



**Contact SAMSUNG WORLDWIDE**

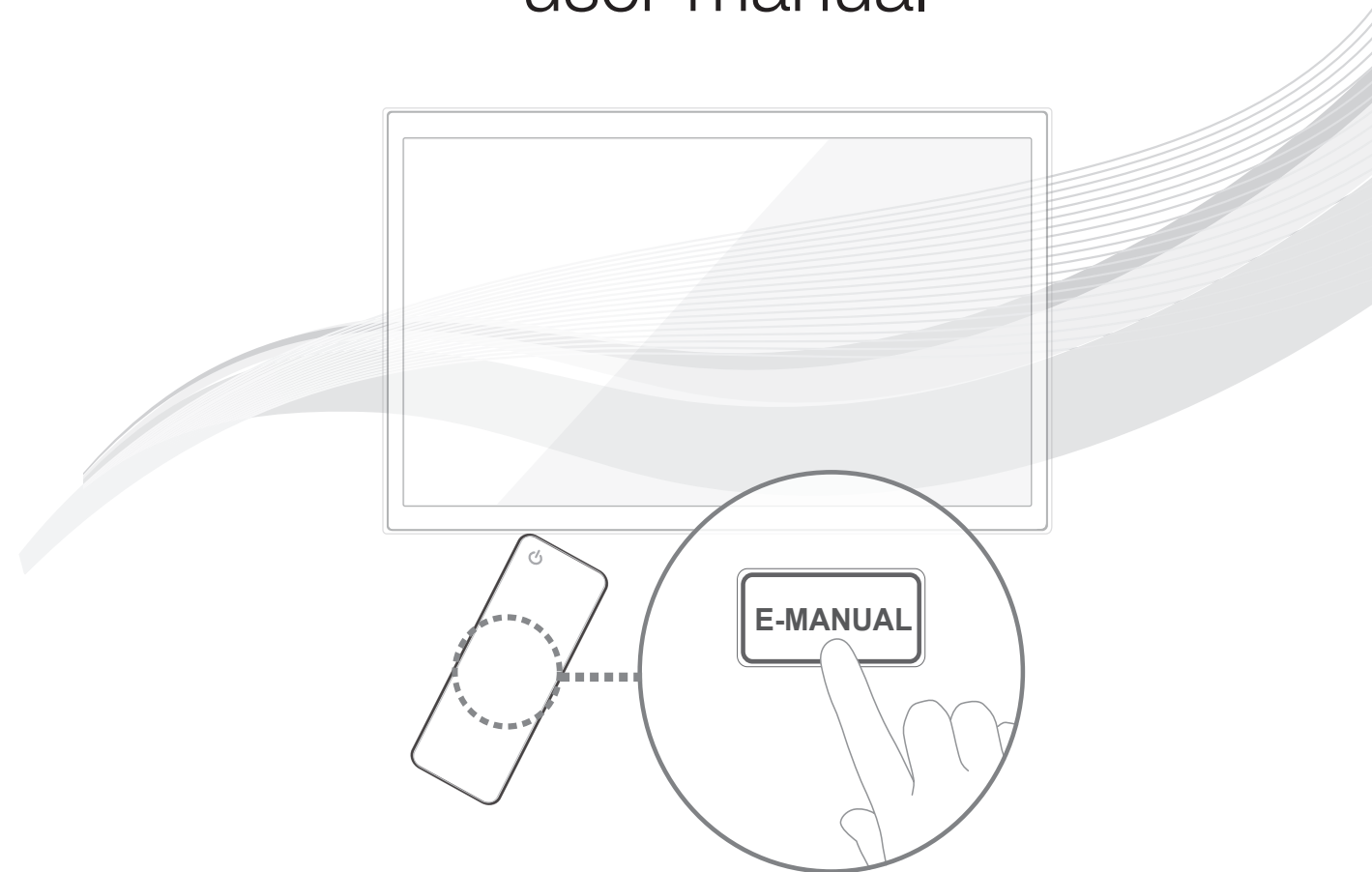
If you have any questions or comments relating to Samsung products, please contact the SAMSUNG customer care centre.

Country	Customer Care Centre ☎	Web Site
EIRE	0818 717 100	www.samsung.com
U.K	0330 SAMSUNG (7267864)	www.samsung.com



# Plasma TV

## user manual



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. \_\_\_\_\_




BN68-03998J-02

## For more information on how to use e-Manual (p. 9)

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.

### Digital TV notice

1. Functionalities related to Digital TV (DVB) are only available in countries/areas where DVB-T (MPEG2 and MPEG4 AVC) digital terrestrial signals are broadcasted or where you are able to access to a compatible DVB-C (MPEG2 and MPEG4 AAC) cable-TV service. Please check with your local dealer the possibility to receive DVB-T or DVB-C signal.
  2. DVB-T is the DVB European consortium standard for the broadcast transmission of digital terrestrial television and DVB-C is that for the broadcast transmission of digital TV over cable. However, some differentiated features like EPG (Electric Programme Guide), VOD (Video On Demand) and so on, are not included in this specification. So, they cannot be workable at this moment.
  3. Although this TV set meets the latest DVB-T and DVB-C standards, as of [August, 2008], the compatibility with future DVB-T digital terrestrial and DVB-C digital cable broadcasts cannot be guaranteed.
  4. Depending on the countries/areas where this TV set is used some cable-TV providers may charge an additional fee for such a service and you may be required to agree to terms and conditions of their business.
  5. Some Digital TV functions might be unavailable in some countries or regions and DVB-C might not work correctly with some cable service providers.
  6. For more information, please contact your local Samsung customer care centre.
-  The reception quality of TV may be affected due to differences in broadcasting method between the countries. Please check the TV performance in the local SAMSUNG Authorized Dealer, or the Samsung Call Centre whether it can be improved by reconfiguring TV setting or not.

