



Colour Television

OWNER'S MANUAL

Please read this manual carefully before operating your set.
Retain it for future reference.
Record model number and serial number of the set.
See the label attached on the back cover and quote this
information to your dealer when you require service.

Model number :
Serial number :



Contents

Installation	3
Location and function of controls	4
Remote control handset	
Battery installation	
Front panel	
Basic operation	7
On and off / Programme selection	
Volume adjustment / Quick view / Mute function	
Auto demonstration / On screen language selection	
On screen menus	8
Menu selection	
Setting up TV stations	9
Auto programme tuning	
Manual programme tuning	
Fine Tuning	
Programme edit	
Calling the programme table	
Picture adjustment	14
Picture adjustment / Eye / Picture format	
Turbo picture selection	
Sound adjustment	16
Sound adjustment / Turbo sound selection	
Stereo/Dual reception / NICAM reception	
Sound output selection	
Other functions	18
TV and AV modes / Auto AV switching	
Child lock / Auto sleep / AVL (Auto volume leveler)	
Blue back / Tilt	
Sleep timer / Degaussing	
PIP operation (option)	20
On and off / Programme selection for sub picture (option)	
Input mode selection for sub picture	
Swapping between main and sub pictures	
Sub picture size / Sub picture freeze	
Sub picture position change	
Teletext (option)	21
Switch on / off	
SIMPLE text	
TOP text (option)	
FASTEXT	
Special teletext functions	
Connection of external equipment	24
Aerial socket	
Euro scart sockets	
Audio/Video in sockets	
S-Video/Audio in sockets (S-AV)	
Headphone socket	
PC in socket	
Troubleshooting check list	26

Installation

Power

This set operates on an AC mains supply, the voltage is as indicated on the label on the back cover. Never apply DC power to the set. In the event of thunderstorms or powercuts, please pull out the aerial and mains plugs.

Warning

To prevent fire or shock hazard, do not expose the set to rain or moisture.

Service

Never remove the back cover of the set as this can expose you to very high voltage and other hazards. If the set does not operate properly, unplug it and call your dealer.

Aerial

Connect the aerial cable to the socket marked 175Ω on the back cover. For the best reception an outdoor aerial should be used.

Location

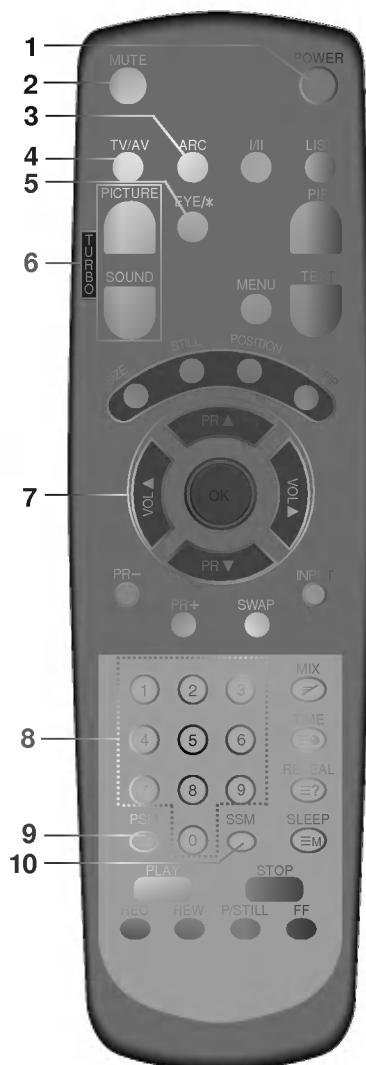
Position your set so that no bright light or sunlight falls directly onto the screen. Care should be taken not to expose the set to any unnecessary vibration, moisture, dust or heat. Also ensure that the set is placed in a position to allow a free flow of air. Do not cover the ventilation openings on the back cover.

Location and function of controls

All the functions can be controlled with the remote control handset. Some functions can also be adjusted with the buttons on the front panel of the set.

Remote control handset

Before you use the remote control handset, please install the batteries. See the next page.



- 1. POWER**
switches the set on from standby or off to standby.
- 2. MUTE**
switches the sound on or off.
- 3. ARC (Aspect Ratio Control)**
changes the picture format.
- 4. TV/AV**
selects TV or AV mode.
clears the menu from the screen.
switches the set on from standby.
- 5. EYE/★**
switches the eye function on or off.
- 6. TURBO PICTURE**
selects Turbo picture.
TURBO SOUND
selects Turbo sound.
- 7. ▲ / ▼ (Programme Up/Down)**
selects a programme or a menu item.
switches the set on from standby.
◀ / ▶ (Volume Up/Down)
adjusts the volume.
adjusts menu settings.
OK
accepts your selection or displays the current mode.
- 8. NUMBER BUTTONS**
switches the set on from standby or directly selects a programme number.
- 9. PSM (Picture Status Memory)**
recalls your preferred picture setting.
- 10. SSM (Sound Status Memory)**
recalls your preferred sound setting.

Location and function of controls

11. DUAL (I/II)
selects the language during dual language broadcast.
selects mono sound during stereo broadcast.

12. LIST
displays the programme table.

13. PIP BUTTONS (option)

PIP
switches the sub picture on or off.

PR +/- (option)
selects a programme for the sub picture.

SWAP
alternates main and sub picture.

INPUT
selects the input mode for the sub picture.

SIZE
adjusts the sub picture size.

STILL
freezes motion of the sub picture.

POSITION
relocates the sub picture in clockwise direction.

9/4PIP
switches on or off the 9 or 4 sub pictures.

14. MENU
selects a menu.

15. TELETEXT BUTTONS (option)
These buttons are used for teletext.
For further details, see the 'Teletext' section.

16. SWAP
returns to the previously viewed programme.

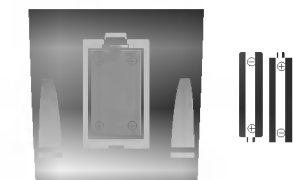
17. SLEEP
sets the sleep timer.

18. VCR BUTTONS
controls a LG video cassette recorder.

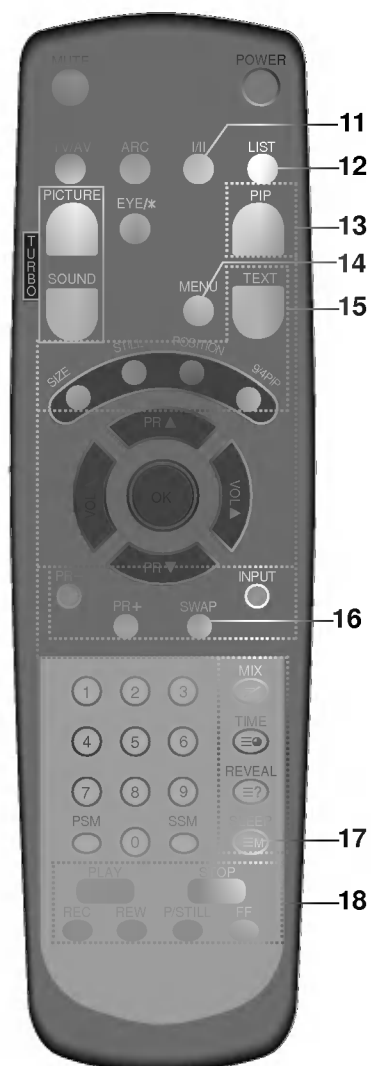
Note : In teletext mode, the **PR +/-**, **SWAP** and **INPUT** buttons are used for teletext function.

Battery installation

The remote control handset is powered by two AAA type batteries. Gently pull down the cover of the remote control handset until the battery compartment is exposed. Install two batteries as indicated by the polarity symbols (⊕ and ⊖) marked inside the compartment.



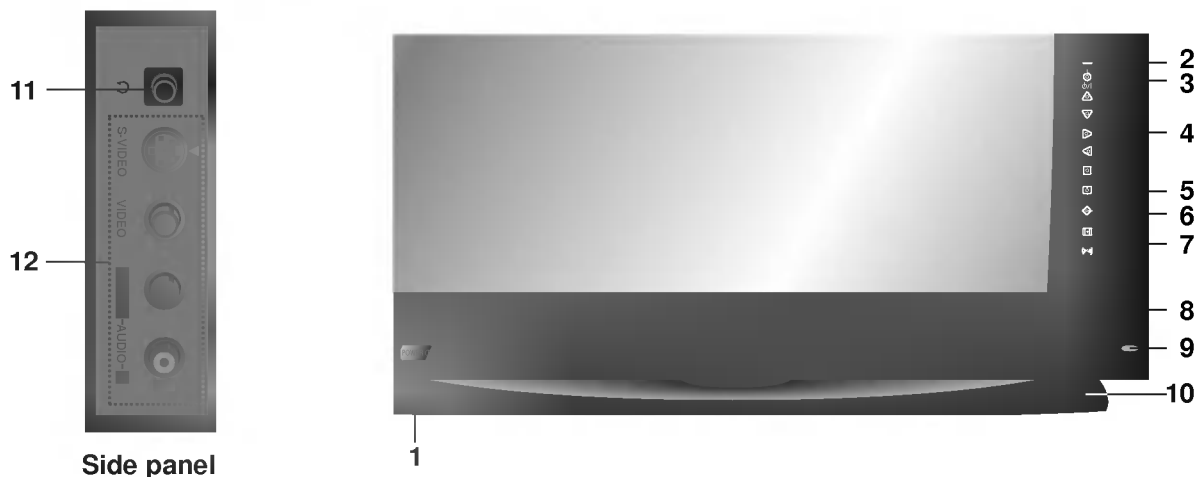
Note : To avoid damage from possible battery leakage, remove the batteries if you do not plan to use the remote control handset for an extended period of time.



