

**TV • VIDEO • AUDIO • SATELLITE**



**Operating instructions**

**ES • NO • UK • TVM2**  
6612 5450 (9240)L

Please read these operating instructions carefully, and while doing this, carry out the operating steps required in each case at once, so that you can see how easy it is to trigger the set's various operating functions.

□ = operating steps ■ = hints

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## For your safety

Please keep small children and unauthorized persons away from the set, and be careful not to allow any objects or liquid to penetrate inside the set.

In order to avoid a slight electric shock, please make sure that you first make all necessary connections **before** connecting the set to the mains.

Switch the set off **using the mains button** (compare "Switching the set on and off"), **before** you subsequently make further connections or alter existing connections.

The above remarks apply to both the cable end already or about to be connected to this set and to the other end of the cable.

Should the set have suffered any damage or if there is a risk of damage, withdraw the mains plug from the socket (if there is a thunderstorm, the aerial plug as well).

Do not pull at the mains lead, and be careful not to damage

Do not open the rear wall of the set. Any repairs may be performed only by authorized service personnel.

## Positioning the set in place

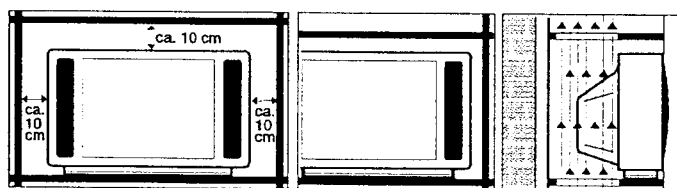


Fig. 1

Fig. 2

Fig. 3

We recommend you to place the TV set in a dry place, as far as possible, not in the vicinity of heaters and out of reach of warming or dazzling sunlight, on a sturdy table or a stand approved for the purpose (please follow the installation instructions).

If you intend to place your set on a shelf, make sure that there is sufficient space for heat dissipation. 10 cm distance on all sides of the set are sufficient (Fig. 1). If the shelf is not wide enough (Fig. 2), you must modify the shelf boards (Fig. 3) or remove the rear wall of the shelf.

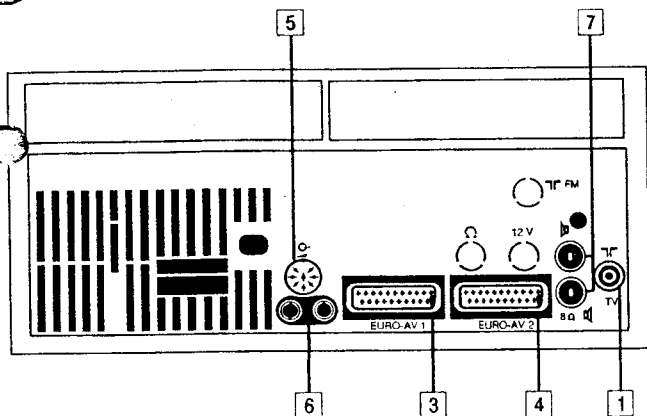
Do not cover the rear ventilation slots with cloths or newspapers (this will reduce useful lifetime, and also involves a fire risk).

There must not be any strong, magnetic field causing interference, e.g. from HIFI loudspeakers or power cables, acting on the set. For purposes of protection, we recommend keeping video and audio cassettes at a distance of not less than 50 cm away from the set.

## Care of the housing

For care and cleaning of the housing components and the screen, we recommend the use of commercially available household cleaning agents, following the instructions of the manufacturers concerned.

**Never use agents containing abrasive substances for cleaning the housing components.**



### Important for step 8 :

The wires in the mains lead of this appliance are coloured in accordance with the following code:

Blue: Neutral  
Brown: Live

As the colours of the wires in the mains lead may not correspond with the coloured markings identifying the terminals in your plug proceed as follows:

The wire coloured blue must be connected to the terminal marked with the letter (N) or coloured black.

The wire coloured brown must be connected to the terminal marked with the letter (L) or coloured red.

On no account should either the wires be connected to the earth terminal marked (E) or coloured green.

To protect the equipment a 5 amp fuse should be fitted to the mains plug or adaptor or at the distribution board.

## Connections

### 1 Aerial connection 75 Ω

Connect the TV aerial cable to socket **RF** or – when a video recorder is being used – connect the aerial cable to the aerial socket of the video recorder, and the video recorder's RF output socket to socket **RF** of this set.

### 2 at the control panel: headphones connection Ω

(Jack socket 6.3 mm Ø)  
For stereo headphones (impedance > 50 Ω).  
You can adjust the headphones volume.

### 3 SCART socket EURO-AV 1 Recording and playback

For video recorders, video disk players, video games, PAL satellite receivers, PAY-TV decoders, video cameras, computers and tape/cassette recorders, for example, both for video and RGB input signals.

### 4 SCART socket EURO-AV 2 Recording and playback :

For Super-VHS video recorders, all audio/video sets as listed for **EURO-AV 1** above, and for recording satellite programs with a built-in satellite receiver and for video transcoding procedures.

### 5 AUDIO output 1

For a power amplifier or an active bass loudspeaker (subwoofer). The units connected are switched on and off automatically together with the television set. All sound adjustments performed with the remote control will affect external amplifiers as well.

### 6 AUDIO output 2

For sound transmission over the audio input sockets of a HIFI system: L = left audio channel, R = right audio channel. You can use the volume control at the TV set to adjust sound reproduction.

