SAMSUNG

COLOUR TELEVISION

Owner's Instructions

Before operating the unit,
please read this manual thoroughly,
and retain it for future reference.

ON-SCREEN MENUS

Picture In Picture (PIP) (depending on the model)

TELETEXT (depending on the model)

SRS TruSurround XT

Register your product at www.samsung.com/global/register

Important Warranty Information Regarding Television Format Viewing

Standard screen format televisions (4:3, the aspect ratio of the screen width to height) are primarily designed to view standard format full-motion video. The images displayed on them should primarily be in the standard 4:3 ratio format and constantly moving. Displaying stationary graphics and images on screen, such as the dark top and bottom letterbox bars (wide screen pictures), should be limited to no more than 15% of the total television viewing per week.

Wide screen format televisions (16:9, the aspect ratio of the screen width to height) are primarily designed to view wide screen format full-motion video. The images displayed on them should primarily be in the wide screen 16:9 ratio format, or expanded to fill the screen if your model offers this feature, and constantly moving. Displaying stationary graphics and images on screen, such as the dark side-bars on non-expanded standard format television video and programming, should be limited to no more than 15% of the total television viewing per week.

Additionally, viewing other stationary images and text such as stock market reports, video game displays, station logos, web sites or computer graphics and patterns, should be limited as described above for all televisions. Displaying any stationary images that exceed the above guidelines can cause uneven aging of picture tubes (CRTs) that leave subtle, but permanent burned-in ghost images in the television picture. To avoid this, vary the programming and images, and primarily display full screen moving images, not stationary patterns or dark bars. On television models that offer picture sizing features, use these controls to view the different formats as a full screen picture.
Be careful in the selection and duration of television formats used for viewing. Uneven CRT aging as a result of format selection and use, as well as other burned-in images, is not covered by your Samsung limited warranty.

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Symbols

Press

Important

Note

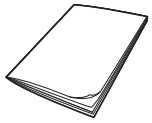
General Information

Accessories

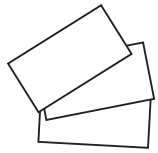
Please make sure the following items are included with your TV.
If any items are missing, contact your dealer.

➢ The items colour and shape may vary depending on the model.

Remote Control & Batteries (AAA x 2)



Owner's Instructions

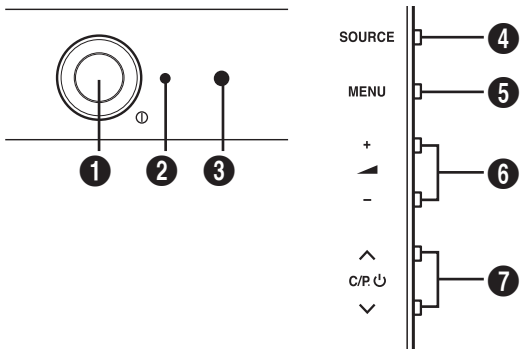


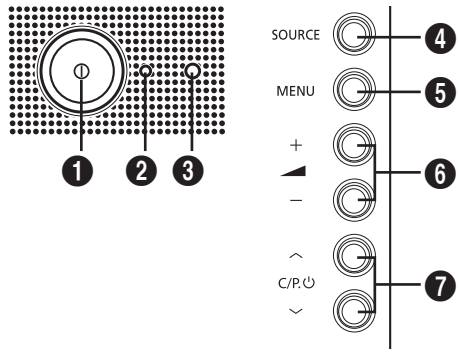
Warranty Card / Registration Card / Safety Guide Manual
(Not available in all locations)

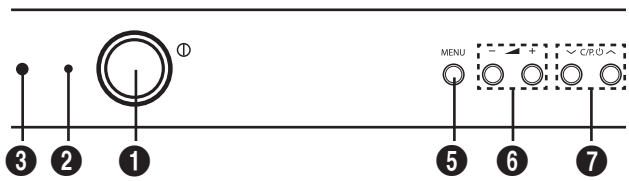
Control Panel (depending on the model)

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

Front of the TV







❶ **Power On/Off**
Press to turn the TV on and off.

❷ **Standby indicator**
Blinks and turns off when the power is on and lights up in stand-by mode.

❸ **Remote control sensor**
Aim the remote control towards this spot on the TV.

❹ **SOURCE**
Displays a menu of all of the available input sources (TV, Ext.1, Ext.2, AV/S-Video, Component, HDMI).

❺ **MENU**
Press to see an on-screen menu of your TV's features.

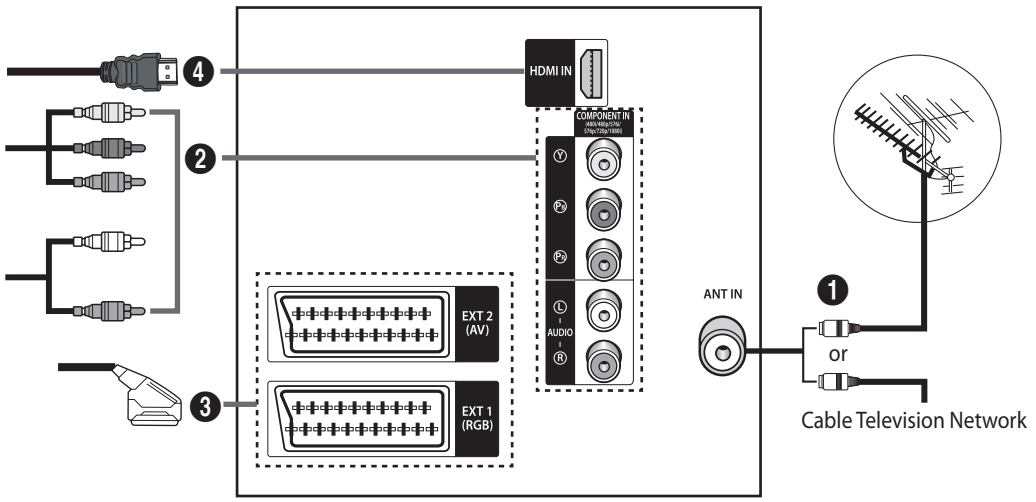
❻ **- +**
Press to decrease or increase the volume.
In the on-screen menu, use the **- +** buttons as you use the ◄ and ► buttons or **ENTER** (↵) button on the remote control.

❼ **C/P.**
Press to change channels.
In the on-screen menu, use the **C/P.** buttons as you use the ▲ and ▼ buttons on the remote control.

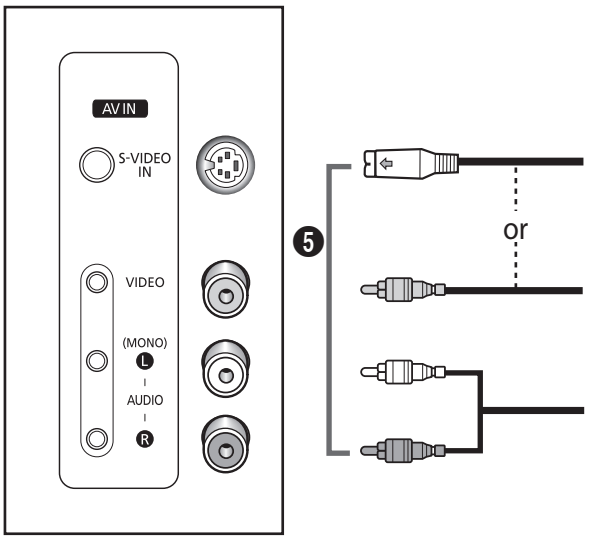
Connection Panel (depending on the model)

The product colour and shape may vary depending on the model.
Whenever you connect an audio or video system to your television, ensure that all elements are switched off.
Refer to the documentation supplied with your equipment for detailed connection instructions and associated safety precautions.

Rear of the TV



Side of the TV



❶ Connecting to an Aerial or Cable Television Network

Connect the aerial or network input cable to the 75 Ω coaxial socket.

To view television channels correctly, a signal must be received by the set from one of the sources: an outdoor aerial, cable television network, or satellite network. If you are using an indoor aerial, you may need to adjust it when tuning your television until you obtain a picture that is both sharp and clear.

❷ Connecting to the COMPONENT Input

- Connect component video cables to component connector (**Y**, **P_B**, **P_R**) on the rear of your television and the other ends to corresponding component video out connectors on the DTV receiver or DVD player.
- The Y, P_B and P_R connectors on your component devices (DTV receiver or DVD player) are sometimes labeled Y, B-Y and R-Y or Y, Cb and Cr.
- Connect RCA audio cables to **AUDIO (L/R) IN** on the rear of your television and the other ends to corresponding audio out connectors on the DTV receiver or DVD player.

❸ Connecting to the SCART Input/Output

Connect SCART cable to an appropriate external A/V device such as a VCR, DVD player, decoder, satellite receiver, video game device, or video disc player.

- The EXT1 (RGB) connector is used for equipment with an RGB output, such as a video game device or video disc player.
- The EXT2 (AV) connector is used for the audio/video output of current television programme.

❹ Connecting to the HDMI (depending on the model)

- Supports connections between HDMI-connection-enabled AV devices (Set-Top Boxes, DVD players, AV receivers and digital TVs).
- No additional Audio connection is needed for an HDMI to HDMI connection.

What is HDMI?

- "High Definition Multimedia interface" allows the transmission of high definition digital video data and multiple channels of digital audio (5.1 channels).
  The HDMI/DVI terminal supports DVI connection to an extended device with the appropriate cable (not supplied). The difference between HDMI and DVI is that the HDMI device is smaller in size, has the HDCP (High Bandwidth Digital Copy Protection) coding feature installed, and supports multi - channel digital audio.
- You should use the DVI-to-HDMI cable or DVI-HDMI Adapter for the connection, and the AUDIO (L/R) connector on DVI for sound output.
  When connecting this product via HDMI or DVI to a Set Top Box, DVD Player or Games Console etc, make sure that it has been set to a compatible video output mode as shown in the table below. Failure to observe this may result in picture distortion, image breakup or no picture.