Location and function of controls

Front panel

You can use the front panel buttons just by touching soft instead of pressing them (except the main power button).



- 1. MAIN POWER (POWER Ⓞ)**
switches the set on or off.
- 2. POWER/STANDBY INDICATOR**
illuminates red when the set is in standby mode and green when the set is switched on.
- 3. POWER**
switches the set on from standby or off to standby.
- 4. ▲ / ▼ (Programme Up/Down)**
selects a programme or a menu item.
switches the set on from standby.
◀ / ▶ (Volume Up/Down)
adjusts the volume.
adjusts menu settings.
OK
accepts your selection or displays the current mode.
- 5. MENU**
selects a menu.
- 6. TV/AV**
selects TV or AV mode.
clears the menu from the screen.
switches the set on from standby.
- 7. TURBO PICTURE/SOUND**
selects Turbo picture or Turbo sound.
- 8. EYE**
adjusts picture according to the surrounding conditions.
- 9. REMOTE CONTROL SENSOR**
- 10. SWIVEL BASE**
turns the TV set by hand to left or right direction by 15 degrees.
- 11. HEADPHONE SOCKET**
connects the headphone plug to this socket.
- 12. AUDIO/VIDEO IN SOCKETS (AV3)**
connects the audio/video out sockets of external equipment to these sockets.
S-VIDEO/AUDIO IN SOCKETS (S-AV)
connects the video out socket of an S-VIDEO VCR to the **S-VIDEO** socket.
connects the audio out sockets of the S-VIDEO VCR to the audio sockets as in **AV3**.

Basic operation

On and off

1. Press the main power button to switch the set on.
2. If the set is in standby mode, press the **POWER**, **▲ / ▼**, **TV/AV** or **NUMBER** buttons on the remote control handset to switch it on fully.
3. Press the **POWER** button on the remote control handset.
The set reverts to standby mode.
4. Press the main power button again to switch the set off.

Note : *If the mains plug is disconnected while the set is switched on, the set will be switched to standby mode. And when the mains plug is replaced in the mains power socket again, the power is switched on again.*

Programme selection

You can select a programme number with the **▲ / ▼** or **NUMBER** buttons.


Volume adjustment

Press the **◀ / ▶** button to adjust the volume.

Quick view

Press the **SWAP** button to view the last programme you were watching.

Mute function

Press the **MUTE** button. The sound is switched off and the display  appears.

You can cancel it by pressing the **MUTE**, **◀ / ▶**, **SSM**, **I/II**, **TURBO SOUND** button.

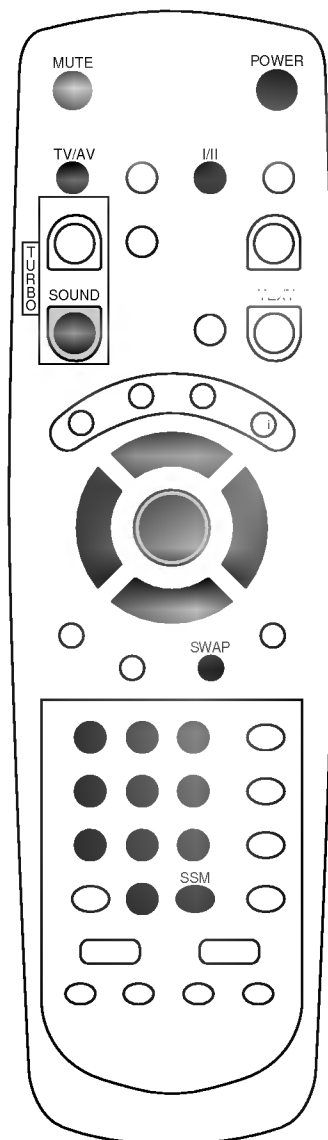
Auto demonstration

To review all the menus programmed in the set, press the **OK** button of the front panel control for about 5 seconds. To stop auto demonstration, press any button of the front panel control and **POWER** button of the remote control handset.

On screen language selection

The menu can be displayed on the screen in desired language. First select your language.

1. Press the **MENU** button to select the Station menu.
2. Press the **▲ / ▼** button to select **Language**.
3. Press the **OK** button.
4. Press the **▲ / ▼** button to select your desired language.
5. Press the **OK** button.
All the on screen displays will appear in the selected language.
6. Press the **TV/AV** button to return to normal TV viewing.



On screen menus

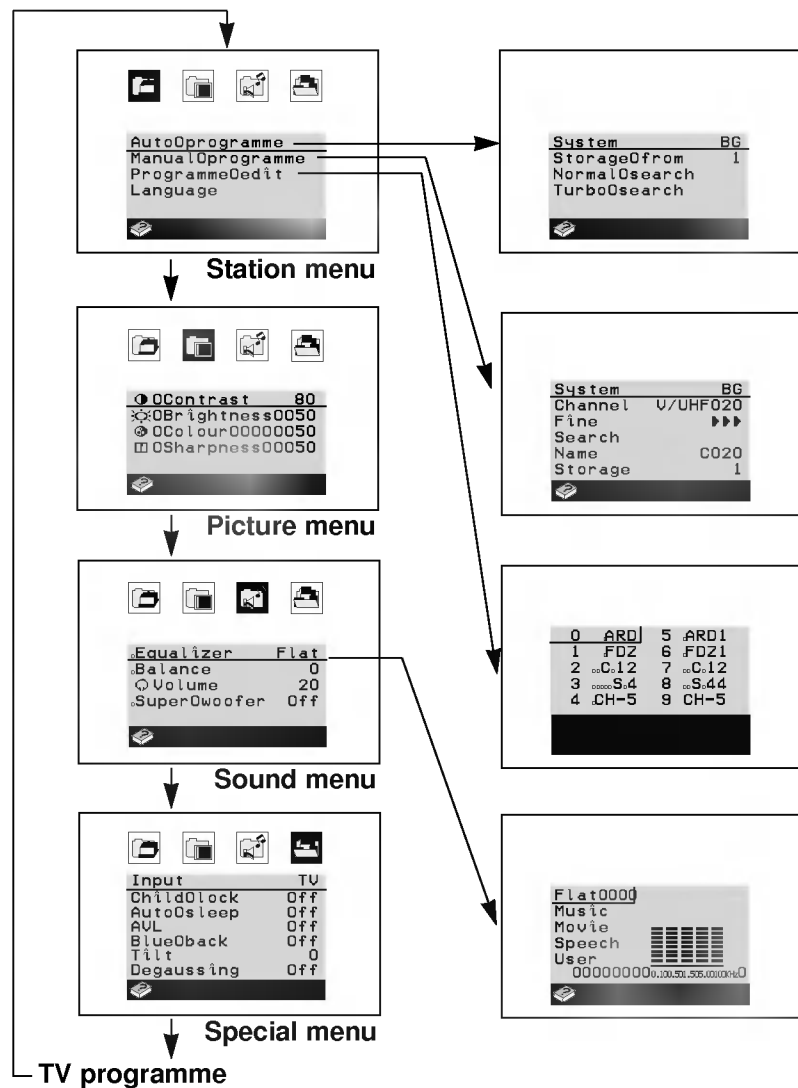
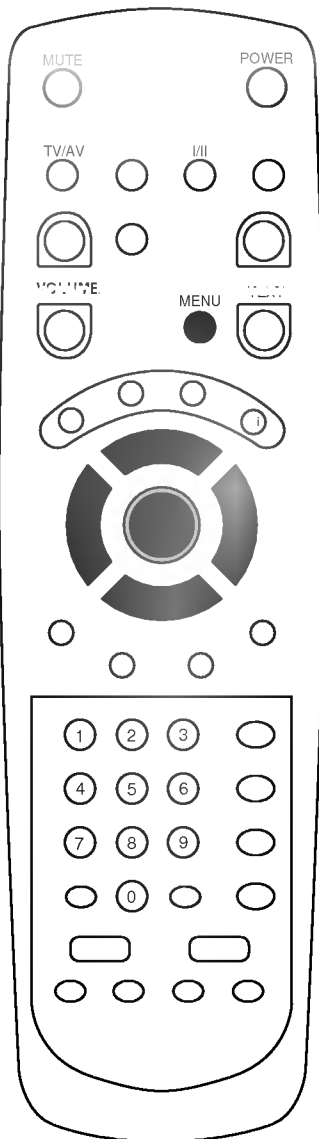
The dialogue between you and your set takes place on screen with an operator menu. The buttons required for the operating steps are also displayed.

