OPERATING INSTRUCTIONS
for LCD TV sets Axio pro, Linus, Caleo, Primus, Sirius with Chassis 610

Metz - immer erstklassig.

Foreword

Dear customer,

Thank you for selecting a Metz LCD TV set.

We have equipped this TV set with a menu system which uses "file cards" and believe that this will provide you with a user interface that is easy to understand.

If you have any problems, you can press the (INFO) key to display a help function that will assist you in setting up your TV set.

However, you should read at least sections 1 to 8 of the Operating Instructions before putting your new TV set into service.

HDTV
integriert

TV sets with the type designation "HDTV" provide the possibility of showing HDTV programmes.

In the box
- TV set
- Remote control RM16 for TV sets without digital recorders, or remote control RM17 for TV sets with digital recorders.
- 2 AAA batteries
- Power cord
- Back panel cable cover
- Operating instructions

Your METZ-WERKE

Contents

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1. Installation

- Take care that no bright artificial light or sunshine falls directly on the screen. This could cause reflections which have a negative effect on the brilliance of the picture.

- The best viewing distance is five times the screen diagonal, i.e.
  - Approx. 2 m (6.3 ft) for 26" screens
  - Approx. 2.4 m (7.6 ft) for 32" screens
  - Approx. 2.8 m (9 ft) for 37" screens
  - Approxi. 3.2 m (10.3 ft) for 42" screens
  - Approxi. 3.5 m (10.3 ft) for 47" screens
  - Approxi. 4.2 m (10.3 ft) for 55" screens

- The antenna cable and any other components (such as a video recorder) connected between the antenna socket in the wall and the TV set must comply with the European standard EN 60966-2-4.

- The antenna cable used for connecting the TV set must have a screening attenuation of at least 75 dB.

- The use of non-approved cables will invalidate the operating permission for the TV set.

- Only use Metz bases as a stand for the LCD TV.

- Use the Metz wall bracket (item no. 604 99 0286.A3) or a suitable Omni-Mount wall bracket to hang the LCD TV on the wall.

- Smoking at the installation location of the LCD TV can lead to nicotine and soot deposits behind the panel glass and thus to an impairment of the image quality. Such deposits can only be removed by a specialist. In extreme cases the panel may be damaged permanently, which may require to replacing the panel. The cleaning and / or the replacement of the panel is not covered by warranty claims.

1.1 Proper use

This TV set is exclusively designed for the reception and replay of picture and sound signals.

The TV set is designed for dry rooms (living rooms and offices).

The room climate should be in a range from +5°C to +35°C with 75% air humidity.

The TV set must not be used in rooms with higher air humidity (e.g. bathroom, sauna, etc.).

The TV set must not be used in rooms with a high concentration of dust (e.g. a workshop).

If, as an exception, you operate the TV set outdoors, then please make sure that it is protected against moisture (rain, water spray, dew).

1.2 Connecting and switching on

Power connector

Connect the TV set to the wall socket with the supplied power cord.

Power connection, back panel

POWER   ET1

DVB-S antenna connector
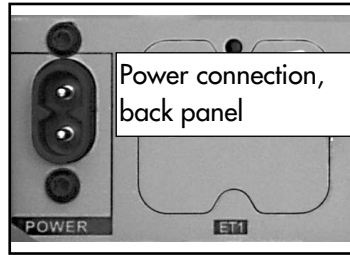
Antenna connector

Connect the TV set to the antenna socket with an antenna cable.

DVB-T 5V, 80mA

Sat. 13-19V, 400mA
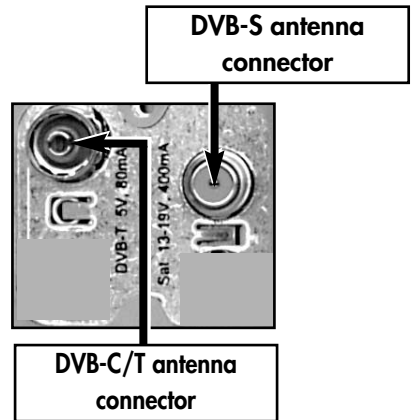
Switching on

Switch on the TV set with the main switch.

DVB-C/T antenna connector

Axio pro

from below

from below

Primus, at the right side

Linus
Sirius

Eurosport

On the side
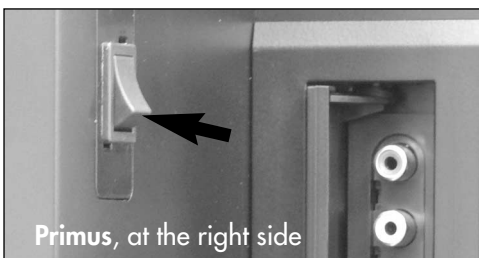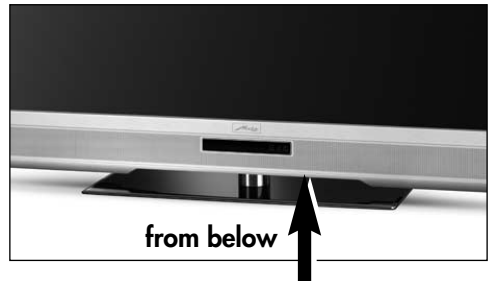
1.2 Connecting and switching on

The TV set is now in standby mode and the red standby indicator lights.

After about 25 seconds, the TV set switches to program position 1 or to the programmed initial program position (see page 108).

If you press no further keys on the remote control a window requesting that you do so is displayed after about 10 minutes. If you do not do this, the TV set switches back to the standby state.

Switching on from the Stand-by

Use the numeric keys to select any desired program position. Pressing the ⏻ or **TV** key selects program position 1 or, if it is programmed, the initial program position (see page 108.

Switching off

Press the ⏻ key to switch the TV set to standby mode. If you do not intend to use the TV set for a longer period switch it off with the main power switch.

2. Safety notes

- Always place the monitor on a solid, stable surface.

- If a cold TV set is moved to a warm room, always allow any condensation on the screen to evaporate before switching it on.

- The TV set is intended for use in a dry room. If, in exceptional circumstances, you use it outdoors, take care that is protected against moisture (rain, splashed water, dew).

- Do not expose TV set to dripping or splashes (e.g. rain)!

- TV sets need adequate ventilation. Never cover the openings on the rear of the set with curtains, doilies, newspapers, etc.
  Also take care that the slits in the bottom of the case are freely accessible so that the intake of the cooling air is not hindered.

- If you place the TV set in a wall unit leave sufficient space on all sides for the circulation of cooling air.

- Do not place the TV set close to a radiator, since this would effect adequate cooling.

2. Safety notes

- Do not place burning candles or vessels containing liquids (vases, etc.) on top of the TV set, since any hot wax or water dripping into the set could cause serious damage to the electronic components and could also jeopardise the electrical safety of the set.

- Lightning can damage electrical equipment. A lightning flash entering the power cable or the aerial cable can damage the TV set even if it is switched off. You should therefore disconnect the power cable and aerial cable from their outlets or from the TV set in the case of a thunderstorm.

- The monitor may be opened and repaired only by a qualified person.

CAUTION! HIGH VOLTAGES CAN KILL !

If repairs should be necessary, consult your local dealer.

- Always switch off the TV set before cleaning it.

- Do not hold the remote control directly in front of your eyes and press a button. The remote control emits infrared radiation!

- Do not place rechargeable batteries in the battery compartment of the remote control. Use only two 1.5 V dry batteries of the type LR03/AM4/AAA (Micro).

- The TV set is intended only for the reception and reproduction of picture and sound signals.

- The TV set may be operated only from a mains voltage of 230-240V VAC, 50 Hz. Australia: 240 VAC.

- Do not demage the power cord or plugs. In the event of repair or maintenance the power cord must be able to be easily disconnected.

- Lay the power cord so that there are no objects resting on it and no-one can trip over it!

- Do not display still images, logos, 4:3 pictures with stripes etc. over an extended period. These still images can result in marks on the screen.

- Lay the power cable so that nothing stands on it and no-one can trip over it.

- Keep candles and open flames away from this product at all times to prevent fire spreading.

- Grime and dust deposits can accumulate behind the front panel glass of the LCD TV set without a visible source being present. These grime and dust deposits are also known as „fogging" or „magic dust". There are scattered instances of this phenomenon, but especially during the warm-up period and after renovation work or in new constructions. Various factors can cause the above mentioned phenomenons, see also reports on the Internet. In such cases cleaning or replacement of the panel is excluded from the guarantee, since it does not involve a set defect, but rather an external influence.

3. The Remote Control

The **RM 16** is included with all TV sets delivered **without** digital recorders.

The **RM 17** remote control is included with all TV sets delivered **with** digital recorders.

3. The Remote Control

The remote control sends commands to the TV set by means of an infrared signal. You must point it towards the TV set when using it. Note that the remote control may interfere with the operation of other devices which use infrared signals (such as infrared headphones).

i Sunlight falling directly on the TV set may interfere with the operation of the remote control, since the TV set cannot detect the infrared signals from the remote control under these conditions. The TV set must be switched on with the main power switch before it can be controlled with the remote control.

⚠️ **Do not insert rechargeable batteries in the battery compartment of the remote control.**

Use only two dry batteries of the type LR03/ AM4/AAA 1.5V.

The batteries that are used must not be exposed to excessive heat such as sunshine, fire or the like.

3.1 The Remote Control (RM 16)

⏻   ON at program position 1 or at the programmed start program position.

OFF, enter stand-by setting.

(INFO) Call "Information".
Back to table of contents in "Information".

❙❙ In TV mode: Start time shift
When set to Play: Still picture/Pause
Hold down when set to Play: Slow motion

TIMESHIFT (TV/R) Switch to TV -> Radio[1] / Radio[1] -> TV

(F1) (F2) (F3) Function keys

Press briefly: for factory programming

Hold down: display of the special functions selection

0/AV   Select AV device

👁 Select picture settings
In TV menu: Adjust the settings for "picture and sound"

🎵 Select sound settings
In TV menu: Adjust the settings "AV devices"

📡 Select program table,
In the TV menu: Adjust the settings "Program table" or station features

🕐 Display date, time info on program
In the TV menu: Adjust the settings "Time settings"
In video text: Scroll by markers
When set to time shift: Display playback position

✴ In the TV menu: Adjust the settings "Configuration"
In video text: Set or delete marker
Mark TV program for recording in EPG

V+   volume + / In the menu: Change value

+P   Progr. + / In the menu: Change value

V–   volume – / In the menu: Change value

–P   Progr. – / In the menu: Change value

3.1 The Remote Control (RM 16)

◆ Cursor control key

⌷K Confirmation key
In the menu: Save

◁)) Mute/sound stop

↶ Back to last program
In the menu: Delete

(EXIT) Exit menu without saving any changes that have been made

(TEXT) Select video text
In video text: Scroll by markers

(EPG) Select the electronic program guide

(MENU) Select the TV menu.
In the menu: Return to main menu point

Note:

In the following sections of these operating instructions the term **+ – Key** is used. This refers to the value adjustment within the TV menu with **V+ / +P** or **V– /–P**.
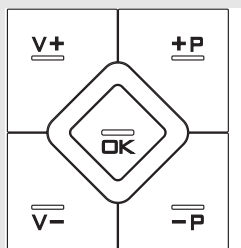
3.2 The Remote Control (RM 17)
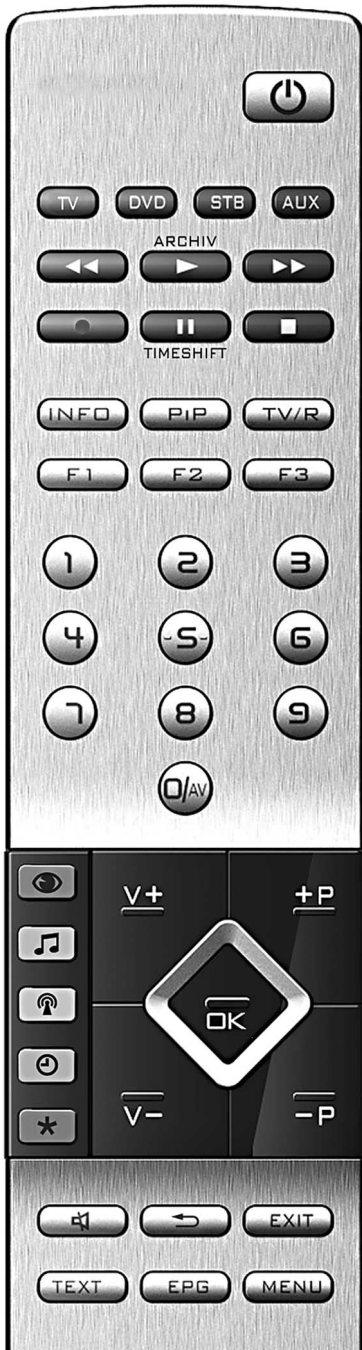
⏻   ON at program position 1 or at the pro-grammed start program position.

OFF, shut down digital recorder & switch to stand-by setting.

TV   Switch to Metz-TV

DVD   Switch to DVD

STB   Switch to STB (**S**et **T**op **B**ox)

AUX   Switch to AUX (audio devices)

◄◄   When set to Play: Rewind
When set to time shift: Skip backwards 20 seconds

ARCHIV   Open archive / in archive: Play

►►   When set to Play: Fast forward
When set to time shift: Skip forwards one minute

●   Start direct recording / EPG direct recording

TIMESHIFT   In TV mode: Start time shift /
when set to Play: Still picture/Pause
When set to Play: hold down: Slow motion.

■   Stop (when set to Play: Return to archive / when set to time shift: Switch to "Live")

INFO   Select "Information" / In "Information" back to table of contents

PIP   Picture in picture on/off

TV/R   Switch to TV -> Radio / Radio -> TV
PVR stop and back to TV picture

F1 **F2** **F3**   Function keys

Press briefly: for factory programming

Hold down: display of the special functions selection.

O/AV   Select AV device

👁   Select picture settings
In TV menu: Adjust the settings "picture and sound"
In "File Manager": Switch from USB stick to digital recorder

3.2 The Remote Control (RM 17)

🎵 Select sound settings
In TV menu: Adjust the settings "AV devices".
In "File Manager": Mark file / Remove marking.

📡 Select program table in the TV menu:
Select "Program table" or station features.
In the PVR archive: Sort recordings according to complete, partial & unseen.

🕐 Display date, time info on program.
In the TV menu: Select "Time settings".
In video text: Scroll by markers.
When set to playback / time shift: Display playback position.
In the PVR archive: Show recording according to the category.

★ In the TV menu: Adjust the settings "Configuration".
In video text: Set or delete marker.
In the PVR archive: Sort the recordings from A-Z.
In EPG : Mark TV program for recording.

V+   volume + / In the menu: Change value.

+P   Progr. + / In the menu: Change value.

V–   volume – / In the menu: Change value.

–P   Progr. – / In the menu: Change value.

◆ᴏᴋ   Cursor control key.

☐K   Confirmation key / In the menu: Save.

🔇   Mute / sound stop.

↩   Back to last program.
Back to last program.

EXIT   Exit menu without saving any changes that have been made to save.

TEXT   Select video text.
In video text: Scroll by marks.

EPG   Select the electronic program guide.

MENU   Select the TV menu.
In the menu: Return to main menu point.

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Opening the menu

4. Daily Operation

Contrast	
Brightness	**50%**
Profil	

Profil	
Colour impr.	**harmoniously**
MPEG noise reduct.	

Noise reduct.	
Sharpness	**7**
Colour intensity	

Colour intensity	
Contrast	**70%**
Brightness	

Brightness	
Profil	**Standard**
Colour impr.	

Sound mode	
Volume	**38%**
Tone settings	

Sound mode	
Headph.Vol.	
Speakers	

Speakers	
Sound mode	**on**
Volume	

Headph.Vol.	
Speakers	**on**
Sound mode	
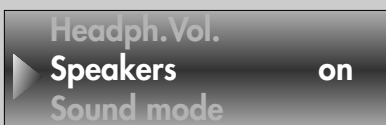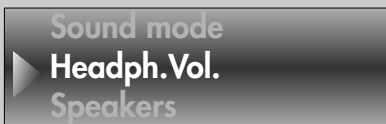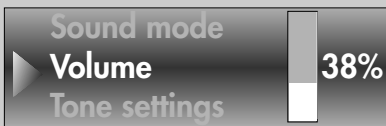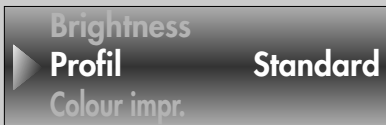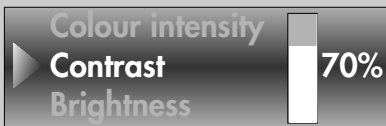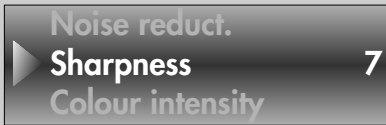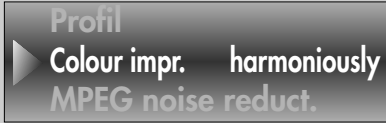
Changing picture settings

The picture settings can be accessed with the blue button 🔵 . The settings box with the individual functions (see picture) appears on the bottom left of the screen.

Select the desired function with the cursor key and adjust it with the **V− /V+** key.

The individual picture characteristics can also be saved as default values for all programs. See Chapter 11 for this.

Volume settings

Use the **V− /V+** key to change the volume.

Changing the sound settings

The sound settings can be accessed with the yellow button 🎵. The settings box with the individual functions (see picture) appears on the bottom left of the screen.
Select the desired function with the cursor key and adjust it with the **V− /V+** key.

The individual sound characteristics can also be saved as default values for all programs.
See Chapter 12 for this.

> **i** The settings that are made here are only temporary and are not saved. If the TV set is switched to stand-by mode or switched off, all settings will be reset to the preset default values.

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5. Station Selection

Station selection and management of program positions

The TV set can store the settings for up to 2000 TV stations and 2000 radio stations in so-called program positions. You can select any of these program positions with the numeric keys, with the oval rocker key "**P+/P-**" or from the station table.

If you use the numeric keys for station selection, the first digit you enter is normally the "thousands" digit. If less than

1000 program positions are occupied, it automatically becomes the "hundreds" digit.
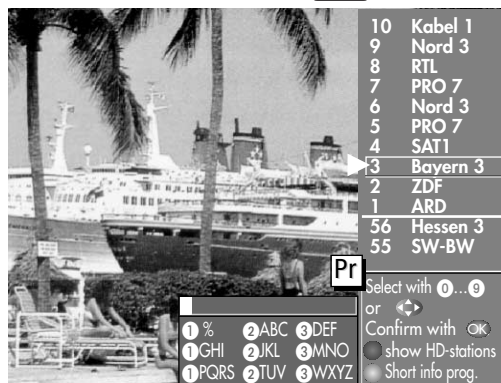
If less than ten program positions are occupied, the first digit you enter automatically becomes the "units" digit.

After pressing any numeric key, you have three seconds to press further numeric keys

5. Station Selection via program table

The program table can be called up with the white key ⬜📡 **2 x** 📡 in the TV or radio mode.

- Programs can be selected with the cursor key or numeric keys in the table displayed. It is possible to skip to the next or last 15 programs with the cursor control key. You can display the program selected with the key ⬜K .
- A key pad is displayed as a result of repeated pressing of the white key 📡 . The station table can be ordered alphanumerically with the corresponding key.
- All HD stations saved in the station table are displayed by pressing the blue key 🔵 . By renewed pressing of the blue key 🔵 all stations are once again displayed in the station table.
- By selection with the cursor control key of another station and pressing the green key 🕐 , you can see the short information of the station on the program and the start and end times **(only DVB stations, not analogue stations).**
- By using the joker **character** % you can look for text characters inside the station name. For example, enter **"%FER"** and all station names are listed in which the character string "FER" occurs, e.g. "hr-fernsehen", "SWR Fernsehen".

6. User Help (Information)

During the design of this TV set, we have made every effort to make it as easy a possible for you to use it and we hope that you will enjoy familiarising yourself with your new TV set.

With the "Information" menu, the TV set is able to answer the many questions which may come up during installation and setup.

(INFO)

To display this menu, simply press the (INFO) key for the table of contents.

The "Information" menu (user help)

Information
Contents

Index
Station selection
Picture settings
Sound settings
AV playback
Recording facilities:
- Timer recording
- Direct recording
- AV copying
Teletext
Function keys
DVB radio mode
Electronic Program Guide (EPG)

Select the underlined text with the cursor..
◈ : further information (INFO) : table of contents
Visited pages: ■ back ■ forward

In the table of contents or the index, you can select the item of interest with the cursor control key.

Use the cursor-right key ▶ to scroll forwards through the contents or index …

Use the cursor-left key ◀ to scroll backwards through the contents or index …

Use the cursor-up key ▲ to select the last underlined item …

Use the cursor-down key ▼ to select the menu lines…

… and then press the ☐K key to display the explanation of the selected item.

You can select any underlined word in the table of contents, the index or the explanation of a selected item with the cursor. Pressing the ☐K key then displays the explanation for this word.

You can also scroll forwards and backwards through previously displayed pages with the aid of the red ⊛ and green ⊙ keys.
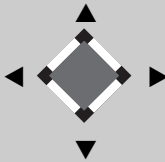
7. Menu Control

With the "TV menu", we provide you with an assistant to help you find your way through the many possible settings of the TV set.

Don't be afraid to change any settings in the various menus. No changes will be saved unless you press the □K key to confirm them. If you are not sure whether you want to keep a changed setting, you can exit from the menu at any time, without saving any changes, by pressing the (EXIT) key.

Within the TV menu, you can return to the previous main menu item at any time by pressing the (MENU) key. If you are not sure what a menu item does, press the (INFO) key for more information.

In order to return to the menu, press the (INFO) key twice.

You can open each of the five main sections of the menu with the key of the corresponding colour. The "card file" which is then displayed is subdivided into Subjects (on the left) and Sections (on the right), and you can select these by moving the red, triangular cursor with the oval cursor control key or with the numeric keys.

When you press the □K key, the current setting for the selected item is shown in the "Setting window" below the card file and can be adjusted with the **V− /V+** key.

You can save the new setting by pressing the □K key, which also returns you to the list of sections. If you do not want to save the new setting, press the (MENU) key to return to the corresponding main menu item or press the (EXIT) key to close the menu.

You can delete any incorrect inputs with the (⮌) key.

Opening the menu
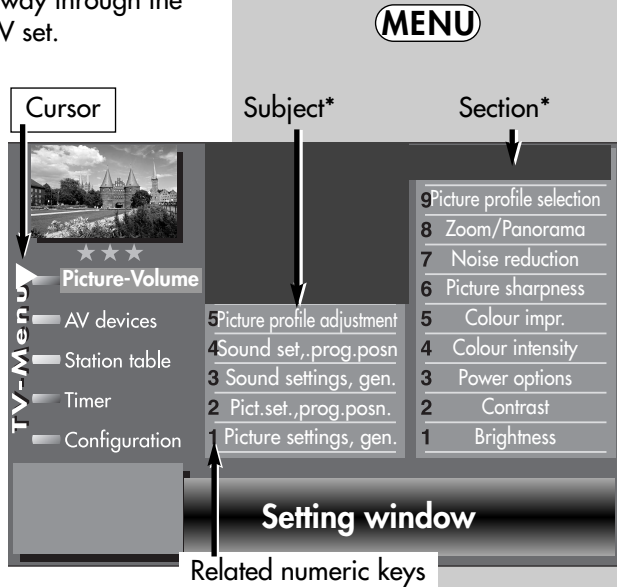
(MENU)

Cursor   **Subject***   **Section***

TV-Menu		
★ ★ ★		**9** Picture profile selection
▶ **Picture-Volume**		**8** Zoom/Panorama
▬ AV devices		**7** Noise reduction
▬ Station table		**6** Picture sharpness
▬ Timer	**5** Picture profile adjustment	**5** Colour impr.
▬ Configuration	**4** Sound set,.prog.posn	**4** Colour intensity
	3 Sound settings, gen.	**3** Power options
	2 Pict.set.,prog.posn.	**2** Contrast
	1 Picture settings, gen.	**1** Brightness

Setting window

Related numeric keys

(EXIT)

Opening the menu

| i | Teletext is an additional service provided free of charge by many TV stations. It is an "electronic magazine" through which you can browse in various ways. |

TEXT

Opening Teletext:

0	Gehörlose		
9	Börse		
8	Service		
7	BR-Intern		
6	Hörfunk		
5	Fernsehen		
4	Sport		
3	Bayern		
2	Schlagzeilen	**2**	Impressum
	Übersicht	**1**	A-Z

Subjects
Chapter
Pages
Next BookMark
select
mark

◄ 100 ►

- Press the "**TEXT**" key. If the selected station offers "TOP-Text", a "card file" is displayed (see the picture on the left).
  If "TOP-Text" is not available, Teletext page 100 is displayed (see the picture below).

- In the TOP-Text card file, you can select the desired cards with the cursor control key or with the numeric keys.

- Press the □K key to open the selected card.

Controlling Teletext with pages displayed:
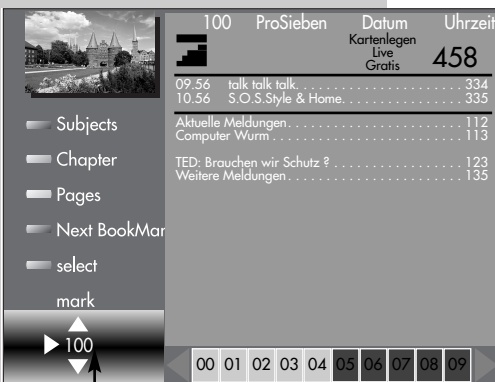
Blue key 💽 – next subject.

Yellow key 🎵 – next section.

White key 📷 – next page.

100	ProSieben	Datum	Uhrzeit

Kartenlegen
Live
Gratis
458

09.56   talk talk talk. 334
10.56   S.O.S.Style & Home. 335

Aktuelle Meldungen 112
Computer Wurm 113

TED: Brauchen wir Schutz ? 123
Weitere Meldungen 135

Subjects
Chapter
Pages
Next BookMar
select
mark

► 100

| 00 | 01 | 02 | 03 | 04 | **05** | 06 | 07 | 08 | 09 |

Page number

Sub-pages

After pressing the coloured pre-selection key, you can step through the subjects, sections or pages with the cursor control key or with the numeric keys.

If you wish to select a specific page, enter its page number on the numeric keys.

If sub-pages exist for the selected page, the page numbers are displayed in black. In the example shown here, there are five sub-pages.

You can step through these sub-pages with the cursor control key.

8. Teletext

Double font size

You can double the size of the font used for Teletext pages with the [F1] key. Pressing this key once displays an enlarged picture of the upper third of the page. Pressing it a second and third time displays the centre and lower thirds of the page. Pressing a fourth time displays the entire page again.

Riddle key (display hidden text)

Function key [F2] is programmed in the factory to display hidden text, such as the answers to riddles.

