

Colour Television **OWNER'S MANUAL**



Contents

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

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 $\mathbb{1}75~\Omega$ 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

(With teletext) (Without PIP)

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

10 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.

switches the sound on or off.

3. ARC (Aspect Ratio Control) changes the picture format.

TV/AV selects TV or AV mode. clears the menu / text from the screen. switches the set on from standby

TURBO PICTURE / SOUND BUTTON selects Turbo picture / sound.

▲ /▼ (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.

7. NUMBER BUTTONS

switches the set on from standby or directly select a number.

8. PSM (Picture Status Memory) recalls your preferred picture setting.

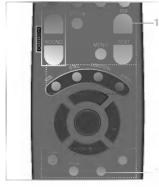
VCR BUTTONS (option) control a LG video cassette recorder.

selects the language during dual language broadcast (option). selects the sound output.

displays the programme table.

12. EYE/★ (option) switches the eye function on or off.

selects a menu.



(With teletext / PIP)

Location and function of controls

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

15. SWAP or Q.VIEW

returns to the previously viewed programme.

16. SLEEP

sets the sleep timer.

17. SSM (Sound Status Memory)

recalls your preferred sound setting.

18. PIP BUTTONS (option)

switches the sub picture on or off.

selects a programme for the sub picture.

SWAP

alternates between main and sub picture.

selects the input mode for the sub picture.

adjusts the sub picture size.

SŤILL

freezes motion of the sub picture. **POSITION**

relocates the sub picture in clockwise direction.

switches on or off the 9 or 4 sub pictures.

COLOURED BUTTONSThese buttons are used for teletext (only TELETEXT models) or programme edit.

Battery installation

The remote control handset is powered by two AAA or AA type batteries. To load the batteries, turn the remote control handset over and open the battery compartment. Install two batteries as indicated by the polarity symbols (⊕ and ⊝) marked inside the compartment.



(With teletext)



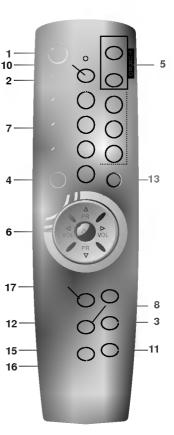




(Without teletext)



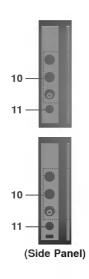
Note: To avoid damage from possible battery leakage, remove the batteries if you do not plan to use the remote control handset for an extended period of time.

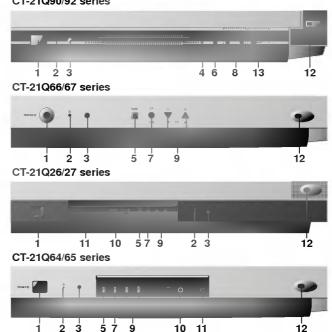


Location and function of controls

Front panel

CT-21Q90/92 series





- 1. MAIN POWER switches the set on or off.
- 2. POWER/STANDBY INDICATOR illuminates brightly when the set is in standby dims when the set is switched on.
- 3. REMOTE CONTROL SENSOR
- 4. MENU selects a menu.
- 5. TV/AV selects TV or AV mode. clears the menu from the screen. switches the set on from standby.
- accepts your selection or displays the current modė.
- 7. C (Function) selects volume, EYE (option), picture items or brief auto programme while the menus not display.

- 8. ▲ / ▼ (Programme Up/Down) selects a programme or a menu item. switches the set on from standby.

 ✓ / ► (Volume Down/Up) adjusts the volume. adjusts menu settings.
- 9. +/- (▲/▼) adjusts the function or selects a programme. switches the set on from standby.
- 10.AUDIO/VIDEO IN SOCKETS (AV2 or AV3) (option)
 Connect the audio/video out sockets of exter-
- nal equipment to these sockets.

Connect the headphone plug to this socket.

11. HEADPHONE SOCKET (option)

- 12.EYE (option) adjusts picture according to the surrounding conditions.
- 13.TURBO SOUND / PICTURE (option) switches Turbo sound or Turbo picture function on or off.

Basic operation

On and off

- Press the main power button to switch the set on.
- 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.
- 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, while the set is switched on, the mains plug is disconnected the set will switch to standby or power on when the mains plug is replaced in the mains power socket.

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 or Q.VIEW 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 or C 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.

On screen language selection

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

- Press the **MENU** button to select the Station menu.

- Press the A / V button to select **Language**.

 Press the **OK** button.

 Press the A / V button to select your desired language.
- 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

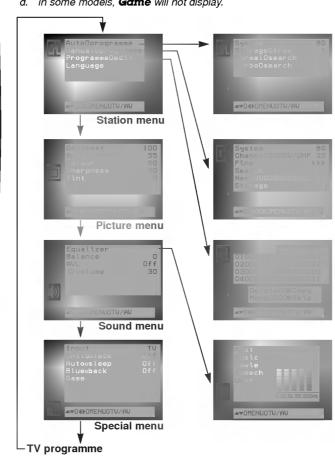
The dialogue between you and your set takes place on screen with an operator menu. The buttons required for the operating steps are also displayed.