### User Instructions

- **Screen Image retention**

Do not display a still image (such as on a video game) on the plasma display panel for more than several minutes as it can cause screen image retention. This image retention is also known as "screen burn". To avoid such image retention, reduce the degree of brightness and contrast of the screen when displaying a still image.

- **Heat on the top of the Plasma TV**

The top side of the product may be hot after long periods of use as heat dissipates from the panel through the vent hole in the upper part of the product.

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

- **The product is making a "cracking" noise.**

A "cracking" noise may occur when the product contracts or expands due to a change in the surrounding environment such as temperature or humidity. This is normal and not a defect of the unit.

- **Cell Defects**

The PDP uses a panel consisting of 2,360,000(HD-level) to 6,221,000(FHD-level) pixels which require sophisticated technology to produce. However, there may be a few bright or dark pixels on the screen. These pixels will have no impact on the performance of the product.

- **Avoid operating the TV at temperatures below 41°F (5°C)**

- **A still image displayed too long may cause permanent damage to the PDP Panel.**



Watching the Plasma TV in 4:3 format for a long period of time may leave traces of borders displayed on the left, right and centre of the screen caused by the difference of light emission on the screen. Playing a DVD or a game console may cause similar effects to the screen.

Damages caused by the above effect are not covered by the Warranty.

- **After-images on the Screen.**

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

- **Warranty**

Warranty does not cover any damage caused by image retention.

Burn-in is not covered by the warranty.



**Correct Disposal of This Product (Waste Electrical & Electronic Equipment)**

**(Applicable in the European Union and other European countries with separate collection systems)**

This marking on the product, accessories or literature indicates that the product and its electronic accessories (e.g. charger, headset, USB cable) should not be disposed of with other household waste at the end of their working life. To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate these items from other types of waste and recycle them responsibly to promote the sustainable reuse of material resources. Household users should contact either the retailer where they purchased this product, or their local government office, for details of where and how they can take these items for environmentally safe recycling. Business users should contact their supplier and check the terms and conditions of the purchase contract. This product and its electronic accessories should not be mixed with other commercial wastes for disposal.







**Correct disposal of batteries in this product**

**(Applicable in the European Union and other European countries with separate battery return systems)**

This marking on the battery, manual or packaging indicates that the batteries in this product should not be disposed of with other household waste at the end of their working life. Where marked, the chemical symbols Hg, Cd or Pb indicate that the battery contains mercury, cadmium or lead above the reference levels in EC Directive 2006/66. If batteries are not properly disposed of, these substances can cause harm to human health or the environment. To protect natural resources and to promote material reuse, please separate batteries from other types of waste and recycle them through your local, free battery return system.



## Accessories

-  Please make sure the following items are included with your TV. If any items are missing, contact your dealer.
-  The items' colours and shapes may vary depending on the models.
-  Cables not included in the package contents can be purchased separately.
-  Check that there is no accessory hidden behind packing materials when you open the box.

- |  |  |
|--|--|
| <ul style="list-style-type: none"> <li>• Remote Control &amp; Batteries (AAA x 2)</li> <li>• Owner's Instructions</li> </ul> | <ul style="list-style-type: none"> <li>• Power Cord</li> <li>• Cleaning Cloth</li> </ul> |
|--|--|



Ferrite Core (3EA)

**PS43E450**




Ferrite Core (1EA)

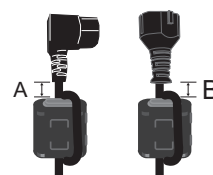
**PS51E450**




Ferrite Core (2EA)

-  Ferrite Core for Power Cord: The ferrite cores are used to shield the cables from interference. When connecting a cable, open the ferrite core and clip it around the cable near the plug as shown in the figure.

- **A** Maximum distance between the ferrite core and the end of the cord inserted in the TV: 3/4 inches
- **B** Maximum distance between the ferrite core and the other end of the cord inserted in the AC outlet: 3/4 inches





Power Cord

-  Ferrite Core: The ferrite cores are used to shield the cables from interference. When connecting a cable, open the ferrite core and clip it around the cable near the plug as shown in the figure.







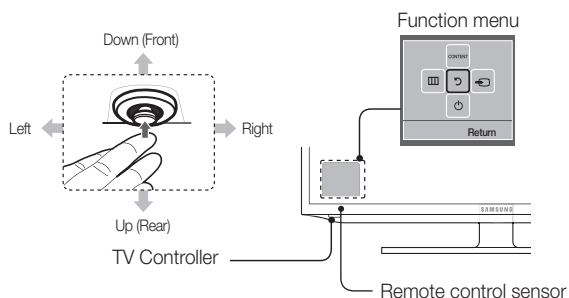
Antenna Cable  
(sold separately)

-  An administration fee may be charged if either
  - (a) an engineer is called out at your request and there is no defect in the product (i.e. where you have failed to read this user manual)
  - (b) you bring the unit to a repair centre and there is no defect in the product (i.e. where you have failed to read this user manual)
-  The amount of such administration charge will be advised to you before any work or home visit is carried out.

## Using the TV's Controller (Panel Key)

TV Controller is a multi directional button that helps navigate without remote control.