Supported modes for HDMI and COMPONENT

	480i-60Hz	480p-60Hz	576i-50Hz	576p-50Hz	720p-50/60Hz	1080i-50/60Hz
HDMI	X	O	X	O	O	O
Component	O	O	O	O	O	O

Do not attempt to connect the HDMI connector to a PC or Laptop Graphics Card.
(This will result in a blank screen being displayed.)

❺ Connecting to the RCA/S-VIDEO Input

- Connect RCA video or S-Video cable to **VIDEO IN** or **S-VIDEO IN** on the rear of your television and the other ends to corresponding video or S-Video out connectors on the A/V device.
- Connect RCA audio cables to **AUDIO (L/R) IN** on the rear of your television and the other ends to corresponding audio out connectors on the A/V device.

Viewing the Remote Control (depending on the model)

- The actual configuration on your TV may be different, depending on the model.
- Operation of remote control may be affected by bright artificial light near to the TV set.
- This is a special remote control for the visually impaired, and has Braille points on the Power, Channel and Volume buttons.

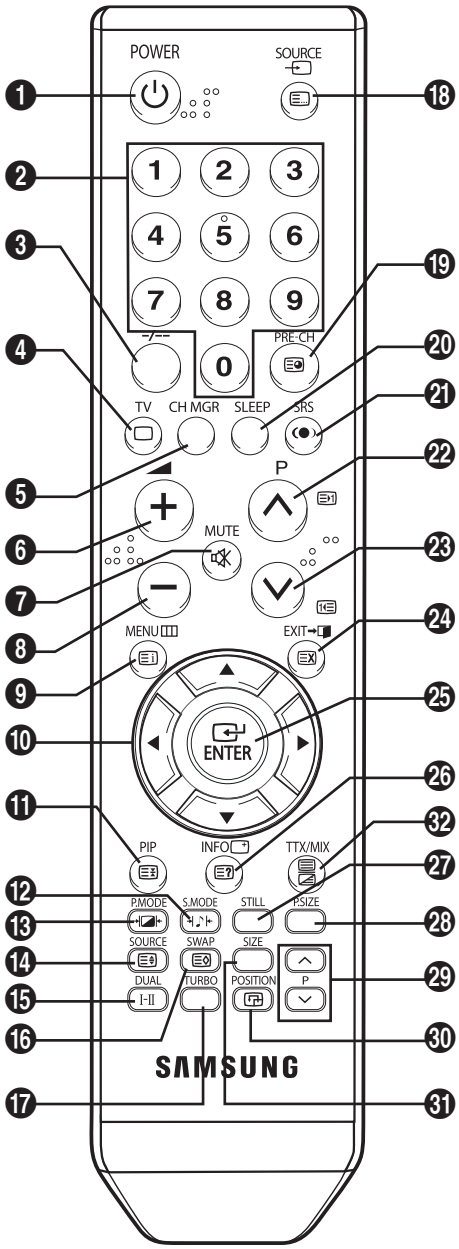
1. Television stand-by
2. Direct channel selection
3. One/Two-digit channel selection
4. Tuner/cable network selection
5. Channel control
6. Volume increase
7. Temporary sound switch-off
8. Volume decrease
9. Menu display
10. Move to the required menu option / Adjust an option value respectively
11. Picture-In-Picture On/Off
12. Sound effect selection
13. Picture effect selection
14. Sub picture (PIP) source selection
15. Sound mode selection
16. Interchange the main and sub picture (PIP)
17. Turbo sound
18. External input selection
19. Switch repeatedly between the last two channels displayed
20. Automatic switch-off
21. SRS TruSurround XT On/Off
22. Next channel
23. Previous channel
24. Exit from any display
25. Change confirmation
26. Information display
27. Still picture
28. Picture size selection
29. Sub picture (PIP) channel selection
30. Sub picture (PIP) location selection
31. Sub picture (PIP) size selection

Teletext Functions

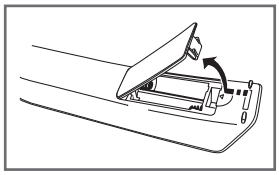
(Refer to page 27)

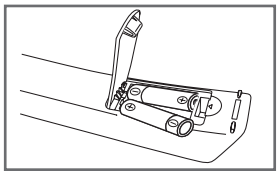
4. Exit from the teletext display
9. Teletext index
11. Teletext page hold
14. Teletext size selection
16. Teletext store
18. Teletext mode selection (LIST/FLOF)
19. Teletext sub-page
22. Teletext next page
23. Teletext previous page
24. Teletext cancel
26. Teletext reveal
32. Teletext display / Mix both Teletext information and the normal broadcast

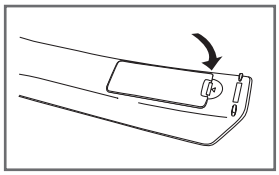
12 13 27 28 Fastext topic selection



Installing Batteries in the Remote Control







1 Lift the cover at the back of the remote control upward as shown in the figure.

2 Install two AAA size batteries.

➢ Make sure to match the "+" and "–" ends of the batteries with the diagram inside the compartment.

3 Close the cover as shown in the figure.

➢ Remove the batteries and store them in a cool, dry place if you won't be using the remote control for a long time. The remote control can be used up to about 23 feet (7m) from the TV. (Assuming typical TV usage, the batteries last for about one year.)

➢ **If the remote control doesn't work! Check the following:**

1. Is the TV power on?
2. Are the plus and minus ends of the batteries reversed?
3. Are the batteries drained?
4. Is there a power cut, or is the power cord unplugged?
5. Is there a special fluorescent light or a neon sign nearby?

Operation

Switching Your Television On and Off

The mains lead is attached to the rear of the television.

1 Plug the mains lead into an appropriate socket.

➢ The main voltage is indicated on the rear of the television and the frequency is 50 or 60Hz.

2 Press the "⏻" button (On/Off) on the front of the television.
The standby indicator on the front of the television lights up.

3 Press the **POWER** button on the remote control to switch the television on.
The programme that you were watching last is re-selected automatically.

➢ If you have not yet stored any channels, no clear picture appears.
Refer to "Storing Channels Automatically" on page 11 or "Storing Channels Manually" on page 12.

4 To switch your television off, press the "⏻" button (On/Off) again.

Placing the Television in Standby Mode

The television can be placed in standby mode, in order to reduce power consumption and wear of the cathode ray tube. Standby mode can be useful when you wish to interrupt viewing temporarily (during a meal, for example).

1 Press the **POWER** button on the remote control while viewing.
The television is in standby mode.

2 To switch the television back on, simply press it again.

➢ You can also switch on by pressing the **TV** (▭), **P** ⌃/⌄, or numeric button.

☛ Do not leave your television in standby mode for long periods of time. Turn your television off by pressing the "⏻" button (On/Off) on the front of the television. It is best to unplug the set from the mains and aerial.

Plug & Play Feature (depending on the model)

When the television is initially powered on, three basic customer settings proceed automatically and subsequently: setting the language, channel and clock.

1 If the television is in Standby mode, press the **POWER** button on the remote control.
The message **Start Plug & Play** is displayed.

2 The **Language** menu will automatically appear after several seconds.

3 Select the appropriate language by pressing the ▲ or ▼ button.
Press the **ENTER** (↵) button to enter the language.
The message **Check antenna input.** is displayed.
➢ If any language is not selected on the **Language** menu, the **Language** menu will disappear about 30 seconds later.

4 Make sure that the antenna is connected to the TV.
Press the **ENTER** (↵) button.
The **Auto Store** menu is displayed.

5 Select your country by pressing the ▲ or ▼ button, then press the **ENTER** (↵) button.
The **Search** menu is displayed.

6 Press the **ENTER** (↵) button to start search the channels.
The channel search will start and end automatically. After all the available channels are stored, the **Clock Set** menu appears.
➢ Refer to "Storing Channels Automatically" on page 11.

7 Press the ◄ or ► button to move to the hour or minute.
Set the hour or minute by pressing the ▲ or ▼ button.
➢ ◆ Refer to "Setting and Displaying the Current Time" on page 24.
◆ You can set the hour and minute directly by pressing the numeric buttons on the remote control.

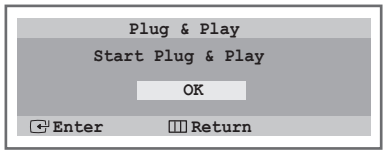
8 When you have finished, press the **MENU** (▥) button.
The message **Enjoy your viewing** is displayed, and then the channel which has been stored will be activated.

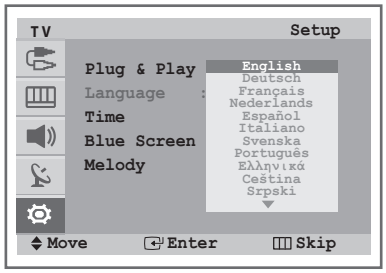
If you want to reset this feature...

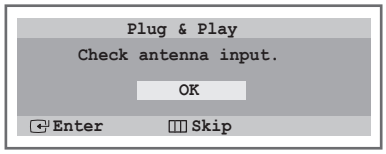
1 Press the **MENU** (▥) button to display the menu.

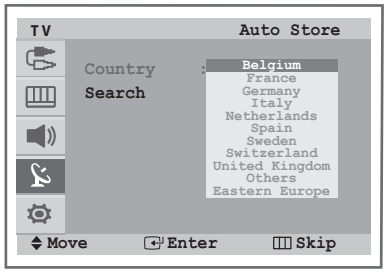
2 Press the ▲ or ▼ button to select **Setup**, and then press the **ENTER** (↵) button.
The **Plug & Play** is selected.

