



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 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 video and programming, should be limited to no more than 5% of the total television viewing time 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 those controls to view different formats as a full screen picture.

Be careful about the television formats you select and the length of time you view them. 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, the Original Limited Warranty Statement and a dated Bill of Sale as Proof of Purchase must be presented to the Service Center.



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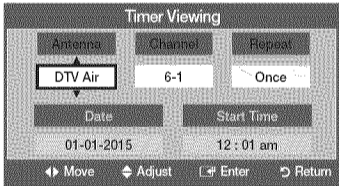
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Timer Viewing: You can schedule a channel to be displayed automatically at a set time, even when you are watching another channel. You must set the current time first in the **Time & Clock** function to use **Timer Viewing**.

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 **Timer Viewing** in the Tools menu, and then press the ENTER button. The Timer 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 select 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 **Every Week**, 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.

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.

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

Deselect All: Deselect all the selected displayed channels.

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

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 **Timer 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 **TOOLS**

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 **Timer 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 **Timer 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.

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

Picture Menu

Mode **TOOLS**

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.
- 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 (G/R): 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**.

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 / Warm): **Cool** makes the picture bluer (cooler). **Warm** makes the picture redder (warmer).
Warm is 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 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 the 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:

Custom: Magnifies or shrinks 16:9 pictures vertically and/or horizontally. A magnified or shrunken picture can be moved left, right, up, and down.

Input Source	Picture Size
ATV, AV, Component (480, 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

Digital Clean View (Off / Low / Medium / High / Auto): If the broadcast signal received by your TV is weak, you can activate the **Digital Clean View** feature to reduce any static and ghosting that may appear on the screen.

When the signal is weak, try all the Digital Clean View options until the TV displays the best picture.

HDMI Black Level (Normal / Low): For HDMI signals, select the black level to adjust the screen depth. Low make blacks look darker.

Available only in HDMI mode (RGB signals).

Film Mode (Off / Auto1 / Auto2): 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).

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.

Picture Reset

Picture Reset (Reset Picture Mode/Cancel): Resets the picture settings to their factory defaults.

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Other Channel Menu Functions

Channel Mode (Added Channels/Favorite Channels)

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

Sleep Timer **TOOLS**

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**.

Timer 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 the **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**.

Volume: Set the desired loudness.

Contents: To select what will be turned on when the timer setting is activated. You can set the TV to turn on a specific channel or play back contents such as photo or audio files.

Use the **◀/▶** buttons to move to the Contents field, and then press the ENTER button. The Contents screen appears. Use the **◀/▶** buttons to move from field to field. Use the **▲/▼** buttons to change the values in each field.

-TV/USB: Select **TV** or **USB**. The USB device must be connected to your TV before you can select **USB**.

-Antenna: Displays the current antenna source, **Air** or **Cable**.

-Channel: If you have selected TV, select the desired channel.

-Music/Photo: If you have selected USB, follow these steps to select a folder containing MP3 (Music) or JPEG (Photo) files on the USB device.

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.

- Use the **◀/▶** buttons to move to the field under **Music** or the field under **Photo**, and then press the ENTER button. The TV displays a single folder (the Root folder) and the type or name of the device.
- Press the ENTER button. A list of folders on the device appears.

If there are no folders on your device, press the **Yellow** select button to select the Root folder, and then press the RETURN button. The Timer screen re-appears.

- Use the **▲/▼** buttons to highlight a folder that contains music or photos, and then press the **Yellow** select button to select the folder.
- Press the RETURN button. The Timer screen re-appears.

Repeat: Select **Once**, **Everyday**, **Mon-Fri**, **Mon-Sat**, **Sat-Sun** or **Manual**. If you select **Manual**, you can select the days you want to activate the timer by using the **◀/▶** buttons to highlight the day, and then pressing the ENTER button. To unselect a day, highlight it, and then press the ENTER button.

When you finished making all your selections on the Timer screen, press either the ENTER or RETURN button.

Sound Menu

Mode **TOOLS**

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.

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.

DTS TruSurround (On/Off)

Available in Standard sound mode only.

DTS TruSurround is a patented DTS technology that solves the problem of playing 5.1 multichannel content over two speakers. TruSurround delivers a 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.

Multi-Track Sound (MTS)

Analog channels only.

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

Stereo: Select 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

Automatically adjusts the volume level when you change video sources or content so the level remains the same.

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: You can select the Digital Audio output (SPDIF) format. The available Digital Audio output (SPDIF) format may differ depending on the input source.

