

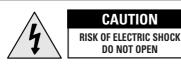
LCD TV LW24R15W

Owner's Instructions

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

ON-SCREEN MENUS
PC DISPLAY
PICTURE IN PICTURE (PIP)
PICTURE BY PICTURE (PBP)
TELETEXT

Caution





CAUTION: TO PREVENT ELECTRICAL SHOCK, DO NOT REMOVE REAR COVER, NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

The lightning flash and arrow head within the triangle is a warning sign alerting you of "dangerous voltage" inside the product.



The exclamation point within the triangle is a warning sign alerting you of important instructions accompanying the product.



WARNING: TO PREVENT DAMAGE WHICH MAY RESULT IN FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.



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

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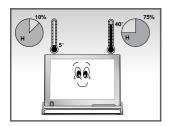
European Notice

Products with the CE Marking comply with both the EMC Directive (89/336/EEC), (92/31/EEC), (93/68/EEC) and the Low Voltage Directive (73/23/EEC) issued by the Commission of the European Community. Compliance with these directives implies conformity to the following European Norms:

- EN55022:1998+A1:2000 Radio Frequency Interference
- EN55024:1998 Electromagnetic Immunity
- EN55013:1990+A12:1994+A13:1996+A14:1999 Radio Frequency Interference
- EN55020:1994+A11:1996+A12/A13/A14:1999 Electromagnetic Immunity
- EN61000-3-2:1995+A1/A2:1998 Power Line Harmonics
- EN61000-3-3:1995 Voltage Fluctuations
- EN60065:1997 or EN60095:1998 Product Safety

Safety Instructions

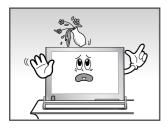
These illustrations represent precautions concerning your TV.



 Do NOT expose the TV to extreme temperature conditions or to extreme humidity conditions.



Do NOT expose the TV to direct sunlight.



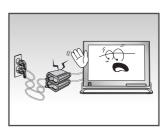
 Do NOT expose the TV to any liquids.



If the TV is broken, do not try to repair it yourself. Contact qualified service personnel.



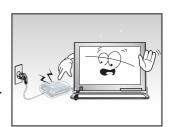
 During a storm conditions (especially when there is lightning) unplug the TV from the mains socket and aerial.



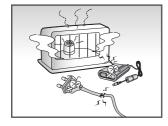
Keep all power adaptors apart. Possible fire hazard.



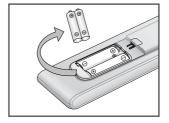
 Always keep the power adaptor in a well-ventilated area.



Remove and discard the plastic
cover from the power adaptor before
use. Possible fire hazard.



 Keep the power adaptor away from any other heater. Possible fire hazard.



If the remote control is not used for a long period of time, remove the batteries and store it in a cool, dry place.

THIS DEVICE IS NOT FOR USE IN INDUSTRIAL ENVIRONMENTS

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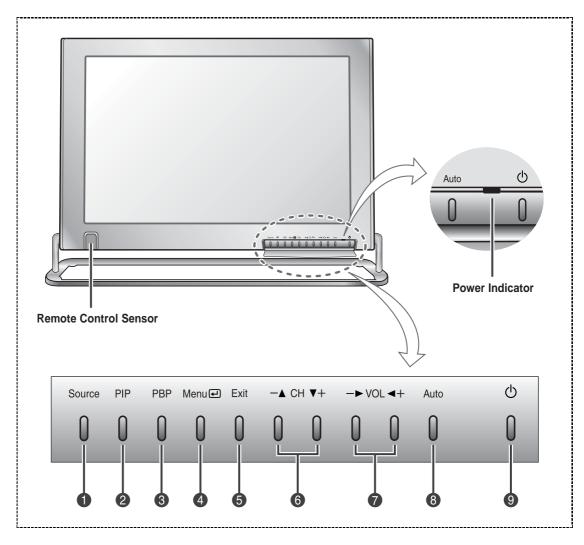
Symbols



Important



Viewing the Control Panel



Source

Displays a menu of all of the available input sources (TV/Video/S-Video/DVD/DTV/PC).

2 PIP

Activates PIP (Picture-In-Picture)

A DRD

Activates PBP (Picture-By-Picture).

Menu

 —

Opens the OSD and selects the function.

6 Exit

Exit from the on-screen menu.

6 -▲ CH ▼+

Moves the selector up or down on the OSD. Increases or decreases the channel number.

7 -▶ VOL **4**+

Moves the selector left or right on the OSD. Increases or decreases the level of audio volume and the values of the selected function.

Auto

Allows you experience the quality of displayed picture. The values of fine, coarse and position are adjusted automatically. (It works PC mode only.)

(Power)
Turns ON/OFF your set.

Installing on the Wall

1 Removing the Stand

Using a hexagonal wrench, remove the stand.

2 Removing Rubbers

Remove the four rubbers from the edges.

3 Mounting on the Wall

Mount the stand on the wall using screws or nails.

4 Fixing the Set

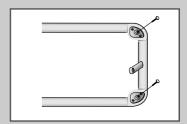
Using a hexagonal wrench, fix your set into the stand.

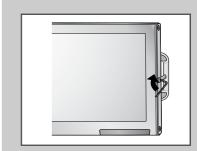
Installation Notes

- Do not install your set on any place other than vertical walls.
- ◆ To protect the performance of your set and prevent troubles, avoid the followings:
 - Do not install next to smoke and fire detectors.
 - Do not install in an area subjected to vibration or high voltage.
 - Do not install in the wall.
 - Do not install near or around any heating apparatus.
- ◆ Use only recommended parts and components.