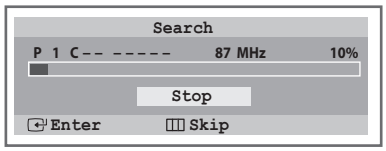
3 Press the **ENTER** (↵) button again.
This feature starts with the message **Start Plug & Play** displayed.

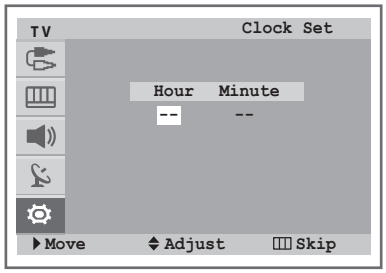




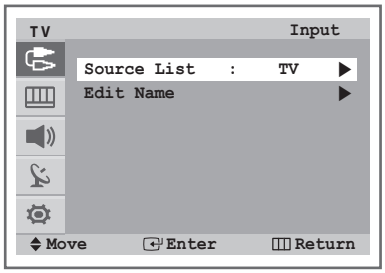


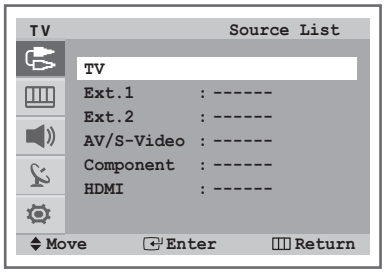


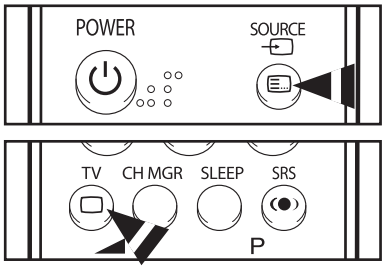




Viewing an External Signal Source (depending on the model)







Use the remote control to switch between viewing signal from connected equipment, such as VCR, DVD, Set-Top-boxes and the TV source (broadcast or cable).

1 Press the **MENU** (▥) button to display the menu.

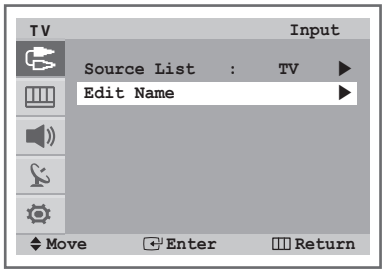
2 Press the **ENTER** (↵) button to select **Input**.

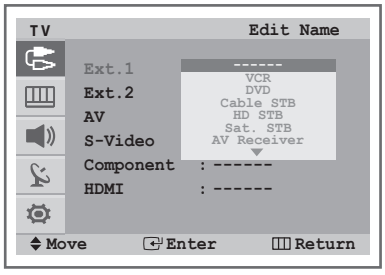
3 Press the **ENTER** (↵) button again.

4 Press the ▲ or ▼ button to select the required signal source, then press the **ENTER** (↵) button.
Available signal source: **TV**, **Ext. 1**, **Ext. 2**, **AV/S-Video**, **Component**, **HDMI**

➢
- When you connect equipment to the TV, you can choose between the following sets of jacks: **Ext. 1**, **Ext. 2**, **Component**, or **HDMI** on the TV's rear panel, and **AV**/**S-Video** on the TV's side panel.
- You can also set these options simply by pressing the **TV** (▭) or **SOURCE** (⇥) button. If you change the external source while viewing, pictures might take a short period of time to be switched.

Editing Device Names (depending on the model)





You can give a name to the external source.

1 Press the **MENU** (▥) button to display the menu.

2 Press the **ENTER** (↵) button to select **Input**.

3 Press the ▲ or ▼ button to select **Edit Name**, then press the **ENTER** (↵) button.

4 Press the ▲ or ▼ button to select the external source to be edited, then press the **ENTER** (↵) button.

5 Select the required device's name by pressing the ▲ or ▼ button, then press the **ENTER** (↵) button.
Available device names: **VCR**, **DVD**, **Cable STB**, **HD STB**, **Sat. STB**, **AV Receiver**, **DVD Receiver**, **Game**, **Camcorder**, **DVD Combo**, **DHR** (DVD HDD Recorder), or **PC**.

6 Press the **EXIT** (⇥▯) button to exit.

Channel Control

Storing Channels Automatically

You can scan for the frequency ranges available to you (availability depends on your country). Automatically allocated programme numbers may not correspond to actual or desired programme numbers. However you can sort numbers manually and clear any channels you do not wish to watch.

1 Press the **MENU** (▥) button to display the menu.

2 Press the ▲ or ▼ button to select **Channel**, then press the **ENTER** (↵) button.

3 Press the **ENTER** (↵) button again.

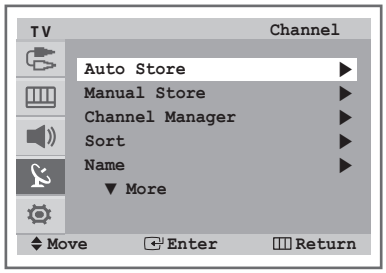
4 Press the **ENTER** (↵) button again.
The available countries are listed.

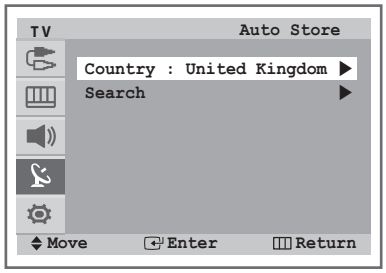
5 Select your country by pressing the ▲ or ▼ button, then press the **ENTER** (↵) button.

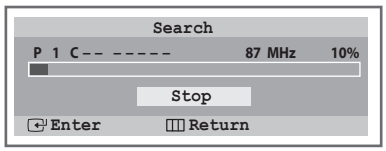
6 Press the ▲ or ▼ button to select **Search**, then press the **ENTER** (↵) button.

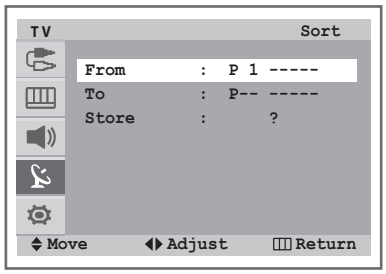
7 Press the **ENTER** (↵) button again to start the search.
The search will end automatically.
➢ To stop the search before it has finished, press the **MENU** (▥) or the **ENTER** (↵) button.

8 When searching and storing are completed, the **Sort** menu is displayed.
- ◆ To sort the stored channels into the desired numerical order, go to step **4** of the "Sorting the Stored Channels" procedure on page 13
- ◆ To exit from the channel store function without sorting the channels, press the **MENU** (▥) button repeatedly until the menus disappear.

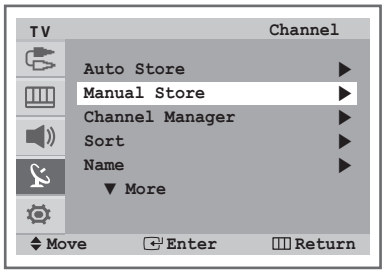


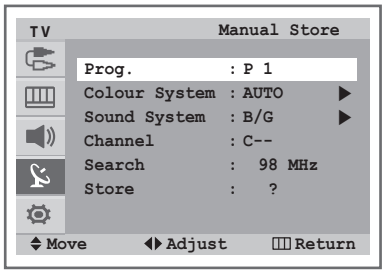






Storing Channels Manually





You can store television channels, including those received via cable networks.
When storing channels manually, you can choose:

- Whether or not to store each of the channels found.
- The programme number of each stored channel which you wish to identify.

1 Press the **MENU** (▥) button to display the menu.

2 Press the ▲ or ▼ button to select **Channel**, then press the **ENTER** (↵) button.

3 Press the ▲ or ▼ button to select **Manual Store**, then press the **ENTER** (↵) button.

4 Select the required option by pressing the ▲ or ▼ button, then press the **ENTER** (↵) or ◀/▶ button.

5 Press the **EXIT** (→▯) button to exit.

- **Prog.** (Programme number to be assigned to a channel)
  - Press the ◀ or ▶ button until you find the correct number.

- **Colour System**: **AUTO**/**PAL**/**SECAM**/**NTSC 4.43**
  - Press the ▲ or ▼ button to select the required colour standard.

- **Sound System**: **B/G, D/K**, **I**, **L**
  - Press the ▲ or ▼ button to select the required sound standard.

- **Channel** (When you know the number of the channel to be stored)
  - Press the ▲ or ▼ button to select **C** (Air channel) or **S** (Cable channel).
  - Press the ▶ button, then press the ▲ or ▼ button to select the required number.
  - ➢ You can also select the channel number directly by pressing the numeric buttons (0~9).
  - ➢ If there is abnormal sound or no sound, re-select the sound standard required.

- **Search** (When you do not know the channel numbers)
  - Press the ◀ or ▶ button to start the search.
  - The tuner scans the frequency range until the first channel or the channel that you selected is received on the screen.

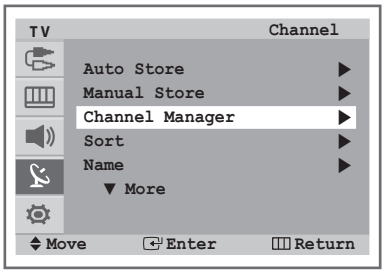
- **Store** (When you store the channel and associated programme number)
  - Set to **OK** by pressing the **ENTER** (↵) button.

☛ **Channel mode**

- **P** (Programme mode): When completing tuning, the broadcasting stations in your area have been assigned to position numbers from P00 to P99. You can select a channel by entering the position number in this mode.
- **C** (Air channel mode): You can select a channel by entering the assigned number to each air broadcasting station in this mode.
- **S** (Cable channel mode): You can select a channel by entering the assigned number for each cable channel in this mode.

