

# Samsung Plasma 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.

## Important Warranty Information Regarding Television Format Viewing

See the warranty card for more information on warranty terms. Wide screen format PDP Displays (with 16:9 aspect ratio, the ratio of the screen width to height) are primarily designed to view 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, with the images constantly in motion. Displaying stationary graphics and images on the screen, such as the dark sidebars on non-expanded standard format television audio and programming, should be limited to no more than 6% 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 for more than 5% of total viewing time can cause uneven aging of your PDP display and leave subtle, but permanent burned-in ghost images in the PDP picture. To avoid this, vary the programming and images, and primarily display full screen moving images, not stationary patterns or dark bars. On PDP models that offer picture sizing features, use these controls to view different formats as a full screen picture.

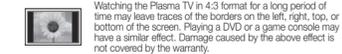
Watching the Plasma TV in a 4:3 format for a long period of time may leave traces of the borders on the left, right, top, or bottom of the screen. Playing a DVD or a game console may have a similar effect. Damage caused by the above effect is not covered by the warranty.

**After-images on the Screen.** Displaying still images from Video games or a PC for longer than a certain period of time may produce partial after-images. To prevent this effect, reduce the 'brightness' and 'contrast' when displaying still images for a long time.

**Warranty** Warranty does not cover any damage caused by image retention. Burn-in is not covered by the warranty.

This is normal and does not indicate any defect or operational failure of unit. However, children should be prevented from touching the upper part of the TV.

- The TV is making a 'crackling' noise.** A 'crackling' noise may occur when the TV contracts or expands due to changes in the surrounding environment such as temperature or humidity. This is normal and not a defect.
- Ceil Defects** Your plasma TV has a panel containing 2,360,000 (HD-level) to 6,221,000 (FH-D-level) 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.
- Avoid operating the TV at temperatures below 41°F (5°C)**
- A still image displayed too long may cause permanent damage to the PDP Panel.**



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**Warranty** Warranty does not cover any damage caused by image retention. Burn-in is not covered by the warranty.



The glass screen of your PDP TV can break if you accidentally drop the TV. Handle the TV with care. When moving the TV, always have two or more people pick it up and carry it as a safety precaution. Do not lay the TV flat on its face or back.

Your Samsung Plasma TV is a high quality television that has been carefully packaged to protect the integrity of its glass panel and component parts during shipment. It is, nonetheless, a fragile piece of electronics that requires careful handling. Refrain from putting undue stress on any part of the packaging when shipping or unpacking the TV. Use care when installing the TV. Avoid placing the TV in a location where it may be struck, exposed to sharp impacts, or fall. Panel breakage caused by a fall or impact strike is not covered under the manufacturer's warranty.

Excluded, but not limited to, are any originally specified provisions for: in-home or on-site services, minimum or maximum repair times, exchanges or replacements, accessories, 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

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 Ridgefield Park, NJ 07660-2112
Customer Care Center	1-800-SAMSUNG(726-7864)	
Web Site	www.samsung.com	



## 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 ( ) 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 ( ) next to an option name indicates the option is also available in one of the Tools menus.

## Picture Menu

### Mode

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 normally lit room.
- 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.

### Cell Light / Contrast / Brightness / Sharpness / Color / Tint (G/R)

- Cell Light:** 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 Cell Light.
- 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 **Cell Light, 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**.
- Color Space (Auto / Native):** Auto automatically matches the range of colors available to create pictures to 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 each color's (red, green, blue) darkness.
  - R-Gain / G-Gain / B-Gain:** Adjusts each color's (red, green, blue) brightness.
- Reset:** Resets the **White Balance** to it's default settings.
- Gamma:** Adjusts the primary color intensity.
- Dynamic Contrast (Off / Low / Medium / High):** Adjusts the screen contrast.
- Black Tone (Off / Dark / Darker / Darkest):** Selects the black level to adjust the screen depth. Darker settings make blacks look darker.
- Flesh Tone:** Adjusts the amount of red in skin tones.
- Motion Lighting (Off / On):** When on, the TV automatically adjusts the brightness of the screen in response to the brightness of the room. In bright light, the screen brightens. In dim light, the screen dims.