Menu selection

1. Repeatedly press the **MENU** button to display each menu.
2. Press the **▲ / ▼** button to select a menu item.
3. Press the **◀ / ▶** button to change the setting of a menu item or **OK** button to display the sub menu.

Note :

- a. In the AV mode, the Station menu is not displayed.
- b. In the teletext mode, menus are not displayed.
- c. In some models, the **Normal/Turbo search** will not display, only the **Start** will display in the **Auto programme** menu.



Setting up TV stations

Up to 100 TV stations can be stored in this set by programme numbers (0 to 99). Once you have preset the stations, you will be able to use the ▲ / ▼ or NUMBER buttons to scan the stations you programmed. Stations can be tuned using automatic or manual modes.

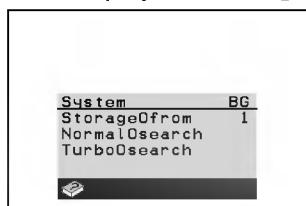
Auto programme tuning

All stations that can be received are stored by this method. It is recommended that you use auto programme during installation of this set.

1. Repeatedly press the **MENU** button to select the Station menu.
2. Press the ▲ / ▼ button to select **Auto programme**.
3. Press the **OK** button to display the **Auto programme** menu.



Station Menu

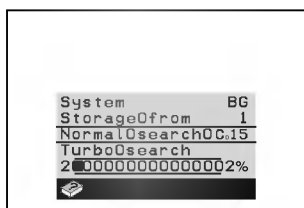


4. Press the ▲ / ▼ button to select **System**. Select a TV system with the ◀ / ▶ button ;
LL : SECAM L/L' (France: SECAM-L models only)
BG : PAL B/G, SECAM B/G (Europe/East Europe)
I : PAL I/II (U.K./Ireland)
DK : PAL D/K, SECAM D/K (East Europe)
5. Press the ▲ / ▼ button to select **Storage from**.
6. Select the beginning programme number with the ◀ / ▶ button or NUMBER buttons. Any number under 10 is entered with a numeric '0' in front of it, i.e. '05' for 5.
7. Press the ▲ / ▼ button to select **Normal** or **Turbo search**.

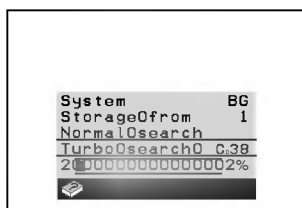
Option: In some models, only can select **Start**.

Note :

- a. **Turbo search** is further faster than **Normal search** and in some models, these searches will automatically store all receivable stations.
- b. If the programmed station has poor quality sound, select the system again in the **Manual programme** menu.



(Normal search)



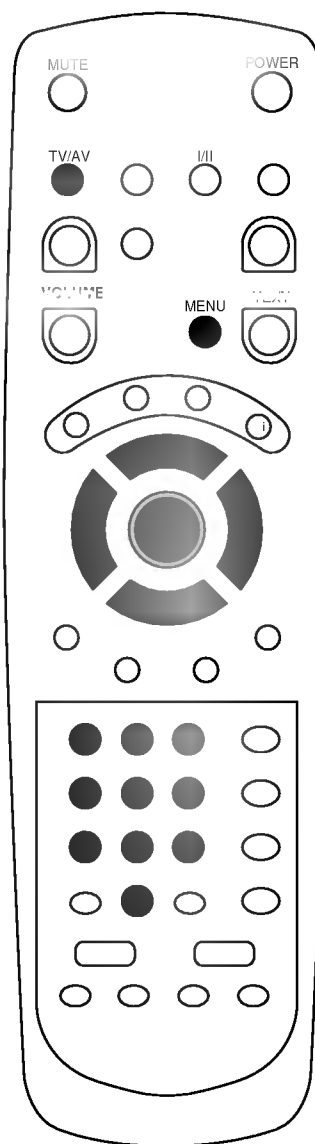
(Turbo search)

8. Press the **OK** button to begin auto programming.

All receivable stations are stored. The station name is stored for stations which broadcast VPS (Video Programme Service), PDC (Programme Delivery Control) or TELETEXT data. If no station name can be assigned to a station, the channel number is assigned and stored as **C** (V/UHF 01-69) or **S** (Cable 01-47), followed by a number.

To stop auto programming, press the **MENU** button. When auto programming is completed, the **Programme edit** menu appears on the screen. See the 'Programme edit' section to edit the stored programme.

9. Press the **TV/AV** button to return to normal TV viewing.



Setting up TV stations

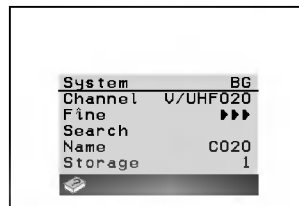
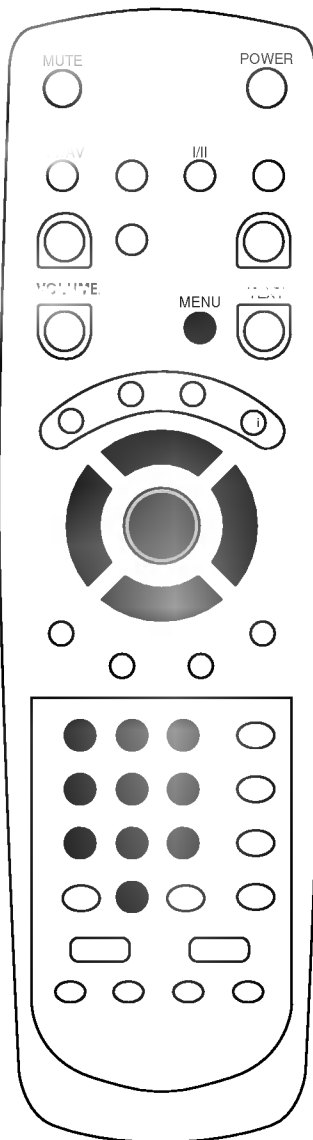
Station Menu



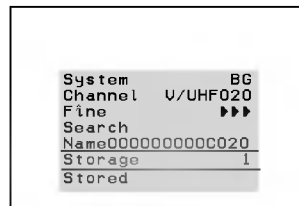
Manual programme tuning

Manual programme lets you manually tune and arrange the stations in whatever order you desire. Also you can assign a station name with five characters to each programme number.

1. Repeatedly press the **MENU** button to select the Station menu.
2. Press the **▲ / ▼** button to select **Manual programme**.
3. Press the **OK** button to display the **Manual programme** menu.



4. Press the **▲ / ▼** button to select **System**. Select a TV system with the **◀ / ▶** button ;
LL : SECAM L/L (France: SECAM-L models only)
BG : PAL B/G, SECAM B/G (Europe/East Europe)
I : PAL I/II (U.K./Ireland)
DK : PAL D/K, SECAM D/K (East Europe)
5. Press the **▲ / ▼** button to select **Channel**. Press the **◀ / ▶** button to select **V/UHF** or **Cable** as required.
 If possible, select the channel number (1 to 69) directly with the number buttons. Any number under 10 is entered with a numeric **'0'** in front of it, i.e. **'05'** for 5.
6. Press the **▲ / ▼** button to select **Search**. Press the **◀ / ▶** button to commence searching. If a station is found the search will stop.
7. If this station is the one required, press the **▲ / ▼** button to select **Storage**. Select the desired programme number (0 to 99) with the **◀ / ▶** button or NUMBER buttons. Any number under 10 is entered with a numeric **'0'** in front of it, i.e. **'05'** for 5.
8. Press the **OK** button to store it. The display **Stored** will appear.



9. To store another station, repeat steps 4 to 8.

Assigning a station name

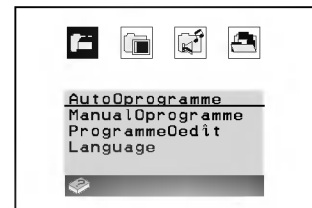
1. Repeat the 'Manual programme tuning' steps 1 to 3.
2. Press the **▲ / ▼** button to select **Name**.
3. Press the **▶** button. You can use a blank, **+**, **-**, the numeric **0** to **9** and the alphabet **A** to **Z**.
 With the **◀** button you can select in the opposite direction.
4. Select the next position by pressing the **OK** button and then take your choice of the second character, and so on.
5. Repeat the 'Manual programme tuning' steps 7 to 8.

Setting up TV stations

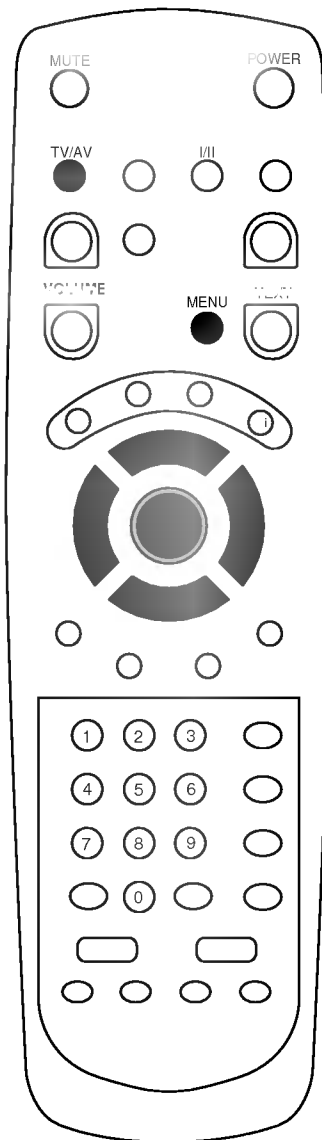
Fine tuning

Normally fine tuning is only necessary if reception is poor.

