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Eco Solution

■ **Energy Saving (Off / Low / Medium / High / Picture Off) :**
This adjust the brightness of the TV in order to reduce power consumption. If you select **Picture Off**, the screen is turned off, but the sound remains on. Press any button except volume button to turn on the screen.

■ **Eco Sensor (Off / On) :** To enhance your power savings; the picture settings will automatically adapt to the light in the room.
If you adjust the **Backlight**, the **Eco Sensor** will be set to **Off**.

Min. Backlight: When **Eco Sensor** is **On**, the minimum screen brightness can be adjusted manually.
If **Eco Sensor** is **On**, the display brightness may change (become slightly darker in most cases) depending on the surrounding light intensity.

■ **No Signal Power Off (Off / 15 min. / 30 min. / 60 min.) :** Sets how quickly the TV switches to standby mode, if no picture is being received.
Disabled when the PC is in power saving mode.

■ **Auto Power Off (Off / On) :** The TV will be automatically turned off when no user operation is performed for 4 hours.

Support Menu

Self Diagnosis

■ **Picture Test:** Use to check for picture problems. If the problem continues to occur, check the color pattern.
■ **Sound Test:** Use the built-in melody sound to check for sound problems.
■ **Signal Strength:** (digital channels only) An HD channel's reception quality is either perfect or the channels are unavailable. Adjust your antenna to increase signal strength.
■ **Reset:** Reset all settings to the factory defaults.
The PIN input screen appears before the setup screen.
Enter your 4-digit PIN. Change the PIN using the **Change PIN** option.

Software Upgrade

Software Upgrade can be performed by downloading the latest firmware from samsung.com to a USB memory device.

HD Connection Guide

Refer to this information when connecting external devices to the TV.

Contact Samsung

View this information when your TV does not work properly or when you want to upgrade the software. You can find information regarding our call centers and how to download products and software.

Media Play

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

Connecting a USB Device

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

Using the Media Play Menu



- Press the MENU button. Press the **▲** or **▼** button to select **Application**, then press the ENTER button.
- Press the **▲** or **▼** button to select **Media Play (USB)**, then press the ENTER button.
- Press the **◀** or **▶** button to select an icon (**Videos**, **Music**, **Photos**, **Settings**), then press the ENTER button.
 - It might not work properly with unlicensed multimedia files.
 - 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. Examples of MSC 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 billings and settlements.

- PTP device is not supported.

- If an over-power warning message is displayed while you are connecting or using a USB device, the device may not be recognized or may malfunction.
- If the TV has no input during the time set in **Auto Protection Time**, the Screensaver will run.
- The power-saving mode of some external hard 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 sequential jpeg format.
- The scene search and thumbnail functions are not supported in the **Videos**.
- If the number of files and folders saved on a USB storage device is approximately over 4000, the files and folders may not appear and some folders may not be opened.
- 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



- Press the **◀** or **▶** button to select **Videos**, then press the ENTER button in the **Media Play** menu.
- Press the **◀/▶/▲/▼** button to select the desired video in the file list.
- Press the ENTER button or **(Play)** button.
 - The selected file is displayed on the top with its playing time.
 - If video time information is unknown, playing time and the progress bar are not displayed.
 - During video playback, you can search using the **◀** and **▶** button.
- 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
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