Skipping Unwanted Channels

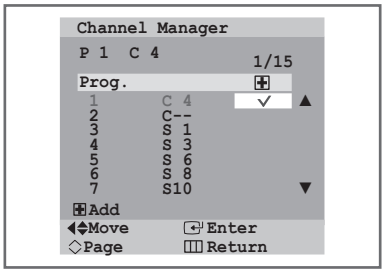
You can exclude the channels you have chosen from the channels you scanned. When you scan through the stored channels, those you have chosen to skip are not displayed.
All of the channels that you do not specifically choose to skip are displayed during scanning.



1 Press the **MENU** (▥) button to display the menu.

2 Press the ▲ or ▼ button to select **Channel**, then press the **ENTER** (↵) button.

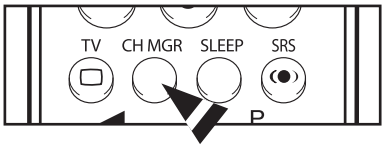
3 Press the ▲ or ▼ button to select **Channel Manager**, then press the **ENTER** (↵) button.
➢ It can be displayed simply by pressing the **CH MGR** (Channel Manager) button.



4 Press the ▲ or ▼ button to select the channel to be add or erase.

5 Press the **ENTER** (↵) button to move to the (⊕) field.

6 Press the **ENTER** (↵) button to add the channel.
The (✓) symbol next to the channel appears and the channel is added.
➢ If you press the **ENTER** (↵) button again, the (✓) symbol next to the channel disappears and the channel is not added.

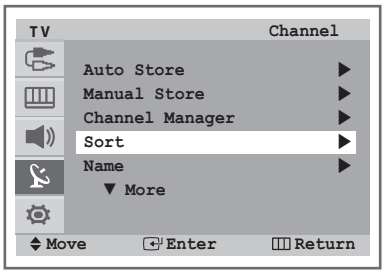


7 Repeat step **4** to **6** for each channel to be added or erased.

8 Press the **EXIT** (⇥▯) button to exit.

Sorting the Stored Channels

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



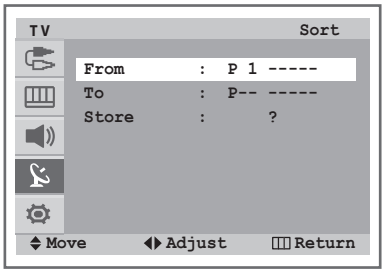
1 Press the **MENU** (▥) button to display the menu.

2 Press the ▲ or ▼ button to select **Channel**, then press the **ENTER** (↵) button.

3 Press the ▲ or ▼ button to select **Sort**, then press the **ENTER** (↵) button.

4 Select the channel number that you wish to change by pressing the ◄ or ► button repeatedly.

5 Press the ▲ or ▼ button to select **To**. Select the new channel number which you wish to identify by pressing the ◄ or ► button repeatedly.

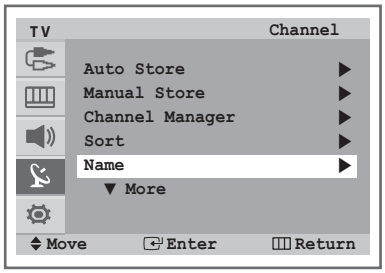


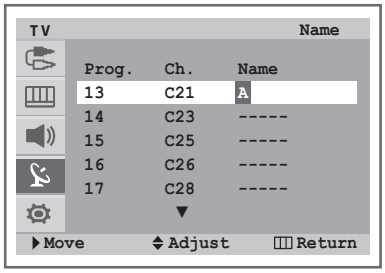
6 Press the ▲ or ▼ button to select **Store**. Select **OK** to confirm the exchange of channel numbers by pressing the **ENTER** (↵) button. The selected channel is exchanged with the one previously stored to the chosen number.

7 For all the channels to move to the required channel numbers, repeat steps **4** to **6** after selecting the **From** by pressing the ▲ or ▼ button.

8 Press the **EXIT** (⇥▯) button to exit.

Assigning Names to Channels

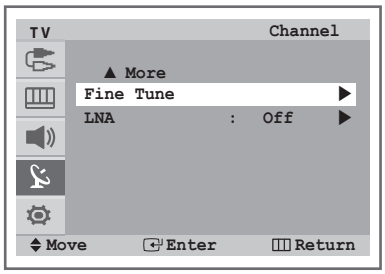


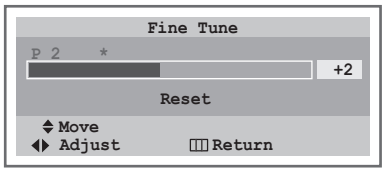


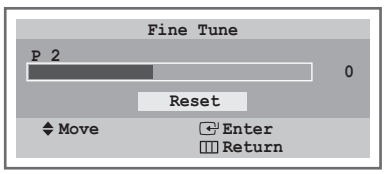
Channel names will be assigned automatically when channel information is broadcast. These names can be changed, allowing you to assign new names.

1. Press the **MENU** (▥) button to display the menu.
2. Press the ▲ or ▼ button to select **Channel**, then press the **ENTER** (↵) button.
3. Press the ▲ or ▼ button to select **Name**, then press the **ENTER** (↵) button.
4. Select the channel to be assigned to a new name by pressing the ▲ or ▼ button.
5. Press the ► button.
6. Press the ▲ or ▼ button to select a letter (A~Z), a number (0~9) or a symbol (space, -). Move on to the previous or next letter by pressing the ◄ or ► button.
7. Repeat Steps **4** to **6** for each channel to be assigned to a new name.
8. Press the **EXIT** (→▯) button to exit.

Fine Tuning Channel Reception







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

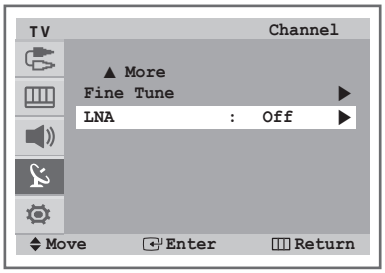
1. Press the **MENU** (▥) button to display the menu.
2. Press the ▲ or ▼ button to select **Channel**, then press the **ENTER** (↵) button.
3. Press the ▲ or ▼ button to select **Fine Tune**, then press the **ENTER** (↵) button.
4. To obtain a sharp and clear picture and good sound quality, press the ◄ or ► button to reach the required setting.
   The channel number changes to red and is marked with a "*".
5. To reset the fine tuning to **0**, select **Reset** by pressing the ▲ or ▼ button. Press the **ENTER** (↵) button.
6. Press the **EXIT** (→▯) button to exit.

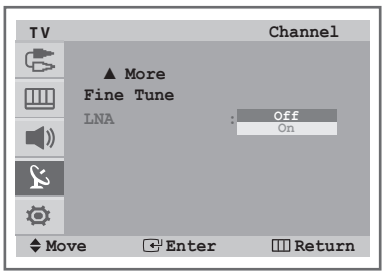
Using the LNA (Low Noise Amplifier) Feature (depending on the model)

This function is very useful in the situation that the TV is used in weak signal.
LNA amplifies the TV signal in the weak signal area, a low-noise preamplifier boosts the incoming signal.

1. Press the **MENU** (▥) button to display the menu.
2. Press the ▲ or ▼ button to select **Channel**, then press the **ENTER** (↵) button.
3. Press the ▲ or ▼ button to select **LNA**, then press the **ENTER** (↵) button.
4. Select **Off** or **On** by pressing the ▲ or ▼ button, then press the **ENTER** (↵) button.
5. Press the **EXIT** (↩) button to exit.

➢
- Setting the **LNA** option to "**On**" may produce worse picture quality due to the current channel's signal condition. Hence, apply LNA On/Off selectively according to the picture quality that is currently displayed.
- Depending on areas, factory mode of LNA, will be set up as **On** or **Off**.





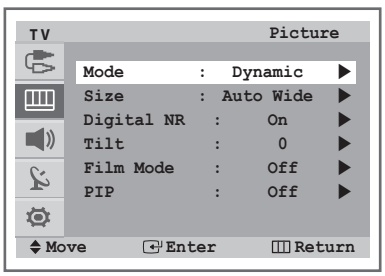
Picture Control

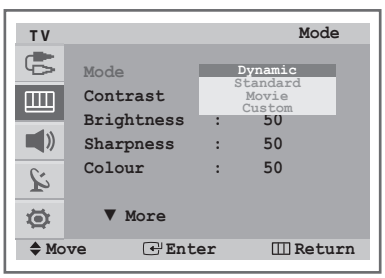
Changing the Picture Standard

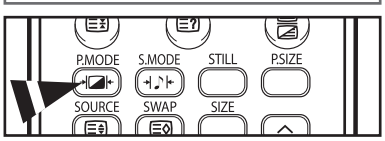
You can select the type of picture which best corresponds to your viewing requirements.

1. Press the **MENU** (▥) button to display the menu.
2. Press the ▲ or ▼ button to select **Picture**, then press the **ENTER** (↵) button.
3. Press the **ENTER** (↵) button twice to select **Mode**.
4. Press the ▲ or ▼ button to select the required option, then press the **ENTER** (↵) button.
   Available options: **Dynamic - Standard - Movie - Custom**
5. Press the **EXIT** (↩) button to exit.

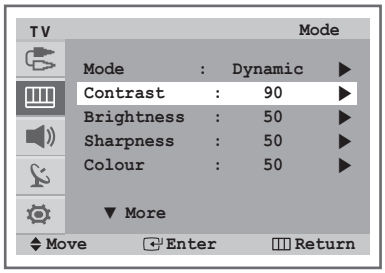
➢ You can also set these options simply by pressing the **P.MODE** (◪) button.