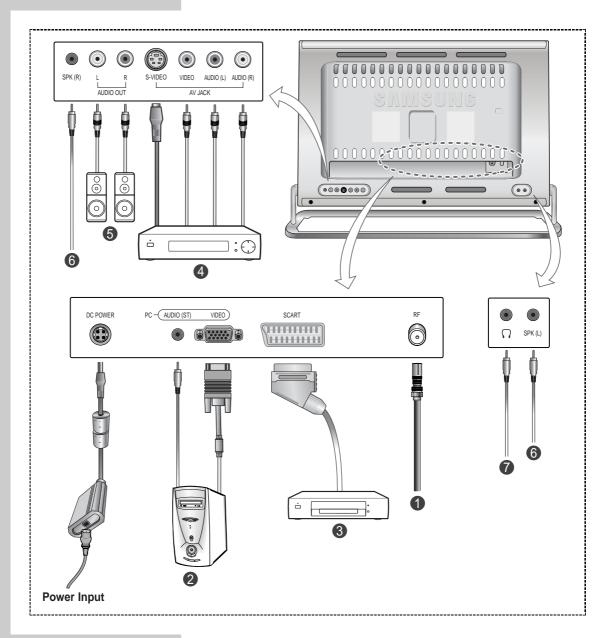








Viewing the Connection Panel



Whenever you connect an audio or video system to your set, ensure that <u>all</u> elements are switched <u>off</u>. Refer to the documentation supplied with your equipment for detailed connection instructions and associated safety precautions.

Viewing the Connection Panel (continued)

1 Connecting an Aerial or Cable Television Network (depending on the model)

To view television channels correctly, a signal must be received by the set from one of the following sources:

- An outdoor aerial
- A cable television network
- A satellite network

2 Connecting Computer

- Connect the 15 Pin D-SUB connector to the PC video connector.
- Connect the stereo audio cable to "Audio (ST)" on the rear of your set and the other end to "Audio Out" of the sound card on your computer.
- If necessary, please install monitor driver contained on the accompanied CD. For more information, refer to the driver installation instructions included with your CD package.

> 15 Pin D-SUB connector

Pin	Separate H/V	Composite H/V	Sync-on-green
1	Red (R)	Red (R)	Red (R)
2	Green (G)	Green (G)	Green (G) + Horizontal/Vertical sync.
3	Blue (B)	Blue (B)	Blue (B)
4	Grounding	Grounding	Grounding
5	Grounding (DDC)	Grounding (DDC)	Grounding (DDC)
6	Red (R) Grounding	Red (R) Grounding	Red (R) Grounding
7	Green (G) Grounding	Green (G) Grounding	Green (G) Grounding
8	Blue (B) Grounding	Blue (B) Grounding	Blue (B) Grounding
9	No connection	No connection	Not used
10	Sync Grounding	Sync Grounding	Sync Grounding
11	Grounding	Grounding	Grounding
12	Data (DDC)	Data (DDC)	Data (DDC)
13	Horizontal sync.	Horizontal/Vertical sync.	Not used
14	Vertical sync.	Not used	Not used
15	Clock (DDC)	Clock (DDC)	Clock (DDC)



Viewing the Connection Panel

3 Connecting DTV Set-Top Box, VCR, or DVD

- Connect the DTV, VCR, or DVD SCART cable to the SCART connector of the DTV, VCR, or DVD.
- If you wish to connect both the DTV Set-Top Box and VCR (or DVD), you should connect the DTV Set-Top Box to the VCR (or DVD) and connect the VCR (or DVD) to your set.

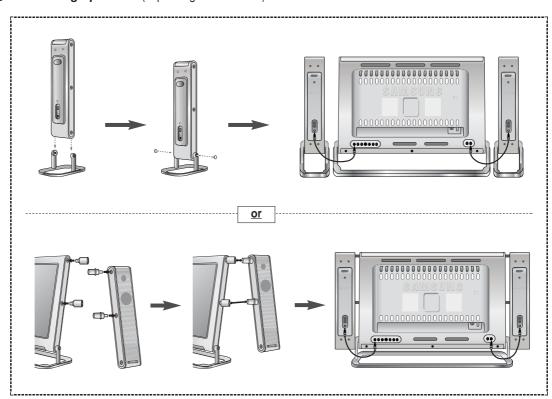
4 Connecting External A/V Devices

- Connect RCA or S-VIDEO cable to an appropriate external A/V device such as VCR, DVD, or Camcorder.
- Connect RCA audio cables to "AUDIO (L)" and "AUDIO (R)" on the rear of your set and the other ends to corresponding audio out connectors on the A/V device.
- Headphone may be connected to the headphone output (1) on the rear of your set. While the headphone is connected, the sound from the built-in speakers will be disabled.

6 Connecting External Speakers

Connect RCA audio cables to amplifier built-in speakers (to take full advantage of the Surround sound effect).

6 Connecting Speakers (depending on the model)



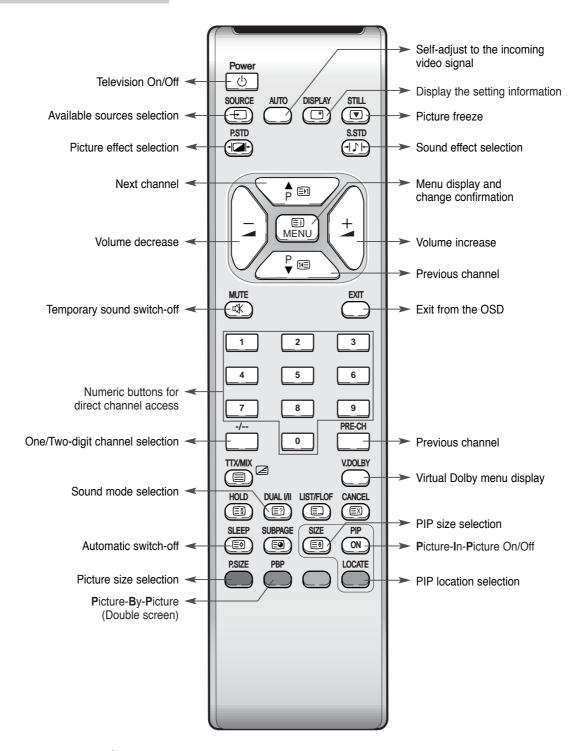
Viewing Pictures From External Sources

Once you have connected up your various audio and video systems, you can view the different sources by selecting the appropriate input.