Back to the last index page

You can return directly to the last index page you have displayed by pressing the numeric key **0**.

Stop page scrolling

The **II** key or the "**OK**" key can be used to stop the automatic scrolling executed by some pages, and to enable this again.

Page selection with the cursor

Press the ☐K key to stop page scrolling. The cursor ▶ is now positioned at the top left corner of the page and you can use the cursor control key ◀ ▶ ▲ ▼ to position it anywhere on the displayed page. This function is useful on index pages (such as pages 100, 200, etc.) in order to select a page you want to see. After positioning the cursor on the desired page number, press the ☐K key to display its contents.

Setting marks in Teletext [6]

As a user of Teletext, you will probably want to visit certain pages (such as stock-market news, news pages or the weather forecast) regularly.

In order to find these pages quickly, you can set marks to suit your personal requirements.

To do this, open a page for which you want to set a mark.

- Press the red [★] key for "Set" to place a mark on this page. The number of the mark you have just set is displayed above the window containing the number of the Teletext page. In the case of multiple pages, the mark is always set and displayed for the currently displayed sub-page.

☞ *Up to 10 marks can be set for each program position.*

Scrolling through marked Teletext pages [6]

With the Teletext window open, you can step sequentially through the marked pages with the green [⏱] key.

An even easier method is by pressing the [TEXT] key while the TV program is displayed. Each time you press this key, the next marked page is displayed. After the last marked page, the TV picture is displayed again.

6) Not possible with an external receiver !

8. Teletext

Displaying all Teletext marks [6]

If you have set marks for a program position, you can display an overview of these marks by pressing the (F3) key. The displayed list shows where the marks are set. Press (F3) again to hide the list.

You can select the individual marks in the list with the numeric keys.

Clearing Teletext marks [6]

Open the Teletext page whose mark is to be deleted and press the red (★) key "Delete" to delete the mark.

Subtitles in Teletext

Your TV set is capable of displaying subtitles. When a program for which subtitles exist starts, the TV station displays a box showing the Teletext page on which these can be found.

- Press the (TEXT) key to open Teletext.

- If this is a "TOP-Text" station, the card file is displayed. Press the □K key and open any available page.

- Use the numeric keys to enter the number of the page containing the subtitles.

Split-Screen

In Teletxt mode, the TV-Programm window in the upper left corner can be enlarged to half of your screen by pressing the "TV" button.

If you press "TV" button again, it will be used to the orginal size.

6) Not possible with an external receiver !

9. Selecting operating mode

You can switch the TV set between its various operating modes with the keys (TV/R) and O/AV . You can also switch from standby mode to the desired operating mode with these keys.

(TV/R)   = TV mode /DVB Radio mode [1]

O/AV   = TV mode with input from AV devices (e.g. video tape recorder, DVD player, etc.)

(TV/R)

(O/AV)

1) Possible only in DVB mode
6) Not possible with a set top box

AV playback

(devices with switching voltage)

☞ *Before they can be used, AV devices must be registered and assigned to the appropriate input sockets in the menu "AV devices".*

Playing back a recording from a video cassette, DVD, etc. on a connected AV device is called AV playback.

In order to see the picture, you must program your TV set to execute an automatic program change at the EURO socket to which the AV device is connected.

Programming a program change

☞ *This menu item is not available in a 2 ** menu (see Section 27, Scope of Operation).*

☞ *The automatic program change is set in the factory to "ON" for all EURO sockets.*

MENU

✱

	F1 ↑	
0		
9	Function for F2	
8	Function for F1	
7	EURO sockets	
6	DVB-C²⁾	
5	DVB-T²⁾	
4	DVB-S ²⁾	
3	Analog-TV ²⁾	
2	Country	2 EURO 2²⁾
1	Language	1 EURO 1
	Operating	

★ ★ ★
Picture-Volume
AV devices
Station table
Timer
Configuration
Configuration
TV-Menu

▶ Change stations   on

• Press the **MENU** key.
  The TV menu appears on the screen.

• Press the red key **✱** . The menu "Configuration" is displayed.

• Use the corresponding numeric key (in this example: ❽) to select the menu item "EURO sockets".

• Use the cursor control key to select "EURO 1 or "EURO 2²⁾".

• Press the **OK** key and then, in the setting window, use the **V-/V+** key to select "Program change on".

• Press the **OK** key to save the new setting.
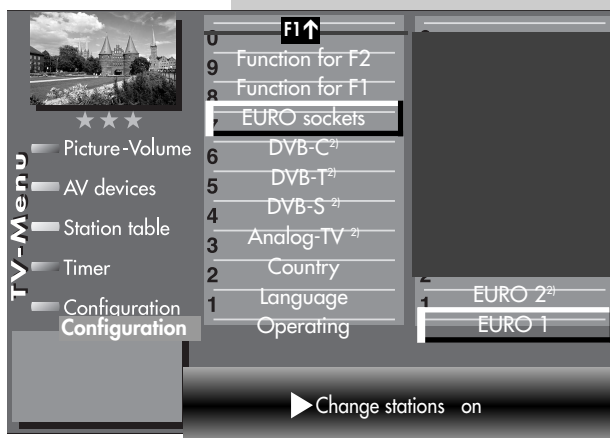
• Press the **EXIT** key to close the TV menu.

OK

+ +
– –

EXIT

The number of subjects and sections depends on the selected scope of operation. Depending on the configuration of the TV set, the various menu items may be displayed in a different order and numbered differently.

2) Possible only on sets equipped with this function.

10. AV Playback

If you now start to play back a recording on the connected AV device, the TV set changes automatically from any other program position to the playback mode.

AV playback

(devices without switching voltage)

☞ *Before they can be used, AV devices must be registered and assigned to the appropriate input sockets in the menu 30."AV devices".*

- Press key ⬛/AV briefly - the function programmed for AV devices (see Chapter 17 "Programming function buttons") is executed. Press button ⬛/AV or approx. 3 seconds - the max. possible selection is displayed.

- Use the corresponding numeric key to select the AV device you want to use.

- The TV set now changes from the current program to the selected playback device.

- Start the replay function on the AV device. This AV selection remains active until you switch to any other program position.

- After watching the film from the AV device, press the (TV/R) key to return to normal TV mode.

☞ *If the same AV device is to be selected quite often, then the AV button can also be programmed for that AV device. See Chapter 17. "Programming Function Buttons".*

6	HDMI 1
5	YCbCr
4	Front
3	Foto
2	DVD Player 1
1	DVD/Videorec.1

AV

☞ *The menu item "VCR" is not available in a 2 ** menu (see Chap. 27) .*

Picture quality when playing back from tape devices

The VCR function ensures an optimum picture quality when playing back recordings from tape devices such as video cassette recorders or camcorders.

Setting the VCR function

- Press key **◻/AV** briefly - the function programmed for **AV devices** (see Chapter 17 "Programming function buttons") is executed. Press button **◻/AV** for approx. 3 seconds - the max. possible selection is displayed.

- Select the AV device that is to provide the picture with the numeric keys.

- Press the **(MENU)** key to open the TV menu.

- Press the blue key **◉**. The menu "Picture and sound" and the menu item "General picture settings" are preselected.

- Use the corresponding numeric key (in the example: **❷**) to select the menu item "Pict.settings for Pr."

- Press the **(F1)** key to display the entire selection.

- Use the corresponding numeric key (in the example: **❾**) to select the menu item "VCR".

- Use the **V-/V+** key to select "Opt.1". If this setting does not produce a satisfactory result, you can try using "Opt.2".

- Press the **◻K** key to save the new setting.

- Press the **(EXIT)** key to close the TV menu.

Menu illustration:

TV-Menu:
- Picture-Volume
- AV devices
- Station table
- Timer
- Configuration

Picture-Volume submenu:
5 Picture profile adjustment
4 Sound set.,prog.posn
3 Sound settings, gen.
2 Pict.set.,prog.posn.
1 Picture settings, gen.

F1↑ list:
0 VCR[3)]
9 Picture format
8 Colour standard[3)7)]
7 Colour offset[3)7)]
6 Noise reduction[3)]
5 MPEG noise reduction
4 Picture sharpness
3 Picture profile
2 Colour intensity
1 Contrast

▶ VCR settings   Opt.1

The number of subjects and sections depends on the selected scope of operation. Depending on the configuration of the TV set, the various menu items may be displayed in a different order and numbered differently.

3) See glossary for an explanation.
7) Available only for analogue stations!

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10.2 AV Playback
MPEG noise reduction

In AV mode, when playing back digitally encoded films, system-related digital picture faults that can be seen as a rectangular pattern (formation of tiny blocks) in moving areas can be reduced with the help of MPEG noise reduction.

The rectangular pattern (formation of tiny blocks) can be corrected in the "MPEG Noise Reduction" menu option.

Set MPEG noise reduction:

• Select the AV level by pressing the 0/AV button and using the numeric buttons to select the AV device that is to provide the picture..

• Select the TV menu with the MENU button.

• Press the blue key 👁 .The menu "Picture and sound" and the menu item "Picture settings, gen." is pre-selected.

• Use the corresponding numeric button (in the example ❷) to select the menu item "Pict. set., prog.posn.".
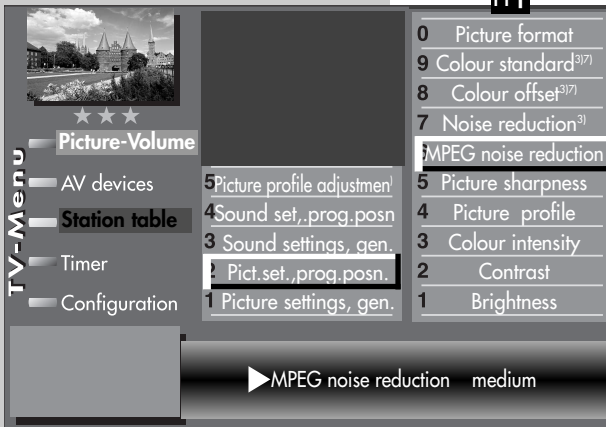
• Use the corresponding numeric button (in the example: ❻ to select the menu item "MPEG noise reduction".

• Set the "MPEG noise reduction" with the **V-/V+** button.

• Save the setting by pressing the **OK** button.

• Clear the TV menu with the EXIT button.

F1

0	Picture format
9	Colour standard[3][7]
8	Colour offset[3][7]
7	Noise reduction[3]
6	MPEG noise reduction
5	Picture sharpness
4	Picture profile
3	Colour intensity
2	Contrast
1	Brightness

TV-Menu

Picture-Volume
AV devices
Station table
Timer
Configuration

5 Picture profile adjustment
4 Sound set,.prog.posn
3 Sound settings, gen.
2 Pict.set.,prog.posn.
1 Picture settings, gen.

▶ MPEG noise reduction   medium

---

3) See glossary for an explanation.
7) Available only for analogue stations!

10.3 AV Playback
Picture profile

The picture profiles (see p. 31) can be assigned for individual AV programs.

Assigning a picture profile

- Press key ▢/AV .

- Select the AV device that is to provide the picture signal with the numeric keys.

- Press key (MENU) .
  The TV menu is displayed.

- Press the blue key ⬤ . The menu "Picture and sound" and the menu item "General picture settings" are pre-selected.

- Use the corresponding numeric button (in the example ❷) to select the menu item "Brightness".

- Use the corresponding numeric button (in the example ❹) Sto select the menu item "Picture profile".

- Use the **V-/V+** key to change the settings for "Picture profile selection".

- Save the changed setting with the key ▢K .

- Close "TV menu" with the key (EXIT) .

☞ *The picture profile can also be temporarily changed during a program without the change being saved. See Chapter 4 for this.*

			F1↑
			0 Picture format
			9 Colour standard[3)7)]
★ ★ ★			8 Colour offset[3)7)]
			7 Noise reduction[3)]
Picture-Volume			6 MPEG noise reduction
AV devices	5 Picture profile adjustment		5 Picture sharpness
Station table	4 Sound set,.prog.posn		4 Picture profile
	3 Sound settings, gen.		3 Colour intensity
Timer	2 Pict.set.,prog.posn.		2 Contrast
Configuration	1 Picture settings, gen.		1 Brightness

(TV-Menu)

▶ Picture profile assignment   Brillant

3) See glossary for an explanation.
7) Available only for analogue stations!

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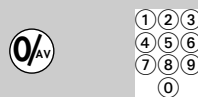
Opening the menu

10.4 AV Playback Picture Format

☞ *Some of the following menu items are not available on a 2 ** menu.*

Setting the picture format:

• Select the AV program position which delivers the picture by pressing the **0/AV** key and then pressing the numeric key corresponding to the device you want to use.

• Press the (MENU) key. The TV menu appears on the screen.
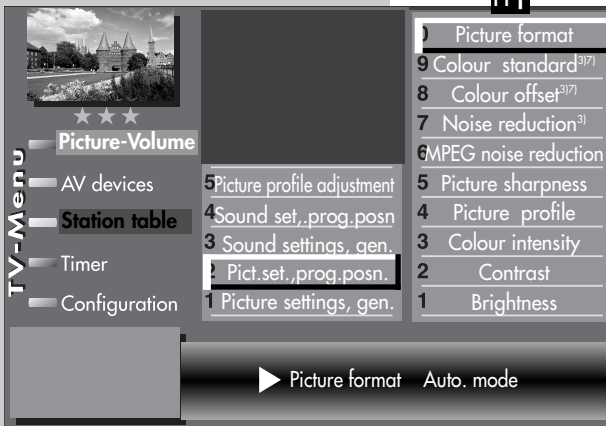
• Press the blue key 🔵 to open the menu "Picture and sound". The menu item "General picture settings" is preselected.

• Press **numeric key 2** to select the menu item "Pict. settings for Pr.".

• Use the corresponding numeric key (in the example: **9**) to select the function "Picture format".

• Use the **V-/V+** key to set the picture format setting to "Automatic".

• Press the **OK** key to save the new setting.

• Press the (EXIT) key to close the TV menu.

F1↑

0	Picture format
9	Colour standard[3][7]
8	Colour offset[3][7]
7	Noise reduction[3]
6	MPEG noise reduction
5	Picture sharpness
4	Picture profile
3	Colour intensity
2	Contrast
1	Brightness

★ ★ ★	
Picture-Volume	
AV devices	5 Picture profile adjustment
Station table	4 Sound set,.prog.posn
Timer	3 Sound settings, gen.
Configuration	2 Pict.set.,prog.posn.
	1 Picture settings, gen.

TV-Menu

▶ Picture format   Auto. mode

The number of subjects and sections depends on the selected scope of operation. Depending on the configuration of the TV set, the various menu items may be displayed in a different order and numbered differently.

3) See glossary for an explanation.
7) Available only for analogue stations!

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10.5 AV Playback
Noise reduction

Opening the menu

☞ *Some of the menu items are not available in a 2 ** menu.*

There may be a "noisy" picture, among other things, when playing back from AV devices.

Noise reduction can be enabled to compensate for a "noisy" picture.

Setting the noise reduction:

• Select the program position whose picture settings you wish to change.

• Press the (MENU) key.
  The TV menu appears on the screen.

• Press the blue key ⬤ .The menu "Picture and sound" and the menu item "Picture settings, gen." is pre-selected.

• Use the corresponding numeric button (in the example ❷) to select the menu item "Brightness".

• Use the corresponding numeric buttons (in this example it is ❼ for noise reduction), to select the individual menu items.

• In the setting window, change the setting with the **V-/V+** button.

• Press the ☐K button to save the new settings.
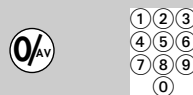
• Clear the "TV menu" with the (EXIT) button.

Picture-Volume	
AV devices	5 Picture profile adjustment[2)
Station table	4 Sound set.,prog.posn
Timer	3 Sound settings, gen.
Configuration	2 Pict.set.,prog.posn.
	1 Picture settings, gen.

F1↑

0	Picture format
9	Colour standard[3)7)
8	Colour offset[3)7)
7	Noise reduction[3)
	MPEG noise reduction
5	Picture sharpness
4	Picture profile
3	Colour intensity
2	Contrast
1	Brightness

▶ Noise reduction   strong

3) See glossary for an explanation.
7) Available only for analogue stations

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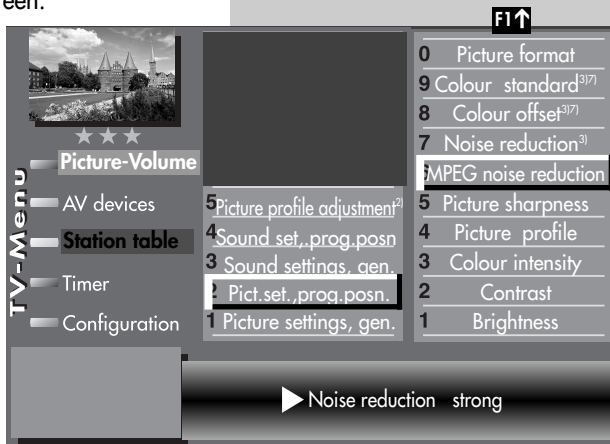
11. General Picture Settings

☞ *Some of the menu items are not available in a 2 ** menu.*

The picture settings brightness, contrast, colour intensity, sharpness and noise reduction can be set generally for all program positions and saved as **standard values** which can be recalled at any time by pressing the ☐K key.

Opening the picture settings menu:

This example describes how the brightness is adjusted. The other picture settings can be adjusted in a similar manner.
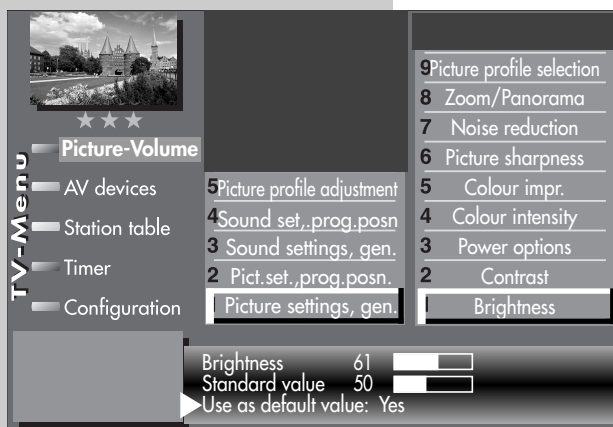
(MENU)

• Press the (MENU) key.
  The TV menu appears on the screen.

• Press the blue key ⬤ .
  The menu "Picture and sound" and the menu item "General picture settings" are pre-selected.

• Use the cursor control key ▶ to select the menu item "Brightness".

• Press ☐K button.

• In the setting window, use the **V-/V+** key to change the setting.

TV-Menu

★ ★ ★
Picture-Volume
AV devices
Station table
Timer
Configuration

5 Picture profile adjustment
4 Sound set,.prog.posn
3 Sound settings, gen.
2 Pict.set.,prog.posn.
Picture settings, gen.

9 Picture profile selection
8 Zoom/Panorama
7 Noise reduction
6 Picture sharpness
5 Colour impr.
4 Colour intensity
3 Power options
2 Contrast
Brightness

Brightness   61
Standard value   50
▶ Use as default value: Yes

• Use the cursor control key ▼ to select the third line "Save as standard values".

• If you wish to save the new setting, use the **V-/V+** key to select "Yes".

• Press the ☐K key to save the changed setting as a standard value.

• Press the (EXIT) key to close the TV menu.

☞ *If the standard values do not provide a satisfactory picture in some program positions, you can make settings for these positions which differ from the standard values. See the next sections. 11.1 and 11.2.*

(EXIT)

The number of subjects and sections depends on the selected scope of operation. Depending on the configuration of the TV set, the various menu items may be displayed in a different order and numbered differently.

11. General Picture Settings
Select power options

Three different power options can be set in the "Power options" menu option.

Eco Mode

The "Eco Mode" setting is a good compromise between energy consumption and picture quality. In addition, the TV set switches to stand-by mode if no buttons are pressed for 4 hours. "Eco Mode" is the preferred setting for normal home operation.

Presentation

The "Presentation" setting is optimised for presentation rooms; it involves higher energy consumption, however. Automatic change-over to stand-by mode is not enabled.

Picture quality

In this mode, all controls can be used for picture maximisation in order to meet the needs of all individual conditions.

(MENU)

(●)

OK

❸

<u>Setting the power options:</u>

- Automatically after the initial start-up after pressing the red button ✱ . See "Important information", or

- Press the (MENU) key. The TV menu appears on the screen

- Press the blue key (●) . The menu "Picture and sound" and the menu item "General picture settings" are pre-selected.

- Use the cursor control key ◀▶▲▼ to select the menu item "power options" and press the □K button
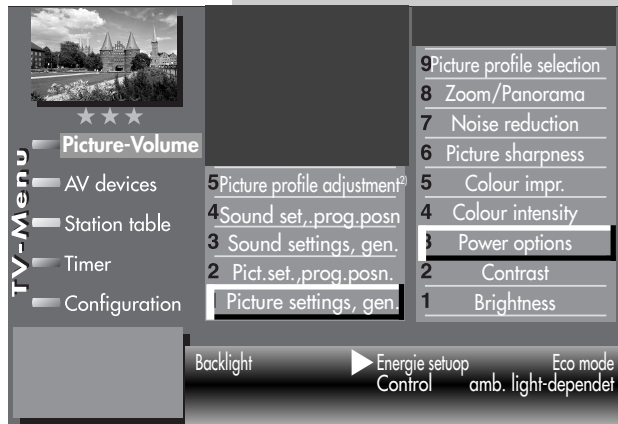
★ ★ ★		**9** Picture profile selection
Picture-Volume		**8** Zoom/Panorama
AV devices		**7** Noise reduction
Station table	**5** Picture profile adjustment²⁾	**6** Picture sharpness
Timer	**4** Sound set,.prog.posn	**5** Colour impr.
Configuration	**3** Sound settings, gen.	**4** Colour intensity
	2 Pict.set.,prog.posn.	**3** Power options
	Picture settings, gen.	**2** Contrast
		1 Brightness

TV-Menu

Backlight ▶ Energie setuop Eco mode
Control amb. light-dependet

The number of subjects and sections depends on the selected scope of operation. Depending on the configuration of the TV set, the various menu items may be displayed in a different order and numbered differently.

11. General Picture Settings
Select power options

- Use the **V-/V+** key to select the "Eco Mode", "Presentation", or "Picture Quality" setting.
- Save the set power option by pressing the □K button.

  For the "Presentation" or "Picture Quality" settings, the types of control described under a) to e) can be set as well.

a) Off: the backlighting is set to maximum. (highest level of power consumption).

b) ambient light-dependent: The backlighting is governed by the room light and always provides the same picture appearance regardless of changes in room lighting.

c) Picture content-dependent[9]: The backlighting is governed by the picture content. In the case of dark picture content, the brightness of the backlighting is reduced to increase contrast.

d) Manual: The backlighting is set to a fixed value in the menu.

e) Automatic[9]: Combination of b) room light dependent and c) picture content dependent

The level control indicates the level of backlighting brightness currently in operation.
The backlighting (lamps that light up the screen) is adjusted automatically depending on the power option selected.
The brightness of the lamps has an influence on the device's power consumption.

- Press the (EXIT) key to close the TV menu.
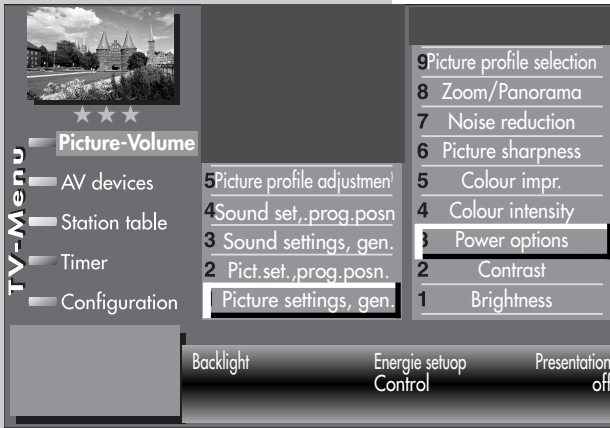
TV-Menu

★ ★ ★		9 Picture profile selection
Picture-Volume		8 Zoom/Panorama
AV devices		7 Noise reduction
Station table	5 Picture profile adjustment	6 Picture sharpness
	4 Sound set,.prog.posn	5 Colour impr.
Timer	3 Sound settings, gen.	4 Colour intensity
Configuration	2 Pict.set.,prog.posn.	3 Power options
	1 Picture settings, gen.	2 Contrast
		1 Brightness

Backlight   Energie setupp   Presentation
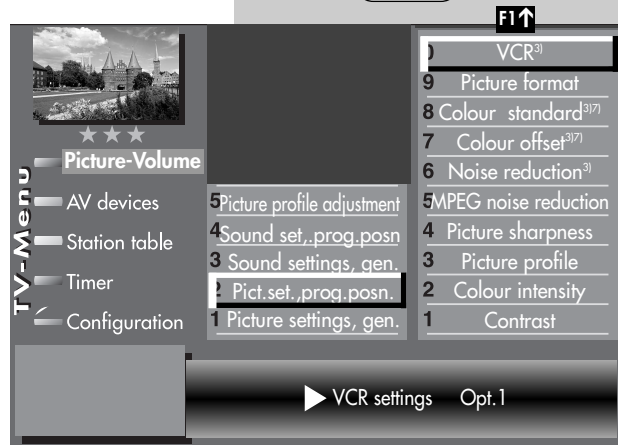Control   off

□K

EXIT

The number of subjects and sections depends on the selected scope of operation. Depending on the configuration of the TV set, the various menu items may be displayed in a different order and numbered differently.

11. General Picture Settings configure picture profile[2)]

Picture profiles are a combination of very special picture parameters that make it possible to always create the best picture reproduction quality for different types of programs or for replaying from different video sources.

The "Standard" picture profile is a good compromise for all types of transmission, and is set at the factory. However, in order to obtain the maximum picture reproduction quality, it is useful to assign the appropriate picture profile to a specific application.

(MENU)

If you are technically inclined, you also have the possibility of adjusting each individual picture profile yourself, as well as to create a separate additional picture profile according to your individual taste.

Picture profile[2)] settings:

• Press the (MENU) key.
  The TV menu appears on the screen.

★ ★ ★
Picture-Volume
AV devices
Station table
Timer
Configuration

Picture profile adjustment
4 Sound set,.prog.posn
3 Sound settings, gen.
2 Pict.set.,prog.posn.
1 Picture settings, gen.

6	User
5	PC monitor
4	Game pad
3	Brilliant
2	Sport
	Standard

Motion compens.[3)]   medium   Colour accentuation[3)]   light
                                 Load factory settings   No
Dyn. contrast [3)]   light   Standard

• Press the blue key ⬤ . The menu "Picture and sound" and the menu item "Picture settings, gen." are pre-selected.

• Press the numeric key ❺ to select the "Picture profile settings" menu option.

• Use the assigned numeric key to access the picture profile that is to be changed.

• Use the cursor control key ◄ ►▲▼ to access the menu option that is to be changed.

