

- 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 :	

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Installation

Power

This set operates on an AC mains supply, the voltage is as indicated on the label on the back. Never apply DC power to the set. To protect your set from damage during thunderstorms, please pull out the mains plug and aerial plug.

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 $1\Gamma75\Omega$ 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.

POWER switches the set on from standby or off to standby.

MUTE switches the sound on or off.

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

4. NUMBER BUTTONS switch the set on from standby or directly select a number.

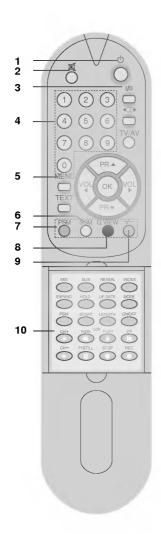
SSM (Sound Status Memory)
recalls your preferred sound setting.

5. MENU

selects a menu.

- 7. PSM (Picture Status Memory) recalls your preferred picture setting.
- 8. QUICK VIEW returns to the previously viewed programme.
- UNIT selects single or double digit.

10. VCR BUTTONS control a Goldstar video cassette recorder.



Location and function of controls

11. SPATIAL

creates the spatial or pseudo stereo sound effect.

12. TV/AV

selects TV or AV mode.

13. ▲ / ▼ (Programme Up/Down)

switches the set on from standby. selects a programme or a menu item.

√ / ► (Volume Down/Up)

adjusts the volume. adjusts menu settings.

OK

accepts your selection or displays the current mode.

14. TELETEXT BUTTONS (option)

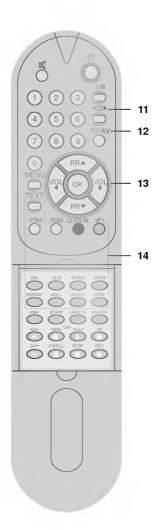
These buttons are used for the teletext. For further details, see the 'Teletext' section.

Battery installation

The remote control handset is powered by two AA 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(\oplus and \ominus) marked inside the compartment.



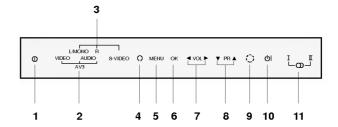
Note: To avoid damage from possible battery leakage, remove the batteries if you do not plan to use the remote control handset for an extended period of time.



Location and function of controls

Front panel

Shown is a simplified representation of the front panel. Seeing your set, please note the function of each control.



1. MAIN POWER (①)

switches the set on or off.

2. AUDIO/VIDEO IN SOCKETS (AV3)

Connect the audio/video out sockets of external equipment to these sockets.

3. S-VIDEO/AUDIO IN SOCKETS (S-AV)

Connect the video out socket of a S-VHS VCR to the **S-VIDEO** socket. Connect the audio out sockets of the S-VHS VCR to the audio sockets as in AV3.

4. HEADPHONE SOCKET (option)

Connect the headphone plug to this socket.

5. MENU

selects a menu.

6. OK

accepts your selection or displays the current mode.

7. VOLUME UP/DOWN

adjusts the volume. adjusts menu settings.

8. PROGRAMME UP/DOWN

switches the set on from standby. selects a programme or a menu item.

9. REMOTE CONTROL SENSOR

10. POWER/STANDBY INDICATOR

illuminates in red when the set is in standby mode. illuminates in yellow when the set is switched on.

11. STEREO/DUAL INDICATOR (option)

illuminates brightly when receiving a dual language broadcast or stereo sound.

Basic operation

On and off

- 1. Press the main power button (Φ) on the set, the set then switches on
- If the set is in standby mode, press the POWER (⁽¹⁾), ▲ / ▼ or NUMBER buttons on the remote control handset to fully switch the set on.
- 3. Press the **POWER** (0) button on the remote control handset once more. The set reverts to standby.
- Press the main power button on the set again. It switches the set off and the power/standby indicator goes out in a few seconds.

Note: If no signal is received for about 10 minutes, the set will automatically switch itself to standby mode.

Programme selection

You can select a programme number with the \blacktriangle / \blacktriangledown or NUMBER buttons.

Before entering a number, press the -/-- button until the display – for single digit programme numbers or – for double digit programme numbers appears on the screen.

Volume adjustment

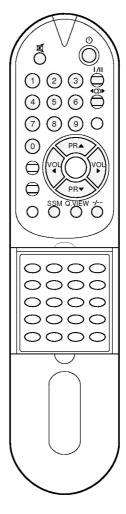
Press the ◀ / ▶ button to adjust the volume.