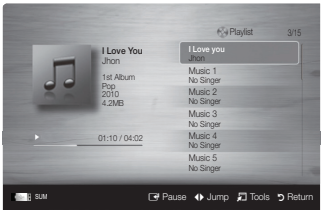
File Extension	Container	Video Codec	Resolution	Frame rate(fps)	Bit rate(kbps)	Audio Codec
*.mp4	MP4	DivX 3.11/4.x/5.1.0.0 H264 AVC MPEG2	1920x1080 1920x1080 1920x1080 640x480	6~30 6~30 6~30 10Mbps	30Mbps	MP3 / AAC
*.avi *.mkv	AVI MKV	DivX 3.11/4.x/5.1.0.0 MPEG4 SP / ASP H264 MPEG2	1920x1080 1920x1080 1920x1080 640x480	6~30 6~30 6~30 10Mbps	30Mbps	MP3 / AAC / LPCM / ADPCM / DTS Core
*.avi *.wmv	ASF	DivX 3.11 / 4.x / 5.1 / 6.0 MPEG4 SP / ASP H.264	1920x1080 1920x1080 6~30	6~30 6~30 30Mbps	30Mbps	MP3 / AAC / WMA Pro / WMA VMA Pro
*.ts *.tp *.mts	TS	MPEG2 H.264 EP / MP / HP	1920x1080 6~30	6~30 30Mbps	30Mbps	AAC / MP3 / DTS / HE-AAC
*.dat *.img *.mpag *.vob	PS	MPEG1 MPEG2 H.264 EP / MP / HP	1920x1080 1920x1080 1920x1080	24/25/30 24/25/30 6~30	30Mbps	AAC / LPCM / AAC
*.3gp	3GPP	MPEG4 SP / ASP H264	1920x1080 6~30	6~30 30Mbps	30Mbps	MP3
*.lv *.avi	format Flash	H264 Sorenson H.263	1920x1080 6~30	6~30 30Mbps	30Mbps	MP3

Other Restrictions

- Video content will not play, or not play correctly, if there is an error in the content or the container.
- Sound or video may not work if the contents have a standard bit rate/ frame rate above the compatible Frame/sec listed in the table above.
- If the Index Table is in error, the Seek (Jump) function is not supported.
- The menu may take longer to appear if the video's bit rate exceeds 10Mbps.
- Video content can not be played, if there are many contents in one file.

Video Decoder
Supports up to H.264, Level 4.1
H.264 FMO / ASO / RS, VCI SP / MP / AP L4 and AVCHD are not supported.
MPEG4 SP, ASP : <ul style="list-style-type: none">Below 1280 x 720: 60 frame max Above 1280 x 720: 30 frame max
H.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



- Press the **◀** or **▶** button to select **Music**, then press the ENTER button in the **Media Play** menu.
- Press the **◀/▶/▲/▼** button to select the desired Music in the file list.
- Press the ENTER button or **(Play)** button.
 - During music playback, you can search using the **◀** and **▶** button.
 - (REW)** and **(FF)** buttons do not function during play.
 - Only displays the files with MP3 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



- Press the **◀** or **▶** button to select **Photos**, then press the ENTER button in the **Media Play** menu.
- Press the **◀/▶/▲/▼** button to select the desired photo in the file list.
- Press the ENTER button or **(Play)** button.
 - NOTE**
 - While a photo list is displayed, press the **(Play)** / ENTER button on the remote control to start the slide show.
 - All files in the file list section will be displayed in the slide show.
 - During the slide show, files are displayed in order.
 - During the slide show, you can adjust the slide show speed using **(REW)** or **(FF)** button.
 - You can move to other file using **◀** or **▶** button.

• Supported Photo Formats

Image	Photo	Resolution
JPEG	Basic-mode	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**

- Press the Yellow button in the file list to select the desired file.
- Repeat the above operation to select multiple files.

☞ **NOTE**

- The **✓** mark appears to the left of the selected files.
- To cancel a selection, press the Yellow button again.
- To deselect all selected files, press the **TOOLS** button and select **Deselect All**.

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

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

- While a file list is displayed, move to any file in desired group.
- Press the **TOOLS** button, and then select **Play Folder**.

Media Play - Additional Functions

■ **Videos/Music/Photos Play Options menus**
When playing a file, press the **TOOLS** button.

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

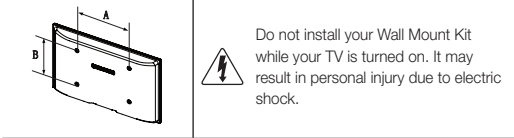
☞ The wall mount kit is not supplied, but sold separately.

Install your wall mount on a solid wall perpendicular to the floor. When attaching to other building materials, please contact your nearest dealer. If you install the TV on a ceiling or slanted wall, it may fall and result in severe personal injury.

