



**Contact SAMSUNG WORLDWIDE**  
If you have any questions or comments relating to Samsung products, please contact the SAMSUNG customer care centre.

Country	Customer Care Centre ☎	Web Site
AUSTRALIA	1300 362 603	www.samsung.com
NEW ZEALAND	0800 SAMSUNG (0800 726 786)	www.samsung.com
CHINA	400-810-5858	www.samsung.com
HONG KONG	(852) 3698-4698	www.samsung.com/hk
INDIA	3030 8282 1800 3000 8282	www.samsung.com
INDONESIA	0800-112-8888 021-5699-7777	www.samsung.com
JAPAN	0120-327-527	www.samsung.com
MALAYSIA	1800-88-9999	www.samsung.com
PHILIPPINES	1-800-10-SAMSUNG(726-7864) 1-800-3-SAMSUNG(726-7864) 1-800-8-SAMSUNG(726-7864) 02-5805777	www.samsung.com
SINGAPORE	1800-SAMSUNG(726-7864)	www.samsung.com
THAILAND	1800-29-3232 02-689-3232	www.samsung.com
TAIWAN	0800-329-999	www.samsung.com
VIETNAM	1 800 588 889	www.samsung.com



BN68-03417A-00

LCD TV user manual

SAMSUNG

SERIES  
4

# LCD TV user manual

imagine the possibilities

Thank you for purchasing this Samsung product. To receive more complete service, please register your product at [www.samsung.com/register](http://www.samsung.com/register)

Model \_\_\_\_\_ Serial No. \_\_\_\_\_



Figures and illustrations in this User Manual are provided for reference only and may differ from actual product appearance. Product design and specifications may be changed without notice.

### Still image warning

Avoid displaying still images (like jpeg picture files) or still image element (like TV programme logo, panorama or 4:3 image format, stock or news bar at screen bottom etc.) on the screen. Constant displaying of still picture can cause ghosting of LCD screen, which will affect image quality. To reduce risk of this effect, please follow below recommendations:

- Avoid displaying the same TV channel for long periods.
- Always try to display any image on full screen, use TV set picture format menu for best possible match.
- Reduce brightness and contrast values to minimum required to achieve desired picture quality, exceeded values may speed up the burnout process.
- Frequently use all TV features designed to reduce image retention and screen burnout, refer to proper user manual section for details.

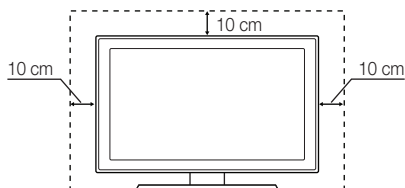
### Securing the Installation Space

Keep the required distances between the product and other objects (e.g. walls) to ensure proper ventilation.

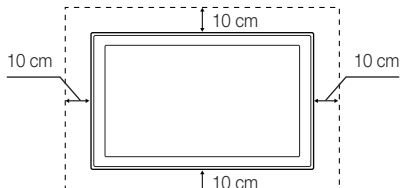
Failing to do so may result in fire or a problem with the product due to an increase in the internal temperature of the product.

- 🔧 When using a stand or wall-mount, use parts provided by Samsung Electronics only.
  - If you use parts provided by another manufacturer, it may result in a problem with the product or an injury due to the product falling.
- 🔧 The appearance may differ depending on the product.
- 🔧 Be careful when you contact the TV because some parts can be somewhat hot.

#### Installation with a stand.




#### Installation with a wall-mount.



# Contents


<b>Getting Started</b> 4	4 Accessories 4 Viewing the Control Panel 5 Viewing the Remote Control 6 Connecting to an Antenna 6 Plug & Play (Initial Setup)
<b>Connections</b> 7	7 Connecting to an AV Device 8 Connecting to an Audio Device 9 Changing the Input Source
<b>Basic Features</b> 9	9 How to Navigate Menus 9 Channel Menu 10 Picture Menu 12 Sound Menu 12 Setup Menu
<b>Advanced Features</b> 14	14 Connecting to a PC 16 Media Play
<b>Other Information</b> 20	20 Analogue Channel Teletext Feature 21 Installing the Wall Mount 22 Anti-Theft Kensington Lock 22 Securing the TV to the Wall 23 Troubleshooting 26 Specifications 27 Index

**Check the Symbol!**




**TOOLS**

This function can be used by pressing the TOOLS button on the remote control.



Note



One-touch button

# Getting Started

## Accessories

- Please make sure the following items are included with your LCD TV. If any items are missing, contact your dealer.
- The items' colours and shapes may vary depending on the models.

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

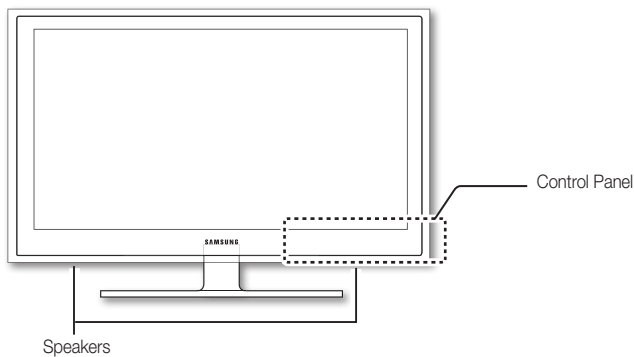
For more detailed information, please refer to stand guide.






- Stand Screws (3EA)

## Viewing the Control Panel

The product colour and shape may vary depending on the model.