### 7 Loudspeaker connection

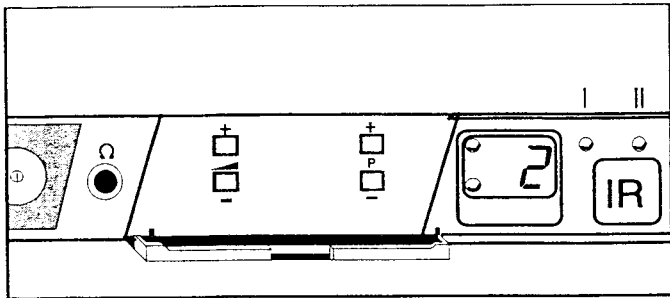
For loudspeakers (impedance > 8 Ω),  
e.g. to extend the stereo base:  
▶ (right channel), ◀ (left channel).

### 8 Mains connection

Connect the mains lead of the set to a power socket with 220/240 V alternating current.

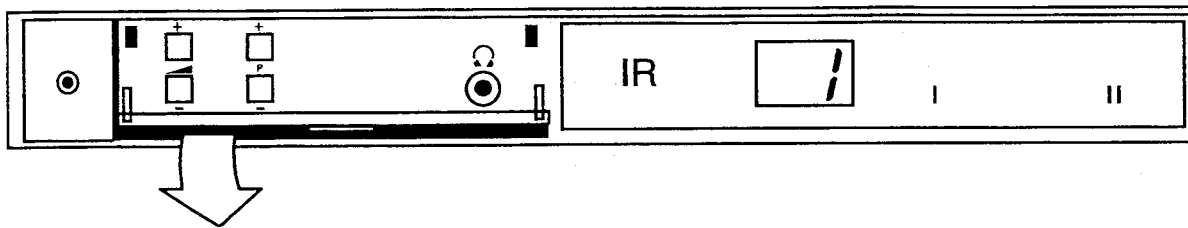
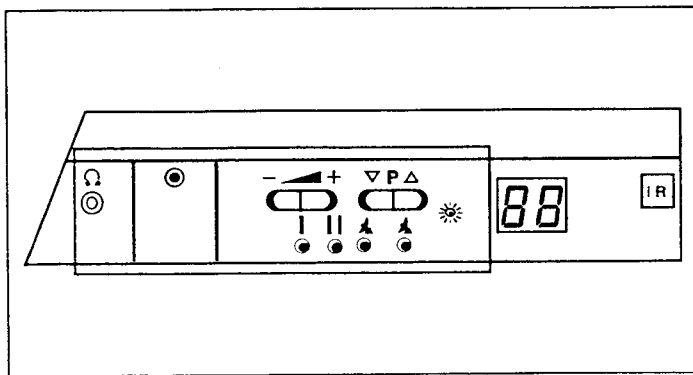
Right:  
Remote control

Bottom:  
Set control panels in three model versions

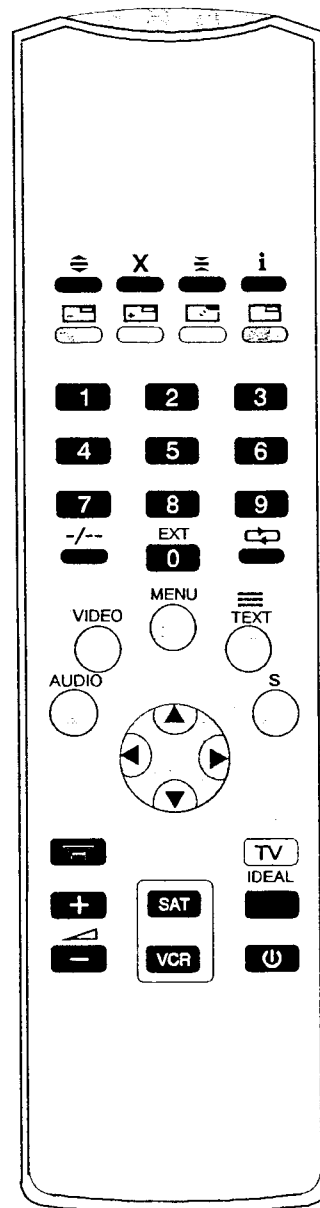


To open the control panel, please reach behind the top of the cover flap, and pull it forwards.

I and II offer orientation about the display functions.





To open the control panel, please reach behind the top of the cover flap, and pull it forwards.



## Controls and displays at the set, and their functions

<b>IR</b>	Infra-red receiver
<b>Button</b>	<b>Functions</b>
Ⓞ	Mains on/off
▶ + -	Volume
P ▽ ▲	Switching through the program memory locations forwards and backwards

<b>Displays</b>	<b>Functions</b>
	Stereo program
II	Sound 1 with dual-language program
RA	Sound 2 with dual-language program
	<b>With some models with built-in satellite tuner:</b> Recording a satellite program with a video recorder

<b>Display88</b>	<b>Functions</b>
flickering:	when remote control is operated
lit up:	Program display
[ ]	Set loudspeakers switched off

### On-screen displays for:

Program memory location with station type (TV, EXT), station name and stereo/dual-language display; lights up only briefly. Adjusting scale for volume.

## Battery of the remote control

To operate the remote control, you need a 9-volt power block, Series IEC 6 F 22. This battery is packed separately when the remote control is delivered.

### Inserting the battery

- Remove the battery compartment lid in the direction of the arrow.
- Insert the battery in the battery compartment so that the positions of + and - printed on battery and battery compartment coincide.
- Push the lid back in position.

### Replacing the battery



When the set functions can no longer be precisely controlled with the remote control, this means that the latter's battery is exhausted and must be replaced. For safety reasons, please also take the battery out of its compartment if you are not going to be using the remote control for a lengthy period of time.

### Battery disposal

Spent batteries – no matter what kind – do not belong in household garbage! Please have your spent batteries disposed of without endangering the environment, by taking them to the special waste depot in your neighbourhood, or handing them in at your electrical goods dealer.

## Remote control buttons and their functions

To control the set functions, point the remote control at the set's control panel. When the television set is switched on, the display will flicker each time you press a button.