1. Repeat the 'Manual programme tuning' steps 1 to 3.
2. Press the ▲ / ▼ button to select **Fine**.
3. Press the ◀ / ▶ button to fine tune for the best picture and sound.
4. Repeat the 'Manual programme tuning' steps 7 to 8.
5. Press the **TV/AV** button to return to normal TV viewing.
The finely tuned programme will be indicated by yellow number during programme selection.



Station Menu



Setting up TV stations

Station Menu

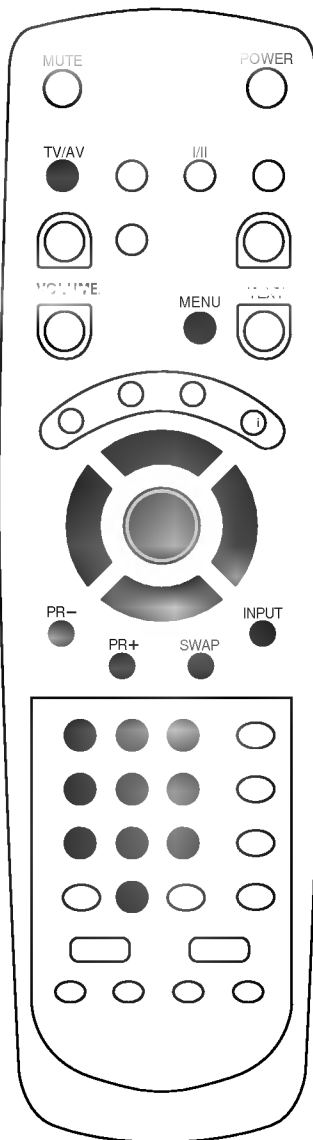


Programme edit

This function enables you to delete or skip the stored programmes. Also you can move some stations to other programme numbers or insert a blank station data into the selected programme number.

1. Repeatedly press the **MENU** button to select the Station menu.
2. Press the **▲ / ▼** button to select **Programme edit**.
3. Press the **OK** button to display the **Programme edit** menu.

0	ARD1	5	ARD1
1	FDZ	6	FDZ1
2	∞C.12	7	∞C.12
3	∞∞∞S.4	8	∞S.44
4	∞CH-5	9	CH-5



Deleting a programme

1. Select a programme to be deleted with the **▲ / ▼** or **◀ / ▶** button.
2. Press the **RED** button twice.
The selected programme is deleted, all the following programmes are shifted up one position.

Copying a programme

1. Select a programme to be copied with the **▲ / ▼** or **◀ / ▶** button.
2. Press the **GREEN** button.
All the following programmes are shifted down one position.

Moving a programme

1. Select a programme to be moved with the **▲ / ▼** or **◀ / ▶** button.
2. Press the **YELLOW** button.
3. Move the programme to the desired programme number with the **▲ / ▼** button.
4. Press the **YELLOW** button again to release this function.

0	ARD1	5	ARD1
1	FDZ	6	FDZ1
2	∞C.12	7	∞C.12
3	∞∞∞S.4	8	∞S.44
4	∞CH-5	9	CH-5

Skipping a programme number

1. Select a programme number to be skipped with the **▲ / ▼** or **◀ / ▶** button.
2. Press the **BLUE** button. The skipped programme turns to blue.
3. Press the **BLUE** button again to release the skipped programme.

When a programme number is skipped it means that you will be unable to select it using the **▲ / ▼** button during normal TV viewing. If you want to select the skipped programme, directly enter the programme number with the **NUMBER** buttons or select it in the programme edit or table menu.

Press the **TV/AV** button to return to normal TV viewing.

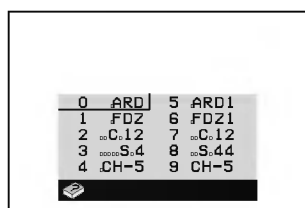
Setting up TV stations

Calling the programme table

You can check the programmes stored in the memory by displaying the programme table.

Displaying programme table

1. Press the **LIST** button to display the Programme table menu.
The programme table appears on the screen. One programme table contains ten programmes as below.



0	ARD1	5	ARD1
1	FDZ	6	FDZ1
2	C.12	7	C.12
3	S.4	8	S.44
4	CH-5	9	CH-5

Note :

- a. You may find some blue programmes. They have been set up to be skipped by auto programming or in the programme edit mode.
- b. Some programmes with the channel number shown in the programme table indicate there is no station name assigned.

Selecting a programme in the programme table

Select a programme with the **▲ / ▼** or **◀ / ▶** button.

Then press the **OK** button.

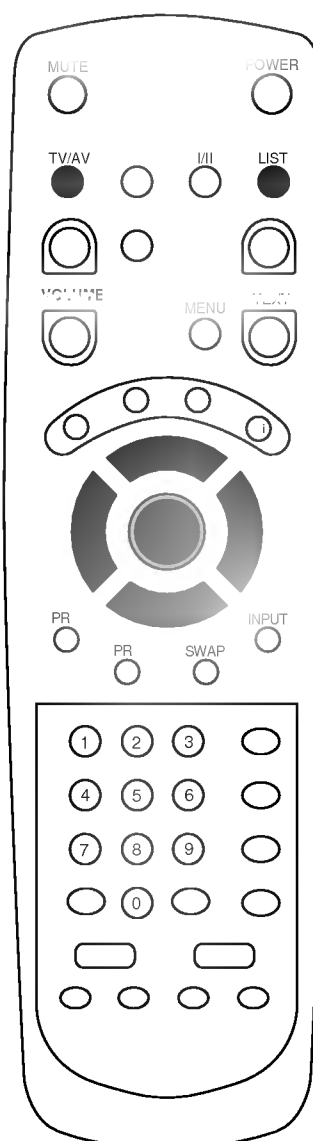
The set switches to the chosen programme number.

Paging through a programme table

There are 10 programme table pages in which contain 100 programmes.

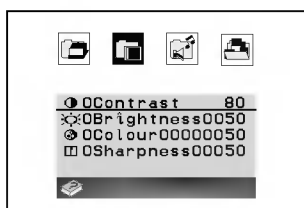
Pressing the **▲ / ▼** or **◀ / ▶** button repeatedly turns the pages.

Press the **TV/AV** button to return to normal TV viewing.



Picture adjustment

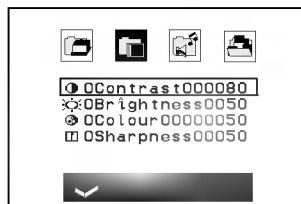
Picture Menu



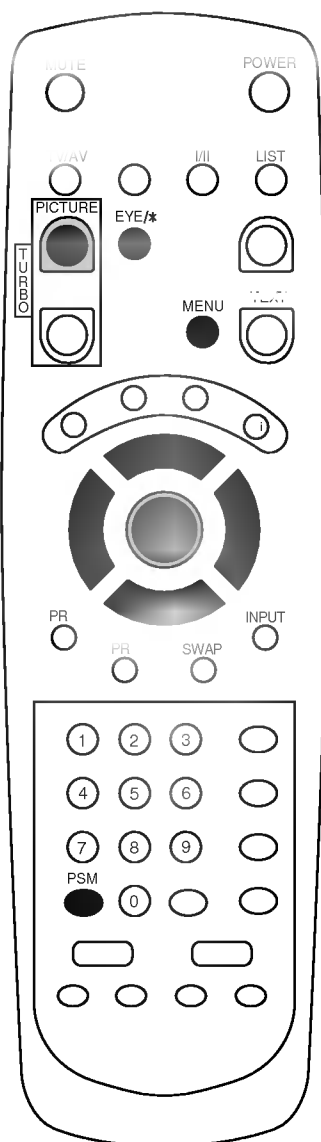
Picture adjustment

You can adjust picture contrast, brightness, colour intensity, sharpness and tint (NTSC AV only) to the levels you prefer.

1. Repeatedly press the **MENU** button to select the Picture menu.
2. Press the **▲** / **▼** button to select the desired picture item.
3. Press the **◀** / **▶** button to make appropriate adjustments.



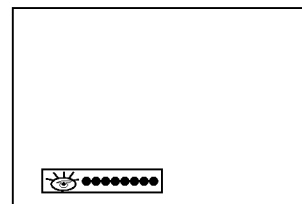
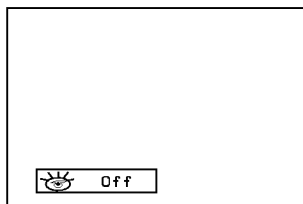
4. Press the **OK** button to store it for the picture **User**. To recall your preferred setting, press the **PSM** button until the desired picture (**Standard**, **Mild**, **Game**, **User** or **Dynamic**) appears. The picture **Standard**, **Dynamic**, **Mild** and **Game** are programmed for good picture reproduction at the factory and cannot be changed.