• Change the setting with the **V-/V+** key.

• Press the ☐K button to save the new settings.

• Press the (EXIT) key to close the TV menu.

(EXIT)

3) See glossary for an explanation.

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11. General Picture Settings selected picture profile[2)]

The picture profiles that were set up earlier can now be generally assigned to all or only individual program positions.

Selected Profile Standard[2)] :

MENU

- Press the (MENU) key.
  The TV menu appears on the screen

- Press the blue key 🔵 . The menu "Picture and sound" and the menu item "Picture settings, gen." are pre-selected.

F1↑

	Picture profile selection
8	Zoom/Panorama
7	Noise reduction[3)]
6	Picture sharpness
5	Colour impr.
4	Colour intensity
3	Power options
2	Contrast
1	Brightness

★ ★ ★

Picture-Volume

AV devices

Station table

Timer

Configuration

5 Picture profile adjustmen¹

4 Sound set,.prog.posn

3 Sound settings, gen.

2 Pict.set.,prog.posn.

Picture settings, gen.

▶ Profile Standard
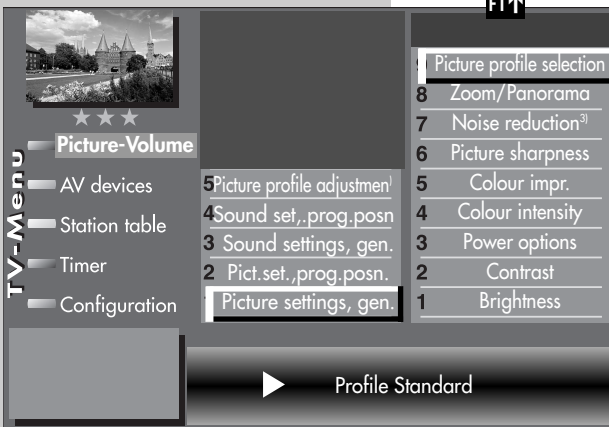
- Use the cursor control key ▶ to select the "Brightness" menu option.

- Use the assigned numeric key **9** to select "Picture profile selection".

- Use the **V-/V+** key to change the settings for "Picture profile selection".

- Press the **OK** button to save the new settings.
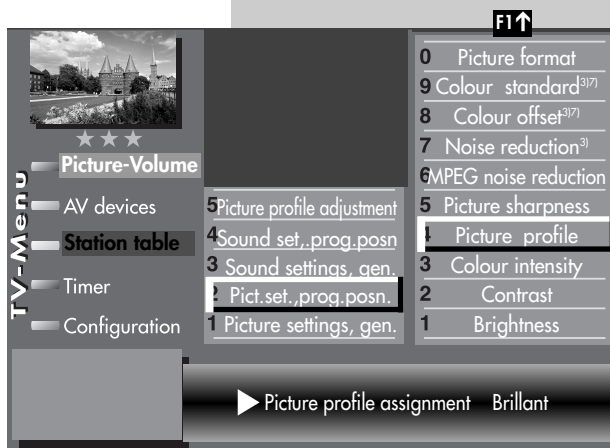
- Clear the "TV menu" with the (EXIT) button.

☞ *The picture profile can also be temporarily changed during a program without the change being saved. See Chapter 4 for this.*

9

OK

EXIT

The number of subjects and sections depends on the selected scope of operation. Depending on the configuration of the TV set, the various menu items may be displayed in a different order and numbered differently.

3) See glossary for an explanation.

11. General Picture Settings
Adjust border colour

Opening the menu

☞ *Some of the menu items are not available in a 2 ** menu.*

Displays that do not fill the screen produce black border. These border can be changed to a grey tone to avoid "image sticking"[3].

Displaying the picture in 4:3 format, for example, produces these black borders at the left and right.

Adjust border colour:

- Press the (MENU) key. The TV menu appears on the screen.

- Press the blue key 🔵 . The menu "Picture and sound" and the menu item "General picture settings" are pre-selected.

- Use the cursor control key ▶ to select the menu item "Brightness".

- Use the corresponding numeric keys (in this example: **8** for Zoom/Panorama) to select the desired menu items.

- Use the cursor control key to select the desired menu items.

- Use the **V-/V+** key to change the settings for "Border colour".

- Press the **OK** key to save the new settings. The picture shows the factory settings.

- Press the (EXIT) key to close the TV menu.

☞ *The setting is only possible if the function "Panorama" is set to "No".*

(MENU)
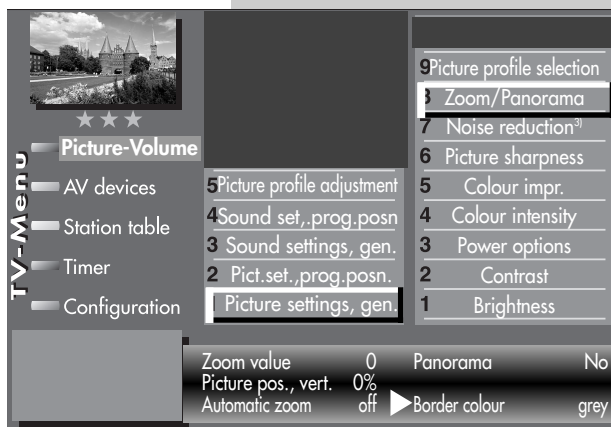
🔵

TV-Menu
- Picture-Volume
- AV devices
- Station table
- Timer
- Configuration

★ ★ ★

5 Picture profile adjustment
4 Sound set,.prog.posn
3 Sound settings, gen.
2 Pict.set.,prog.posn.
  Picture settings, gen.

9 Picture profile selection
8 Zoom/Panorama
7 Noise reduction[3]
6 Picture sharpness
5 Colour impr.
4 Colour intensity
3 Power options
2 Contrast
1 Brightness

Zoom value	0	Panorama	No
Picture pos., vert.	0%		
Automatic zoom	off ▶	Border colour	grey

8

OK

(EXIT)

The number of subjects and sections depends on the selected scope of operation. Depending on the configuration of the TV set, the various menu items may be displayed in a different order and numbered differently.

3) See glossary for an explanation.

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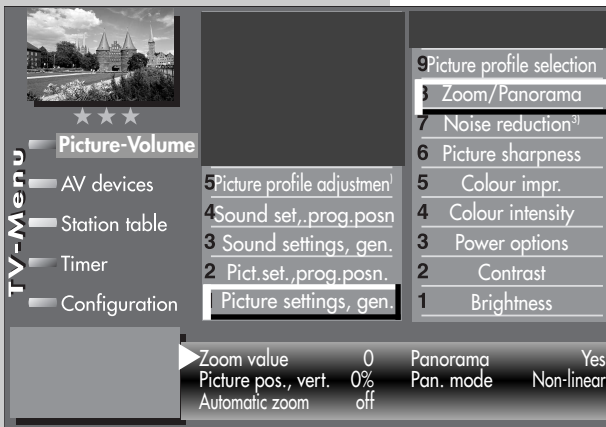
11. General Picture Settings
Setting Zoom/Panorama

☞ *Some of the menu items are not available in a 2 ** menu.*

The picture settings zoom, vertical position, automatic zoom and panorama can be set and saved as general settings for all program positions.

Setting the zoom/panorama mode:

(MENU)

- Press the (MENU) key.
  The TV menu appears on the screen.

- Press the blue key ⬤ . The menu "Picture and sound" and the menu item "General picture settings" are pre-selected.

TV-Menu

| | | 9 Picture profile selection |
| | | 8 Zoom/Panorama |
★ ★ ★ | | 7 Noise reduction³⁾ |
Picture-Volume | | 6 Picture sharpness |
AV devices | 5 Picture profile adjustment | 5 Colour impr. |
Station table | 4 Sound set,.prog.posn | 4 Colour intensity |
Timer | 3 Sound settings, gen. | 3 Power options |
Configuration | 2 Pict.set.,prog.posn. | 2 Contrast |
 | Picture settings, gen. | 1 Brightness |

▶ Zoom value   0   Panorama   Yes
Picture pos., vert. 0%   Pan. mode   Non-linear
Automatic zoom   off

- Use the cursor control key ▶ to select the menu item "Brightness".

- Press the corresponding numeric key to select ❽ "Zoom/Panorama".

- Use the cursor control key to select the desired menu items.

- Use the **V-/V+** key to change the settings for "Zoom/Panorama".

❽

- Press the ☐K key to save the new settings. The picture shows the factory settings.

- Press the (EXIT) key to close the TV menu.

☞ *The functions "Panorama" and "Zoom" can be combined with each other.*

(EXIT)

The number of subjects and sections depends on the selected scope of operation. Depending on the configuration of the TV set, the various menu items may be displayed in a different order and numbered differently.

3) See glossary for an explanation.

11.1 Picture Settings for Programs via TV Menu

Opening the menu

☞ *Picture settings for individual program positions are not available in a 2 ** menu.*

If the standard values do not provide a satisfactory picture in some program positions, you can make different settings for these positions which override almost all of the general picture settings. These individual settings apply only to the program position for which they are made, and they cannot be overwritten with the standard values. In addition to the general picture settings, the individual settings also include the settings colour offset, colour standard and VCR.

Individual picture settings for a program position:

- Select the program position whose picture settings you wish to change.

- Press the (MENU) key. The TV menu appears on the screen.

- Press the blue key 🔵 . The menu "Picture and sound" and the menu item "General picture settings" are preselected.

- Use the corresponding numeric keys (in this example: ❷ for noise reduction) "Pic. settings for Pr.".

- Use the corresponding numeric keys (in this example: ❺ for noise reduction) to select the desired menu items.

- In the setting window, use the **V-/V+** key to change the setting.

- Press the ⬜K key to save the new setting.

- Press the (EXIT) key to close the TV menu.

(MENU)

🔵

❷

0	VCR[3][7]
9	Picture format
8	Colour standard[3][7]
7	Colour offset[3][7]
6	Noise reduction
5	MPEG noise reduction[3]
4	Picture sharpness
3	Picture profil
2	Colour intensity
1	Contrast

TV-Menu
- Picture-Volume
- AV devices
- Station table
- Timer
- Configuration

5	Picture profile adjustment
4	Sound set.,prog.posn
3	Sound settings, gen.
2	Pict.set.,prog.posn.
1	Picture settings, gen.

★ ★ ★

▶ Noise reduction   light

❺

⬦ (+ / −)   ◇ OK
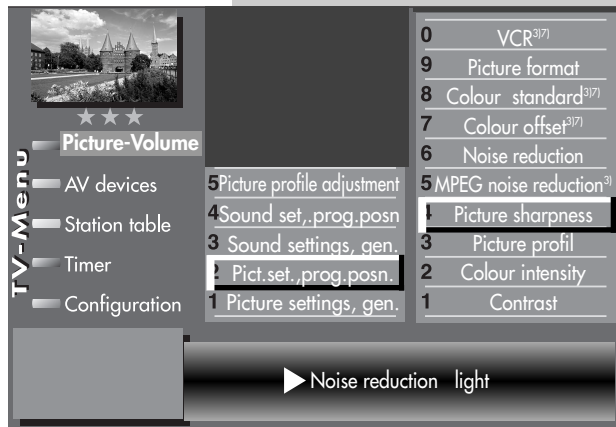
(EXIT)

3) See glossary for an explanation.
7) Available only for analogue stations

11.2 Picture Settings for Program via Station Table

Individual picture settings for a program position:

(MENU)

(📡)

F2

▶ **8**

• Select the program position whose picture settings you wish to change.

• Press the (MENU) key.
The TV menu appears on the screen.

• Press the white key (📡) . The station table is displayed with the currently active program position highlighted.

```
                          F1↑
          0010 Hessen 3        0    Sound corrections
          0009 Südwest         9   Colour standard³⁾⁷⁾
          0008 MDR             8      Picture quality
          0007 PRO 7           7     Picture correct.
   ★★★    0006 RTL 2           6       Enter logo
Picture-Volume 0005 RTL        X  Station contained in EPG
AV devices    0004 SAT 1       4       CA module⁵⁾
Station table 0003 Bayern 3    3     Signal quality⁵⁾
Timer         0002 ZDF         2     DVB-prog. info⁵⁾
Configuration 0001 ARD         1  Frequency/channel⁷⁾

              ▶ Picture sharpness  gen.   Noise reduction   gen.
                                          Colour offset        0
                VCR              off
```
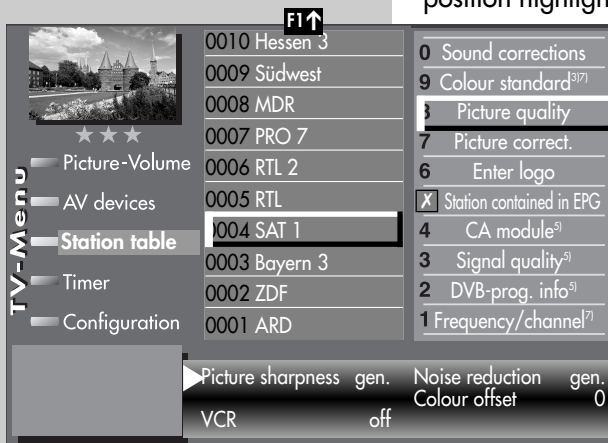
• Press the (F2) key to enable editing of the station table.

• Press the cursor control key ▶ to move to the subject side.

• Use the corresponding numeric keys (in this example: **8** for the picture quality) to select the desired menu items.

• In the setting window, use the cursor control key to select the desired function.

• Use the **V-/V+** key to change the setting. "gen." means here that the new setting will overwrite the related general picture setting (see page 28).

☞ *The individual settings made here which differ from the general settings remain saved.*

• Press the **□K** key to save the new settings.

• Press the (EXIT) key to close the TV menu.

(EXIT)

The number of subjects and sections depends on the selected scope of operation. Depending on the configuration of the TV set, the various menu items may be displayed in a different order and numbered differently.

5) Available only for DVB stations!

7) Available only for analogue stations

12. General Sound Settings

Opening the menu

☞ *Some of the menu items are not available in a 2 ** menu.*

The sound settings (volume) stereo wide and spatial sound can be set generally for all program positions and saved as standard values which can be recalled at any time by pressing the □K key.
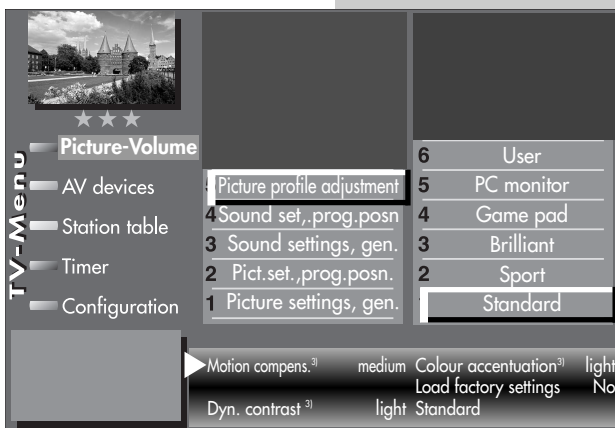
Opening the sound settings menu:

- Press the (MENU) key.
  The TV menu appears on the screen.

(MENU)

- Press the blue key ⬤ . The menu "Picture and sound" and the menu item "General picture settings" are pre-selected.

⬤

- Use the corresponding numeric key (in the example: ❸) to select "General sound settings".

❸

- Use the corresponding numeric keys to select the desired menu items in the right-hand column.

★ ★ ★	7 Balance
Picture-Volume	6 Tone setting
AV devices	5 Volume headphones
5 Picture profile adjustment	4 Equalizer
Station table	**4** Sound set.,prog.posn
3 Sound settings, gen.	3 Tone adaption
Timer	**2** Automatic volume control
2 Pict.set.,prog.posn.	Volume
Configuration	**1** Picture settings, gen.	

Volume   61
Standard value   50
▷Use as default value:Yes

- Press the □K key to open the selected menu item for editing.

- In the setting window, use the **V-/V+** key to change the setting.

- Use the cursor control key ▼ to select the third line "Save as standard value".

- If you wish to save the new setting, use the **V-/V+** key to select "Yes".

- Press the □K key to save the new settings as standard values.

- Press the (EXIT) key to close the TV menu.

☞ *If the standard values do not provide satisfactory results for some program positions, you can make different individual settings for these positions. See sections 12.1.*
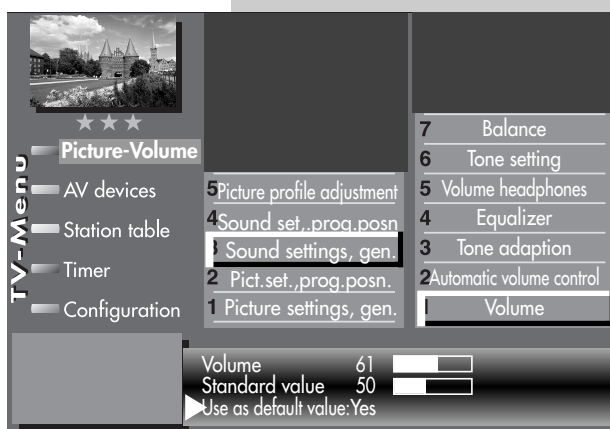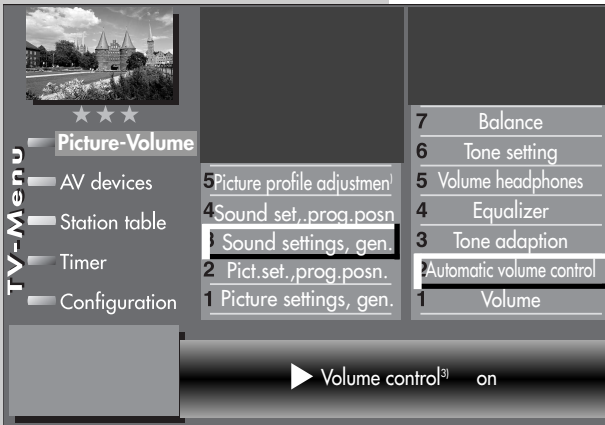
⬥ OK

+ +
− −

(EXIT)

3) See glossary for an explanation.

12. General Sound Settings

Automatic volume correction

Some TV stations transmit their commercials at a higher sound volume than that for the normal program. In order to save you from adjusting the volume each time with the remote control, you can activate automatic volume correction.

With this function active, there is little difference in the volume levels for the normal program and the commercials.

The setting made here applies to all program positions.

Opening the volume correction menu:

(MENU)

(blue key)

3

★ ★ ★	
Picture-Volume	5 Picture profile adjustment
AV devices	4 Sound set.,prog.posn
Station table	Sound settings, gen.
Timer	2 Pict.set.,prog.posn.
Configuration	1 Picture settings, gen.

TV-Menu

7	Balance
6	Tone setting
5	Volume headphones
4	Equalizer
3	Tone adaption
2	Automatic volume control
1	Volume

▶ Volume control³⁾   on

2

(navigation pad + / −)

(OK)

EXIT

- Press the (MENU) key. The TV menu appears on the screen.

- Press the blue key. The menu "Picture and sound" and the menu item "General picture settings" are pre-selected.

- Use the corresponding numeric key (in the example: **3**) to select "General sound settings".

- Use the corresponding numeric key (in the example: **2**) to select "Volume correction".

- In the setting window, use the **V-/V+** key to change the setting.

- Press the ☐K key to save the new setting.

- Press the (EXIT) key to close the TV menu.

☞ *The function "Volume correction" in the menu "General sound settings" does not overwrite the function "Volume correction" in the menu "Sound settings for Pr...".*

The number of subjects and sections depends on the selected scope of operation. Depending on the configuration of the TV set, the various menu items may be displayed in a different order and numbered differently.

3) See glossary for an explanation.

☞ *Some of the menu items are not available in a 2 ** menu.*

Sound adjustment

The sound playback can be changed with this menu item. The following sound adjustment can be set:

Normal: sound playback in normal mode.

mecaSound: virtual output increase and improved spatial playback..

mecaSurround: virtual surround sound.

Select sound adjustment

- Press the (MENU) key. The TV menu appears on the screen.

- Press the blue key ⬤. The menu "Picture and sound" and the menu item "General picture settings" are pre-selected.

- Use the corresponding numeric key (in the example: ❸) to select "General sound settings".

- Use the corresponding numeric key (in the example: ❸) to select "Tone adaption".

- In the setting window, use the **V-/V+** key to change the setting.

- Press the ☐K key to save the new setting.

- Press the (EXIT) key to close the TV menu.

(MENU)

⬤

❸

TV-Menu

★ ★ ★

Picture-Volume

AV devices

Station table

Timer

Configuration

5 Picture profile adjustment
4 Sound set,.prog.posn
3 Sound settings, gen.
2 Pict.set.,prog.posn.
1 Picture settings, gen.

7 Balance
6 Tone setting
5 Volume headphones
4 Equalizer
3 Tone adaption
2 Automatic volume control
1 Volume

▶ Tone adaption normal

❸

+ +
− −

☐K

(EXIT)

3) See glossary for an explanation.

12. General Sound Settings

☞ *Some of the menu items are not available in a 2 ** menu.*

Audio frequencies can be individually adjusted to your personal tastes in the "Equalizer" menu.

Adjust Equalizer:

(MENU)

(symbol)

3

- Press the (MENU) key.
  The TV menu appears on the screen.

- Press the blue key (symbol). The menu "Picture and sound" and the menu item "General picture settings" are pre-selected.

★ ★ ★

Picture-Volume

AV devices

Station table

Timer

Configuration

TV-Menu

5 Picture profile adjustment	
4 Sound set,.prog.posn	
Sound settings, gen.	
2 Pict.set.,prog.posn.	
1 Picture settings, gen.	

7	Balance
6	Tone setting
5	Volume headphones
	Equalizer
3	Tone adaption
2	Automatic volume control
1	Volume

Equalizer
Use a default value. No

100 Hz 200 Hz 500 Hz 1,2 kHz 3 kHz 7,5 kHz 12 kHz

- Use the corresponding numeric key (in the example: **3**) to select "General sound settings".

- Use the corresponding numeric key (in the example: **4**) to select "Equalizer".

- Press Cursor control key ▶ and adjust each slider in turn.

- Change the setting with the **V-/V+** key.

- With the cursor control key ▼ activate the line "As standard".

- To save the new value press the **V-/V+** key and select "Yes".

- Press the ☐K key to save the new setting.

- Press the (EXIT) key to close the TV menu.

4

(cursor keys)

(cursor/volume keys + −)

(OK)

(EXIT)

3) See glossary for an explanation.

Opening the menu

☞ *Some of the menu items are not available in a 2 ** menu.*

The headphone volume can be set to a volume which can also be adopted as a standard value.

Adjusting the headphone volume:

- Press the (MENU) key.
  The TV menu appears on the screen.

- Press the blue key 🔵 . The menu "Picture and sound" and the menu item "General picture settings" are pre-selected.

- Use the corresponding numeric key (in the example: ❸) to select "General sound settings".

- Use the corresponding numeric key (in the example: ❺ to select "Volume headphones".

- To save the new value press the **V-/V+** key and select "Yes".

- Press the ⬜K key to save the new setting.

- Press the (EXIT) key to close the TV menu.

(MENU)

🔵

❸

★ ★ ★

TV-Menu				
	Picture-Volume		7	Balance
	AV devices	5 Picture profile adjustment	6	Tone setting
	Station table	4 Sound set.,prog.posn	5	Volume headphones
	Timer	3 Sound settings, gen.	4	Equalizer
	Configuration	2 Pict.set.,prog.posn.	3	Tone adaption
		1 Picture settings, gen.	2	Automatic volume control
			1	Volume

Vol. headphone   61
Standard value   50
▶Use as default value: Yes

❺

➕◇➕
➖◇➖

⬛OK

(EXIT)

3) See glossary for an explanation.

41

Opening the menu

12.1 Sound Settings for Programs via TV Menu

☞ *Some of the menu items are not available in a 2 ** menu.*

Volume correction

Various TV stations broadcast their programs with different sound volumes. This volume difference can be minimised by correcting the volume. This adjustment remains active even if the standard sound values are recalled.

MENU

4

Adjusting the volume correction:

• Press the (MENU) key. The TV menu appears on the screen.

• Press the blue key . The menu "Picture and sound" and the menu item "General picture settings" are pre-selected.

• Use the corresponding numeric key (in the example: **4**) to select "Sound settings for Pr.".

• Press the ☐K key and then, in the setting window, use the **V-/V+** key to change the setting.

• Press the ☐K key to save the new settings.

• Press the (EXIT) key to close the TV menu.

☞ *Individual sound settings can also be made in the station table.*

TV-Menu

★ ★ ★
Picture-Volume
AV devices
Station table
Timer
Configuration

5 Picture profile adjustment
Sound set,.prog.posn
3 Sound settings, gen.
2 Pict.set.,prog.posn.
1 Picture settings, gen.

2 Tone settings
Volume correction

▶ Volume correction   -15

OK

**+ +
− −**

EXIT

42

12.1 Sound Settings for Programs via TV Menu

☞ *Some of the menu items are not available in a 2 ** menu.*

Tone setting

The tone setting can be set to "Normal" or "Speech". The setting "Speech" should be used primarily for stations which broadcast mainly programs with a lot of speech, such as news stations. The setting "Normal" is better for music programs.

(MENU)

④

Adjusting the tone setting :

• Press the (MENU) key. The TV menu appears on the screen.

• Press the blue key ⬤ . The menu "Picture and sound" and the menu item "General picture settings" are pre-selected.

• Use the corresponding numeric key (in the example: ④) to select "Sound settings for Pr.".

• Use the corresponding numeric key (in the example: ②) to select "Tone settings".

• In the setting window, use the **V-/V+** key to change the setting.

• Press the ☐K key to save the new settings.

• Press the (EXIT) key to close the TV menu.

☞ *Individual sound settings can also be made in the station table.*

TV-Menu

★ ★ ★

Picture-Volume

━ AV devices

━ Station table

━ Timer

━ Configuration

5 Picture profile adjustment

Sound set,.prog.posn

3 Sound settings, gen.

2 Pict.set.,prog.posn.

1 Picture settings, gen.

2 Tone settings

1 Volume correction

▶Tone settings   Speech

②

(EXIT)

43
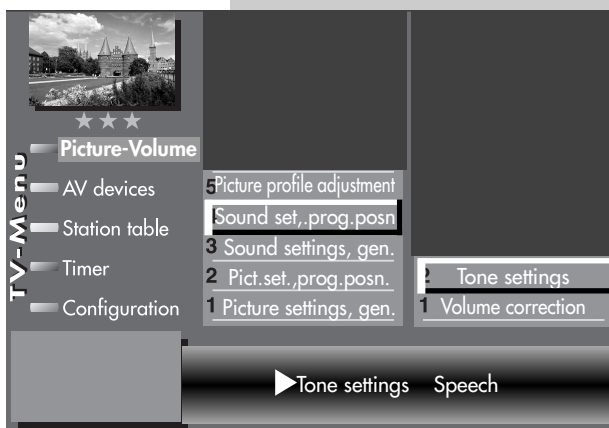
12.2 Sound Settings for Prog. via the Station Table

☞ *Some of the menu items are not available in a 2 ** menu.*

Making sound corrections:

• Select the program position whose sound settings you wish to change.