<b>AUDIO</b>	Calling up the menu for audio functions
<b>VIDEO</b>	Calling up the menu for the picture functions
<b>MENU</b>	Calling up the INDEX menu for program selection
<b>Control button</b>	Operation with the button sectors: Volume ◀▶ Program selection ▲▼ After you have pressed <b>AUDIO, VIDEO, MENU:</b> Direction control ◀▶▲▼ of the menu cursor
<b>Red button</b>	Storing a programmed setting in memory
<b>TV</b>	Fading out a menu Returning from text to TV operating mode
<b>IDEAL</b>	Returning to the default settings
Ⓞ	Switching off to standby mode
▶ + -	Volume adjustment
	Switching sound reproduction via the loudspeakers on and off
1 - 9, 0	Switching on from standby mode, program memory location selection
-/--	Switching over between one- and two-digit program memory location numbers
	Changing over between two program memory locations
i	(Showing the program display on screen) Fading the time in and out, operative with stations with TELETEXT
≡ TEXT	Switching over to text mode
i, X and Ⓞ, plus coloured buttons	Text functions
S	without function

### VCR, SAT

These buttons can be used for function control when an appropriately designed video recorder or an external satellite receiver has been connected to the set.

### Please note:

Severe interference, such as thunderstorms, may cause the set to stop reacting to remote-control commands. In such a case, switch the set off for a few moments using the mains button.

## Initial operating steps

### Switching the set on and off

#### Using the mains switch

- To switch the set on, press the mains button. The display will show I.
- When you press the mains button once more, the set is switched off again. This is particularly recommended if you leave the set unsupervised for a lengthy period of time.
- Should colour alterations occur later on after you have switched the set off *using the remote control*, switch the set off *with the mains button*, and leave it switched off for about 15 minutes before you switch it on again.

#### Using the remote control

- Use button  $\odot$  to switch the set off into standby mode. The display will show --.
- The set can be switched on again from standby mode using one of the **numbered** buttons, or with the **TV** button. You can also use the **TV** button to return to the program memory location last selected.

#### Automatic switch-off into standby mode

Approx. 10 minutes after closedown of the TV program selected, the set will switch itself off automatically into standby mode.

#### Selecting the menu language

After you have switched the set on for the first time, a language menu will appear on the screen:

1 = DANSK	6 = ITALIANO
2 = DEUTSCH	7 = NEDERLANDS
3 = ENGLISH	8 = SUOMI
4 = ESPANOL	9 = SVENSKA
5 = FRANCAIS	

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- To store the language you want in memory, press the corresponding numbered button **1 - 9**, e.g. **3** for ENGLISH. The menu will then disappear.
- It is absolutely essential that you first select a menu language, since otherwise it will be impossible to perform any operating steps, apart from switching the set on and off.

## Daily operation

Your dealer will certainly have already performed all the programming operations required. **If not, please first carry out the appropriate basic adjustment procedures as given in the programming instructions.**

### Volume adjustment

- Press the **control** button ◀ or ▶.

Or:

Press button  $\blacktriangleleft$  + or -.

A scale displayed on the screen indicates the volume setting during operation.

### Program selection

This set possesses 59 program memory locations for the various TV and cable TV programs, and for the **EURO-AV** sockets. You will see the number of the program selected on the display at the set.

#### Manual selection of program memory locations

- Use the **numbered** buttons **0...9** to select the program memory locations.

To change over between one- and two-digit program memory location numbers, press button -/--.

To select program memory locations for external sets, press the **0** button once or repeatedly.

#### Automatic selection of program memory locations

- Use **control** button ▲ or button **P** ▲ at the set to select the program memory locations in ascending order from 1...57-58-59-E0-E2-E1-1-2..., and use ▼ or **P** ▼ to select them in the reverse sequence. When you keep one of these buttons depressed, the set switches through the program memory locations continuously.

#### Changing to the program previously selected

You will find it very easy to switch back and forth between a previously selected program (e.g. 4) and the program you are currently watching (e.g. 12).

- To change, press button  $\leftrightarrow$  in each case.

#### On-screen display


After you have selected a program, the on-screen display will briefly show TV or EXT (or, **with some models**: SAT), the name of the station concerned, and (with stereo programs) STEREO, and (with dual-language programs) SOUND 1 or SOUND 2.

## Calling up the time

This function is operative in TV operating mode if the TV station in question is also broadcasting a text program.

- To call up the time, press button **i** twice with some models once, and to fade it out again press button **i** once more.

## Switching off the loudspeakers

- You can use button  to switch sound reproduction via the loudspeakers off and on again. [ ] in the display indicates that this function has been switched off.


## Returning to the default settings

- If during daily operation you have altered the picture and some of the sound settings, you can quickly return to the programmed default values by pressing the **IDEAL** button.

## Menu-prompted operation

programming functions, plus many of the operating functions, can be performed quickly and easily on the screen, using the menus.



In the menus, a yellow cursor with double-height lettering or a black field with yellow lettering will indicate a particular function, enabling you to make your choice or perform an adjustment using the **control** button.

To move the cursor up or down, to the left or right, to go to other menu lines or fields, use the appropriate button **sectors** .

You cannot select blue menu lines.

## Altering the menu language

You can subsequently alter the menu language as follows:

- Use the **MENU** button to call up Menu 2.
- Press the **blue** button, and Menu 3 will appear.
- Use the **control** button  to select the line DK/D/GB/E/F/I/NL/SF/S.
- Press the **control** button ; Menu 1 will appear.
- Press the **numbered** button corresponding to the language you want. The menu will disappear.



## Storing settings in memory

- When a **red** field in the menu footer line shows **M** in white, this means you can store settings, and also altered default settings, in memory using the **red** button.
- If you forget to store your settings in memory, a setting or the programmed data will be lost when you erase the menu or when you switch the set off.

## Erasing menus from the screen

- To erase (and to abort a programming procedure you have started), press the **TV** button.

