

Tiros

Crystal

63 TF 51 - 100 MT

70 TF 53 - 100 MT

Operating Instructions



## Hints for use of the Operating Instructions

Do not be put off by the size of the Operating Instructions. Initially, it is sufficient to read the instructions in Sections 1.1, 2 and 4. In order to familiarise yourself with the TV set and its many functions, we recommend that you read the Operating Instructions step by step, carrying out the described actions on your TV set as you do so.

This method, often called "learning by doing", is the easiest way of learning how to execute the various functions.

Do not be afraid to change the settings in the various menus (the TV menu, the TV station table, programming of the function keys, etc.). If you make any changes to these settings, the TV set reacts immediately, but the changes are not yet stored. After each change in a menu, a red box is displayed at the bottom right of the screen, asking if you want to save the changes.

- If you want to save the changes, press the **OK** key to do so.
- If you are not sure, or if you do not want to save a changed setting, press the MENU key and then the TV key to exit from the menu without saving the new settings.

We have made every effort to provide a detailed table of contents and a comprehensive index to help you to find the information you need. The Section "Glossary" contains explanations of various technical terms used in the manual.

In the descriptions of the various functions, the left-hand column shows which keys you must press in order to see the screen display given in the centre column. Do not press the keys too quickly. It may occur that the TV set will not recognise the next key you press and may therefore not display the menu shown in the centre column but something completely different. The right-hand column of the function description provides additional information which may be useful but is not absolutely necessary for execution of the function.

If you comply with these hints, you should have no problems in the operation of your TV set.

Your Metz-Werke

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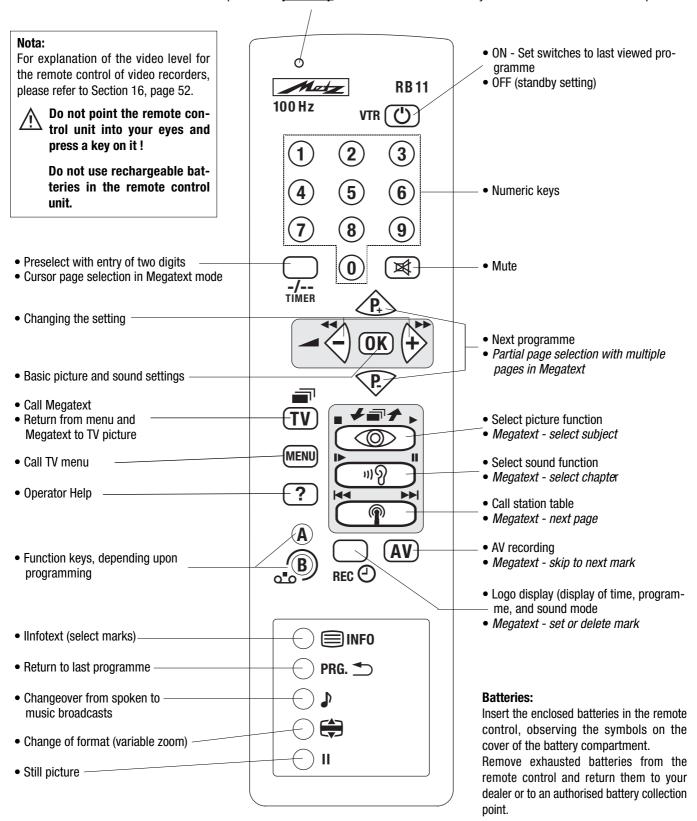
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## **Remote control handset RB 11**

The remote control sends commands to the TV set with the aid of infrared light. For this reason, you should always point the remote control at the TV set for reliable operation. Use of the remote control may interfere with the operation of other devices or systems controlled which use infrared light (such as infrared headphones).

If the TV set is exposed to direct sunlight, it may sometimes not function correctly because it cannot recognise the commands transmitted by remote control.

The television must be switched on or in standby mode (ON/OFF key depressed) when it is to be operated by remote control. Always point the remote control in the direction of the TV for operation. A **pilot lamp** starts to flash as soon as a key on the remote control handset is pressed.

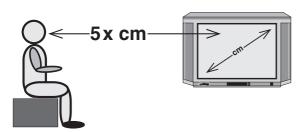


## 1. Setting up and connecting

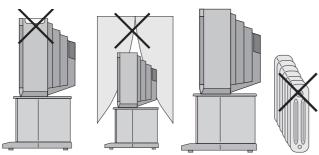
#### Setting up

When selecting a suitable place for the TV, be sure that no bright light or sunlight falls on the screen. Light may cause reflections and impair the brilliance of the image.

The best viewing distance is five times the picture tube diagonal, e.g. about 3.5 m for TV sets with a 70 cm screen.



riangle TV sets require adequate ventilation. The ventilation slots at the rear of the set should therefore never be covered by curtains, doilies, newspapers or similar objects. Likewise, all slots at the bottom of the set must be freely accessible so that the intake of air is not impaired in any way



Do not set up the TV near a radiator as this would impair adequate cooling.

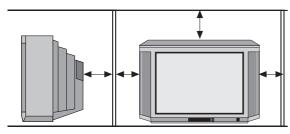


 $\stackrel{\text{/!}}{\sim}$  Do not place

- burning candles or
- flower vases filled with water

on top of the TV set.

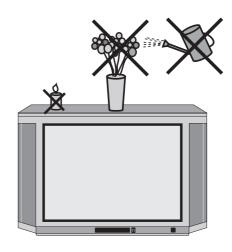
Hot wax and liquids destroy the electrical components and jeopardize the electrical safety of the set



 $\stackrel{/!}{\sim}$  If you place the set in a wall unit, leave sufficient space on all sides so that the air can circulate freely.



Your TV set is intended for use in dry rooms. If you wish to use it occasionally outdoors, be sure to protect it against any kind of moisture (rain, splashes, dew, etc.).

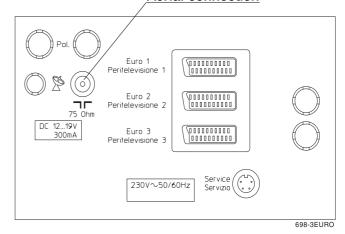


### Connecting the aerial

Standard SAT and terrestrial station aerial sockets are fitted at the rear of the TV.

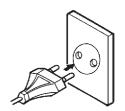
Thunderstorms represent a danger for all electrical appliances! If lightning strikes the power line or the aerial, the TV may be damaged even if it is switched off. Therefore, always unplug the mains lead AND aerial during thunderstorms. If the TV is not going to be used for an extended period of time, for instance when on holiday, then disconnect the set both from the mains and the aerial.

### Aerial connection



### Mains voltage

Plug the mains lead into a wall outlet. The TV set is equipped for 230 V ac (Australia 240 V ac).



## 1.1 Turning the TV on and off

### Turning on with the ON/OFF key



Before turning on a cold TV in a warm room, first allow any condensation mist that may have formed on the screen to evaporate.

Press the ON/OFF key.

Programme position 1 is then selected. Depending on the assignments made, the following information will appear in the screen box:

Terrestrial programme position

SAT programme position (only with built-in SAT upgrade module)





### Turning off with the ON/OFF key

Press the ON/OFF key. The television is now disconnected from the mains.

You are advised to turn off the TV with the ON/OFF key after station closedown and when it is not going to be used for an extended period of time.

#### Turning on with the remote control

The programmes can be directly selected with the 0-9 keys when the television is in standby mode.

Select single-digit programme numbers by pressing the corresponding numeric key.

Two-digit programme numbers are entered with the — preselect kev:

- The television is switched to the last watched programme.
- The preselect box is displayed on the screen.



 The 2-digit programme number can now be entered with the numeric keys.

The last programme watched before the television was switched off can be set with the we key.

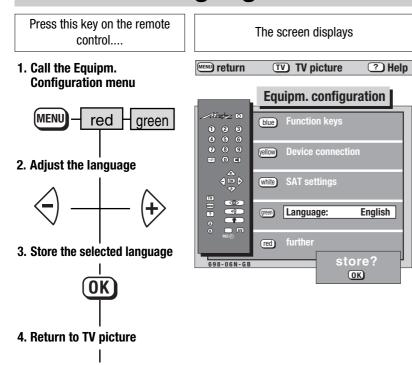
The television is automatically set to standby mode ten minutes after station closedown. However, this is not the case if the station starts to transmit a test card within these ten minutes.

### Turning off with the remote control

Press the key to switch the TV to standby mode.

The standby status is indicated by the red lamp.

# 2. Language selection in the TV menu



Explanation

The desired language for the entire TV menu is adjusted in the "Equipm.Configuration" menu.

Select the desired language with the  $\textcircled{-} \Leftrightarrow$  keys when the submenu for the language is displayed on a green background.

Press the OK key to confirm and store the selection made. The complete text in the TV menu is then displayed in the selected language.

TV picture

## 2.1 TV menu and operator help

Menu control of the TV, and the versatility of the system, ensure that supposed complicated settings and entries are made easily and clearly comprehensible for everyone. Operator Help can be called with the (2) key when in TV mode. Operator Help indicates the functions of the individual keys.

All settings are entered by way of different submenus. Simply call Operator Help with the ? key should you encounter difficulties in entering the different equipment configurations or if problems arise in operating the TV. Operator Help is specifically matched to the corresponding menu and functions as a reminder when settings are entered or programmed.

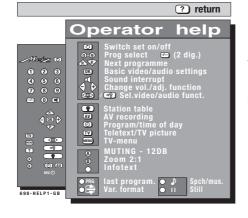
Press this key on the remote control....

The screen displays

Explanation

**Operator Help: Call/exit** 

?

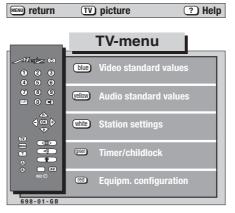


Operator Help shows the functions of the individual keys when in TV mode.

The **A** and **B** function keys can be programmed by the user. Consequently their functions can differ to those shown in the adjoining picture.

TV menu: Call/exit





The individual menu lines are selected with the coloured keys of the remote control, to open the corresponding submenu. Keys not enhanced in white or colour on the displayed menu have no function in the current operating state.

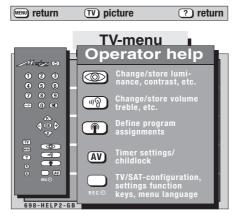
Settings in the submenus can be changed with the  $\diamondsuit$  keys.

Press the **OK** key to confirm and store the new setting.

Press the key to move back by one step within the TV menu.

Operator Help in TV menu: Call/exit





Operator Help can be called for each menu displayed on the screen (Example: Operator Help with displayed TV menu).

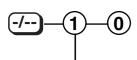
# 2.2 Programme selection

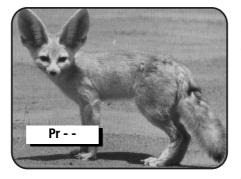
Press this key on the remote control....

The screen displays

Explanation

1. Select the programme position (e.g. Prog number 10)





Press the 🖅 key when the TV is in standby mode. The TV then switches to the programme viewed before the receiver was turned off to standby.

Now enter the programme number with the numeric keys. The TV is changed over to the selected programme position as soon as the last digit has been entered.

With single-digit programme numbers it is only necessary to press the corresponding key, e.g. key 4 for programme position 4.

After the programme position has been selected an information box appears indicating the programme position number, the time, and the currently valid sound mode, e.g. stereo.

2. Next programme





Press the key keys to run through the programmes. Keeping the replacements or key depressed for more than 2 seconds will cause a programme box to be displayed on the screen for selection of the programme position. Release the replacement of the programme position. Release the replacement of the programme position will then be selected.