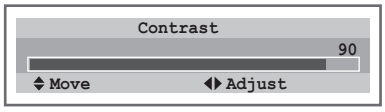


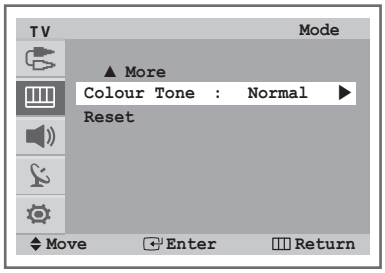


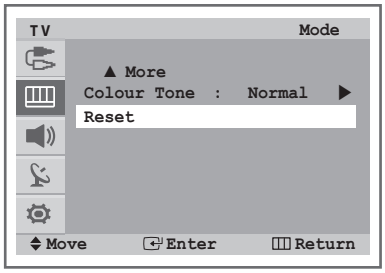


Adjusting the Picture Settings









Your television has several settings which allow you to control picture quality.

1 Press the **MENU** (▥) button to display the menu.

2 Press the ▲ or ▼ button to select **Picture**, then press the **ENTER** (↵) button.

3 Press the **ENTER** (↵) button twice to select **Mode**.

4 Press the ▲ or ▼ button to select the required option, then press the **ENTER** (↵) button.
Available options: **Dynamic - Standard - Movie - Custom**

5 Press the ▲ or ▼ button to select the option to be adjusted, then press the **ENTER** (↵) button.
Available options: **Contrast** - **Brightness** - **Sharpness** - **Colour** - **Tint**(NTSC only)

6 Press the ◄ or ► button to reach the required setting.

7 Press the **MENU** (▥) button.

8 Press the ▲ or ▼ button to select **Colour Tone**, then press the **ENTER** (↵) button.

9 Press the ▲ or ▼ button to select the required option, then press the **ENTER** (↵) button.
Available options: **Cool2 - Cool1 - Normal - Warm1 - Warm2**

Resetting the Picture Settings to the Factory Defaults

10 Press the ▲ or ▼ button to select **Reset**, then press the **ENTER** (↵) button.
The previously adjusted settings will be reset to the factory defaults.

11 Press the **EXIT** (→▯) button to exit.

- The reset function is set for each picture mode.
- The television has an "automatic degaussing" system that is activated if magnetic interference is present. To degauss the television screen, switch power off by pressing the "ⓘ" button (On/Off) on the front panel. (Refer to "Automatic Degaussing to Remove Colour Patches" on page 29.)

Selecting the Picture Size (depending on the model)

You can select the picture size which best corresponds to your viewing requirements.

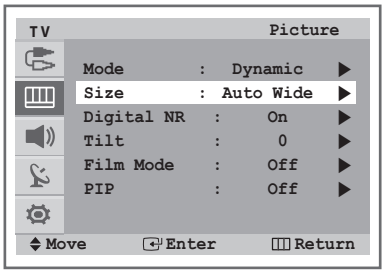
1 Press the **MENU** (▥) button to display the menu.

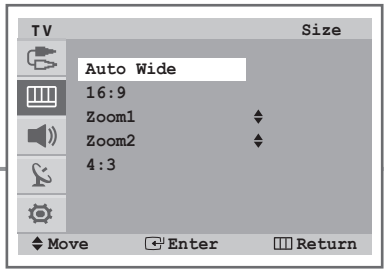
2 Press the ▲ or ▼ button to select **Picture**, then press the **ENTER** (↵) button.

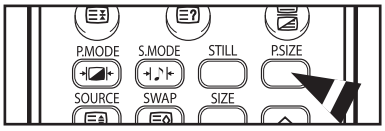
3 Press the ▲ or ▼ button to select **Size**, then press the **ENTER** (↵) button.

4 Press the ▲ or ▼ button to select the required option, then press the **ENTER** (↵) button.
Available options:
- **Normal**, **Zoom1**, **Zoom2** (Normal model)
- **Auto Wide**, **16:9**, **Zoom1**, **Zoom2**, **4:3** (Wide model)
  Lifting is available in the **Zoom1** or **Zoom2** mode by pressing the ▲ or ▼ button.

5 Press the **EXIT** (⇥▯) button to exit.







- **Normal**: Sets the picture to 4:3 normal mode.
  Zoom1: Magnifies the size of the picture on the screen.
  Zoom2: Expands the Zoom1 format picture.
- **Auto Wide**: Expanding and pulling up the picture from 4:3 to 16:9 ratio.
  16:9: Sets the picture to 16:9 wide mode.
  Zoom1: Magnifies the size of the picture on the screen.
  Zoom2: Expands the Zoom1 format picture.
  4:3: Sets the picture to 4:3 normal mode.

✱ Available Picture Size for Component and HDMI Mode.

	Normal Model				Wide Model				
Mode	Normal	Zoom1	Zoom2	Wide	Auto Wide	16:9	Zoom1	Zoom2	4:3
480i/576i	O	O	O	X	O	O	O	O	O
480p/576p	O	X	X	X	X	O	X	X	O
720p/1080i	O	X	X	O	X	O	X	X	X

➢ You can also set these options simply by pressing the **P.SIZE** button.

Setting the Digital Noise Reduction

If the signal received by your television is weak, you can activate this feature to reduce any static and ghosting that may appear on the screen.

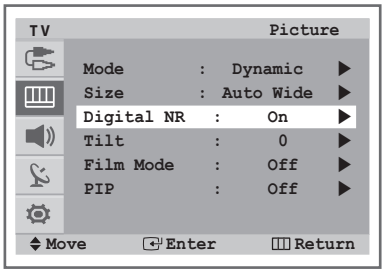
1 Press the **MENU** (▥) button to display the menu.

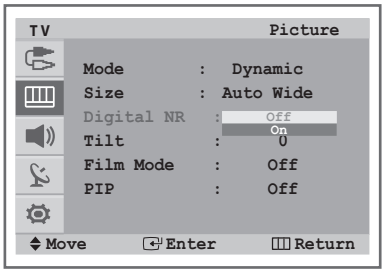
2 Press the ▲ or ▼ button to select **Picture**, then press the **ENTER** (↵) button.

3 Press the ▲ or ▼ button to select **Digital NR**, then press the **ENTER** (↵) button.

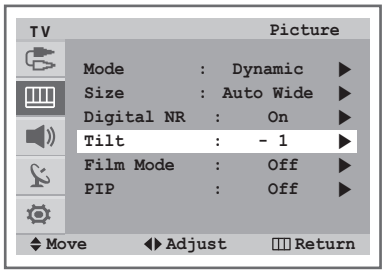
4 Select **Off** or **On** by pressing the ▲ or ▼ button, then press the **ENTER** (↵) button.

5 Press the **EXIT** (⇥▯) button to exit.





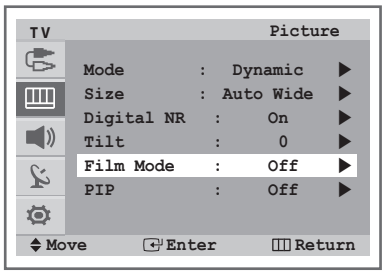
Using the Tilt Control Feature (depending on the model)

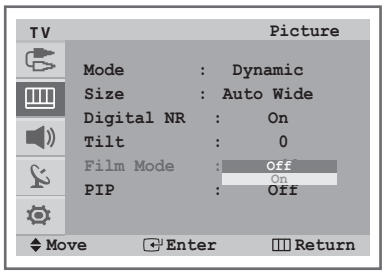


If you find that the picture received is slightly tilted to one side, you can adjust the tilt setting.

1. Press the **MENU** (▥) button to display the menu.
2. Press the ▲ or ▼ button to select **Picture**, then press the **ENTER** (↵) button.
3. Press the ▲ or ▼ button to select **Tilt**.
4. Press the ◄ or ► button to reach the required setting (**-7** to **+7**).
5. Press the **EXIT** (→▯) button to exit.

Selecting the Film Mode





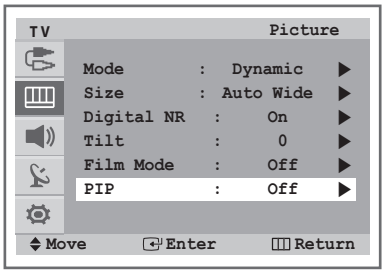
You can automatically sense and process film signals from some sources and adjust the picture for optimum quality.

1. Press the **MENU** (▥) button to display the menu.
2. Press the ▲ or ▼ button to select **Picture**, then press the **ENTER** (↵) button.
3. Press the ▲ or ▼ button to select **Film Mode**, then press the **ENTER** (↵) button.
4. Select **Off** or **On** by pressing the ▲ or ▼ button, then press the **ENTER** (↵) button.
5. Press the **EXIT** (→▯) button to exit.

➢
- Not available in the Component or HDMI mode.
- Mode discrepancies, such as turning off **Film Mode** while viewing a film source or turning on **Film Mode** while viewing Non-film sources, may affect the picture quality.

Viewing the Picture In Picture (PIP) (depending on the model)

You can display a sub picture within the main picture of TV program or external A/V devices such as VCR or DVD. In this way you can watch TV program or monitor the video input from any connected devices while watching TV or other video input.



Activating Picture In Picture

1 Press the **MENU** (▥) button to display the menu.

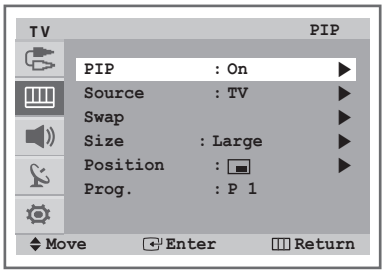
2 Press the ▲ or ▼ button to select **Picture**, then press the **ENTER** (↵) button.

3 Press the ▲ or ▼ button to select **PIP**, then press the **ENTER** (↵) button.

4 Press the **ENTER** (↵) button again.

5 Select **Off** or **On** by pressing the ▲ or ▼ button, then press the **ENTER** (↵) button.

➢ You can also activate the PIP simply by pressing the **PIP** button. To deactivate, press it again.