-  Some functions which require a PIN code may not be available.
-  The product colour and shape may vary depending on the model.
-  Exits the menu when pressing the controller more than 1 second.
-  When selecting the function by moving the controller to the up/down/left/right directions, be sure not to press the controller. If you press it first, you cannot operate it to move the up/down/left/right directions.



<b>Power on</b>	Turns the TV on by pressing the controller in standby mode.
<b>Adjusting the volume</b>	Adjusts the volume by moving the controller from side to side when the power is on.
<b>Selecting a channel</b>	Selects a channel by moving the controller up and down when the power is on.
<b>Using the function menu</b>	Press the controller when the power is on, then the function menu screen appears. If you press it again, the function menu screen disappears.
<b>Using the Menu</b>	Selects the <b>MENU</b> (≡) by moving the controller in the function menu screen. The OSD (On Screen Display) of your TV's feature appears.
<b>Selecting the Source</b>	Selects the <b>Source</b> (↔) by moving the controller in the function menu screen. The <b>Source</b> list screen appears.
<b>Selecting the Contents Home</b>	Selects the <b>Contents Home</b> (CONTENT) by moving the controller in the function menu screen. The <b>Contents Home</b> main screen appears.
<b>Power Off</b>	Selects the <b>Power Off</b> (⏻) to turn the TV off by moving the controller in the function menu screen.




### 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.

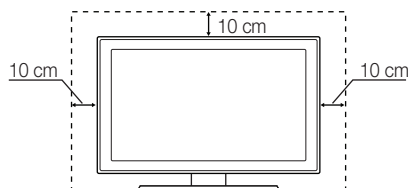
## Securing the Installation Space

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

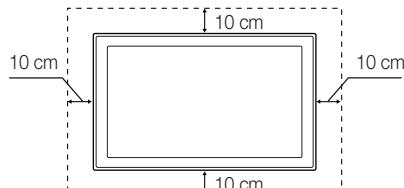
Failing to do so may result in fire or a problem with the product due to an increase in the internal temperature of the product.

-  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.

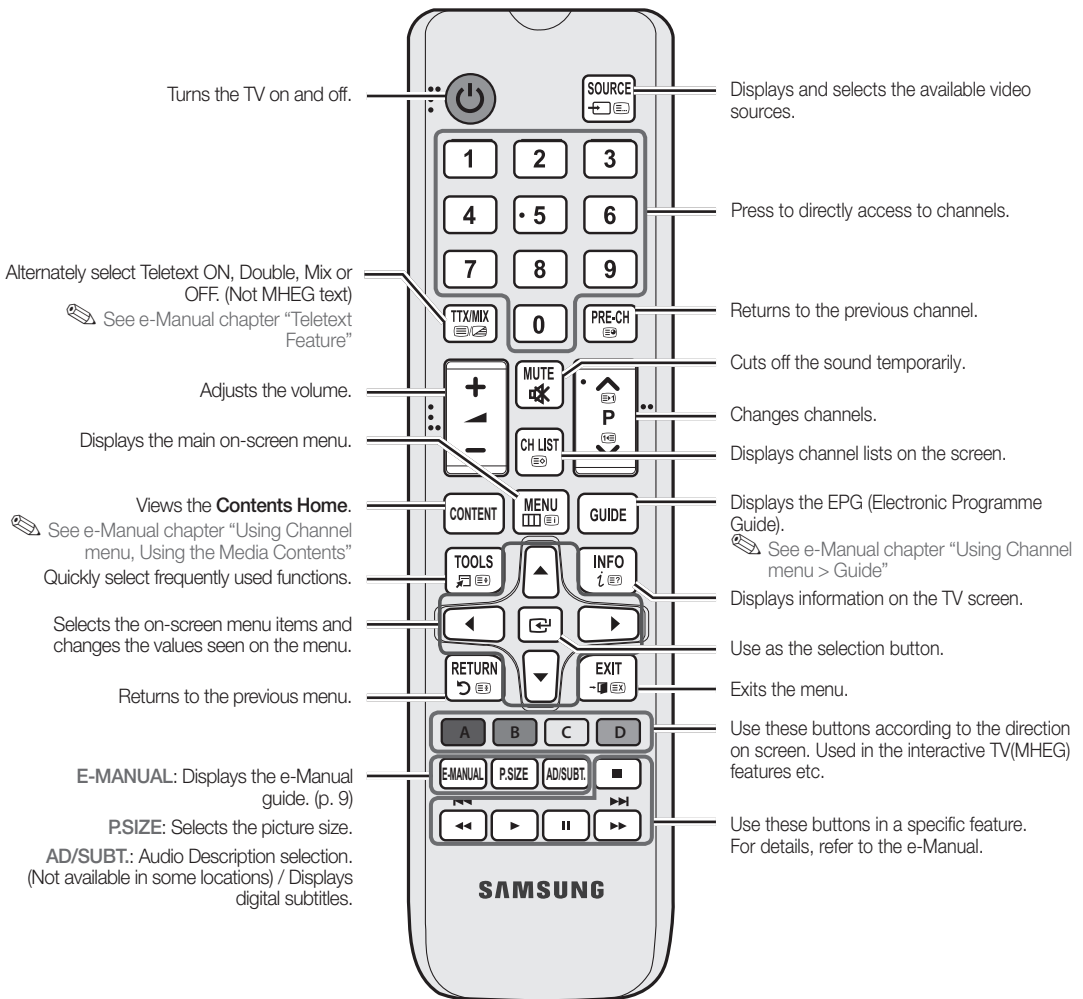


Installation with a wall-mount.