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 / Standard / Warm1 / Warm2):** 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 size settings as well. However, we highly recommend you use the TV's 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 above and to the right:

## Input Source

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

- HDMI Black Level (Normal / Low):** For HDMI signals, select the black level to adjust the screen depth. Low makes blacks look darker.
- 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 adjusts the picture for optimum quality.
- Available in ATV, DTV (interlace), AV, COMPONENT (480i / 1080i) and HDMI (480i / 1080i).

**Screen Burn Protection :** To reduce the possibility of screen burn, this unit is equipped with Pixel Shift screen burn prevention technology. Pixel Shift moves the picture slightly on the screen. The Time function setting allows you to program the time between movement of the picture in minutes.

**Pixel Shift (Off / On) :** Using this function, you can set the TV to move pixels minutely on the PDP screen in a horizontal or vertical direction to minimize after images on the screen.

## Available Pixel Shift Settings and Optimum Settings

	Available Settings	Optimum Settings
Horizontal	0-4 (pixels)	4
Vertical	0-4 (pixels)	4
Time (minute)	1-4 min	4 min

The **Pixel Shift** value may differ depending on the monitor size (inches) and mode.

This function is not available in the **Screen Fit** mode.

## Multi-Track Sound (MTS)

Analog channels only.

**Mono:** Selects for channels that are broadcasting in mono or if you are having difficulty receiving a stereo signal.

**Stereo:** Selects for channels that are broadcasting in stereo.

**SAP:** Select to listen to the Separate Audio Program, which is usually a foreign-language translation.

Depending on the program being broadcast, you can listen to **Mono, Stereo or SAP**.

## Auto Volume

Because each station has its own broadcasting conditions, the volume may fluctuate each time you change the channel. This feature automatically adjusts the volume of a 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

The SPDIF (Sony Philips Digital InterFace) outputs an uncompressed digital audio signal when you connect the digital audio jack on the back of the TV to a digital audio in jack on a receiver or home theater.

**Audio Format (PCM/Dolby Digital):** You can select the Digital Audio output (SPDIF) mode. The available Digital Audio output format may differ depending on the input source.

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

### Equalizer

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

### SRS TruSurround HD (On/Off)

Available in Standard sound mode only. SRS TruSurround HD is a patented SRS technology that solves the problem of playing 5.1 multichannel content through two speakers. TruSurround delivers a compelling, virtual surround sound experience through any two-speaker playback system, including internal television speakers. It is fully compatible with all multichannel formats.

### Preferred Language

Digital channels only. Digital-TV broadcasts can transmit many audio tracks simultaneously (for example, simultaneous translations of a program into foreign languages).

You can only select a language from among the ones being broadcast.

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## Display Icons Used in the Channel List Screens

Icons	Meaning
✓	A selected channel.
♥	A Favorite channel.
⊕	A reserved program.
⊞	A program currently being broadcast.

## The Channel List Tools Menu

The Channel List Tools menu contains most of the functions you can use on the **All Channel, Added Channels, and Favorite List** screens. To view, select a list screen, select a channel, and then press the TOOLS button.

**Add / Delete:** Delete a channel from or add a channel to the **Added Channels** list.

To delete channels from the **Added Channels** list, follow these steps:

- Select one or more channels in the **Added Channels** list using the **▲/▼** buttons and the Yellow Select button on your remote.
- Press the TOOLS button on your remote. The Tools menu appears.
- Select **Delete** in the Tools menu, and then press the ENTER button.

To add channels to the **Added Channels** list, follow these steps:

- Select one or more channels in the **All Channels** list using the **▲/▼** buttons and the Yellow Select button on your remote.
- Press the TOOLS button on your remote. The Tools menu appears.
- Select **Add** in the Tools menu, and then press the ENTER button.