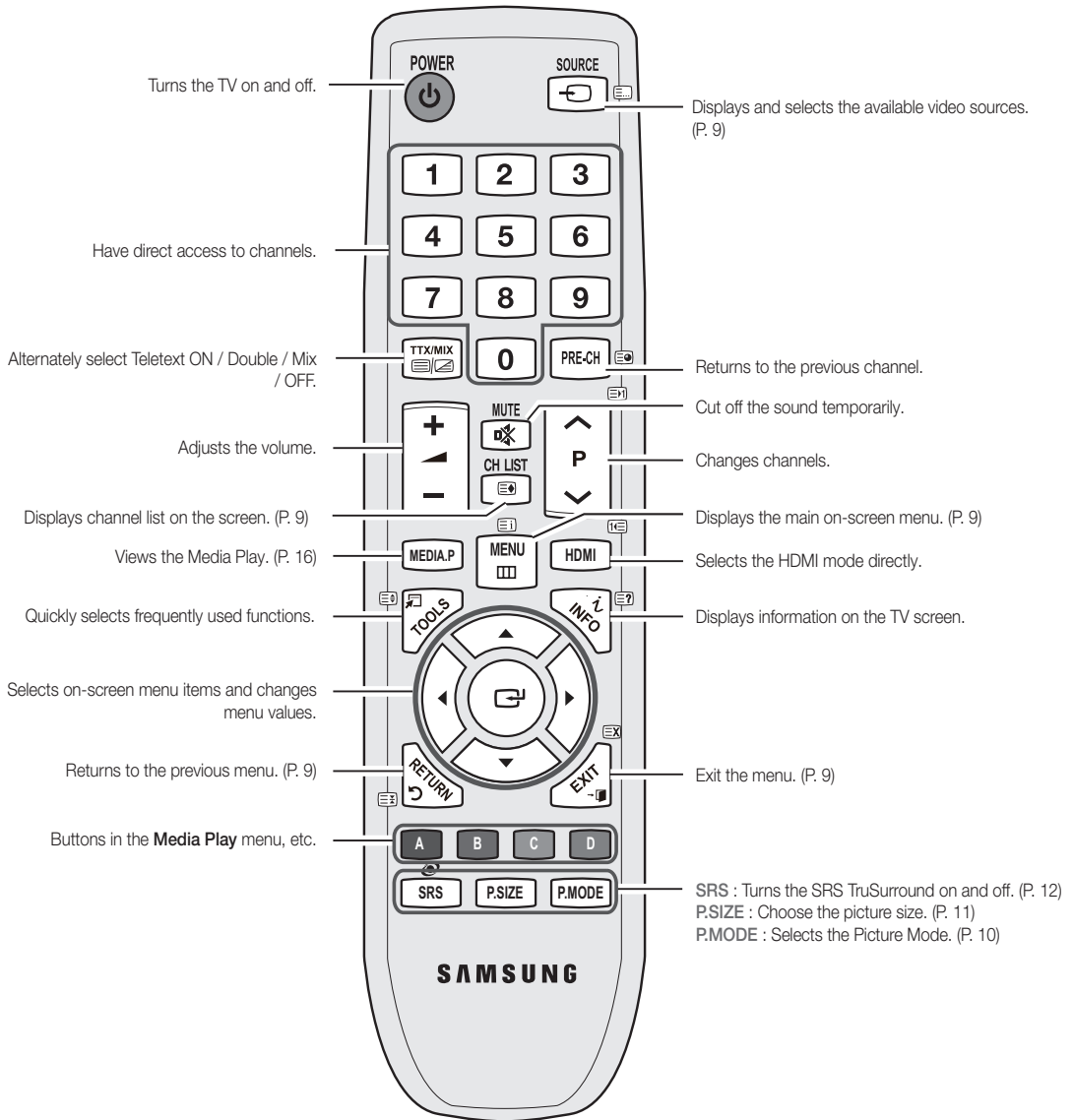


 (Power)	Turns the TV on or off.
Power Indicator	Blinks and turns off when the power is on and lights up in standby mode.
SOURCE 	Toggles between all the available input sources. In the on-screen menu, use this button as you would use the ENTER  button on the remote control.
MENU	Displays an on-screen menu, the OSD (on screen display), of your TV's features.
- VOL +	Adjusts the volume. In the OSD, use the - VOL + buttons as you would use the ◀ and ▶ buttons on the remote control.
▼ CH ▲	Changes the channels. In the OSD, use the ▼ CH ▲ buttons as you would use the ▼ and ▲ buttons on the remote control.
Remote control sensor	Aim the remote control towards this spot on the TV.

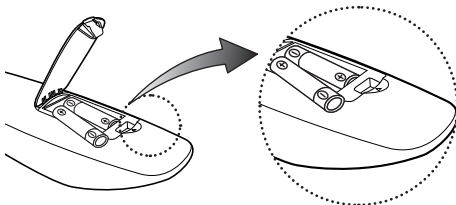
### Standby mode

Do not leave your TV in standby mode for long periods of time (when you are away on a holiday, for example). A small amount of electric power is still consumed even when the power button is turned off. It is best to unplug the power cord.

## Viewing the Remote Control



### Installing batteries (Battery size: AAA)




#### NOTE

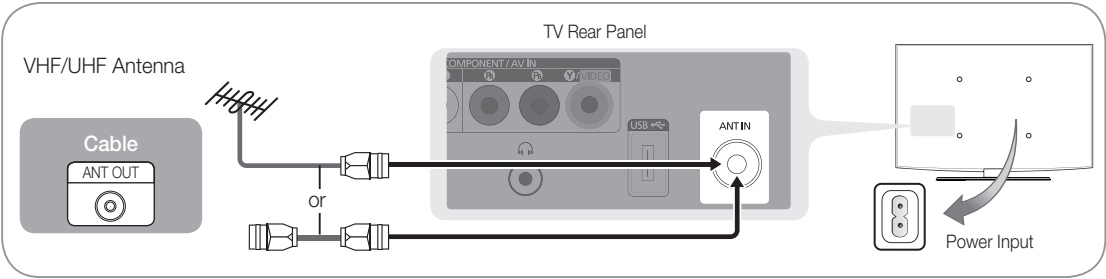
- Use the remote control within 23 feet from the TV.
- Bright light may affect the performance of the remote control. Avoid using nearby special fluorescent light or neon signs.
- The colour and shape may vary depending on the model.

# Getting Started

## Connecting to an Antenna



When the TV is initially powered on, basic settings proceed automatically.

 **Preset:** Connecting the mains and antenna.



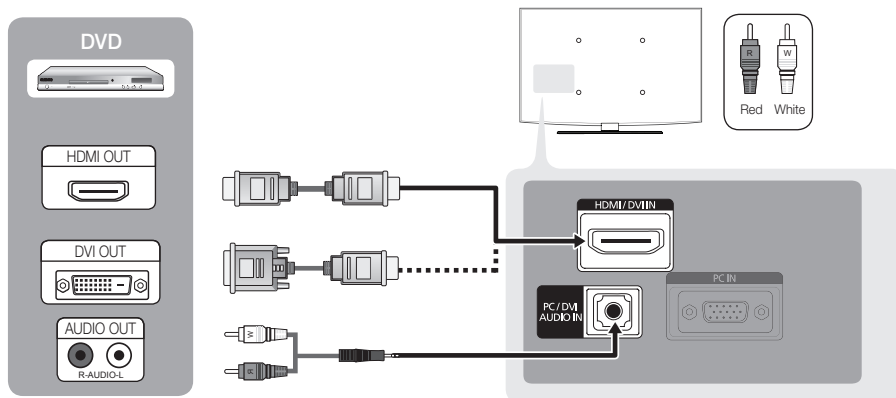
## Plug & Play (Initial Setup)

When the TV is initially powered on, a sequence of on-screen prompts will assist in configuring basic settings. Press the **POWER** button. **Plug & Play** is available only when the **Source** is set to TV.

1	Selecting a language	Press the ▲ or ▼ button, then press the ENTER button. Select the desired OSD (On Screen Display) language.	
2	Selecting <b>Store Demo</b> or <b>Home Use</b>	Press the ◀ or ▶ button, then press the ENTER button. <ul style="list-style-type: none"><li>Select the <b>Home Use</b> mode. <b>Store Demo</b> Mode is for retail environments.</li><li>Return the unit's settings from <b>Store Demo</b> to <b>Home Use</b> (standard): Press the volume button on the TV. When the OSD volume is displayed, press and hold <b>MENU</b> for 5 sec.</li></ul>	
3	Selecting an area.	Press the ▲ or ▼ button, then press the ENTER button. Select the appropriate area.	
4	Selecting a channel	Press the ENTER button, then the channel search will start automatically. For more information, refer to <b>Channel → Auto Store</b> . (P. 10)  Press the ENTER button at any time to interrupt the memorisation process.	
5	Setting the clock	Press the ◀ or ▶ button to select <b>Month, Day, Year, Hour, Minute</b> or <b>am/pm</b> . Set these by pressing the ▲ or ▼ button.	

### Using an HDMI / DVI Cable: HD connection (up to 1080p)

Available devices: DVD / Blu-ray player / HD Cable Box / HD Satellite receiver (STB) / Cable Box / Satellite receiver (STB)

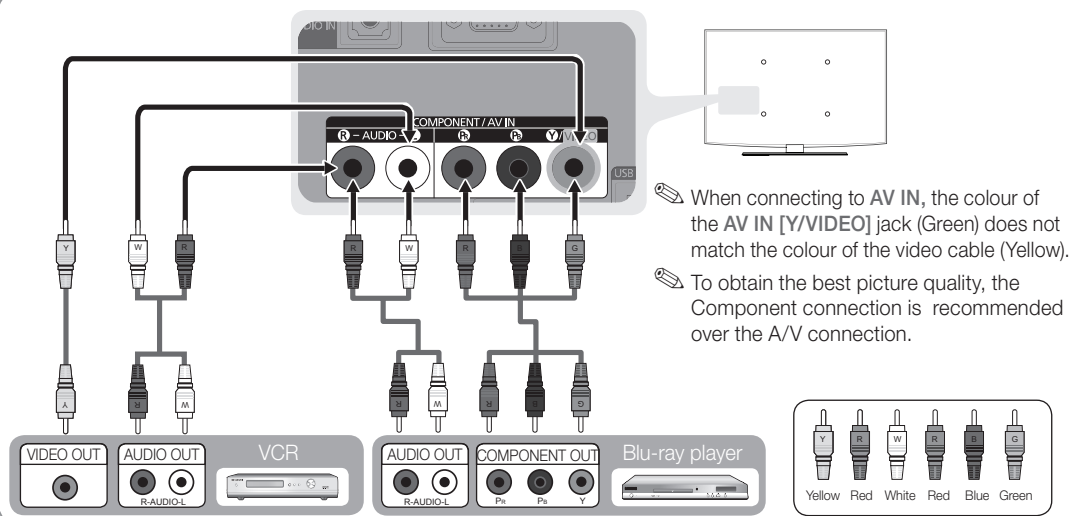


#### HDMI (DVI) IN / PC/DVI AUDIO IN

- For better picture and audio quality, connect to a digital device using an HDMI cable.
- An HDMI cable supports digital video and audio signals, and does not require an audio cable.
  - To connect the TV to a digital device that does not support HDMI output, use an HDMI/DVI and audio cables.
- The picture may not display normally (if at all) or the audio may not work if an external device that uses an older version of HDMI mode is connected to the TV. If such a problem occurs, ask the manufacturer of the external device about the HDMI version and, if out of date, request an upgrade.
- Be sure to purchase a certified HDMI cable. Otherwise, the picture may not display or a connection error may occur.
- A basic high-speed HDMI cable or one with ethernet is recommended. This product does not support the ethernet function via HDMI.