- 1 Check that all the necessary connections have been made (refer to pages 8 and 9 for further details).
- Switch your set on and if necessary, press the SOURCE button repeatedly. The input sources are displayed in the following order:
 Ant (TV) Scart Video S-Video PC.

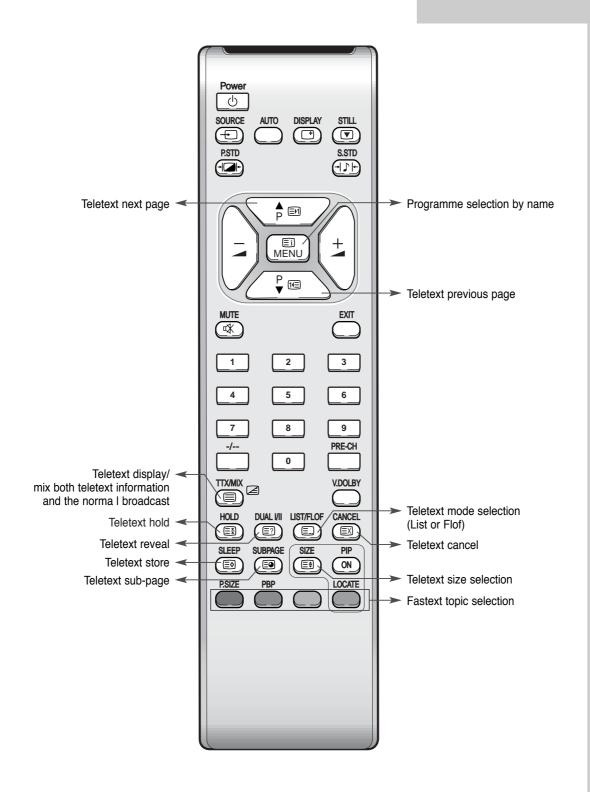


Viewing the Remote Control (All Functions Except Teletext)

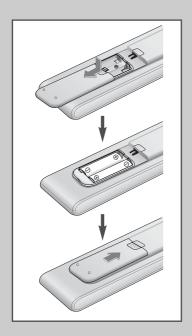


The performance of the remote control may be affected by bright light.

Viewing the Remote Control (Teletext Functions)



Inserting the Batteries in the Remote Control

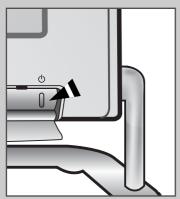


You must insert or replace the batteries in the remote control when you:

- Purchase your set
- Find that the remote control is no longer operating correctly
- 1 Remove the cover on the rear of the remote control by pressing the symbol downwards and then pulling firmly to remove it.
- 2 Insert two R03, UM4, "AAA" 1.5V or equivalent batteries taking care to respect the polarities:
 - + on the battery against + on the remote control
 - on the battery against on the remote control
- Replace the cover by aligning it with the base of the remote control and pressing it back into place.
- Do not mix battery types, i.e. alkaline and monganese.

Switching On and Off





The mains lead is attached to the rear of your set.

If you have purchased this set in the United Kingdom, refer to page 39 for further instructions on plug wiring.

Plug the mains lead into an appropriate socket.

Result:

The screen is turned on and a green Standby indicator appears on the front of your set.

Your set can be placed in Standby mode, in order to reduce the power

The Standby mode can be useful when you wish to interrupt viewing temporarily (during a meal, for example).

Press the **Power** (**b**) button on the remote control or the front of your

The screen is turned off and a green Standby indicator Result: disappears on the front of your set.

2 To switch your set back on, simply press the **Power** (b) button again.

Do not leave your set in Standby mode for long periods of time (when you are away on holiday, for example). Turn your set off by unpluging from the mains and aerial.

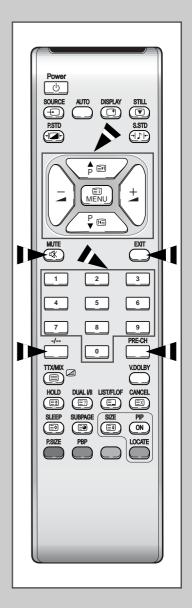
Becoming Familiar with the Remote Control

The remote control is used mainly to:

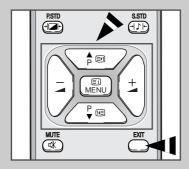
- ♦ Change channels and adjust the volume
- ♦ Set up your set using the on-screen menu system

The following table presents the most frequently used buttons and their functions.

Button	Viewing Function	Menu Function	
A P	Used to display the next stored channel.	Used to select the previous menu option.	
P ▼	Used to display the previous stored channel.	Used to select the next menu option.	
PRE-CH	Used to switch repeatedly displayed. (PRE-CH; Previ	between the last two channels ous Channel)	
o to 9	Used to display the corresp	onding channels.	
-/	Used to select a channel numbered ten or over. Press this button, and the "" symbol is displayed. Enter the two-digit channel number.		
	Used to decrease the volume.	Used to ◆ Display a submenu containing selections for the current menu option. ◆ Search forwards manually for channels ◆ Reduce a menu option value.	
+	Used to increase the volume.	Used to ◆ Display a submenu containing selections for the current menu option. ◆ Search backwards manually for channels ◆ Increase a menu option value.	
MUTE	Used to switch the sound off temporarily. To turn the sound back on, press this button again, or press the — - or — + button.		
MENU	Used to display the on-screen menu system.	Used to return to the previous menu or normal viewing.	
EXIT	Used to exit from the menu system and return to normal viewing directly.		



Choosing Your Language





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

1 Press the **MENU** button.

Result: The main menu is displayed.

2 Press the P▼ or P▲ button to select the Function.

Result: The options available in the Function group are displayed.

3 Press the -- or -+ button.

4 Press the P▼ or P▲ button to select the Language.

5 Select a particular language by pressing the -- or -- + button repeatedly.

When you are satisfied with your choice, press the **EXIT** button to return to normal viewing.

Storing Channels Automatically

You can scan for the frequency ranges available to you (and 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.

Result: The main menu is displayed.

2 Press the P▼ or P▲ button to select the Channel.

Result: The options available in the Channel group are displayed.

3 Press the - or + button.

Result: The Auto store is selected.