## Program selection

- Use the **MENU** button to call up program menu 1, and move the cursor to the station name you want with the **control** button  and .

After a few moments, picture and sound of the program selected will automatically appear.

INDEX			>>>
1 BBC 1	11 ORF 1	21	
2 BBC 2	12 ORF 2	22	
3 ITV	13 DRS	23	
4 1 PLUS	14 MOVIE	24	
5 3 SAT	15 SKY	25	
6 SAT 1	16 NEWS	26	
7 RTL+	17 LIFE	27	
8 PRO 7	18 SPORT	28	
9 TELE 5	19 ARD	29	
10 W 3	20 ZDF	30	
E1 RGB	E2 S - VHS	31	>>>
PROGR	>>> = MENU	EXIT = V	2

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The program overview consists of two menu pages.

- To display the other page, proceed as follows:  
Press the **MENU** button  
or  
move the cursor to the >>> field at the bottom right  
or  
enter a program number from the other menu page directly, using the **numbered** buttons.
- Use the **TV** button to erase the menu from the screen.

## Programming functions

can be called up from Menu 2 with the **blue** button:

SAT		
TV	- PROGR.	<
EXT	- PROGR.	
DK/D/GB/E/F/I/NL/SF/S		
INDEX = MENU	EXIT = TV	3

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## Adjusting the picture

### Colour-intensity, brightness, contrast

- Press the **VIDEO** button.

COLOUR	=====
BRIGHTN.	=====
CONTR.	=====
<b>M</b>	* >>> = VIDEO EXIT = TV

ES 303 GB

### Contour definition

- Press the **VIDEO** button.

SHARPN.	=====
<b>M</b>	>>> = VIDEO EXIT = TV

ES 304 GB

- If necessary, use the **VIDEO** button to change between Menus 1 and 2.

## Adjusting the sound

### Volume, stereo balance, trebles, basses

- Press the **AUDIO** button.


STEREO	
HYPERSONIC ON	
BASS	=====
TREBLE	=====
BALANCE	===== =====
VOLUME	=====
<b>M</b>	>>> = AUDIO EXIT = TV

ES 301 GB

- If necessary, use the **AUDIO** button to change between adjustment menu 4 for headphones sound reproduction and Menu 3 for sound reproduction over the loudspeakers.

STEREO	
HP-VOLUME	=====
HP-BALANCE	===== =====
<b>M</b>	>>> = AUDIO EXIT = TV

ES 302 GB

- After you have pressed button , the set will switch over automatically from Menu 3 to Menu 4. The >>> = AUDIO menu field will appear after you have pressed the same button again.

- Menu 4 enables you to set the volume individually for the headphones, but does not affect the volume for loudspeaker sound reproduction.

The same setting affects the audio signal at the **AUDIO** output sockets 2.

### Stereo/mono/dual-language reproduction in the STEREO field

In the case of stereo programs, both displays are lit up in the control panel, and only one display in each case with dual-language programs.

- For stereo reproduction, it is essential that the reception signal be strong and undistorted. If stereo reproduction quality is unsatisfactory, we recommend switching over to MONO.
- For dual-language programs with different languages on two different audio channels, for example, the menu line offers SOUND 1 or SOUND 2 for you to choose from.

The on-screen program display (when called up) shows the current setting.

### Hypersonic in the HYPERSONIC field

The hypersonic setting for a spatial sound effect in Menu 3 is cancelled when the set is switched off.

### NICAM system in the STEREO field

Some stations broadcast the television sound using the digital NICAM system, instead of with the conventional analog stereo sound system (A2).

- In Menu 3 or 4, switch over STEREO DIGITAL to MONO, or SOUND 1 to SOUND 2 in the top menu line.
- If the NICAM sound is being disturbed by hissing or crackling noise due to the station signal being too weak, this interference can be eliminated by switching over from NICAM to analog FM mono reproduction, using the MONO switch-over feature.
- After you have changed programs, the set will automatically return to the original function, e.g. to STEREO DIGITAL with NICAM stereo programs, or to SOUND 1 DIGITAL with NICAM dual-language programs.



## Default settings

Picture and sound settings have been programmed to default values in the factory.

### Returning to the default settings

If during daily operation you have altered one of the picture or sound settings, you can quickly return to the preprogrammed default value by pressing the **IDEAL** button.

### Altering default settings



If the default settings do not correspond to your wishes, you can alter them as follows:

- Perform a picture or sound adjustment procedure, and store the new default settings in memory with the **red** button.

## Video recorder control

With some video recorders, functions can be controlled using this remote control without an additional connection lead.

- Point the remote control at the video recorder.
- Press the **VCR** button and keep it depressed while you are pressing additionally one of the following buttons:

Button	Function
Control button ▲	Start
Control button ▼	Stop
Control button ►	Fast forward, picture search forwards
Control button ◀	Fast rewind, picture search backwards
-	Pause
+	Slow motion forwards
Red button	Storing a programmed setting
	Switching off to standby mode
1 - 9, 0	Selecting the program memory locations
-/--	Switching over between one-/two-digit program memory location numbers
	Changing between two program memory locations

## Video recorder operation

This is conditional on at least one program memory location having been prepared for the operating mode concerned in accordance with the programming instructions.


### Playback via the aerial socket

- Select the video program memory location 0. You will now see (except during tape playback) the TV picture being received by the video recorder's tuner.
- Start and stop recorder playback.

### Playback via the EURO-AV socket

#### Automatic TV/AV switch-over

from TV reception to AV operation

- Start and stop recorder playback. The video recorder supplies a switching voltage in playback mode, which switches the television set automatically over from TV reception to video playback. The control-panel display will show the TV program number.
- You can use button  to switch back and forth between the current video program and the TV program last selected.
- This function is only operative at the **EURO-AV 1** socket.