Eye

The set will automatically adjust the picture according to the surrounding conditions. This will enable you to enjoy the most suitable picture according to the surroundings.

Press the **EYE/★** button to switch the eye function on or off.



When the eye function is on, the most suitable picture is automatically adjusted according to the surrounding conditions. At this time the display **●●●●●●** in green does not appear continuously but the display **●●●●●●** in yellow appears each time the picture condition changes.

Note : If you press the **PSM** or **TURBO PICTURE** button with the eye function, the eye function is automatically switched off.

Picture adjustment

Picture format

You can watch TV in various picture formats ; 4:3, 16:9, Zoom 1, Zoom 2 or Auto.
Repeatedly press the **ARC** button to select your desired picture format.

4:3

This picture format is 4 to 3 of general TV.

16:9

You can enjoy the cinema (the picture format of 16:9) or general TV programme through the 16:9 mode.
The screen 16:9 is viewed just like that but the screen 4:3 is magnified to the left and right so that the screen 16:9 is full.

Zoom 1

You can enjoy the cinema in a vast screen through the Zoom mode.
The screen 4:3 is magnified to the upper / lower and left / right sides so that the screen 16:9 is full. The bottom and top of the picture may be lost.

Zoom 2

You can enjoy more magnified screen in this mode. The screen Zoom 2 is viewed just like that but the screen 16:9 is magnified to the upper and lower so that the screen Zoom 2 is full.

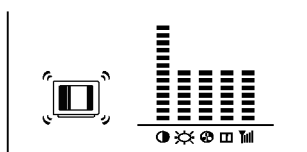
Auto

When your TV receives the wide screen signal, it will be automatically changed to the picture format to be sent.

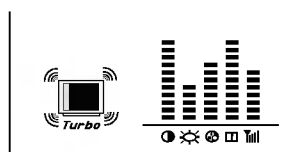
Note : In the PC mode, only **16:9** picture format is available.

Turbo picture selection

When this function is on, picture will be more brilliant and distinct picture than normal picture. You can enjoy the Turbo picture so much better than normal picture.
Repeatedly press the **TURBO PICTURE** button to switch on or off.

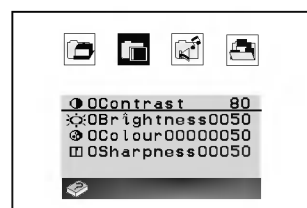


(Turbo picture off)

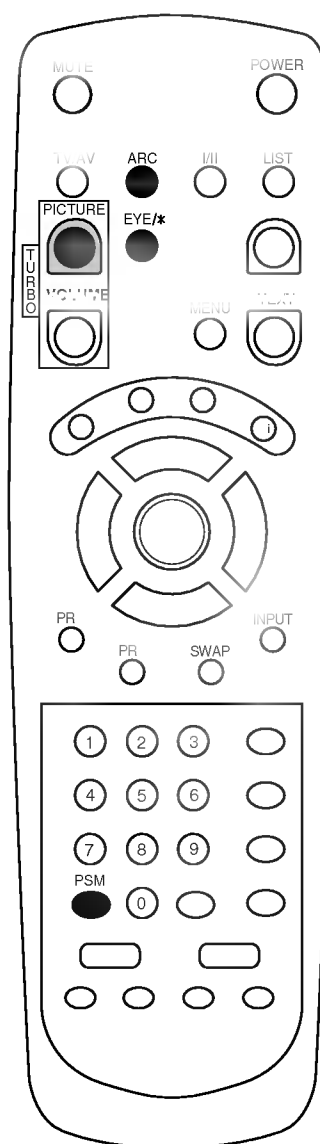


(Turbo picture on)

Note : If you press the **PSM** or **EYE/★** button with the Turbo picture function, the Turbo picture function is automatically switched off.

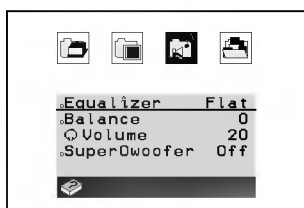


Picture Menu



Sound adjustment

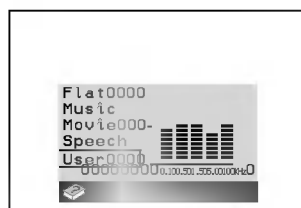
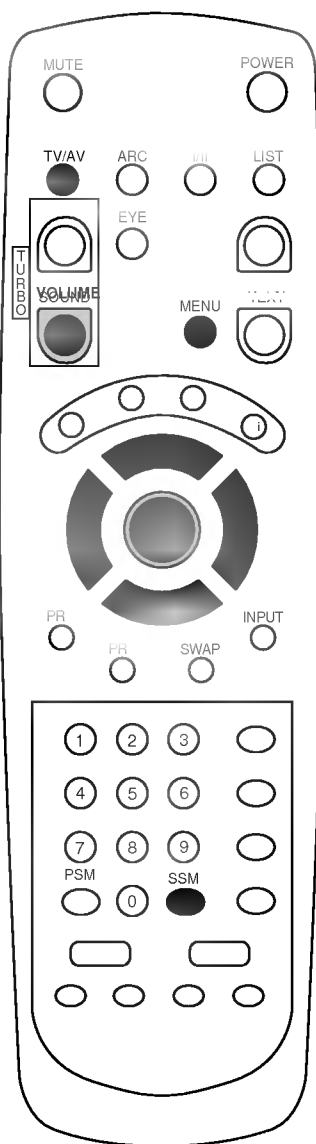
Sound Menu



Sound adjustment

You can select your preferred sound setting; Flat, Music, Movie or Speech as you prefer. Also you can adjust the sound frequency of equalizer, balance, headphone volume/sound or super woofer on/off. The Turbo sound creates an all around sound as in a concert hall and the woofer sound stresses and emphasized bass.

1. Repeatedly press the **MENU** button to select the Sound menu.
2. Press the **▲/▼** button to select the desired sound item ; **Equalizer**, **Balance**, **Volume** or **Super woofer**.
3. Press the **◀/▶** button to make desired adjustment. Press the **OK** button in **Equalizer** to set the **Equalizer User**.



- a. Select **User** by pressing the **▲ / ▼** button.
- b. Select a sound band by pressing the **◀ / ▶** button.
- c. Make appropriate sound level with the **▲ / ▼** button.
- d. Press the **OK** button to store it for the sound **User**. The display **Stored** appears.

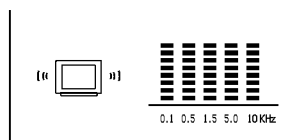
Press the **TV/AV** button to return to normal TV viewing.

To recall your preferred setting, press the **SSM** button until the desired sound (**User**, **Flat**, **Music**, **Movie** or **Speech**) appears. The sound **Flat**, **Music**, **Movie** and **Speech** are programmed for good sound reproduction at the factory and cannot be changed.

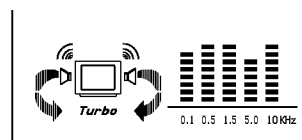
Note : If you press the **SSM** button after making appropriate adjustment in Sound menu, the display **User** automatically appears even though you have already set a factory preset setting; **Flat**, **Music**, **Movie** or **Speech**.

Turbo sound selection

When this function is on, sound will be more emphasized and amplified sound than normal sound. You can enjoy the Turbo Sound so much better than normal Sound. Repeatedly press the **TURBO SOUND** button to switch on or off.



(Turbo sound off)



(Turbo sound on)

Sound adjustment

Stereo/Dual reception

When a programme is selected, the sound information for the station appears after the programme number and station name disappear.

Broadcast	On Screen Display
Mono	MONO
Stereo	STEREO
Dual	DUAL I

Mono sound selection

If the stereo signal is weak in stereo reception, you can switch to mono by pressing the **I/II** button twice. In mono reception the depth of sound is improved. To switch back to stereo, press the **I/II** button twice again.

Language selection for dual language broadcast

If a programme received in two languages (dual language), you can switch to **DUAL I**, **DUAL II** or **DUAL I II** by pressing the **I/II** button repeatedly.

DUAL I sends the primary broadcast language to the loudspeakers.

DUAL II sends the secondary broadcast language to the loudspeakers.

DUAL I II sends a separate language to each loudspeaker.

NICAM reception

If your set is equipped with the receiver for NICAM reception, the high quality NICAM (Near Instantaneous Companding Audio Multiplex) digital sound can be received.

Sound output can be selected according to the type of received broadcast as follows by pressing the **I/II** button repeatedly.

1. When NICAM mono is received, you can select **NICAM MONO** or FM MONO.
2. When NICAM stereo is received, you can select **NICAM STEREO** or FM MONO. If the stereo signal is weak, switch to FM mono.
3. When NICAM dual is received, you can select **NICAM DUAL I**, **NICAM DUAL II**, **NICAM DUAL I II** or **MONO**. When FM mono is selected the display **MONO** appears on the screen.