### Using a Component Cable: (up to 1080p) / Using an Audio/Video: (480i only)

Available devices: VCR / DVD / Blu-ray player / Cable Box / Satellite receiver



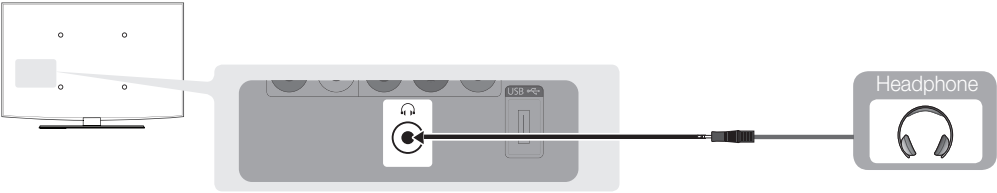
- When connecting to AV IN, the colour of the AV IN [Y/VIDEO] jack (Green) does not match the colour of the video cable (Yellow).
- To obtain the best picture quality, the Component connection is recommended over the A/V connection.

# Connections



## Connecting to an Audio Device

### Using Audio Cable (Analogue) Connection

Available devices: amplifier, DVD home theatre.

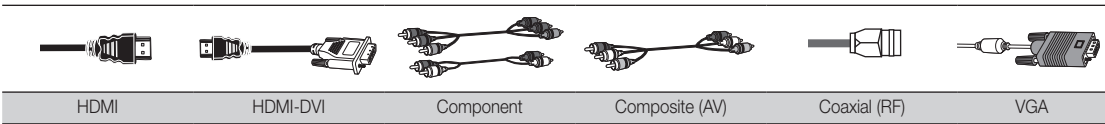


The diagram illustrates an analogue audio connection. On the left, a TV set is shown with a callout pointing to its back panel. In the center, a grey rectangular device (likely a set-top box or amplifier) features a circular headphone jack icon. A black audio cable is plugged into this jack and extends to the right, where it connects to a box labeled 'Headphone' containing an icon of a pair of headphones.

 **Headphones**  You can connect your headphones to the headphones output on your set. While the headphones are connected, the sound from the built-in speakers will be disabled.

- Sound function may be restricted when connecting headphones to the TV.
- Headphone volume and TV volume are adjusted separately.

### Input Cables (Sold Separately)








# Connections


## Changing the Input Source


### Source List

 MENU  → Input → Source List → ENTER 

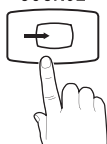
Use to select TV or other external input sources such as DVD / Blu-ray players / cable box / STB satellite receiver connected to the TV.

#### ■ TV / AV / Component / PC / HDMI/ DVI

 In the **Source List**, connected inputs will be highlighted.

 **PC** always stay activated.

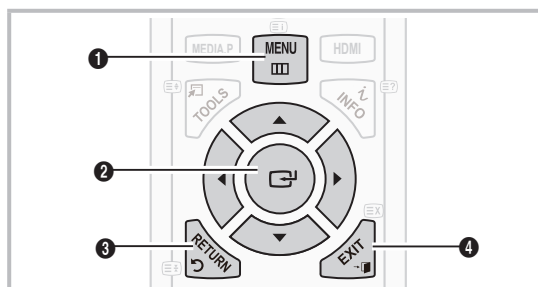
SOURCE




## Basic Features

### How to Navigate Menus









Before using the TV, follow the steps below to learn how to navigate the menu and select and adjust different functions.






- 1 MENU button: Displays the main on-screen menu.
- 2  (Enter) / Direction button: Move the cursor and select an item. Confirm the setting.
- 3 RETURN button: Returns to the previous menu.
- 4 EXIT button: Exits the on-screen menu.

### How to Operate the OSD (On Screen Display)


The access step may differ depending on the selected menu.

1	MENU 	The main menu options appears on the screen: <b>Picture, Sound, Channel, Setup, Input.</b>
2	▲ / ▼	Select an icon with the ▲ or ▼ button.
3	ENTER 	Press ENTER  to access the sub-menu.
4	▲ / ▼	Select the desired submenu with the ▲ or ▼ button.
5	ENTER 	Press ENTER  to access the sub-menu.
6	▲ / ▼	Adjust the value of an item with the ▲ or ▼ button. The adjustment in the OSD menu.
7	ENTER 	Press ENTER  to complete the configuration.
8	EXIT 	Press EXIT.

### Edit Name

 MENU  → Input → Edit Name → ENTER 

#### ■ VCR / DVD / Cable STB / Satellite STB / PVR STB / AV Receiver / Game / Camcorder / PC / DVI PC / DVI / TV / IPTV / Blu-ray / HD DVD / DMA: Name the device connected to the input jacks to make your input source selection easier.

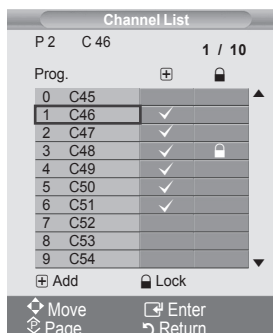
 When connecting an HDMI/DVI cable to the HDMI (DVI) IN port, you should set to **DVI PC** or **DVI** mode under **Edit Name**.

### Channel Menu

### Channel List



 MENU  → Channel → Channel List → ENTER 



Using the Channel List, you can conveniently add/delete or lock/unlock channels.



### Adding / Deleting channels



You can add or delete channels.


Move to the  field by pressing the ▲ / ▼ buttons, select a channel to be added, and press the ENTER  button to add the channel.


 If you press the ENTER  button again, the (✓) symbol next to the channel disappears and the channel is not added.

### Locking / Unlocking channels

This feature allows you to prevent unauthorized users, such as children, from watching unsuitable programmes by muting out video and audio.

Move to the  field by pressing the ▲ / ▼ buttons, select a channel to be locked, and press the ENTER  button.

 This function is available only when the **Child Lock** is set to **On**.

 The PIN number input screen appears. Enter your 4 digit PIN number.

# Basic Features

## Retuning channels

### Area

You can change the desired area.

### Auto Store

Scans for a channel automatically and stores in the TV.

✎ Automatically allocated programme numbers may not correspond to actual or desired programme numbers. If a channel is locked using the **Child Lock** function, the PIN input window appears.

### Manual Store

Scans for a channel manually and stores in the TV.

✎ If a channel is locked using the **Child Lock** function, the PIN input window appears.

■ **Programme (0~99), Colour System, Sound System, Channel, Search, Store:** If there is abnormal sound or no sound, reselect the sound standard required.

✎ Channel mode

- **P** (programme mode): When tuning is complete, the broadcasting stations in your area have been assigned to position numbers from P0 to P99. You can select a channel by entering the position number in this mode.
- **C** (aerial channel mode) / **S** (cable channel mode): These two modes allow you to select a channel by entering the assigned number for each aerial broadcasting station or cable channel.

## Other Features

### Sort

This operation allows you to change the programme numbers of the stored channels. This operation may be necessary after using the auto store.

### Name

Channel names will be assigned automatically when channel information is broadcast. These names can be changed, allowing you to assign new names.

### Fine Tune

If the signal is weak or distorted, fine tune the channel manually.

Fine tuned channels are marked with an asterisk "\*\*\*".

## Picture Menu

### Changing the Preset Picture Mode

#### Mode

Select your preferred picture type.

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



### Adjusting picture settings

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

Your television has several setting options for picture quality control.

#### NOTE

- In analogue **TV**, **AV** modes of the PAL system, the **Tint (G/R)** function is not available.
- In **PC** mode, you can only make changes to **Backlight**, **Contrast** and **Brightness**.
- Settings can be adjusted and stored for each external device connected to the TV.