3. Last programme





With this key, you can switch back and forth between the last two programme positions you selected.

Example:

You are watching a programme on ITN; during the commercials, you switch to BBC with the aid of the numeric keys ① . . ①

You can now switch back and forth between ITN and BBC by pressing the  $PRG. \stackrel{*}{\frown}$  key.

## 3. Presetting TV stations

### **Direct channel entry/** station search

The TV is supplied with factory preprogrammed TV stations. However, if you can receive TV stations in your area that are not listed in the station table, then these transmitters can be entered and programmed at any time.

You can choose one of the following three programming possibilities:

a) Direct channel entry

b) Station search

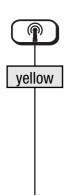
c) Autostore function

Press this key on the remote control....

The screen displays

**Explanation** 

1. Call the station table and channel type survey



MENU return TV picture ? Help Station table

Aerial Std channel 06 ARD w Spec. channel Fine tuning

With direct channel entry it is necessary to know the type of channel and the channel number.

If type and number of channel are not known, you can scan through the entire reception range with the search function to locate stations.

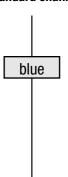
The station table lists all the preset stations.

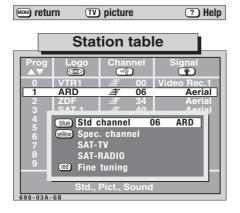
These stations can be changed at any time.

The cursor always highlights the type of channel currently preset in the given programme position.

For the **search function** it is advisable to switch to a vacant programme position.

2. Select the type of channel (e.g. standard channel)



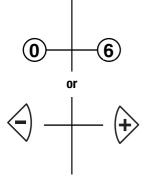


The yellow framed field offers four types of channels. Select the channel type with the assigned coloured

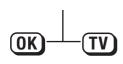
After the channel type has been selected, a channel number is displayed in the bar when a station is stored in this programme position. Two lines are shown if this position is still vacant.

"SAT channel" and "SAT radio channel" can only be selected if a SAT upgrade module has been installed in the TV receiver.

3. Enter the channel number (Example: Standard channel 06) or start station search



4. Store the setting and return to TV picture



Station table Aerial blue Std channel ARD Spec. channel SAT-RADIO Fine tuning store? OK)

**TV** picture

? Help

MENU return

With **direct channel entry**, the station table is briefly faded out when the channel number is entered, and the selected station is displayed.

The station search proceeds from the displayed channel number in a forward sequence with the key, and in a reverse sequence with the  $\triangleleft$  key. Search proceeds from the lower channel area upwards or downwards when two lines are displayed. The search stops when a station has been found.

Proceed as described in step 4 if the located station is to be stored.

Press the + or - key if the located station is not to be stored so that the search can be continued.

Complete fine tuning if station reception is not clear (see Section 3.2).

TV picture

## 3. Presetting TV stations

Autostore function, sorted to countries

The autostore function automatically scans through the entire reception range to locate stations. The located stations are presented in the station table and can then be stored by way of the **OK** key.

If you do not like the order in which the stations appear in the station table, you can sort the stations to match your own requirements as described on the next page.

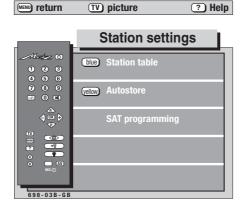
Press this key on the remote control....

The screen displays

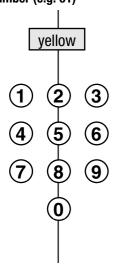
Explanation

1. Call the menu "Station settings"





2. Call the autostore function and enter a programme number (e.g. 01)





Press the yellow key to call the autostore function. Use the numeric keys to enter the two-digit programme number (e.g. 01) at which the station is to be stored.

After entry of this number, a red box with the text "Start?" is displayed.

3. Start the autostore function





The TV now scans through the entire reception range.

The first "standard-channel" station to be found is shown on the screen after all stations have been located. The channel number and an automatic logo are displayed. The auto logo only appears for stations which transmit a VPS signal.

Now proceed as described in Section **3.1 Sorting stations**.

## 3.1 Sorting stations

In the "Sort" submenu you can move, exchange, copy, or delete the stationss stored in the programme positions. The "Sort" submenu is displayed automatically after the autostore function has found all available stations.

? Help

P

Aerial

This menu can also be called at any time from the station table display for subsequent modification of the station programming.

Press this key on the remote control....

The screen displays

TV picture

Station table

06

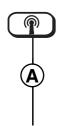
MENU) return

ARD

Explanation

## 1. Call the "Sort" submenu and move the station

either automatically after autostore



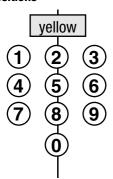
When the "Sort" submenu is displayed, the function "Move" is preset.

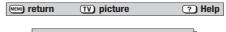
Use the  $ext{ } ext{ } ext$ 

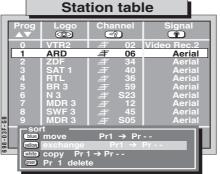
Select one of the functions "move", "exchange", "copy" or "delete" with the related coloured key.

If you inadvertently delete a programme position, you can restore it by pressing the **B** key.

## 2. Exchanging two programme positions







When moving, exchanging or copying a programme position, the new programme position must be selected by entering **two digits** on the numeric keys.

The blinking hyphen on the right of the sub-menu now prompts you for input of a programme position number.

The selected function is executed as soon as you enter the new number.

### 3. Store the settings





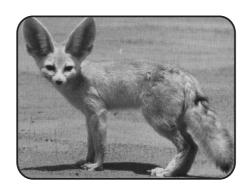
Station table									
Prog	Logo	Channel অঞ্চ		Signal					
0	VTR2 ARD	事	02 06	Video Rec.2 Aerial					
3	ZDF SAT 1	事事	34 40 36	Aerial Aerial Aerial					
3 4 5 6 7	BR 3 N 3	事事	59 S23	Aerial Aerial Aerial					
89 8	MDR 3 SWF 3	事事	12 45	Aerial Aerial					
0,7									
exchange Promise copy Pr1 → Pr- store?  Pr 1 delete OK									

After the contents of a programme position have been moved, exchanged, copied or deleted, a red store box is displayed to ask if you want to store the new settings.

Press the **W** key to store the new settings or press the **W** key to abort the operation.

### 4. Return to TV picture





# 3.2 Fine tuning

The individual channels are automatically tuned to channel centre for station tuning. As a rule, this automatic tuning will be sufficient. Apply manual fine tuning if automatic tuning does not produce satisfactory results.

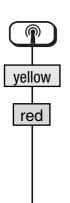
Select the programme number at which fine tuning is to be completed.

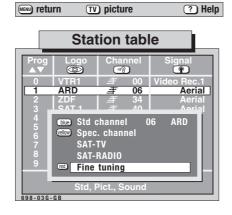
Press this key on the remote control....

The screen displays

Explanation

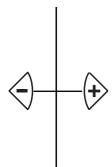
1. Select the fine tuning function





The "Fine tuning" function is only activated when the red bar is displayed.

2. Adjust the fine tuning





Adjust fine tuning within the range of -99 to +99 with the  $\bigcirc \diamondsuit$  keys.

The station table is blanked out for better picture assessment.

3. Store the fine tuning and return to TV picture





Once the station is correctly tuned, press the  $\bigcirc$ K key to store the new setting.

## 3.3 Allocating a station logo

A logical logo consisting of up to 5 characters can be allocated to each station. The station RTL 2, for example, can be allocated the logo RTL 2.

Manual logo allocation is not necessary with most stations. The corresponding station logo appears a few seconds after the picture when a station is selected by direct channel entry. However, an automatic logo only appears for stations which transmit a VPS signal.

? Help

? Help

? Help

Press this key on the remote control....

The screen displays

**TV** TV picture

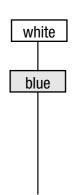
MENU return

MENU return

MENU return

Explanation

1. Call the logo menu

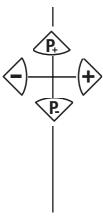




The logo is automatically displayed if the selected programme position already has a logo. The field remains blank if a logo has not yet been allocated.

Any existing logo will be overwritten.

2. Select the first character



TV station table

Prog Logo Channel Signal

Composition table

Composition table

Prog Logo Channel Signal

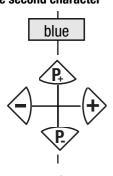
Com

TV TV picture

Select the desired character (in our example the letter **R**) with the keys p, p.

This will overwrite any existing logo.

3. Move the cursor to the second position and select the second character



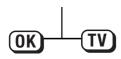
**TV** TV picture

The cursor is moved within the logo field with the blue kev.

Select the desired character (in our example the letter  $\mathbf{T}$ ) with the keys  $\bigcirc \bigcirc$ ,  $\bigcirc$ .

Repeat this procedure to enter the entire logo.

4. Store the setting and return to TV picture

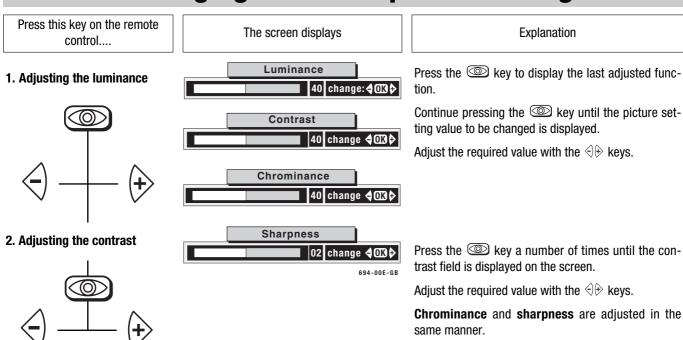


TV picture

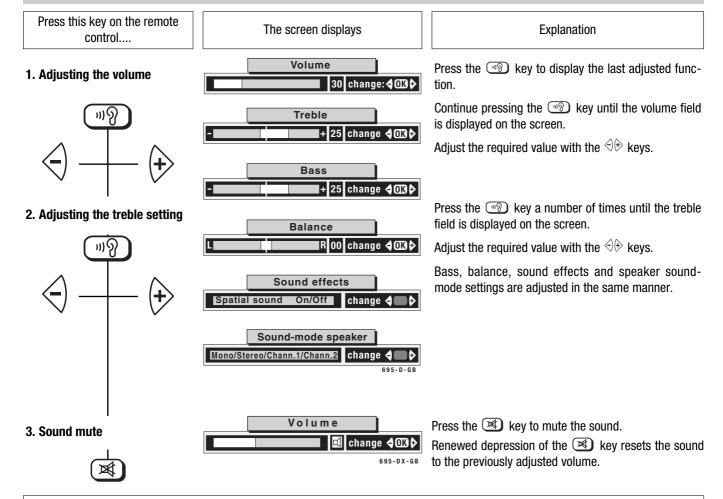
After input of the desired logo, press the  $\ensuremath{\text{OK}}$  key to store it.

The programmed logo automatically appears in the station table.

## 4. Changing individual picture settings



# 4.1 Changing individual sound settings



**Note:** All settings modified in this menu can be stored by calling the "Video standard values" or "Audio standard values" menu respectively and pressing the OK key. The stored values can be recalled at any time with the OK key.

## 4.2 Adjusting the video and audio standard values

? Help

? Help

Press this key on the remote control....