Sound output selection

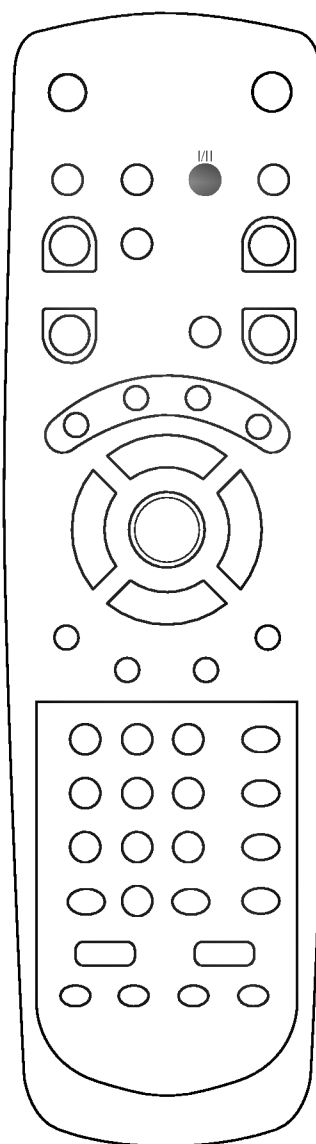
In AV mode, you can select output sound for the left and right loudspeakers.

Repeatedly press the **I/II** button to select the sound output.

L+R : Audio signal from audio L input is sent to left loud-speaker and audio signal from audio R input is sent to right loud-speaker.

L+L : Audio signal from audio L input is sent to left and right loudspeakers.

R+R : Audio signal from audio R input is sent to left and right loudspeakers.



Other functions

Special Menu

Input	TV
ChildLock	Off
AutoSleep	Off
AUL	Off
BlueBack	Off
Tilt	0
Degaussing	Off

TV and AV modes

Inputs can be set for TV or AV mode. AV mode is used when a video cassette recorder (VCR), or other equipment is connected to the set.

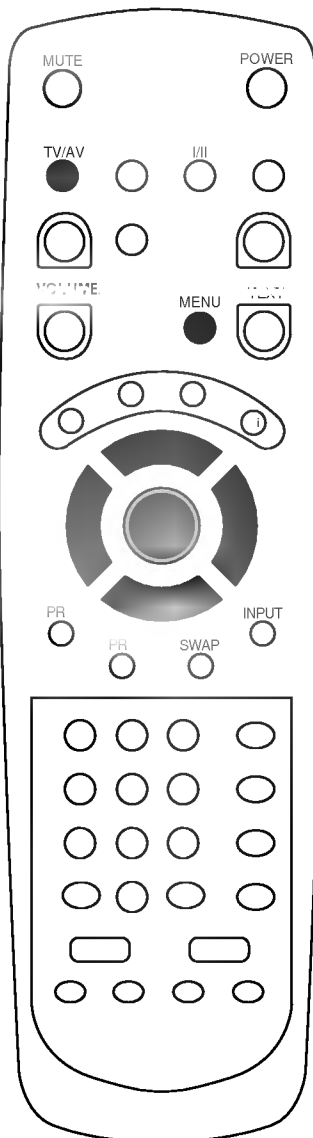
Note : When a VCR is connected via the aerial socket the set is used in TV mode. See the 'Connection of external equipment' section.

1. Repeatedly press the **MENU** button to select the Special menu.
2. Press the **▲ / ▼** button to select **Input**.
3. Press the **◀ / ▶** button to select **TV, AV 1, AV 2, AV 3** or **PC**.
The three AV modes and external equipments are :
AV1 : VCR connected to the Euro scart socket 1 on the back
AV2 : VCR connected to the Euro scart socket 2 on the back
AV3 : VCR connected to the **AV3** sockets on the side panel
PC : PERSONAL COMPUTER connected to the PC sockets on the back panel

Note : PC monitor can be input only when the resolution of the PC is 640X480.

To return to TV mode, press the **▲ / ▼** or **NUMBER** buttons.

Alternatively you can select the TV or AV mode by pressing the **TV/AV** button.



Auto AV switching

If your VCR outputs switching voltage when it is switched to playback with the VCR connected to the Euro scart socket 1 or 2. The set is automatically switched to **AV 1** or **AV 2** mode when an AV signal is input. But if you want to keep on watching TV mode, press the **▲ / ▼** or **NUMBER** buttons. Press the **TV/AV** button to return to AV modes.

Child lock

The TV can be set so that the remote control handset is needed to control it. This feature can be used to prevent unauthorized viewing.

1. Repeatedly press the **MENU** button to select the Special menu.
2. Press the **▲ / ▼** button to select **Child lock**.
3. Press the **◀ / ▶** button on the remote control handset to select **On**.
4. Press the **TV/AV** button to return to normal TV viewing.

With the lock on, the display **Child lock on** appears on the screen if any button on the front panel is pressed while viewing the TV.

Note : The display **Child lock on** will not appear on the screen if any button on the front panel is pressed while displaying the menus.

Auto sleep

If you select **Auto sleep On** the set will automatically switch itself to standby mode approximately ten minutes after a TV station stops broadcasting.

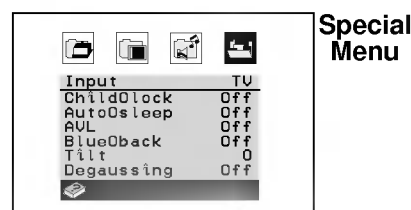
1. Repeatedly press the **MENU** button to select the Special menu.
2. Press the **▲ / ▼** button to select **Auto sleep**.
3. Press the **◀ / ▶** button to select **On**.
4. Press the **TV/AV** button to return to normal TV viewing.

Other functions

AVL (Auto volume leveler)

If you select **AVL On**, the set automatically keeps on an equal volume level even if you change programmes.

1. Repeatedly press the **MENU** button to select the Special menu.
2. Press the **▲ / ▼** button to select **AVL**.
3. Press the **◀ / ▶** button to select **On**.
4. Press the **TV/AV** button to return to normal TV viewing.



Blue back

If you select **Blue back On**, the blue background appears on the screen when there is no or poor signal.

1. Repeatedly press the **MENU** button to select the Special menu.
2. Press the **▲ / ▼** button to select **Blue back**.
3. Press the **◀ / ▶** button to select **On** or **Off**.
4. Press the **TV/AV** button to return to normal TV viewing.

Tilt

The TV picture may tilt to the left or right if the TV set moves to another position. This function can be used to compensate the tilt.

1. Repeatedly press the **MENU** button to select the Special menu.
2. Press the **▲ / ▼** button to select **Tilt**.
3. Press the **◀ / ▶** button to adjust the tilt.
4. Press the **TV/AV** button to return to normal TV viewing.

Sleep timer

You don't have to remember to switch the set off before you go to sleep. The sleep timer automatically switches the set to standby after the preset time elapses.

Press the **SLEEP** button to select the number of minutes. The display **⏻---** will appear on the screen, followed by **10, 20, 30, 60, 90, 120, 180** and **240**. The timer begins to count down from the number of minutes selected.

Note :

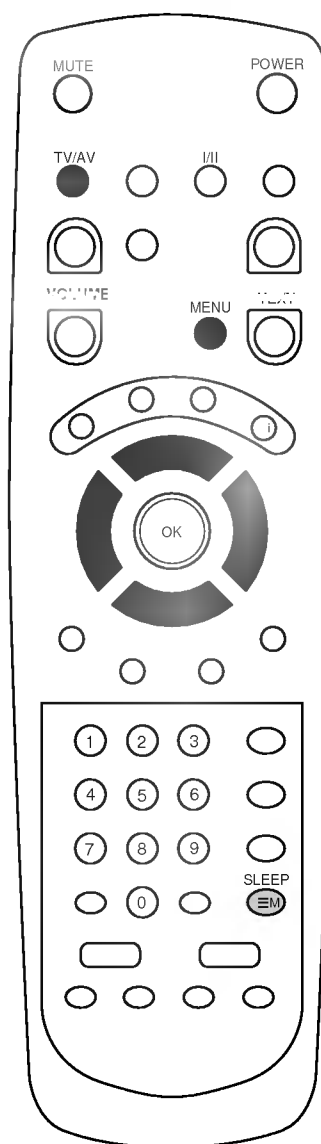
- a. To view the remaining sleep time, press the **SLEEP** button once.
- b. To cancel the sleep time, repeatedly press the **SLEEP** button until the display **⏻---** appears.
- c. When you switch the set off, the set releases the preset sleep time.

Degaussing

Owing to the super large Braun Tube in the set the magnetic field of the earth may influence on the colour purity of picture by neighbour magnetic substance or installation direction of the set. The stripes may appear on the screen or the colour may not be equal in the corner. You can enjoy the programme in high colour quality by operating the Degaussing.

1. Repeatedly press the **MENU** button to select the Special menu.
2. Press the **▲ / ▼** button to select **Degaussing**.
3. Press the **◀ / ▶** button to select **On**.
After the degaussing function works, **On** mode switches to **Off** mode.
4. Press the **TV/AV** button to return to normal TV viewing.

Note : If you cannot adjust the screen condition by degaussing, try it again after about 5 minutes.



PIP operation (option)

Option :

PIP is an optional function, so that only the set with PIP function can operate.

PIP (Picture in Picture) displays a picture within a picture.