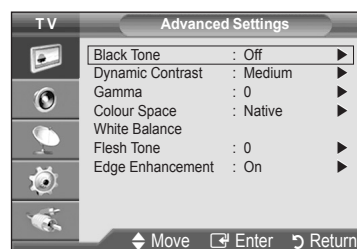
### Changing the Picture Options

## Advanced Settings

(available in **Standard / Movie** mode)

You can adjust the detailed setting for the screen including colour and contrast.

✎ In **PC** mode, you can only make changes to **Gamma** and **White Balance**.

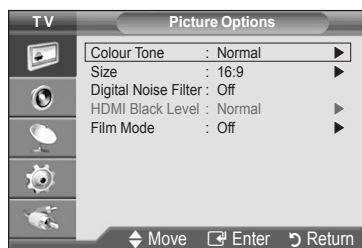


- **Black Tone (Off / Dark / Darker / Darkest):** Select the black level to adjust the screen depth.
- **Dynamic Contrast (Off / Low / Medium / High):** Adjust the screen contrast.

- **Gamma:** Adjust the primary colour intensity.
- **Colour Space (Auto / Native):** Adjust the range of colours available to create the image.
- **White Balance:** Adjust the colour temperature for a more natural picture.  
**R-Offset / G-Offset / B-Offset:** Adjust each colour's (red, green, blue) darkness.  
**R-Gain / G-Gain / B-Gain:** Adjust each colour's (red, green, blue) brightness.  
**Reset:** Resets the **White Balance** to it's default settings.
- **Flesh Tone:** Emphasize pink "Flesh Tone."
- **Edge Enhancement (Off / On):** Emphasize object boundaries.

## Picture Options

- ✎ In PC mode, you can only make changes to the **Colour Tone** and **Size**.



- **Colour Tone (Cool / Normal / Warm1 / Warm2)**  
 ✎ **Warm1** or **Warm2** is only activated when the picture mode is **Movie**.  
 ✎ Settings can be adjusted and stored for each external device connected to an input on the TV.
  - **Size:** Your cable box/satellite receiver may have its own set of screen sizes as well. However, we highly recommend you use 16:9 mode most of the time.  
**16:9 :** Adjusts the picture size to 16:9 for DVDs or wide broadcasting.  
**Wide Zoom:** Magnifies the picture size more than 4:3.  
 ✎ Adjusts the Position by using ▲, ▼ buttons.  
**Zoom:** Magnifies the 16:9 wide pictures vertically to fit the screen size.  
 ✎ Adjusts the Position or Size by using ▲, ▼ button.  
**4:3 :** The default setting for a movie or normal broadcasting.  
 ✎ Do not watch in 4:3 format for a long time. Traces of borders displayed on the left, right and centre of the screen may cause image retention(screen burn) which are not covered by the warranty.
- Screen Fit:** Displays the full image without any cut-off when HDMI (720p / 1080i / 1080p) or Component (1080i / 1080p) signals are input.

## NOTE

- After selecting Screen Fit in HDMI (1080i / 1080p) or Component (1080i / 1080p) mode: Adjusts the Position or Size by using ▲, ▼, ◀, ▶ button.
- Depending on the input source, the picture size options may vary.
- The available items may differ depending on the selected mode.
- In **PC** mode, only **16:9** and **4:3** modes can be adjusted.
- Settings can be adjusted and stored for each external device connected to an input of the TV.
- If you use the **Screen Fit** function with HDMI 720p input, 1 line will be cut at the top, bottom, left and right as in the overscan function.
- **Digital Noise Filter (Off / Low / Medium / High / Auto):** When the broadcast signal is weak, some static and ghosting may appear. Select one of the options until the best picture is displayed.
- **HDMI Black Level (Normal / Low):** Selects the black level on the screen to adjust the screen depth.  
 ✎ 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 adjust the picture for optimum quality.  
 ✎ Available in TV, AV, COMPONENT (480i / 1080i) and HDMI (480i / 1080i).

## Reset

Resets your current picture mode to its default settings.

## Setting up the TV with Your PC

Set the input source to PC.

## Auto Adjustment TOOLS

Adjust frequency values/positions and fine tune the settings automatically.

- ✎ Not available when connecting through HDMI/DVI cable.

## Screen

- **Coarse / Fine:** Removes or reduces picture noise. If the noise is not removed by Fine-tuning alone, then adjust the frequency as best as possible (**Coarse**) and Fine-tune again. After the noise has been reduced, readjust the picture so that it is aligned to the centre of screen.
- **Position:** Adjust the PC screen position with direction button (▲ / ▼ / ◀ / ▶).
- **Image Reset:** Resets the image to default settings.

# Basic Features

## Using Your TV as a Computer (PC) Display

Setting Up Your PC Software (Based on Windows XP)  
Depending on the version of Windows and the video card, the actual screens on your PC may differ in which case the same basic set-up information will almost always be applied. (If not, contact your computer manufacturer or Samsung Dealer.)

1. Click on "Control Panel" on the Windows start menu.
2. Click on "Appearance and Themes" in the "Control Panel" window and a display dialog-box will appear.
3. Click on "Display" and a display dialog box will appear.
4. Navigate to the "Settings" tab on the display dialog-box.
  - The correct size setting (resolution) [Optimum: 19": 1360 X 768 pixels, 22":1920x1080 pixels]
  - If a vertical-frequency option exists on your display settings dialog box, the correct value is "60" or "60 Hz". Otherwise, just click "OK" and exit the dialog box.

### Sound Menu

## Changing the Preset Sound Mode

### 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.
- **Custom:** Recalls your customized sound settings.

## Adjusting sound settings

### Equalizer

Adjusts the sound mode.

- **Balance L/R:** Adjusts the balance between the right and left speaker.
- **100Hz / 300Hz / 1KHz / 3KHz / 10KHz (Bandwidth Adjustment):** Adjusts the level of specific bandwidth frequencies.

## Sound Systems, Etc.

## SRS TruSurround HD (Off / On)

This feature allows you to experience deep and full surround sound as if you are sitting in a movie theatre or concert hall. Select this when you are listening to a DVD or to music.

SRS




## Auto Volume (Off / On)


Because each broadcasting station has its own signal conditions, it is not easy to adjust the volume every time the channel is changed. This feature lets you automatically adjust the volume of the desired channel by lowering the sound output when the modulation signal is high or by raising the sound output when the modulation signal is low.

## Selecting the Sound Mode

When you set to **Dual I II**, the current sound mode is displayed on the screen.

	Audio Type	Dual I-II	Default
A2 Stereo	Mono	Mono	Automatic change
	Stereo	Stereo ↔ Mono	
	Dual	Dual I ↔ Dual II	Dual I
NICAM Stereo	Mono	Mono	Automatic change
	Stereo	Mono ↔ Stereo	
	Dual	Mono ↔ Dual I ↖ Dual II ↗	Dual I

 If the stereo signal is weak and an automatic switching occurs, then switch to the mono.

 Only activated in stereo sound signal.


 Only available when the **Input** source is set to **TV**.


### Setup Menu

## Setting the Time

### Time


- **Clock Set:** Setting the clock is for using various timer features of the TV.

 The current time will appear every time you press the **INFO** button.

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

 You can set the **Month, Day, Year, Hour** and **Minute** directly by pressing the number buttons on the remote control.

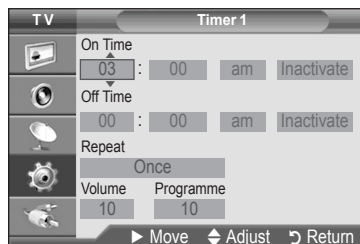
## Using the Sleep Time

- **Sleep Timer ** : Automatically shuts off the TV after a preset period of time. (30, 60, 90, 120, 150 and 180 minutes).

 To cancel **Sleep Timer**, select **Off**.

## Setting the On/Off Time

- **Timer 1 / Timer 2 / Timer 3:** Three different on / off timer settings can be made. You must set the clock first.



**On Time / Off Time:** Set the hour, minute, am/pm and activate / inactivate. (To activate timer with the setting you've chosen, set to **Activate**.)

**Repeat :** Select **Once**, **Everyday**, **Mon~Fri**, **Mon~Sat**, **Sat~Sun** to set at you convenience.

**Volume:** Set the desired volume level.

**Programme :** When the **On Time** is active, you can turn on a specific channel.

- 🔧 Auto Power Off (available only when the TV is turned on by Timer): The TV will be automatically turned off after 3 hours of being left idle to prevent overheating.