☞ **NOTE**

- Standard dimensions for wall mount kits are shown in the table below.
- When purchasing our wall mount kit, a detailed installation manual and all parts necessary for assembly are provided.
- Do not use screws that do not comply with the VESA standard screw specifications.
- Do not use screws 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		4
	26	100 X 100	M4	
	32~40	200 X 200	M6	
	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 follows.

To prevent the TV from falling

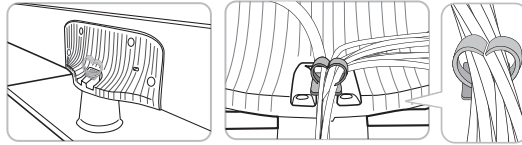
- Since the necessary clamps, screws, and string are not supplied, please purchase these additionally.
- Drive the screws into the clamps and firmly fasten them onto the wall. Make sure the screws are firmly fixed into the wall.
- Remove the screws from the back center of the TV, put the screws into the clamps, and then fasten the screws onto the TV again.
- Connect the clamps fixed onto the TV and the clamps fixed onto the wall with a strong cable and then tie the string tightly.
- 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.
- It is safe to connect the string so that the clamps fixed on the wall are equal to or lower than the clamps fixed on the TV. Untie the string 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 "☞" icon on the rear of the TV. The Kensington slot is beside the "☞" icon.
- The position and color may differ depending on the model.

Assembling the Cable manager



Troubleshooting

If the TV seems to have a problem, first review this list of possible problems and solution. 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	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. If you follow below step with your remote, you can turn these features off or on. <ul style="list-style-type: none">Energy saving : User Menu → Setup → Eco Solution → Energy Saving Eco Sensor : User Menu → Setup → Eco Solution → Eco Sensor
Component Connections / Screen Color	If you find that the color on your Samsung television's screen is not correct or black and White, first run a Self Diagnosis on the TV to make sure there are no device issues. <ul style="list-style-type: none">Self Diagnosis : User Menu → Support → Self Diagnosis → Picture Test If the test is ok, try making sure ; <ul style="list-style-type: none">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. 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 video source to the red Pr jack on the TV.
Screen Brightness	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. <ul style="list-style-type: none">Backlight, Contrast, Brightness, Sharpness, Color, Tint and so on. Go into "Picture" on user Menu then try adjusting options mentioned above.
Unwanted Powering off	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. <p>First make sure your Sleep Timer is not accidentally set. The sleep timer allows you the comfort of falling asleep with the TV still on but, turns it off after a certain period of time so as not to waste energy.</p> <ul style="list-style-type: none">Sleep Timer : User Menu → Setup → Time → Sleep Timer If the Sleep Timer is not activated, you may have engaged the No Signal Power Off or Auto Power Off feature. No Signal Power Off : User Menu → Setup → Eco Solution → No Signal Power Auto Power Off : User Menu → Setup → Eco Solution → Auto Power Off
Trouble Powering On	Before Turn on check red light on the right or left bottom of your TV. Press power on button on TV or remote and it will blink about 5 times before turning on. <p>If you find that you are having trouble powering on your Samsung television, there are a number of things to check before making a call to the service department.</p> <ul style="list-style-type: none">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. <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>
Stand Assembly	<ul style="list-style-type: none">If you have any trouble to assemble the stand though you refer to "Install the Stand" mentioned at separate guide.
Cannot find channel	Re-run plug and play.
Poor picture	First, perform the Picture Test and to see if your TV is properly displaying the test image. Go to MENU -> Support -> Self Diagnosis -> Picture Test <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">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. Cable/Satellite subscribers: Try HD channels from the channel line up. Air Cable Antenna connection: Try HD channels after performing Auto program. <ul style="list-style-type: none">Many HD channels are up scaled from SD(Standard Definition) contents. Adjust the Cable/Set top box video output resolution to 1080i or 720p.
The picture is distorted: macroblock error, small block, dots, pixelization.	<ul style="list-style-type: none">Compression of video contents may cause picture distortion, especially on fast moving pictures such as sports and action movies. A weak signal can cause picture distortion. This is not a TV problem. Mobile phones used close to the TV (within 3.3ft) may cause noise in the picture on analog and digital channels.
Color is wrong or missing.	<ul style="list-style-type: none">If you're using a component connection, make sure the component cables are connected to the correct jacks. Incorrect or loose connections may cause color problems or a blank screen.