On and off

Press the **PIP** button to switch on the sub picture.

Press this button again to switch it off.

Programme selection for sub picture (option)

Press the **PR +/-** buttons in AV mode. The selected programme number is displayed at the left upper side of sub picture.

Input mode selection for sub picture

Press the **INPUT** button while the sub picture remains within the main picture.

Each time this button is pressed, each input mode for the sub picture is displayed as shown below at the left upper side of sub picture.



Swapping between main and sub pictures

Press the **SWAP** button to exchange the main and sub pictures.

Sub picture size

Repeatedly press the **SIZE** button to select the desired sub picture size. The sub picture appears as 1/4 size of the main picture, followed by 1/9.

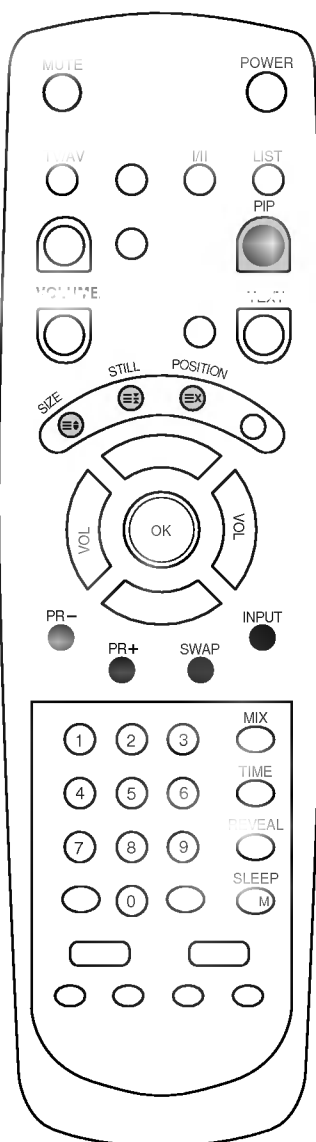
Sub picture freeze

Press the **STILL** button to freeze motion of the sub picture.

Press this button again to restore motion.

Sub picture position change

Press the **POSITION** button repeatedly until desired position is achieved. The sub picture moves clockwise.



Teletext (option)

Teletext (or TOP text) is an optional function, therefore only a set with the teletext system can receive the teletext broadcast.

Teletext is a free service broadcast by most TV stations which gives up-to-the-minute information on news, weather, television programmes, share prices and many other topics.

The teletext decoder of this TV can support the SIMPLE, TOP and FASTEXT systems. SIMPLE (standard teletext) consists of a number of pages which are selected by directly entering the corresponding page number. TOP and FASTEXT are more modern methods allowing quick and easy selection of teletext information.

Switch on/off

Press the **TEXT** button to switch to teletext. The initial page or last selected page appears on the screen.

Two page numbers, TV station name, date and time are displayed on the screen headline. The first page number indicates your selection, while the second shows the current page displayed.

Press the **TEXT** or **TV/AV** button to switch off teletext. The previous mode reappears.

SIMPLE text

Page selection

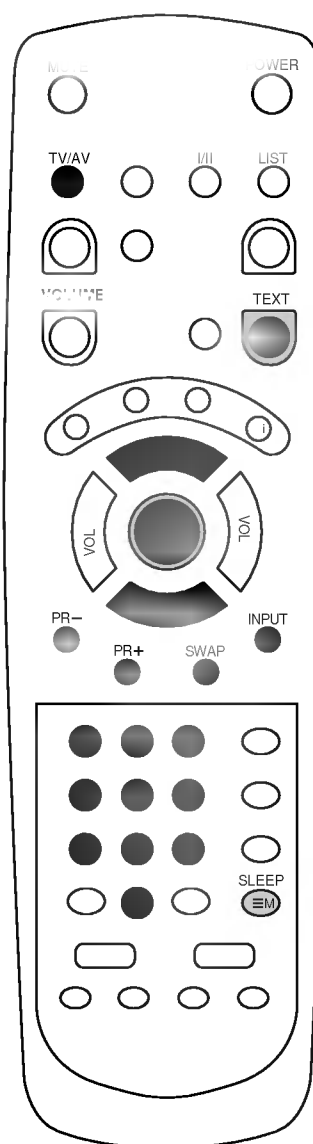
1. Enter the desired page number as a three digit number with the **NUMBER** buttons. If during selection you press a wrong number, you must complete the three digit number and then re-enter the correct page number.
2. The **▲ / ▼** button can be used to select the preceding or following page.

Programming a colour button in LIST mode

If the TV is in SIMPLE text, TOP text or FASTEXT mode, press the **EM** button to switch to LIST mode.

Four teletext page numbers of your choice can be colour coded and easily selected by pressing the corresponding coloured button on the remote control handset.

1. Using the **NUMBER** buttons, select the page you wish to programme.
2. Wait until the page is displayed on the screen and press the **OK** button. The page numbers in the colour boxes along the bottom of the screen change to "000?".
3. Press a colour button to store the page number. From now on, you can select this page with the same coloured button.
4. The three other coloured buttons are programmed in the way.



Teletext (option)

TOP text (option)

The user guide displays four fields-red, green, yellow and blue at the bottom of the screen. The yellow field denotes the next group and the blue field indicates the next block.

Block / group / page selection

1. With the blue button you can progress from block to block.
2. Use the yellow button to proceed to the next group with automatic overflow to the next block.
3. With the green button you can proceed to the next existing page with automatic overflow to the next group. Alternatively the ▲ button can be used.
4. The red button permits to return to previous selection. Alternatively the ▼ button can be used.

Direct page selection

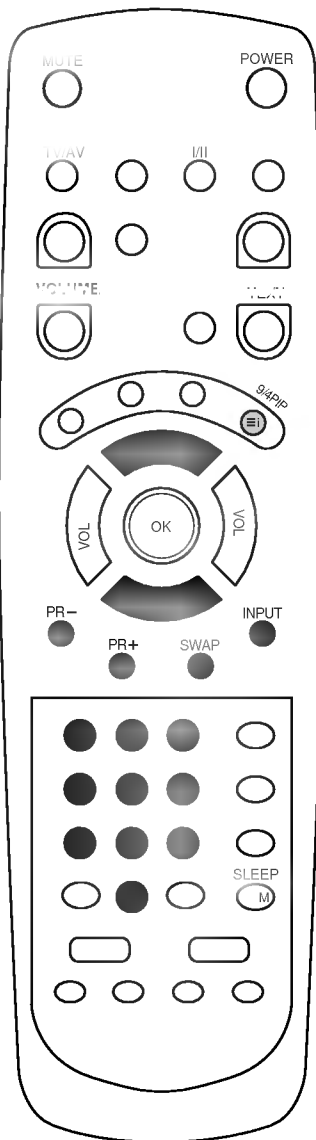
Corresponding to the SIMPLE teletext mode, you can select a page by entering it as a three digit number using the NUMBER buttons in TOP mode.

FASTEXT

The teletext pages are colour coded along the bottom of the screen and are selected by pressing the corresponding coloured button.









Page selection

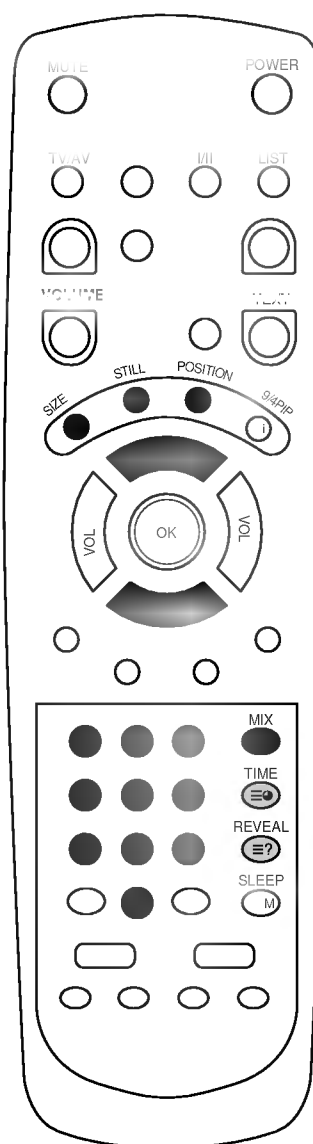
1. Press the ⊞ button to select the index page.
2. You can select the pages which are colour coded along the bottom line with the same coloured buttons.
3. Corresponding to the SIMPLE teletext mode, you can select a page by entering its three digit page number with the NUMBER buttons in FASTEXT mode.
4. The ▲ / ▼ button can be used to select the preceding or following page.