Audio Delay: Lets you correct timing mismatches between the audio track and the video when you are watching the TV and listening to digital audio output from the TV through an external device such as an AV receiver. When you select **Audio Delay**, a slider appears. Use the left and right arrow buttons to adjust the slider. Press ENTER when done (0ms - 250ms).

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Other Features

Game Mode (On/Off)

When you connect a game console such as a PlayStation™ or Xbox™ to your TV, you can enjoy a more realistic gaming experience by turning on the **Game Mode** function.

Precautions and limitations for game mode:

- Before you disconnect the game console and connect another external device, set **Game Mode** to **Off** in the setup menu.
- If you display the TV menu in **Game Mode**, the screen shakes slightly.

Game Mode is not available when the input source is set to TV.

After connecting the game console, set **Game Mode** to **On**. You may notice slightly reduced picture quality.

Caption (On-Screen Text Dialogue)

Caption: You can switch the caption function on or off. If captions are not available, they will not be displayed on the screen.

The **Caption** feature does not work in **Component** or **HDMI** mode.

Caption Mode: You can select the desired caption mode.

Default / CC1-CC4 / Text1-Text4: (analog channels only) The Analog Caption function operates in either analog TV channel mode or when a signal is supplied from an external device to the TV. (Depending on the broadcasting signal, the Analog Caption function may or may not work with digital channels.)

Default / Service1 -Service6 / CC1-CC4 / Text1-Text4: (Digital channels only) The Digital Captions function works with digital channels.

Service1-6 may not be available in digital caption mode depending on the broadcast.

Digital Caption Options: (Digital channels only)

Size: Options include Default, Small, Standard and Large. The default is Standard.

Font Style: Options include Default and Styles 0 to 7. The default is Style 0.

Foreground Color: Options include Default, White, Black, Red, Green, Blue, Yellow, Magenta and Cyan. You can change the color of the letters. The default is White.

Background Color: Options include Default, White, Black, Red, Green, Blue, Yellow, Magenta and Cyan. You can change the background color of the captions. The default is Black.

Foreground Opacity: This adjusts the opacity of text. Options include Default, Transparent, Translucent, Solid and Flashing.

Background Opacity: This adjusts the opacity of the caption background. Options include Default, Transparent, Translucent, Solid and Flashing.

Return to Default: This option sets each Size, Font Style, Foreground Color, Background Color, Foreground Opacity and Background Opacity to its default.

Digital Caption Options are available only when you can select **Default** and **Service1 ~ Service6** in **Caption Mode**.

The Foreground and Background cannot be set to the same color.

Boot Logo

Enable/disable displaying the logo while the TV starts up.

Speaker Select

If you are listening to the sound track of a broadcast or movie through an external receiver, you may hear a sound echo caused by the difference in decoding speed between the TV's speakers and the speakers attached to your audio receiver. If this occurs, set the TV to **External Speaker**.

When you set **Speaker Select** to **External Speaker**, the TV's speakers are turned off. You will hear sound through the external speakers only. When you set **Speaker Select** to **TV Speaker**, both the TV's speakers and the external speakers are on. You will hear sound through both.

When **Speaker Select** is set to **External Speaker**, the **VOLUME** and **MUTE** buttons will not operate and the sound settings will be limited.

If there is no video signal, both the TV's speakers and the external speakers will be mute.

Visual Impaired

(digital channels only)

Adds verbal description to the main audio to help the visually impaired.

Dolby Digital Comp

Set Dolby Digital compression mode.

Sound Reset

Reset All: Resets all sound settings to the factory defaults.

Channel Menu

Memorizing Channels

When you first set up your TV using **Plug & Play**, the TV memorized the channels that were available over the air or through your cable system and added them to the **Channel List**. The **Antenna** and **Auto Program** functions described below let you re-run the channel memorization function without having to re-run the **Plug & Play** procedure.

Antenna (Air / Cable)

Before your television can memorize the available channels, you must select your TV's signal source, **Air** (using an antenna) or **Cable**. Select **Menu > Channel > Antenna > Air** or **Cable**. After you have selected the signal source, go on to the **Auto Program** function.

Selecting the signal source using the **Antenna** function also determines the signal source the TV is tuned to. For example, if you receive your TV signal over the air, and you select **Cable**, you will see only snow. You must select **Air** to see a picture.

Auto Program

The **Auto Program** function memorizes all channels that are available over the air or through your cable system and adds them to the **Channel List**.