Mute function

Press the button. The sound is switched off and the display appears. You can cancel it by pressing the t, ✓ / ►, SSM, I/II or ◆ button.

Quick view

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



On screen menus

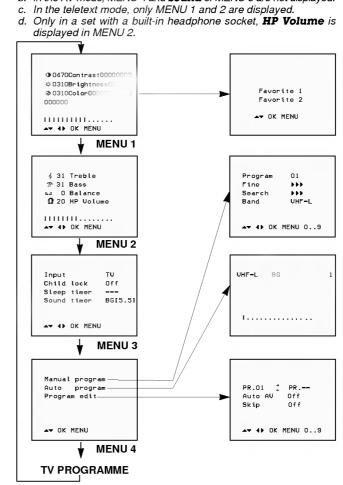
The dialogue between you and your set takes place on screen with an operator menu. The buttons required for the operating steps are also displayed.

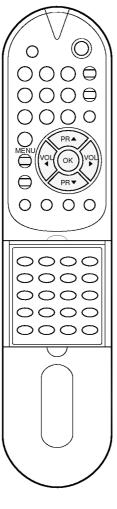
Menu selection

- 1. Repeatedly press the **MENU** button to display each menu.
- Press the ▲ / ▼ button to select a menu item.
 The selected menu item changes from green to magenta.
- Press the ◀ / ► button to change the setting of a menu item or OK button to display the sub menu.

Note:

- a. The menus automatically disappear in about 10 seconds if you do not press a button. However if you press the MENU button again, the last selected menu will appear with your selected menu item.
- b. In the AV mode, MENU 4 and Sound of MENU 3 are not displayed.





Up to 80 TV stations can be stored in this set by programme numbers (0 to 79). Once you have preset the stations, you will be able to use the \blacktriangle / \blacktriangledown or NUMBER buttons to scan the stations you programmed.

Stations can be tuned using an automatic or a manual mode.

Manual program Auto program Program edit

MENU 4

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 MENU 4.
- 2. Press the ▲ / ▼ button to select **Auto program**.
- 3. Press the **OK** button to begin auto programming.

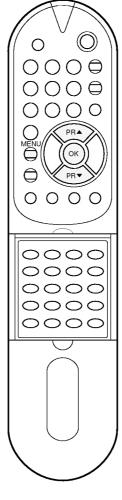
The band automatically changes

VHF·L → VHF·H → UHF.

When auto programming is completed, the station stored into programme number 1 will appear on the screen.

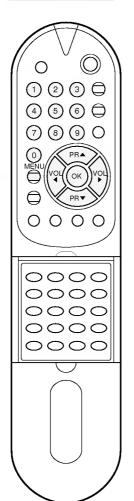
To stop auto programming, press any button. The active programme at that time will be displayed.

Note: Some undesired stations may be stored, such as noisy or unclear signals from distant transmitters. You can easily skip these stations by entering **Program edit** mode.



MENU 4





Manual programme tuning

Manual programme lets you manually tune and arrange the stations in whatever order you desire.

- 1. Repeatedly press the MENU button to select MENU 4.
- 2. Press the ▲ / ▼ button to select **Manual program**.
- 3. Press the **OK** button to display the **Manual program** mode.



- Press the ▲ / ▼ button to select **Program**. Select the desired programme number with the ◀ / ▶ or NUMBER buttons.
- Press the ▲ / ▼ button to select Band. Press the ◀ / ► button to select VHF-L, VHF-H or UHF as required.
- Press the ▲ / ▼ button to select **Search**. Press the ◀ / ► button to commence searching. To stop the search at any time press the MENU button.
- 7. If this station is the one required press the **OK** button, if not press the ◀ / ▶ button again.
- 8. To store another station repeat steps 4 to 7.
- 9. Press the **MENU** button to return to normal TV viewing.

Fine tuning

Normally fine tuning is only necessary if reception is poor.

- 1. Repeat steps 1 to 3 above.
- Press the ▲ / ▼ button to select Fine. Press the ◀ / ▶ button to fine tune for the best picture and sound.
- 3. Press the **OK** button to store the setting.
- Press the MENU button to return to normal TV viewing.
 The finely tuned programme will be indicated by yellow number during programme selection.

Programme edit

This function enables you to rearrange the programmes stored by auto programming in whatever order you desire. Also you can skip particular programme numbers stored by auto programming.