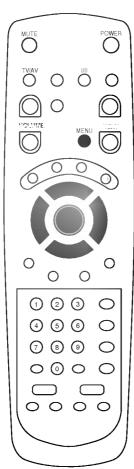
Menu selection

- Repeatedly press the **MENU** button to display each menu. Press the \blacktriangle / \blacktriangledown button to select a menu item. The selected menu item changes from white to red. Press the \blacktriangleleft / \blacktriangleright button to change the setting of a menu item or **OK** button to display the sub menu.

Note:

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





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

- Repeatedly press the **MENU** button to select the Station menu. Press the **A** / **V** button to select **Auto programme**. Press the **OK** button to display the **Auto programme** menu.



Press the ▲ / ▼ button to select **System**. Select a TV system with the ◀ / ▶ button; **BG**: (Asia/New Zealand/M.East/Africa/Australia) **I**: (Hong Kong/South Africa) **DK**: (East Europe/China/Africa/CIS) **M**: (USA/Korea/Philippines)

Press the ▲ / ▼ button to select **Storage from**.

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.

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 receivsome moders, triese searches will automatically along able stations.

If the programmed station has poor quality sound, select the system again in the **Manual programme** menu.

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



(Normal search)



(Turbo search)

All receivable stations are stored. 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.



Station Menu



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**.
- Press the OK button to display the Manual programme menu



Press the ▲ / ▼ button to select **System**. Select a TV system with the ◀ / ▶ button;

BG: (Asia/New Zealand/M.East/Africa/Australia)

I : (Hong Kong/South Africa) **DK** : (East Europe/China/Africa/CIS)

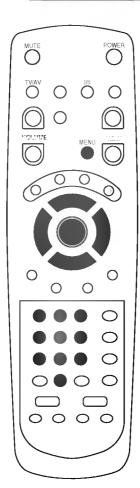
M (USA/Korea/Philippines)

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.

- Press the ▲ / ▼ button to select Search. Press the ◀ / ► button to commence searching. If a station is found the search will stop.
- 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

- Repeat the 'Manual programme tuning' steps 1 to 3.
 Press the ▲ / ▼ button to select Name.
 Press the ▶ button. You can use a blank, +, -, the numeric 0 to 9 and the alphabet A to Z. With the divided 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.

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

Fine tuning

Normally fine tuning is only necessary if reception is poor.

- Repeat the 'Manual programme tuning' steps 1 to 3.
- Press the ▲ / ▼ button to select **Fine**.

 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



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.

- Repeatedly press the **MENU** button to select the Station menu.
- Press the ▲ / ▼ button to select **Programme edit**.

 Press the **OK** button to display the **Programme edit** menu.



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

Copying a programme

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

Moving a programme

- Select a programme to be moved with the ▲ / ▼ or ◀ / ▶ button. Press the YELLOW button.
- Move the programme to the desired programme number with the ▲ / ▼ or ◀ / ▶ button.

 Press the YELLOW button again to release this function.



Skipping a programme number

- Select a programme number to be skipped with the \blacktriangle / \blacktriangledown or \blacktriangleleft / \blacktriangleright button.
- Press the BLUE button. The skipped programme turns to blue. Press the BLUE button again to release the skipped pro-

gramme.

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.



Calling the programme table

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

Displaying programme table

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.



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 \blacktriangle / \blacktriangledown or \blacktriangleleft / \blacktriangleright 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 \blacktriangle / \blacktriangledown or \blacktriangleleft / \blacktriangleright button repeatedly turns the pages.

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



Picture adjustment

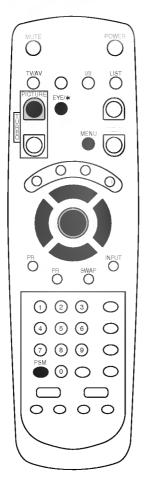
Picture Menu



Picture adjustment

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

- Repeatedly press the **MENU** button to select the Picture menu. Press the \blacktriangle / \blacktriangledown button to select the desired picture item. Press the \blacktriangleleft / \blacktriangleright button to make appropriate adjustments.





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

Eye (option)

Eye is an optional function. Only a set with eye option can perform this function.

In some models, 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; Standard, 16:9 (Wide), Zoom 1 or Zoom 2. Repeatedly press the **ARC** button to select your desired picture for-

Standard

This picture format is 4 to 3 of general TV.

