc., Customer Service 55 Standish Court Mississauga Ontario L5R 4B2 Canada	Samsung Electronics America, Inc. 85 Challenger Road Ridgely Park, NJ 07660
Customer Care Center ☎	1-800-SAMSUNG (726-7864)	
	www.samsung.com/ca (English) www.samsung.com/ca/fr (French)	www.samsung.com
Web Site		

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### The On Screen Menus

Your TV has two kinds of menus, the Main menu and the various Tools menus. The Main menu gives you access to most or all of the menu options available on your TV. The Tools menus display a selected number of frequently used menu options that change depending on the screen you are viewing. A Tools menu symbol (P) in the lower right side of the screen indicates that a Tools menu is available.

The Main menu has seven primary categories:

- Picture
- Sound
- Channel
- Setup
- Input
- Application
- Support

To view the Main menu, press the MENU button on your remote. To view a Tools menu, press the TOOLS button on your remote.

The menu options that appear in the Main menu depend on the Source you have selected. For example, if you have selected the HDMI source, the Channel category will not appear. To see the Channel category, you must first select TV in the Source List.

The Menu options are presented below, arranged by Main menu categories. A Tools button symbol (TOOLS P) next to an option name indicates the option is also available in one of the Tools menus.

### Picture Menu

#### Mode [TOOLS P]

Select your preferred picture mode.

- When your TV is connected to a PC, you can only select **Entertain** and **Standard**.
- Dynamic**: Brightens the screen. Suitable for a bright room.
- Standard**: Suitable for a normal room brightness.
- Movie**: Darkens the screen, making it less glary. Suitable for watching movies in a darkened room.
- Entertain**: Sharpens the picture. Suitable for games.
- Only available when the TV is connected to a PC.

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

- Backlight**: Adjusts the brightness of the screen by adjusting the brightness of the individual pixels.
- Contrast**: Increases or decreases the contrast between dark and light areas of the picture.
- Brightness**: Adjusts the brightness of the screen. Not as effective as Backlight.
- Sharpness**: Sharpens or dulls the edges of objects.
- Color**: Adjusts the color saturation. The higher the Color setting, the more intense the color. Low settings remove color and the picture becomes black, white, and gray.
- Tint**: Adjusts the amount of green and red in the picture. As you increase the amount of green, the amount of red decreases and vice versa.

When the TV is connected to a PC, you can only make changes to **Backlight**, **Contrast**, **Brightness**, and **Sharpness**.

#### Advanced Settings

- Available in **Standard** and **Movie** mode only.
- Compared to previous models, new Samsung TVs offer a more precise picture with more precise controls.
- When your TV is connected to a PC, you can only make changes to **Gamma** and **White Balance**.
- Dynamic Contrast**: Adjusts the screen contrast.

- Black Tone**: Selects the black level to adjust the screen depth. Darker levels can make the picture look darker.
- Flesh Tone**: Adjusts the amount of red in skin tones.
- Color Space**: Auto automatically matches the range of colors (the variety and number of colors) available to create pictures with the color range of the video source. Native provides a color range wider than the color range of the video source.
- White Balance**: Adjusts the color temperature of the picture so that white objects look white (instead of, for example, slightly pink or slightly yellow) and the overall color of the picture looks natural.
- R-Offset / G-Offset / B-Offset**: Adjusts how dark each color (red, green, blue) is.
- R-Gain / G-Gain / B-Gain**: Adjusts how bright each color (red, green, blue) is.
- Reset**: Resets the **White Balance** to its default settings.
- Gamma**: Adjusts the primary color intensity.
- 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 is dimmer. In dim light, the screen dims.
- Available in **Standard** mode only.