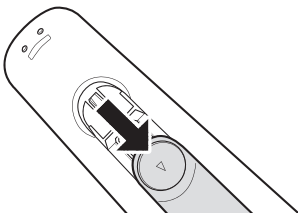


## Viewing the Remote Control

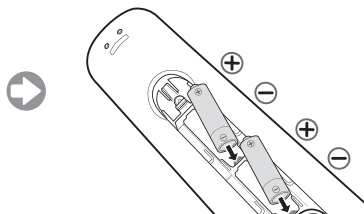
 This is a special remote control for the visually impaired persons and has Braille points on the Power, Channel, and Volume buttons.



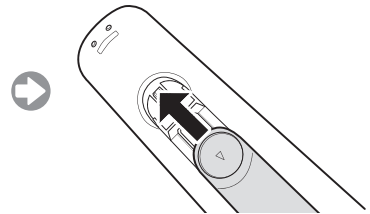
### Installing batteries (Battery size: AAA)




Remove the battery cover located on the back of the handset by gently pulling downwards from the indicated part.



Insert two **AAA/R6** or equivalent type batteries inside. Place the batteries in the right directions.




Replace the battery cover.

 Remove the batteries from remote control handset when it is not to be used for a long period. Otherwise it can be damaged due to any leakage of batteries.

## 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. **Setup** is available only when the source is set to TV.


### 1. Menu Language: Selecting a menu language

Press the **▲** or **▼** button, then press the **ENTER**  button.  
Select the desired OSD (On Screen Display) language.


### 2. Use Mode: Selecting Store Demo or Home Use

Press the **▲** or **▼** button, then press the **ENTER**  button.

Select the **Home Use** mode. **Store Demo** mode is for retail environments.


 When pressing TV controller, the function menu screen appears. Select the **MENU** (III) and press it more than 5 seconds using the controller. The **Store Demo** mode is set.

 Cancel the **Store Demo** by selecting **Source** (←) and pressing it more than 5 seconds.

 **Store Demo** is only for shop display. If you select it, several functions are not able to use. Please select **Home Use** when you watch at home.

### 3. Country (Depending on the country): Selecting a country

Press the **▲** or **▼** button, then press the **ENTER**  button.  
Select the appropriate country.

 After selecting the country in the country menu, some models may proceed with an additional option to setup the pin number.

### 4. Auto Tuning (Step 1): Selecting how you watch your TV


**Let's find and store channels on your TV. Do you need to search for channels?**

- **Yes, I need to.:** Memorises all of the available channels using RF cable.
- **No, I don't need to.:** You don't need to use Auto Tuning to find channels.

### 5. Auto Tuning (Step 2): Selecting a search options

Select the desired broadcasting signal and antenna source. Press the **▲/▼/◀/▶** button, then press the **ENTER**  button.

When setting the antenna source to **Cable**, a step appears allowing you to assign numerical values (channel frequencies) to the channels. For more information, refer to **Channel** → **Auto Tuning**.

 Press the **ENTER**  button at any time to interrupt the memorisation process.

 See **e-Manual** chapter "Retuning Channels > **Auto Tuning**"

### 6. Clock: Setting the Clock Mode

- **Auto:** Set the current time automatically.
- **Manual:** Allows you to manually set the current date and time.

### 7. Time Zone (Depending on the country): Setting your Time Zone


This step is only available when the clock mode is set to **Auto**.

- **Auto:** Set the time zone automatically.
- **Manual:** Set the time zone manually.

 If you selected **Manual**, you can select whether to turn DST (Daylight Savings Time) **On** or **Off**. (Depending on the country)

### 8. Setup Complete


Press the **ENTER**  button.

 The completed settings are displayed.

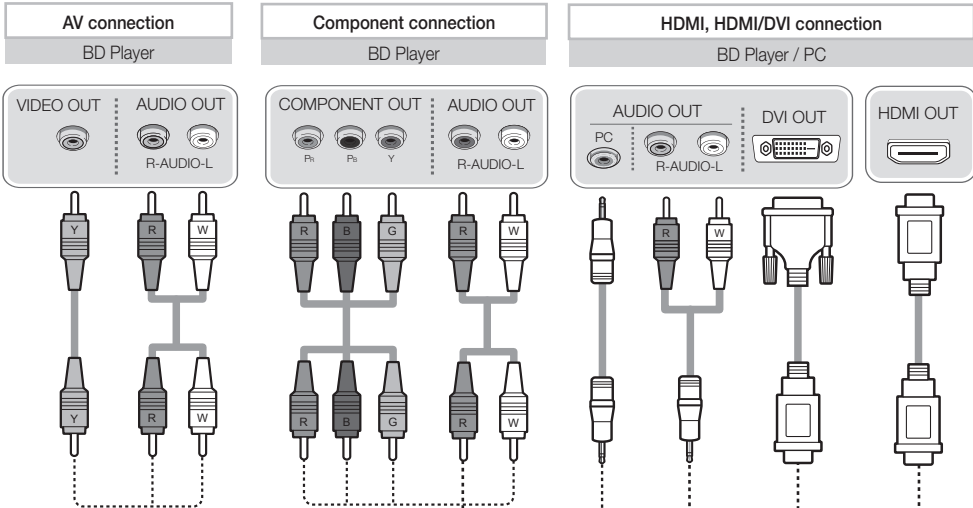
#### If You Want to Reset This Feature...

Select **System - Setup** (Initial Setup). Enter your 4 digit PIN number. The default PIN number is "0-0-0-0". If you want to change the PIN number, use the **Change PIN** function.