4 Press the -- or -+ button again.

Result: The options available in the Auto store group are displayed with the Country is selected.

5 Select your country by pressing the -- or -- + button repeatedly. The following countries are available:

Belgie - Deutschland - Espania - France - Italia - Nederland - Schweiz - Sverige - UK - East Europe.

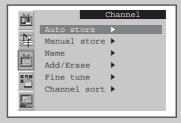
6 Press the P▼ or P▲ button to select the search, and then press the
- or - the button.

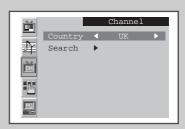
Result:

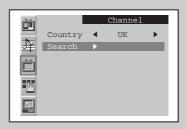
The search will end automatically. Channels are sorted and stored in an order which reflects their position in the frequency range, (with lowest first and highest last). The programme originally selected is then displayed.

To stop the search before it has finished, press the **EXIT** button.

- 7 When the channels have been stored, you can:
 - Change channels
 - ◆ Assign a name to the stored channels (refer to page 19)
 - ◆ Clear a channel (refer to page 20)
 - ◆ Fine tune channel reception if necessary (refer to page 20)
 - ◆ Sort them in the order required (refer to page 21)

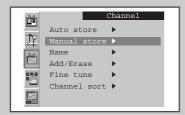






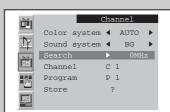


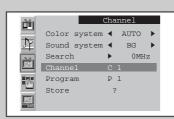
Storing Channels Manually

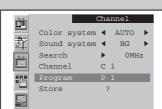














English-18

You can store up to 100 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.

Result: The main menu is displayed.

2 Press the P▼ or P▲ button to select the Channel.

Result: The options available in the Channel group are displayed.

- 3 Press the or + button.
- 4 Press the P▼ or P▲ button to select the Manual store. Press the → or → + button.

Result: The options available in the Manual store group are displayed with the Color system is selected.

Result: The color standards are displayed in the following order:

AUTO - PAL - SECAM - NT4.43.

Result: The sound standards are displayed in the following order: BG - DK - I - L.

If you do not know the channel numbers, press the P▼ or P▲ button to select the search. Start the search by pressing the — or — +button.

Result: The tuner scans the frequency range until the first

channel or the channel that you selected is received on your screen.

- To assign a programme number to a channel, select the Program by pressing the P▼ or P▲ button. Press the or + button to find the correct number.

Result: The channel and associated programme number are stored.

10 Repeat Steps 7 to 9 for each channel to be stored.

Giving Channels Names

If channel name information is broadcast when you store the channels either manually or automatically, the names are assigned to the channels directly. You can however change these names or assign new names as required.

1 Press the **MENU** button.

Result: The main menu is displayed.

2 Press the P▼ or P▲ button to select the Channel.

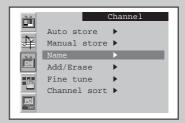
Result: The options available in the Channel group are displayed.

3 Press the -- or -+ button.

4 Press the P▼ or P▲ button to select the Name. Press the — or — + button.

Result: The current channels are displayed.

- 5 If necessary, select the channel to be assigned to a new name by pressing the P▼ or P▲ button.
- 6 Press the -- or -+ button.
- 7 Press the P▼ or P▲ button to select a letter (A~Z), a number(0~9) or a symbol (-, space). Move on the previous or next letter by pressing the or + button.
- 8 Repeat Steps 5 to 7 for each channel to be assigned to a new name.

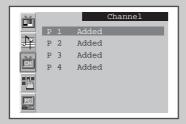


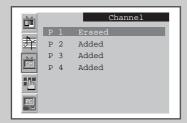




Skipping Unwanted Channels







You can exclude the channels you chosen from the channels you scanned. When you scan through the stored channels, those you have chosen to skip are not displayed.

All channels that you do not specifically choose to skip are displayed during scanning.

1 Press the **MENU** button.

Result: The main menu is displayed.

2 Press the P▼ or P▲ button to select the Channel.

Result: The options available in the Channel group are displayed.

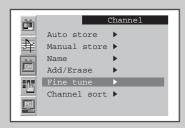
3 Press the - or + button.

4 Press the P▼ or P▲ button to select the Add/Erase. Press the — or — + button.

Result: The stored channels are displayed.

- 5 Press the P▼ or P▲ button to select the channel to add or erase. If necessary, select the Added or Erased by pressing the — or — + button.
- 6 Repeat Step 5 for each channel to be added or erased.

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 however the signal is weak or distorted, you may have to fine-tune the channel manually.

1 Press the **MENU** button.

Result: The main menu is displayed.

2 Press the P▼ or P▲ button to select the Channel.

Result: The options available in the Channel group are displayed.

3 Press the - or + button.

4 Press the P▼ or P▲ button to select the Fine tune.

Sorting the Stored Channels

You can exchange the numbers of two channels, in order to:

- Modify the numeric order in which the channels have been automatically stored.
- Give easily remembered numbers to the channels that you watch most often.
- 1 Press the **MENU** button.

Result: The main menu is displayed.

2 Press the P▼ or P▲ button to select the Channel.

Result: The options available in the Channel group are displayed.

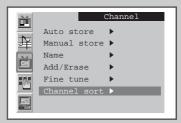
- 3 Press the -- or -+ button.
- 4 Press the P▼ or P▲ button to select the Channel sorting. Press the — - or — + button.

Result: The options available in the Channel sorting group are displayed with the From is selected.

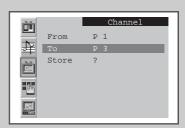
- Select the channel number that you wish to change by pressing the
 or
 button repeatedly.
- 6 Press the P▼ or P▲ button to select the To. Select the new number by which you wish to identify the channel by pressing the or + button repeatedly.
- 7 Press the P▼ or P▲ button to select the store. Select the OK to confirm the exchange of channel numbers by pressing the or + button.

Result: The selected channel is exchanged with the one previously stored to the chosen number.

For all the channels to move to the required channel numbers, repeat steps 5 to 7 after select the From by pressing the P▼ or P▲ button.