#### Selection for AV applications without automatic TV/AV switch-over

- Press button **0** repeatedly until you have reached one of the following applications:  
E1 for a video recorder **without** automatic TV/AV switch-over.  
E1 for a set with RGB signal.  
E2 for a standard video recorder.  
E2 for an S-VHS video recorder.
- Start recorder playback.

#### Please note:

If the picture is not being reproduced in colour, you must reprogram the TV standard of the socket in question in accordance with the programming instructions.







### Transcopying procedures with the EURO-AV 1 and EURO-AV 2 sockets

- Connect the video recorder which you are going to use to record with to the **EURO-AV 2** socket, and switch it to its EXT or AV position.
- Connect the video recorder intended for playback to the **EURO-AV 1** socket.
- Start both recorders.
- If a satellite receiver is built in, the program you have selected at this receiver can be switched on as signal source for recording via the **EURO-AV 2** socket and protected against unintentional re-adjustments as per satellite operating instructions.

## Satellite receiver control

With some **external** satellite receivers, functions can be controlled using this remote control without an additional connection lead.

- Point the remote control at the satellite receiver.
- Press the **SAT** button and keep it depressed while you are pressing additionally:

Button	Function
<b>AUDIO</b>	Selecting the audio channel
<b>MENU</b>	Calling up menus
<b>Control button ▲</b>	Menu control forwards
<b>Control button ▼</b>	Menu control backwards
<b>Control button ►</b>	Program selection forwards
<b>Control button ◀</b>	Program selection backwards
<b>Red button</b>	Storing a programmed setting in memory
<b>TV</b>	Fading out a menu, returning from text to TV operation
	Switching off to standby mode
	Switching sound reproduction via the loudspeakers on and off
<b>1 - 9, 0</b>	Switching on from standby mode, selecting the program memory locations
<b>-/--</b>	Switching over between one-/two-digit program memory location numbers
	Changing between two program memory locations
<b>TEXT</b>	Switching over to text mode
<b>i</b>	Calling up the index page of the text program, e.g. page 100
<b>X</b>	Calling up and fading out the TV picture while in text mode
	Doubling the character height in the top and bottom page halves, returning to normal character height
	Mixing text and TV programs, and cancelling this function
	Revealing hidden texts, and hiding them again

## Programming instructions

This set possesses 59 program memory locations for the various TV and cable TV programs, and for external sets, e.g. video recorders.

### Program memory locations and their functions

- 1 - 9 TV programs suitable for a preferred text page. Please use these program memory locations preferably for TV stations which also broadcast a text program.
- 10 - 59 TV programs; it is not possible to store a preferred text page in memory.
- 0 For video recorder operation via the aerial socket or for TV programs
- E2 For standard or S-VHS video recorders
- E1 For standard video recorders or an RGB signal source.

### TV stations and channels

The stations broadcast their television programs (depending on the region involved) on different channels, to which your set must be tuned. Always select the channel which ensures optimum picture, sound and text reproduction.

During the station selection procedure, the TV channels must be called up for each program memory location (using the channel tables provided at the end of this manual) and stored in the program memory location desired.

## Programming TV stations

During programming, you must assign each of the selected stations to a program memory location of your choice, and store it in memory.

- For Menu 1, first press the **MENU** button, and then the **blue** button.

S A T			
TV	-	PROGR.	◊
EXT	-	PROGR.	
DK/D/GB/E/F/I/NL/SF/S			
		INDEX = MENU	EXIT = TV

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- If necessary, move the cursor to the TV-PROGR. line, using the **control** button ▲ ▼.
- Call up programming menu 2 for steps 1 with ◀ ▶.

TV-CHANNEL	:	◊	37	TAB A
PROGR.	:		1	
NAME	:		BBC 1	
STANDARD	:		1	
SYSTEM	:		PAL	
FINETUNE	:		+ -	
M	C			EXIT=TV

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- For Steps 2, call up Menu 3 with the **green** button.

TV-FREQU.	:	◊	471	MHz
PROGR	:		2	
NAME	:		BBC 2	
STANDARD	:		1	
SYSTEM	:		PAL	
A F C	:		OFF	
M	C			EXIT=TV

ES 310 GB

- You can use the **green** button to choose between programming menus 2 and 3.

### With unknown station particulars:

- 1. Use **control** button ◀ ▶ to switch through the channel numbers consecutively.

Or:

- 2. Tune through the frequencies until you have reached the program you want, using **control** button ◀ or ▶.

### In the case of known TV stations:

- 1. For a known TV station, enter the channel number as per channel table **in two-digit form** using the **numbered** buttons, e.g. 10 or 03. If necessary, use the **blue** button to select the channel table.

### Fine tuning, automatic tuning feature

- If necessary, move the cursor to the FINETUNE line in Menu 2, using **control** button ▼ ▲, and perform fine tuning for optimum picture and sound reproduction with **control** button ◀ or ▶; also important for the modulator of a video recorder.

As a rule, the automatic tuning feature is switched off. If a station or modulator is working unstably, this automatic feature can correct slight frequency deviations for optimum tuning.

- In Menu 3, move the cursor to the AFC line with **control** button ▼ ▲, and switch ON or OFF with ◀ ▶.

### Selecting the program memory location

- Use **control** button ▼ to move to the PROGR. line, and use (button -/-- and) the **numbered** buttons to enter a program memory location number, e.g. 2 or -/-- 12, or select the program numbers with **control** button ◀ or ▶.

### Selecting program names if necessary

- Use **control** button ▼ to move to NAME, and call up Menu 4 with ◀ or ▶.