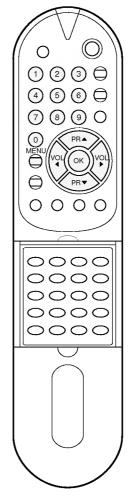
- 1. Repeatedly press the **MENU** button to select MENU 4.
- 2. Press the ▲ / ▼ button to select **Program edit**.
- 3. Press the **OK** button, and the **Program edit** mode will appear.



Exchanging programmes

- Press the ◀ / ▶ button to change the left hand programme number. The viewing station corresponding to the new programme number is shown on the screen.
- Press the NUMBER buttons to enter the desired right hand programme number. Any number under 10 is entered with a numeric '0' in front of it, i.e. '05' for 5.
- Press the OK button. The station stored in the right hand programme number will now appear as the left hand programme number.
- 4. Repeat steps 1 to 3 to exchange other programmes.





MENU 4





Auto AV setting (option)

If your VCR outputs a switching voltage when it is switched to playback select **AV1** or **AV2** (Euro scart models only). You can now watch your recordings instead of the TV.

This set is automatically switched to AV mode when the AV signal is input. But if you want to keep on watching TV mode, set ${\bf Auto}$

AV to Off.

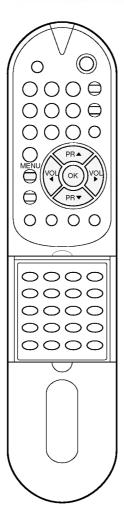
- Press the ◀ / ▶ button to select your desired programme number.
- 2. Press the ▲ / ▼ button to select **Auto AV**.
- 3. Press the ◀ / ▶ button to select Off, AV1 or AV2.
- 4. Press the **OK** button.
- 5. Repeat steps 1 to 4 to set another programme.

Skipping the stored programme

- Press the ◀ / ▶ button to select the programme you want to skip. The viewing station corresponding to the selected programme number is shown on the screen.
- 2. Press the ▲ / ▼ button to select **Skip**.
- Press the ◀ / ► button to select On or Off.
 If you select On, the selected station is skipped.
- 4. Press the **OK** button.
- 5. Repeat steps 1 to 4 to skip another programme.

The selection of the skipped programme numbers with the NUMBER buttons is still possible and they will be indicated by cyan numbers during programme selection.

Press the **MENU** button to return to normal TV viewing.



Picture adjustment

You can adjust picture contrast, brightness, colour intensity and tint (NTSC input only) as you prefer.

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

At this point you can complete your adjustments or store your setting for immediate recall by following steps 4 to 6.

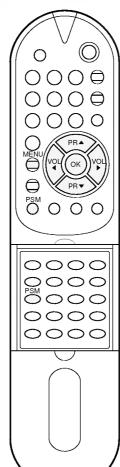
4. Press the **OK** button.



- 5. Select Favorite 1 or Favorite 2 with the ▲ / ▼ button. The Favorite 1 or Favorite 2 option allow you to programme two entirely different picture settings for various lighting conditions such as day and night.
- 6. Press the **OK** button. The display **Stored** will appear.

To recall your preferred setting, press the PSM button until the desired picture (Standard, Favorite 1 or Favorite 2) appears. The Standard picture is programmed for good picture reproduction at the factory and cannot be changed.

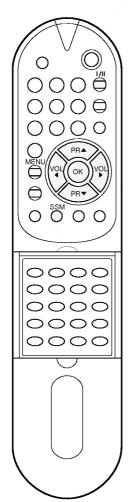




Sound adjustment

MENU 2





Sound adjustment

You can adjust the treble, bass, balance and HP volume (Headphone socket models only) as you prefer.

- 1. Repeatedly press the **MENU** button to select MENU 2.
- 2. Press the ▲ / ▼ button to select the desired sound item.
- 3. Press the ◀ / ▶ button to make desired adjustment.
- Press the **OK** button to store.
 The adjusted sound level is stored in Favorite.

To recall your preferred setting, press the SSM button until the desired sound (Favorite, Standard, News, Movie,

♪ Sports or ♪ Music) appears. They, except for ♪ Favorite, are programmed for good sound reproduction appropriate to each programme character at the factory and cannot be changed.

Note: If your set is equipped with a headphone socket, **HP DUAL** is displayed in dual language reception. Refer to the 'Headphone socket' section.

Stereo/Dual reception

When a programme is selected, the sound information for the station appears on the screen after the programme number and colour system disappear.