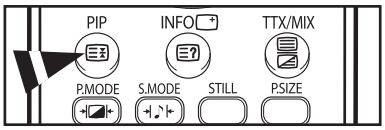


Table of PIP Settings

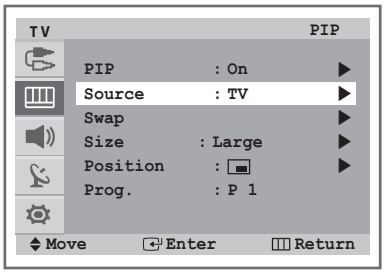
X : This PIP combination is not available.
O : This PIP combination is available.

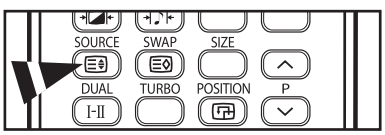
Sub Picture / Main Picture	TV	EXT 1	EXT 2	AV/S-Video	Component	HDMI
TV	O	O	O	O	X	X
EXT 1	O	O	O	O	X	X
EXT 2	O	O	O	O	X	X
AV/S-Video	O	O	O	O	X	X
Component	X	X	X	X	X	X
HDMI	X	X	X	X	X	X

Selecting a Signal Source for PIP

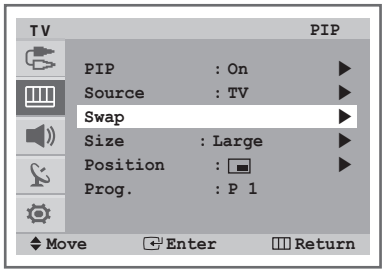
6 Press the ▲ or ▼ button to select **Source**, then press the **ENTER** (↵) button.
Press the ▲ or ▼ button to select a source of the sub picture, then press the **ENTER** (↵) button.

➢ You can select these options simply by pressing the **SOURCE** button.





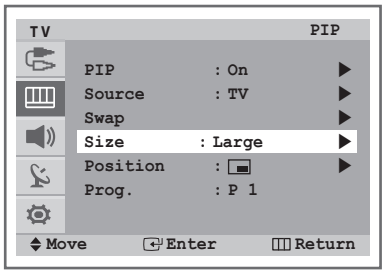
continued...



Swapping the Contents of the PIP and Main Picture

7 Press the ▲ or ▼ button to select **Swap**, then press the **ENTER** (↵) button.
The main picture and the sub picture are interchanged.

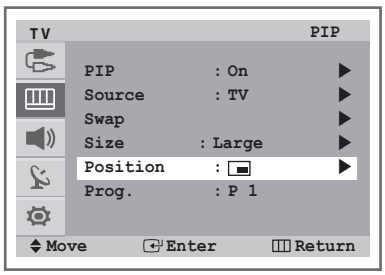
➢ You can also interchange the main picture and the sub picture simply by pressing the **SWAP** button.



Changing the Size of the PIP Window

8 Press the ▲ or ▼ button to select **Size**, then press the **ENTER** (↵) button.
Press the ▲ or ▼ button to select a size of the sub picture, then press the **ENTER** (↵) button.
Available options: **Large - Small - Double Window**

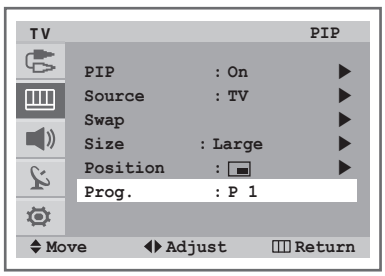
➢ You can select these options simply by pressing the **SIZE** button.



Changing the Position of the PIP Window

9 Press the ▲ or ▼ button to select **Position**, then press the **ENTER** (↵) button.
Press the ▲ or ▼ button to select a position of the sub picture, then press the **ENTER** (↵) button.
Available options: ▄ - ▀ - ▐ - ▌

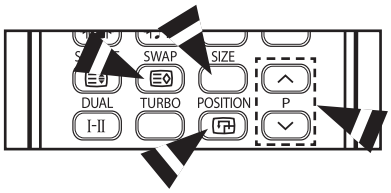
➢ You can select these options simply by pressing the **POSITION** (⧉) button.



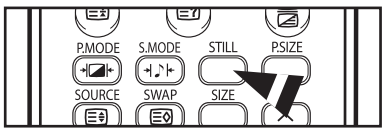
Changing the PIP Channel

10 Press the ▲ or ▼ button to select **Prog.**, then press the **ENTER** (↵) button.
Press the ◄ or ► button to select the channel of the sub picture, then press the **ENTER** (↵) button.

➢
- ◆ You can select the channel of the sub picture simply by pressing the P ∧ or ∨ button.
- ◆ When the **Source** is set to **TV**, you can select the channel of sub picture.



Freezing the Current Picture



You can freeze the picture when watching a television programme simply by pressing the **STILL** button.

➢
- ◆ To return to normal viewing, press this button again.
- ◆ Not available in Component/HDMI mode.

Sound Control

Changing the Sound Standard

You can select the type of special sound effect to be used when watching a given broadcast.

1 Press the **MENU** (▥) button to display the menu.

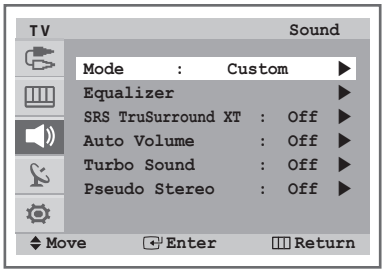
2 Press the ▲ or ▼ button to select **Sound**, then press the **ENTER** (↵) button.

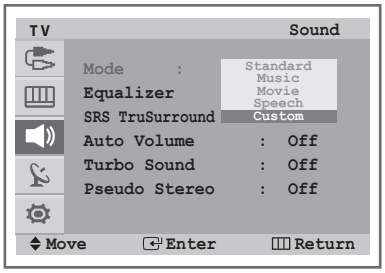
3 Press the **ENTER** (↵) button again to select **Mode**.

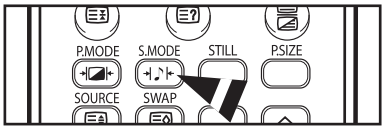
4 Press the ▲ or ▼ button to select the required option, then press the **ENTER** (↵) button.
Available options: **Standard - Music - Movie - Speech - Custom**

5 Press the **EXIT** (⇥) button to exit.

➢ You can also set these options simply by pressing the **S.MODE** (♪) button.







Adjusting the Sound Settings (depending on the model)

The sound settings can be adjusted to suit your personal preferences.

1 Press the **MENU** (▥) button to display the menu.

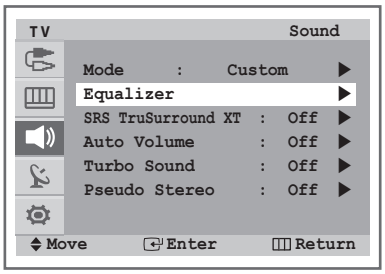
2 Press the ▲ or ▼ button to select **Sound**, then press the **ENTER** (↵) button.

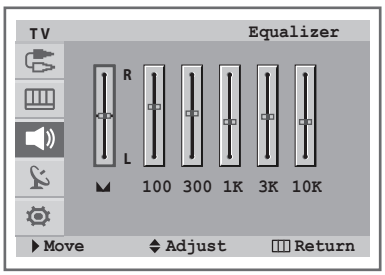
3 Press the ▲ or ▼ button to select **Equalizer**, then press the **ENTER** (↵) button.

4 Press the ◄ or ► button to select the option to be adjusted, then press the ▲ or ▼ button to reach the required setting.

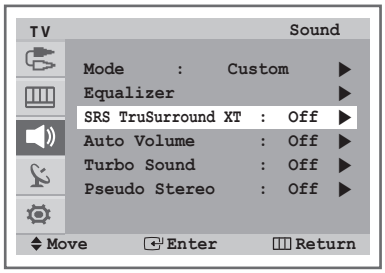
5 Press the **EXIT** (⇥) button to exit.

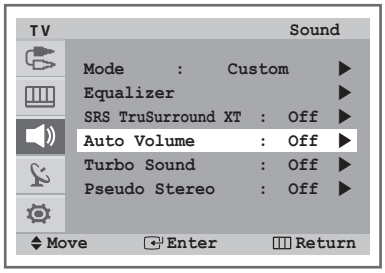
➢ If you make any changes to these settings, the sound standard is automatically switched to **Custom**.

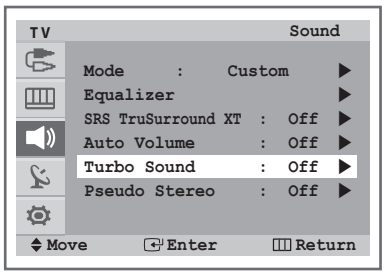


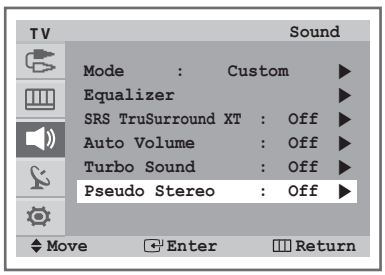


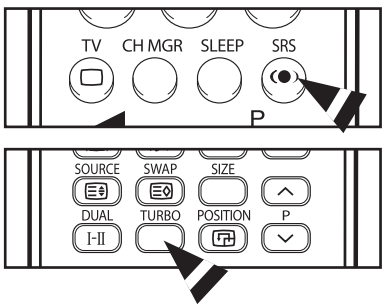
Extra Sound Settings (depending on the model)











◆ **SRS TruSurround XT**

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

◆ **Auto Volume**

Each broadcasting station has its own signal conditions, and so it is not easy for you 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.