(MENU)

The screen displays

TV picture

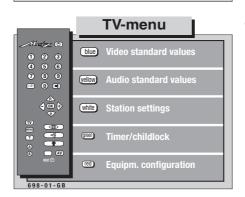
MENU return

MENU return

698-04A-GB

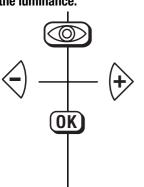
Explanation

1. Call the TV menu



Press any coloured key to step through the submenus. Pressing the blue key selects the "Video standard values" submenu, pressing the yellow key selects the "Audio standard values" submenu

2. <u>Example 1:</u> Call the "Video standard values" submenu. Adjust and store the luminance.





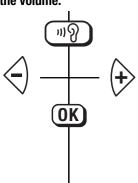
TV picture

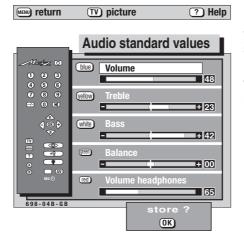
Select the menu line with the value to be changed by pressing the assigned colour keys.

\* (only if a multi-standard upgrademodule has been installed)

The <u>volume</u>, <u>treble</u>, <u>bass</u> and <u>balance</u> settings, as well as the <u>headphones volume</u>, can be adjusted in a similar manner in the "Audio standard values" submenu. Adjust the desired value with the  $\diamondsuit$  kevs.

3. <u>Example 2:</u> Call the "Audio standard values" submenu. Adjust and store the volume.



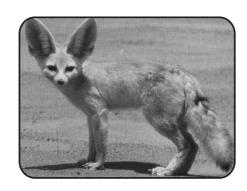


If no other video standard values or audio standard values are to be changed, then press the <code>@K</code> key to store the new setting.

The red store box disappears when the **OK** key is pressed.

4. Return to TV picture



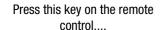


## 5. Equipment configuration

The remote control handset has two factory programmed function keys A and B. Press the key in normal television mode to reveal the factory programming. The displayed Operator Help text describes the current programming in the last-but-one paragraph. This programming can be changed according to your requirements in conformity with the displayed selection. This choice is described in the "Glossary" chapter.

#### Example of programming function key B:

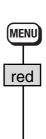
In TV mode, the **B** key is to activate the "subtitles" function; in Megatext mode, you can use it for the "page stop" function.

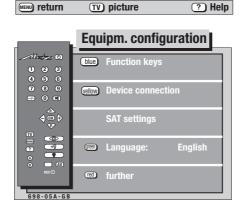




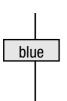
Explanation

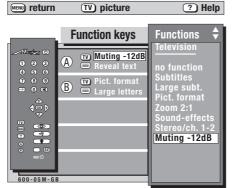
## 1. Call the "Equipment configuration" menu





2. Call the "Function keys" menu





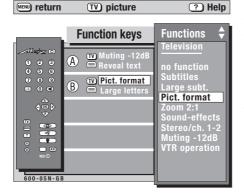
The left-hand side of this menu shows the currently valid programming of the function keys.

The window on the right-hand side indicates the selection that can be programmed.

The individual functions are explained in detail in the "Glossary" on page 52.

3. Press the function key to be programmed (in this example: B key)





Two functions can be programmed for function key **B**. The upper line indicates the function programmed for TV mode, the lower line the function programmed for Megatext mode.

Press the **TV** key to switch between the two lines. Press the **B** key to display the currently programmed function.

# 5. Equipment configuration

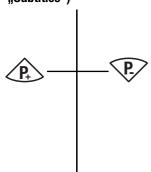
### **Assigning the** function keys

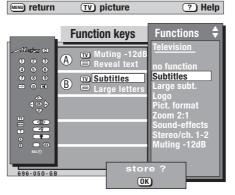
Press this key on the remote control....

The screen displays

Explanation

4. Select the function for TV mode (in this example "Subtitles")

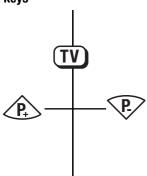




Select the function in the right-hand field with the & or 🗫 key. The text on the left-hand side changes as soon as the cursor (a white bar) is moved.

If the function "Subtitles" has been programmed for key B, the subtitles will be displayed when the TV set is switched, if subtitles are actually transmitted with the programme.

5. Switch to Megatext mode and program the function keys



TV picture MENU return ? Help **Function keys** TV Subtit.

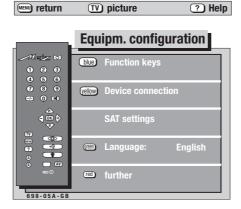
Stop page Stop page

The cursor (a white bar) is now located in the second line, on the currently programmed function.

The desired Megatext functions can now be programmed in the sequence described in steps 3 and 4, above.

6. Store the assignments and return to the "Equipment Configuration" menu





? Help

7. Return to TV picture





## 5. Equipment configuration

# Settings for programme change

Press this key on the remote control....

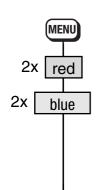
The screen displays

Explanation

In this menu you can define the sound functions for a

programme change.

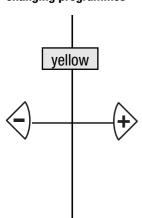
1. Call the settings for programme change



In the first line of the menu, use the <⊕ keys to select whether the mute function is to be retained ("Yes") or to be cancelled ("No") when you change programmes.

The new settings can be stored by pressing the **(K)** key.

2. Set spatial sound when changing programmes



OK)

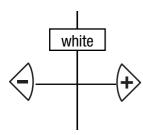
Use the <<a>⊕</a> keys in this menu line to define whether the spatial sound is to be switched on or off when the programme is changed to a monaural station.

When in mono mode, you can change over to spatial sound by pressing a self-defined function key (sound effects).

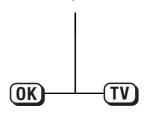
If no other values are to be changed, then press the key to store the new setting.

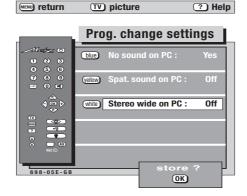
The term "spatial sound" is explained in the section "Glossary" on page 52.

3. Select stereo wide when changing program



4. Store the settings and return to TV picture





Use the  $\circlearrowleft$  keys in this menu line to select whether stereo wide is to be switched on or off when the programme is changed to a stereo station.

When in stereo mode you can change over to stereo wide by pressing a self-defined function key (sound effects).

If no other values are to be changed, then press the (OK) key to store the new setting.

The term "stereo wide" is explained in the Section "Glossary" on page 52.



# 5. Equipment configuration RGB priority Volume adaptation

? Help

? Help

**RGB** priority

Press this key on the remote control....

The screen displays

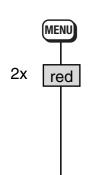
TV picture

MENU return

MENU return

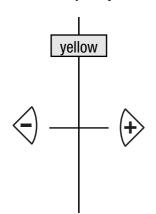
Explanation

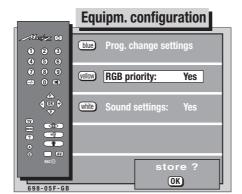
1. Call the "Equipment configuration" menu



**Equipm. configuration** vellow RGB priority: white Sound settings:

2. Set the RGB priority





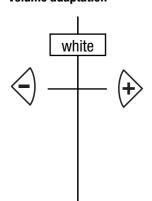
TV picture

The RGB priority must be set to Yes if a Pay-TV decoder (Premiere) is to be connected to the TV.

Select the setting **Yes** or **No** with the  $\diamondsuit$  keys.

Store the new settings with the **OK** key

3. Activate and deactivate the volume adaptation



MENU return TV picture ? Help **Equipm. configuration** 

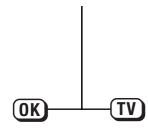


Some stations transmit commercials at a higher volume than the normal programme. You can activate an automatic volume adaptation function so that you do not have to adjust the volume with the remote control each time.

When this function is active, differences in the volume are automatically equalised.

The setting you select here applies to all programme positions.

4. Store the settings and return to TV picture





## 6. Volume adjustment and forced mono

It is possible for TV stations to be received at different volume levels although the volume level settings on the individual programme positions are identical. To overcome this problem, you can set a volume correction factor for each programme position.

### Example:

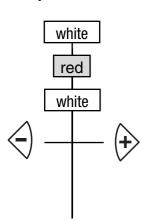
Programme 1 is soft: volume value 40. Programme 3 is loud: volume value 40. Programme 1 is to be adjusted to the same volume as Programme 3. **Switch over to programme position 1.** 

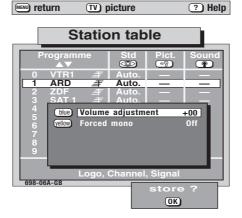
Press this key on the remote control....

The screen displays

Explanation

1. Call the sound submenu and adjust the volume



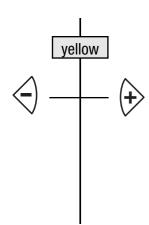


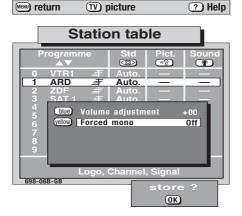
In this submenu, you can assign a volume correction factor to a programme position and, if necessary, activate forced mono sound mode.

A volume correction factor can be set with the  $\triangleleft \diamondsuit$  keys when the text is displayed on a blue background.

### In our example:

2. Set forced mono





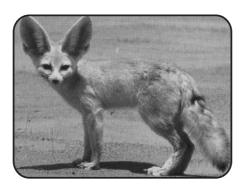
It may happen that the TV set inadvertently switches from mono to stereo during a transmission, although no stereo programme is being received. This usually depends upon the prevailing reception conditions.

Use the *今* keys to select forced mono.

If this setting is stored, all transmissions received in this programme position will always be reproduced in mono.

3. Store the setting and return to TV picture





All changed settings are stored.

## **6.1 Correcting picture deviations**

It is possible for stations to be received with differing levels of chrominance, picture sharpness and contrast, even though the settings on the individual programme positions are identical. For this reason, your TV set enables you to correct the value for each programme position and/or to select a picture correction function (CTI, noise reduction).

? Help

Ð

OK)

? Help

A2

(OK)

? Help

? Help

Press this key on the remote control....

The screen displays

**™** picture

Station table

Auto

Sharpness

TV picture

Station table

Sharpness Noise reduction

TV picture

Auto.

MENU return

MENU return

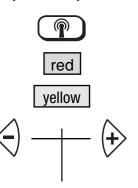
MENU return

MENU return

ARD

Explanation

1. Call the first picture menu in the station table and correct the picture sharpness

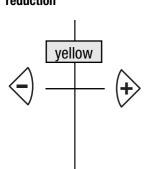


The picture menu contains all settings which can change the picture.

If the pictures received from a station are unsharp, this function permits you to correct the picture sharpness for an individual programme position and to store this adjustment.

The picture sharpness can be changed with the

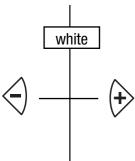
2. Switch on the noise reduction



This noise reduction function can be switched on if the picture contains snow or noise.

The noise reduction function can be switched OFF or A1 or A2.

3. Switch on the CTI function



Station table ARD Auto CTI 0n further (OK)

TV picture

CTI stands for Colour Transient Improvement and improves the transitions between different coloured areas of the picture, making the picture appear much sharper. The CTI function is effective for both transmissions received by way of the aerial input and for signals received via the AV sockets. CTI also provides a visible improvement when playing back from a video recorder. However, in certain applications (such as playing back from an S-VHS video recorder), the CTI function may

When playing back from such recorders, CTI can result in a lower-quality picture. For this reason, this menu permits you to switch off the CTI function for specific programme positions.

just have the opposite effect.