(MENU)

(📡)

• Press the (MENU) key.
The TV menu appears on the screen.

F2

• Press the white key 📡 . The station table is displayed with the currently active program position highlighted.

▶

F1↑		
	0010 Hessen 3	) Sound corrections
	0009 Südwest	9 Colour standard[7]
	0008 MDR	8 Picture quality
★ ★ ★	0007 PRO 7	7 Picture correct.
Picture-Volume	0006 RTL 2	6 Enter logo
AV devices	0005 RTL	X Station contained in EPG
Station table	0004 SAT 1	4 CA module[5]
Timer	0003 Bayern 3	3 Signal quality[5]
Configuration	0002 ZDF	2 DVB-prog. info[5]
	0001 ARD	1 Frequency/channel[7]
	▶Volume correction 0 Tone settings gen.	
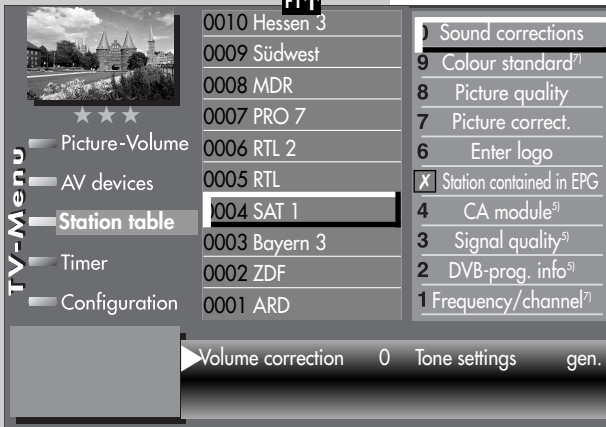
• Press the F2 key to enable editing of the station table.

• Use the cursor control key ▶ to move to the subjects side.

• Use the corresponding numeric keys (in this example: **0** for sound corrections) to select the desired menu items.

• In the setting window, use the cursor control key to select the desired functions.

The use of the **V-/V+** key to change the selected setting. "**gen**." means here that the new setting will overwrite the **gen**eral sound settings (see pages 26).

☞ *The individual settings made here, which differ from the standard values, remain saved.*

0

• Press the ☐Ҝ key to save the new settings.

• Press the (EXIT) key to close the TV menu.

(EXIT)

5) Available only for DVB stations!
7) Available only for analogue stations

12.3 Sound Settings Mute Function

In the menu "Sound settings", you can activate a two-stage mute function.

When this function is active, the volume in TV mode can be reduced in two stages with the mute key ⌧.

Activating the mute function

- Press the (MENU) key to open the TV menu.
- Press the red key ✱ to open the "Configuration" menu.
- Press the ▢K key to move to the right side of the menu.
- Use the cursor control key ▲ or the corresponding numeric key (in the example: ❹) to select the menu item "Sound settings".
- In the setting window, use the **V-/V+** key to set the function "Mute (2-stage)" to "On".
- Press the ▢K key to save the setting.
- Press the (EXIT) key to close the TV menu.

MENU

✱

OK

	F1↑	
	0 Function for F2	0 Subtitle
	9 Function for F1	9 Data Logic adjustment
	8 EURO sockets	8 CI dialogue via
★ ★ ★	7 DVB-C²⁾	7 EPG settings
Picture-Volume	6 DVB-T²⁾	6 Display configuration²⁾
AV devices	5 DVB-S ²⁾	5 Operating
Station table	4 Analog-TV	4 Sound settings
Timer	3 Country	3 HiFi output²⁾
	2 Language	2 Time shift²⁾
Configuration	Operating	1 Init. prog.position

▶Mute (two-stage)   on   Speakers   on
Preset value   Channel 1

In normal TV mode, the mute key ⌧ is used as follows:

- Press it once to reduce the volume by 12 scale divisions.
- Press it again within five seconds to reduce the volume to "00".
- Pressing the ⌧ key once again restores the volume to its original level.

During films for the blind, the scenes are described in the dialogue intervals. Under "**Dual channel**", select "Audio 2" if you want to receive films for the blind (with audio descriptions).
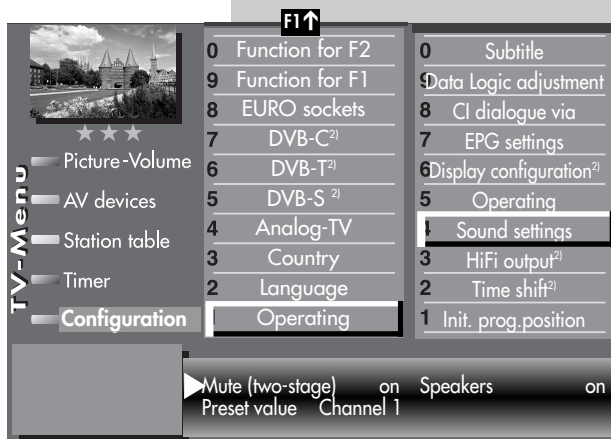
❹

+◇+
−◇−

OK

EXIT

2) Possible only on sets equipped with this function.
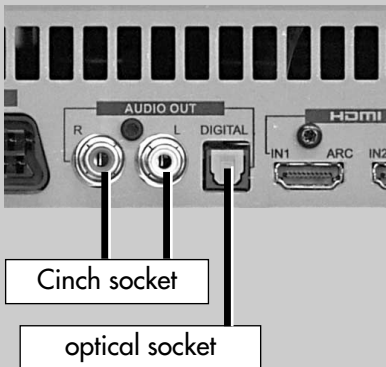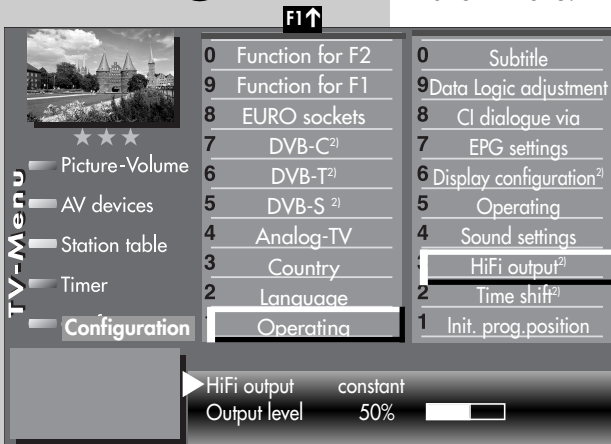
12.4 Sound Settings
HiFi-output

On the back of the TV set, there are audio sockets (see picture and page 116 of the user's guide) with which you can connect an AV device to the TV set.

☞ *Settings in the "Hi-fi output" and "Sound settings" menu options are then only necessary if the TV set will be connected to an AV device, for example a hi-fi receiver, radio headphones, Surround decoder etc.*

The "Hi-fi output" and "Sound settings" menu options are linked to each other. The link is described on pages 48-50.

The sound can be output via a **RCA cable** or an **optical audio cable** ("Toslink", available in an accessories shop).

HiFi output settings

• Press the (MENU) key to open the TV menu.

• Press the red button ⭐ to open the "Configuration" menu.

• Use the cursor control key ▶ to access "Init. prog. position".

• Select the menu option "hi-fi output" with the assigned numeric key. In the example it is ❸

• Set the desired parameters in the settings window with the **V-/V+** key.

• Press the ☐K button to save the new settings.

• Press the (EXIT) key to close the TV menu.

AUDIO OUT
R L DIGITAL HDMI IN1 ARC IN2

Cinch socket

optical socket

MENU

⭐

OK

❸

F1 ↑

0	Function for F2	0	Subtitle
9	Function for F1	9	Data Logic adjustment
8	EURO sockets	8	CI dialogue via
7	DVB-C [2)	7	EPG settings
6	DVB-T [2)	6	Display configuration [2)
5	DVB-S [2)	5	Operating
4	Analog-TV	4	Sound settings
3	Country	3	HiFi output [2)
2	Language	2	Time shift [2)
	Operating	1	Init. prog.position

★ ★ ★
Picture-Volume
AV devices
Station table
Timer
Configuration

TV-Menu

▶ HiFi output constant
Output level 50%

For normal TV mode, the yellow button 🎵 and the **V-/V+** key can be used to set "Speaker on".

2) Possible only on sets equipped with this function.

+ +
OK
– –

EXIT

12.5 Sound Settings Speakers

There are audio sockets (see picture and page 116 of the user's guide) on the back of the TV set with which you can connect an AV device to the TV set.

☞ *Settings in the "hi-fi output" and "Sound settings" menu options are only necessary if the TV set will be connected to an AV device, for example a hi-fi receiver, radio headphones, Surround decoder etc.*

The "hi-fi output" and "Sound settings" menu options are linked together. The link is described on pages 48-50.

Speaker settings

- Select the TV menu with the (MENU) button.

(MENU)

- Use the red button ✱ to open the "Configuration" menu.

✱

- Press the ☐K button and change to the right column.

☐K

- With the cursor control key ▲ or the assigned numeric key ❹in the example), select the "Sound settings" function.

	F1↑	
	0 Function for F2	0 Subtitle
★ ★ ★	9 Function for F1	9 Data Logic adjustment
Picture-Volume	8 EURO sockets	8 CI dialogue via
AV devices	7 DVB-C²⁾	7 EPG settings
Station table	6 DVB-T²⁾	6 Display configuration²⁾
Timer	5 DVB-S ²⁾	5 Operating
Configuration	4 Analog-TV	4 Sound settings
	3 Country	3 HiFi output²⁾
	2 Language	2 Time shift²⁾
	Operating	1 Init. prog.position

Mute (two-stage) on ▶Speakers Center
Preset value   Channel 1

- In the settings window, use the cursor control key ▶ to access the "Speakers" menu option.

❹

- Set "Centre speaker" with the **V-/V+** key.

- Press the ☐K button to save the new settings.

☐K

- Clear the TV menu with the (EXIT) button.

For TV mode, the yellow button 🎵 and the **V-/V+** key can be used to set "Speakers" temporarily.

(EXIT)

---
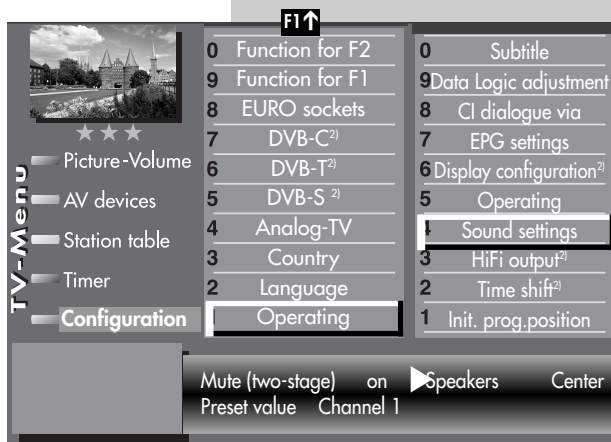
2) Possible only on sets equipped with this function.

12.6 Sound Settings, Overview

F1↑			
	0 Function for F2	0 Subtitle	0 Subtitle
	9 Function for F1	9 Data Logic adjustment	9 Data Logic adjustment
★ ★ ★	8 EURO sockets	8 CI dialogue via	8 CI dialogue via
Picture-Volume	7 DVB-C²⁾	7 EPG settings	7 EPG settings
AV devices	6 DVB-T²⁾	6 Display configuration²⁾	6 Display configuration²⁾
TV-Menu — Station table	5 DVB-S ²⁾	5 Operating	5 Operating
Timer	4 Analog-TV	4 Sound settings	Sound settings
Configuration	3 Country	3 HiFi output²⁾	3 HiFi output²⁾
	2 Language	2 Time shift²⁾	2 Time shift²⁾
	Operating	1 Init. prog.position	1 Init. prog.position
	▶ HiFi output constant		Speakers on
	Output level 50% ▭▬		

"HiFi output"	"Sound settings"	
HiFi output "**constant**"	Speakers "On"	The volume on the "AUDIO OUT sockets" on the back of the TV set remains "constant" at the % value set in the menu. The sound is also output via the speakers of the TV set. The volume of the TV set speaker can be changed with the **V-/V+** button of the remote control.
	Speakers "Off"	The volume on the "AUDIO OUT sockets" on the back of the TV set remains "constant" at the % value set in the menu. The sound is <u>not</u> output via the speakers of the TV set. The symbol for the mute setting appears on the screen. The volume cannot be changed with the **V-/V+** button of the remote control.
	Speakers "Center"	The sound of an AV device connected to the "CENTRE IN socket" (e.g. Surround decoder) is output through the speaker of the TV set. The speakers of the TV set are thus used as "centre speakers"

12.6 Sound Settings, Overview

F1↑		
0 Function for F2	**0** Subtitle	**0** Subtitle
9 Function for F1	**9** Data Logic adjustment	**9** Data Logic adjustment
8 EURO sockets	**8** CI dialogue via	**8** CI dialogue via
7 DVB-C[2)]	**7** EPG settings	**7** EPG settings
6 DVB-T[2)]	**6** Display configuration[2)]	**6** Display configuration[2)]
5 DVB-S [2)]	**5** Operating	**5** Operating
4 Analog-TV	**4** Sound settings	**4** Sound settings
3 Country	**3** HiFi output[2)]	**3** HiFi output[2)]
2 Language	**2** Time shift[2)]	**2** Time shift[2)]
Operating	**1** Init. prog.position	**1** Init. prog.position

TV-Menu

★ ★ ★
Picture -Volume
AV devices
Station table
Timer
Configuration

▶ HiFi output   variable

▶ Speakers

"HiFi output"	"Sound settings"	
HiFi output "**variable**"	Speakers "On"	The volume on the "AUDIO OUT sockets" on the back panel of the TV set is adjustable. The sound is also output via the speakers of the TV set. The volume of the TV set speakers and the volume on the "AUDIO OUT sockets" can be changed with the V-/V+ button of the remote control.
	Speakers "Off"	The volume on the "AUDIO OUT sockets" on the back panel of the TV set is adjustable. The sound is not output via the speakers of the TV set. The symbol for the mute setting appears on the screen ⊄ The volume on the "AUDIO OUT sockets" can be changed with the -+ button of the remote control.
	Speakers "Center"	The sound of an AV device connected to the "CENTRE IN socket" (e.g. Surround decoder) is output through the speaker of the TV set. That way, the speakers of the TV set are used as "Centre speakers".

12.6 Sound Settings, Overview

0 Function for F2	0 Subtitle	0 Subtitle
9 Function for F1	9 Data Logic adjustment	9 Data Logic adjustment
8 EURO sockets	8 CI dialogue via	8 CI dialogue via
7 DVB-C[2)]	7 EPG settings	7 EPG settings
6 DVB-T[2)]	6 Display configuration[2)]	6 Display configuration[2)]
5 DVB-S [2)]	5 Operating	5 Operating
4 Analog-TV	4 Sound settings	4 Sound settings
3 Country	3 HiFi output[2)]	3 HiFi output[2)]
2 Language	2 Time shift[2)]	2 Time shift[2)]
Operating	1 Init. prog.position	1 Init. prog.position

★ ★ ★

TV-Menu
- Picture-Volume
- AV devices
- Station table
- Timer
- **Configuration**

▶ HiFi output   Headphone

▶ Speakers   on

"HiFi output"	"Sound settings"	
HiFi output "**Headphone**"	Speakers "On"	The volume on the "AUDIO OUT sockets" on the back panel of the TV set is adjustable. The sound is also output via the speakers of the TV set. The volume of the TV set speakers can be changed with the V-/V+ button of the remote control. Changing the volume on the "AUDIO OUT sockets": - press the yellow button 🎵 . - press cursor button ▲ or ▼ and select "Headph. vol.". - use the **V-/V+** button to change the volume. The headphones output on the front or side will also be changed.
	Speakers "Off"	The volume on the "AUDIO OUT sockets" on the back panel of the TV set is adjustable. The sound is not output via the speakers of the TV set. The symbol for the mute setting appears on the screen ⊗ The volume on the "AUDIO OUT sockets" can be changed with the **V-/V+** button of the remote control. The headphone output on the front or side will also be changed.
	Speakers "Center"	The sound of an AV device connected to the "CENTRE IN socket" (e.g. Surround decoder) is output through the speaker of the TV set. The speakers of the TV set are thus used as "Centre speakers"

12.7 Connecting Headphones

For the **Axio pro, Linus** and **Sirius**, the headphones connector is located behind a flap. See page 115. Press ••• to open the flap.

The headphones connector is located behind a flap on the left side for the **Axio pro** and **Linea**. See page 115. Press III in order to open the flap.

The headphones connector is located behind a flap on the right side of the Primus. See page 115.

Radio headphones can also be connected to the AUDIO OUT sockets on the back of the TV set. Also see page 116.

The sound settings for the radio headphones should then be set as described on page 50.

We recommend headphones with impedance that is not less than 32 Ohm.
For headphones with less impedance (approx. 8 Ohm), the dynamic range is smaller.
The headphones volume can be saved as a default value (see Chapter 12.)

⚠️ *Setting the volume too high when using headphones or earphones can result in damage to the ears - including the complete loss of hearing.*

12.8 Sound 1, Sound 2

When receiving a dual-language program, you can switch between the two sound channels.

In TV mode, press and hold the yellow key 🎵 until the sound function "Sound mode" is selected.

Then use the **V-/V+** key to select Sound 1 or Sound 2.

Headphone volume	
Headphone	Ton 2
Headphone volume	
Sound via	
Sound mode	Ton 2
Balance	
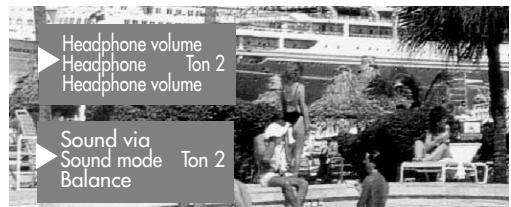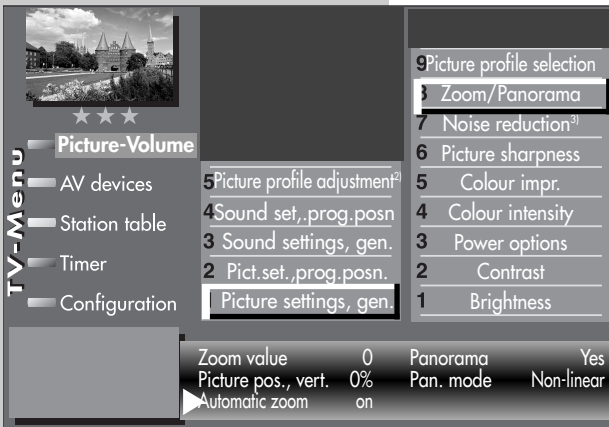
13. Automatic zoom

☞ *The menu item "Automatic zoom" is not available in a 2 ** menu.*

When the automatic zoom function is active, programs in a "widescreen" format (such as programs in 16:9) are expanded to fill as much of the screen as possible.

If the function is inactive, the programs are displayed in their original format.

Activating the automatic zoom [2]

- Press the (MENU) key. The TV menu appears on the screen.

- Press the blue key ⬤. The menu "Picture and sound" and the menu item "General picture settings" are pre-selected.

- Use the cursor control key ▶ to select the menu item "Brightness".

- Use the corresponding numeric key (in the example: ❽) to select the function "Zoom/Panorama".

- Use the cursor control key ▼ to select the menu item "Automatic zoom".

- Use the **V-/V+** key to change the setting.

- Press the ⬛K key to save the new setting.

- Press the (EXIT) key to close the TV menu.

(MENU)

⬤

OK

TV-Menu

★ ★ ★

- **Picture-Volume**
- AV devices
- Station table
- Timer
- Configuration

5 Picture profile adjustment[2]
4 Sound set,.prog.posn
3 Sound settings, gen.
2 Pict.set.,prog.posn.
| Picture settings, gen.

9 Picture profile selection
8 Zoom/Panorama
7 Noise reduction[3]
6 Picture sharpness
5 Colour impr.
4 Colour intensity
3 Power options
2 Contrast
1 Brightness

Zoom value	0	Panorama	Yes
Picture pos., vert.	0%	Pan. mode	Non-linear
▶Automatic zoom	on		

❽

OK

(EXIT)

With the aid of the childlock function, you can determine whether or not the TV set can be switched on and which stations may be selected at which times. The childlock can be set such that:

a) it is always active,

b) one to six TV, radio or AV programs (Prog A ... Prog F) are exempted from the locking function (permitted programs), or

c) all programs, or programs which are not locked, may be viewed during a permitted time period (TV start – TV end).

The childlock must be saved once with a 4-digit "code" (password).

a) Activating the childlock

- Press the (MENU) key.
  The TV menu appears on the screen.

- Press the green key ⏱ to open the menu "Timer".

- Use the cursor control key ▶ to select "Settings" and press the ☐K key.

- In the setting window, use the cursor control key to select the menu item "Activate" and then use the **V-/V+** key to set the childlock to "Active".

- Use the cursor control key ◀ to select "Code" and enter your personal 4-digit code with the numeric keys.
  Make a note of this code!

- Press the ☐K key to save the new setting.

- Press the (EXIT) key to close the TV menu.

b) Permitted programs:

(MENU)
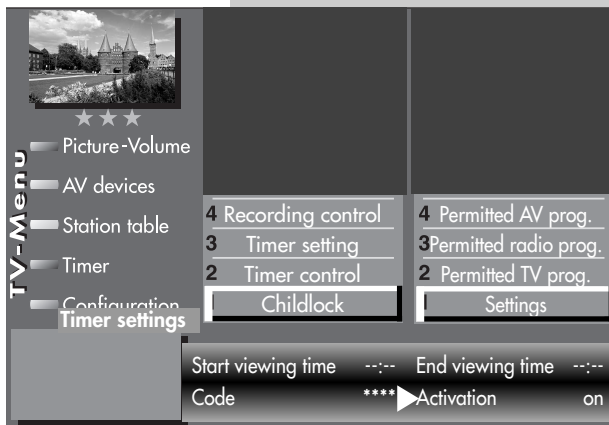
⏱

☐K

★ ★ ★

TV-Menu

Picture-Volume

AV devices

Station table

Timer

Configuration

Timer settings

4 Recording control
3 Timer setting
2 Timer control
Childlock

4 Permitted AV prog.
3 Permitted radio prog.
2 Permitted TV prog.
Settings

Start viewing time   --:--   End viewing time   --:--
Code   ****▶Activation   on

☐K   **+ ◇ +**
         −   −

☐K

(EXIT)

The number of subjects and sections depends on the selected scope of operation. Depending on the configuration of the TV set, the various menu items may be displayed in a different order and numbered differently.

14. Childlock

Activate the childlock as described in step a).

Use the corresponding numeric key to select the menu item "Permitted xx progs." (xx = TV, radio or AV). Press the □K key and, in the setting window, enter the program positions with the numeric keys or use the **V-/V+** key to select the desired program positions.

- Press the □K key to save the new settings.

c) TV start – TV end

Activate the childlock as described in step a). In the setting window, use the cursor control key to select the start and end times and enter the desired times with the numeric keys. Press the "OK" key to save the settings.

Protecting the childlock settings with your code

- Use the cursor control key to select "Code" and enter your personal code (password) with the numeric keys.

☞ *Make a note of this code, since the child lock can be deactivated only if the correct code is entered !*

- Press the □K key to save the settings.
- Press the (EXIT) key to close the TV menu.
- Switch off the TV set with the (⏻) key.

☞ *The childlock is not fully activated until the TV set is switched off.*

Deactivating the childlock

If the childlock is active, a window requesting your personal code is displayed each time the TV set is switched on. Entering the correct code enables the TV set and it can then be used normally until it is switched off again. To cancel the childlock function, proceed as described in step a), above, and set the childlock to "Inactive".
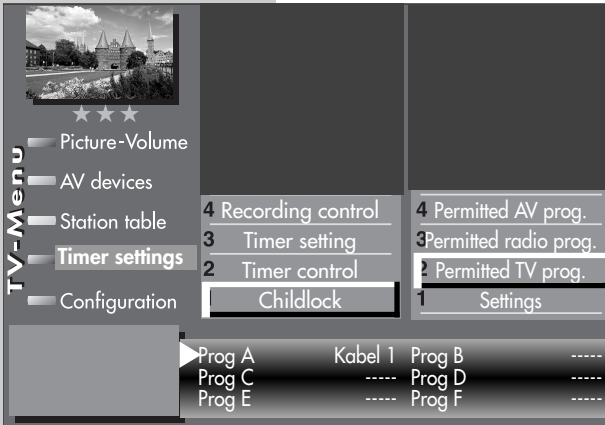
☞ *The menu items "On time" and "Off time" are not available in a 2 ** menu.*

In the menu item "Timer control", you can program a switch-on time, a switch-off time and a sleep timer (switch off after ...).

The **switch-on time** is the time at which the TV set is to be switched on automatically.

The **switch-off time** is the time at which the TV set is to be switched off automatically.

The **sleep timer** (switch off after...) switches off the TV set after a programd delay (which can be set in steps of 15 minutes).

(MENU)

🕐

2

Setting the on time and off time

- Press the (MENU) key to open the TV menu.

- Press the green key 🕐 to open the "Timer" menu.

- Press the numeric key **2** to select "Timer control".

TV-Menu
- Picture-Volume
- AV devices
- Station table
- **Timer settings**
- Configuration

4 Recording control
3 Timer setting
2 Timer control
1 Childlock

3 Switch off after...
2 Switch-off time
1 Switch-on time

▶ Time   --:--

- Press the ☐K key and then, in the setting window, enter the desired time (four digits) with the numeric keys.

- Press the ☐K key to save the setting.

- Press the (EXIT) key to close the TV menu.

At the programmed on time, the TV set is switched on from the standby state (red LED lights). You must confirm this automatic action by pressing any key on the remote control. If this is not done, the TV set will switch back to the standby state after 10 minutes. This ensures that the TV set does not stay on if you are not at home.

☞ *If you do not want to have the TV set switch itself on each day, you must clear the on and off times in the menu by pressing the ⮌ key.*
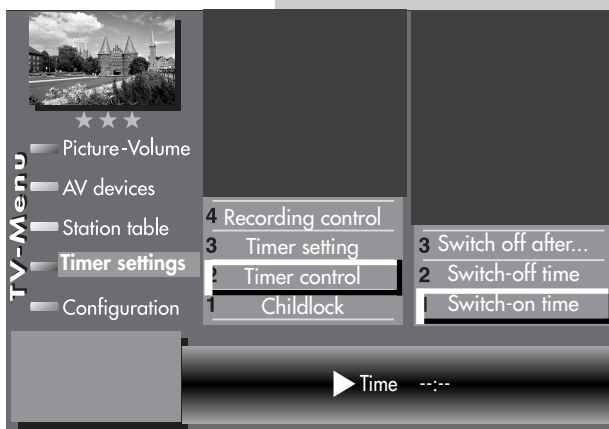
☐K

0 . . . . **9**

☐K

(EXIT)

The number of subjects and sections depends on the selected scope of operation. Depending on the configuration of the TV set, the various menu items may be displayed in a different order and numbered differently.