There is poor color or brightness.	<ul style="list-style-type: none">Adjust the Picture options in the TV menu. (go to Picture Mode / Color / Brightness / Sharpness) Adjust Energy Saving option in the TV menu. (go to MENU -> Setup - Eco Solution - Energy Saving) Try resetting the picture to view the default picture setting. (go to MENU -> Picture - Picture Reset)
There is a dotted line on the edge of the screen.	<ul style="list-style-type: none">If the picture size is set to Screen Fit, change it to 16:9. Change cable/satellite box resolution.
The picture is black and white.	<ul style="list-style-type: none">If you are using an AV composite input, connect the video cable (yellow) to the Green jack of component input 1 on the TV.
When changing channels, the picture freezes or is distorted or delayed.	<ul style="list-style-type: none">If connected 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) Set output resolution of the cable box to 1080i or 720p.
Sound Problem	First of all, please perform the Sound Test to confirm that your TV audio is properly operating. (go to MENU -> Support - Self Diagnosis - Sound Test) <p>If the audio is OK, the sound problem may caused by the source or signal.</p>
There is no sound or the sound is too low at maximum volume.	<ul style="list-style-type: none">Please check the volume 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">If you are using an external device, check the device's audio output option (ex, you may need to change your cable box's audio option to HDMI when you have a HDMI connected to your TV). Reboot the connected device by reconnecting the device's power cable.
The speakers are making an inappropriate noise.	<ul style="list-style-type: none">Check the cable connections. Make sure a video cable is not connected to an audio input. For Antenna or Cable connections, check the signal information. A weak signal may cause sound distortion. Perform the Sound Test as explained above.
No Picture, No Video	
The TV will not turn on.	<ul style="list-style-type: none">Make sure the AC power cord is securely plugged into the wall outlet and the TV. Make sure the wall outlet is working. Try pressing the POWER button on the TV to make sure the problem is not the remote. If the TV turns on, refer to "Remote control does not work" below.
The TV turns off automatically.	<ul style="list-style-type: none">Ensure the Sleep Timer is set to Off in the Time menu. If your PC is connected to the TV, check your PC power settings. Make sure the AC power cord is plugged in securely to the wall outlet and the TV. When 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.
There is no picture/video.	<ul style="list-style-type: none">Check the cable connections. (Remove and reconnect all cables connected to the TV and external devices). 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. Make sure your connected devices are powered on. Be sure to select the TV's correct source by pressing the SOURCE button on the remote control. Reboot the connected device by reconnecting the device's power cable.
RF(Cable/Antenna) Connection	
The TV is not receiving all channels.	<ul style="list-style-type: none">Make sure the coaxial cable is connected securely. Please by Auto Program to add all cable channels to the channel list. go to MENU -> Channel - Auto program then select Auto and make sure the correct Cable TV signal type is set in the menu. There are 3 options. (STD, HRC and IRC) Verify the antenna is positioned correctly.
No Caption on digital channels.	<ul style="list-style-type: none">Check the Caption Setup menu. Try changing Caption Mode Service 1 to CC1. Some channels may not have caption data.
The picture is distorted: macroblock error, small block, dots, pixelization.	<ul style="list-style-type: none">Compression of video contents may cause picture distortion. Especially on fast moving pictures such as sports and action movies. A weak signal can cause picture distortion. This is not a TV problem.
Others	
Purple/green horizontal rolling bars and buzzing noise from the TV speakers with Component cable connection.	<ul style="list-style-type: none">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.
The picture will not display in full screen.	<ul style="list-style-type: none">HD channels will have black bars on