All deleted channels will be shown on the **All Channels** list. You add channels back to the **Added Channels** list on the **All Channels** list.

A gray-colored channel indicates the channel has been deleted from the **Added Channels** list.

The **Add** menu option only appears for deleted channels.

**Add to Favorite/Delete from Favorite:** Lets you add channels to and delete channels from your **Favorites** list.

To add channels to the Favorites list, follow these steps:

- Select one or more channels in the **All Channels** list using the **▲/▼** buttons and the Yellow Select button on your remote.
- Press the TOOLS button on your remote. The Tools menu appears.
- Select **Add to Favorite** in the Tools menu, and then press the ENTER button.

To delete channels from the Favorites list, follow these steps:

- Select one or more channels in the **Favorites** Channels list using the **▲/▼** buttons and the Yellow Select button on your remote.
- Press the TOOLS button on your remote. The Tools menu appears.
- Select **Delete from Favorite** in the Tools menu, and then press the ENTER button.

## Timer Viewing

You can schedule a channel to be displayed automatically at a set time, even when you are watching another channel. You must set the current time first in the **Time > Clock** function to use **Time Viewing**.

To schedule a channel, follow these steps:

- Select a channel in the **Added Channels** list using the **▲/▼** buttons and the Yellow Select button on your remote.
- Press the TOOLS button on your remote. The Tools menu appears.
- Select **Time Viewing** in the Tools menu, and then press the ENTER button. The Time Viewing screen appears.



- Use the **◀/▶** buttons to move from entry field to entry field and the **▲/▼** buttons to change the entries. Where numbers are displayed, you can also enter numbers directly using the number keypad on your remote.
- If you select **Everyday** or **Every Week**, the date you selected in the Date field becomes the start date for your scheduled viewing. For **Everyday**, the TV will turn on every day, at the time you selected, starting from that date. For **Everyweek**, the TV will turn on every week, on the same day of the week as the start date you selected, at the time you selected, from that day on. If you select **Once**, the TV will turn on once, on the date and time you selected.
- Press the ENTER button on your remote when done.

Only **Added channels** can be scheduled.

Scheduled programs and channels are displayed in the **Programmed List**.

When you select a digital channel, press the **▶** button to view the digital program list. If you highlight a program in the list, and then press the ENTER (Schedule) button, you set **Timer Viewing** for that program directly.

**Select All:** Select all the channels in the displayed channel list.

**Deselect All:** Deselect all the selected displayed channels.

You can only select **Deselect All** when one or more channels are selected.

**Channel Name Edit:** Analog channels only. Lets you assign a name of up to five characters to an analog channel. For example, Hist, Food, Golf, etc. This makes it easier to find and select a channel.

**Auto Program:** See Auto Program Under Memorizing Channels.

### Programmed List (on the Channel List Screen)

The **Programmed list** displays the channels and programs you have scheduled for viewing using the **Time Viewing** function. You can view, modify, or delete a show you have scheduled using the functions on the **Programmed List** screen Tools menu.

### Programmed List Screen Tools Menu

**Change Info:** Change the scheduling information for a show or channel you have scheduled.

To change the information, follow these steps:

- Select the **Programmed List** icon on the left side of the **Channel List** screen, and then press the ENTER button.
- On the **Programmed List** screen, select the show or channel entry you want to change, and then press the TOOLS button. The Tools Menu appears.
- Select **Change Info**, and then press the ENTER button. The **Time Viewing** screen appears.
- Use the **◀/▶** buttons to move from entry field to entry field and the **▲/▼** buttons to change the entries. Where numbers are displayed, you can also enter numbers directly using the number keypad on your remote.
- Press the ENTER button when done.