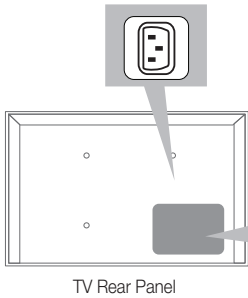
You should do **Setup** (**MENU** → **System**) again at home although you did in shop.

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

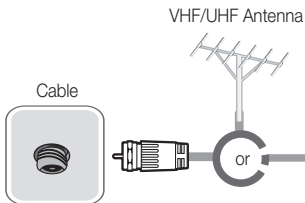
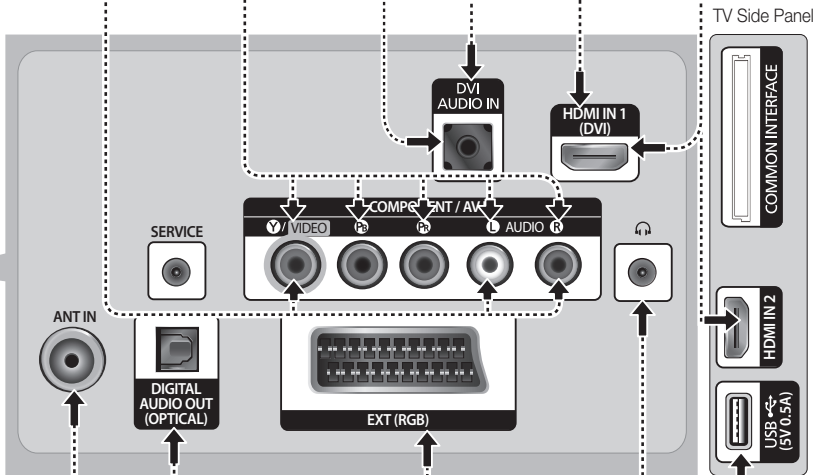
# Connections



It supports both Component and AV connection in one port.

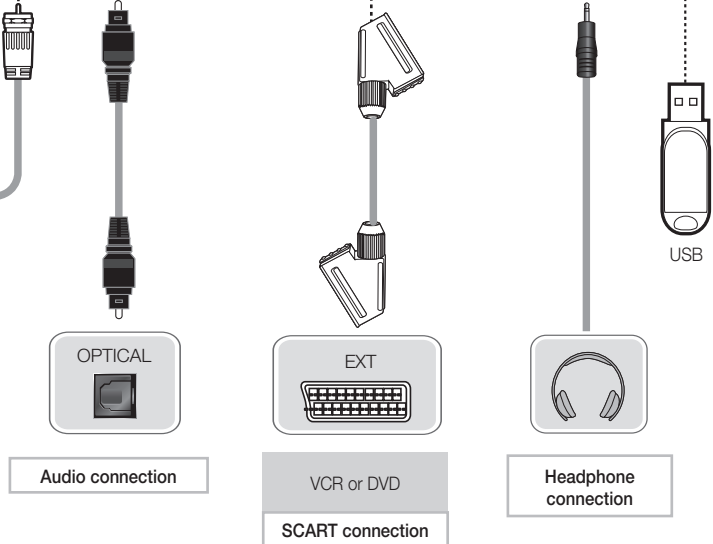


The position of port may differ depending on the model.



The PDP device may interfere with an amateur radio or AM radio.

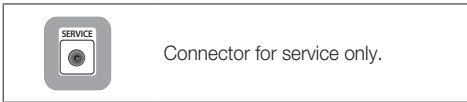
When using two-way radio mobile and portable units or amateur radio or AM radio near by your TV, this may cause the TV to malfunction.



## Display Modes (HDMI/DVI Input)

Optimal resolution is 1024 x 768@60Hz. See specification page for full available resolution.

## SERVICE



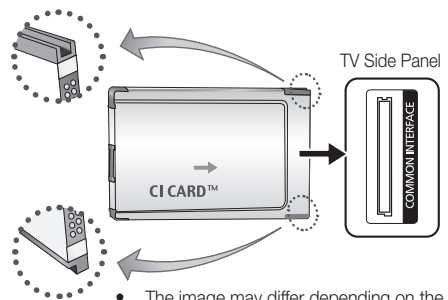
### NOTE

- For HDMI/DVI cable connection, you must use the **HDMI IN 1 (DVI)** port.
- 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.
- PC(D-Sub) input is not supported.
- Connecting through the HDMI cable may not be supported depending on the PC.
- The headphone jack supports only the 3 conductor tip-ring-sleeve (TRS) type.

## Connecting to a COMMON INTERFACE slot (Your TV viewing Card Slot)

To watch paid channels, the "CI or CI+ CARD" must be inserted.

- If you do not insert the "CI or CI+ CARD", some channels will display the message "Scrambled Signal".
- The pairing information containing a telephone number, the "CI or CI+ CARD" ID the Host ID and other information will be displayed in about 2~3 minutes. If an error message is displayed, please contact your service provider.
- When the configuration of channel information has finished, the message "Updating Completed" is displayed, indicating the channel list is updated.



## Changing the Input Source

### Source

#### TV / Ext. / HDMI1/DVI / HDMI2 / AV / Component

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

In the displaying **Source** list, connected inputs will be highlighted.

PC(D-Sub) input is not supported. If you want to connect PC to the TV, use **HDMI1/DVI** input.

**Ext.** always stays activated.

Press the **TOOLS** button.

#### • Edit Name

You can set an external input sources name you want.

- When connecting a PC to the **HDMI IN 1 (DVI)** port with HDMI cable, you should set the TV to **PC** mode under **Edit Name**.
- When connecting a PC to the **HDMI IN 1 (DVI)** port with HDMI to DVI cable, you should set the TV to **DVI PC** mode under **Edit Name**.
- When connecting an AV devices to the **HDMI IN 1 (DVI)** port with HDMI to DVI cable, you should set the TV to **DVI Devices** mode under **Edit Name**.