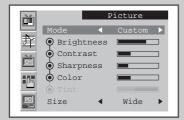


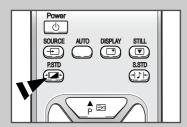






Changing the Picture Standard





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

1 Press the **MENU** button.

Result: The main menu is displayed.

2 Press the P▼ or P▲ button to select the Picture.

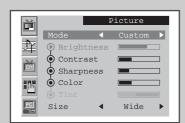
Result: The options available in the Picture group are displayed.

3 Press the - or + button.

Result: The Mode is selected.

- - You can also set these options simply by pressing the **P.STD** (Picture Standard) button.
 - On the Picture menu, if you change the Brightness, Contrast, Sharpness, Color or Tint (NTSC only) settings, the Custom is selected automatically.

Adjusting the Picture Settings





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

1 Press the **MENU** button.

Result: The main menu is displayed.

2 Press the P▼ or P▲ button to select the Picture.

Result: The options available in the Picture group are displayed.

3 Press the - or + button.

Select the option (Brightness, Contrast, Sharpness, Color or Tint-NTSC only) to be adjusted by pressing the P▼ or P▲ button. Press the — - or — + button.

Result: The horizontal bar is displayed.

5 Press the -- or -+ button to reach the required setting.

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

Selecting the Picture Format

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

1 Press the **MENU** button.

Result: The main menu is displayed.

2 Press the P▼ or P▲ button to select the Picture.

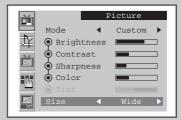
Result: The options available in the Picture group are displayed.

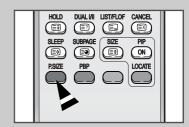
3 Press the -- or -+ button.

4 Press the P▼ or P▲ button to select the Size.

Select the required picture format by pressing the button repeatedly. The following picture formats are available:
Wide - Normal 1 - Normal 2 - Zoom 1 - Zoom 2.

You can also select these options simply by pressing the P.SIZE (Picture Size) button.

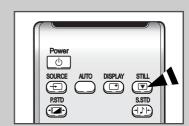




Freezing the Current Picture

Press the STILL button on the remote control to freeze the picture on a given frame.

To return to normal viewing, press the STILL button again.



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.

Result: The main menu is displayed.

2 Press the P▼ or P▲ button to select the sound.

Result: The options available in the sound group are displayed.

3 Press the - or + button.

Result: The Mode is selected.

You can also set these options simply by pressing the **S.STD** (Sound Standard) button.

Adjusting the Sound Settings





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

1 Press the **MENU** button.

Result: The main menu is displayed.

2 Press the P▼ or P▲ button to select the sound.

Result: The options available in the sound group are displayed.

3 Press the —- or —+ button.

4 Select the option (Bass or Treble) to be adjusted by pressing the P▼ or P▲ button. Press the — - or — + button.

Result: The horizontal bar is displayed.

5 Press the -- or -+ button to reach the required setting.

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

Enjoying the Dolby Sound

This feature provides a home theater-like Dolby effect by mixing the left and right speakers.

1 Press the **MENU** button.

Result: The main menu is displayed.

2 Press the P▼ or P▲ button to select the sound.

Result: The options available in the sound group are displayed.

3 Press the — or — + button.

4 Press the P▼ or P▲ button to select the Dolby.

5 For enjoying the Dolby sound effect, select the on by pressing the
- or - + button.

You can also select simply by pressing the V.DOLBY (Virtual Dolby) button.



Switching the Internal Speakers On/Off

When the internal speakers are switched off, all the sound is routed to the external speakers.

1 Press the **MENU** button.

Result: The main menu is displayed.

2 Press the P▼ or P▲ button to select the sound.

Result: The options available in the sound group are displayed.

3 Press the - or + button.

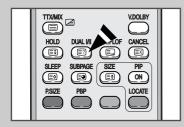
4 Press the P▼ or P▲ button to select the speaker.

5 Select the on to be routed the sound to the internal speakers by pressing the — or — + button.



Choosing the MTS (Multichannel Television Stereo)





Depending on the particular program being broadcast, you can listen to Stereo, Mono, or Dual I/II (Dual I/II is usually a foreign-language translation).

1 Press the **MENU** button.

Result: The main menu is displayed.

2 Press the P▼ or P▲ button to select the sound.

Result: The options available in the sound group are displayed.

- 3 Press the -- or -+ button.
- 4 Press the P▼ or P▲ button to select the MTS.
- 5 Select the required sound mode by pressing the

 or
 + button repeatedly. The sound modes are displayed in the following order: Mono − Stereo − Dual I − Dual I.

You can also set these options simply by pressing the DUAL I/II button. The "DUAL I/II" button displays/controls the processing and output of the audio signal.



- 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)" connector on the rear panel.

Viewing the Picture In Picture (PIP)

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.

1 Press the **MENU** button.

Result: The main menu is displayed.

2 Press the P▼ or P▲ button to select the Function.

Result: The options available in the Function group are displayed.

3 Press the - or + button.

4 Press the P▼ or P▲ button to select the PIP. Press the -- or -- +- button.

Result: The options available in the PIP group are displayed.

5 Select the on by pressing the -- or -- + button.

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

6 Press the P▼ or P▲ button to select the TV/Video. Select a source of the sub picture by pressing the — - or — + button.

Result: The sources are displayed in the following order:

TV - Scart - Video - S-Video.

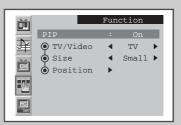
7 Press the P▼ or P▲ button to select the size. Select a size of the sub picture by pressing the — or — + button.

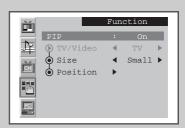
Result: The sizes are displayed in the following order:
Small - Medium - Large.

You can also select these options simply by pressing the SIZE button

- - You can also move the sub picture simply by pressing the LOCATE button.