55
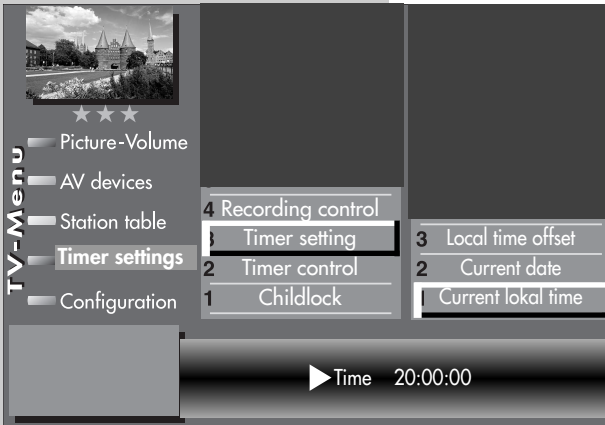
15.1 Setting the Time and Date

Normally, the TV set will determine the current date and time from the Teletext signals of the currently selected station (providing this station sends Teletext).

Note: For this the device must be turned on with the mains switch.

If this is not the case, or if an incorrect date or time is displayed, you can set the date and time manually.

In almost all cases, you will not need to do this. Even the changeover between winter time and summer time is executed automatically.

(MENU)

⏱

❸

Setting the time and date manually:

- Press the (MENU) key to open the TV menu.

- Press the green key ⏱ to open the "Timer" menu.

- Press the numeric key ❸ to select "Time settings".

- Press the □K key and then, in the setting window, enter the current time with the numeric keys.

TV-Menu
- Picture-Volume
- AV devices
- Station table
- **Timer settings**
- Configuration

4 Recording control
3 Timer setting
2 Timer control
1 Childlock

3 Local time offset
2 Current date
Current lokal time

▶ Time 20:00:00

◇OK◇

➊ . . . . **➒**

◇OK◇

(EXIT)

- You can then start the internal clock precisely by pressing the □K key when the time you have entered is reached.

- Press the numeric key ➋ to select "Current date".

- In the setting window, enter the date with the numeric keys.

- Press the □K key to save the settings.

- Press the (EXIT) key to close the TV menu.

i The **local time offset** is the difference between the local time where the TV set is installed and Greenwich Mean Time (GMT). The TV set normally detects this time offset and also the additional changeover to summer time.

The time needs to be set manually only if it is not detected automatically.

The number of subjects and sections depends on the selected scope of operation. Depending on the configuration of the TV set, the various menu items may be displayed in a different order and numbered differently.

15.2 Recording Control

Opening the menu

☞ *This menu item is not available in a 2 ** menu.*

In the menu item "Recording control", you can set a lead time and an overrun time for timer recordings.

The TV set is automatically switched to the program position from which the recording is to be made at a time which is the number of minutes programmed as the **lead time** before the programmed starting time for the recording.

At the end of the programmed recording time, the TV set remains set to this program position for the period programmed as the **overrun time**.

Setting the lead time, VPS lead time and overrun time

- Press the (MENU) key to open the TV menu.

- Press the green key ⏲ to open the "Timer" menu.

- Use the corresponding numeric key (in the example: ❹ to select the menu item "Recording control".

- Use the cursor control key to select the desired menu item.

- Press the ☐K key and then, in the setting window, use the **V-/V+** key to set the desired lead or overrun time.

- Press the "**OK**" key to save the settings.

- Press the "**EXIT**" key to close the TV menu.

(MENU)

⏲

❹

TV-Menu

- Picture-Volume
- AV devices
- Station table
- **Timer settings**
- Configuration

Recording control
3 Timer setting
2 Timer control
1 Childlock

2 Overrun time
Lead time

▶ Lead time 5 min

OK

+ +
◇
− −

OK

(EXIT)

The number of subjects and sections depends on the selected scope of operation. Depending on the configuration of the TV set, the various menu items may be displayed in a different order and numbered differently.

15.2 Recording Control

Application example:

You wish to record a program received via DVB-T. The program starts at 22:45 hours, ends at 23:40 hours and is broadcast on ITV.

Set up a "manual timer" as described in Section 16, "Special Functions 2" or set a timer with the aid of the EPG as described in Section 18.3 "Using EPG, Recording a Program".

Set the lead time to 3 minutes and the overrun time to 10 minutes.

At the programmed start time minus the programmed lead time of three minutes, the TV set is either:

- switched on from the standby state (red LED lights) with the program position for ITV selected, whereby the screen remains dark but the program is sent via the EURO socket to your recorder, or

- In the case of TV sets with a receiver (tuner): If you are already watching television, the program will be switched to SAT 1 if recording requires this setting..

At the programmed end of the recording (at 23:40 hours) the program position for ITV remains selected for the programmed overrun time of 10 minutes.

☞ *It is not possible to switch to another program position during the programmed lead and overrun times.*

16. Special Functions
Picture-in-Picture[2]

In the case of TV sets with **two receivers**, it is possible to display a DVB program and to open a window to show a different analogue program or DVB program from the second receiver or from the AV program position.

☞ *In principle only one HDTV program can be shown. An HDTV picture can therefore not be shown as a PIP.*

Activating the PIP function

• Press the F1 key (RM16) or PIP (RM17) . A small window will appear. If an HDTV program is shown as the main picture, the AV program position AV1 will always appear as the PIP.
   If either a DVB program or an analogue program is shown as the main picture, the same station will always appear again as the PIP.

• By using the numeric keys or the **+P −P** rocker switch, it is possible to select a different AV program position or a program that is received with the second receiver as a PIP.

• You can use the cursor control keys ◀ ▶ to move the PIP picture on the screen. The last position to which this picture was set is saved.

• By pressing the □K key, you can set the frame of the PIP picture to active (red) or inactive (white).

• The contents of the PIP picture can be changed only if its frame is active (red).

If you wish to display the picture from a connected AV device as a picture-in-picture, press the □/AV key and then use the **numeric keys** to select the desired AV device.

If you wish to display the picture from another station, use the numeric keys to select the desired program position.

16. Special Functions
Picture-in-Picture

⮌

🕐

EXIT
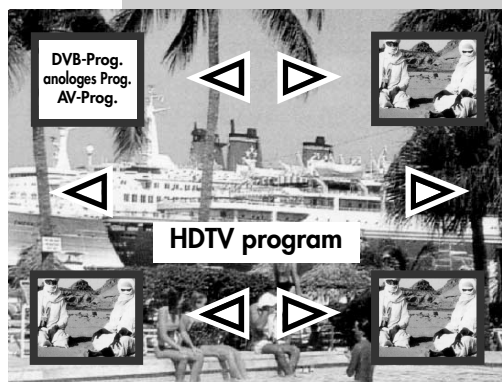
- Pressing the red key ⮌ swaps the contents of the two pictures.
- Pressing the green key 🕐 causes the PIP picture to expand to fill the screen and terminates the PIP function.
- To close the PIP picture, press the EXIT key.
- ☞ *If a recording has been programmed in the timer menu, activating the PIP function displays the program which is being recorded.*

16. Special Functions
JPEG Photograph Display

The JPEG photograph display is an image viewer for JPEG formats. The automatic image resizing and a full-picture mode ensure smooth, pleasant display.

Starting the photograph viewer[2]:

- Insert the memory stick in the USB socket on the TV (see page 115). The photograph display overview appears on the screen. The JPEG photograph display can also be started as follows:

  - Press the (F2) key for approx.. 2 seconds. The maximum possible selection appears.

  - Press the numeric key ❹ to Select the JPEG photograph display. The JPEG photograph display menu appears on the screen.

- Use the cursor control keys ▼ ▲ ◀ ▶ to select the desired image folder.

- Press the ▢K key to open the image folder.

- Use the cursor control keys ▼ ▲ ◀ ▶ to select the individual images.

- Press the ▢K key to open the selected image.

- Using the green key ⏱ , the selected image can be rotated clockwise; with the red key ✱ , it can be rotated counter-clockwise.

Note: It may not be possible to turn or display pictures that have already been processed on a PC. When processing pictures on a PC, turn off "JPEG progressive".

- If you want to delete a picture, press the key ⏎ and answer the security question with **Yes**.

Press the (EXIT) key to exit the photograph viewer.

Photo Viewer				
F2 Slide Show	Pictures	Aida.jpg	Beduinen.jpg	Strobo.jpg
OK Fullscreen				
◆ Select	W-Fuchs.jpg	Nacht.jpg	Claudia.jpg	Schlitten.jpg
Zoom – +				
● Rotate				
○ Rotate				
❚❚ Delete				

F2

❹

◇K

EXIT

61

<u>Starting the zoom function[2]:</u>

- When an image is displayed, the zoom function can be activated with the **+** key.
  A red outlined quadrangle appears in the image.

- Use the **V-/V+** key to select the zoom factor (x2, x4, x8).

- Use the cursor control keys ◄ ► ▲▼ to move the red zoom quadrangle in the image in order to determine the image section to be magnified.

- Press the ☐K key for a magnified display of the selected image section.
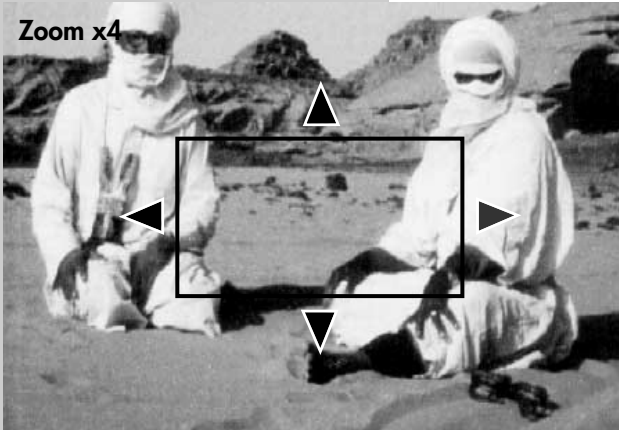
- Use the cursor control keys ◄ ► ▲▼ to scroll the magnified image section.

- To return to the full screen, press the **–** key repeatedly until the "zoom" message disappears.

Zoom x4

Starting the slide show:

- Use the cursor control keys ◄ ► ▲▼ to select the desired image folder.

- Press the ☐K key to open the selected image folder.

- Press the (F2) key and select the "Slide Show" function.

- The display of the individual images (display time 3 - 60 seconds) can be adjusted with the **V-/V+** key.

- Press the ☐K key to start the slide show.

- During the slide show, the ▇▇ key has the "Pause" function.
  Press the ▇▇ key to resume the slide show.

- When the slide show is finished or stopped with ☐K (RM 16) or ▇▇▇ (RM 17) or (EXIT), the photograph viewer appears again.
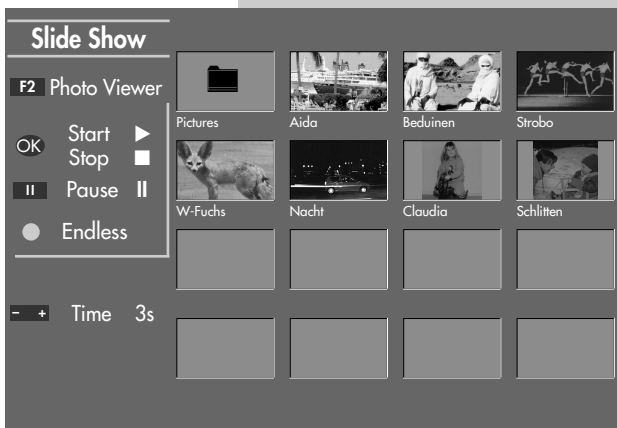
Press (EXIT) to return to the TV picture.

Slide Show				
F2 Photo Viewer	Pictures	Aida	Beduinen	Strobo
OK Start ► Stop ■	W-Fuchs	Nacht	Claudia	Schlitten
▪ Pause ▐▐				
● Endless				
– + Time 3s				

⚠ *Prior to unplugging the USB memory stick, be sure to exit the photo display with the (EXIT) key!*

There is otherwise a risk of losing data on the memory stick.

OK

F2

ARCHIV ►

RM16   RM17

EXIT

16. Special Functions viewing-time shift mode

The TV set stores the recordings in temporary digital storage (time shift buffer).
The temporary digital storage is sufficient for recording approx. 130-300 min (SD) and 70-120 min (HD=HDTV programs).

Bayerisches FS

PVR	Stereo		
Pause	– 05:50 min		
18.04.08	20:30:10	◀ – 05:50 min	▶

This information only represents approximate values, which can vary depending on the volume of data in the recording.

• Pause the program with the 〔❚❚〕 button.

The program is recorded in the temporary storage. The name of the "paused" program appears in the upper left corner of the screen. The green button 🕐 can be used to make the status display, which gives you information about the current position in time shift mode, visible.

The time since the program was "paused" or alternatively recorded (05:50:00 in the example) is shown on the left below the bar display.

During pause mode, you can also change to a different program position[12]**, to watch the news for example. Then, in addition to the name of the program, the symbol 🄿 appears as a sign that the program is "parked".**

P Bayerisches FS
R T L

When the news is over, you can press the 〔❚❚〕 button again to continue the previously paused program without having missed anything. The time shift bar fills in with colour in accordance with the length of the pause. After a fill level of approx. 98%, the time shift bar is shown in **red**.
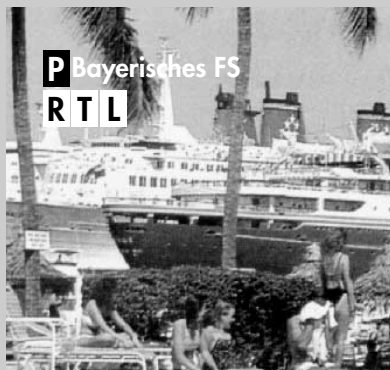
12) depending on the built-in tuners

Everything that is further in the past than the set time will be lost.

- Press the **I ▮▮** button again to continue watching the paused and recorded program.

- Press the green button 🕐 and show the play bar (see picture below).

- By briefly pressing the cursor control keys repeatedly ◄ ► (RM16) or the fast forward - **►►** (RM17) and rewind key **◄◄** (RM17) the playback can be forwarded in increments of +1 minutes and rewound in increments of -20 seconds.

- By holding down the cursor control keys ◄ ► (RM16) or fast forward **►►** (RM17) and rewind key **◄◄** (RM17) the forward/rewind mode is activated at twice the speed. By repeated pressing the recording can be forwarded and rewound at up to 32-times normal speed.

If you want to return to the current status of the program ("Live") from time shift mode, then press the green button 🕐 to cause the status display to appear (play bar, see display insert in picture) and then press the key ☐K (RM16) or **▮ ■** (RM17) for the "LIVE picture" of the current program.

The amount of time that the program has been "paused" is shown on the left beside the bar display (-08:25 minutes in the example). The time that the replay lags behind the live broadcast is shown below the bar display (05:50 min in the example).

☞ *If the TV set is in stand-by mode or switched off, the recording will be lost.*

PVR   Stereo
Timeshift   – 08:25 min   OK Live
18.04.08   20:30:10   ◄   – 05:50 min   ►

65

16. Special Functions
Recording a program with a timer

If you wish to record a program which your video recorder or DVD recorder cannot receive directly because it does not have a suitable tuner (such as DVB-T or DVB-C), you can use the "Timer overview" to make such programs available to the recording device.

Setting a timer manually for a recording:

F2

9

F1

- Press the `F2` key. If you press `F2` briefly, the function programmed for `F2` (see Section 18. "Programming the function keys") is executed.
  If you hold down `F2` for about two seconds, all possible selections are displayed.

- If all possible selections are displayed, press the corresponding numeric key (in the example: **9**) to open the timer menu.

- If a timer already exists, press the `F1` key.

- The cursor is located at the left of the first line "Record". The number of subjects and sections depends on the selected scope of operation.
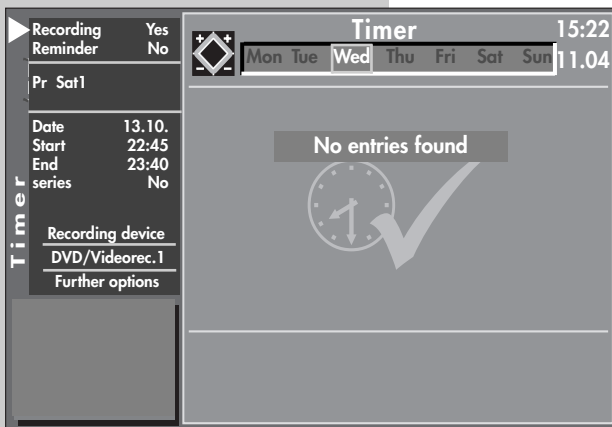
Timer	15:22
Mon Tue **Wed** Thu Fri Sat Sun	11.04

Recording	Yes
Reminder	No
Pr Sat1	
Date	13.10.
Start	22:45
End	23:40
series	No
Recording device	
DVD/Videorec.1	
Further options	

No entries found

Depending on the configuration of the TV set, the various menu items may be displayed in a different order and numbered differently.
Use the **V-/V+** key to set this menu item to "Yes".

- If desired, press cursor control key ▼ and use the **V-/V+** key to activate the reminder function. If the reminder function is active, a reminder window is displayed on the screen one minute before the start time programmed for the timer.

- Use the **numeric keys** to select the program position (see the station table of the TV set) which is to

16. Special Functions
Recording a program with a timer

make the program available for recording.

- Press the cursor control key ▼ and use the **numeric keys** to enter the date, start time and end time of the program you want to record..

☞ *If you inadvertently enter a wrong time, you can delete it with the I⬤ key or overwrite it with the numeric keys.*

- Press the cursor control key ▼ and use the **V-/V+** key to select the recording device connected to the TV set which is to be used for the recording.

- Press the ☐K key to save the programmed settings. The settings are stored in the timer memory.

- Press the (EXIT) key to close the TV menu.

Clearing a timer:

- Press the (F2) key.

- Press numeric key ❾ to open the timer menu.

- Use the cursor control key to select the timer you wish to clear and press (⬤) to mark it for deletion. A window is displayed on the screen, asking whether you really want to clear this timer. Confirm the intended action by pressing the appropriate key.

▼

Recording	Yes
Reminder	No
Pr Sat1	
Date	13.10.
Start	22:45
End	23:40
series	No

Recording device
DVD/Videorec.1
Further options

Timer 15:22
Mon Tue **Wed** Thu Fri Sat Sun 11.04

20:00 ✔ Das Erste -20:15
Tagesschau

67

16. Special Functions
Direct recording of a program

If you wish to record the program you are currently watching, you can start a direct (one-touch) recording to make the current program available to a recording device connected to the EURO sockets.

Starting a direct recording:

• Press the **F2** key.
  If you press **F2** briefly, the function programmed for F2 (see Section 17. "Programming the Function keys") is executed.
  If you hold down **F2** for about two seconds, all possible selections are displayed.

Timer	
Recording	Yes
Reminder	No
Pr Sat1	
Date	13.10.
Start	22:45
End	23:40
series	No
Recording device	
DVD/Videorec.1	
Further options	

• Press numeric key **0** to open the timer menu window.
  The timer menu window displays the program position, the date and the EPG data for the current program or for the next two hours.

• If there is more than one AV device connected to your TV set, use the cursor control key ▼ to select the proposed recording device and use the **V-/V+** key to select the desired device.

• Press the **OK** key to save the settings.

☞ *On the recording device (e.g. video recorder), select the AV program position and start the recording by pressing the appropriate button (REC, OTR, etc.).*

16. Special Functions Picture format

Adjusting the picture format:

- Press the F3 key.
  If you press F3 briefly, the function programmed for F3 (see Section 17. "Programming the Function keys") is executed.
  If you hold down F3 for about two seconds, all possible selections are displayed.

F3

Special functions 3

1 Picture format
2 Pic. form., vertikal

- Press numeric key ❶ to select the function "Picture format menu".

- Use the ▼▲ rocker key to select the desired function. After selection of a picture format, you can also adjust the zoom setting by pressing the **V+ V−** key within five seconds.

❶

- The settings made here (except for the automatic zoom set in the TV menu) remain active until you switch to a different program position or switch off the TV set.

Zoom / Picture position

After selecting the function "Zoom", you can adjust the zoom factor with the **V+ V−** key. In addition, you can move the picture position 4) up and down on the screen in order, for example, to keep the station logo or the subtitles visible. To change the picture position, press and hold the F3 key until the selection is displayed. Then press numeric key ❷ and use the **V+ V−** rocker key to move the picture.

16:9 full picture
▶ Zoom
Standard 4:3

Standard 4:3

This is the standard setting for all programs in the 4:3 picture format.

V+

V−

OK

Panorama

With the aid of the panorama function, you can expand programs broadcast in 4:3 format to fill the screen of a 16:9 TV set. The picture is expanded uniformly in the horizontal direction. You can also zoom the picture. The panorama function can be activated and deactivated in the menu item "General picture settings" of the menu "Picture and sound".

16:9 Full picture

This function serves to display pictures from external devices (such as a 16:9 video recorder) with the correct aspect ratio.

16. Special Functions
Picture Position

If desired, the picture can be shifted up or down in order, for example, to make subtitles visible or to hide "ticker" displays.

Adjusting the picture position:

- Press the `F3` key.
  If you press `F3` briefly, the function programmed for `F3` (see Section 17., "Programming the Function keys") is executed.

- Press numeric key ❷ to select the function "Picture position vertical".

- You can now use the **V+ V−** key to move the picture up and down on the screen so that, for example, the station logo or the subtitles are visible.

☞ *This setting is not saved. If you wish to save it as a global setting, use the procedure described in Section 11 to set it.*

Special functions 3

1 Picture format
2 Pic. form., vertikal

V+

V−

16. Special Functions
Audio/language selection

Various programs are transmitted with several audio channels (e.g. multilingual or $\boxed{\text{DD DOLBY}\atop\text{DIGITAL}}$).

If you are receiving a multilingual program the information box on the bottom left of the screen features the 📧 logo.

Pr 30   👥 Stereo
arte
05.04.07

Press ⬚F2 to see the list of available languages.

⬚F2

Open menu:

Special fuctions 2

2 Language of progr.

4 Photo Viewer
5 File manager

9 Timer overview
0 Direct recording

• Press ⬚F2 .
  Press ⬚F2 briefly to run the function programmed for the key (see Chapter 17. "Programming function keys").

Press ⬚F2 for approx. 3 seconds and the max. possible selection is displayed.

❷

• Press numeric key ❷ and select the "Program language" function.

• Select a language with the cursor control key ▲▼.

1 German
2 France

$\boxed{\text{DD DOLBY}\atop\text{DIGITAL}}$ Symbol in grey:
Other audio options e.g. dd = "Dolby digital" are available but are not selected.

$\boxed{\text{DD DOLBY}\atop\text{DIGITAL}}$ Symbol in white:
One of the audio options has been selected.

16. Special Functions
Select Subtitle[5)]

Opening the menu

People with a hearing impairment can make use of the subtitles function.

By default, the "Subtitles" function has to be activated first of all via the TV menu.

Activating subtitles

• Select the TV menu with the key. (MENU) .

• Use the red button ✱ to open the "Configuration" menu.

• Use the cursor control key ▶ to switch to the menu item "Initial program position".

• Use the respective numeric key to select the "Subtitles" menu item.

• In the settings window, use the V-/V+ key to set the "Subtitles" function to "on".

• If desired, a language can be selected here.

• Save the changed setting with the key. ☐K .

• Close "TV menu" with the key. (EXIT) .

(MENU)

✱

▶ 0

F1↑		
	0 Function for F2	Subtitle
	9 Function for F1	9 Data Logic adjustment
	8 EURO sockets	8 CI dialogue via
★ ★ ★	7 DVB-C[2)]	7 EPG settings
Bild und Ton	6 DVB-T[2)]	6 Display configuration[2)]
AV Geräte	5 DVB-S [2)]	5 Operating
Sendertabelle	4 Analog-TV	4 Sound settings
Zeiteinstellungen	3 Country	3 HiFi output[2)]
	2 Language	2 Time shift
Configuration	Operating	1 Init. prog.position

▶ Subtitle   on   Language select. 1   Deutsch
                            Language select. 2   English
                            Language select. 3   Français

TV-Menü

Displaying subtitles - see next page.

☐K

(EXIT)

2) Possible only on sets equipped with this function.

73

16. Special Functions
Subtitle displayed[5]

Pr 2   📺   ⊡ DOLBY   Stereo
            DIGITAL

ZDF

16.02.10 ⟨▬▬▭⟩ [16:9] 20:25:35
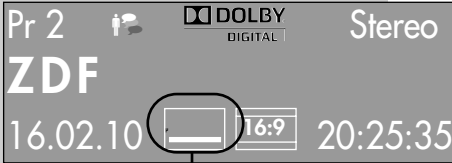
If a TV program has subtitles, they can be displayed by pressing the green button. ⟨🟢⟩ .

A program marked in this manner comes with subtitles.

Displaying subtitles:

• Press key ⟨F2⟩ briefly - the programmed function (see Chapter 17. "Programming function keys") is executed. Press key ⟨F2⟩ for approx. 3 seconds - the max. possible selection is displayed.

⟨F2⟩

❸

    • Use the numeric key ❸ to call up the "Subtitles" function.

    • Use the cursor control keys ▼ ▲ to make a selection if this is offered by the station or the program.

☞ *The station or program is exclusively responsible for offering and displaying subtitles.*

Special fuctions 2

2 Language of progr.
3 Subtitle

9 Timer overview
0 Direct recording

◆
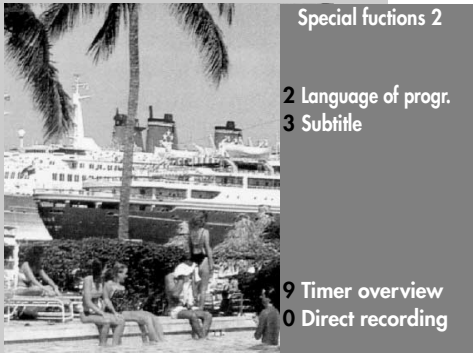
1 OFF
▶**2 German**
3 English

5) Can only be selected for DVB stations.

17. Programming the Function Keys

Opening the menu

The remote control has four function keys: F1, F2, F3 and ⬜/AV. You can program these function keys with any of the available functions.

If you press and hold any function key, a window with the available functions is displayed. The picture on the right shows the functions available for the F2 key.

F2

Programming function key F1, F2, F3 or AV with a function

- Press the (MENU) key, to open the TV menu.

- Press the red key ⭐ to open the "Configuration" menu.

- Use the cursor control key ▼▲ or the corresponding numeric keys to select the desired "Function for.." (in this example: F2).