◆ **Turbo Sound**

This feature suitably emphasizes both higher and lower bands of sound (and includes other effects). You can enjoy more magnificent and dynamic sound when watching music, movie or other channels.

◆ **Pseudo Stereo**

Pseudo Stereo feature converts a monaural sound signal into two identical left and right channels. Once the **Pseudo Stereo** is set to **On** or **Off**, these settings apply to the sound effects such as **Standard**, **Music**, **Movie**, and **Speech**.

1 Press the **MENU** (▥) button to display the menu.

2 Press the ▲ or ▼ button to select **Sound**, then press the **ENTER** (↵) button.

3 Press the ▲ or ▼ button to select the required option (**SRS TruSurround XT**, **Auto Volume**, **Turbo Sound**, or **Pseudo Stereo**), then press the **ENTER** (↵) button.

4 Select **Off** or **On** by pressing the ▲ or ▼ button, then press the **ENTER** (↵) button.

5 Press the **EXIT** (→▯) button to exit.

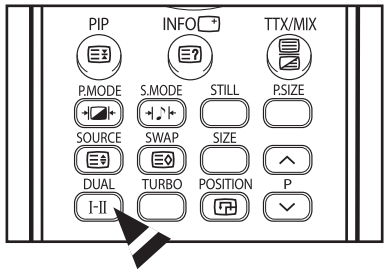
➢
- ◆ You can select the turbo sound feature simply by pressing the **TURBO** button.
- ◆ SRS TruSurround XT and Turbo Sound can not be both set to "On".
- ◆ You can select these options simply by pressing the **SRS** (◉) button.
- ◆ TruSurround XT, SRS and (◉) Symbol are trademarks of SRS Labs, Inc. TruSurround XT technology is incorporated under license from SRS Labs, Inc.

SRS(◉) TruSurround XT

Selecting the Sound Mode (depending on the model)

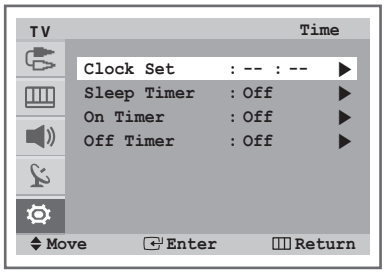
The **DUAL I-II** button displays/controls the processing and output of the audio signal. When power is switched on, the mode is automatically preset to either "Dual-I " or "Stereo", depending on the current transmission.

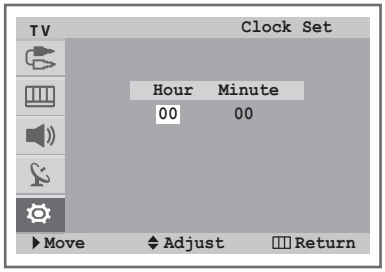
	Type of broadcast	On-screen indication
NICAM Stereo	Regular broadcast (Standard audio)	**Mono** (Normal use)
	Regular + NICAM Mono	**Mono** **NICAM** ↔ **Mono** (Normal)
	NICAM Stereo	**Stereo** **NICAM** ↔ **Mono** (Normal)
	NICAM Dual-I/II	**Dual-I** **NICAM** → **Dual-II** **NICAM** → **Mono** (Normal)
A2 Stereo	Regular broadcast (Standard audio)	**Mono** (Normal)
	Bilingual or Dual-I/II	**Dual-I** ↔ **Dual-II**
	Stereo	**Stereo** ↔ **Mono** (Forced mono)

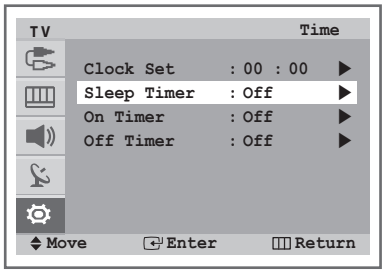


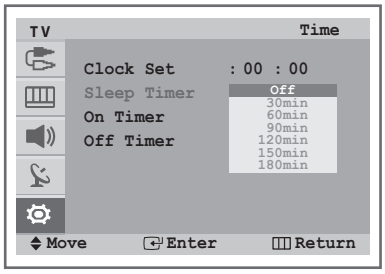
- If the receiving conditions deteriorate, listening will be easier if the mode is set to the **Mono**.
- If the stereo signal is weak and an automatic switching occurs, then switch to the **Mono**.
- When receiving a mono sound in the AV mode, connect to the "AUDIO-L" input connector on the panel (front or side). If the mono sound comes out only from left speaker, press the **DUAL I-II** button.

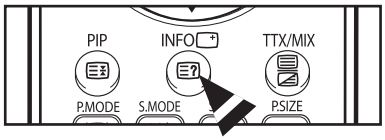
Setting the Time

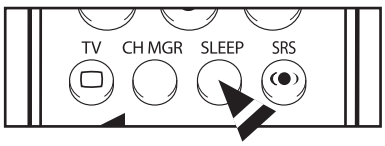












Setting and Displaying the Current Time

You can set the television's clock so that the current time is displayed by pressing the **INFO** ( ) button. You must also set the time if you wish to use the automatic on or off timers.

➢ When pressing the "⏻" button (On/Off) on the television, the clock setting will be reset.

1 Press the **MENU** ( ) button to display the menu.

2 Press the ▲ or ▼ button to select **Setup**, then press the **ENTER** ( ) button.

3 Press the ▲ or ▼ button to select **Time**, then press the **ENTER** ( ) button.

4 Press the **ENTER** ( ) button again.

5 Press the ◄ or ► button to move to **Hour** or **Minute**. Set the hour or minute by pressing the ▲ or ▼ button.

6 Press the **ENTER** ( ) button.

7 Press the **EXIT** ( ) button to exit.

Setting the Sleep Timer

You can set your TV to automatically turn off after a preset interval.

1 Press the **MENU** ( ) button to display the menu.

2 Press the ▲ or ▼ button to select **Setup**, then press the **ENTER** ( ) button.

3 Press the ▲ or ▼ button to select **Time**, then press the **ENTER** ( ) button.

4 Press the ▲ or ▼ button to select **Sleep Timer**, then press the **ENTER** ( ) button.

5 Press the ▲ or ▼ button to select the preset time interval (**Off**, **30min**, **60min**, **90min**, **120min**, **150min**, **180min**) for staying on, then press the **ENTER** ( ) button.

6 Press the **EXIT** ( ) button to exit.

➢ You can select a time period of between 30 and 180 minutes after the television automatically switches to standby mode by pressing the **SLEEP** button.

Switching the Television On and Off Automatically

You can set the On/Off timers so that the television will:

- Switch on automatically and tune to the channel of your choice at the time you select
- Switch off automatically at the time you select

➢ The first step is to set the television's clock (refer to "Setting and Displaying the Current Time" on the page 24). If you have not yet set the clock, the message **Set the clock first** is displayed.

1 Press the **MENU** (▥) button to display the menu.

2 Press the ▲ or ▼ button to select **Setup**, then press the **ENTER** (↵) button.

3 Press the ▲ or ▼ button to select **Time**, then press the **ENTER** (↵) button.

4 Press the ▲ or ▼ button to select **On Timer**, then press the **ENTER** (↵) button.

5 Press the ◄ or ► button to move to **Hour**, **Minute**, **Prog.**, or **Volume**. Set these by pressing the ▲ or ▼ button.

6 Press the ◄ or ► button to move to **Activation**, then press the ▲ or ▼ button to select **Yes**.

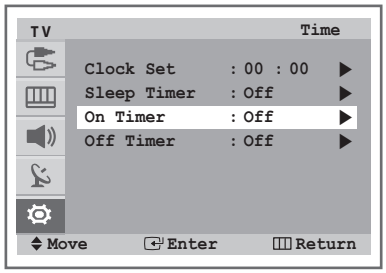
7 Press the **MENU** (▥) button.

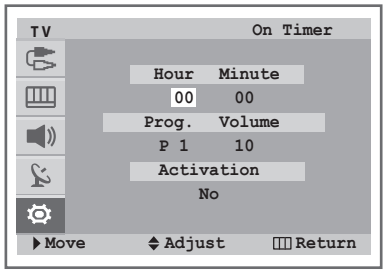
8 Press the ▲ or ▼ button to select **Off Timer**. In the same above, set the time at which you wish the television to be switched off automatically.

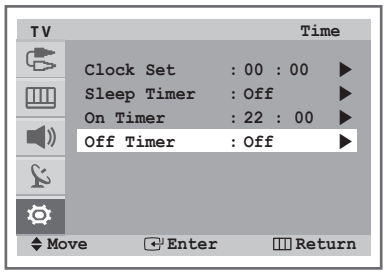
9 Press the **EXIT** (⇥) button to exit.

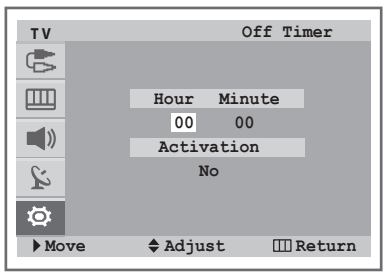
➢ You can set the hour and minute directly by pressing the numeric buttons on the remote control.

➢ **Absent Power Off**
When you set the timer "On", your television will eventually be turned off, if you do not operate any controls during the 3 hours after the TV is turned on by timer. This function is available in only the timer "On" mode and will prevent a leakage accident or overheating, caused by your TV left on for a long time due to the timer "On" (when you are away on holiday, for example).

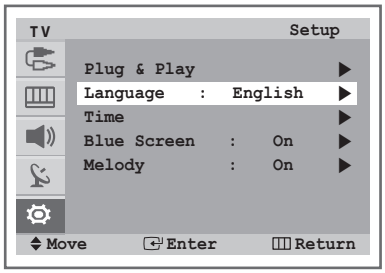








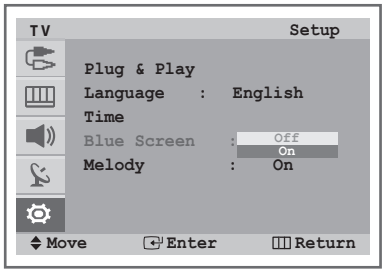
Choosing Your Language



When you start using your television for the first time, you must select the language which will be used for displaying menus and indications.