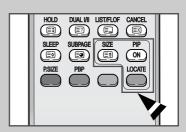




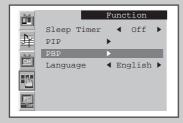






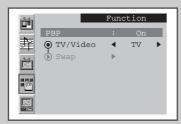


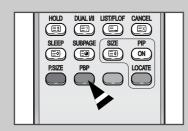
Viewing the Picture By Picture (PBP; Double Screen)











When external A/V devices (PC, VCR, or DVD) are connected to your set or watching TV, you can display two video sources simultaneously in the screen.

1 Press the **MENU** button.

Result: The main menu is displayed.

2 Press the P▼ or P▲ button to select the Function.

Result: The options available in the Function group are displayed.

3 Press the — or — + button.

Result: The options available in the PBP group are displayed.

5 Select the on by pressing the -- or -+ button.

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

6 Press the P▼ or P▲ button to select the TV/Video. Select a source of the sub picture by pressing the — - or — + button.

Result: The sources are displayed in the following order:

TV - Scart - Video - S-Video.

7 Press the P▼ or P▲ button to select the swap.

8 Press the -- or -+ button.

Result: The main picture and the sub picture are interchanged.

You can also do simply by pressing the PBP button.

Switching Off Automatically

You can select a time period of between 10 and 240 minutes after your set automatically switches off.

1 Press the **MENU** button.

Result: The main menu is displayed.

2 Press the P▼ or P▲ button to select the Function.

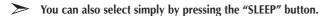
Result: The options available in the Function group are displayed.

3 Press the **→** - or **→** + button.

Result: The Sleep Timer is selected.

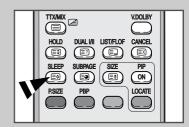
Select the number of minutes after which your set switches off by pressing the — - or — + button repeatedly.

The preset time intervals: 10, 20, 30, 60, 90, 120, 150, 180, 210, and 240 minutes.



If the sleep timer is already set, the screen displays the remaining time and then your set will be switched off. If the sleep timer is not yet set, displays **Off**.





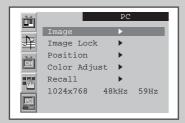
Displaying Information

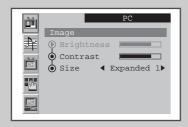
You can view the setting status of selected source by pressing the "DISPLAY" button on the remote control. The displayed information are different depending on the selected source.



Adjusting the Brightness and Contrast

Preset to the PC mode by pressing the **SOURCE** button.







1 Press the MENU button.

Result: The main menu is displayed.

2 Press the P▼ or P▲ button to select the PC.

Result: The options available in the PC group are displayed.

3 Press the -- or -+ button.

Result: The Image is selected.

4 Press the -- or -+ button again.

Result: The options available in the Image group are displayed.

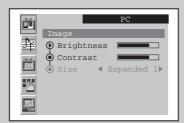
5 Select the option (Brightness or Contrast) to be adjusted for the color of your computer image by pressing the P▼ or P▲ button.
Press the — - or — + button.

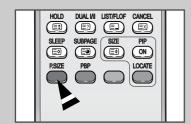
Result: The horizontal bar is displayed.

6 Press the -- or -+ button to reach the required setting.

Selecting the Image Size

Preset to the PC mode by pressing the SOURCE button.





1 Press the **MENU** button.

Result: The main menu is displayed.

2 Press the P▼ or P▲ button to select the PC.

Result: The options available in the PC group are displayed.

3 Press the - or + button.

Result: The Image is selected.

4 Press the **→** - or **→** + button again.

Result: The options available in the Image group are displayed.

Fress the P▼ or P▲ button to select the size. Select a size of the your computer image by pressing the — - or — + button.

Result: The sizes are displayed in the following order:

Expanded 1 - Expanded 2 - Normal.

You can also select these options simply by pressing the **P.SIZE** (Picture Size) button.

Adjusting the Image Quality

Preset to the PC mode by pressing the SOURCE button.

This feature is used to fine tune and get the best image by removing noises that create unstable images with jitters and shimmers.

1 Press the **MENU** button.

Result: The main menu is displayed.

2 Press the P▼ or P▲ button to select the PC.

Result: The options available in the PC group are displayed.

3 Press the -- or -+ button.

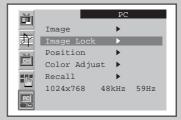
Result: The options available in the Image Lock group are displayed.

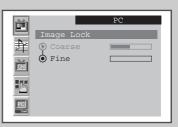
5 Select the option (Coarse or Fine) to be adjusted for the quality of your computer image by pressing the P▼ or P▲ button. Press the — or — + button.

Result: The horizontal bar is displayed.

6 Press the -- or -+ button to reach the required setting.

This feature may change the width of the image. If necessary, adjust the position to center.







Changing the Image Position

> Preset to the PC mode by pressing the **SOURCE** button.

1 Press the **MENU** button.

Result: The main menu is displayed.

2 Press the P▼ or P▲ button to select the PC.

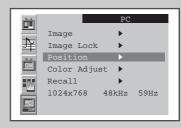
Result: The options available in the PC group are displayed.

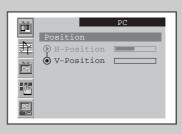
3 Press the -- or -+ button.

4 Press the P▼ or P▲ button to select the Position. Press the or →+ button.

Result: The horizontal bar is displayed.

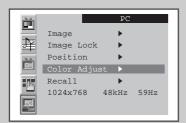
6 Press the -- or -- + button to reach the required setting.

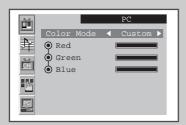


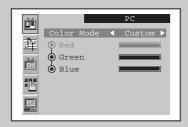




Adjusting the Color









Preset to the PC mode by pressing the SOURCE button.

1 Press the **MENU** button.

Result: The main menu is displayed.

2 Press the P▼ or P▲ button to select the PC.

Result: The options available in the PC group are displayed.

3 Press the -- or -+ button.

Result: The options available in the Color Adjust group are displayed with the Color Mode is selected.

Select the required color mode by pressing the → - or → + button repeatedly. The following color modes are available: Custom - Color 1 - Color 2 - Color 3.

If you wish adjust the color which best corresponds to your viewing requirements, select the option (Red, Green, or Blue) to be adjusted by pressing the $P \mathbf{V}$ or $P \mathbf{A}$ button.