## Locking Programs

- 🔧 The PIN input screen appears before the setup screen.
- 🔧 Enter your 4-digit PIN, the default of which is "0-0-0-0". Change the PIN using the **Change PIN** option.

## Child Lock (Off / On)

Lock channels in **Channel List**, to prevent unauthorized users, such as children, from watching unsuitable programme.

- 🔧 Available only when the **Input** source is set to **TV**.

## Change PIN

Change your personal ID number required to set up the TV.

- 🔧 If you forget the PIN code, press the remote control buttons in the following sequence, which resets the PIN to "0-0-0-0": **POWER** (off) → **MUTE** → 8 → 2 → 4 → **POWER** (on).

## Other Features

### Language

Set the menu language.

### Game Mode (Off / On)

When connecting to a game console such as PlayStation™ or Xbox™, you can enjoy a more realistic gaming experience by selecting game mode.

#### NOTE

- Precautions and limitations for game mode
  - To 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 in **TV** and **PC** mode.
- After connecting the game console, set **Game Mode** to **On** to prevent poor picture quality.
- If **Game Mode** is **On**: **Picture** mode is set to **Standard** and **Sound** mode is set to **Custom**.
- **Game Mode** is only for playing the game.

### Melody (Off / Low / Medium / High)

Set so that a melody plays when the TV is turned on or off.

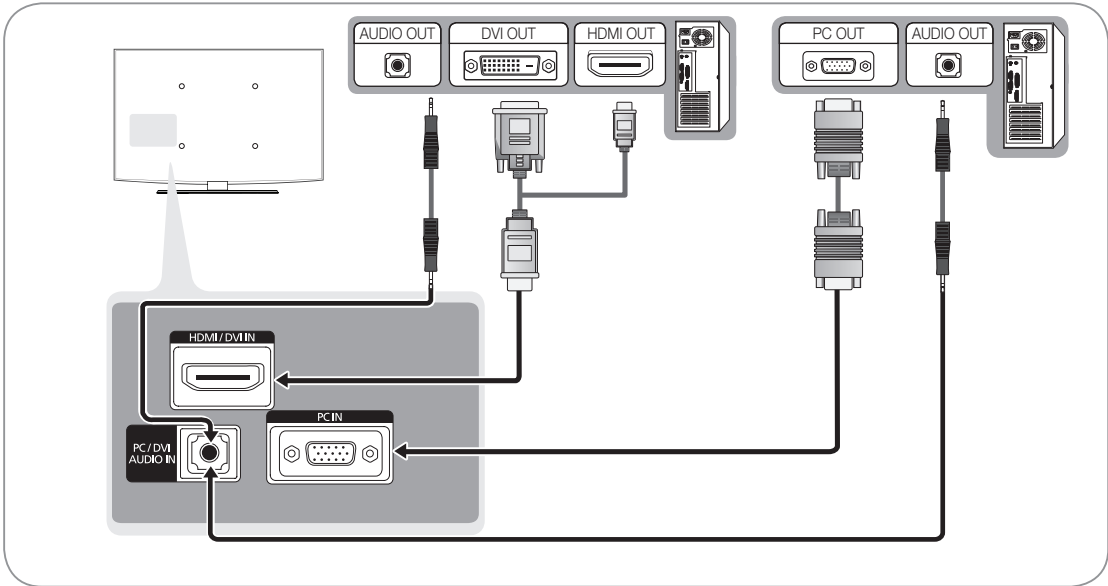
### Energy Saving TOOLS (Off / Low / Medium / High / Auto)

This feature adjusts the brightness of the TV in order to reduce power consumption. When watching TV at night, set the Energy Saving mode option to High to reduce eye fatigue as well as power consumption.

# Advanced Features

## Connecting to a PC

Using an HDMI/DVI Cable / a D-sub Cable



### Display Modes (D-Sub and HDMI/DVI Input)

Optimal resolution is 1360X768@60Hz. (for 19 inch LCD)

Mode	Resolution	Horizontal Frequency (KHz)	Vertical Frequency (Hz)	Pixel Clock Frequency (MHz)	Sync Polarity (H / V)
IBM	640 x 350	31.469	70.086	25.175	+ / -
	720 x 400	31.469	70.087	28.322	- / +
MAC	640 x 480	35.000	66.667	30.240	- / -
	832 x 624	49.726	74.551	57.284	- / -
VESA DMT	640 x 480	31.469	59.940	25.175	- / -
		37.861	72.809	31.500	- / -
		37.500	75.000	31.500	- / -
	800 x 600	37.879	60.317	40.000	+ / +
		48.077	72.188	50.000	+ / +
		46.875	75.000	49.500	+ / +
	1024 x 768	48.363	60.004	65.000	- / -
		56.476	70.069	75.000	- / -
		60.023	75.029	78.750	+ / +
	1360 x 768	47.712	60.015	85.500	+ / +
	720 x 576	35.910	59.950	32.750	- / +

Optimal resolution is 1920 X 1080 @ 60 Hz. (For 22 inch LCD)

Mode	Resolution	Horizontal Frequency (KHz)	Vertical Frequency (Hz)	Pixel Clock Frequency (MHz)	Sync Polarity (H / V)
IBM	640 x 350	31.469	70.086	25.175	+ / -
	720 x 400	31.469	70.087	28.322	- / +
MAC	640 x 480	35.000	66.667	30.240	- / -
	832 x 624	49.726	74.551	57.284	- / -
	1152 x 870	68.681	75.062	100.000	- / -

Mode	Resolution	Horizontal Frequency (KHz)	Vertical Frequency (Hz)	Pixel Clock Frequency (MHz)	Sync Polarity (H / V)
VESA DMT	640 x 480	31.469	59.940	25.175	- / -
		37.861	72.809	31.500	- / -
		37.500	75.000	31.500	- / -
	800 x 600	37.879	60.317	40.000	+ / +
		48.077	72.188	50.000	+ / +
		46.875	75.000	49.500	+ / +
	1024 x 768	48.363	60.004	65.000	- / -
		56.476	70.069	75.000	- / -
		60.023	75.029	78.750	+ / +
	1152 x 864	67.500	75.000	108.000	+ / +
	1280 x 1024	63.981	60.020	108.000	+ / +
	1280 x 1024	79.976	75.025	135.000	+ / +
	1280 x 800	49.702	59.810	83.500	- / +
		62.795	74.934	106.500	- / +
	1280 x 960	60.000	60.000	108.000	+ / +
	1360 x 768	47.712	60.015	85.500	+ / +
	1440 x 900	55.935	59.887	106.500	- / +
	1440 x 900	70.635	74.984	136.750	- / +
	1600 x 1200	75.000	60.000	162.000	+ / +
	1680 x 1050	65.290	59.954	146.250	- / +
VESA DMT / DTV CEA	1920 x 1080p	67.500	60.000	148.500	+ / +

#### NOTE

- For HDMI/DVI cable connection, you must use the **HDMI (DVI) IN** jack.
- The interlace mode is not supported.
- The set might operate abnormally if a non-standard video format is selected.
- Separate and Composite modes are supported. SOG(Sync on Green) is not supported.
- Connecting through the HDMI cable may not be supported depending on the PC.

# Advanced Features

## Media Play



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



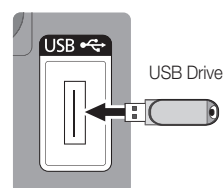
**MENU** **Input** **Media Play (USB)**



## Connecting a USB Device

1. Turn on your TV.
2. Connect a USB device containing photo and/or music files to the **USB** jack on the side of the TV.
3. When the **Input** selection screen is displayed, press the and button to select **Media Play (USB)**, then press the **ENTER** button.

TV Side Panel



## Using the Media Play Menu

1. Press the **MENU** button. Press the or button to select **Input**, then press the **ENTER** button.
2. Press the or button to select **Media Play (USB)**, then press the **ENTER** button.
3. Press the or button to select the corresponding USB Memory Device, then press the **ENTER** button.



The Media Play menu differs depending on the USB Memory Device connected to TV.



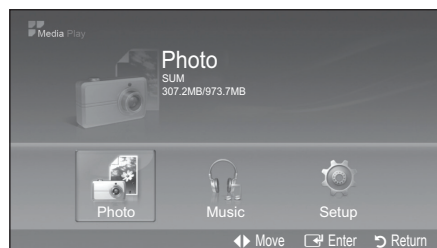
Some devices may not be supported due to compatibility problems.