#### • Information

You can see detailed information about the connected external device.

# How to use the e-Manual

**E-MANUAL**



You can find instructions about your TV's features in the **e-Manual** in your TV. To use, press the **E-MANUAL** button on your remote. Move the cursor using the up/down/right/left buttons to highlight a category, then a topic, and then press the **ENTER** button. The **e-Manual** displays the page you want to see.

You can also access it through the menu:



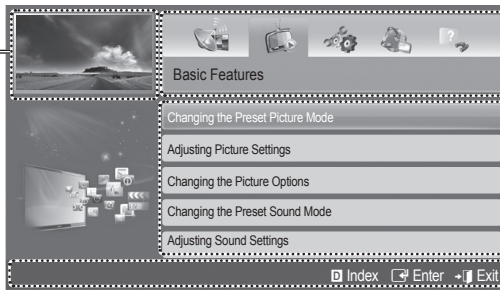
**MENU** → **Support** → **e-Manual** → **ENTER**



To return to the **e-Manual** main menu, press the **E-MANUAL** button on the remote.

## Screen Display

Currently displayed video, TV Programme, etc.



The category list. Press ◀ or ▶ button to select the category you want.

Displays the sub-menu list. Use the arrow buttons on your remote to move the cursor. Press **ENTER** button to select the sub-menu you want.

Operation Buttons

**Index**: Displays the index screen.

**Enter**: Selects a category or sub-menu.

**Exit**: Exit the e-Manual.

<Viewing the Contents>

**Try now**: Displays the OSD menu that corresponds to the topic. To return to the e-Manual screen, press the **E-MANUAL** button.

**Home**: Moves to the e-Manual home screen.

**Page**: Moves to previous or next page.

**Zoom**: Magnifies a screen.

- Select the **Zoom**, and then press **ENTER** to magnify the screen. You can scroll through the magnified screen by using the ▲ or ▼ buttons. To return to the screen to normal size, press the **RETURN** button.

## How to toggle between an e-Manual topic and the corresponding OSD menu(s).



This function is not enabled in some menus.



You cannot use the **Try now** function if the menu is not activated.

Method 1	Method 2
<ol style="list-style-type: none"> <li>1. If you want to use the menu that corresponds to an <b>e-Manual</b> topic, press the red button to select <b>Try now</b>.</li> <li>2. To return to the <b>e-Manual</b> screen, press the <b>E-MANUAL</b> button.</li> </ol>	<ol style="list-style-type: none"> <li>1. Press the <b>ENTER</b> button when a topic is displayed. "<b>Are you sure?</b>" appears. Select <b>Yes</b>, and then press the <b>ENTER</b> button. The OSD window appears.</li> <li>2. To return to the <b>e-Manual</b> screen, press the <b>E-MANUAL</b> button.</li> </ol>

## How to search for a topic on the index page



This function may not be supported depending on the language.

1. If you want to search a keyword, press the blue button to select **Index**.
2. Press the ◀ or ▶ button to select a character order you want.
3. Press the ▲ or ▼ button to select a keyword you want to see, and then press the **ENTER** button.
4. You can view the corresponding e-Manual instruction screen.




To close the **Index** screen, press the **RETURN** button.

## Installing the Wall Mount

The wall mount kit (sold separately) allows you to mount the TV on the wall. For detailed information on installing the wall mount, see the instructions provided with the wall mount. Contact a technician for assistance when installing the wall mount bracket. We do not advise you to do it yourself.

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.

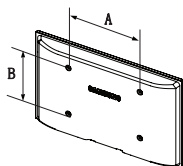
#### NOTE

- 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 that do not comply with the VESA standard screw specifications.
- 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 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.

inches	VESA Spec. (A * B)	Standard Screw	Quantity
43-51	400 X 400	M8	4
60-64	600 X 400		



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






## Securing the TV to the Wall



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

### To avoid the TV from falling

1. Put the screws into the clamps and firmly fasten them onto the wall. Confirm that the screws have been firmly installed onto the wall.
  -  You may need additional material such as an anchor depending on the type of wall.
  -  Since the necessary clamps, screws, and string are not supplied, please purchase these additionally.
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.
  -  Screws may not be supplied with the product. In this case, please purchase the screws of the following specifications.
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.

#### NOTE

- 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.
4. 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.

## Troubleshooting

If the TV seems to have a problem, first try this list of possible problems and solutions. If none of these troubleshooting tips apply, visit “[www.samsung.com](http://www.samsung.com)”, then click on Support, or call Samsung customer service centre.

### Issues

The TV will not turn on.

- Make sure the AC power cord is securely plugged in to 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.

### Issues

There is no picture/video.

- Check cable connections (remove and reconnect all cables connected to the TV and external devices).
- Set your external device's (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.
- Make sure your connected devices are powered on.
- Be sure to select the TV's correct source by pressing the **SOURCE** button on the remote control.
- Reboot the connected device by reconnecting the device's power cable.

### Issues


The remote control does not work.

- Replace the remote control batteries with the poles (+/-) in the right direction.
- Clean the sensor's transmission window on the remote.
- Try pointing the remote directly at the TV from 5~6 feet away.

### Issues

The cable/set top box remote control doesn't turn the TV on or off, or adjust the volume.

- Program the Cable/Set top box remote control to operate the TV. Refer to the Cable/Set user manual for the SAMSUNG TV code.