			13579
1PLUS	N 3	SPORT	
3 SAT	NED 1	SUPER	
ARD	NED 2	SVT 1	
A 2	NED 3	SVT 2	
	NEWS	TCC	
B 3	NRK	TEL21	
HR 3	ORF 1	W NET	
ITV	S 3	YLE 1	
LIFE	SAT 1	YLE 2	
MTV	SKY	ZDF	24680
		OK = MENU	EXIT = TV

ES 315 GB

- Move the cursor to the program name you want with **control** buttons ▼, ◀, ▶ and ▲, and accept this name into the programmed data by pressing the **MENU** button.
- If you want to erase a name for the program memory location, move the cursor to the top left into the empty field, and press the **MENU** button.

### Creating program names if necessary

- In Menu 4, move the cursor to the free editing field in the right column, using **control** button ▲ ▼ ◀ ▶.
- To write letters, figures, special characters and empty spaces, use **only** the **numbered** buttons: odd **numbered** buttons = forwards, even **numbered** buttons = backwards.
- To accept the new name, press the **MENU** button.

### Standard selection if necessary

In its AUTO programming position, this television set adjusts itself automatically to the TV standard being broadcast. If the picture of a TV station or video recorder is not being reproduced in colour, for example, or if there is no sound, you must alter the standard settings individually.

You make the appropriate adjustments in Menu 2 or 3.

- Use **control** button ▼ ▲ to move the cursor to the SYSTEM line, and select AUTO, PAL, SECAM or NTSC (4.43 MHz) with ◀ ▶.
- Use **control** button ▲ to move the cursor to the STANDARD line, and select one of the reception standards with ◀ ▶.
- If necessary, in AV NTSC operation, select the HUE function in the picture settings, using the VIDEO button, and adjust for the most natural colour reproduction with **control** button ◀ ▶.

### Terminating the programming procedures

- Store the station in memory with the **red** button.
- For every further station you want to select and store in memory, repeat the programming steps listed above.
- To erase the programming menu from the screen, press the TV button.

### Transcopying stations to other program memory locations

- Use the **numbered** buttons to select the program memory location whose station is to be copied into another program memory location.
- Call up programming menu 2 (previous page), and – in the PROGR. line – select a new program memory location. Any stations previously stored in this memory will be erased.
- To store the new program selection in memory, press the **red** button, and to erase the menu from the screen, press the TV button.

EXT.	:	◀	0
FREQU.	:	607	MHz
NAME	:	VCR	
STANDARD	:	1	
SYSTEM	:	PAL	
A F C	:	OFF	
<b>M</b>			EXIT=TV

ES 314 GB

EXT.	:	◀	1
NAME	:	VCR	
INPUT	:	VIDEO	
SYSTEM	:	PAL	
SYNCHR.	:	VCR	
<b>M</b>			EXIT=TV

ES 313 GB

## Programming procedures for video recorders

### TV

For a video recorder connected to the TV 1F aerial socket, the set has been adjusted in the factory to channel 36 (approx. 591 MHz). If the recorder's modulator works on a different frequency:

- Select program memory location 0.
- Use the **MENU** button, the **blue** button and **control** button ◀ ▶ to call up Menu 1.
- At the video recorder, switch on the TEST setting of the modulator, and tune the TV set (in the FREQU. line) to the modulator frequency of the video recorder as per Steps 8, so that the recorder test picture appears.
- To store the programmed frequency in memory, press the **red** button.

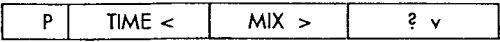
### AV

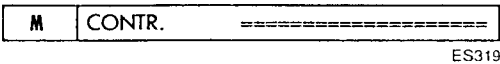
For video recorders connected to EURO-AV:

- For the programming menu, first press the **MENU** button and then the **blue** button, use **control** button ▼ to switch to the EXT.-PROGR. line, and call up Menu 2 with ◀ ▶.
- Use the **control** button to select AV function 1 for video or RGB operation in the EXT line, or AV function 2 for video or S-VHS operation, and – in the INPUT line – make a corresponding selection for one of the VIDEO, RGB or S-VIDEO functions.  
The AV functions selected will be operative separately for the **EURO-AV 1** and **2** sockets.
- If necessary, use **control** button ▼ to switch to the NAME menu line, select or create a VCR name (as described above), and accept the name with the **MENU** button.
- In the SYSTEM line, select NTSC, SECAM, AUTO or PAL as required, and in the SYNCHR. line the time constant TV or VCR.

# TELETEXT

## Remote control buttons and their text functions



Button	Control button	Function
≡	TEXT	Switch over to the text mode, call up the preferred page
▶		Browse forwards in text pages
◀		Browse backwards in text pages
MENU		Call up the function menu line
		
ES220		
◀		Enter a preselection page, and cancel the preselection function
▶		Mix text and TV programs, and cancel mixture
▼		Reveal hidden texts, and hide these texts again
Red button		Store a preferred page in memory
VIDEO		Call up the contrast menu



ES319

◀▶	Adjust contrast
Red button	Store the contrast in memory

## The other buttons and their functions

Numbered buttons	Page selection
Coloured buttons	Select a subject and page in FASTEXT
	Call up the text program's index page, e.g. page 100
X	Call up and fade out the TV picture in text mode
	Double the character height in the top and bottom page halves, return to normal character height
≡	Halt a multiple page and release for automatic further browsing
TV	Fade out a menu, switch back to TV operation

Text programs are given different designations in different countries, e.g. TELETEXT or VIDEOTEXT. The contents are sometimes called pages, sometimes panels. In some countries, text programs are broadcast in the FASTEXT system.

Text programs require a good TV signal. When reception conditions are poor, text pages may be received incompletely or not at all. Please bear this in mind when programming the TV stations.

Text programs are only transmitted together with a TV program or a test picture.

Therefore, always proceed as follows:

1. First select the TV program,
2. then switch over to the text program.

## The most important text functions

### Switching over to the text program

In order to switch over from TV to text program, press button ≡ **TEXT**.