4. Press the or button to select an icon (**Photo**, **Music**, **Setup**), then press the **ENTER** button.

It might not work properly with unlicensed multimedia files.

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

- Only alphanumeric characters must be used as a folder name or file name (photo, music).
- The file system only supports FAT16/32 (The NTFS file system is not supported) Certain types of USB Digital camera and audio devices may not be compatible with this TV.
- Media Play (USB) only supports the USB Mass Storage Class device (MSC). MSC is a Mass Storage Class Bulk-Only Transport device. Examples of MSC are Thumb drives and Flash Card Readers (USB HDD and HUB and any usb device more than 16Giga byte are 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.
- Please connect directly to the **USB** port of your TV. If you are using a separate cable connection, there may be a USB Compatibility problem.












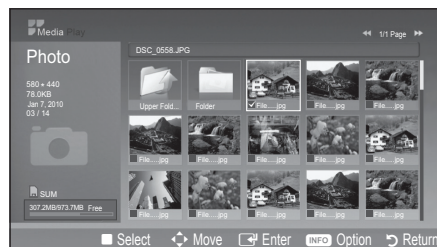


- Only MP3 and JPEG file formats are supported.
- The Media Play (USB) mp3 format only supports music files with a high sampling frequency (32 kHz, 44.1 kHz, or 48 kHz).
- We recommend the sequential jpeg format.
- Do not disconnect the USB device while it is loading.
- MSC supports MP3 and JPEG files, and the PTP device supports JPEG files only.
- MTP (Media Transfer Protocol) is not supported.
- The playing duration of an mp3 file may be displayed as “00:00:00” if its playing time information is not found at the start of the file.
- The higher the resolution of the image, the longer it takes to display on the screen.
- The Photo or Music List displays up to 300 folders or files.
- Loading may take some time depending on the size of the file.
- MP3 files with DRM that have been downloaded from a non-free site cannot be played.
- Digital Rights Management (DRM) is a technology that supports the creation, distribution and management of the content in an integrated and comprehensive way, including the protection of the rights and interests of the content providers, the prevention of the illegal copying of contents, as well as managing billings and settlements.
- If a USB extension cable is used, the USB device may not be recognized or the files on the device may not be read.
- 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 the PC, format the device and check the connection.
- If a file deleted from the PC is still found when Media Play is run, use the “Empty the Recycle Bin” function on the PC to permanently delete the file.

## Photo

### Viewing a Photo (or Slide Show)




1. Press the **INFO** button to display the option **Start Slide Show**, **Select All** or **Deselect All**.
  2. Press the **▲** or **▼** button to select **Start Slide Show** then press the **ENTER**  button.
    -  During the slide show, files are displayed in order from the currently shown file.
    -  MP3 files can be automatically played during the Slide Show if the Default **Background Music** is set to **On**. To enable this function, MP3 files and other photo files must be located in the same folder on the USB Memory Device.
-  Press the **INFO** button during the slide show to set the following options **Slide Show Speed**, **Background Music**, **Background Music Setting**, **List**. Press the **▲** or **▼** button to select the option, then press the **ENTER**  button.
- After setting the option press the **ENTER**  button to make a change.
-  Press the **INFO** button during the photo view to set the following options **Start Slide Show**, **Zoom**, **Rotate**, **List**. Press the **▲** or **▼** button to select the option, then press the **ENTER**  button.
- After setting the option press the **ENTER**  button to make a change.







# Advanced Features

## Music

### Using the MP3 List

	Folder icon
	Music list icon
	Move to the previous folder stage icon

 The selected file is displayed on the top with its playing time.

1. To select all files or a file, press the **INFO** button to display the **Music** menus.  
Press the **ENTER**  button to select **Play**, **Play the selected file**, **Repeat Music**, **Select All** or **Deselect All**.
2. Press the **▲** or **▼** button to move to an icon, then press the **ENTER**  button.  
Pressing the **ENTER**  button over a musical note icon immediately plays the music file.  
Pressing the **ENTER**  button over a folder icon shows the music files included in the folder.

■ **Play:** Select to play MP3 files.



 This menu only shows files with the MP3 file extension. Files with other file extensions are not displayed, even if they are saved on the same USB device.

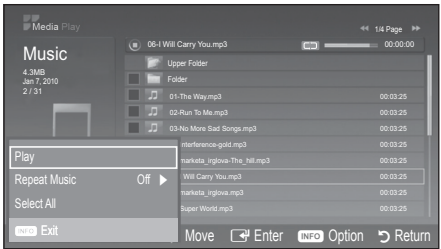
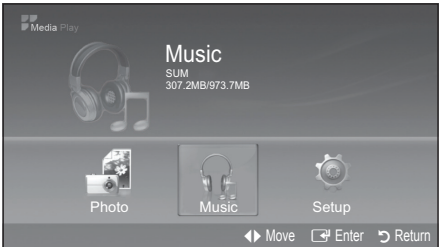
 To adjust the music volume, press the **—VOL+** button on the remote control. To mute the sound, press the **MUTE** button on the remote control.

■ **Repeat Music (On / Off):** Select to repeatedly play MP3 files in the current folder.

### Playing Music

- Only displays files with the MP3 file extension. Other file extensions are not displayed, even if they are saved on the same USB device.
- If the sound is strange when playing MP3 files, adjust the **Equalizer** and **SRS TruSurround HD** in the **Sound** menu. (An over-modulated MP3 file may cause a sound problem.)
- Music function information icons

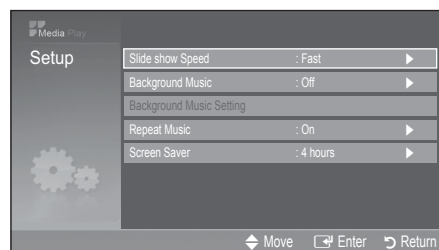
	Repeat Music is On.
	Repeat Music is Off.





## Setup

### Using the Setup Menu

- **Slide Show Speed:** Select to control the slide show speed. You can select **Fast**, **Normal** or **Slow**.
- **Background Music:** Select to determine whether to play an MP3 file during a slide show. You can select “**Off** or **On**”.
- **Background Music Setting:** While a slide show is in progress, use the **Background Music Setting** to select a music file to listen to. Select an MP3 file as the background music.
- **Repeat Music:** Select to determine whether to repeat playing the music when all MP3 files in the current folder have been played.
- **Screen Saver:** Select to set the waiting time before the screen saver appears. The screensaver will appear when no button is pressed for **4 hours**, **8 hours**, **10 hours**.



### Playing the selected photos / music files








- Press the Yellow button.
- Repeat the above operation to select desired photos / music files.  
 Selected photos or files are marked with the symbol ✓. To cancel a selection, press the Yellow button again.
- Press the **ENTER**  button to play the selected photos or files.

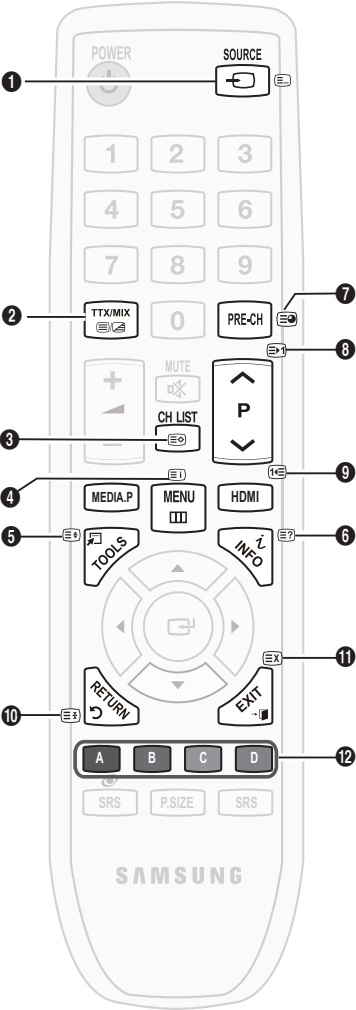
# Other Information






## Analogue Channel Teletext Feature

The index page of the Teletext service gives you information on how to use the service. For Teletext information to be displayed correctly, channel reception must be stable. Otherwise, information may be missing or some pages may not be displayed.

 You can change Teletext pages by pressing the numeric buttons on the remote control.