In this second picture menu, the chrominance, colour offset and contrast can be corrected individually for each programme position.

In our example, the chrominance of Programme 1 is to be diminished. Hold down the < key until the colour intensity is the same as in programme position 3.

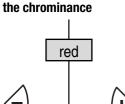
The chrominance adjustment range is -15 to +15.

If no other values are to be changed, then press the **OK)** key to store the new setting.

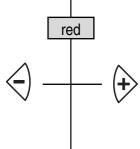


4. Call the second picture

menu and adjust



Station table Auto. Chrom. adjustm. 00 Contrast adj. Picture format



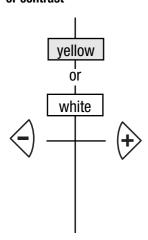
# **6.1 Correcting picture deviations**

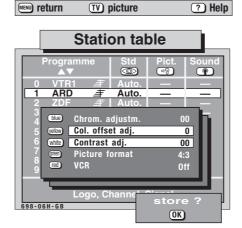
Press this key on the remote control....

The screen displays

Explanation

5. Adjust the colour offset or contrast





Normally, it is not necessary to adjust the colour offset.

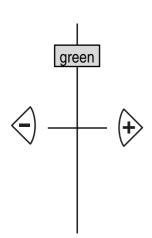
However, if external units are connected it is possible that colour and black-and-white pictures are not accurately superimposed. A similar effect is sometimes encountered in journals when the black-and-white and colour impressions do not register, with the result that the contours are blurred.

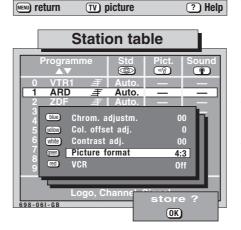
The colour offset range is between -3 and +3.

The contrast adjustment range is -15 to +15.

If no other values are to be changed, then press the OK key to store the new settings.

6. Chage the picture format





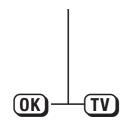
The picture format of each TV programme position must be set to 4:3.

If a video recorder with 16:9 format detection is connected, the picture format of the related programme position must be set to 16:9.

If a 16:9 input signal is applied to the phono sockets or the mini-DIN (YC) socket, the picture format must be changed manually.

An external switching voltage of 4-7 V at the EUR01 or EUR0 2 socket automatically switches the TV to 16:9 format, provided that the signal type was stored under the heading "...controls AV operation" in the menu "Equipm. configuration, device connection".

7. Store all settings and return to TV picture





## 7. AV recording

### Camcorder → video recorder

In the "AV recording" menu, you can define which of the connected peripheral AV devices are to be used for copying a recording.

**AV device** is a generic term for all external video units, such as video recorders, camcorders, video disk players, photo CD players, etc which can be connected to a TV.

**Example:** You wish to copy a film recorded with an S-VHS/Hi8 camcorder to an S-VHS/Hi8 video recorder which is also connected to the TV set.

Press this key on the remote control....

The screen displays

Explanation

1. Call the AV menu





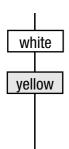
In the "AV recording" menu, you can select how the AV devices connected to your TV set (see Section 13, "Equipment configuration/Connecting external devices") are to be used for copying a recording.

The left side of the menu (Input) shows the devices which supply picture and sound for the copy operation.

Selection of an input for a programme is meaningful only for SAT or decorder operation.

The right side of the menu (Output) shows the devices capable of recording the picture and sound.

2. Select the desired AV devices (in this example: Camcorder and Video Rec. 1)





After calling this menu, you must first select the input device, i.e. the device which is to supply the picture. Once you have done this, the cursor moves to the output side of the menu and the keys are displayed in colour. If there is more than one AV device shown on the output side, you must select the desired device manually. If you make a mistake, you can switch between the input and output sides of the menu with the  $\triangleleft \ni$  keys.

#### Back to the example:

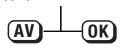
You want to copy the film from the camcorder to video recorder 1.

Press the white key to display the signal from the camcorder on the screen. Then press the yellow key to select the output device.

3. Store the settings and clear the menu



4. Terminate or abort the copy operation





The copy operation with the selected devices is now active.

If any subsequent switching operations could interfere with copying, a warning box with the text "AV recording" will be displayed and the requested switching operation will not be executed.

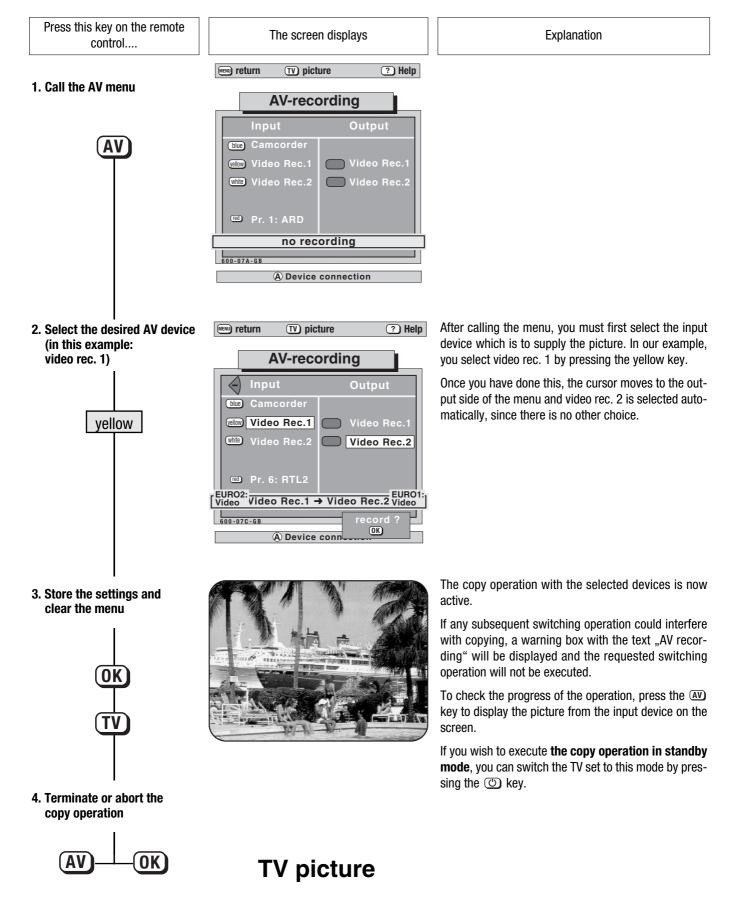
To check the progress of the operation, press the AV key to display the picture from the input device on the screen.

If you wish to execute the copy operation **in standby mode**, you can switch the TV set to this mode by pressing the key.

## 7. AV recording

Video recorder → video recorder

**Example:** You wish to copy a film from video recorder 1 to video recorder 2.



## 8. Time settings

# Switch-on/off and reminder time

In the "Time settings" menu, you can enter settings which will instruct the TV to switch itself on or off, and to display a reminder at a given time. **Switching from summer time to winter time and vice versa is carried out automatically by the teletext clock.** 

The switch-on time function will automatically turn on the TV at the preset time if the television is in standby mode. The switch-off time function will automatically switch it off as desired. The reminder service is intended to help you remember things which you have to do later on, for instance a telephone call. All three settings can be jointly programmed.

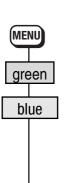
**Example:** The TV is to switch itself on at 20:00 hr, remind you of something at 21:45 hr, and switch itself off at 23:30 hr.

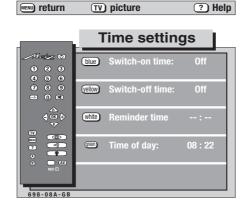
Press this key on the remote control....

The screen displays

Explanation

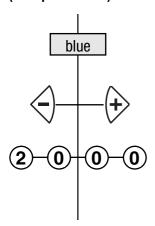
1. Call the "Time settings" menu

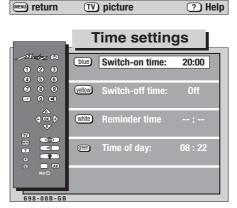




The adjoining picture shows the appearance of the "Time settings" menu when no times have been programmed.

2. Enter the switch-on time (Example: 20.00 hr)



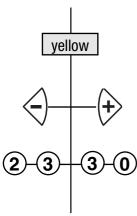


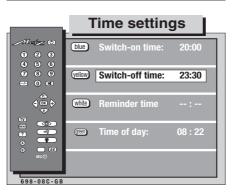
If you press the blue key, the text in the first line is displayed on a blue background.

Now press the  $\odot$  or the  $\circlearrowleft$  key to switch on the function. Enter the desired switch-on time with the numeric keys. The function is activated after input of the last digit. Henceforth the TV set will switch itself on every day at the preprogrammed time.

When the set has switched itself on automatically, you must press any key you choose on the remote control, otherwise the set will return to standby mode after about 10 min. This is a safety precaution to ensure that the television does not stay on if you are not at home.

3. Enter the switch-off time (Example: 23.30 hr)





TV) picture

? Help

MENU return

If you press the yellow key, the text in the second line is displayed on a yellow background.

Now press the  $\bigcirc$  or the  $\bigcirc$  key to switch on the function.

Enter the desired switch-off time with the numeric keys. The function is activated after input of the last digit.

The switch-on/switch-off times can be deleted with the  $\lhd$   $\Rightarrow$  keys (function **OFF**).

## 8. Time settings

? Help

# Switch-on/off and reminder time

Press this key on the remote control....

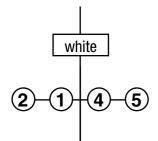
The screen displays

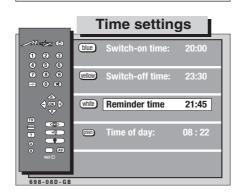
TV picture

MENU return

Explanation

4. Enter the reminder time (Example: 21.45 hr)



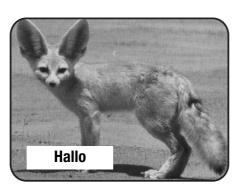


If you press the white key, the text in the third line is displayed on a white background.

nter the desired reminder time with the numeric keys. The function is activated after input of the last digit.

The reminder time can be deleted with the — key.

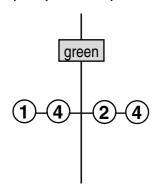


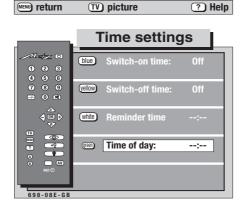


At the programmed time, a box with the text "**Hallo**" is displayed on the screen if the TV set is switched on.

This box disappears if you press the or veckey or switch to a different programme position.

5. Enter the time manually (Example: 14.24 hr)





If you switch to a programme position in which teletext has been stored, the current time automatically appears in this menu and the green key is not displayed. In such a case the time setting cannot be changed.

If, for the reason stated above, the clock is to be set manually, simply enter the time with four digits.

6. Switch to standby mode



From the standby mode, the TV set will switch itself on at 20.00 hr, remind you of the telephone call you wish to make at 21.45 hr, and switch back to standby mode at 23.30 hours.

## **TV** picture

## 8.1 Childlock

Switching on

Your TV set can be protected against unauthorized use. It is possible to prevent any use of the television at all or to permit viewing of up to five specific programmes. Consequently, the childlock can be set to prevent a child from seeing violent films, yet still provide access to children's programmess on selected channels. Access to such permitted programmes can be provided in general or within a specified period of time.

**Example:** The children shall only be allowed to watch programmes on the programme positions 01, 02 and 05 from 14.00 to 18.00 hr. Access to all other programme positions shall be excluded.

? Help

Press this key on the remote control....