#### Picture Options

- When the TV is connected to a PC, you can only make changes to the **Color Tone**, **Size**, and **HDMI Black Level**.
- Color Tone**: Cool makes the picture bluer (cooler). Warm 1 and Warm 2 make the picture redder (warmer).
- Warm1** and **Warm2** are deactivated when the picture mode is set to **Dynamic**.
- Size**: Set the size and aspect ratio of the picture on the screen. Your cable box or satellite receiver may have its own set of screen sizes as well. However, we highly recommend you use the TVs 16:9 mode most of the time.
- 16:9**: Sets the picture to the 16:9 wide screen format.
- Zoom1**: Provides moderate magnification of the picture. Sides, top, and bottom are cut off.
- Zoom2**: Provides larger magnification of the picture. Sides, top, and bottom are cut off.
- Wide Fit**: Enlarges the aspect ratio of the picture so the picture fits the entire screen.
- 4:3**: Sets the picture to the old 4:3 format and puts black or gray borders on the right and left of the picture.
- Do not watch your TV in the 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 is not covered by the warranty.
- Screen Fit**: Displays the full image without any cut-off when your TV is inputting HDMI (720p / 1080i / 1080p) or Component (1080i / 1080p) HD signals.
- HD** (High Definition) has a 16:9 aspect ratio and 1080i/1080p (1920x1080) or 720p (1280x720) resolution.
- You can adjust and store settings for each external device you have connected to an input on the TV. Picture Sizes available by Input Source are listed below:

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

#### If you selected Manual:

- The **Clock Set** screen appears. Use the ▲/▼ buttons to change the values in each field or use the number buttons to enter the values directly. Use the ◀/▶ buttons to move from field to field. When done with all the fields, press ENTER.
- Available only when **Clock Mode** is set to **Manual**.
- Sleep Timer [TOOLS P]**: Automatically shuts off the TV after a preset period of time. (30, 60, 90, 120, 150 and 180 minutes).
- To cancel the **Sleep Timer**, select **Off**.
- Turns 1 / Timer 2 / Timer 3**: Turns the TV on and off automatically at times and days you select. You can set three different on/off timer settings.
- You must set the clock first.
- On Time / Off Time**: Set the hour, minute, am/pm, and Activate/ inactivate fields for **On Time** and **Off Time**. Use the ◀/▶ buttons to move from field to field. Use the ▲/▼ buttons to change the values in each field. To activate the timer with the setting you have chosen, set the Activate/Inactivate field to **Activate**.
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- Volume**: Set the desired loudness



- 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 the sequential jpeg format.
- The Videos option does not support the scene search and thumbnail functions.
- If the number of files and folders saved on a USB storage device are over approximately 4000, the files and folders may not appear and some folders may not open.
- The maximum number of files the TV can display, including sub folders, in one folder of a USB storage device is 2000.
- The media may not play smoothly if you use a USB device rated lower than USB 2.0.

## Videos

1. In the **Media Play** menu, press the ◀ or ▶ button to select **Videos**, and then press the ENTER button.
  2. Press the ◀▶/▲▼ buttons to select a video in the file list.
  3. Press the ENTER button or [Play] button.
- The file name is displayed on the top of the screen with the 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 ▶ buttons.
  - In this mode, you can play movie clips contained in a game, but you cannot play the game itself.

- Supported Subtitle Formats

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

Name	Container	Format
Xsub	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
*.mp4	MP4	H264 DivX, H.144, V.5.16.0	1920x1080	6~30	30Mbps	MP3 / ADPCM / AAC
*.avi *.mrv	AVI MNV	H264 MPEG4 SP MPEG2 MPEG1	1920x1080 1920x1080 1920x1080 1920x1080	6~30 6~30 6~30 6~30	30Mbps 30Mbps 10Mbps	MPEG1 / AC3 / LPCM / ADPCM / DTS / DTS Comf
*.asf *.wmv	ASF	DivX H.144, V.5.16.0 MPEG4 SP MPEG2 MPEG1	1920x1080 1920x1080 1920x1080 1920x1080	6~30 6~30 6~30 6~30	30Mbps 30Mbps 10Mbps	MP3 / AC3 / LPCM / ADPCM / WMA / WMA Pro
*.ts *.trp *.tp *.mts	TS	H.264 H.264 BP MPEG2	1920x1080 1920x1080 1920x1080	6~30 6~30 6~30	30Mbps	AC3 / AAC / MP3 / DTS / HE-AAC
*.dat *.mpg *.mpeg *.vob	PS	MPEG1 MPEG2 H.264 BP MPEG4 SP ASP	1920x1080 1920x1080 1920x1080 1920x1080 1920x1080	24/25/30 24/25/30 6~30 6~30 6~30	30Mbps 30Mbps 30Mbps	AC3 / MP3 / LPCM / AAC
*.3gp	3GPP	MPEG4 SP H.264 H.264 BP	1920x1080 1920x1080 1920x1080	6~30 6~30 6~30	30Mbps	MP3
*.flv	flash formats	Sorenson H.263	1920x1080	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 Supported Video Formats table.
- If the Index Table contains an error, the Seek (Jump) function will not work.
- The menu may take longer to appear if the video's bit rate exceeds 10Mbps.
- Video content may not be play if there is too much content in one file.