Broadcast On Screen Display
Mono MONO
Stereo STEREO
Dual DUAL I

Mono sound selection

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

Language selection for dual language broadcast

If a programme is 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.

Sound adjustment

NICAM reception (option)

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

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

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

Spatial sound

The spatial sound effect for a stereo broadcast or pseudo stereo sound effect for a mono or dual language broadcast can be created.

Repeatedly press the 🕪 button to switch between spatial(or pseudo stereo) sound and normal sound.

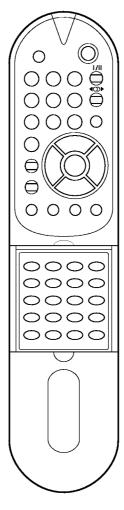
When spatial(or pseudo stereo) sound is selected the display **O>* appears on the screen.

Sound output selection

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

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

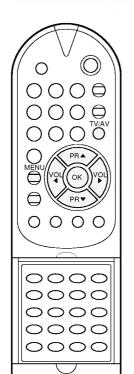
- **L+R**: Audio signal from audio L input is sent to left loudspeaker and audio signal from audio R input is sent to right loudspeaker.
- **L+L**: Audio signal from audio L input is sent to left and right loudspeakers.
- **R+R**: Audio signal from audio R input is sent to left and right loudspeakers.



Other functions

MENU 3





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 MENU 3.
- 2. Press the ▲ / ▼ button to select Input.
- 3. Press the \blacktriangleleft / \blacktriangleright button to select **TV**, **AV1**, **AV2**, **AV3** or **S-AV**.

The four AV modes are:

AV 1: VCR connected to the euro scart socket 1 on the back

AV 2: VCR connected to the socket(s) 2 on the back

AV 3: VCR connected to the AV3 sockets on the front

S-AV: VCR connected to the **AUDIO** and **S-VIDEO** sockets on the front

4. Press the OK button.

To return to TV mode from AV mode press the ▲ / ▼ button.

Alternatively you can select the TV or AV mode by pressing the ${
m TV/AV}$ button.

Child lock

The TV can be set so that the remote control handset is needed to control the set fully.

This feature can be used to prevent unauthorised viewing.

- 1. Repeatedly press the **MENU** button to select MENU 3.
- 2. Press the ▲ / ▼ button to select **Child lock**.
- Press the ◀ / ► button on the remote control handset to select On
- 4. Press the **OK** 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.

Other functions

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.

- 1. Repeatedly press the **MENU** button to select MENU 3.
- 2. Press the ▲ / ▼ button to select **Sleep timer**.
- For selecting your desired number of minutes, press the ¢ ,/¢" button several times or continuously. --- will appear on the screen, followed by 240, 180, 120, 90, 60, 30, 20 and 10.
- Press the **OK** button to return to normal TV viewing.
 The timer begins to count down from the number of minutes selected.

Note:

- a. To view the remaining sleep time, select menu 3.
- b. To cancel the sleep time, set the sleep time to ---.
- c. When you switch the set off, the set releases the preset sleep time.

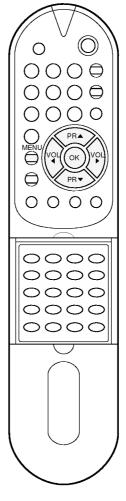
Sound system setting

If the sound is distorted or noisy, reset the TV system using this function.

- 1. Repeatedly press the **MENU** button to select MENU 3.
- 2. Press the ▲ / ▼ button to select **Sound**.
- 3. Press the ◀ / ▶ button to select the correct sound system, BG[5.5], DK[6.5], I[6.0]. or M [4.5].
- 4. Press the **OK** button to return to normal TV viewing.



MENU 3



Teletext (option)

Teletext is an optional function, therefore only set with the teletext system can receive the teletext broadcast by using the teletext buttons

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 LIST, TOP and FASTEXT modes. LIST (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 without recurring page numbers.

Switch on/off

Press the **TEXT** button to switch on the teletext. The initial page or last selected page appears on the screen. The teletext decoder is in the teletext mode transmitted by the broadcast station.

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.

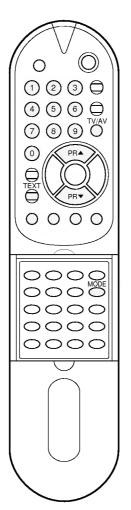
Press the **TEXT** or **TV/AV** button to switch off the teletext. The previous mode reappears.