**Cancel Schedules:** Cancel a show or channel you have scheduled.

To cancel a scheduled show or channel, follow these steps:

- Select the **Programmed List** icon on the left side of the **Channel List** screen, and then press the ENTER button.
- On the **Programmed List** screen, select the show or channel entry you want to cancel, and then press the TOOLS button. The Tools Menu appears.
- Select **Cancel Schedules**, and then press the ENTER button. The **Cancel Schedule** screen appears.
- Select **OK**, and then press the ENTER button.

**Information:** Display the information for a show or channel you have scheduled. You can also change the schedule information.

Select the **Programmed List** icon on the left side of the **Channel List** screen, and then press the ENTER button.

On the **Programmed List** screen, select the show or channel entry you want information for, and then press the TOOLS button. The Tools Menu appears.

Select **Information**, and then press the ENTER button. The **Time Viewing** Information screen appears.

Select **Change Info** and press the ENTER button to change information, or select **Close** and press the ENTER button to close the Information screen.

**Select All / Deselect All:** You can select or deselect all channels in the channel list.

## Other Channel Menu Functions

Lets you select the channel list displayed when you press the **ACHV** (Channel) button on your remote. For example, if you select Favorites Channels, you will only see Favorite channels when you press the **ACHV** button.

### Fine Tune

Analog channels only. If the reception is clear, you do not have to fine tune the channel, as this is done automatically during the search and store operation. If the signal is weak or distorted, fine tune the channel manually.

Select the channel, and then select **Fine Tune**.

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 fine-tuning, select the channel, select **Fine Tune**, and then select **Reset** on the **Fine Tune** screen.

## Setup Menu

### Plug & Play

Lets you re-run the **Plug & Play** initial setup procedure. For instructions, see your Quick Start Guide.

### Language

Set the menu language.

Choose between **English, Español, and Français**.

### Setting the Time

The time you set will appear when you press the INFO button.

**Clock:** Set the clock so you can use the various timer features of the TV.

If you disconnect the power cord, you have to set the clock again.

To set the clock, follow these steps:

- Select **Setup > Time > Clock**.
- Press **ENTER** and select **Auto or Manual**, and then press **ENTER** again.
- If you selected **Auto:** The TV will automatically download the correct time from a digital channel.

Select **Time Zone**, and then press the ENTER button. Use the **▲/▼** buttons to select your **Time Zone**, and then press ENTER.

Select **DST (Daylight Savings Time)**, and then press ENTER. Select **On** if you want to turn the DST adjustment on and off manually. Select **Off** to turn off the DST adjustment. Select **Auto** if you want the TV to adjust

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

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

Media Play might not work properly with unlicensed multimedia files.

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

- The file system supports FAT16, FAT32 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. MSC are Mass Storage are Thumb drives and Flash Card Readers. Devices should be connected directly to the TV's USB port. USB HDD is not supported.
- Before connecting your device to the TV, please back up your files to prevent them from damage or loss of data. SAMSUNG is not responsible for any data file damage or data loss.
- A USB device that requires high power (more than 0.5A) may not be supported.
- Do not disconnect the USB device while it is loading.
- The higher the resolution of the image, the longer it takes to display on the screen.
- The maximum supported JPEG resolution is 15360 x 8640 pixels.
- If a file is corrupted or the TV does not support the file type, the "Not Supported File Format" message appears.
- The TV cannot play MP3 files with DRM that have been downloaded from a for-pay site. Digital Rights Management (DRM) is a technology that supports the creation, distribution, and management of digital content in an integrated and comprehensive way, including protecting the rights and interests of content providers, preventing illegal copying of contents, and managing billing and settlements.
- PTP devices are 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 period set in **Auto Protection Time**, the Screensaver will run.

The power-saving mode of some external hard disk drives may be released automatically when you connect them to the TV.

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

If a USB device connected to the TV is not recognized, the list of files on the device is corrupted, or a file in the list is not played, connect the USB device to a PC, format the device, and check the connection.

If a file you deleted from the PC is still found when you run **Media Play**, use the "Empty the Recycle Bin" function on the PC to permanently delete the file.