Video Decoder
Supports up to H.264_Level 4.1 H.264 FMO / ASO / RS, VC1 SP / MP / AP L4 and AVCHD are not supported. Below 1280 x 720: 60 frame max Above 1280 x 720: 30 frame max H.263 is not supported. GMC is not supported.

Audio Decoder
Supports up to WMA7, 8, 9 STD, 9 PRO, and 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

1. In the **Media Play** menu, press the ◀▶ buttons to select **Music**, and then press the ENTER button.
  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.
  - Media Play only displays 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. In the **Media Play** menu, press the ◀ or ▶ button to select **Photos**, then press the ENTER button.
  2. Press the ◀▶/▲▼ buttons to select a 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 a 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 files using the ◀ or ▶ button.
  - **Media Play** can play Music files automatically during a Slide Show if **Background Music** is set to **On**.
  - You cannot change the **Mode in Background Music** until the Background Music file has finished loading.

- Supported Photo Formats

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 Videos

- **Playing selected video/music/photo files**
- 1. On the File List Screen, highlight a file, and then press the Yellow button on your remote.
- 2. Repeat Step 1 to select multiple files.
- NOTE
- A ✓ 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, select **Deselect All**, and then the ENTER button.
- 3. Press the TOOLS button, select **Play Selected Contents**, and then press the ENTER button.
- **Playing a video/music/photo folder**
- 1. With the folders on your USB device displayed, use the ◀▶/▲▼ buttons to highlight a folder.
- 2. Press the TOOLS button, select **Play Folder**, and then press the ENTER button.

## 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 select another video file to play 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 have the same language 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.	✓		
Stop Slide Show / Start Slide Show	You can start or stop a Slide Show.			✓
Slide Show Speed	You can select the slide show speed during the slide show.			✓
Background Music	You can set and select background music when watching a Slide Show.			✓
Zoom	You can zoom into images in full screen mode.			✓
Rotate	You can rotate images in full screen mode.			✓
Information	You can see detailed information about the played file.	✓	✓	✓

## Settings

### Using the Setup Menu

- **DivX Video On Demand** : Shows the registration code authorized for the TV. If you connect to the DivX web site and register with the 10-digit registration code, you can download the VOD activation file. Once you run the file using Media Play, the registration is completed.
- For more information on DivX® VOD, visit "http://vod.divx.com".
- **Information**: Select to view information about the connected USB 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 about installing the wall mount, see the instructions provided with the wall mount kit. 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.

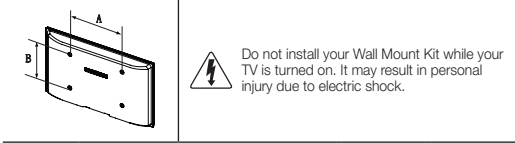
### Wall Mount Kit Specifications (VESA)

- The wall mount kit is not supplied, but sold separately.
- Install your wall mount on a solid wall perpendicular to the floor. If you are attaching the wall mount to a wall made of building materials other than drywall, please contact your nearest dealer for information about the appropriate mounting hardware. 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.