LIST mode

If the TV is in TOP or FASTEXT mode, press the $\textbf{MODE}\$ button to switch to LIST mode.

Page selection

- 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 reenter the correct page number. If the page is not available, the page number, e.g. "> 300 <" will flash for a few seconds.
- The ▲ / ▼ button can be used to select the preceding or following page.



Teletext (option)

Programming a colour button

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.
- 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 e.g. ">000?".
- 3. Press a coloured button to store the page number. From now on, you can select this page with the same coloured button.
- The three other coloured buttons are programmed in the same way.

TOP mode (option)

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

Group/block/page selection

- 1. With the CYAN button you can progress from block to block.
- Use the YELLOW button to proceed to the next group with automatic overflow to the next block.
- 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.
- The RED button permits to return to previous selection.
 Alternatively the ▼ button can be used.

Direct page selection

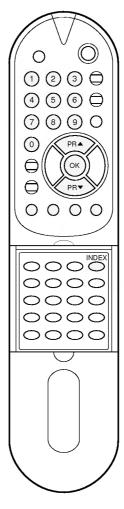
Corresponding to the LIST teletext mode, you can select a page by entering a three digit number with the NUMBER buttons in TOP mode. If the page is not available, the page number, e.g. ">300<" flashes for a few seconds.

FASTEXT mode

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 INDEX 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.
- Corresponding to the LIST teletext mode, you can select a page by entering a three digit number with the NUMBER buttons in FASTEXT mode.
- The ▲ / ▼ button can be used to select the preceding or the following page.

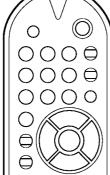


Teletext (option)

Special teletext functions

Press this button to display the concealed information, such as solutions of riddles or puzzles.

Press this button again to remove the information from the display.



EXPAND (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 (a) 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.

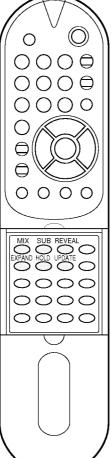
HOLD (STOP)

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.

Displays the teletext pages superimposed on the TV picture. To switch the TV picture off press this button again.

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 teletext mode press this button to select and hold or change a four digit sub page number. This is displayed along the bottom of the screen. Press this button again to exit this function.



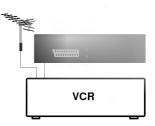
Connection of external equipment

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

Here shown may be somewhat different from your set.

Aerial socket

- 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.
- Select the programme number where the VCR channel is stored.
- 5. Press the PLAY button on the VCR.

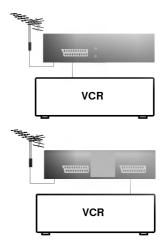


Euro scart socket

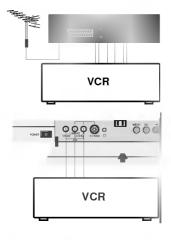
- Connect the euro scart socket of the VCR to euro scart socket 1 of the set.
- 2. Press the TV/AV button to select AV1.
- Press the PLAY button on the VCR.
 The VCR playback picture appears on the screen.

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

Note: Some models are equipped with two euro scart sockets. If you connect it to euro scart socket 2, select **AV2**.



Connection of external equipment



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S-VHS VCR

Audio/Video in/out sockets

- Connect the audio/video out sockets of the VCR to audio/video in sockets of the set and in sockets of the VCR to out sockets of the set.
- Press the TV/AV button to select AV2.
 Select AV3 if AV3 sockets on the front are connected to the VCP
- Press the PLAY button on the VCR.
 The VCR playback picture appears on the screen.

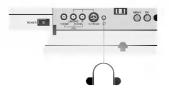
You can also record programmes received by the TV on video tape via audio/video out sockets.



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

- Connect the S-video socket of the VCR to the S-VIDEO socket on the front panel of the set.
- Connect the audio cable from the S-VHS VCR to the AUDIO sockets on the front panel of the set.
- 3. Select **S-AV** 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 you have a mono VCR, connect the audio cable from the VCR to the **AUDIO** L/**MONO** socket on the front panel.



Headphone socket (option)

If your set is equipped with a headphone socket, insert the headphone plug to the headphone socket.

You can listen to the sound through the headphone and the TV's speaker.

If you press the button, only the sound from the TV's speaker is switched off. To adjust the headphone volume, see the 'Sound adjustment' section.

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 speaker. In MENU 2, press the ▲ / ▼ button to select **HP DUAL** then the ◀ / ▶ button to set the desired language.



Troubleshooting check list