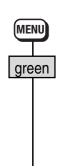
The screen displays

TV) picture

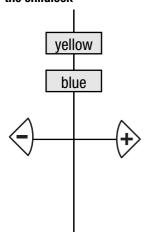
MENU return

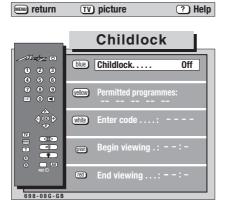
Explanation

1. Call the "Timer/childlock" menu



2. Call the "Childlock" submenu and switch on the childlock



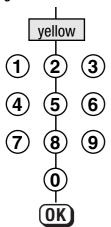


The childlock can be switched on and off with the  $\triangleleft \triangleright$  keys. If you set the childlock to "ON", you must also enter a 4-digit personal code number.

The TV set can now still be switched on, but programmes will not be shown on the screen. Instead the "Childlock" menu will be displayed with the cursor on the "Enter code" line.

The childlock can be turned off again by entering the 4-digit personal code number. The TV is automatically switched to standby mode after approx. 10 minutes if it has not been switched off manually in the meantime.

3. Select and store permitted programmes





A maximum of 5 programme positions can be entered to which access is permitted.

These programme positions are entered with the numeric keys; all entries can be erased with the  $\checkmark$ -- key.

#### Back to the example:

Enter two digits for each programme position that may be watched. In our example the child has access to the programme positions 01, 02 and 05.

Before continuing with the next programming steps, the permitted programme positions entered above must be stored; otherwise the entries will be lost.

## 8.1 Childlock

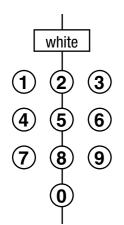
### **Switching on**

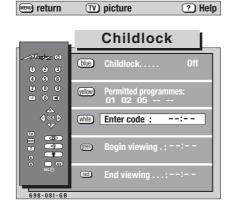
Press this key on the remote control....

The screen displays

Explanation

4. Enter your personal code



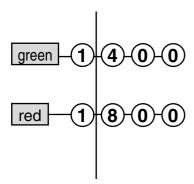


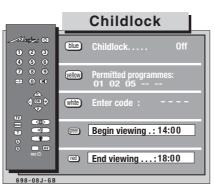
Enter your personal 4-digit code at this point.

The digits are entered with the numeric keys. The entered code number is NOT displayed!

Ask your local dealer for help if you have forgotten your personal code number.

5. Enter the beginning and end of the viewing period





TV picture

? Help

MENU) return

Here you can enter the times between which viewing of the permitted programmes is allowed.

The TV is not automatically switched on at the beginning of this period; it is, however, automatically switched off at the end of it.

If no permitted programmes have been entered all TV transmissions within this period can be viewed.

6. Activate the childlock



The childlock is activated when the set is switched off with the with the N/OFF key.

## 8.1 Childlock

### **Switching off**

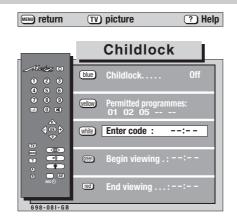
Call the TV menu and enter your personal code







0



Entry of the personal code number switches off the childlock and the selected programme is displayed on the screen.

Ask your local dealer for help if you have forgotten your personal code number.

## 8.2 Recording with the timer

The menu "Timer recording" is intended primarily for recording Pay-TV programmes (e.g. Premiere) in cases where the decoder is connected to a EURO socket of the TV set.

#### 8 timers can be programmed up to 2 months in advance.

Example: A VHS video recorder which has only one EURO socket is connected to the EURO 1 socket of the TV, while a Pay-TV decoder is connected to the EURO 3 socket. You now wish to record a film running on the Pay TV channel.

? Help

? Help

Press this key on the remote control....

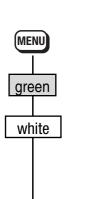
The screen displays

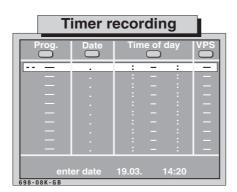
TV picture

MENU return

Explanation

1. Call the "Timer recording" menu



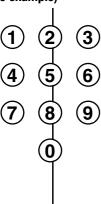


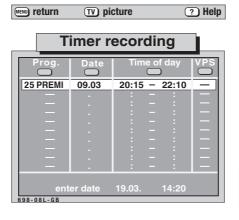
If no timers have been programmed before, the table in the menu is empty. If you have previously programmed timer recordings, these will be displayed in the table.

The current time of day and the current date are needed for programming in the timer menu. The time is normally obtained from the Megatext function and the date from the VPS signal. Note that some stations do not transmit VPS signals and/or Megatext.

If the time and/or date are not detected automatically, you must enter them manually.

2. Enter the date and time of the film to be recorded (see example)



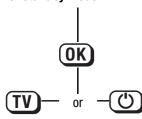


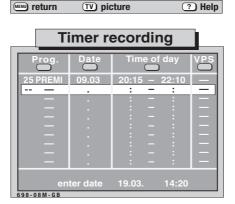
The month, the day, the hours and the minutes must each be entered in the form of two digits, e.g. 01.09 for September 1 and 09:00 for 9 AM.

If you make a mistake when entering the date and time, you can delete the entry in the current column or the entire line by pressing the — key. The entire line can be deleted only if the key symbols at the top of the menu are displayed in colour.

Timer recordings are not possible if the childlock is switched on.

3. Store the programmed data and return to the TV picture or standby mode





At the moment, PAY TV stations do not transmit a VPS signal.

The recording can be aborted at any time by pressing the keys AV, OK and TV sequentially, in this order, or by pressing the  $\checkmark$ - key with the timer menu displayed.

The same data must must also be entered on the AV programme position of the video recorder or on a programme position where the video recorder does not receive a station.

## 9. Connecting headphones

Headphones can be connected to the TV by way of the connecting socket underneath the fascia cover at the front. The socket will only accept headphones with a 3,5 mm jack plug.

We recommend the use of headphones with an impedance of at least 32 0hms. Headphones of a lower impedance (down to approx. 8 Ohms) will impair the sound quality.

The headphones volume can be stored as a standard value. The headphones and the TV speakers can be used together.

In the event of 2-channel sound transmissions it is possible to listen to either channel 1 or 2 on the headphones, irrespective of the channel set for the TV speakers.

## 9. Headphones

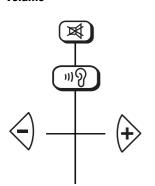
**Volume** 

Press this key on the remote control....

The screen displays

Explanation

1. Switch off the TV speakers and adjust the headphones volume



Volume headphones 35 change **♦**013 ♦ It is advisable to switch off the TV speakers with the key when adjusting the volume for the headphones.

Press the yellow key to display the bar for the headphones volume.

Adjust the volume with the  $\diamondsuit$  keys.

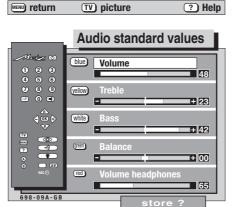
2. Store the headphones volu-



me as a standard value







The standard value for the headphones volume can only be stored by way of the TV menu.

All standard values can be stored in the "Audio standard values" submenu.

The volume has already been adjusted (see step 1).

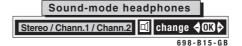
It is now only necessary to press the **OK** key to store the headphones volume.

## TV picture

OK)

Sound mode selection for headphones





With 2-channel sound transmissions it is possible to select either channel 1 or channel 2.

If headphones are connected, it is possible to listen, for example, to the English sound track on the speakers (channel 1) and to the other language on the headphones (channel 2).

This setting can also be called by pressing repeatedly the yellow key.

The desired channel can then be selected with the 

### **Basic functions**

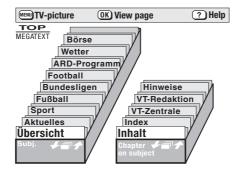
Press this key on the remote control....

The screen displays

Explanation

### 1. Call Megatext



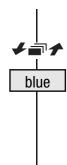


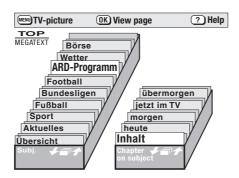
The Megatext file displays all the subjects available on a specific programme position and the chapters belonging to the currently selected subject.

The range of subjects and chapters depend on the transmitting station and can therefore be completely different in each programme position.

For some stations, for example, only numbers, rather than the header lines, appear in the Megatext file.

### 2. Select a subject



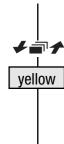


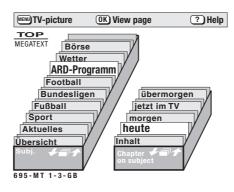
Each time the blue key is pressed, the next subject is selected and the corresponding file card is raised. Prolonged depression of the blue key raises all of the subjects sequentially.

Press the right side of the key to step backwards through the subjects, or the left side of the key to step forwards.

The displayed choice of chapters is adapted to the currently selected subject.

### 3. Select a chapter





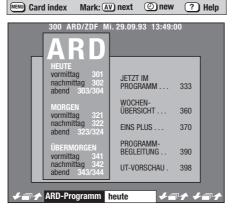
Each time the yellow key is pressed, the next chapter is selected and the corresponding file card is raised.

Press the right side of the key to step backwards, or the left side of the key to step forwards.

Prolonged depression of the yellow key raises all the chapters sequentially.

## 4. Open the first page of the chapter





The first page of the selected subject and chapter is displayed.

File symbols with arrows in the bottom line indicate that the corresponding coloured keys will activate subject-by-subject, chapter-by-chapter or page-by-page leafing.

The blue text window shows the name of the currently selected subject, while the yellow shows the name of the currently selected chapter.

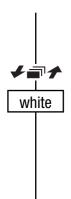
### **Basic functions**

Press this key on the remote control....

The screen displays

Explanation

### 5. Page-by-page leafing

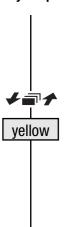


MENU Card inc	lex Mark: (AV) ne	xt @new	? Help
30	1 ARD/ZDF Mi. 5	.10.93 10:52	:00
AR	D	Di 5. Oktob	enstag, er 1993
05.55 06.00 09.00 09.03 09.45 10.00 10.03 10.45	Käpt'n Blaubär ARD-Morgenmag Tagesschau Dallas Tele-Gym Tagesschau auslandsjournal ZDF-Info Gesund Tagesschau		
11.03 12.35 12.55	Cappuccino Mela Fernsehfilm, 199 Umschau Presseschau		307
13.00 13.05	Tagesschau ARD-Mittagsmag bis 13.45 Uhr	azin	313
<b>≠</b> ARI	Nachmitta D-Programm heute	igsprogramm <b>≠</b> ≣	auf 302

This function enables you to run through the individual pages. Just as in a book, you can leaf forwards or backwards from the displayed page.

Press the right side of the key to step backwards, and the left side of the key to step forwards.

### 6. Chapter-by-chapter leafing



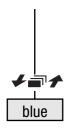


This function enables you to run through the individual chapters.

Each time you press the yellow key, the first page of the next or previous chapter is opened.

Press the right side of the key to step backwards, and the left side of the key to step forwards.

### 7. Subject-by-subject leafing





Each time you press the blue key, the first page of the next or previous subject is opened. In most cases, this will be an index page.

Press the right side of the key to step backwards, and press the left side of the key to step forwards.

### **Multiple pages**

Press this key on the remote control....

The screen displays

Explanation

### 1. Recognizing multiple pages



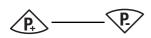
Multiple pages are indicated by a dark bar with the subpage numbers on the left-hand side of the displayed page.