Product Family	TV size in inches	VESA screw hole specs (A * B) in millimeters	Standard Screw	Quantity
LED-TV	19~22	75 X 75	M4	4
	25~28	100 X 100		
	32~42	200 X 200		
	46~60	400 X 400	M8	



## Securing the TV to the Wall

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

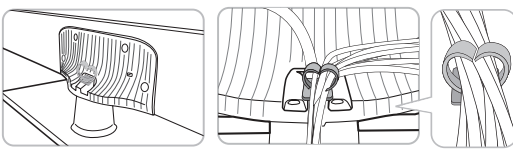
### To prevent the TV from falling

- TV Holder kits are sold separately. To purchase a TV Holder kit, contact Samsung Customer Care.
- 1. Insert the screws into the wall brackets and firmly fasten them to the wall. Make sure the screws are firmly fixed to the wall.
- We strongly recommend you drive the screws into a stud.
- 2. Insert the screws through the TV brackets, and then fasten the screws to the top VESA screw holes on the back of the TV.
- 3. Connect the brackets on the TV and the brackets on the wall with a strong string or cable, and then tie the string or cable tightly to the brackets.
- Verify all connections are properly secured. Periodically check the connections for any sign of fatigue or failure. If you have any doubt about the security of your connections, contact a professional installer.
- Install the TV close to the wall so that it does not fall.
- Connect the string or cable so that the brackets on the wall are at the same height or lower than the brackets on the TV. Untie the string or cable before moving the TV.

## 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 "K" icon on the rear of the TV. The Kensington slot is beside the "K" icon.
- The position and color may differ depending on the model.

### Assembling the Stand Wire Holder



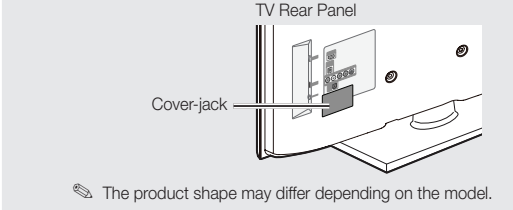
## Display Modes (HDMI/DVI Input)

Optimal resolution: 1920 x 1080@60Hz

Mode	Resolution	Horizontal Frequency (Hz)	Vertical Frequency (Hz)	Pixel Clock Frequency (MHz)	Sync Polarity (H/V)
BM	720 x 400	31.469	70.087	25.322	-/+
	640 x 480	35.000	66.667	30.240	-/-
	832 x 624	49.728	74.551	57.284	-/-
MAC	1152 x 870	68.681	75.002	100.000	-/-
	640 x 480	31.469	59.940	25.175	-/-
	640 x 480	37.861	75.009	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	+/+
VESA DMT	800 x 600	48.875	75.000	49.500	+/+
	1024 x 768	48.363	60.004	65.000	+/-
	1024 x 768	64.476	70.069	75.000	-/-
VESA DMT	1024 x 768	60.023	75.009	78.750	+/-
	1152 x 864	67.500	75.000	108.000	+/-
	1280 x 1024	65.000	60.000	74.250	+/+
VESA DMT	1280 x 800	49.702	59.810	83.500	+/-
	1280 x 1024	63.981	60.020	108.000	+/-
	1280 x 1024	79.876	75.025	135.000	+/-
VESA DMT	1368 x 768	47.712	59.790	85.500	+/-
	1440 x 960	65.355	59.897	108.500	+/-
	1600 x 900@90	60.000	60.000	108.000	+/-
VESA DMT	1680 x 1050	65.290	59.954	140.250	+/-
	1680 x 1080	67.500	60.000	148.500	+/-

## Caution of the cover-jack

- **CAUTION:** The cover-jack is for use by qualified service personnel only. To reduce the risk of electric shock or fire hazard, do not use the cover-jack, unless you are qualified to do so.