To start **Auto Program**, follow these steps:

1. Push **MENU** → **Channel** → **Auto Program** → ENTER on your remote. The Antenna Source screen appears.

2. On the Antenna Source screen, select the source of your TV signal.

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Air

If your TV is connected to an antenna choose **Air**, and then press ENTER. The TV will automatically start memorizing channels.

Cable

If your TV is connected to a cable outlet, choose **Cable**, and then press ENTER. Go to Step 3.

Auto

- If the TV has no input during the time period set in **Auto Protection Time**, the Screen saver 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 folders 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 ◀/▶/▲/▼ button 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
SubRip	.rt
SubViewer	.sub
Micro DVD	.sub or .txt
SubStation Alpha	.ssa
Advanced SubStation Alpha	.ass

- Internal

Name	Container	Format
Xvid	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
*.avi *.mkv *.asf		Motion JPEG	640x480		8	
*.wmv *.mp4 *.mov *.3gp *.mpe *.mpg *.mpq *.ts *.3gp *.mp4 *.mov *.avi *.divx	AVI MKV ASF MP4 3GP MOV FLV VRO VOB PS TS	H.264 BIV MP4H H.264 BIV / MP / HP Divx 3.11 / 4 / 5 / 6 MPEG4 SP / ASP MVC VC1 Window Media Video (WMV1) MPEG2 MPEG1	1920x1080	MAX 30	30	AC3 LPCM ADPCM IMA, MS AAC HE-AAC WMA DTS MPEG2(MP2) DTS (Core, LBR (G,711A (Law, u-Law)
*.webm	WebM	VFB	1920x1080	6-30	20	Vorbis

Other Restrictions

- Codecs may not function properly if there is a problem with the content.
- Video content does not play or does not play correctly if there is an error in the content or container.
- Sound or video may not work if they have standard bit rates/ frame rates above the TV's compatibility ratings.
- If the Index Table has an error, the Seek (Jump) function will not work.
- When playing video over a network connection, the video may not play smoothly because of data transmission speeds.
- Some USB/digital camera devices may not be compatible with the TV.
- While the TV is playing a video at the bit rate of 10 Mbps or higher, the menu screens may be displayed slowly.

Video Decoder

Supports up to H.264, Level 4.1
H.264 FMO / ASO / RS, VC1 / AP L4 are not supported.
GMC 2 or above is not supported.

Audio Decoder

WMA 10 Pro supports up to 5.1 channels. Supports up to the M2 profile. WMA lossless audio is not supported.
QCPEL and AMR NB/WB are not supported.
Vorbis is supported for up to 2 channels.
Dolby Digital Plus is supported for up to 5.1 channels.
The DTS LBR codec is only available for MKV / MP4 /TS containers.

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.)

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.)

3. Press the ENTER button or [▶] (Play) button.

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.

- ☞ 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 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, YCCO 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**
- 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

Video/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 Settings	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 during the slide show.		✓	
Background Music	You can on/ off 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".

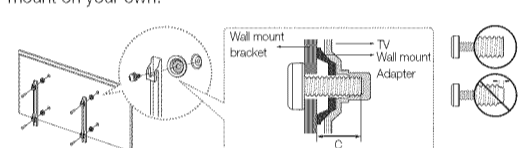
- **Information:** Select to view information about the connected USB device.

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.



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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	C (mm)	Standard Screw	Quantity
LED-TV	32	200 X 200	31.3 - 32.3	M8	4



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 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 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.