Press the — or — + button.

Result: The horizontal bar is displayed.

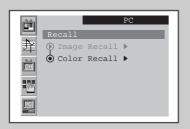
7 Press the -- or -+ button to reach the required setting.

If you change the **Red**, **Green**, or **Blue** settings, the **Color mode** is selected to **Custom** automatically.

Initializing the Image Settings

Preset to the PC mode by pressing the **SOURCE** button.

Image | PC | Image | Position | Position | Color Adjust | Pecall | 1024x768 | 48kHz | 59Hz



English-32

You can replace all image settings with the factory default values.

1 Press the MENU button.

Result: The main menu is displayed.

2 Press the P▼ or P▲ button to select the PC.

Result: The options available in the PC group are displayed.

3 Press the -- or -+ button.

Result: The options available in the Recall group are displayed.

5 Select the option (Image Recall or Color Recall) to be replaced by pressing the P▼ or P▲ button. Press the — or —+ button.

Result: The screen becomes black and return to original view about a few seconds later.

Display Modes

If the signal from the system equals to the standard signal mode, the screen is adjusted automatically. If the signal from the system doesn't equal to the standard signal mode, adjust the mode with referring to the Video card user guide because the screen might not display or only the power LED might be on. For the display modes listed below, the screen image has been optimized during manufacture.

Mode	Resolution	Horizontal Frequency (kHz)	Vertical Frequency (Hz)	Pixel Clock Frequency (MHz)	Sync Polarity (H/V)
VGA	720 x 400	31.469	70.087	28.322	-/+
	640 x 480	31.469	59.940	25.175	-/-
	640 x 480	37.500	75.000	31.500	-/-
	640 x 480	43.269	85.008	36.000	-/-
SVGA	800 x 600	46.875	75.000	49.500	+/+
	800 x 600	53.674	85.061	56.250	+/+
XGA	1024 x 768	48.363	60.004	65.000	-/-
	1024 x 768	60.023	75.029	78.750	+/+
	1024 x 768	68.677	84.997	94.500	+/+
SXGA	1280 x 1024	63.981	60.020	108.000	+/-,+/-
	1280 x 1024	79.976	75.025	135.000	+/+
UXGA	1600 x 1200	75.000	60.000	162.000	+/-,+/-
WUXGA LW24R15W)	1920 x 1200	75.000	60.000	193.156	+/-,+/-

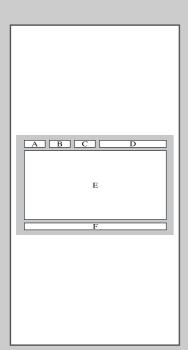
PowerSaver

This set has a built-in power management system called PowerSaver. This system saves energy by switching your set into a low-power mode when it has not been used for a certain period of time. The available modes are "On", "Standby", "Sleep", and "Deep Sleep". PowerSaver operates with a VESA DPMS compliant video card installed in your computer. You use a software utility installed on your computer to set up this feature.

State	Normal Operation	Power-Saving Function mode (EPA/NUTEK)
Horizontal Sync	Active	Inactive
Vertical Sync	Active	Inactive
Power Indicator	Green	Green, Blinking (1 sec interval)
Power Consumption	LW24R15W : 120W (Max.)	Less than 8W

This set automatically returns to normal operation when horizontal and vertical sync return. This occurs when you move the computer's mouse or press a key on the keyboard.

Teletext Feature



Most television channels provide written information services via teletext. Information provided includes:

- **♦** Television programme times
- **♦** News bulletins and weather forecasts
- ♦ Sports results
- **♦** Travel information

This information is divided into numbered pages (see diagram).

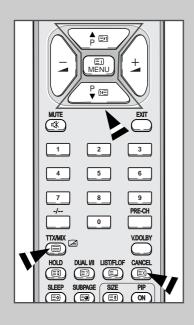
Part	Contents	
А	Selected page number.	
В	Broadcasting channel identity.	
C Current page number or search indications.		
D	Date and time.	
Е	Text.	
F	Status information. FASTEXT information.	



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)

Displaying the Teletext Information



You can display Teletext information at any time on your set.

- For Teletext information to be displayed correctly, channel reception must be stable; otherwise:
 - ◆ Information may be missing
 - ♦ Some pages may not be displayed
- Select the channel providing the Teletext service using the P▼ or P▲ button.
- 2 Press the TTX/MIX button to activate the teletext mode.

Result: The contents page is displayed. It can be redisplayed at any time by pressing the (index) button.

- 3 If you wish to display the actual broadcast at the same time as the teletext page, press the TTX/MIX button again.
- 4 To return to normal viewing, press the CANCEL (♠X) button.
- 5 Press the TTX/MIX button again to exit from the teletext display.

Selecting a Page by Number

You can enter the page number directly by pressing the numeric buttons on the remote control.

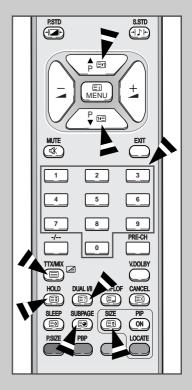
1 Enter the three-digit page number given in the content by pressing the corresponding numeric buttons.

Result: The current page counter is incremented and the page is then displayed.

2 If the selected page is linked with several secondary pages, the secondary pages are displayed in sequence. To freeze the display on a given page, press the HOLD (国到) button. Press the HOLD (国到) button again to resume.

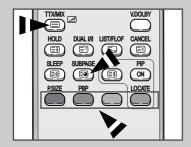
Using the various display options:

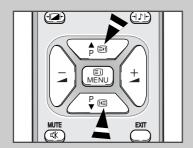
To display	Press the
Both teletext information and the normal broadcast	TTX/MIX
 Hidden text (answers to quiz games, for example) 	≣? (reveal)
◆ The normal screen	🗊 (reveal) again
 A secondary page, by entering its 4-digit number 	SUBPAGE (
◆ The next page	
◆ The previous page	1 (page down)
 Double-size letters in the: Upper half of the screen Lower half of the screen 	SIZE ((□⊕)) • Once • Twice
◆ Normal screen	Three times





Using FLOF to Select a Page





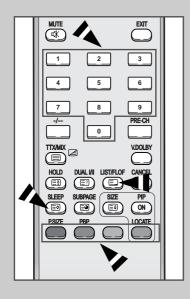
The various topics included in the teletext pages are color-coded, and can be selected by pressing the colored buttons on the remote control.