The bright numbers indicate the number of subpages contained in this multiple page. The number of subpages is transmitted by the stations at intervals of 20 seconds. Consequently, it may take some time until all subpage numbers are displayed.

If there are more than 15 subpages, the cursor (white bar) can be moved downwards with the key to display the next group of subpage numbers (for example /16 to /30).

Some stations do not provide multiple page identification; in this case, the subpages are displayed sequentially. To stop a page for reading, one of the A or B function keys must be programmed with the "Stop page" function in Megatext mode. Renewed depression of the "Stop page" function key advances to another subpage (the one the station is currently transmitting).

### 2. Selecting subpages





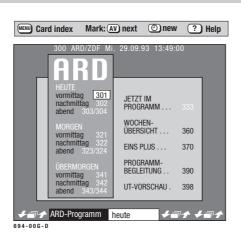
Use the  $\ensuremath{\Re}$   $\ensuremath{\&}$  keys to move the cursor (white bar) up or down. The subpage selected with the cursor is displayed on the screen.

The numbers in the top right corner of the displayed page (in this example 2/4) indicate the currently displayed subpage and the total number of subpages (in the example: subpage 2 of a total of 4 pages).

## 10. Megatext

### Page selection by cursor





Use the — key to move the cursor (coloured bar) downwards through the page numbers. The page number highlighted by the cursor can be directly called with the OK key.

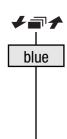
### **Direct page selection**

Press this key on the remote control....

The screen displays

Explanation

1. Select the subject



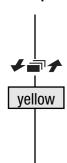
? Help MENU TV-picture **OK** View page TOP Börse Wetter ARD-Programm Football Bundesligen übermorgen Fußball jetzt im TV Sport morgen Aktuelles heute Inhalt Übersicht 695-MT2-GB

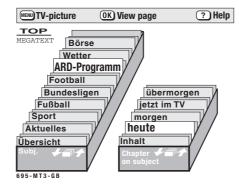
Select a file card for any desired subject.

Continue pressing the blue key to run through the filecard box.

The displayed choice of chapters is adapted to the selected subject.

2. Select the chapter





Select a file card for any desired chapter.

Continue pressing the yellow key to run through the file-card box.

3. Open the first page of the chapter





The first page of the selected subject and chapter is displayed.

4. Enter the page number e.g. page 422





After depression of the first numeric key, the number of this key, followed by two hyphens, appears at the top left of the screen. Enter the complete 3-digit number. A green line with the text "Wait for page ..." is displayed at the top of the screen after the last digit has been entered. A red line with the message "Page is not transmitted" is displayed if the entered page number does not exist. Otherwise the TV searches for the specified page and displays it as soon as it is located.

### **Direct page selection**

Press this key on the remote control....

The screen displays

Explanation

#### 5. Return to TV picture



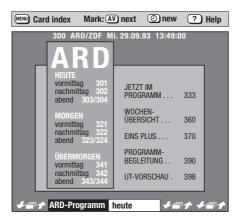


## 10. Megatext

### Return to last index page

### Return to last index page





Press the **0** key to return to the previous numerically called page or, if not numerically called, to the index page of the displayed choice.

The adjoining picture shows the index page of the ARD channel as an example.

# 10. Hi Text

# Topical or news-flash pages

### Suppressing news-flash pages





Some stations transmit Teletext pages with news flashes, general information, football results, etc.

Once you have selected such a page and hidden it by pressing the 🖼 key, the page will be displayed again whenever it is updated by the TV station.

In some cases, it may not be possible to switch to another programme position while a news flash page is displayed.

If this happens, simply select a "normal" Teletext page with the white key: you will then be able to switch to the desired programme position without problems.

### **Doubling the font size**

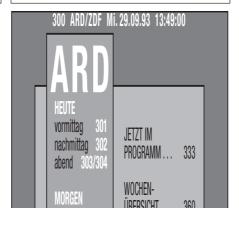
Press this key on the remote control....

The screen displays

Explanation

1. Select double font size, e.g. press the B\* key





doubled.

You can scroll slowly through the page by holding

When the B\* key is pressed for the first time, the upper

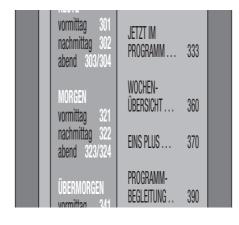
part of the selected page is displayed with the font size

You can scroll slowly through the page by holding down the key.

\* The **B** key was programmed in the factory for this function, but this programming can be changed (see Section "Equipment configuration - Assigning the function keys").

2. Scroll the page upwards, e.g. press the B\* key

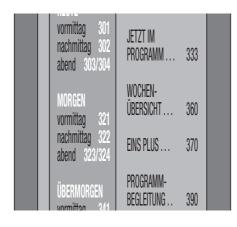




When the B\* key is pressed for the second time, the displayed page is scrolled upwards.

3. Scroll the page further, e.g. press the B\* key





When the **B**\* key is pressed for the third time, the displayed page is scrolled further, and so on.

4. Return to normal font size





Press the  $\mathbf{B}^*$  key for a fifth time to return to normal font size.

<sup>\*</sup> Depending on the assignment of the function keys. The factory setting is **B**.

There will be certain Megatext pages, e.g. stock market, news, weather forecast, etc., that you will want to read repeatedly. We have programmed a way of making it easier to read such pages.

10 marks per position can be set on each of the first ten programme positions. These marks can be set on any desired text page of your choice, and they can be erased at any time. After marks have been assigned to a programme position it will be possible to step sequentially through the marked pages with the key. Marks can also be set on all programme positions above Pr 10, but these marks are erased when you switch to another programme position.

Press this key on the remote control....

The screen displays

Explanation

1. Call the desired page e.g. page 400





2. Set the first mark





If marks have not yet been set in this programme position, then press the red key to set the 1st mark.

"MARK 1" is displayed in green lettering in the top lefthand corner of the screen.

3. Select the next page e.g. 422





In the ARD channel, for example, page 422 is a multiple page.

With multiple pages, marks can be set on any subpage.

### **Infotext - Setting marks**

Press this key on the remote control....

The screen displays

Explanation

4. Set the second mark

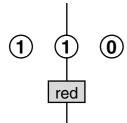




When the required page is displayed (in our example subpage 422/2), press the red key again.

"MARK 2" is now displayed in green lettering in the top left-hand corner of the screen.

5. Set further marks e.g. page 110

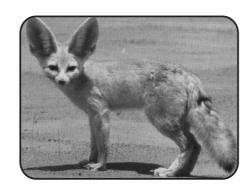




10 marks can be set as described in steps 1 - 4 in each of the first 10 programme positions.

6. Return to TV picture





### Infotext - Mark-by-mark advance

Press this key on the remote control....

The screen displays

Explanation

1. From TV picture to the first mark

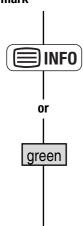




After the key has been pressed, a panel with "Mark 1" will be displayed.

On programme positions without a mark, a white field will be displayed with the text "No mark".

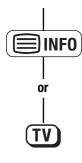
2. Step forward to the next mark

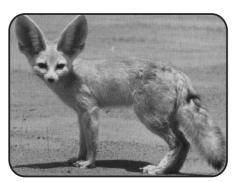




Each time the **INFO** key is pressed, you advance to the next mark. In this manner you can run through all pages on which marks are set.

3. Return to TV picture





The key will return you to the TV picture after having run through all marks.

Press the (TV) key to return directly to the TV picture without having to run through all the marks.

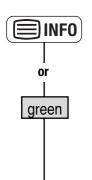
### **Infotext - Erasing marks**

Press this key on the remote control....

The screen displays

Explanation

1. Call the desired page e.g. page 422/2



MENU	Card index Mar	k: (AV) nex	t @new	? Help
MAR	KE 2_422_ARD/Z			
	börs	e fr	ank	furt
/1	Fortlaufende N	otierung		2/4
/3	12.10.93		Kassa	Vortag
/4	Commerzbank	325,0	324,7	326,5
/3 /6	Continental	225,6	227,5	232,0
10	Daimler	741,5	740,5	741,0
11/1	Degussa	384,5	384,0	383,0
/8	Dt. Babcock	206,5	206,0	206,5
/9	Dt. Bank	808,4	808,0	809,0
/10	Douglas	579,0	576,0	580,0
/11	Dresdn. Bk.	430,5	431,5	435,0
/12	FAG	123,5	125,0	125,0
/13	Henkel Vz.	580,0	580,0	588,0
/14	Hochtief	1125,0	1122,0	1140,0
/15	Hoechst	285,5	286,5	291,5
>>	Holzmann	935,0	930,0	962,0
	ohne Gewähr ■			
<b>≠</b> =	₽ <b> B</b> örse	Kurse	Ffm. 🗸	<b>?</b>

Press the **MINFO** key to call the page where the mark is to be erased.

2. Erase the mark





Erasure of the mark on the current text page changes the sequence of the remaining marks.

Example:

3 marks have been set in the current programme position:

- Mark 1 on text page 400
- Mark 2 on text page 422/2
- Mark 3 on text page 503

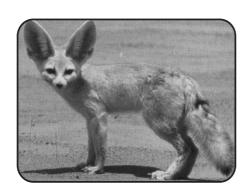
You now erase the mark 2 on text page 422/2.

The sequence of the remaining marks is immediately re-arranged and is now::

- Mark 1 on text page 400
- Mark 2 on text page 503

3. Return to TV picture





**Subtitles** 

This TV enables you to display programme subtitles automatically.

For this purpose one of the two A or B function keys must be programmed on the remote control handset. Please refer to Section "Equipment configuration - Assigning the function keys" for programming. The subtitles will only be displayed automatically after a function key has been programmed accordingly.

Example: You wish to watch the news with its subtitles. Program a function key with the "Subtitle" function.

Press this key on the remote control....

The screen displays

Explanation

1. Display of subtitles in the

current programme automatically

The teletext transmitted by the station is superimposed on the picture at the bottom of the screen.

The subtitle function can be activated or deactivated with the A or B function key.

2. Blank out the subtitles\*







In Ballungsgebieten sind solche Bilder selten

The subtitle function can be switched off and on again with the correspondingly programmed function key.

Note: If the subtitle function is programmed for one of the function keys, it will automatically be activated when the TV set is switched on.

## 10. Megatext

**Riddle solutions key** 

Access to riddle solutions

Megatext contains riddles with hidden answers.

The solutions to these riddles can be displayed with the A\* or B function key.



<sup>\*</sup> Depending on the assignment of the function keys

<sup>\*</sup> Depending on the assignment of the function keys. The factory setting is A.

### 11. Special picture effects

Variable Zoom

All programmes that are not transmitted in the traditional 4:3 screen format, such as cinema films in Cinemascope or Super-Cinemascope or 16:9 format, have black bars at the top and bottom of the screen.

With the zoom function, you can increase the size of the picture and make the black bars disappear. Although this also causes part of the picture to move off the screen at each side, the resulting loss of information is slight and less disturbing than the black bars.

Press this key on the remote control....

The screen displays

Explanation

1. Switch on the zoom function and enlarge the picture





Press the 😥 button until the black bars at the top and bottom of the screen have disappeared. The entire picture is enlarged uniformly.

The selected enlargement factor is automatically stored for this programme position as long as the TV set is not switched off. Switching to another station will restore the picture to its normal size. If you return to the station for which you activated the zoom function, the picture will be automatically enlarged if the same programme is still running.

2. Call the zoom function for the current programme position





If you wish to use the selected enlargement also for other programmes, press the key again after setting the zoom factor with the key. This returns the picture to its normal size, but stores the current enlargement factor for subsequent use.