- Press the ⬜K key and then use the cursor control key to select one of the available functions.

- Press the ⬜K key to assign this function to the selected function key (the selected function is marked with "**X**").

- Press the (EXIT) key to close the TV menu.

☞ *If a function key is programmed with a function, this function can be called by briefly pressing the function key. Pressing and holding the function key displays a list of all available functions.*

		Special fuctions 2
2	Language of progr.	
4	Photo Viewer	
5	File manager	
9	Timer overview	
0	Direct recording	

(MENU)

⭐

◆

◻K

TV-Menu	F1↑	
	0 Function for F3	6 Direct recording
	9 Function for F2	5 Timer overview
	8 Function for F1	☐ Film manager
★ ★ ★	7 EURO sockets	X Photo Viewer
Picture-Volume	6 DVB-C	☐ Subtitle
AV devices	5 DVB-T	☐ anguage of prog
Station table	4 DVB-S	
Timer	3 Analog-TV	
Configuration	2 Country	
	1 Language	

▶ Function for F2   Timer overview

(EXIT)

2) Possible only on sets equipped with this function.

18. EPG

EPG (**E**lectronic **P**rogram **G**uide) is an electronic TV guide covering all major channels.

So-called DVB-SI data is transmitted with the TV picture in the TV signal (DVB-S or DVB-C).

DVB-SI (**D**igital **V**ideo **B**roadcasting-**S**ervice **I**nformation) is a service provided by different broadcasters. Program details are broadcast digitally by each broadcaster exclusively for those programs it offers.

EPG

18.1 Activating the EPG

MENU

✱

◆   OK

Factory EPG settings:

• EPG   On
• DVB-SI selection   TV
• Prog. selection in the channel table   all free slots*

*) In the menu, "retain" is displayed, i.e. when you make an adjustment, this change is displayed in plain text after it is confirmed by selecting ☐K in the menu. "Retain" is then displayed in the menu as an indication that the previously confirmed setting has been retained.

	F1↑	
	0 Function for F2	0 Subtitle
	9 Function for F1	9 Data Logic adjustment
★ ★ ★	8 EURO sockets	8 CI dialogue via
Picture-Volume	7 DVB-C	7 EPG settings
AV devices	6 DVB-T	6 Display configuration²⁾
Station table	5 DVB-S	5 Operating
Timer	4 Analog-TV	4 Sound settings
Configuration	3 Country	3 HiFi output²⁾
	2 Language	2 Time shift
	Operating	1 Init. prog.position

▶EPG   NextView & DVB-SI Pr selection in stationtable
                                        retain
DVB-SI selection   TV

Not possible with a set top box

18.2 Collecting EPG data

EPG data is broadcast by each station for its program contents. Information will therefore vary accordingly.

Switch on your TV, so that EPG data can be compiled and/or updated.

While data is being compiled the **orange** LED is lit or "EPG" lights in the display.

☞ *After switching on the TV set or if a recording timer has been programmed, the collection of data is interrupted until a switch back occurs to stand-by mode or the recording timer is terminated.*

Please note

All free- to-air stations found are listed in the TV set's station table and shown in the program guide unless you make a different selection in the station table.

The data collection operation is interrupted if:

• the Teletext function is called;

• a recording is programmed in the menu "AV recording";

• a "timer recording" is active or will start within one hour;

• the Teletext function "Subtitles" is activated.

If you switch the TV set to the standby state during the data-collection operation, the green LED lights or "EPG" is displayed to indicate that data collection is still running.

Not possible with a set top box

Exclude stations from the EPG TV guide:
You can decide which channels should appear in the EPG program guide.

As a rule, the collection process gathers data for all free channels. The following options are available to exclude selected channels from the EPG program guide:

Solution 1:

(MENU)

- Press the (MENU) key. The TV menu appears on the screen.

(📡)

- Press the white key 📡 The menu channel table appears with the active program slot selected.

(F2)

- Press (F2) to permit editing of the channel list.

▶

- Press ▶ to switch to the menu page.

▲

- Using ▲ and ▼ select "Include channel in EPG" and dedeselect rows marked (x) with □K .
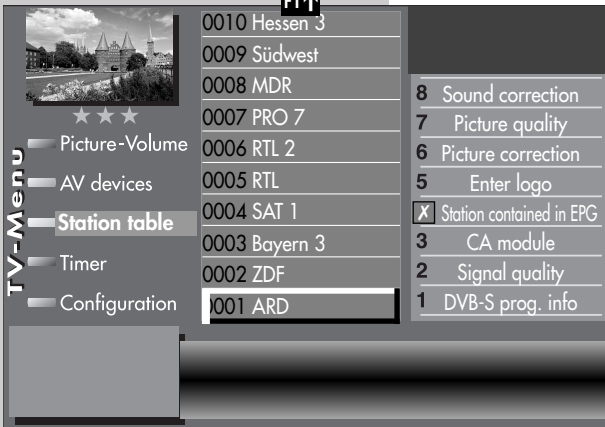
- To exclude other channels from the EPG program guide, use ◀ ▶ ▲ and ▼ to select the channel and repeat the procedure.

	F1⬆	
	0010 Hessen 3	
	0009 Südwest	
	0008 MDR	**8** Sound correction
★ ★ ★	0007 PRO 7	**7** Picture quality
Picture-Volume	0006 RTL 2	**6** Picture correction
AV devices	0005 RTL	**5** Enter logo
Station table	0004 SAT 1	**X** Station contained in EPG
Timer	0003 Bayern 3	**3** CA module
Configuration	0002 ZDF	**2** Signal quality
	0001 ARD	**1** DVB-S prog. info

(left side vertical label: TV-Menu)

Not possible with a set top box

18.2 Collecting EPG data

Solution 2:

- Press the (MENU) key 📡 . The TV menu appears on the screen.

- Press the white key. The menu channel table appears with the active   program slot selected.

- Follow the steps described under "22. Sort channels" to sort and save your favourite channels so that they appear at the top of the list, for example sort 1-50 and save them.

- Select "EPG Settings" from the Configuration menu and under "Prog. select. in the channel table", select "Channels 1-50" using the **V-/V+** key and save by pressing **□K** .

Not possible with a set top box

18.3 Using the EPG

When the complete data is available, the EPG TV guide appears after pressing the "EPG" button and shows the program that is currently running in that program position.

(F1) Sort the display by station list.

(F2) Sort a station by the timetable.

(F3) Sort all stations by time

(EPG)

☞ *The last display to be selected is retained after exiting the EPG display*

▲ ▼ Select program.

	Mo	Di	Mi	Do	Fr	Sa	So	03.03.
	15:00		15:30		16:00		16:30	15:45

1	Das Erste	15:10 - 16:00	Sturm der Liebe
2	ZDF	15:15 - 16:00	Tierisch Kölsch
3	BR 3	15:30 - 16:00	Wir in Bayern
4	RTL	15:00 - 16:00	Verdachtsfälle
5	SAT 1	15:00 - 16:00	Richterin Babara Salesch
6	RTL 2	15:30 - 16:30	Hinterm Sofa
7	PRO 7	14:00 - 16:00	We are Family
8	VOX	15:05 - 16:05	Gilmore Girls
9	Kabel 1	15:30 - 16:00	King of Queens
10	arte	14:45 - 16:55	Kirschblüten
11	N-TV	15:40 - 16:00	Telebörse

EPG

All programs
Interest
Record

◄ ►Scroll page forwards - backwards

□K Watch the selected program set a reminder

+P/–P Scroll time of day forwards/backwards

After pressing the (F2) button, the station can be changed with the **+P/-P** button.

0-9 Enter a time. Programs can be selected as of the time entered.

blau 📺: Program selection of all programs
gelb 🎵: User can set interests – or – program selection in accordance with the set interests of the user
weiß 📡: in F1 status, scroll time of day forwards, In F2 status, scroll stations forwards.
grün 🕐: in F1 status, scroll time of day backwards, In F2 status, scroll stations backwards.
rot ✱: The selected program is ready to be recorded (see pg. 89)
(EXIT) Back to TV picture.
V+ / V– Day of week forwards/backwards.

(EXIT)

Not possible with a set top box

Select, watch, remind program

A program can be selected in the TV guide with the cursor control key.

• Press the ☐K button and

  - watch the selected program if the program is already running.

  - or set a reminder for it, if the starting time is still in the future. A green checkmark appears behind the starting time.

• Press the (TEXT) button to show or hide the content description of the program. It is not possible to display the content description for all programs.

Interests settings

Areas of interest can be set in the EPG TV guide. To do this:

• Press the yellow button 🎵 or if you want to change interests, press the button 🎵 twice.

• use the cursor control key or the assigned numeric key to access one of the themes.

• Use the cursor control key ▶ to change to the other page.

• Use the cursor control key to access the theme and mark it with the ☐K button (✗).

• The markings (✗) can be deleted again with the ☐K button.

		adult movie
9	Arts/Culture	serious/classical
8	Music/Ballet/Dance	romance
7	Education/Science	soap/melodrama
6	Children/School	✗ comedy
5	Sport	✗ fantasy
4	Leisure	adventure/western
3	Shows	detective/thriller
2	Current affairs	feature film, general
1	Feature film	show all programs

★ ★ ★
All programs
Interest
E P G

fantasy
comedy
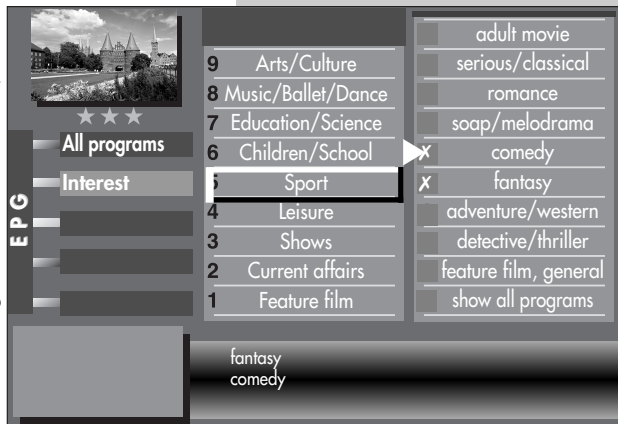
Not possible with a set top box

Program Information (Now Showing: ..)

After switching to a channel, a box is displayed at the bottom of the screen as shown in the picture.

This box contains the following information:

- Channel number (in this example: Pr4).

- Audio mode (stereo/mono).

- Start/end time of the program

- The time bar shows the elapsed program time.

- Broadcasting station

- Program title

- Date and time

- Time details and title of the following program

Press the green key ⊕ to view additional information about the programme currently showing, provided the selected station broadcasts such information.

Repeatedly press the green key ⊕ to view additional information about the following program, provided the selected station broadcasts such information.

This information can also be accessed while a program is running.

To hide the information, press EXIT.

Not possible with a set top box

18.3 Using the EPG Recording a Program

Selecting a program for recording:

If you have a video recorder with the dialogue system (QLink,Easylink... see page 119), the EPG permits you to start a recording by pressing a single key.

• Press the "**EPG**" key to open the EPG.

• Use the cursor control key to select the programme you wish to record.

If a **video recorder with dialogue system** is connected (see also Section 30):

- Switch on the video recorder.

- Insert a cassette.

- Press the red key ⊛ on the remote control.

If a **normal video recorder** is connected:

- Switch on the video recorder.

- Insert a cassette.

- Press the red key ⊛ on the remote control to program the TV timer (see also "Direct recording OTR)".

- On the AV program position of the video recorder, program a timer with the data and time of the program which will be provided by the TV timer.

EPG

▲   ▼

⊛

Recording	Yes
Reminder	No
Pr Sat1	
Date	13.10.
Start	22:45
End	23:40
series	No
Recording device	
DVD/Videorec.1	
Further options	

Timer
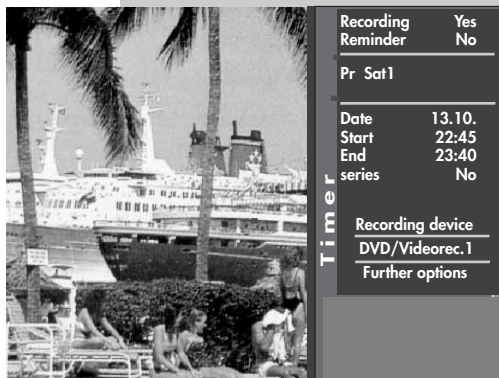
Not possible with a set top box

19. Setting the Country and Language

☞ *The menu items "Language" and "Country" are not available in a 2 ** menu.*

(MENU)

(★)

2

◆

Selecting the language in the TV menu

You can select any of the available languages for the TV menu. All texts in the menu and in the help screen (Information) are then displayed in the selected language.

Setting the country

After installation of the TV set, you must enter the country in which it is installed (such as Great Britain) in order to assign certain basic settings (such as the channel assignments, the order in which the stations are stored, etc.).

TV-Menu			
★ ★ ★	0	Function for F2	0 Dansk
Picture-Volume	9	Function for F1	Suomi
AV devices	8	EURO sockets	Norsk
	7	DVB-C	Português
Station table	6	DVB-T	Español
Timer	5	DVB-S	Français
Configuration	4	Analog-TV	Italiano
	3	Country	Nederlands
	2	Language	✗ English
	1	Operating	Deutsch

Selected language   English

TV-Menu			
★ ★ ★	0	Function for F2	Luxemburg
Picture-Volume	9	Function for F1	Italy
AV devices	8	EURO sockets	✗ Great Britan
	7	DVB-C	France
Station table	6	DVB-T	Finland
Timer	5	DVB-S	Germany
Configuration	4	Analog-TV	Denmark
	3	Country	Belgiun
	2	Language	Baltic states
	1	Operating	Australia

Selected country   Great Britan

Setting language and country:

• Press the (MENU) key to open the TV menu.

• Press the red key (★) to open the menu "Configuration".

• Use the corresponding **numeric keys** to select "Language" or "Country".

• Press the ☐K key and then use the cursor control key to select the desired language or country.

• Press the ☐K key to confirm your selection.

• Press the (EXIT) key to close the TV menu.

(OK)   (EXIT)

84
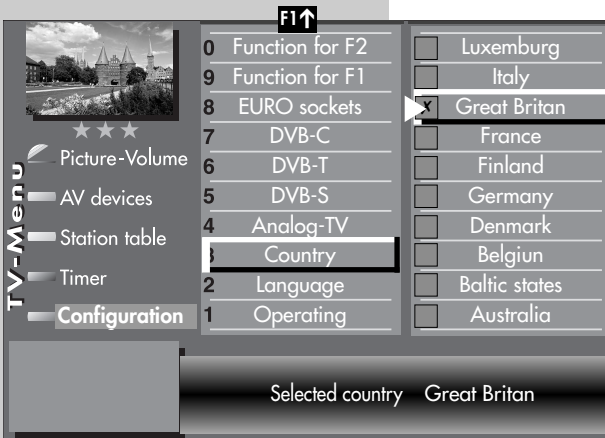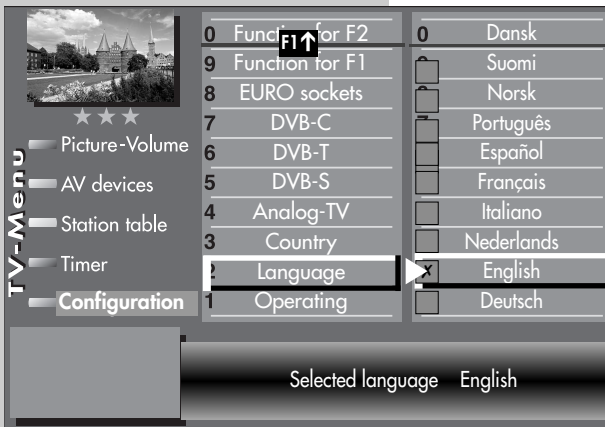
20. Setting Stations
Setting the reception mode

This TV set is equipped for up to four different types of reception, depending on the configuration or retro-fitting:

Analogue TV: The broadcasting technology which has been used for many years. The signals can be received via a rooftop antenna or a cable.

DVB-T: The new digital broadcasting technology whose signals can be received via an existing (analogue) rooftop antenna or an indoor antenna (depending on the strength of the available signal). For more details, please consult your local TV dealer or search for "DVB-T" in the Internet.

DVB-C: The new digital broadcasting technology whose signals are received via a cable connection. For further details, please consult your local cable provider or TV dealer or search for "DVB-C" in the Internet.

(MENU)

★

DVB-S: The digital broadcasting technology that can be received via a satellite. Ask your local TV dealer about it, or find out more at "www.lyngsat.de".

Select the reception mode to match the broadcasting technology available in your area.

Setting the reception mode

• Press the (MENU) key to open the TV menu.

• Press the red key ★ to open the menu "Configuration".

• Use the corresponding numeric key to select the appropriate reception mode "Analogue TV", "DVB-T", "DVB-C" or "DVB-S".
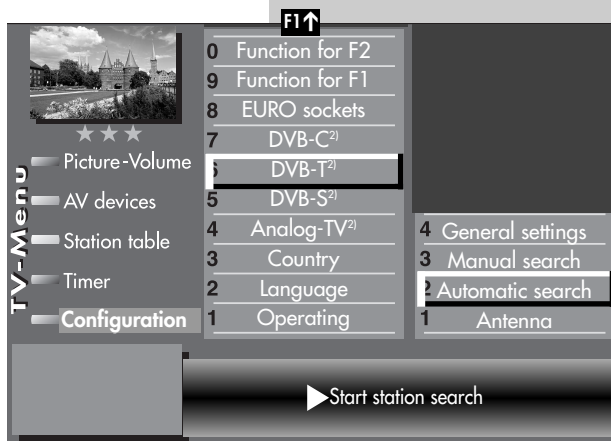
	F1↑	
	0 Function for F2	
	9 Function for F1	
	8 EURO sockets	
	7 DVB-C[2]	
	6 DVB-T[2]	
★ ★ ★	5 DVB-S[2]	
Picture-Volume	4 Analog-TV[2]	4 General settings
AV devices	3 Country	3 Manual search
Station table	2 Language	2 Automatic search
Timer	1 Operating	1 Antenna
Configuration		
	▶Start station search	

TV-Menu

2) Possible only on sets equipped with this function.

85
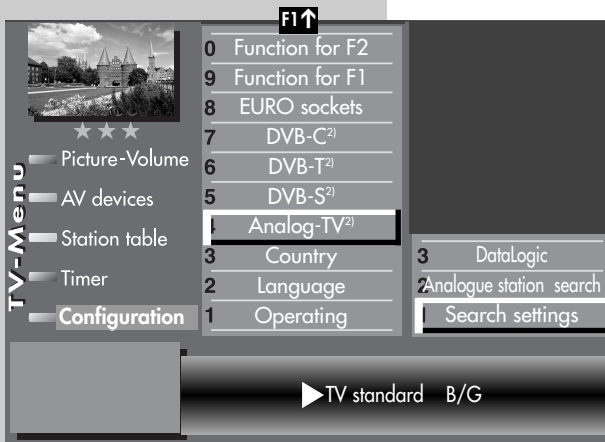
20.1 Setting Stations
TV-Standard [2] for analogue stations

Various TV standards for picture and sound are used in different countries. If the wrong TV standard is selected, you will not be able to hear the sound, or it will be distorted. The TV standard "L" also uses a different standard for transmission of the picture. The TV standard must therefore be set before you execute a station search.

(MENU)

[✱]

❹

F1↑

0	Function for F2
9	Function for F1
8	EURO sockets
7	DVB-C[2]
6	DVB-T[2]
5	DVB-S[2]
	Analog-TV[2]
3	Country
2	Language
1	Operating

★ ★ ★

Picture-Volume

AV devices

Station table

Timer

Configuration

TV-Menu

3	DataLogic
2	Analogue station search
	Search settings

▶ TV standard   B/G

The TV set is set in the factory to the TV standard B/G.

Setting the TV standard [2]

- Press the (MENU) key to open the TV menu.

- Press the red key [✱] to open the menu "Configuration".

- Use the corresponding numeric key (in the example: ❹) to select "Analogue TV".

- The menu item "Search settings" is already selected.

- Press the ⬜K key and, in the setting window, use the **V-/V+** key to select the desired TV standard.

- Press the ⬜K key to confirm your selection.

- Press the (EXIT) key to close the TV menu.

⬜OK⬜

+ ◇ +
− −

⬜OK⬜

(EXIT)

The number of subjects and sections depends on the selected scope of operation. Depending on the configuration of the TV set, the various menu items may be displayed in a different order and numbered differently.

2) Possible only on sets equipped with this function.

86

20.1 Setting Stations Analogue TV

Terrestrial station search

The terrestrial station search automatically searches the entire range of available reception frequencies for stations. All stations which are found are placed in the station table which is displayed at the end of the search operation. If you are not satisfied with the order in which the stations are displayed, you can move them to other positions or delete unwanted stations
(see Section 22., "Sorting stations".

Executing a terrestrial station search

- Press the (MENU) key to open the TV menu.
- Press the red key ✱ to open the menu "Configuration".
- Use the corresponding **numeric key** (in the example: ❹) to select "Analogue TV".
- Use the corresponding numeric key (in the example: ❷) to select "Terr. station search".

- Press the ☐K key and, in the setting window, confirm the menu item "Start station search" by pressing the ☐K key.

- The TV set starts to search for available stations. A station table with the newly found stations is displayed on the left half of the screen. If a station table already existed before the search, the newly found stations are automatically appended after the last existing station.

- After completion of the search, all stations which have been found are sorted.

- You can delete any unwanted stations from the station table by selecting them with the cursor control key and pressing the ⬅ key.

(MENU)

✱

❹

	F1⬆	
0	Function for F2	
9	Function for F1	
8	EURO sockets	
7	DVB-C[2]	
★★★	6	DVB-T[2]
Picture-Volume	5	DVB-S[2]
AV devices		Analog-TV[2]
Station table	3	Country
Timer	2	Language
Configuration	1	Operating

3	DataLogic
	Analogue station search
1	Search settings

▶Start stadion search

❷

☐K

The number of subjects and sections depends on the selected scope of operation. Depending on the configuration of the TV set, the various menu items may be displayed in a different order and numbered differently.

[2] Possible only on sets equipped with this function.

87
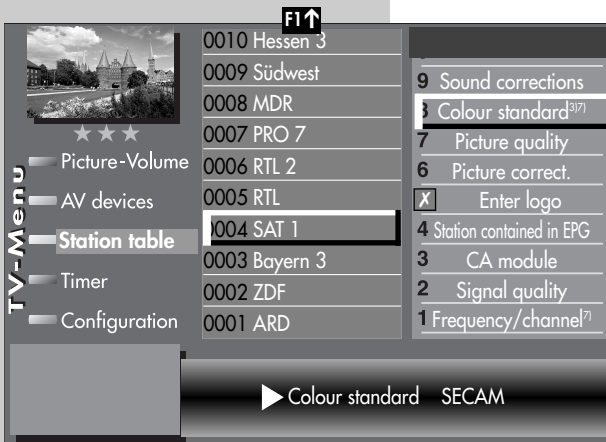
The TV set will normally detect the colour standard automatically.

If this automatic selection does not provide satisfactory results (which should happen only rarely), you can select the colour standard manually for each program position.

The colour standard is set in the factory to "Automatic".

Setting the colour standard

MENU

F2

▶

6

			F1⬆

0010 Hessen 3
0009 Südwest
0008 MDR
0007 PRO 7
0006 RTL 2
0005 RTL
0004 SAT 1
0003 Bayern 3
0002 ZDF
0001 ARD

★ ★ ★

Picture-Volume
AV devices
Station table
Timer
Configuration

TV-Menu

9 Sound corrections
8 Colour standard[3][7]
7 Picture quality
6 Picture correct.
X Enter logo
4 Station contained in EPG
3 CA module
2 Signal quality
1 Frequency/channel[7]

▶ Colour standard   SECAM

• Press the (MENU) key to open the TV menu.

• Press the white key to open the station table.

• Press the (F2) key to enable editing of the station table.

• Use the cursor control key to select the program position whose colour standard you wish to change.

• Press the cursor control key ▶ to move to the left column.

• Use the corresponding numeric key (in the example: **9**) to select "Colour standard".

• Use the **V-/V+** key to select the desired colour standard, or to step through the available colour standards until the picture is displayed clearly.

• Press the ☐K key to confirm your selection.

• Press the (EXIT) key to close the TV menu.

OK

EXIT

The number of subjects and sections depends on the selected scope of operation. Depending on the configuration of the TV set, the various menu items may be displayed in a different order and numbered differently.

3) See glossary for an explanation.
7) Available only for analogue stations

20.2 Setting Stations
DVB-T, Antenna supply voltage[2]

Opening the menu

With this menu item, you switch the supply voltage for a DVB-T antenna on or off.

On: The antenna supply voltage is constantly on (Select this setting if you have a TV-Set with two DVB-T-Tuners but only one active antenna or if you receive also analog stations via the active antenna).

Switched: The antenna supply voltage is only active for DVB-T-programs (e.g. for controlling a relay to switch between DVB-T-antenna and bro-adband cable, if they coexist).

Off: For a passive antenna or a community antenna

Setting the antenna supply voltage

- Press the (MENU) key to open the TV menu.

- Press the red key ✱ to open the "Configura-tion" menu.

- Use the corresponding numeric key (in the example: ❻) to select the function "DVB-T".

- Press the ☐K key and, in the setting window, use the **V-/V+** key to select the antenna supply voltage.

- Press the ☐K key to save the new settings.

- Press the (EXIT) key to close the TV menu.

(MENU)

✱

❻

F1↑		
	0 Function for F2	
	9 Function for F1	
	8 EURO sockets	
★ ★ ★	7 DVB-C[2]	
Picture-Volume	6 DVB-T[2]	
AV devices	5 DVB-S[2]	
Station table	4 Analog-TV[2]	4 General settings
Timer	3 Country	3 Manual search
	2 Language	2 Automatic search
Configuration	1 Operating	1 Antenna
	▶Supply voltage off	

TV-Menu

☐K

＋ ◇ ＋
－   －

☐K

(EXIT)

2) Possible only on sets equipped with this function.

89

20.2 Setting Stations

Automatic DVB-T station search[2]

The DVB-T station search operation searches the entire frequency band for **TV and radio stations**. All stations which are found are placed in separate TV and radio station tables. See Section 25. for details of DVB radio mode.
If you are not satisfied with the order in which the stations are displayed, you can move them to other positions or delete unwanted stations (see Section 22. Sorting stations.
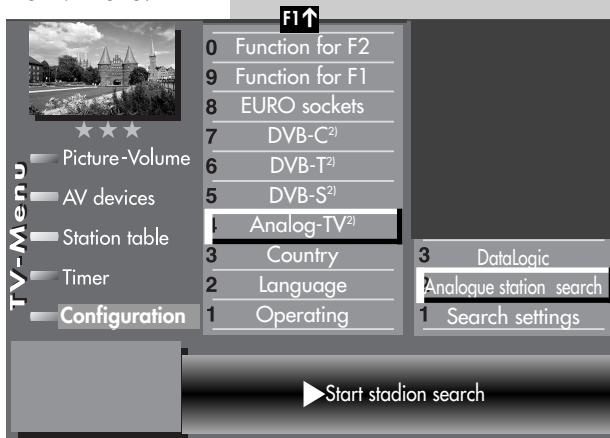
Executing the automatic station search

(MENU)

★

6

- Press the (MENU) key to open the TV menu.
- Press the red key ★ to open the menu "Configuration".
- Use the corresponding **numeric key** (in the example: **6**) to select " DVB-T".