Teletext (option)

Special teletext functions

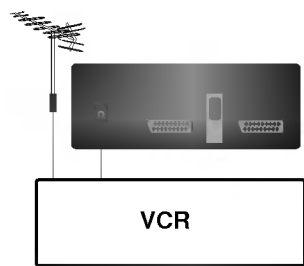
-  **REVEAL**
Press this button to display concealed information, such as solutions of riddles or puzzles.
Press this button again to remove the information from the display.
-  **SIZE**
Selects double height text.
Press this button to enlarge the top half of the page.
Press this button again to enlarge the bottom half of the page.
Press this button again to return to the normal display.
-  **UPDATE**
Displays the TV picture on the screen while waiting for the new teletext page. The display  will appear at the top left hand corner of the screen. When the updated page is available then display  will change to the page number.
Press this button to view the updated teletext page.
-  **HOLD**
Stops the automatic page change which will occur if a teletext page consists of 2 or more sub pages. The number of sub pages and the sub page displayed is, usually, shown on the screen below the time. When this button is pressed the stop symbol is displayed at the top left-hand corner of the screen and the automatic page change is inhibited.
To continue press this button again.
-  **MIX**
Displays the teletext pages superimposed on the TV picture.
To switch the TV picture off press this button again.
-  **TIME**
When viewing a TV programme, press this button to display the time at the top right hand corner of the screen. Press this button again to remove the display.
In the teletext mode, press this button to select a sub page number. The sub page number is displayed at the bottom of the screen. To hold or change the sub page, press the **▲ / ▼** or **NUMBER** buttons.
Press again to exit this function.



Connection of external equipment

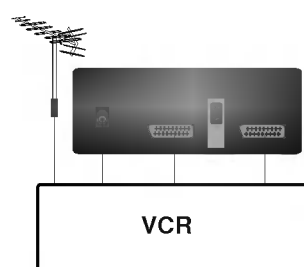
You can connect additional equipment, such as VCRs, camcorders etc. to your set.

Here shown may be somewhat different from your set.



Aerial socket

1. Connect the RF out socket of the VCR to the aerial socket on the back of the set.
2. Connect the aerial cable to the RF aerial in socket of the VCR.
3. Store the VCR channel on a desired programme number using the 'Manual programme tuning' section.
4. Select the programme number where the VCR channel is stored.
5. Press the **PLAY** button on the VCR.



Euro scart sockets

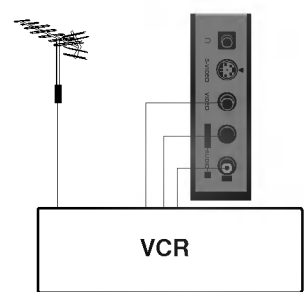
1. Connect the Euro scart socket of the VCR to the Euro scart socket 1 or 2 of the set.
2. Press the **PLAY** button on the VCR.
If your VCR outputs a switching voltage connect to Euro scart socket 1 or 2, the set will switch to **AV 1** or **AV 2** mode automatically. But if you want to keep on watching TV mode, press the **▲ / ▼** or **NUMBER** buttons.

Otherwise press the **TV/AV** button on the remote control handset to select **AV 1** or **AV 2**. The VCR playback picture appears on the screen.

You can also record programmes received by the TV on video tape.

Note :

- a. Signal type **RGB**, i.e. the signals red, green and blue can only be selected for the Euro scart socket 1 (not Euro scart 2). These signals are transmitted, for example, by a computer, pay TV decoder, game machine or photo CD unit, etc.
- b. If both Euro scart 1 and 2 sockets have been connected to the VCRs simultaneously, only the **AV 1** can be received.



Audio/Video in sockets

1. Connect the audio/video out sockets of the VCR to audio/video in sockets of the set.
2. Press the **TV/AV** button to select **AV 3**.
3. Press the **PLAY** button on the VCR.
The VCR playback picture appears on the screen.

Note : If you have a mono VCR, connect the audio cable from the VCR to the **AUDIO L/MONO** socket on the side panel.

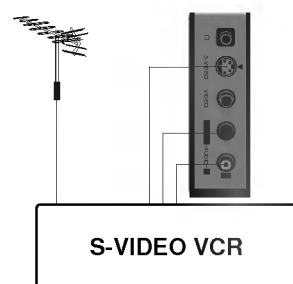
Connection of external equipment

S-Video/Audio in sockets (S-AV)

When connecting an S-VIDEO VCR to the **S-VIDEO** socket, the picture quality will be further improved.

1. Connect the S-Video socket of the VCR to the **S-VIDEO** socket on the side panel of the set.
2. Connect the audio cable from the S-VIDEO VCR to the **AUDIO** sockets on the side panel of the set.
3. Select **AV 3** by pressing the **TV/AV** button repeatedly.
4. Press the **PLAY** button on the VCR.
The VCR playback picture appears on the screen.

Note : If both **S-VIDEO** and **VIDEO** sockets have been connected to the S-VHS VCR simultaneously, only the **S-VIDEO** can be received.



Headphone socket

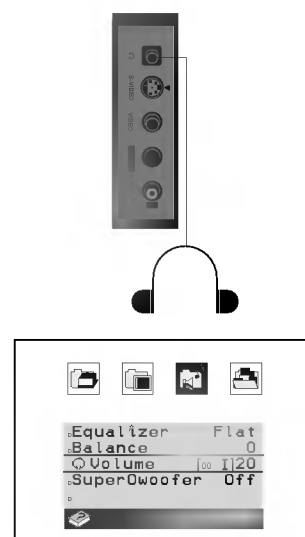
Insert the headphone plug to the headphone socket on the side panel.

You can listen to the sound through the headphone and the TV's speakers. To adjust the headphone in the Sound menu, press the **▲ / ▼** button to select **Volume** then the **◀ / ▶** button. See the 'Sound adjustment' section.

If you press the **MUTE** button, only the sound from the TV's speakers are switched off.

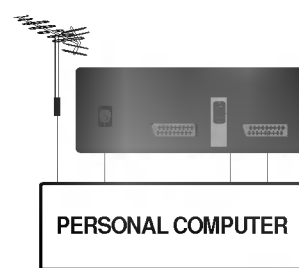
When a programme is received in dual language, you can select a language (**DUAL I**, **DUAL II** or **DUAL I II**) for the sound from the headphone regardless of that from the TV's speakers. In the Sound menu, press the **▲ / ▼** button to select **Volume** then **I/II** button to select the desired language; **I**, **II** or **I II**.

At this time if the set is in AV mode, the **I/II** button selects output sound; **L R**, **L L** or **R R**, in turn.



PC in socket

1. Connect the monitor output socket of the PERSONAL COMPUTER to the PC input socket on the back panel of the set.
2. Connect the audio cable from the PC to the Euro scart socket 2 on the back panel of the set.
3. Press the **TV/AV** button to select **PC**.
4. Turn the PC on, and the PC screen appears on the set.
The set can be operated as the PC monitor.



Troubleshooting check list

Symptoms

No picture, no sound

Sound OK, poor picture

Picture OK, poor sound

Picture blurred

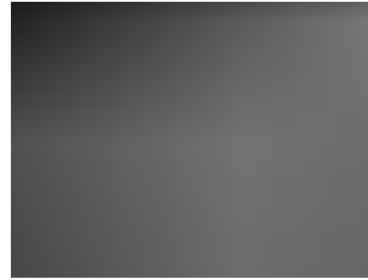
Lines or streaks in picture

Poor reception on some channels

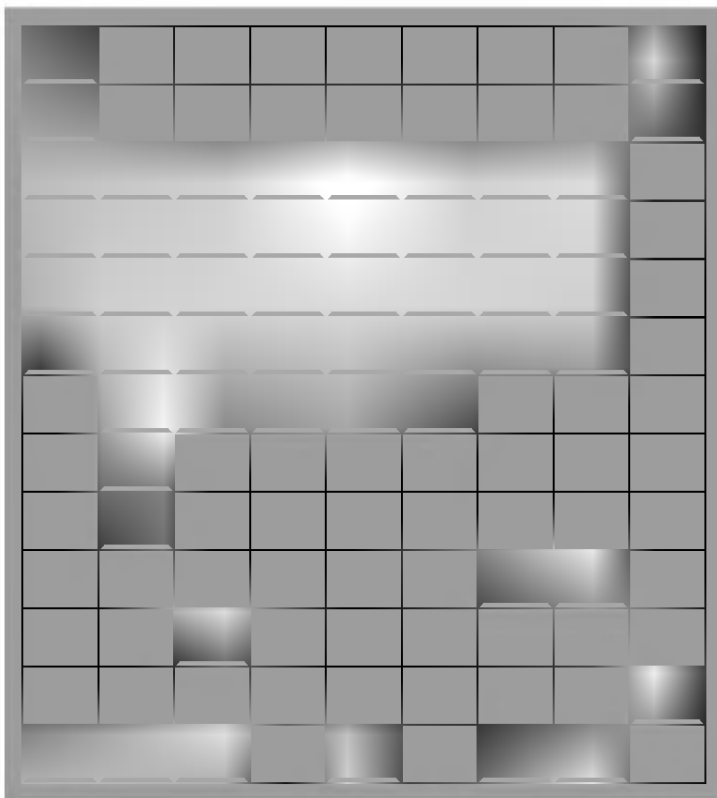
No colour

Poor colour

Remote control does not work



Check these items and try to adjust these



The mains plug-(plugged in and switched on)

Is the TV switched on

Try another channel (weak signal)

Check aerial (plugged into TV?)

Check aerial (broken lead?)

Check aerial

Check for local interference

Adjust contrast

Adjust brightness

Adjust colour

Adjust volume

Check the batteries in remote control

Check Audio/Video sockets (VCR only)