3. Switch off the zoom function





If the TV set has been switched off with the remote control or the main switch, the stored enlargement factor can be recalled by pressing the \(\bigoplus \) key twice.

## 11. Special picture effects

Frame freeze

Press this key on the remote control....

The screen displays

Explanation

#### 1. Activating frame freeze





When you press this key, the current frame is "frozen" on the screen. The TV programme (or the video film) continues to run in the background.

#### 2. Deactivating frame freeze





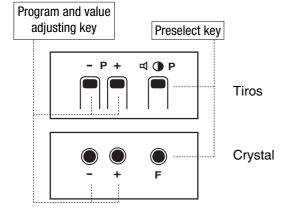
Pressing the key again switches back to the current programme (or video film).

### 12. Operation without remote control

This mode is only intended for an emergency when the battery in the remote control handset is flat, or if the remote control is not available.

#### The TV controls are underneath a cover at the front of the set.

You can control the following functions on the TV without the remote control handset. The preselection of the function is valid for 10 seconds, only 5 of which are shown in the permanent display.



#### **Programme selection:**

Press the - + keys.

#### Volume:

Hold down the **preselect key** until the bar display for the volume appears on the screen. Now press the - + keys to adjust the volume.

#### **Contrast:**

Hold down the **preselect key** until the bar display for contrast appears on the screen. Then press the - + keys to adjust the contrast.

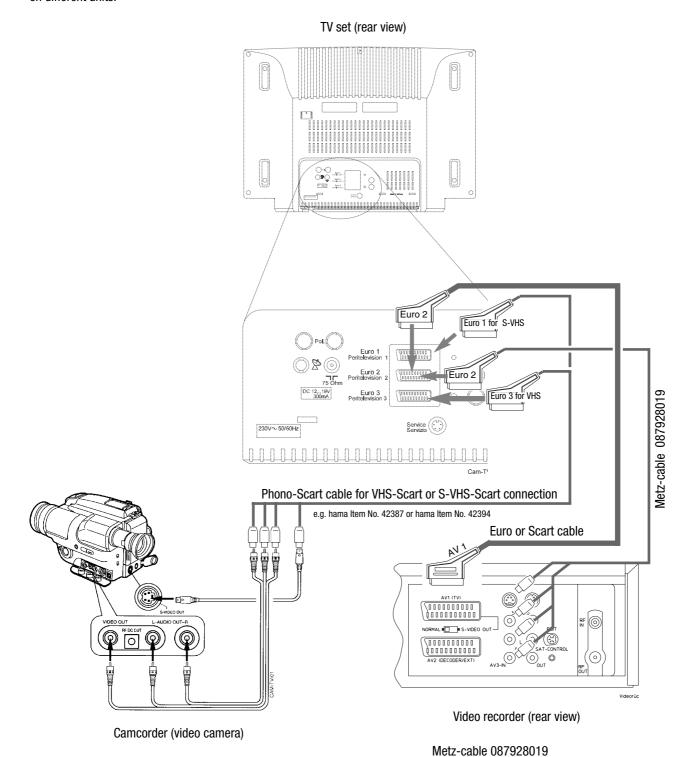
## 13. Connecting peripheral equipment

Video recorders can be connected to the TV set via the antenna socket or a EURO socket.

We recommend connection via a EURO (Scart) socket, since only such sockets have separate inputs and outputs for the picture and sound signals.

**Camcorders** can be connected to the TV set with special cables (available from your dealer).

The following connection diagram applies in principle to all of our products, although the various sockets may be located in different positions on different units.



only for copying S-VHS/Hi-8 films from EURO 2 to AV 3 In (phono input)

### 13. Equipment configuration

## Connecting external devices

In the menu "Device connection", you can define which AV devices are connected to the various sockets on the TV set. The box "Devices" contains a list of common AV devices. Only certain devices can be connected to the FRONT sockets.

#### Wherever possible, the AV devices should be connected to specific EURO sockets, namely:

**EURO 1:** S-VHS or VHS play back video recorder, S-VHS or VHS camcorder (videocamera), PC, games console (e.g. Nintendo), laser disk, photo CD, SAT receiver/ Pay-TV decoder, SAT/Set Top unit, S-VHS playback unit.

EURO 2: S-VHS/Hi8 video recorder, S-VHS/Hi8 video recorder, S-VHS or Hi8 camcorder (videocamera), SAT receiver.

**EURO 3:** VHS play back video recorder. VHS video recorder + Pay-TV decoder. Pay-TV decoder.

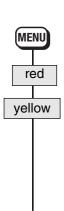
The connections are pre-programmed in the factory as shown in the picture for step 2.

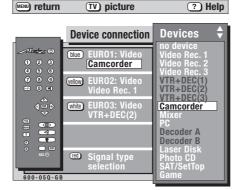
Press this key on the remote control....

The screen displays

Explanation

1. Call the "Device connection" menu





In the "Device connection" menu, you can assign one of the defined AV devices to each of the EURO sockets.

### The abbreviations in the box on the right have the following meanings:

**Video rec.** = video recorder (up to 3 may be connected). Video rec. 1 is the video recorder which is always connected; Video rec. 2 and 3 are used for copying from one recorder to another.

**VTR+Dec.** = video recorder and Pay-TV decoder (e.g. Premiere), where the decoder is connected only to the video recorder.

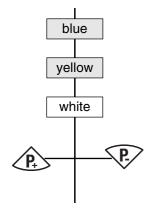
*Camcorder* = video camera

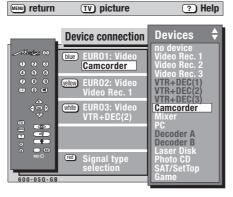
**Decoder** = Pay-TV decoder (e-g- Premiere)

SAT = external satellite receiver

**Game** = games console

### 2. Change the device connections



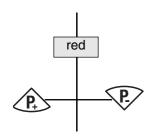


The default settings can be modified to meet your own requirements. You should, however, note the following input and output signal allocations when doing this.

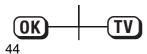
	S-VHS / Hi8 (= Y/C =S-Video)		VHS (= Video)		RGB
	Input	Output	Input	Output	Input
EURO 1	Yes	No	Yes	No	Yes
EURO 2	Yes	Yes	Yes	Yes	No
EURO 3	No	No	Yes	Yes	No

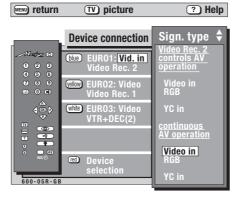
To change the settings, select the appropriate EURO socket with the coloured keys and then select the device to be connected with the 🏝 and 😵 keys.

#### 3. Change the signal type



4. Store the settings and return to TV picture





When the devices are selected, the signal type is always set to "video". Pressing the red key displays a box for selection of the signal type.

#### Differences between the signal types:

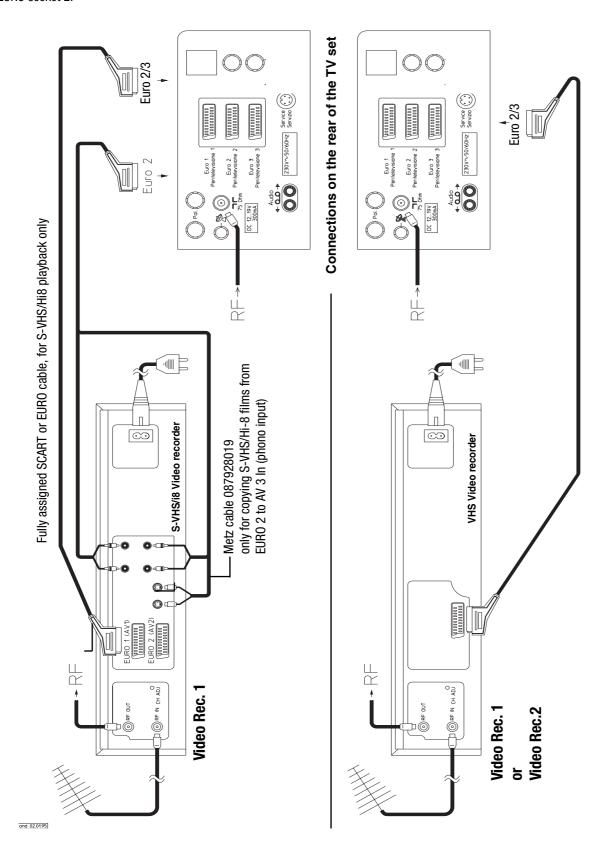
- <u>continuous AV operation</u>: the screen displays the picture provided by the AV device. The channel setting of the TV set has no effect.
- ... controls AV operation: if the AV device is set to "play", the screen displays the picture provided by the AV device; if the AV device is set to "stop", the screen displays the picture of the selected TV programme position.

### TV picture

A video recorder can be connected to the TV set via the aerial socket or via one of the EURO sockets.

We recommend connecting the video recorder via a EURO (Scart) socket, since only these sockets have separate inputs and outputs for the video and audio signals.

A **VHS video recorder** can be connected to the EURO2 or EURO3 sockets. An **S-VHS/Hi8 video recorder** must be connected to the EURO socket 2 if you wish to take advantage of the full picture quality provided by such a recorder (see the table on page 45). A second S-VHS/Hi8 video recorder can be connected to EURO socket 1 to play back films recorded on the S-VHS/Hi8 video recorder connected to the EURO socket 2.



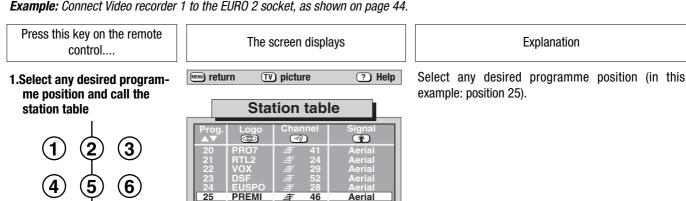
## 13. Connecting peripheral equipment

**Video recorders** Video signal

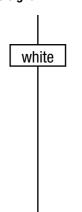
In the following example, video recorder 1 is to be connected to the EURO 2 socket.

Video recorder 1 is programmed in the factory on programme position 0. For this reason, connect the video recorder via a EURO cable to the EURO 2 socket, insert a recorded cassette, press the ▶ key and select programme position 0 on the TV set.

Example: Connect Video recorder 1 to the EURO 2 socket, as shown on page 44.



2. Call the submenu "Video signal"

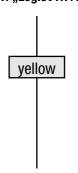


white



The video signal is normally supplied directly by the aerial.

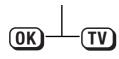
3. Select the video signal EURO 1: "LogicVTR+D"





In order to display the picture from the video cassette on the screen, the video signal must be set to "EUR01".

4. Store the setting and return to the TV picture



TV picture

### 13. Connecting peripheral equipment Video recorders

#### Connecting a video recorder via the aerial socket

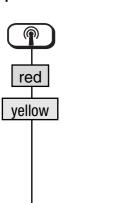
- Connect the aerial output (RF-out) of the video recorder to the aerial socket of your TV by means of the aerial cable.
- Load a recorded video cassette in the video recorder.
- Start playback or switch on the test pattern of the video recorder. The test pattern of most video recorders is located within the standard channels Ch 30 to Ch 40 (see operating instructions of the video recorder).
- Execute a station search, beginning with standard channel 25. See Section 3. Presetting TV stations, station search.
- If the playback picture or the test pattern of the video recorder is displayed on the screen, then this channel can be stored. See Section 3. Presetting TV stations.
- In order to ensure optimum picture quality at all times, select the option "VCR On". To do so, proceed as described below.