After you have switched on the set and switched over to text mode for the first time, the index page for the text program concerned (or – on program memory locations 1-9 – a preprogrammed preferred page) will appear automatically.

- If the TV program concerned does not broadcast a text program, only a page number or header line will appear.

### Calling up the index page

When in text mode, you can call up the index page at any time by pressing button **i** or your preferred page by pressing button ≡ **TEXT**.

### Switching back to the TV program

In order to switch back to TV reception, press button **TV**.

Now you can, for instance, select another TV program, and then switch over to its text program.

## Page selection

The individual text pages are selected by entering the page number concerned in each case.

- Use the **numbered** buttons 1 to 9 and 0 to enter the three-digit code for the page you want in each case. You will see your entry on the left of the header line, and – depending on the text program involved – next to it on the right the search display in the page counter. The search function will not commence until the complete code has been entered in three-digit form.

The colour of the page counter will change to white as soon as the page selected has been written on the screen.

## In the FASTEXT system:

Different subject areas are marked by different colours on the text pages.

- For information selection, you need only the appropriate **coloured** buttons, plus button **i** on the remote control.
- If a text page appears without a colour menu, you must select another text page using the **numbered** buttons, or call up the index page.

## Programming preferred pages

This function is fully operative only with stations of program memory locations 1-9.

The preferred page remains stored in memory even after the set has been switched off. When you switch the set on and then over to text mode, it will appear instead of an index page.

- With the text program switched on, select the page number you want for your preferred text page.
- To store in memory, press the **MENU** button and then the **red** button. The page number you have selected will change its colour to yellow.
- Erase the menu line from the screen by pressing button **≡ TEXT**.
- To call up your preferred page, press button **≡ TEXT**.

## Browsing in text pages

- Use **control** button **▶** to browse forwards through the pages, and **◀** to browse backwards.

When you are browsing through the text pages quickly, you must wait until the next page has been read in.

## Automatic browsing and halting of multiple pages

With multiple pages, several single pages are browsed through automatically under the same page number at 20 to 30-second intervals, depending on the station concerned.

They are often marked **>>** or **>**, depending on the text system and program involved; or the single page involved and the total number of pages available are indicated by codes such as 01/04 or 1/4.

- To halt a multiple single page, press button **≡**. You will now see **>1** in the header line instead of the page number, and after that the single-page memories being counted through.

The halted page can remain on the screen for as long as you wish. While it is visible on the screen, the page memory is filling up with more single pages.

- To quit the halted page, select another page number.

## Browsing through multiple pages manually

- When a multiple single page has been halted, the procedure for filling the memory with further single pages can take up to 3.5 minutes, depending on the standard involved.
- If you want, press button **X** to make the TV picture appear and disappear, or erase the menu from the screen with the **TV** button.
- Press **control** button **▶** to browse forwards through multiple pages, and **◀** to browse backwards.

If the header line shows **>... in yellow**, the pages are browsed through automatically in this page memory.

- To quit browsing mode, select another page number.

## Calling up a multiple single page, entering a time-preselection page, such as alarm clock

- Press the **MENU** button and then **control** button **◀**. You will now see 0000 or another four-digit number in the header line instead of the page number.
- Enter the number of the multiple single page you want, e.g. 3 or 11, or the time, like 1715 or 830.
- If you want to watch TV until the page you want appears, all you need to do is press button **X**.
- When the page is reached, the header line will appear in the television picture; press button **X** for reading the page.
- Press button **≡ TEXT** to quit this page or this text function.

## Additional text functions

- To erase menu lines from the screen, press button **≡ TEXT**.

### Mixing program contents

To mix the program contents, press the **MENU** button and then **control** button **▶** once, and to cancel this function press **control** button **▶** once more.

### Latest news

Latest-news items are displayed on the TV screen on special pages. When you have read the news, you can erase it by pressing button **X**. With the next news update, a new text will appear in the TV picture.

If you want to display news on the screen again manually, press button **X**.

### Subtitles

On some TV programs, subtitles are displayed on-screen synchronously.

Select the text page announced for the TV program in question.

### Revealing hidden texts

Some text pages contain results of television university exercises, answers to quiz questions, or VPS times for video recorder programming.

Press the **MENU** button and then **control** button **▼** once to reveal these hidden texts. To hide them again, press **control** button **▼** once more.

### Double character height

Repeated pressing of button **⊕** will cause the character height of the top and the bottom page half alternately to be doubled, and then reduced back to normal character height again for the complete page.

### Page selection in the television picture

In order to bridge the (sometimes lengthy) waiting times when searching for text pages, you can also perform every page selection procedure while the television picture is still visible on the screen.

To do this, press button **X**. Use the **numbered** buttons to select a page number. It will be visible on the screen until the page selected has been found. Then the header line will be displayed on the TV screen.

To switch back to the text page, press button **X** once more.

Adjusting the text contrast if necessary

- Use the **VIDEO** button to call up the adjustment menu.
- Use the **control** button ◀▶ to alter the contrast setting.
- Use the **red** button to store the altered setting in memory.

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## Retrofitting and modification options, accessories

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What you want in addition is ...	What you need is ...
an elegant support base	the TV STAND accessory
to receive satellite programs	a satellite module
to improve bass reproduction	a SUBWOOFER

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## Assignment of connections for sockets

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### EURO-AV 1

- 1 Audio output B
- 2 Audio input B
- 3 Audio output A
- 4 Audio ground
- 5 Blue ground
- 6 Audio input A
- 7 Blue
- 8 Switching voltage
- 9 Green ground
- 10 –
- 11 Green
- 12 –
- 13 Red ground
- 14 Ground
- 15 Red
- 16 Blanking signal
- 17 Video output ground
- 18 Video input ground
- 19 Video output
- 20 Video input
- 21 Screening or ground

### EURO-AV 2

- 1 Audio output B
- 2 Audio input B
- 3 Audio output A
- 4 Audio ground
- 5 –
- 6 Audio input A
- 7 –
- 8 –
- 9 –
- 10 –
- 11 –
- 12 –
- 13 –
- 14 –
- 15 Chroma signal with S-VHS
- 16 –
- 17 Video output ground
- 18 Video input ground
- 19 Video output
- 20 Video input or luminance with S-VHS
- 21 Screening or ground

### 8-pole audio socket

- 1 Do not connect anything!
- 2 Ground
- 3 Audio output, left
- 4 Do not connect anything!
- 5 Audio output, right
- 6 –
- 7 –
- 8 +12 V

Subject to alterations!