- 1 Display the teletext contents page by pressing the **TTX/MIX** button.
- 2 Press the coloured button corresponding to the topic that you wish to select; the available topics are given on the status line.

Result: 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.
- 4 To display the subpage, see the following steps.
 - Press the SUBPAGE () button.
 Result: The available subpages appear.
 - Select the required sub-page. Sub-pages can be scrolled by using the (P▼) or (P▲) button.

Storing Teletext Pages



You can store up to four teletext pages to display them later at leisure.

- 1 Select the LIST mode using the **LIST/FLOF** (button.
 - Result: Four 3-digit numbers are displayed in different colors.
 - The **LIST/FLOF** (**(E)**) button is used to switch between the LIST and FLOF modes.
- Press the colored button corresponding to the page that will be replaced.
- **3** Enter the new page number using the numeric buttons.
- 4 Repeat steps 2 and 3 for each page to be stored, using a different colored button each time.
- 5 Press the (store) button until the corresponding blocks blink.

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 your set 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 Power ((b)) button. Check the picture contrast and brightness settings. Check the volume.
Normal picture but no sound	 Check the volume. Check whether the MUTE button has been pressed on the remote control.
No picture or black and white picture	 Adjust the color settings. Check that the broadcast system selected is correct.
Sound and picture interference	 Try to identify the electrical appliance that is affecting the set and move it further away. Plug your set into a different mains socket.
Blurred or snowy picture, distorted sound	 Check the direction, location and connections of your aerial. This interference is often 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.
"Check Signal Cable" message is displayed.	 Check that the signal cable is firmly connected to the PC or video sources. Check that the PC or video sources are turned on.
On PC mode, "Not Supported Mode" message is displayed.	 Check the maximum resolution and the frequency of the video Adapter. Compare these values with the data in the Display Modes Timing Chart.
On PC mode, horizontal or vertical bars appear to flicker, jitter or shimmer on the image.	◆ Adjust the Coarse or Fine function.
On PC mode, screen is black and power indicator light is steady amber or blinks every 0.5 or 1 seconds	 The TV is using its power management system. Move the computer's mouse or press a key on the keyboard.
On PC mode, image is not stable and may appear to vibrate.	 Check that the display resolution and frequency from your computer or video board is an available mode for your set. On you computer check: Control Panel, Display, Settings. If the setting is not correct, use your computer utility programme to change the display settings.
	 Your set supports multiscan display functions within the following frequency domain: Horizontal frequency: 30 ~ 85 kHz Vertical frequency: 55 ~ 85 Hz
On PC mode, image is not centered on the screen.	◆ Adjust the horizontal and vertical position.
You need the Monitor driver software.	 Download the driver from WWW pages: http://www.samsungusa.com/monitor http://www.samsung-monitor.com

Technical and Environmental Specifications

Model	LW24R15W
Panel	
Size	24.06" Diagonal
Display Size	518.4(H) x 324(V) mm
Type	a-si TFT active matrix
Pixel Pitch	0.27 (H) x 0.27 (V) mm
Viewing Angle	80/80/80/80 (L/R/T/B)
Frequency	
Horizontal	30 ∼ 85 kHz
Vertical	55 ~ 85 Hz
Display Color	16,777,216 colors
Display Resolution	
Maximum Mode	1920 x 1200 @ 60 Hz
Input Signal	
Sync.	H/V Separate, TTL, P. or N.
-, -	H/V Composite, TTL, P. or N.
	Sync-on-green 0.3 Vp-p, N.
Video Signal	0.7 Vp-p @ 75 ohm
TV/Video	
Color System	PAL, SECAM, NTSC4.43
Sound System	B/G, D/K, I, L, L'
Video Format	CVBS, S-VHS
Scart	
Video Input/Output	1.0 Vp-p @ 75 ohm
RGB Input	0.7 Vp-p @ 75 ohm
Audio Input/Output	500mVrms
Color system	PAL
Power Supply	
Input	100 - 240 V (50Hz / 60Hz)
Output	DC 14V/8A
Power Consumption	
Maximum	120 W
Power Saving	< 8 W
Dimensions (W X D X H)	618 x 67.5 x 422 (TV body)
	665.2 x 218.2 x 472 (With stand)
Environmental Considerations	
Operating Temperature	50 °F to 104 °F (10 °C to 40 °C)
Operating Humidity	10% to 80%
Storage Temperature	- 13 °F to 113 °F (-25 °C to 45 °C)
Storage Humidity	5% to 95%
Audio Characteristics	
Audio Input	RCA Jack (L, R), 0.5Vrms (-9dB)
Audio Input (PC)	3.5Ø Stereo Jack, 0.5Vrms (-9dB)
Audio Output	RCA Jack (L, R), 0.5Vrms (-9dB)
Speaker Output	Max. 5W Output (3.5Ø Stereo Jack, 2)
Headphone Output	Max. 10mW Output (3.5Ø Stereo Jack, 32Ω)
Frequency	RF: 80Hz ~ 15kHz (at- 3dB)
Response	A/V: 80Hz ~ 20kHz (at- 3dB)

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 color 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 suitable safety approved extension lead or consult your dealer for assistance. However, if there is no alternative to cutting 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 colored in accordance with the following code:

BLUE - NEUTRAL BROWN - LIVE

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

The wire colored BLUE must be connected to the terminal marked with the letter N or colored BLUE or BLACK. The wire colored BROWN must be connected to the terminal marked with the letter L or colored 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 \(\pm \) , OR COLORED GREEN OR GREEN AND YELLOW.

- AFTER SALES SERVICE

 Do not hesitate to contact your retailer or service agent if a change in the performance of your product indicates that a faulty condition may be present.