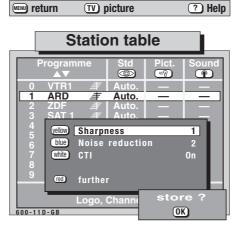
Press this key on the remote control....

The screen displays

Explanation

1. Select the station table and call the picture submenu

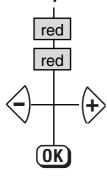


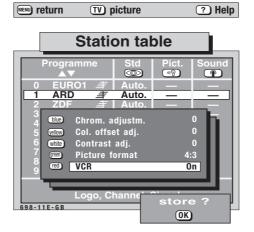


The picture quality of a video film can be improved in a terrestrial programme position with a standard channel.

The video signal for this programme position must be set to "Aerial".

2. Call the second picture submenu and adjust VCR





To ensure optimum picture quality the "VCR" function must be switched on.

Set the "VCR" function to "On" with the  $\bigcirc \bigcirc$  keys and press the  $\bigcirc$  key to store the setting in the programme position.

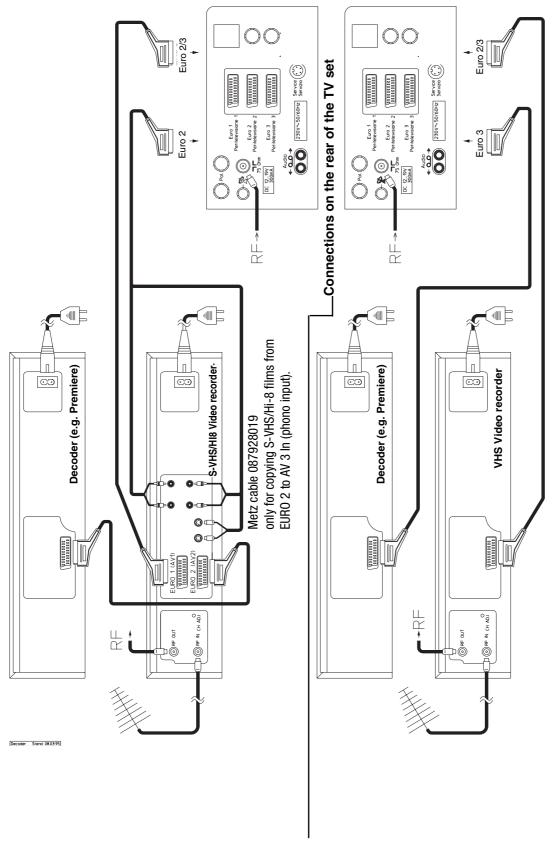
Press the TV key to return to the TV picture.

# 13. Connecting peripheral equipment Pay-TV decoder

This Pay-TV decoder decodes the scrambled signals of a Pay-TV station (e.g. Premiere) so that they can be displayed on the screen of the TV set. For connection of a Pay-TV decoder, you need a EURO (=Scart) cable in which all 21 pins are assigned.

If you want to record Pay-TV programmes with a video recorder, we recommend that you connect the Pay-TV decoder directly to the video recorder. If this is not possible, the Pay-TV decoder can be connected to the EURO 3 socket (see also "Connecting external devices" on page 45).

The following diagram shows the connection of a Premiere decoder Typ G2.



## 13. Connecting peripheral equipment

**Pay-TV decoder** 

For the following explanation it is assumed that the Pay-TV decoder A (Premiere) is connected to the EURO 3 socket. The following settings must be made on the TV set:

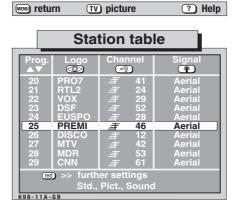
Press this key on the remote control....

The screen displays

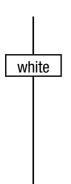
**Explanation** 

 Select the Pay-TV programme position and call the station table





2. Call the submenu "Signal"





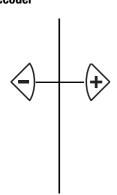
TV picture

? Help

MENU return

The video signal is normally supplied directly from the aerial.

3. Select video signal "via decoder"



Station table

Prog. Logo Channel

20 PRO7 # 41 Aerial
21 RTL2 # 24 Aerial
22 VOX # 29 Aerial
23 DSF # 52 Aerial

BURO1: Video Rec. 2

BURO2: Video Rec. 1

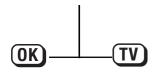
BURO3: Decoder A

Std Rick Sov. Store?

A Pay-TV signal must always be unscrambled in a decoder before it can be displayed on the screen.

You can switch between "Aerial direct" and "Aerial via decoder" with the aid of the  $\diamondsuit$  keys.

4. Store the setting and return to TV picture





#### Note:

You can call the Premiere Info-Service only if the RBG priority is set to "Yes" in the menu "Equipment configuration". See Section 5. Equipment configuration, RGB priority.

### 14. Technical data

Mains voltage: 230 V ac, 50/60 Hz

- Australia: 240 V ac

#### Power consumption:

	Power consumption (to CENELEC/TC 59 X):	Music power output to DIN 45324 at 4 Ohms and 1 kHz (sine output)	
all TV- sets	ca. 110 W	2 x 10 W (2 x 6 W)	

Consumption of

*energy per hour:* 110 Wh

Standby (all sets): ca. 1.5 W

Aerial input: Channel coverage: 75 Ohms, asymmetric DIN 45325 Standard channels 2...12, 21...69 Special channels S1...S20, S21...S41 S42...S46 (Belgian OIR channels)

## 14.1 Upgrade kits

- Multi-standard upgrade kit 031 NB 1038
  For reception of "Standard M" and "Standard L" stations.
- NICAM upgrade kit 041 NB 1048
- SAT upgrade kit 082 NB 1014 SAT receiver to replace the terrestrial receiver.

Contact your dealer for further upgrade kits.

### 14.2 Maintenance and care

#### **Guarantee**

When you purchase the television, ensure that your dealer includes the completed TV "passport". It must specify the date, the dealer's stamp and signature. Keep this document in a safe place, together with the invoice. Any claims under the warranty will only be accepted if these documents are submitted. Keep your TV clean and handle it with care.

#### Cleaning the set



Always switch off the TV with the ON/OFF key before you clean it!

Use a soft, dry or slightly moist cloth to clean the cabinet. Do not use any strong detergents as they may damage the finish and labels. Use a damp chamois leather to clean the screen.

#### Repairs



The TV should only be opened and repaired by qualified service personnel!

#### **CAUTION! DANGER!**

Consult your dealer when repairs are necessary.

Any unauthorized attempts to open or repair the TV may result in the guarantee becoming null and void.

Adequate shielding is provided against X-ray radiation (see approval certificate on the rear panel of the TV).

Changing the high voltage or fitting a different type of picture tube may cause an increased amount of X-ray radiation. Televisions modified in such a manner are no longer in keeping with this approval certificate and must not be used!

### 15. Glossary

#### 2-channel sound transmission:

Separate reproduction of 2 sound channels, e.g. 2 different languages.

#### Audio

Latin for "I hear" - The sound frequency range audible to the human ear is between 60 to 20,000 Hz approx.

#### Camcorder

A video camera with integrated video recorder.

#### Cinch (phono)

Single-pole plug connector for separate audio and/or video copying.

#### Decoder

An electronic circuit that decodes TV signals; required to receive coded TV transmissions, such as Premiere.

#### **Dual-Band LNC**

An LNC that can simultaneously process two transponder frequency ranges (11 GHz and 12 Ghz)

#### **EURO** socket assignments:

	S-VHS / Hi8 VHS (= Y/C =S-Video) (= Video)		RGB		
	Input	Output	Input	Output	Input
EURO 1	Yes	No	Yes	No	Yes
EURO 2	Yes	Yes	Yes	Yes	No
EURO 3	No	No	Yes	Yes	No

#### FBAS = CVBS

 $\mathbf{C} = \text{composite}, \mathbf{V} = \text{video}, \mathbf{B} = \text{blanking}, \mathbf{S} = \text{signal}$ 

Function keys - Television:

• No function

No function has been assigned to this key.

Subtitles

Displays the subtitle with corresponding transmissions.

Large subtitles

50% enlarged subtitles are displayed with corresponding programmes.

Logo

The display of the station logo is meaningful only if a PIP upgrade kit has been installed.

• Picture format (variable zoom)

Changes from 4:3 to 16:9 in the presence of a switching voltage.

• Zoom 2:1

The picture can be zoomed to double its size and then back again to 1:1

· Sound effects

Spatial sound or stereo wide can be activated or deactivated.

• Muting - 12 dB

The sound can be muted by 12 dB.

#### **Function keys - Teletext**

· No function

No function has been assigned to this key.

Riddle solutions

Display of the hidden answers to riddles

· Large font

Doubles the font size in teletext.

Stop page

Running through multiple pages consisting of more than 15 subpages is automatic. This can be stopped at any page with the "Stop page" key so that "leafing" can be continued manually.

#### **Noise reduction**

Can be switched on to enhance the picture quality.

#### **OSD (On Screen Display)**

Convenient display of all functions to adjust the television. They are superimposed on the current programme.

#### Phono (cinch)

Single-pole plug connector for separate audio and/or video copying.

#### **RGB** control

 $\mathbf{R} = \text{red}, \, \mathbf{G} = \text{green}, \, \mathbf{B} = \text{blue}.$  Indicates separate colour signal processing.

#### **Spatial sound**

Mono transmissions can be reproduced with an artificial stereo effect.

#### Standard channels

02-12 and 21-69 can be received by way of the aerial and cable system.

#### Standby mode

The TV has been switched off with the remote control, or it has switched itself off.

#### Stereo wide

For stereo broadcasts, the distance between the speakers can be increased artifically to achieve a wider stereo effect.

#### Timer

Used to program automatic recording, or to switch a video recorder or TV automatically on and off at a preset time.

### 16. Remote control handset for video recorders

The remote controls RB11 are capable of controlling the basic functions of the current series of Metz video recorders. Remember to point the remote control at the video recorder!

!\ \frac{1}{t}

In order to permit control of a video recorder, function key B for the TV level must be programmed to "VTR operation" in the menu "Equipment configuration/Assigning the function keys" on the TV set.

Whenever a key is pressed, an indicator on the remote control unit blinks. **RB11** 100 Hz Video recorder On/OFF 3 6 · Programme position selection • Video recorder timer ON/OFF 9 Next programme • REW (rewind) From STOP: fast rewind FF (fast forward) From PLAY: picture search reverse From STOP: fast forward From PLAY: picture search forward AV link: switches the TV set between TV and video rec. modes Stop Next programme · Terminates playback or recording · Play - Start playback (MENU Slow-motion playback 11) 9 • Still - Pause ? • Operator help for video rec. operation Index - Video index search forward A Index - Video index search reverse • Switch to AV mode AV 1, AV 2, .... REC (2) To switch the remote control to video REC - Start recording recorder mode: Press and hold this key and press **■**)INF0 the desired function key. In order to permit control of a video PRG. ◆ recorder, function key B for the TV level must be programmed to "VTR operation" in the menu "Equipment configuration/Assigning the function keys" on the TV set.

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Subject to technical changes. Errors and omissions excepted.







With the trend-setting Metz technology you will allways make the correct choice.

See your Metz dealer.

He will be happy to demonstrate the current Metz range.



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Internet: www.metz.de E-Mail: info@metz.de

Availability and technical details subject to change without notice.



Videorecorder



Camcorder



DVD



Audio



mecablitz

**(**E