Photos only supports 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 is over approximately 4000, the files and folders may not appear and some folders may not open.

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

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

## Videos



1. 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

External	Name	File extension
	MPEG-4 timed text	.txt
	SAMI	.smi
	SubFip	.srt
	SubViewer	.sub
	MovD	.sub or .txt
	SubStation Alpha	.ssa
	Advanced SubStation Alpha	.ass

Internal	Name	Container	Format
	YouU	AVI	Picture Format
	SubStation Alpha	MKV	Text Format
	Advanced SubStation Alpha	MKV	Text Format
	SubFip	MKV	Text Format
	MPEG-4 Timed text	MP4	Text Format

Supported Video Formats

File Extension	Container	Video Codec	Resolution	Frame rate(frame/s)	Bit rate(Mbps)	Audio Codec
*.mp4	MP4	DxV 3.11/4.4x5.1 /B.D	1920x1080	6-30	30Mbps	MP3 / ADPCM / AAC
		H264	1920x1080	6-30	30Mbps	
		AVC	1920x1080	6-30	30Mbps	
		MJPEG	640x480	6-30	10Mbps	
*.avi *.mkv	AVI MKV	DxV 3.11/4.4x5.1 /B.D	1920x1080	6-30	30Mbps	MP3 / AC3 / LPCM / ADPCM / DTS Core
		MPEG4 SP /ASP	1920x1080	6-30	30Mbps	
		H264	1920x1080	6-30	30Mbps	
		MJPEG	640x480	6-30	10Mbps	
*.asf *.wmv	ASF	DxV 3.11 / 4.4 /5.1 / 6.0	1920x1080	6-30	30Mbps	MP3 / AC3 / LPCM / ADPCM / WMA / WMA Pro
		MPEG4 SP /ASP	1920x1080	6-30	30Mbps	
		H264	1920x1080	6-30	30Mbps	
		MJPEG	640x480	6-30	10Mbps	
*.ts *.mp *.ip *.m2ts	TS	DxV 3.11 / 4.4 /5.1 / 6.0	1920x1080	6-30	30Mbps	AC3 / AAC / MP3 / DTS / HE-AAC
		H.264 BP /MP /HP	1920x1080	6-30	30Mbps	
*.dat *.mpg *.mpe *.vob	PS	MPEG1	1920x1080	24/25/30	30Mbps	AC3 / MP3 / LPCM / AAC
		MPEG2	1920x1080	24/25/30	30Mbps	
*.3gp	3GPP	H.264 BP /MP /HP	1920x1080	6-30	30Mbps	MP3
		H.264	1920x1080	6-30	30Mbps	

File Extension	Container	Video Codec	Resolution	Frame rate(frame/s)	Bit rate(Mbps)	Audio Codec
*.avi	flash formats	H.264	1920x1080	6-30	30Mbps	MP3
		Sorenson H.263	1920x1080	6-30	30Mbps	

## 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 Indexed Table erroneous, 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 / ASO / RS, VC1 SP / MP / AP L4 and AVCHD are not supported.

MPEG4 SP, ASP :

– Below 1280 x 720: 60 frame max

– Above 1280 x 720: 30 frame max

H.263 is not supported.

GMC is not support.

## Audio Decoder

Supports up to WMA7, 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



1. In the **Media Play** menu, press the **◀** or **▶** button 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 **◀** and **▶** button.

**⏮** (REW) and **⏭** (FF) buttons do not function during play.

Media Play only displays files with MP3 and PCM 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



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 **◀** or **▶** button.

Media Play can play Music file 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
JPG	Base-line	15360 x 8704
	Progressive	1024 x 768

## Other Restrictions

- CMYK, YCCK Color space JPEG are not supported.

## Playing Multiple Files

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**

**▲** **▼** 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 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.	✓		
Stop Slide Show / Start Slide Show	You can start or stop a Slide Show.			✓
Slide Show Speed	You can select the slide show speed to play 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 play it 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 items. Contact a technician for assistance when installing the wall mount bracket. Samsung Electronics is not responsible for any damage to the product or injury to yourself or others if you elect to install the wall mount on your own.