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Trouble Powering On	<p>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.</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"> • 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> <ul style="list-style-type: none"> • If you have any trouble assembling the stand, refer to "Install the Stand" in the Start Up or Stand Installation Guide. <p>Cannot find a channel</p> <ul style="list-style-type: none"> • Re-run Plug & Play or run Auto Program. (go to MENU - Channel - Auto Program) <p>Poor Picture</p> <p>First, perform the Picture Test and to see if your TV is displaying the test image properly. Go to MENU - Support - Self Diagnosis - Picture Test</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"> • 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 running Auto Program. ☞ Many HD channels broadcast up scaled SD (Standard Definition) content. The picture quality of up scaled SD content is low. • Adjust the Cable/Set top box video output resolution to 1080i or 720p. <p>The TV image does not look as good as it did in the store.</p> <ul style="list-style-type: none"> • Compression of video contents may cause picture distortion, especially on fast moving pictures such as those in 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 ft) may cause noise in the picture on analog and digital channels. <p>Color is wrong or missing.</p> <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 black screen. <p>There is poor color or brightness.</p> <ul style="list-style-type: none"> • Adjust the Picture options in the TV menu. (go to Picture Mode / Color / Brightness / Sharpness) • Adjust the Energy Saving option in the TV menu. (go to MENU - Setup - Eco Solution - Energy Saving) • Try resetting the picture to the default picture settings. (go to MENU - Picture - Picture Reset) <p>There is a dotted line on the edge of the screen.</p> <ul style="list-style-type: none"> • If the picture size is set to Screen Fit, change it to 16:9. • Change the cable/satellite box resolution. <p>The picture is black and white.</p> <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. <p>When changing channels, the picture freezes or is distorted or delayed.</p> <ul style="list-style-type: none"> • If connected to a cable box, please try to reset it. (Disconnect the AC cord and wait until the cable box reboots. It may take up to 20 minutes) • Set the output resolution of the cable box to 1080i or 720p. <p>Sound Problems</p> <p>Perform the Sound Test to confirm that your TV audio is properly operating. (go to MENU - Support - Self Diagnosis - Sound Test)</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"> • Check the volume of the device (Cable/Sat Box, DVD, Blu-ray, etc.) connected to your TV. <p>There is no sound or the sound is too low at maximum volume.</p> <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 if the box is connected to your TV using an HDMI cable. • Reboot the connected device by reconnecting the device's power cable. <p>The picture is good, but there is no sound.</p> <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. <p>No Picture, No Video</p> <p>The TV will not turn on.</p> <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. <p>The TV turns off automatically.</p> <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 securely into 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.
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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 devices (Cable/Sat Box, DVD, Blu-ray) 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 correct input 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. • Run Auto Program to add available 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 Service1 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 those in 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 ft) may cause noise in the picture on analog and digital channels.
Others	
Purple/Green rolling horizontal 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 either side of the screen when displaying up scaled SD (4:3) contents. • Black bars on the top and bottom appear when movies that have aspect ratios different from your TV play on the TV. • Adjust the picture size option on your external device or change the TV to full screen.
The remote control does not work.	<ul style="list-style-type: none"> • Replace the remote control's batteries. Make sure you insert them with the polarity (+/-) correct. • Clean the transmission window located on the top of the remote control. • Try pointing the remote directly at the TV from 5-6 feet away.
A "Mode Not Supported" message appears.	<ul style="list-style-type: none"> • 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.
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"> • Check the supported resolution of the TV and adjust the external device's output resolution accordingly. Refer to resolution settings in this manual. • You cannot select Caption in the TV menu when watching content from a device connected via HDMI or Component. • Caption must be activated on the external device.
There is a plastic smell from the TV.	<ul style="list-style-type: none"> • This smell is normal and will dissipate in a few days.
TV Signal Strength is unavailable in the Self Diagnosis Test menu.	<ul style="list-style-type: none"> • This function is only available for digital channels received through an Antenna / RF/Coax connection.
TV is tilted to the right or left side.	<ul style="list-style-type: none"> • Remove the stand base from the TV and reassemble it.
The Channel menu is grey out (unavailable).	<ul style="list-style-type: none"> • The Channel 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.	<ul style="list-style-type: none"> • If TV is in the Store Demo mode, it will reset audio and picture settings every 30 minutes. Please change from Store Demo mode to Home Use mode using the Plug & Play procedure. Press the SOURCE button to select TV mode, go to MENU -> Setup -> Plug & Play -> ENTER.
You have intermittent loss of audio or video.	<ul style="list-style-type: none"> • 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.	<ul style="list-style-type: none"> • This is part of the product's design and is not a defect.
POP (TV's internal banner ad) appears on the screen.	<ul style="list-style-type: none"> • Select Home Use under Plug & Play mode. For details, refer to Plug & Play (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.
- ☞ Watch these troubleshooting on video 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 -> Downloads). 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.

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.

Display Modes (HDMI/DVI Input)

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

Mode	Resolution	Horizontal Frequency (kHz)	Vertical Frequency (Hz)	Pixel Clock Frequency (MHz)	Sync. Polarity (H/V)	1366 x 768	1920 x 1080
BM	640 x 360	31.469	70.086	26.175	+/-	✓	✓
	720 x 480	31.469	70.087	28.322	-/+	✓	✓
MAC	832 x 624	49.776	74.551	57.284	-/+	✓	✓
	1152 x 870	68.881	75.088	100.000	-/+	✓	✓
VESA DMT	640 x 480	31.469	59.940	25.175	-/+	✓	✓
	840 x 480	37.861					