Problem	Possible Solution
The picture is black and white.	<ul style="list-style-type: none"><li>• If you are using an AV composite input, connect the video cable (yellow) to the Green jack of Component input 1 on the TV.</li></ul>
When changing channels, the picture freezes or is distorted or delayed.	<ul style="list-style-type: none"><li>• If the TV is connected to a cable box, reset the cable box. (Disconnect and then reconnect the box's AC cord and wait until the cable box reboots. It may take up to 20 minutes.)</li><li>• Set the output resolution of the cable box to 1080i or 720p.</li></ul>
<b>Sound Problem</b>	Perform the <b>Sound Test</b> to confirm your TV's audio is working properly. (Go to MENU - <b>Support</b> - <b>Self Diagnosis</b> - <b>Sound Test</b> ) If the audio is OK, the sound problem may be caused by the source or signal.
There is no sound or the sound is too low at maximum volume.	Check the volume control of the device (Cable/Sat Box, DVD, Blu-ray, etc.) connected to your TV.
The picture is good but there is no sound.	<ul style="list-style-type: none"><li>• 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 if you have the cable box's audio output connected to your TV using an HDMI cable.</li><li>• Reboot the connected device by unplugging and then reconnecting the device's power cable.</li></ul>
The speakers are making an inappropriate noise.	<ul style="list-style-type: none"><li>• Check the cable connections. Make sure a video cable is not connected to an audio input.</li><li>• For Antenna or Cable connections, check the signal information. A weak signal may cause sound distortion.</li><li>• Perform the <b>Sound Test</b> as explained above.</li></ul>
<b>No Picture, No Video</b>	
The TV will not turn on.	<ul style="list-style-type: none"><li>• Make sure the AC power cord is securely plugged into the wall outlet and the TV.</li><li>• Make sure the wall outlet is working.</li><li>• Try pressing the POWER button on the TV to make sure the problem is not caused by the remote. If the TV turns on, refer to "Remote control does not work" below.</li></ul>
The TV turns off automatically.	<ul style="list-style-type: none"><li>• Ensure the <b>Sleep Timer</b> is set to <b>Off</b> in the <b>Time</b> menu.</li><li>• If your PC is connected to the TV, check your PC power settings.</li><li>• Make sure the AC power cord is plugged into the wall outlet and TV securely.</li><li>• When you are watching a TV connected to an antenna or to a cable connection, the TV will turn off after 10 - 15 minutes if there is no signal.</li></ul>
There is no picture/video.	<ul style="list-style-type: none"><li>• Check the cable connections. (Remove and reconnect all cables connected to the TV and external devices).</li><li>• Set your external device's (Cable/Sat Box, DVD, 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.</li><li>• Make sure your connected devices are powered on.</li><li>• Be sure that the TV is set to the correct source by pressing the SOURCE button on the remote control.</li><li>• Reboot the connected device by unplugging and then reconnecting the device's power cable.</li></ul>
<b>RF/Cable/Antenna Connection</b>	
The TV is not receiving all channels.	<ul style="list-style-type: none"><li>• Make sure the coaxial cable is connected securely.</li><li>• Run <b>Auto Program</b> to add available channels to the channel list.</li><li>• Go to MENU - <b>Channel</b> - <b>Auto Program</b> then select <b>Auto</b> and make sure the correct Cable TV signal type is set in the menu. There are 3 options, <b>STD</b>, <b>HRC</b>, and <b>IRC</b>.</li><li>• Verify the antenna is positioned correctly.</li></ul>
No Caption on digital channels.	<ul style="list-style-type: none"><li>• Check the Caption Setup menu. Try changing <b>Caption Mode Service1</b> to <b>CC1</b>.</li><li>• Some channels may not have caption data.</li></ul>
The picture is distorted: macroblock error, small block, dots, pixelization.	<ul style="list-style-type: none"><li>• Compression of video contents may cause picture distortion, especially on fast moving pictures such as sports and action movies.</li><li>• A weak signal can cause picture distortion. This is not a TV problem.</li></ul>
<b>Others</b>	
Purple/green rolling horizontal bars and buzzing noise from the TV speakers with Component cable connection.	<ul style="list-style-type: none"><li>• Remove the left and right audio connections from the set-top-box. If the buzzing stops, this indicates that the set-top-box has a grounding issue. Replace the Component video cables with an HDMI connection.</li></ul>
The picture will not display in full screen.	<ul style="list-style-type: none"><li>• HD channels will have black bars on either side of the screen when displaying up scaled SD (4:3) contents.</li><li>• Black bars on the Top &amp; Bottom will be shown on movies that have aspect ratios different from your TV.</li><li>• Adjust the picture size option on your external device or change the TV to full screen.</li></ul>
The remote control does not work.	<ul style="list-style-type: none"><li>• Replace the remote control batteries. Make sure you install the new batteries with their polarity (+/-) correct.</li><li>• Clean the transmission window located on the top of the remote control.</li><li>• Try pointing the remote directly at the TV from 5~6 feet away.</li></ul>
The cable/set top box remote control does not turn the TV on or off, or adjust the volume.	<ul style="list-style-type: none"><li>• Program the Cable/Set top box remote control to operate the TV. Refer to the Cable/Set top box user manual for the SAMSUNG TV code.</li></ul>
A "Mode Not Supported" message appears.	<ul style="list-style-type: none"><li>• Check the supported resolution of the TV and adjust the external device's output resolution accordingly. Refer to resolution settings in this manual.</li></ul>
<b>Caption</b> on the TV menu is greyed out.	<ul style="list-style-type: none"><li>• You cannot select <b>Caption</b> in the TV menu when watching content from a device connected via HDMI or Component.</li><li>• <b>Caption</b> must be activated on the external device.</li></ul>
There is a plastic smell from the TV.	<ul style="list-style-type: none"><li>• This smell is normal and will dissipate over time.</li></ul>