 You can keep your TV as optimum condition to upgrade the latest firmware on web site ([www.samsung.com](http://www.samsung.com) → Support → Downloads) by USB.

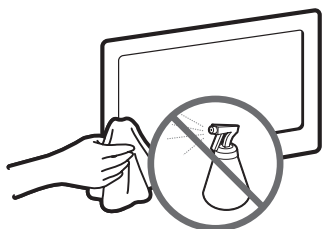
## Licence



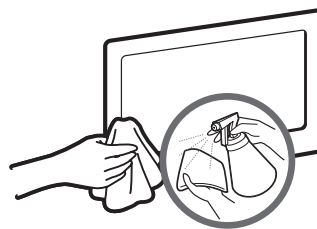
## Storage and Maintenance

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

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



Do not spray water 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. Do not use a flammable liquid (e.g. benzene, thinners) or a cleaning agent.

## Specifications

Display Resolution	1024 X 768	
Environmental Considerations Operating Temperature Operating Humidity Storage Temperature Storage Humidity	10°C to 40°C (50°F to 104°F) 10% to 80%, non-condensing -20°C to 45°C (-4°F to 113°F) 5% to 95%, non-condensing	
TV System	Analogue: B/G, D/K, L, I (Depending on your country selection) Digital: DVB-T/DVB-C	
Colour/Video System	Analogue: PAL, SECAM, NTSC-4.43, NTSC-3.58, PAL60 Digital: MPEG-2 MP@ML, MPEG-4, H.264/AVC MP@L3, MP@L4.0, HP@L4.0	
Sound System	BG, DK, L, NICAM, MPEG1, DD, DD+, HEAAC	
HDMI IN	Video: 1080 24p, 1080p, 1080i, 720p, 576p, 480p Audio: 2Ch Linear PCM 32/44.1/48kHz, 16/20/24bits.	
Model Name	PS43E450	PS51E450
Screen Size	43 inches	51 inches
Sound (Output)	10W X 2	
Dimensions (WxDxH) Body With stand	1011.8 X 56.0 X 622.4 (mm) 1011.8 X 262.0 X 675.9 (mm)	1187.8 X 56.0 X 706.6 (mm) 1187.8 X 262.0 X 760.1 (mm)
Weight Without Stand With Stand	14.2 kg 15.4 kg	19.6 kg 20.8 kg

 Design and specifications are subject to change without prior notice.

 For information about power supply, and more about power consumption, refer to the label attached to the product.

 Typical power consumption is measured according to IEC 62087 Ed.2

## Supported Video Formats

File Extension	Container	Video Codec	Resolution	Frame rate (fps)	Bit rate (Mbps)	Audio Codec		
*.avi *.mkv *.asf *.wmv *.mp4 *.3gp *.vro *.mpg *.mpeg *.ts *.tp *.trp *.m2ts *.mts *.divx	AVI MKV ASF MP4 3GP VRO VOB PS TS	DivX 3.11/4.x/5.x/6.1	1920 x 1080	6-30	30	AC3 LPCM ADMPCM (IMA, MS) AAC HE-AAC WMA DD+ MPEG (MP3) DTS Core		
		MPEG4 SP/ASP						
		H.264 BP/MP/HP						
					Motion JPEG		640 x 480	8
					Window Media Video v9		1920 x 1080	30
					MPEG2			
					MPEG1			



## Full available resolution: 1024 X 768 @ 60 Hz

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	-/-
	640 x 480	37.861	72.809	31.500	-/-
	640 x 480	37.500	75.000	31.500	-/-
	800 x 600	37.879	60.317	40.000	+/+
	800 x 600	48.077	72.188	50.000	+/+
	800 x 600	46.875	75.000	49.500	+/+
	1024 x 768	48.363	60.004	65.000	-/-
	1024 x 768	56.476	70.069	75.000	-/-
	1024 x 768	60.023	75.029	78.750	+/+

## Warning! Important Safety Instructions

Please read the appropriate section that corresponds to the marking on your Samsung product before attempting to install the product.

<b>CAUTION</b>
<b>RISK OF ELECTRIC SHOCK DO NOT OPEN</b>
CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). THERE ARE NO USER SERVICEABLE PARTS INSIDE. REFER ALL SERVICING TO QUALIFIED PERSONNEL.

	This symbol indicates that high voltage is present inside. It is dangerous to make any kind of contact with any internal part of this product.
	This symbol alerts you that important literature concerning operation and maintenance has been included with this product.