### Wall Mount Kit Specifications (VESA)

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

The wall mount is mounted 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 specifications 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
PDP-TV	43-51	400 X 400	M8	4
	60-64	600 X 400		



Do not install your Wall Mount Kit while your TV is turned on. It may result in personal injury due to electric shock.

## 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 industry safety flyer. For added stability, install the anti-fall device for safety purposes, as follows.

### To prevent the TV from falling

Since the necessary brackets, screws, and string or cable are not supplied, please purchase these separately.

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. Using M8 screws, 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.

To purchase a TV Holder kit, contact Samsung customer care.

## Kensington Lock

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

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

The position and color may differ depending on the model.

### To lock the product, follow these steps:

- Wrap the Kensington lock cable around a large, stationary object such as desk or chair.
- Slide the end of the cable with the lock attached through the looped end of the Kensington lock cable.
- Insert the locking device into the Kensington slot on the product.
- Lock the lock.

These are general instructions. For exact instructions, see the User manual supplied with the locking device.

The locking device has to be purchased separately.

The location of the Kensington slot may be different depending on the TV model.

## 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](http://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 may need to disable some of its energy efficient features like the Eco Sensor or the Energy Saving feature. Follow the steps below with your remote to turn these features off or on.</li><li><b>Energy saving : Menu → Setup → Eco Solution → Energy Saving →Select Settings</b></li><li><b>Eco Sensor : Menu → Setup → Eco Solution → Eco Sensor →Select Settings</b></li></ul>
Component Connections / Screen Color	<ul style="list-style-type: none"><li>If you find that the color on your Samsung television's screen is not correct or black and white, first run a Self Diagnosis Test on the TV to make sure there are no device issues.</li><li><b>Self Diagnosis : User Menu → Support → Self Diagnosis → Picture Test</b></li><li>If the test is ok, try making sure :<ul style="list-style-type: none"><li>Your connections are all consistent. For example, if you've used the AV In jack on your TV, make sure you have used the AV Out jack on your video source.</li><li>Try making sure you have connected to the correct jacks. For example, if you use the Component jacks, labeled Pb, Pr, and Y, to connect your TV and video source, make sure you have connected the blue Pb jack on the video source to the blue Pb jack on the TV, the red Pr jack on the source to the red Pr jack on the TV.</li></ul></li></ul>
Screen Brightness	<p>If you find that the colors on your Samsung TV are correct but just a little too dark or bright, there are some settings you should check before calling for a repair.</p> <ul style="list-style-type: none"><li><b>Backlight, Contrast, Brightness, Sharpness, Color, Tint</b> and so on. Go to "Picture" in the Menu, and then try adjusting these options.</li></ul>
Unwanted Powering off	<ul style="list-style-type: none"><li>If your Samsung TV appears to turn off by itself, there may be an issue with either your Timer settings or your Eco Friendly No Signal Power Off feature.</li><li>First make sure the Sleep Timer is not accidentally set. The Sleep Timer lets you fall asleep with the TV still on knowing that it will turn off after a certain period of time and not waste energy.</li><li><b>Sleep Timer : User Menu → Setup → Time → Sleep Timer</b></li><li>If the Sleep Timer is not activated, you may have engaged the No Signal Power Off or Auto Power Off feature.</li><li><b>No Signal Power Off : User Menu → Setup → Eco Solution → No Signal Power</b></li><li><b>Auto Power Off : User Menu → Setup → Eco Solution → Auto Power Off</b></li></ul>
Trouble Powering On	<p><b>Before you turn the TV on, find the red light on the right or left bottom of your TV. Press the power on button on the TV or remote and the light should blink about 5 times before the TV turns on.</b></p> <p>If you find that you are having trouble powering on your Samsung television, there are a number of things to check it before making a call to the service department.</p> <ul style="list-style-type: none"><li>If you happen to be using the TV as a monitor and the stand-by light only blinks for a few seconds when you press the power button, your PC is in sleep mode. To take your PC out of sleep mode, press a key on your keyboard or move the mouse. Then try turning your TV on.</li></ul> <p>If you're sure your power cord, remote control, and PC are functioning properly, you may be having a cable issue. If you have a cable or satellite box, your TV may appear to be off because the cable or satellite box is not outputting a signal. To test the signal output of your cable or satellite box, press the guide or info button on the cable or satellite box remote control. If the screen displays the guide or info data, the problem is caused by the box.</p>