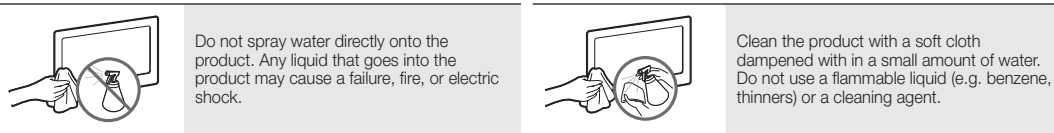
TV Signal Strength is unavailable in the <b>Self Diagnosis</b> test menu.	This function is only available for digital channels received through an Antenna/RF/Coax connection.
TV is tilted to the right or left side.	Remove the stand base from the TV and reassemble it.
The <b>Channel</b> menu is greyed out (unavailable).	The <b>Channel</b> menu is only available when you select the TV source.
Your settings are lost after 30 minutes or every time the TV is turned off.	If it is in the <b>Store Demo</b> mode, it will reset audio and picture settings every 30 minutes. Please change from <b>Store Demo</b> mode to <b>Home Use</b> mode using the <b>Plug &amp; Play</b> procedure. Press the SOURCE button to select TV mode, go to MENU → <b>Setup</b> → <b>Plug &amp; Play</b> → ENTER.
You have intermittent loss of audio or video.	Check the cable connections and reconnect them. Loss of audio or video can be caused by using overly rigid or thick cables. Make sure the cables are flexible enough for long term use. If mounting the TV to the wall, we recommend using cables with 90 degree connectors.
You see small particles when you look closely at the edge of the frame of the TV.	This is part of the product's design and is not a defect.
POP (TV's internal banner ad) appears on the screen.	Select <b>Home Use</b> under <b>Plug &amp; Play</b> mode. For details, refer to <b>Plug &amp; Play</b> (Initial Setup).

- This TFT LED panel uses a panel consisting of sub pixels which require sophisticated technology to produce. However, there may be a few bright or dark pixels on the screen. These pixels will have no impact on the performance of the product.
- You can watch detailed troubleshooting videos at www.samsung.com/spn.
- Some functions and pictures shown in this manual are available on specific models only.
- You can keep your TV in optimum condition by upgrading it with the latest firmware from the Samsung web site (samsung.com → Support). To upgrade, download the firmware to your computer, copy the firmware file to a USB memory stick, insert the USB memory stick into the TV's USB slot, and then select **Support** > **Software Upgrade** in the TV's menu.

## Storage and Maintenance

- If a sticker was attached to the TV screen, some debris can remain after you remove the sticker. Please clean it before watching the TV.

- The exterior and screen of the product can get scratched during cleaning. Be sure to wipe the exterior and screen carefully using a soft cloth to prevent scratches.



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## Troubleshooting

- If the TV seems to have a problem, first review this list of possible problems and solutions. If none of these troubleshooting tips apply, visit samsung.com, then click on Support, or call Samsung Customer Service at 1-800-SAMSUNG.

Problem	Possible Solution
Flickering and Dimming	<ul style="list-style-type: none"><li>• If your Samsung television is flickering or dimming sporadically, you</li></ul>