- The slots and openings in the cabinet and in the back or bottom are provided for necessary ventilation. To ensure reliable operation of this apparatus, and to protect it from overheating, these slots and openings must never be blocked or covered.
  - Do not cover the slots and openings with a cloth or other materials.
  - Do not block the slots and openings by placing this apparatus on a bed, sofa, rug or other similar surface.
  - Do not place this apparatus in a confined space, such as a bookcase, or built-in cabinet, unless proper ventilation is provided.
  - Give your product 10 cm (4 inch) clearance from the wall.
- Do not place this apparatus near or over a radiator or heat resistor, or where it is exposed to direct sunlight.
- Do not place heat generating items such as candles, ashtrays, incense, flammable gas or explosive materials near the product.
- Do not place a water containing vessel on this apparatus, as this can result in a risk of fire or electric shock.
- Do not expose this apparatus to rain or place it near water (near a bathtub, washbowl, kitchen sink, or laundry tub, in a wet basement, or near a swimming pool etc.). If this apparatus accidentally gets wet, unplug it and contact an authorized dealer immediately. Make sure to pull out the power cord from the outlet before cleaning.
- This apparatus use batteries. In your community there might be regulations that require you to dispose of these batteries properly under environmental considerations. Please contact your local authorities for disposal or recycling information.
- Do not overload wall outlets, extension cords or adaptors beyond their capacity, since this can result in fire or electric shock.
- Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plug end, adaptors and the point where they exit from the appliance.
- To protect this apparatus from a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the antenna or cable system.  
This will prevent damage to the set due to lightning and power line surges.
- Before connecting the AC power cord to the DC adaptor outlet, make sure the voltage designation of the DC adaptor corresponds to the local electrical supply.
- Never insert anything metallic into the open parts of this apparatus. Doing so may create a danger of electric shock.
- To avoid electric shock, never touch the inside of this apparatus. Only a qualified technician should open this apparatus.
- Make sure to plug the power cord in until it is firmly inserted. When removing the power cord, make sure to hold the power plug when pulling the plug from the outlet. Do not touch the power cord with wet hands.
- If this apparatus does not operate normally - in particular, if there are any unusual sounds or smells coming from it
  - unplug it immediately and contact an authorized dealer or service center.
- Be sure to pull the power plug out of the outlet if the TV is to remain unused or if you are to leave the house for an extended period of time (especially when children, elderly or disabled people will be left alone in the house).
  - Accumulated dust can cause an electric shock, an electric leakage or a fire by causing the power cord to generate sparks and heat or the insulation to deteriorate.
- Be sure to contact an authorized service center, when installing your set in a location with heavy dust, high or low temperatures, high humidity, chemical substances and where it operates for 24 hours such as the airport, the train station etc. Failure to do so may cause serious damage to your set.
- Use only a properly grounded plug and receptacle.
  - An improper ground may cause electric shock or equipment damage. (Class I Equipment only.)
- To disconnect the apparatus from the mains, the plug must be pulled out from the mains socket, therefore the mains plug shall be readily operable.
- Do not allow children to hang onto the product.
- Store the accessories (battery, etc.) in a location safely out of the reach of children.
- Do not install the product in an unstable location such as a shaky self, a slanted floor or a location exposed to vibration.
- Do not drop or impart any shock to the product. If the product is damaged, disconnect the power cord and contact a service center.



**WARNING - TO PREVENT THE SPREAD OF FIRE,  
KEEP CANDLES OR OTHER OPEN FLAMES AWAY  
FROM THIS PRODUCT AT ALL TIMES.**

## Wiring the Mains Power Supply Plug (UK Only)

### IMPORTANT NOTICE

The mains lead on this equipment is supplied with a moulded plug incorporating a fuse. The value of the fuse is indicated on the pin face of the plug and, if it requires replacing, a fuse approved to BSI1362 of the same rating must be used.

Never use the plug with the fuse cover omitted if the cover is detachable. If a replacement fuse cover is required, it must be of the same colour as the pin face of the plug. Replacement covers are available from your dealer.

If the fitted plug is not suitable for the power points in your house or the cable is not long enough to reach a power point, you should obtain a suitably approved extension lead or consult your dealer for assistance. However, if there is no alternative but to cut off the plug, remove the fuse and then safely dispose of the plug.

Do NOT connect the plug to a mains socket as there is a risk of shock hazard from the bared flexible cord.

### IMPORTANT

The wires in the mains lead are coloured in accordance with the following code:

BLUE - NEUTRAL BROWN - LIVE

As these colours may not correspond to the coloured markings identifying the terminals in your plug, proceed as follows :

The wire coloured BLUE must be connected to the terminal marked with the letter N or coloured BLUE or BLACK. The wire coloured BROWN must be connected to the terminal marked with the letter L or coloured BROWN or RED.

### WARNING:

DO NOT CONNECT EITHER WIRE TO THE EARTH TERMINAL, WHICH IS MARKED WITH THE LETTER E OR BY THE EARTH SYMBOL , OR COLOURED GREEN OR GREEN AND YELLOW.

## Warranty Card



**UNITED KINGDOM**



**REPUBLIC OF IRELAND  
(EIRE)**

This Samsung product is warranted for a period of twelve (12) months from the original date of purchase, against defective materials and workmanship. In the event that warranty service is required, you should return the product to the retailer from whom it was purchased. However, Samsung Authorised Dealers and Authorised Service Centres in other EC Countries will comply with the warranty on the terms issued to purchasers in the country concerned. In case of difficulty, details of our Authorised Service Centres are available from:

**Samsung Customer Support Centre, PO Box 479, Gateshead, NE9 9BJ United Kingdom**

**Telephone: 0330 SAMSUNG (7267864) Fax: 0330 7260001 (UK & Northern Ireland)**

**Tel: 0818 717 100 Fax: +44 (0)117 915 6736 (EIRE Only)**

**Web : [www.samsung.com](http://www.samsung.com)**

### WARRANTY CONDITIONS

1. The warranty is only valid if, when warranty service is required, the warranty card is fully and properly completed and is presented with the original invoice or sales slip or confirmation, and the serial number on the product has not been defaced.
2. Samsung's obligations are limited to the repair or, at its discretion, replacement of the product or the defective part.
3. Warranty repairs must be carried out by Authorised Samsung Dealers or Authorised Service Centres. No re-imburement will be made for repairs carried out by non Samsung Dealers and, any such repair work and damage to the products caused by such repair work will not be covered by this warranty.
4. This product is not considered to be defective in materials nor workmanship by reason that it requires adaptation in order to conform to national or local technical or safety standards in force in any country other than the one for which the product was originally designed and manufactured.