1. Press the **MENU** (▥) button to display the menu.
2. Press the ▲ or ▼ button to select **Setup**, then press the **ENTER** (↵) button.
3. Press the ▲ or ▼ button to select **Language**, then press the **ENTER** (↵) button.
4. Press the ▲ or ▼ button to select the appropriate language, then press the **ENTER** (↵) button.
5. Press the **EXIT** (→▯) button to exit.

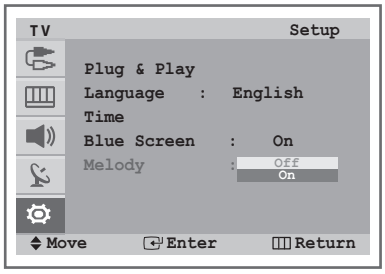
Setting the Blue Screen



If no signal is being received or the signal is very weak, a blue screen automatically replaces the noisy picture background. If you wish to continue viewing the poor picture, you must set the "Blue Screen" mode to "Off".

1. Press the **MENU** (▥) button to display the menu.
2. Press the ▲ or ▼ button to select **Setup**, then press the **ENTER** (↵) button.
3. Press the ▲ or ▼ button to select **Blue Screen**, then press the **ENTER** (↵) button.
4. Select **Off** or **On** by pressing the ▲ or ▼ button, then press the **ENTER** (↵) button.
5. Press the **EXIT** (→▯) button to exit.

Selecting the Melody

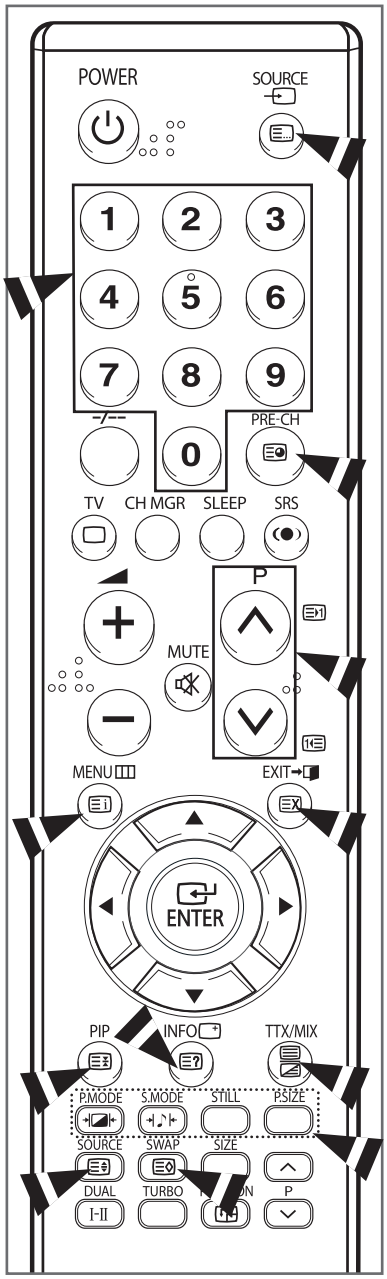


You can hear melody sound when the television is powered on or off.

1. Press the **MENU** (▥) button to display the menu.
2. Press the ▲ or ▼ button to select **Setup**, then press the **ENTER** (↵) button.
3. Press the ▲ or ▼ button to select **Melody**, then press the **ENTER** (↵) button.
4. Select **Off** or **On** by pressing the ▲ or ▼ button, then press the **ENTER** (↵) button.
5. Press the **EXIT** (→▯) button to exit.

Teletext Feature (depending on the model)

Most television stations provide written information services via teletext.
The index page of the teletext service gives you information on how to use the service. In addition, you can select various options to suit your requirements by using the remote control buttons.



☛ For teletext information to be displayed correctly, channel reception must be stable. Otherwise, information may be missing or some pages may not be displayed.

◆ **(teletext on/mix)**
Press to activate teletext mode after selecting the channel providing the teletext service. Press it again to overlap the teletext with the current broadcasting screen.

◆ **(sub-page)**
Used to display the available sub-page.

◆ **(size)**
Press to display the double-size letters in the upper half of the screen. For lower half of the screen, press it again. To display normal screen, press it once again.

◆ **(store)**
Used to store the teletext pages.

◆ **(hold)**
Used to 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.

◆ **(page up)**
Used to display the next teletext page.

◆ **(mode)**
Press to select the teletext mode (LIST/FLOF). If you press it in the LIST mode, it switches into the List save mode. In the List save mode, you can save teletext page into list using the (store) button.

◆ **(page down)**
Used to display the previous teletext page.

◆ **(index)**
Used to display the index (contents) page at any time while you are viewing teletext.

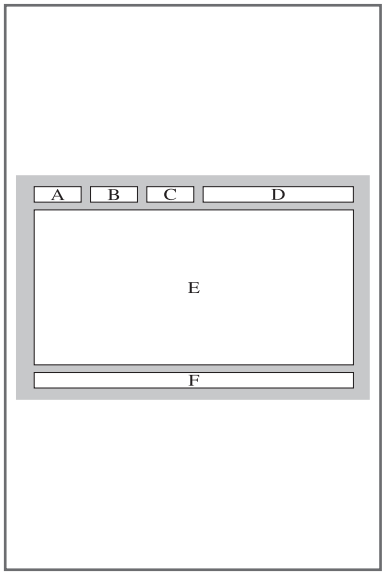
◆ **(reveal)**
Used to display the hidden text (answers to quiz games, for example). To display normal screen, press it again.

◆ **Coloured 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.

◆ **(cancel)**
Used to display the broadcast when searching for a page.

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

continued...



The teletext pages are organized according to six categories:

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

➢ Teletext information is often divided between several pages displayed in sequence, which can be accessed by:

- ◆ Entering the page number
- ◆ Selecting a title in a list
- ◆ Selecting a coloured heading (FASTEXT system)

➢ Press the **TV** (▭) button to exit from the teletext display.

Appendix

Automatic Degaussing to Remove Colour Patches

A degaussing coil is mounted around the picture tube, so you do not normally need to degauss the television manually.

If you move the television to a different position and colour patches appear on the screen, you must:

- **Switch the television off by pressing the "⏻" button (On/Off) on the television**
- **Unplug the television from the wall socket**
- **Leave the television power-off for about 30 minutes so that the automatic degauss function can be activated, and then press the "POWER " button on the remote control.**

☛ **If your television will be left unattended, press the "⏻" button (On/Off) to turn your television off.**

Troubleshooting: Before Contacting Service Personnel

Before contacting Samsung after-sales service, perform the following simple checks.
If you cannot solve the problem using the instructions below, note the model and serial number of the television and contact your local dealer.

No sound or picture	◆ Check that the mains lead has been connected to a wall socket. ◆ Check that you have pressed the "⏻" button (On/Off) and the **POWER** button. ◆ Check the picture contrast and brightness settings. ◆ Check the volume.
Normal picture but no sound	◆ Check the volume. ◆ Check whether the volume **MUTE** (🔇) button on the remote control has been pressed.
No picture or black and white picture	◆ Adjust the colour settings. ◆ Check that the broadcast system selected is correct.
Sound and picture interference	◆ Try to identify the electrical appliance that is affecting the television, then move it further away. ◆ Plug your television into a different mains socket.
Blurred or snowy picture, distorted sound	◆ Check the direction, location and connections of your aerial. This interference often occurs due to the use of an indoor aerial.
Remote control malfunctions	◆ Replace the remote control batteries. ◆ Clean the upper edge of the remote control (transmission window). ◆ Check the battery terminals.

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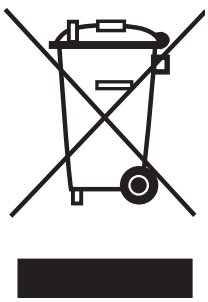

Correct Disposal of This Product

(**W**aste **E**lectrical & **E**lectronic **E**quipment)

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

This marking shown on the product or its literature, indicates that it should not be disposed with other household wastes at the end of its working life. To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate this from other types of wastes and recycle it 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 this item for environmentally safe recycling.

Business users should contact their supplier and check the terms and conditions of the purchase contract. This product should not be mixed with other commercial wastes for disposal.

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

Country	Customer Care Centre ☎	Web Site
BELGIUM	02 201 2418	www.samsung.com/be
CZECH REPUBLIC	844 000 844	www.samsung.com/cz
DENMARK	38 322 887	www.samsung.com/dk
FINLAND	09 693 79 554	www.samsung.com/fi
FRANCE	08 25 08 65 65 (€ 0,15/Min)	www.samsung.com/fr
GERMANY	01805 - 121213 (€ 0,12/Min)	www.samsung.de
HUNGARY	06 40 985 985	www.samsung.com/hu
ITALIA	199 153 153	www.samsung.com/it
LUXEMBURG	02 261 03 710	www.samsung.lu
NETHERLANDS	0900 20 200 88 (€ 0,10/Min)	www.samsung.com/nl
NORWAY	231 627 22	www.samsung.com/no
POLAND	0 801 801 881	www.samsung.com/pl
PORTUGAL	80 8 200 128	www.samsung.com/pt
RUSSIA	8-800-200-0400	www.samsung.ru
SLOVAKIA	0850 123 989	www.samsung.com/sk
SPAIN	902 10 11 30	www.samsung.com/es
SWEDEN	08 585 367 87	www.samsung.com/se
U.K	0870 242 0303	www.samsung.com/uk
UKRAINE	8-800-502-0000	www.samsung.com/ur