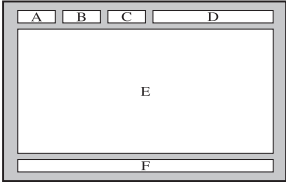
- 1  (mode): Select the Teletext mode (LIST/ FLOF).  
If you press this button in the LIST mode, the mode is switched into the List save mode. In the List save mode, you can save a Teletext page into list using the  (store) button.
- 2  (Teletext on/mix/off):  
Activate the Teletext mode after selecting the channel providing the Teletext service. Press it twice to overlap the Teletext mode with the current broadcasting screen. Press it one more time to exit teletext.
- 3  (store): Store the Teletext pages.
- 4  (index): Display the index (contents) page at any time while you are viewing Teletext
- 5  (size): Display the double-size letters on the upper half of the screen. For the lower half of the screen, press it again. To display the normal screen, press it once again.
- 6  (reveal): Display the hidden text (answers to quiz games, for example). To display the normal screen, press it again.



- 7  (sub-page): Display the available sub-page.
- 8  (page up): Display the next Teletext page.
- 9  (page down): Display the previous Teletext page.
- 10  (hold): Hold the display on a given page if the selected page is linked with several secondary pages which follow on automatically. To resume, press it again
- 11  (cancel): Display the current broadcast when searching for a page.
- 12 **Colour buttons (red/green/yellow/blue):** If the FASTEXT system is used by a broadcasting company, the different topics covered on a Teletext page are colour-coded and can be selected by pressing the coloured buttons. Press one of them corresponding to the required. The page is displayed with other coloured information that can be selected in the same way. To display the previous or next page, press the corresponding coloured button.

The Teletext pages are organized according to six categories:

Part	Contents	Part	Contents
A	Selected page number.	D	Date and time.
B	Broadcasting channel identity.	E	Text.
C	Current page number or search indications.	F	Status information. FASTEXT information.



## Installing the Wall Mount

### Installing the Wall Mount Kit

Wall mount items (sold separately) allow 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 TV on your own.

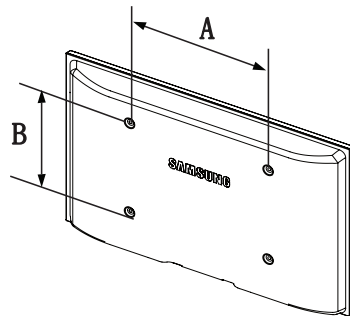
### Wall Mount Kit Specifications (VESA)

 Wall mount kit is not supplied but sold separately.

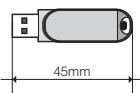
Install your wall mount on a solid wall perpendicular to the floor. When attaching to other building materials, please contact your nearest dealer. If installed on a ceiling or slanted wall, it may fall and result in severe personal injury.

#### 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 longer than the standard dimension, as they 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 their specifications.
- Do not use screws that do not comply with the VESA standard screw specifications.
- Do not fasten the screws too strongly, 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 exceed 15 degrees tilt when mounting this TV.



Product Family	inches	VESA Spec. (A * B)	Standard Screw	Quantity
LCD-TV	19~22	75 X 75	M4	4
	26	200 X 100		
	32~40	200 X 200	M6	
	46	400 X 400	M8	



If the length of the USB device is equal to or longer than 45 mm when used with 26" or 32" models installed with a wall mount, the USB device may touch the wall. Therefore, using a short type USB device is recommended.




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

# Other Information

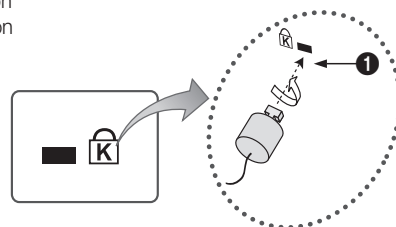
## Anti-Theft Kensington Lock

The Kensington Lock is a device used to physically fix the system when using it in a public place. The appearance and locking method may differ from the illustration depending on the manufacturer. Refer to the manual provided with the Kensington Lock for proper use.

- Please find a “” icon on the rear of the TV.  
A kensington slot is beside the “” icon.

To lock the product, follow these steps:

1. Wrap the Kensington lock cable around a large, stationary object such as desk or chair.
2. Slide the end of the cable with the lock attached through the looped end of the Kensington lock cable.
3. Insert the locking device into the Kensington slot on the product (1).
4. Lock the lock.



<Optional>

- 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 Lock may be different depending on its model.

## 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 avoid the TV from falling

- Since the necessary clamps, screws, and string are not supplied, please purchase these additionally.

1. Drive the screws into the clamps and firmly fasten them onto the wall. Make sure the screws are firmly fixed into the wall.

### Screw Specifications

- For a 30 ~ 40 Inch LCD TV: M6

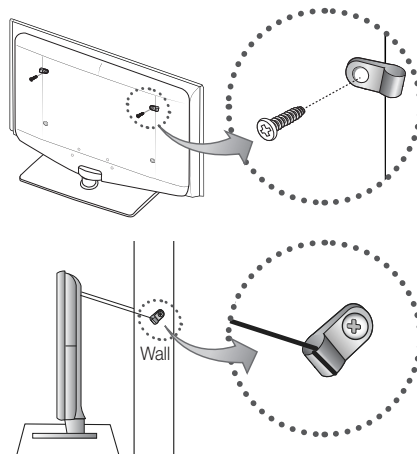
2. Remove the screws from the centre back of the TV, put the screws into the clamps, and then fasten the screws onto the TV again.
3. Connect the clamps fixed onto the TV and the clamps fixed onto the wall with a strong string and then tie the string tightly.

- Verify all connections are properly secured. Periodically check connections for any sign of fatigue for failure. If you have any doubt about the security of your connections, contact a professional installer.

- Install the TV near to the wall so that it does not fall backwards.


- 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.



## Troubleshooting

If you have any questions about the TV, first refer to this list. If none of these troubleshooting tips apply, please visit "www.samsung.com," then click on Support, or contact the call centre listed on the back-cover of this manual.


Issues	Solutions and Explanations
<b>Picture Quality</b>	
The TV image does not look as good as it did in the store.	<ul style="list-style-type: none"> <li>If you have an analogue cable/set top 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 stations from the channel line up.</li> <li>Antenna connection: Try HD stations after performing Auto programme.</li> <li> Many HD channels are upscaled from SD(Standard Definition) contents.</li> <li>Adjust the Cable/Set top box video output resolution to 1080i or 720p.</li> <li>Make sure you are watching the TV at the minimum recommended distance based on the size and definition of the signal.</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 in fast moving pictures such as sports and action movies.</li> <li>Low signal level or bad quality can cause picture distortion. This is not a TV issue.</li> <li>Mobile phones used close to the TV (cca up to 3.3ft) may cause noise in picture on analog and digital TV.</li> </ul>
Colour 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 colour problems or a blank screen.</li> </ul>
There is poor colour or brightness.	<ul style="list-style-type: none"> <li>Adjust the <b>Picture</b> options in the TV menu. (go to <b>Picture</b> mode / <b>Colour / Brightness / Sharpness</b>)</li> <li>Adjust <b>Energy Saving</b> option in the TV menu. (go to <b>MENU - Setup - Energy Saving</b>) (P. 14)</li> <li>Try resetting the picture to view 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 <b>16:9</b>. (P. 11)</li> <li>Change cable/set top 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 with a cable box, please try to reset the cable box. 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>
<b>Sound Quality</b>	
There is no sound or the sound is too low at maximum volume.	<ul style="list-style-type: none"> <li>Please check the volume the of external device connected to your TV.</li> </ul>
The picture is good but there is no sound.	<ul style="list-style-type: none"> <li>If you are using an external device, make sure the audio cables are connected to the correct audio input jacks on the TV.</li> <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 when you have a HDMI connected to your TV).</li> <li>If you are using a DVI to HDMI cable, a separate audio cable is required.</li> <li>If your TV has a headphone jack, make sure there is nothing plugged into it.</li> </ul>
The speakers are making an inappropriate noise.	<ul style="list-style-type: none"> <li>Check the cable connections. Make sure a video cable is not connected to an audio input.</li> <li>For antenna or cable connections, check the signal strength. Low signal level may cause sound distortion.</li> </ul>