0	Funct**F1**or F2	
9	Function for F1	
8	EURO sockets	
7	DVB-C[2]	
6	DVB-T[2]	
5	DVB-S[2]	
4	Analog-TV[2]	**4** General settings
3	Country	**3** Manual search
2	Language	**2** Automatic search
1	Operating	**1** Antenna

★ ★ ★
Picture-Volume
AV devices
Station table
Timer
Configuration

TV-Menu

▶ Start station search

- Make a selection with the assigned numeric key, in the example **2** "Automatic search".

- Press key ☐K and confirm the question about the station search with the corresponding numeric key:
  1 free-to-air programs[3]

  2 all programs[3]

  3 free + CICAM programs[3].

After pressing the corresponding numeric key the program search begins.

2

☐K

2) Possible only on sets equipped with this function.
3) See glossary for an explanation.

20.2 Setting Stations
Manual DVB-T station search[2)]

For a manual station search, you must know the channel number or the frequency of the station you wish to find.

Executing the manual search

- Press the (MENU) key to open the TV menu.

- Press the red key ✱ to open the menu "Configuration".

- Use the corresponding **numeric key** (in the example: ❻) to select " DVB-T".

- In the setting window "Antenna", you can switch the supply voltage for an antenna on or off with the **V-/V+** key (see also page 89).

- Make a selection with the assigned numeric key (in the example ❸), "Manual search".

- Enter the channel number or frequency in the setting window with the numeric keys. If additional data of a program is known, then select the "Mod- parameter" menu item and change the setting to "manual" using the **V-/V+** key. Additional data can now be entered.

- After entering the program data with the cursor control key, select "Start program search".

- Press key ⬜K and confirm the question about the station search with the corresponding numeric key:
  ❶ free-to-air programs[3)]
  ❷ all programs[3)]
  ❸ free + CICAM programs[3)].
  After pressing the corresponding numeric key the program search begins.

(MENU)

✱

❻

F1↑

0	Function for F2
9	Function for F1
8	EURO sockets
7	DVB-C[2)]
6	DVB-T[2)]
5	DVB-S[2)]
4	Analog-TV[2)]
3	Country
2	Language
1	Operating

TV-Menu

- Picture-Volume
- AV devices
- Station table
- Timer
- **Configuration**

4	General settings
3	Manual search
2	Automatic search
1	Antenna

Channel	05	Frequency	177.500 Mhz
Mod.-Parameter	auto.	▶ Start station search	

Transmission	8k Mode	Modulation	64 QAM
Mod. Parameter	manuell	Guard Intervall	1/8
Code rate	3/4	Start station search	

❸

+ ◇ +
− −

⬜K

2) Possible only on sets equipped with this function.
3) See glossary for an explanation.

91

20.3 Setting Stations

Automatic DVB-C station search[2]

The DVB-C station search operation searches the entire frequency band for **TV and radio stations**. All stations which are found are placed in separate TV and radio station tables. See Section 25 for details of DVB radio mode.

If you are not satisfied with the order in which the stations are displayed, you can move them to other positions or delete unwanted stations (see Section 22.Sorting stations.

MENU

✱

7

F1↑

0	Function for F2
9	Function for F1
8	EURO sockets
7	DVB-C[2]
6	DVB-T[2]
5	DVB-S[2]
4	Analog-TV[2]
3	Country
2	Language
1	Operating

★ ★ ★

Picture-Volume

AV devices

Station table

Timer

Configuration

TV-Menu

3 General settings
2 Manual search
Automatic search

Symbol rate 1[3]   6900   Precision search   off
Symbol rate 2   6875 ► Start station search
Symbol rate 3

Executing the automatic search

• Press the MENU key to open the TV menu.

• Press the red key ✱ to open the menu "Configuration".

• Press the numeric key **7** to select "DVB-C".

• The cursor is on the menu line "Automatic search".

• Press key □K . The cursor is on symbol rate 1.

☞ *The most common symbol rates[3] were set in the factory. Changing the setting is normally unnecessary. If this setting of the symbol rates does not lead to the desired result, other symbol rates must be set and saved with the key □K . Ask your cable network provider or the person setting up the system about this. Fine search is required if the stations are not tuned to the channel centre.*

• Select the menu line "Start program search" with the cursor control key ► .

• Press key □K and confirm the question about the station search with the corresponding numeric key:
  1 free-to-air programs[3]
  2 all programs[3]
  3 free + CICAM programs[3].
After pressing the corresponding numeric key the program search begins.

□K

+ +
◇
− −

□K
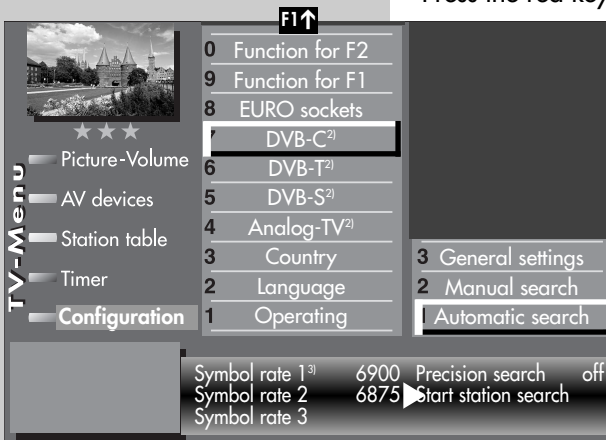
2) Possible only on sets equipped with this function.
3) See glossary for an explanation.

20.3 Setting Stations
Manual DVB-C station search[2]

Opening the menu

For a manual station search, you must know the channel number or the frequency of the station you wish to find.

Executing the manual search

- Press the (MENU) key to open the TV menu.

- Press the red key ✱ to open the menu "Configuration".

- Use the corresponding **numeric key** (in the example: ❼) to select "DVB-C".

- Make a selection with the assigned numeric key, in the example ❷ "Manual search".

- The cursor is on "Channel".

- Enter the channel number or special channel number or frequency in the setting window with the numeric keys. If additional data of a program is known, then select the corresponding menu items "Modulation" and "Symbol rate" and change the setting using the − + key or with the numeric keys.

	F1↑	
0	Function for F2	
9	Function for F1	
8	EURO sockets	
7	DVB-C[2]	
6	DVB-T[2]	
5	DVB-S[2]	
4	Analog-TV[2]	
3	Country	3 General settings
2	Language	2 Manual search
1	Operating	1 Automatic search

★ ★ ★
Picture-Volume
AV devices
Station table
Timer
Configuration

TV-Menu

Channel   05   Cable channel   --
Frequency   64.500MHz   Symbol rate   6900
Madulation   Auto.mode ▶Start station search

- Select "Start program search" with the cursor control button in the setting window.

- Press key ☐K and confirm the question about the station search with the corresponding numeric key:
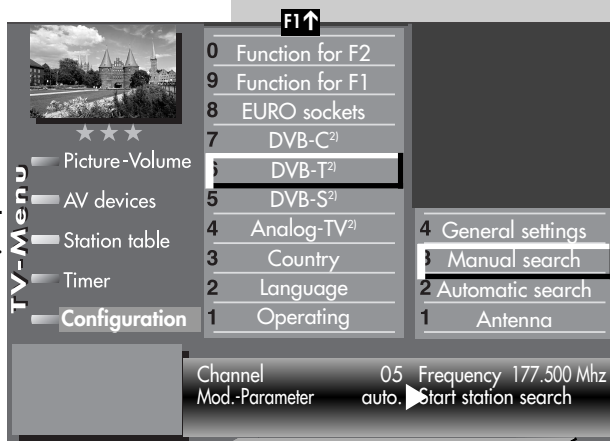 ❶ free-to-air programs[3]
  ❷ all programs[3]
  ❸ free + CICAM programs[3].
  After pressing the corresponding numeric key the program search begins.

2) Possible only on sets equipped with this function.
3) See glossary for an explanation.
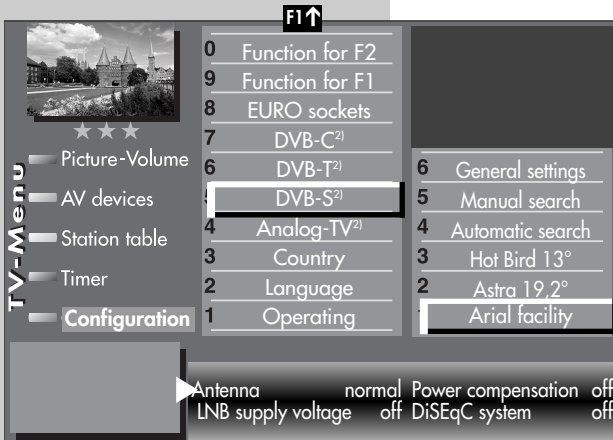
20.4 Set-up of Sat System Antenna system[2)]

i The sat. antenna system must be selected for the TV set in the "Configuration" menu.

Antenna

Normal

In the "Normal" setting, the DVB-S receivers in the LCD TV set each have a separate antenna cable.

Tandem

In the "Tandem" setting, the two DVB-S receivers have one feed line and are connected together with a splitter.

Single Cable (Single Cable Distribution SDC)

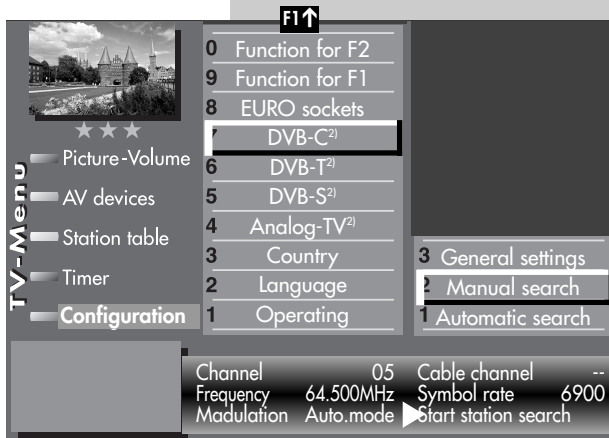With the "Single cable" setting, the DVB-S receivers have one feed line. The program selection is preset according to the structural conditions of the satellite system.

No antenna control signals can be sent over the feed line.

Unicable

The antenna system with a channel router feeds one cable and is designed to receive the full program selection. For this purpose, each receiver is assigned one specific frequency in the satellite frequency range (950-2150 MHz). The channel router has multiple fixed frequencies (SCR-Freq.) saved in a frequency bank. See the user's guide for the channel router.

☞ *The satellite antenna splitter 010ZR1199 is required for all satellite single cable solutions.*

MENU

✱

5

	F1↑			
	0	Function for F2		
	9	Function for F1		
	8	EURO sockets		
★ ★ ★	7	DVB-C[2)]		
Picture-Volume	6	DVB-T[2)]	6	General settings
AV devices		DVB-S[2)]	5	Manual search
Station table	4	Analog-TV[2)]	4	Automatic search
Timer	3	Country	3	Hot Bird 13°
Configuration	2	Language	2	Astra 19,2°
	1	Operating		Arial facility

TV-Menu

▶ Antenna   normal   Power compensation   off
LNB supply voltage   off   DiSEqC system   off

◆ OK ◆

◆ + + / − − ◆

◆ OK ◆

EXIT

20.4 Set-up of satellite system Unicable[2)]

Each DVB-S receiver must be assigned a subscriber number (SCR no.) and the associated subscriber frequency (SCR freq.) from the frequency bank (see channel router or its user's guide)

☞ *Each subscriber number and subscriber frequency may only be assigned once.*

The DVB-S receiver in the TV set requests the data for the desired program from the channel router.

Setting the SCR no. and SCR freq.

- Call up the TV menu with the (MENU) button
- Use the red button ★ to open the "Configuration" menu.
- Select the menu option "DVB-S" with the assigned numeric buttons. In the example it is ❺.
- Press the ☐K button and the "Arial facility" setup window opens.
- Use the cursor control buttons to select "Antenna" and then the **V-/V+** button to select "Unicable".
- Use the cursor control buttons to select the SCR data for each receiver.
- Enter the required data with the numeric buttons.
- Confirm the setting by pressing the ☐K button.
- Clear the "TV menu" with the (EXIT) button.
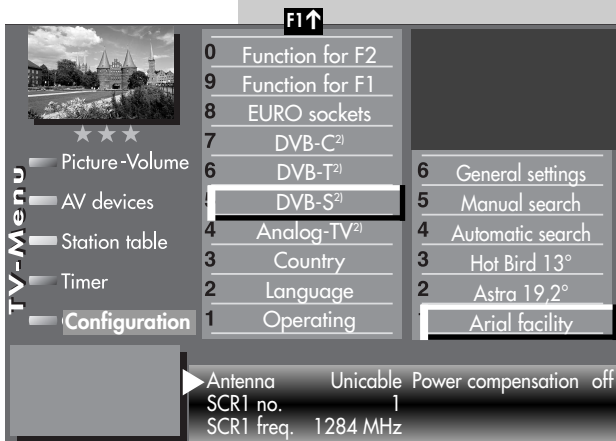
(MENU)

★

❺

	F1↑		
	0	Function for F2	
	9	Function for F1	
	8	EURO sockets	
★★★	7	DVB-C[2)]	
Picture-Volume	6	DVB-T[2)]	6 General settings
AV devices	5	DVB-S[2)]	5 Manual search
Station table	4	Analog-TV[2)]	4 Automatic search
Timer	3	Country	3 Hot Bird 13°
	2	Language	2 Astra 19,2°
Configuration	1	Operating	Arial facility

▶ Antenna   Unicable Power compensation off
SCR1 no.   1
SCR1 freq.   1284 MHz

☐K

+ +
– –

☐K
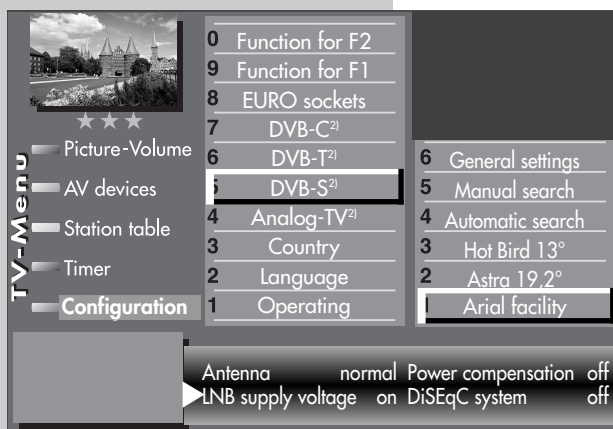
(EXIT)

20.4 Set-up of satellite system LNB supply voltage[2]

(MENU)

(★)

5

	0	Function for F2		
	9	Function for F1		
	8	EURO sockets		
★ ★ ★	7	DVB-C[2]		
Picture-Volume	6	DVB-T[2]	6	General settings
AV devices	5	DVB-S[2]	5	Manual search
Station table	4	Analog-TV[2]	4	Automatic search
Timer	3	Country	3	Hot Bird 13°
	2	Language	2	Astra 19,2°
Configuration	1	Operating		Arial facility

Antenna   normal Power compensation off
▶LNB supply voltage   on   DiSEqC system   off

◇OK◇

+◇+
–◇–

◇OK◇

(EXIT)

The settings of the satellite antenna system must be entered in the menu "Configuration" so that the TV set knows them.

i These settings should always be made in the order in which they are shown in the right-hand column of the menu, starting at the bottom, i.e. LNB supply voltage, DiSEqC system, etc.

LNB supply voltage

The LNB voltages for selection of the polarisation (horizontal H = 18V, vertical V = 14V) are already set and do not normally need to be changed.

If the cable to the satellite antenna is very long, the voltages reaching the LNB may be too low. In such cases, the voltages can be increased by 1 V by activating the line-compensation function.

If any changes should be necessary, they can be made as follows.

Change settings

- Call up the TV menu with the (MENU) button.
- Use the red button (★) to open the "Configuration" menu.
- Select the menu option "DVB-S" with the assigned numeric buttons. In the example it is **5**.
- Press the ◻K button and the "Arial facility" setup window opens.
- Use the cursor control buttons to select "LNB supply voltage" and then use the **V-/V+** button to set the LNB supply voltage on or off.
- Confirm the setting by pressing the ◻K button.
- Press the (EXIT) key to close the TV menu.

☞ *If the TV set is connected to a community antenna, the LNB supply voltage must always be set to "Off".*

2) Possible only on sets equipped with this function.

20.4 Set-up of satellite system DiSEqC system[2]

Opening the menu

☞ *Section 21.4 only in the case of corresponding equipment or conversion.*

i "DiSEqC" makes it possible to control the satellite antenna digitally via the existing antenna cable and is a prerequisite for the reception of signals from more than two satellites (e.g. Astra, Eutelsat, Hotbird).

If you wish to receive signals from at least three satellites (e.g. ASTRA 19.2°, Eutelsat 16°, Hotbird 13°) the antenna system can be controlled only with the aid of "DiSEqC".

☞ *This menu item is not available in a 2** menu.*

Switching DiSEqC on and off

- Press the (MENU) key to open the TV menu.
- Press the red key [★] to open the menu "Configuration".
- Press the appropriate numeric key (in this example ❺ to select "DVB-S".
- Press the ☐K button and the "Arial facility" setup window opens.
- Use the cursor control buttons to select "DiSEqC" and then use the **V-/V+** button to set DiSEqC on or off.
- Press the ☐K key to confirm the new setting.
- Press the (EXIT) key to close the TV menu.

(MENU)

[★]

❺

TV-Menu
- Picture-Volume
- AV devices
- Station table
- Timer
- **Configuration**

0	Function for F2
9	Function for F1
8	EURO sockets
7	DVB-C[2]
6	DVB-T[2]
5	DVB-S[2]
4	Analog-TV[2]
3	Country
2	Language
1	Operating

6	General settings
5	Manual search
4	Automatic search
3	Hot Bird 13°
2	Astra 19,2°
	Arial facility

Antenna   normal   Power compensation off
LNB supply voltage   off ▶DiSEqC system   off

(OK)

(+ +/− −)

(OK)

(EXIT)

20.4 Set-up of satellite system Selecting satellites[2]

☞ **Section 20.4 only in the case of corresponding equipment or conversion.**

You can set up to four satellites in the menu "Configuration". No satellite is set in the factory.

The LNB frequency is used to switch between the high and low frequency bands. The default frequencies **Low band 9.75 GHz** and **High band 10.60 GHz** are set in the factory.

Selecting satellites

(MENU)

★

❺

❷

	0	Function for F2		
	9	Function for F1		
	8	EURO sockets		
★ ★ ★	7	DVB-C[2]	7	
Picture-Volume	6	DVB-T[2]	6	General settings
AV devices	5	DVB-S[2]	5	Manual search
Station table	4	Analog-TV[2]	4	Automatic search
Timer	3	Country	3	Hot Bird 13°
Configuration	2	Language	2	Astra 19,2°
	1	Operating	1	Arial facility

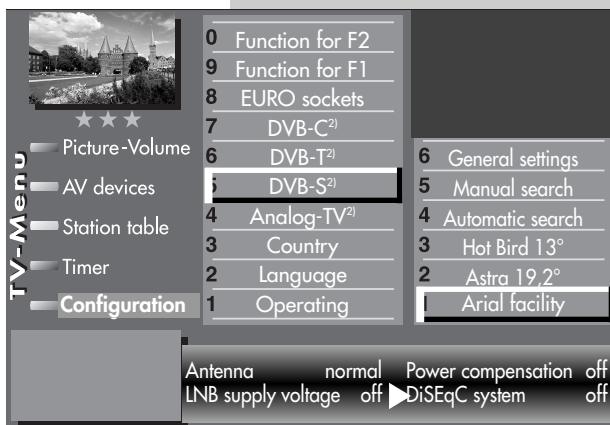| Satellite	Astra 19,2°
Low band	9,75 GHz
High band	10,60 GHz

- Press the (MENU) key to open the TV menu.
- Press the red key ★ to open the menu "Configuration".
- Press the appropriate numeric key (in this example ❺ to select "DVB-S".
- Press the appropriate numeric key (in this example ❷ to select "Satellite A".
- Use the **V-/V+** key to select the desired satellite. The common satellites are called up in order and the accompanying symbol rates set automatically.

- Use the cursor control key to select "Low band" or "High band". The settings depend on the components installed in the satellite antenna. For the correct settings, please consult the data sheet or the label of the LNB(s) being used.
- Press the □K key to confirm the new settings.
- Press the (EXIT) key to close the TV menu.

OK

(EXIT)

2) Possible only on sets equipped with this function.

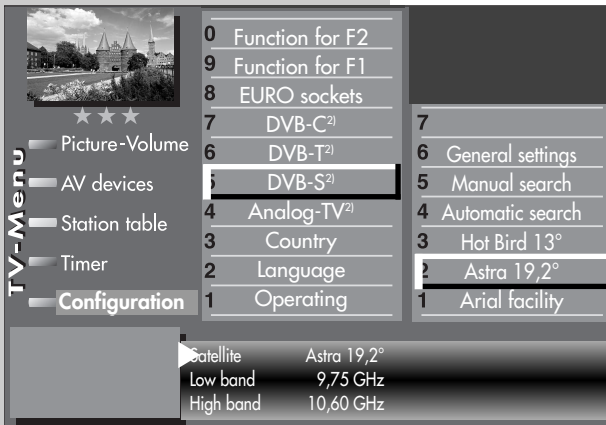# 20.5 Setting the stations automatic search[2]

Opening the menu

The reception area is searched for TV and radio stations in the DVB-S program search. The programs found are stored in a TV and radio station table. See Chapter 25 for DVB radio mode.

You can move or delete stations that are found if you are not satisfied with the order. See Chapter 22 "Sort stations".

☞ **The search only works properly if the LNB frequencies have been correctly set and saved.**

Carry out automatic search

- Call up the TV menu with the key (MENU) .
- Use the red button ⭑ o open the "Configuration" menu.
- Make a selection with the assigned numeric key ❺, in the example "DVB-S".

0	Function for F2			
9	Function for F1			
8	EURO sockets			
7	DVB-C[2]			
6	DVB-T[2]	6	General settings	
5	DVB-S[2]	5	Manual search	
4	Analog-TV[2]	4	Automatic search	
3	Country	3	Hot Bird 13°	
2	Language	2	Astra 19,2°	
1	Operating	1	Arial facility	

Satellite   Astra 19,2°   ▶ Start station search

- Make a selection with the assigned numeric key ❹ in the example "Automatic search".
- Select the desired satellites in the setting window with the **V-/V+** key if a selection is possible.
- Select the menu line "Start program search" with the cursor control key ▶ .
- Press key ☐K and confirm the question about the station search with the corresponding numeric key:
  ❶ free-to-air programs[3]
  ❷ all programs[3]
  ❸ free + CICAM programs[3].
  After pressing the corresponding numeric key the program search begins.

(MENU)

⭑

❺

❹

(EXIT)

2) Possible only on sets equipped with this function.

20.5 Setting the stations
Automatic search[2]

A search is carried out for the programs and presented in a station table.

If necessary, the stations can also be sorted, moved, or deleted. See Chapter 22 for this.

20.5 Setting the stations
Manual search[2]

For the manual search, you must know the frequency, the symbol rate and the polarisation of the station for which you want to search.

Executing the manual search

• Press the (MENU) key to open the TV menu.
• Press the red key ⊛ to open the menu "Configuration"
• Press the appropriate numeric key (in this example ❺ to select "DVB-S".
• Select the menu option "Manual search" with the assigned numeric keys. In the example it is ❺.
• The cursor then moves to "Satellite". If more than

20.5 Setting the stations Manual search[2]

one satellite is available, use the **V-/V+** key to select the desired satellite.

- In the setting window, use the cursor control key ▶ to select the menu line "Frequency".
- Use the numeric keys or the **V-/V+** key to set the frequency.

☞ *For a HD station search, the information for the DVB system (e.g. DVB-S2) must also be entered.*

- If all the data has been entered, use the cursor control key in the settings window to access the "Start program search" menu item and confirm with the key □K .

- Press key □K and confirm the question about the station search with the corresponding numeric key:
  ❶ free-to-air programs[3]
  ❷ all programs[3]
  ❸ free + CICAM programs[3].
  After pressing the corresponding numeric key the program search begins.

If necessary, the stations can also be sorted, moved, or deleted. See Chapter 22 for this.
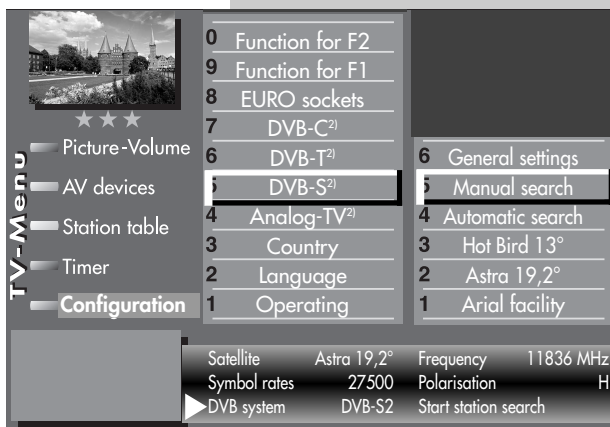
	0	Function for F2		
	9	Function for F1		
	8	EURO sockets		
★ ★ ★	**7**	DVB-C[2]		
Picture-Volume	**6**	DVB-T[2]	**6**	General settings
AV devices	**5**	DVB-S[2]	**5**	Manual search
Station table	**4**	Analog-TV[2]	**4**	Automatic search
Timer	**3**	Country	**3**	Hot Bird 13°
	2	Language	**2**	Astra 19,2°
Configuration	**1**	Operating	**1**	Arial facility

Satellite	Astra 19,2°	Frequency	11836 MHz
Symbol rates	27500	Polarisation	H
▶DVB system	DVB-S2	Start station search	

MENU

★

5

5
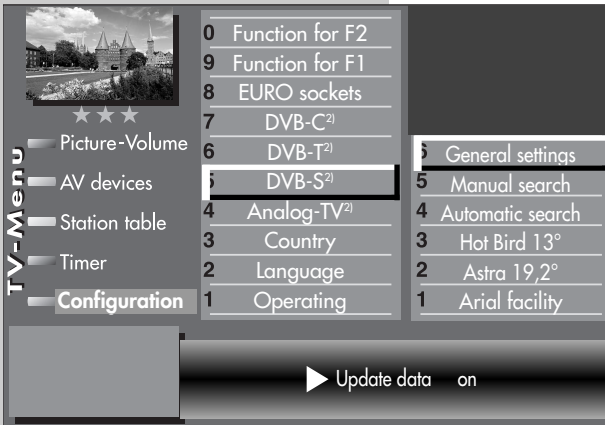
EXIT

With the menu item, "General settings", you can specify whether or not the data are to be saved in the non-volatile memory of the TV set when transmission parameters are changed.