# Channel tables

The figures in the tables have the following meanings:

- 1 = Channel designation,
- 2 = Channel number to be entered in two-digit form
- 3 = Reception frequency.

Table A predominantly contains conventional TV channels,  
Table B special and cable TV channels.

## A

1	2	3	1	2	3
1	00	45.25 (NZ)	E50	50	703.25
A	01	45.75 (IRL)	E51	51	711.25
E2	02	48.25	E52	52	719.25
E3	03	55.25	E53	53	727.25
E4	04	62.25	E54	54	735.25
E5	05	175.25	E55	55	743.25
E6	06	182.25	E56	56	751.25
E7	07	189.25 (EU)	E57	57	759.25
E8	08	196.25	E58	58	767.25
E9	09	203.25	E59	59	775.25
E10	10	210.25	E60	60	783.25 (EU)
E11	11	217.25	E61	61	791.25
E12	12	224.25	E62	62	799.25
A	13	53.75	E63	63	807.25
B	14	62.25	E64	64	815.25
C	15	82.25	E65	65	823.25
D	16	175.25	E66	66	831.25
E	17	183.75 (I)	E67	67	839.25
F	18	192.25	E68	68	847.25
G	19	201.25	E69	69	855.25
H	20	210.25	E70	70	863.25
E21	21	471.25	2	71	57.75
E22	22	479.25	7	72	176.25 (RC)
E23	23	487.25	8	73	184.25
E24	24	495.25	MK4	74	163.25
E25	25	503.25	MK5	75	171.25
E26	26	511.25	MK6	76	179.25
E27	27	519.25	MK7	77	187.25 (MA)
E28	28	527.25	MK8	78	195.25
E29	29	535.25	MK9	79	203.25
E30	30	543.25	MK10	80	211.25
E31	31	551.25	10	81	200.25 (RC)
E32	32	559.25	A2	82	55.25
E33	33	567.25	A3	83	61.25
E34	34	575.25	A4	84	67.25
E35	35	583.25 (EU)	A5	85	77.25
E36	36	591.25	A6	86	83.25
E37	37	599.25	A7	87	175.25 (USA)
E38	38	607.25	A8	88	181.25
E39	39	615.25	A9	89	187.25
E40	40	623.25	A10	90	193.25
E41	41	631.25	A11	91	199.25
E42	42	639.25	A12	92	205.25
E43	43	647.25	A13	93	211.25
E44	44	655.25	K1	94	43.25
E45	45	663.25	K2	95	52.25
E46	46	671.25	K3	96	60.25
E47	47	679.25		97	49.25
E48	48	687.25		98	56.25 (B)
E49	49	695.25		99	63.25

(EU) = CCIR    (O) = OIRT

## B

1	2	3	1	2	3
3	00	65.75 (RC)		50	190.25 (B)
S1	01	105.25	R1	51	49.75
S2	02	112.25	R2	52	59.25
S3	03	119.25	R3	53	77.25
S4	04	126.25	R4	54	85.25
S5	05	133.25	R5	55	93.25
S6	06	140.25	R6	56	175.25
S7	07	147.25	R7	57	183.25
S8	08	154.25	R8	58	191.25
S9	09	161.25	R9	59	199.25
S10	10	168.25	R10	60	207.25
S11	11	231.25	R11	61	215.25
S12	12	238.25	R12	62	223.25
S13	13	245.25	U1	63	226.25
S14	14	252.25	U2	64	234.25
S15	15	259.25	U3	65	242.25
S16	16	266.25	U4	66	250.25
S17	17	273.25	U5	67	258.25
S18	18	280.25		68	47.25
S19	19	287.25		69	69.25
S20	20	294.25		70	83.25
S21	21	303.25	M1/7	71	104.25
S22	22	311.25 (EU)	M2/7	72	111.25
S23	23	319.25	M3/7	73	118.25
S24	24	327.25	M4/7	74	125.25
S25	25	335.25	M5/7	75	132.25 (B)
S26	26	343.25	M6/7	76	139.25
S27	27	351.25	M7/7	77	146.25
S28	28	359.25	M8/7	78	153.25
S29	29	367.25	M9/7	79	160.25
S30	30	375.25	M10/7	80	167.25
S31	31	383.25	M1/8	81	110.25
S32	32	391.25	M2/8	82	118.25
S33	33	399.25	M3/8	83	126.25
S34	34	407.25	M4/8	84	134.25
S35	35	415.25	M5/8	85	142.25
S36	36	423.25	M6/8	86	150.25
S37	37	431.25	M7/8	87	158.25
S38	38	439.25	M8/8	88	166.25
S39	39	447.25	11	89	208.25 (RC)
S40	40	455.25	0	90	46.25
S41	41	463.25	1	91	57.25
C	42	61.75 (IRL)	2	92	64.25
S22H	43	315.25	3	93	86.25
S24H	44	339.25	4	94	95.25 (AUS)
S26H	45	363.25	5	95	102.25
S28H	46	387.25 (EU)	5A	96	138.25
S30H	47	411.25	10	97	209.25
S32H	48	435.25	11	98	216.25
S34H	49	459.25	13	99	247.44 (SA)

(EU) = CCIR    (O) = OIRT