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 mag-

nified 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.

a. When you switch the set to standby or off, the 16:9 or Zoom picture format is reset to the **Standard** (4:3).

b. In the 1/2 size sub picture and vertical four sub pictures of PIP mode the picture format is not available.

Turbo picture selection (option)

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)

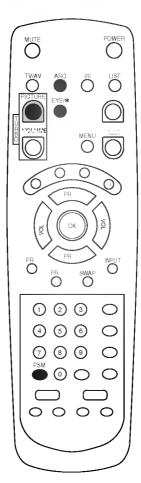


(Turbo Picture on)

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



Ö

Sound adjustment

You can select your preferred sound setting; Flat, Music, Movie or Speech and you can also adjust the sound frequency of equalizer, balance, headphone volume/sound (option). If you switch AVL to on, the set automatically keeps on an equal volume level even if you change programmes. The Turbo sound creates an all around sound as in a concert hall.

- Repeatedly press the **MENU** button to select the Sound menu. Press the **▲** / ▼ button to select the desired sound item; **Equalizer**, **Balance**, **AVL** or **♀ Volume** (option).
- 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 (**Flat**, **Music**, **Movie**, **Speech** or **User**) 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 (option)

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)

0

00

Sound adjustment

Stereo/Dual reception (option)

Stereo/dual is an optional function.

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

> On Screen Display Broadcast

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 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 loud-

DUAL I+II sends a separate language to each loudspeaker.

NICAM reception (option)

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.

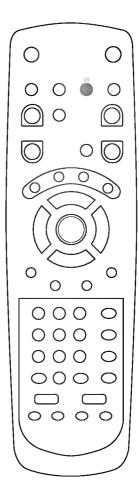
- When NICAM mono is received, you can select NICAM MONO or FM MONO.
- When NICAM stereo is received, you can select **NICAM STEREO** or FM MONO. If the stereo signal is weak, switch to FM mono
- When NICAM dual is received, you can select NICAM DUAL I, NICAM DUAL II or NICAM DUAL I+II or MONO. When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

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.

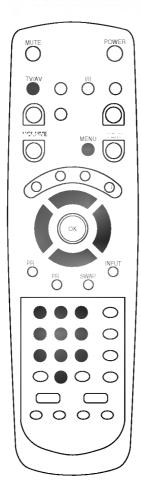
 L+R: Audio signal from audio L input is sent to left loud-speaker and audio signal from audio R input is sent to right loud-
- L+L: Audio signal from audio L input is sent to left and right loudspeakers
- R+R: Audio signal from audio R input is sent to left and right loudspeakers.



Other functions

Special Menu





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.

- Repeatedly press the **MENU** button to select the Special menu. Press the ▲ / ▼ button to select **Input**.

 Press the ◀ / ▶ button to select **TV**, **AV 1**, **AV 2** or **AV 3** (option). The AV modes are
 - AV1: VCR connected to the Euro scart socket or phone jack of the set

 - AV2: VCR connected to the AV2 sockets of the set AV3: VCR connected to the AV3 sockets of the set (option)

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

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

Auto AV switching (option)

If your VCR outputs switching voltage when it is switched to play-back with the VCR connected to the Euro scart socket. The set is automatically switched to **AV 1** 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.

- Repeatedly press the MENU button to select the Special menu.
- Press the ▲ / ▼ button to select **Child lock**.

 Press the ◀ / ▶ button on the remote control handset to select **On**.

 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.

- Repeatedly press the **MENU** button to select the Special menu. Press the \blacktriangle / \blacktriangledown button to select **Auto sleep**. Press the \blacktriangleleft / \blacktriangleright button to select **On**.

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

Other functions

Blue back

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

- Repeatedly press the **MENU** button to select the Special menu.
- Press the **A**/▼ button to select **Blue back**.
 Press the **4**/► button to select **On** or **Off**.
- Press the TV/AV button to return to normal TV viewing.

Game (option)

- Repeatedly press the MENU button to select the Special menu.
- Press the **A**/**▼** button to select **Game**.
 Press the **OK** button to enter the game mode.
- Press the ▲/▼ button to select the game 1 or 2, then press the OK button.
- Press the **◄/▶** button to select a level, then press the **OK** button.
- Press the ▲/▼ button to select the music on or off. Press the **OK** button to start the game.

1. PERFECT PUZZLE

Press the ◀/▶ button to move the object to the left or right.

Press the ▼ button to make the object fall down and press the **OK** button to change the order of icons inside the object. The game scores are displayed on the screen.

2. QUICK BRAIN

Select a pair of cards with same picture by pressing the **▲**/**▼**, **◄**/**▶** and **OK** button.

If you find all the pairs of cards with same picture in a level, the next level begins automatically.

- Press the TV/AV or MENU button to return to the normal TV
- b. If you want a new game, press the RED button to start.

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 dis-

play **(†)** 0 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.