# Other Information

Issues	Solutions and Explanations
<b>No Picture, No Video</b>	
The TV will not turn on.	<ul style="list-style-type: none"> <li>Make sure the AC power cord is securely plugged in to the wall outlet and the TV.</li> <li>Make sure the wall outlet is working.</li> <li>Try pressing the <b>POWER</b> button on the TV to make sure the problem is not the remote. If the TV turns on, refer to "The 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>Setup</b> menu. (P. 13)</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 in securely to the wall outlet and the TV.</li> <li>When watching TV from 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 cable connections (remove and reconnect all cables connected to the TV and external devices).</li> <li>Set your external devices' (Cable/Set top Box, DVD, Blu-ray etc) video outputs to match the connections to the TV input. For example, if an external device's output is HDMI, it should be connected to an HDMI input on the TV.</li> <li>Make sure your connected devices are powered on.</li> <li>Be sure to select the TV's correct source by pressing the <b>SOURCE</b> button on the TV remote.</li> </ul>
<b>RF(Cable/Antenna) Connection</b>	
The TV is not receiving all channels.	<ul style="list-style-type: none"> <li>Make sure the Antenna cable is connected securely.</li> <li>Please try <b>Plug &amp; Play</b> (Initial setup) to add available channels to the channel list. Go to <b>MENU - Setup - Plug &amp; Play</b> (Initial setup) and wait for all available channels to be stored. (P. 6)</li> <li>Verify the Antenna is positioned correctly.</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 with fast moving pictures such as sports and action movies.</li> <li>A low signal can cause picture distortion. This is not a TV issue.</li> </ul>
<b>PC Connection</b>	
A " <b>Mode Not Supported</b> " message appears.	<ul style="list-style-type: none"> <li>Set your PC's output resolution and frequency so they match the resolutions supported by the TV. (P. 15)</li> </ul>
"PC" is always shown on the source list, even if a PC is not connected.	<ul style="list-style-type: none"> <li>This is normal; "PC" is always shown on the source list, regardless of whether a PC is connected.</li> </ul>
The video is OK but there is no audio.	<ul style="list-style-type: none"> <li>If you are using a HDMI connection, check the audio output setting on your PC.</li> </ul>
<b>Others</b>	
The picture will not display in full screen.	<ul style="list-style-type: none"> <li>HD channels will have black bars on either side of the screen when displaying upscaled SD (4:3) contents.</li> <li>Black bars on the top and bottom will appear during movies that have aspect ratios different from your TV.</li> <li>Adjust the picture size options on your external device or TV to full screen.</li> </ul>
The remote control does not work.	<ul style="list-style-type: none"> <li>Replace the remote control batteries with the poles (+/-) in the right direction.</li> <li>Clean the sensor's transmission window on the remote.</li> <li>Try pointing the remote directly at the TV from 5~6 feet away.</li> </ul>
The cable/set top box remote control does not turn the TV on or off, or adjust the volume.	<ul style="list-style-type: none"> <li>Programme the Cable/Set top box remote control to operate the TV. Refer to the Cable/Set user manual for the SAMSUNG TV code.</li> </ul>
A " <b>Mode Not Supported</b> " message appears.	<ul style="list-style-type: none"> <li>Check the supported resolution of the TV, and adjust the external device's output resolution accordingly. Refer to the resolution settings on page 14~15 of this manual.</li> </ul>
There is a plastic smell from the TV.	<ul style="list-style-type: none"> <li>This smell is normal and will dissipate over time.</li> </ul>
The TV is tilted to the side.	<ul style="list-style-type: none"> <li>Remove the base stand from the TV and reassemble it.</li> </ul>
There are difficulties assembling the stand base.	<ul style="list-style-type: none"> <li>Make sure the TV is placed on a flat surface. It is necessary to use magnetized screw driver if you cannot remove the screws from the TV.</li> </ul>
The <b>Channel</b> menu is greyed out. (unavailable)	<ul style="list-style-type: none"> <li>The <b>Channel</b> menu is only available when the TV source is selected.</li> </ul>

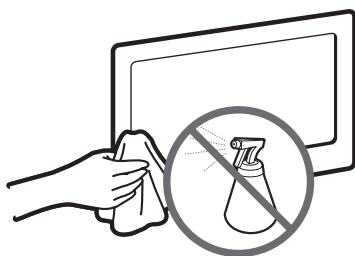


Issues	Solutions and Explanations
Your settings are lost after 30 minutes or every time the TV is turned off.	<ul style="list-style-type: none"> <li>If the TV is in the <b>Store Demo</b> mode, it will reset audio and picture settings every 30 minutes. Change the settings from <b>Store Demo</b> mode to <b>Home Use</b> mode in the <b>Plug &amp; Play</b> (Initial setup) procedure. Press the <b>SOURCE</b> button to select <b>TV</b> mode, and go to <b>MENU</b> → <b>Setup</b> → <b>Plug &amp; Play</b> (Initial setup) → <b>ENTER</b> [P. 6]</li> </ul>
You have intermittent loss of audio or video.	<ul style="list-style-type: none"> <li>Check the cable connections and reconnect them.</li> <li>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.</li> </ul>
You see small particles when you look closely at the edge of the frame of the TV.	<ul style="list-style-type: none"> <li>This is part of the product's design and is not a defect.</li> </ul>
There are recurrent picture/sound issues.	<ul style="list-style-type: none"> <li>Check and change the signal/source.</li> </ul>
A reaction may occur between the rubber cushion pads on the base stand and the top finish of some furniture.	<ul style="list-style-type: none"> <li>To prevent this, use felt pads on any surface of the TV that comes in direct contact with furniture.</li> </ul>

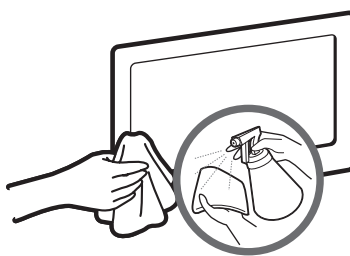
 This TFT LCD panel uses a panel consisting of sub pixels which require sophisticated technology to produce. However, there may be a few bright or dark pixels on the screen. These pixels will have no impact on the performance of the product.

## Storage and Maintenance

 If you remove the attached sticker on the TV screen, clean the residues and then watch TV.




Do not spray water or a cleaning agent directly onto the product. Any liquid that goes into the product may cause a failure, fire, or electric shock.



Clean the product with a soft cloth dipped in a small amount of water.



## Licence



TruSurround HD, SRS and  symbol are trademarks of SRS Labs, Inc.  
TruSurround HD technology is incorporated under licence from SRS Labs, Inc.

# Other Information

Specifications		
Display Resolution	1360 X 768	1920x1080
Environmental Considerations		
Operating Temperature	10°C to 40°C (50°F to 104°F)	
Operating Humidity	10% to 80%, non-condensing	
Storage Temperature	-20°C to 45°C (-4°F to 113°F)	
Storage Humidity	5% to 95%, non-condensing	
Stand Swivel (Left / Right)	0°	
Model Name	LA19D400	LA22D400
Screen Size (Diagonal)	19 inch	22 inch
Sound Output	3W X 2	
Dimensions (WxDxH)		
Body	461.3X61.2X299.7 (mm)	533.2X62.2X344.2 (mm)
With stand	461.3X160.7X346.8 (mm)	533.2X171.6X390.0 (mm)
Weight		
With Stand	4.0 kg	5.1 kg
Without Stand	3.8 kg	4.9 kg

-  Design and specifications are subject to change without prior notice.
-  For the power supply and power consumption, refer to the label attached to the product.

## Index

**A**

Auto Adjustment	11
Auto Store	10

**B**

Balance	12
---------	----

**C**

Child Lock	13
Component	7

**D**

D-sub	14
DVD Home Theatre	8

**E**

Energy Saving	13
Equalizer	12

**H**

HDMI	7, 14
------	-------

**I**

Input Cables	8
--------------	---

**L**

Licence	25
---------	----

**M**

Manual Store	10
Media Play	16
Melody	13
Language	13

**O**

Optimal resolution	14
--------------------	----

**P**

Power Indicator	4
-----------------	---

**R**

Remote Control	5
Retuning channels	10

**S**

Sleep Timer	12
Slide Show	16
Source List	9
Standby mode	4

**T**

Teletext	20
Timer	13

**U**

USB	16
-----	----

**V**

Volume	4, 5
--------	------

**W**

Wall Mount	21
------------	----

***This page is intentionally  
left blank.***