Problem	Possible Solution
Stand Assembly	<ul style="list-style-type: none"><li>If you have any trouble assembling the stand, refer to "Install the Stand" in the Start Up or Stand Installation Guide.</li></ul>
Cannot find a channel	<ul style="list-style-type: none"><li>Re-run Plug &amp; Play or run Auto Program. (go to <b>MENU - Channel - Auto Program</b>)</li></ul>
Poor Picture	<p>First, perform the <b>Picture Test</b> and to see if your TV is displaying the test image properly. Go to <b>MENU - Support - Self Diagnosis - Picture Test</b></p> <p>If the test image is properly displayed, the poor picture may be caused by the source or signal.</p> <ul style="list-style-type: none"><li>If you have an analog cable/satellite box, upgrade to a digital set top box. Use HDMI or Component cables to deliver HD (high definition) picture quality.</li><li>Cable/Satellite subscribers: Try HD channels from the channel line up.</li><li>Air/Cable Antenna connection: Try HD channels after running Auto Program.<ul style="list-style-type: none"><li>Many HD channels broadcast up scaled SD (Standard Definition) content. The picture quality of up scaled SD content is low.</li></ul></li><li>Adjust the Cable/Set top box video output resolution to 1080i or 720p.</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 those in sports and action movies.</li><li>A weak signal can cause picture distortion. This is not a TV problem.</li><li>Mobile phones used close to the TV (within 3.3ft) may cause noise in the sound on analog and digital channels.</li></ul>
Color is wrong or missing.	<ul style="list-style-type: none"><li>If you're using a Component connection, make sure the component cables are connected to the correct jacks. Incorrect or loose connections may cause color problems or a blank screen.</li></ul>
There is poor color or brightness.	<ul style="list-style-type: none"><li>Adjust the Picture options in the TV menu. (go to <b>Picture Mode / Color / Brightness / Sharpness</b>)</li><li>Adjust the <b>Energy Saving</b> option in the TV menu. (go to <b>MENU - Setup - Eco Solution - Energy Saving</b>)</li><li>Try resetting the picture to the default picture settings. (go to <b>MENU - Picture - Picture Reset</b>)</li></ul>
There is a dotted line on the edge of the screen.	<ul style="list-style-type: none"><li>If the picture size is set to <b>Screen Fit</b>, change it to 16:9.</li><li>Change the cable/satellite box resolution.</li></ul>
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 connected to a cable box, please try to reset it. (Reconnect the 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>
Sound Problems	<p>Perform the <b>Sound Test</b> to confirm that your TV audio is properly operating. (go to <b>MENU - Support - Self Diagnosis - Sound Test</b>)</p> <p>If the audio is OK, the sound problem may be caused by the source or signal.</p> <ul style="list-style-type: none"><li>Check the volume of the device (Cable/Sat Box, DVD, Blu-ray, etc.) connected to your TV.</li></ul>
There is no sound or the sound is too low at maximum volume.	<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 to HDMI if the box is connected to your TV using an HDMI cable.</li><li>Reboot the connected device by reconnecting the device's power cable.</li></ul>
The picture is good, but there is no sound.	<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>
The speakers are making an inappropriate noise.	
No Picture, No Video	
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 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 securely into the wall outlet and the TV.</li><li>When you are watching TV connected to an antenna or 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</li></ul>