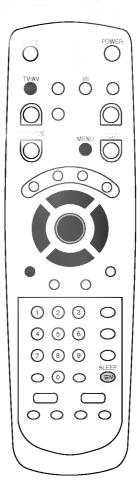
Note:

- To view the remaining sleep time, press the SLEEP button once. To cancel the sleep time, repeatedly press the SLEEP button until the display **0** appears.

 When you switch the set off, the set releases the preset sleep



Special Menu



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

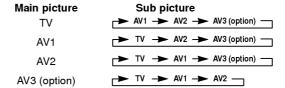
Press the ${\bf PIP}$ button to switch on one of the 1/16, 1/4 and 1/2 size sub pictures.

Press this button again to switch it off.

Input mode selection for sub picture

Press the **INPUT** button to select the input mode for the sub 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.

Programme selection for sub picture (option)

The sub picture programme selection is available when the sub picture is TV mode. Press the **PR** +/- buttons to select a programme for the sub picture. The selected programme number is displayed at the left upper side of sub picture.

Sub picture size

Repeatedly press the **SIZE** button to select the desired sub picture size. The sub picture appears as below.



Sub picture freeze

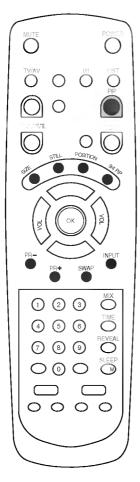
Press the **STILL** button to freeze motion of the sub picture. Press this button again to restore motion.

Sub picture position change

Press the **POSITION** button repeatedly until desired position is achieved. The 1/16 and 1/4 sub pictures move clockwise.

9 or 4 sub picture

Press the 9/4 PIP button repeatedly to select 9 or 4 sub pictures.



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.

If TV and text picture are displayed half and half of the screen, press the TEXT button again to display text picture fully.

The initial page or last page appears on the screen.

Two page numbers, TV station name, date and time are displayed on the screen headline. The first page nimber 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

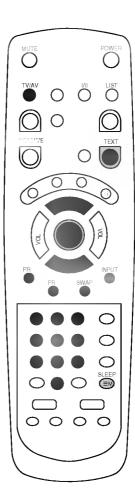
- Enter the desired page number as a three digit number with the NUMBER buttons. If during selection you press a wrong number, you must complete the three digit number and then reenter the correct page number.
- The ▲ / ▼ button can be used to select the preceding or following page.

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. Press a coloured button.
- 2. Using the NUMBER buttons, select the page you wish to pro-
- Press the **OK** button. Then the selected page is stored as the selected page number with blinking once. From now on, you can select this page with the same coloured button.
- 4. The three other coloured buttons are programmed in this 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

- With the blue 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 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.
- You can select the pages which are colour coded along the bot-
- tom line with the same coloured buttons.

 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.

 The A / V button can be used to select the preceding or fol-
- lowing 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.



SI7F

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 \Longrightarrow will appear at the top left hand corner of the screen. When the updated page is available then display \Longrightarrow 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.

Note: When TV and text picture are displayed half and half of the screen, MIX function is not available.



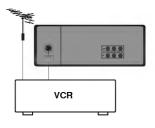
TIME

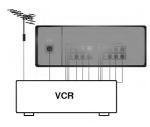
When viewing a TV programme, press this button to display the time at the top right hand corner of the screen. Press this button again to remove the display. In the teletext mode, press this button to select a sub page number. The sub page number is displayed at the bottom of the screen. To hold or change the sub page, press the RED/GREEN, \blacktriangle / \blacktriangledown or NUMBER buttons.

Press again to exit this function.

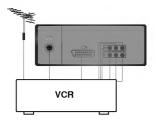


Connection of external equipment









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.

Audio/Video in/out sockets (option)

- 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
- If the VCR is connected to the AV sockets on the set, press the TV/AV button to select AV 1, AV 2 or AV 3 (option).
 Press the PLAY button on the VCR.
- 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.

Euro scart socket (option)

- Connect the Euro scart socket of the VCR to the Euro scart socket of the set.
- Press the PLAY button on the VCR.
 If your VCR outputs a switching voltage connect to Euro scart socket, the set will switch to AV 1 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**. The VCR playback picture appears on the

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

Note: Signal type RGB, i.e. the signals red, green and blue can only be selected for the Euro scart socket. These signals are transmitted, for example, by a computer, pay TV decoder, game machine or photo CD unit, etc.

Connection of external equipment

Headphone socket (option)

Insert the headphone plug to the headphone socket of the set. You can listen to the sound through the headphone and the TV's speakers. To adjust the headphone volume, press the \triangle / \blacktriangledown button to select \bigcirc **Volume** then press the \blacktriangleleft / \blacktriangleright button in the Sound menu. See the 'Sound adjustment' section.

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

In some models, 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.





Troubleshooting check list