This update function applies to stations which use different transmission parameters at different times of the day, such as when they transmit regional programs.

Setting the data update function

(MENU)

★

5

6

• Press the (MENU) key to open the TV menu.

	0 Function for F2	
	9 Function for F1	
★ ★ ★	**8** EURO sockets	
● Picture-Volume	**7** DVB-C[2)]	
	6 DVB-T[2)]	**6** General settings
● AV devices	**5** DVB-S[2)]	**5** Manual search
● Station table	**4** Analog-TV[2)]	**4** Automatic search
● Timer	**3** Country	**3** Hot Bird 13°
	2 Language	**2** Astra 19,2°
● **Configuration**	**1** Operating	**1** Arial facility

▶ Update data   on

• Press the red key ★ to open the menu "Configuration".

• Press the appropriate numeric key (in this example **5** to select "DVB-S".

• The cursor is located on the line "Arial facility".

• Press the appropriate numeric key (in this example **6** to select "General settings".

• In the setting window, use the **V-/V+** key to set "Update data" to "On".

• Press the □K key to confirm the new setting.

• Press the (EXIT) key to close the TV menu.

+ ◇ **+**
− **−**

□K

(EXIT)

2) Possible only on sets equipped with this function.

20.7 DVB Prog. Info. signal quality

Opening the menu

The displays for the DVB prog. info or signal quality are only for informational purposes. DVB prog. info. shows the data for the displayed station.

The signal quality display is not directly related to the picture quality. The bit error rate fluctuates between the transponders and increases if a rain front is approaching, for example.
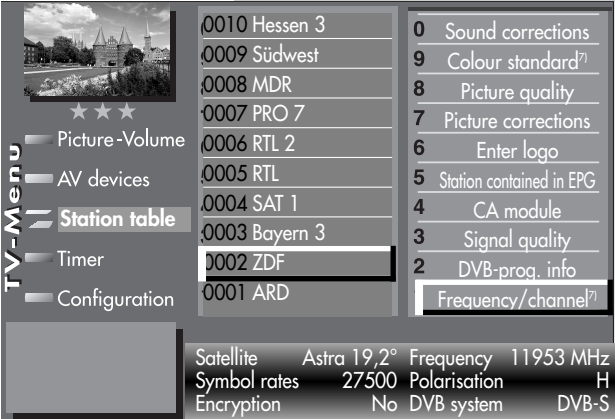
- Select the program position for the DVB prog. info or signal quality that is to be displayed.

- Press the (MENU) key. The TV menu appears on the screen.

- Press the white key 📡 The station table menu appears on the screen and the active program position is selected.

- Press the (F2) button.

- Press the cursor control key ▶ and switch to the menu page.

- Use the assigned numeric keys to select the DVB prog. info. or the signal quality menu option.

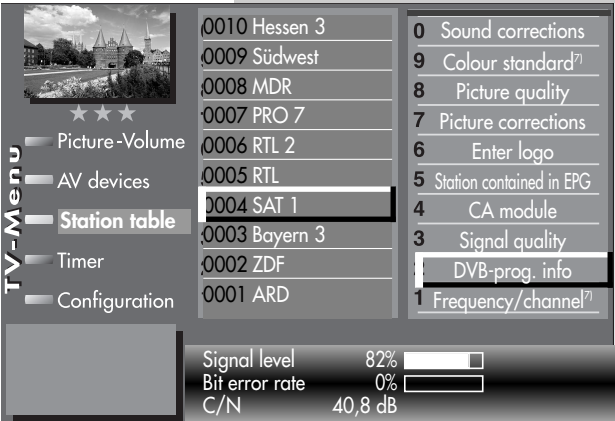- Clear the "TV menu" with the (EXIT) button.

(MENU)

📡

F2

▶

TV-Menu		0	Sound corrections
	,0010 Hessen 3	9	Colour standard[7]
	,0009 Südwest	8	Picture quality
	,0008 MDR	7	Picture corrections
★ ★ ★	,0007 PRO 7	6	Enter logo
Picture-Volume	,0006 RTL 2	5	Station contained in EPG
AV devices	,0005 RTL	4	CA module
Station table	,0004 SAT 1	3	Signal quality
Timer	,0003 Bayern 3	2	DVB-prog. info
Configuration	,0002 ZDF		Frequency/channel[7]
	,0001 ARD		

Satellite	Astra 19,2°	Frequency	11953 MHz
Symbol rates	27500	Polarisation	H
Encryption	No	DVB system	DVB-S

TV-Menu		0	Sound corrections
	,0010 Hessen 3	9	Colour standard[7]
	,0009 Südwest	8	Picture quality
	,0008 MDR	7	Picture corrections
★ ★ ★	,0007 PRO 7	6	Enter logo
Picture-Volume	,0006 RTL 2	5	Station contained in EPG
AV devices	,0005 RTL	4	CA module
Station table	,0004 SAT 1	3	Signal quality
Timer	,0003 Bayern 3		DVB-prog. info
Configuration	,0002 ZDF	1	Frequency/channel[7]
	,0001 ARD		

Signal level	82%
Bit error rate	0%
C/N	40,8 dB

7) Available only for analogue stations

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20.8 DVB Portal stations

Various pay TV stations broadcast portal stations. These portal stations are filled with sub-stations or optional channels.

In station search (see ch. 20) in "Search settings" the setting "all", "only free" or "free+CICAM" must be set so that these stations can be found too.

10	Kabel 1
9	Nord 3
8	RTL
7	PRO 7
6	Nord 3
5	PRO 7
4	SAT1
3	Portalsender
2	ZDF
1	ARD
56	Hessen 3
55	SW-BW
54	N-TV
53	West 3
52	Phönix

After a station search, the portal stations and the accompanying optional channels (may also be identified in the station table as SID=xy) will be shown in the station table on various program places.

We have programmed a simple way for you to find optional channels quickly.

If you select a portal station via the station table (see p. 11), a suitcase symbol appears next to the station logo.

This suitcase can be opened by pressing the white button 🅟 repeatedly. All optional channels included in this suitcase then appear in the station table. Other stations are not shown simultaneously.

In this way, you can switch quickly between the optional channels.

5	Optionskanal 4
4	Optionskanal 3
3	Optionskanal 2
2	Optionskanal 1
1	Portalsender

Opening the menu

With the aid of the VPS signal, a station logo with a maximum length of 15 characters is automatically assigned to each station.

If this automatic assignment does not work, or if you want to use a different logo, you can change the setting manually.

Setting the station logo

- Press the (MENU) key.

- Press the white key 🔞 to open the "station table".

- Press the (F2) key to enable editing of the station table.

- Select the program position whose logo you wish to change.

- Press the cursor control key ▶ to move to the other column.

- Use the corresponding numeric key (in the example: ❺) to select "Logo input".

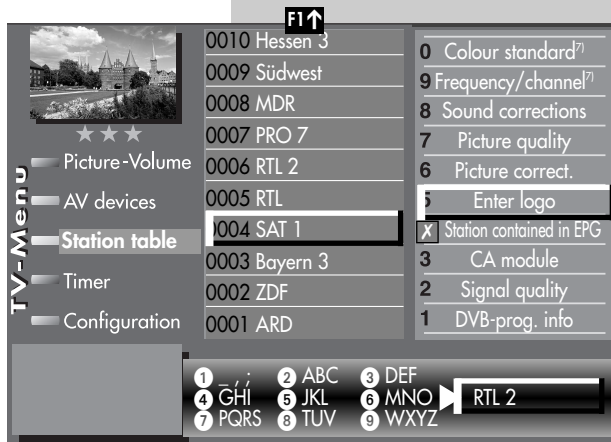- The various letters and digits can be selected with the aid of the cursor control key ◀ ▶.

- You can delete single characters with the red key ✱ or the complete logo with the ⟲ key.

- Set the desired logo by repeatedly pressing the various numeric keys. The lowercase letters are displayed after the uppercase letters.

- Press the ☐K key to save the new logo.

- Press the (EXIT) key to close the TV menu.

(MENU)

🔞

F2

▶ ❺

	F1↑	
	0010 Hessen 3	**0** Colour standard[7)
	0009 Südwest	**9** Frequency/channel[7)
	0008 MDR	**8** Sound corrections
★ ★ ★	0007 PRO 7	**7** Picture quality
Picture-Volume	0006 RTL 2	**6** Picture correct.
AV devices	0005 RTL	**5** Enter logo
Station table	0004 SAT 1	**X** Station contained in EPG
Timer	0003 Bayern 3	**3** CA module
Configuration	0002 ZDF	**2** Signal quality
	0001 ARD	**1** DVB-prog. info

TV-Menu

❶ _ , ;	❷ ABC	❸ DEF
❹ GHI	❺ JKL	❻ MNO ▶ RTL 2
❼ PQRS	❽ TUV	❾ WXYZ

☐K

(EXIT)

The number of subjects and sections depends on the selected scope of operation. Depending on the configuration of the TV set, the various menu items may be displayed in a different order and numbered differently.

7) Available only for analogue stations

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Individual stations in the station table can be moved, copied or deleted.

Copying, moving, deleting individual stations

(MENU)

- Call up the TV menu with the (MENU) button.

[📡]

- Use the white button [📡] to retrieve the station table.

- Use the cursor control key to select a program position that is to be copied, moved, or deleted.

□K

- Press the □K button and mark the program position (prog. 0006 in the example).

Copy:

F1↑		F1↑	
0010	Hessen 3	0020	BR alpha
0009	Südwest	0019	3 SAT
0008	MDR	0018	Kinderkan.
0007	PRO 7	0017	FRANKEN
0006	RTL 2	0016	TELE-5
0005	RTL	0015	9LIVE
0004	SAT 1	0014	SuperRTL
0003	Bayern 3	0013	Kabel 1
0002	ZDF	0012	VOX
0001	ARD	0011	West 3
F3↓		F3↓	

★ ★ ★

Picture-Volume

AV devices

Station table

Timer

Configuration

TV-Menu

Select stations with ⌂ (hold down to select a block). Select new position with the cursor.
↕ move/copy, ⊖ delete.
Delete all marks with ▇.

- When <u>copying</u>, afterwards use the cursor to select the program position where the station is to be inserted.

- Use the **+** key to copy the station

Move :

- When <u>moving</u>, select the program position where the program position is to be moved.

- Use the **−** key to move the station.

Delete:

- If the station is to be deleted, then press the (⬑) I button.

(EXIT)

- When you are finished, clear the "TV menu" using the (EXIT) button.

22. Sorting stations, block-by-block

Opening the menu

Individual or multiple stations can be moved, copied or deleted in the station table.

Copying, moving, deleting multiple stations

- Call up the TV menu with the (MENU) button.

- Use the white button 📡 to retrieve the station table.

- Use the cursor control key to select the first program position that is to be copied, moved, or deleted.

- Press the ☐K button and mark the program position (prog. 006 in the example).

- Use the cursor control key to select the last program position that is to be copied, moved, or deleted.

- Press down the ☐K button until all stations between the first and last station position are marked.
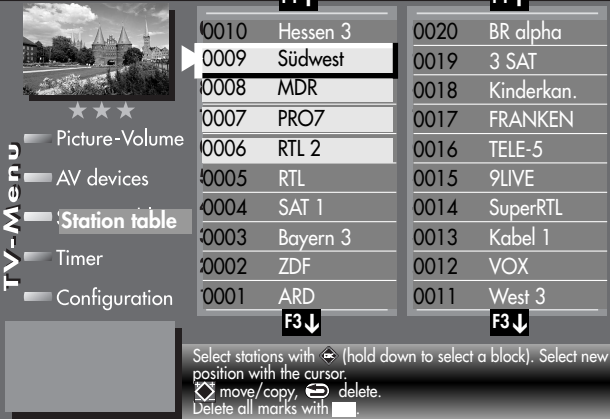
Copy:

- When copying, afterwards use the cursor to select the program position after which the stations are to be inserted.

- Use the **+** key to copy the block of stations.

Move:

- When moving, afterwards use the cursor to select the program position after which the stations are to be re-inserted.

- Use the **–** key to move the block of stations.

Delete:

- If the marked block of stations is to be deleted, then press the ⟲ button.

- When you are finished, clear the "TV menu" with the (EXIT) button.

(MENU)

📡

OK

▲   ▼

F1↑			F1↑	
0010	Hessen 3		0020	BR alpha
0009	Südwest		0019	3 SAT
0008	MDR		0018	Kinderkan.
0007	PRO7		0017	FRANKEN
0006	RTL 2		0016	TELE-5
0005	RTL		0015	9LIVE
0004	SAT 1		0014	SuperRTL
0003	Bayern 3		0013	Kabel 1
0002	ZDF		0012	VOX
0001	ARD		0011	West 3
F3↓			F3↓	

TV-Menu
- ★ ★ ★
- Picture-Volume
- AV devices
- **Station table**
- Timer
- Configuration
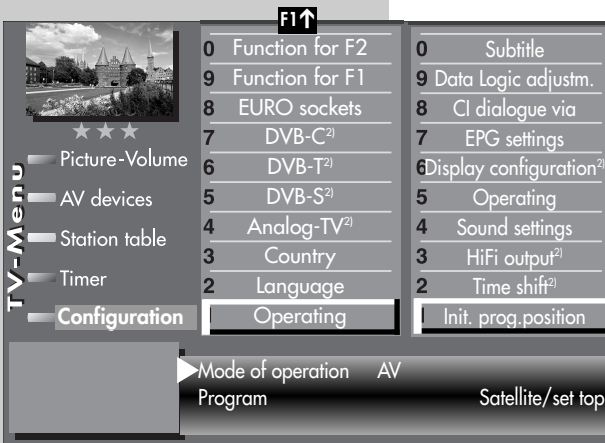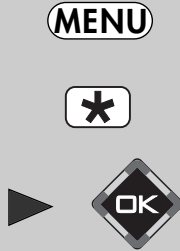
Select stations with ⊜ (hold down to select a block). Select new position with the cursor.
◇ move/copy, ⟲ delete.
Delete all marks with ▮.

+ ◇ +
– –

(EXIT)

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23. Initial Program Position

You can define an initial program position for this TV set. The preferred use for the initial program position is to switch to the AV program position when using an external receiver or to set a favourite channel as the start-up station when the set is switched on

MENU

✱

▶ **OK**

Initial program position settings

☞ *This menu option cannot be set in a 2** menu*

	F1⬆			
	0	Function for F2	0	Subtitle
★ ★ ★	9	Function for F1	9	Data Logic adjustm.
	8	EURO sockets	8	CI dialogue via
Picture-Volume	7	DVB-C²⁾	7	EPG settings
AV devices	6	DVB-T²⁾	6	Display configuration²⁾
Station table	5	DVB-S²⁾	5	Operating
Timer	4	Analog-TV²⁾	4	Sound settings
Configuration	3	Country	3	HiFi output²⁾
	2	Language	2	Time shift²⁾
		Operating		Init. prog.position

▶ Mode of operation   AV
Program   Satellite/set top

• Press the **MENU** key to open the TV menu.

• Use the red button **✱** to open the "Configuration" menu.

• Use the cursor control key to select "Operating" and "Init. prog. position" and press **OK** .

• The cursor is on the "Mode of operation" menu option. You can use the **V-/V+** key to set the desired mode of operation (TV, Radio or AV).

+ +
– –

OK

• Then select "Program". If you have selected TV as the mode of operation, you can now set the desired program (e.g. 004 for "RTL"). With the AV mode of operation, you can select an external AV connection like EURO 1, EURO 2²⁾, HDMI, etc. as an external AV connection.

• Press the **OK** button to save the new settings.

• Clear the "TV menu" with the **EXIT** button.

EXIT

☞ *If the TV set is now switched on with the power button ⏻ on the set or the button on the remote control, the preset initial program position appears.*

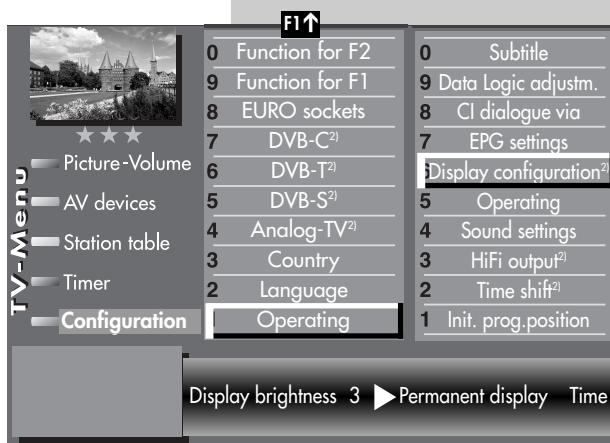The number of subjects and sections depends on the selected scope of operation. Depending on the configuration of the TV set, the various menu items may be displayed in a different order and numbered differently.

2) Possible only on sets equipped with this function.

24. Display Configuration[2)]

By way of an option, the green display on the front of the TV set (depending on TV set configuration) can also be used for displaying the **time** or the **station logo**.

Setting the display configuration [2)]

- Press the (MENU) key to open the TV menu.

- Press the red key ✱ to open the menu "Configuration".

- Use the cursor control key ▶ to select "Initial program position".

- Use the corresponding numeric key (in the example: **5**) to select "Display configuration".

- In the setting window, use the **V-/V+** key to select the desired setting.

- Press the ☐K key to save the new setting.

- Press the (EXIT) key to close the TV menu.

Opening the menu

(MENU)

✱

▶ ❻

		F1↑		
		0 Function for F2	0	Subtitle
		9 Function for F1	9	Data Logic adjustm.
		8 EURO sockets	8	CI dialogue via
★ ★ ★		7 DVB-C[2)]	7	EPG settings
Picture-Volume		6 DVB-T[2)]		Display configuration[2)]
AV devices		5 DVB-S[2)]	5	Operating
Station table		4 Analog-TV[2)]	4	Sound settings
Timer		3 Country	3	HiFi output[2)]
Configuration		2 Language	2	Time shift[2)]
		Operating	1	Init. prog.position

Display brightness 3 ▶ Permanent display   Time

(EXIT)

The number of subjects and sections depends on the selected scope of operation. Depending on the configuration of the TV set, the various menu items may be displayed in a different order and numbered differently.

2) Possible only on sets equipped with this function.

Opening the menu	# 25. DVB Radio Mode

To switch from TV mode to DVB radio mode, press the ⬚TV/R key.

⬚**TV/R**

The screen is automatically blanked after about 30 seconds.

To switch from DVB radio mode to TV mode, press the ⬚TV/R key.

⬚**TV/R**

Setting DVB radio stations

The available DVB radio stations are automatically detected during a station search (see Section 20) and stored in a separate station table at the operating level for radio mode.

The radio station table can be sorted (see Section 22) and the station logos can be changed (see Section 21).

☞ *Chapters 12 / 14 / 15 / 15.2 / 16 special functions, normal/language and 18 to 18.3 also apply to radio programs.*

☞ *Note: The screen can be switched on and off manually with the blue key ⬤.*

26. Operation without the Remote Control

Operation without the remote control is provided as an emergency measure in case the batteries of your remote control are exhausted or the remote control is not readily available.

Local controls for Axio pro   *Local controls for Linus, Sirius*

26. Operation without the Remote Control

Local controls for Primus

Local controls for Caleo

Switching on

Press the main power switch on the TV set. After about 30 seconds, the TV set is switched on with program position 1 or the programd initial program position selected.

You can also use the following functions directly on the TV set, without a remote control.

Volume

Press and hold the preselection key **F** until the bar display for the volume appears on the screen. Then press the "**–**" or "**+**" button to adjust the volume.

Program selection

Press the **– +** buttons.

Program selection via program table:

Press preselection key F often enough until the program table appears on the screen. Select the program desired with the "-" or "+" key. Press preselection key F and make the selection.

Switching from TV to AV program

Press F key often enough until the selection table for the AV devices appears. Select the AV device desired with the "–" or "+" key. Press preselection key F and adopt the selection.

Switching from AV to TV program

Press preselection key F often enough until the selection list for the program table appears. Select the program desired with the "–" or "+" key. Press preselection key F and adopt the selection.

27. Scope of Operation

The adjustable scope of operation for the TV set can be a great help in finding your way around the complex operating functions of the TV set.

The scope of operation can be set to various levels, which are identified by asterisks.

1 ★ "Just watching TV"- in other words, it is not possible to open the TV menu and only the functions available on the remote control can be used:

- Zapping

- Selection of program positions with the numeric keys, the oval "**P+/P-**" rocker key or the
white key ⑨.

- Opening Teletext.

- Displaying help information (INFO).

- Playing back films from a video recorder or DVD player by pressing the "**AV**" key.

- Selecting "Special functions 1" by pressing the ⸤ F1 ⸥ key.

- Selecting "Special functions 2" by pressing the ⸤ F2 ⸥ key.

- Selecting "Special functions 3" by pressing the ⸤ F3 ⸥ key.

- Selecting connected AV devices by pressing the ▢/AV key.

- Calling the standard picture functions by pressing the blue key ⬤ .

- Calling the standard sound functions by pressing the yellow key 🎵 .

- Calling the "EPG" function with the ⸤ EPG ⸥ key.

- in TV mode: Archive open / in Archive2): Play

- All function keys for PVR can be operated (see too Chapter 3)

If the scope of operation is set to a 1★ menu and you subsequently want to open a menu, then:

• Press and hold the ⸤ MENU ⸥ key for at least five seconds to open the TV menu.

• The menu item "Operation" is automatically selected.

27. Scope of Operation

- Use the **V-/V+** key to select the desired scope of operation and press the □K key to save the new setting.

2 ★ ★ This menu permits you to configure the use of the TV set to a certain degree. All of the functions listed for the 1★ menu are available and are supplemented by the following functions:

- Childlock

- Timer control (sleep timer)

- Automatic station search

- Transfer of the TV station table from the TV set to a Data Logic video recorder.
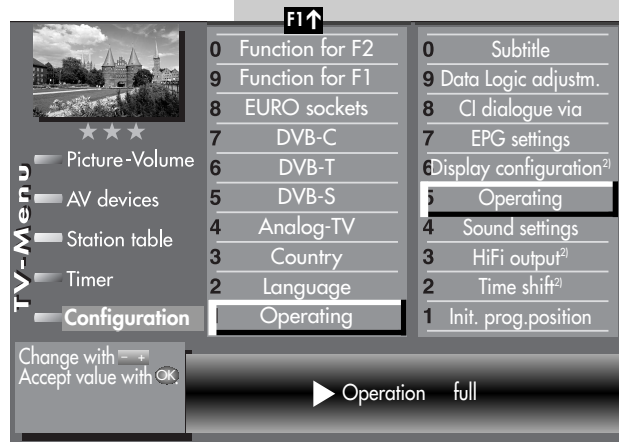
- Editing functions in the station table

3 ★ ★ ★ This is the operating scope for persons who are interested in technology who want to be able to use the full range of functions of the TV set.

Setting the scope of operation

- Press the (MENU) key to open the TV menu.
- Press the red key (✱) to open the menu "Configuration".
- Use the cursor control key ▶ to move to the menu line "Initial program position".
- Press the numeric key ❺ to select "Scope of operation".
- In the setting window, use the **V-/V+** key to select the desired scope of operation.
- Press the □K key to save the new setting.
- Press the (EXIT) key to close the TV menu.

Opening the menu

(MENU)

(✱)

▶ ❺

		F1↑		
		0 Function for F2	0	Subtitle
		9 Function for F1	9	Data Logic adjustm.
		8 EURO sockets	8	CI dialogue via
★ ★ ★		7 DVB-C	7	EPG settings
Picture-Volume		6 DVB-T	6	Display configuration[2]
AV devices		5 DVB-S	5	Operating
Station table		4 Analog-TV	4	Sound settings
Timer		3 Country	3	HiFi output[2]
Configuration		2 Language	2	Time shift[2]
		Operating	1	Init. prog.position

Change with − +
Accept value with OK

▶ Operation   full

(EXIT)

The number of subjects and sections depends on the selected scope of operation. Depending on the configuration of the TV set, the various menu items may be displayed in a different order and numbered differently.

2) Possible only on sets equipped with this function.

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28. Cleaning the TV Set

☞ *Before cleaning the set, always switch it off with the mains switch!*

☞ *Incorrect treatment and cleaning of the screen surface can cause irreparable damage to it. You should therefore always observe the following instructions for treatment and cleaning of the set.*

Treatment:

Always treat the screen surface very carefully.

Take care not to damage it mechanically by shocks, impact, scratching or scraping.

Keep sharp, pointed and hard objects away from the surface of the screen.

Keep the surface of the screen clean.

For cleaning the case and the screen, use only a soft, dry cloth. For removing stubborn marks, you may moisten the cloth slightly.

Cleaning and care:

The surface of the screen may be cleaned only with a soft, dry cloth (such as a microfleece duster). If any marks cannot be removed with this dry cloth, you may moisten the cloth slightly.

Take care that no water or other liquid can enter the TV set, since this can cause serious damage to the set.

If any liquid or other foreign object (pieces of metal, etc.) enters the set, immediately disconnect the mains plug from the wall outlet.

Never insert your hands or tools into the set, since this may result in electric shocks.

Detaching the front glass on Primus models

Pull the front glass out of the frame on all four corners as far as it will go.
Take out the front glass by lifting it approx. 1.5 cm upwards and at the same time forwards.

Detaching the front glass on Sirius models

The front glass can be taken off frontwards for cleaning. The Sirius 32 has 4 retaining pins and the Sirius 37/42 has 6 retaining pins on the back of the front glass. The front glass should be removed if possible by two persons, by removing the bolts one at a time and taking it off frontwards.

Cleaning

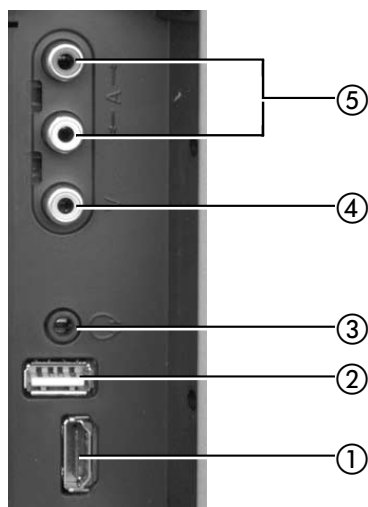The front glass can be cleaned with a standard glass cleaner.

29. Connections on the Front Side of the Set

Axio pro 26, left side

Axio pro, Caleo, at the right side under the flap

Linus, Sirius, at the front under the flap

Primus, right side

① HDMI connection. Signal type HDMI, (video/audio digital input)
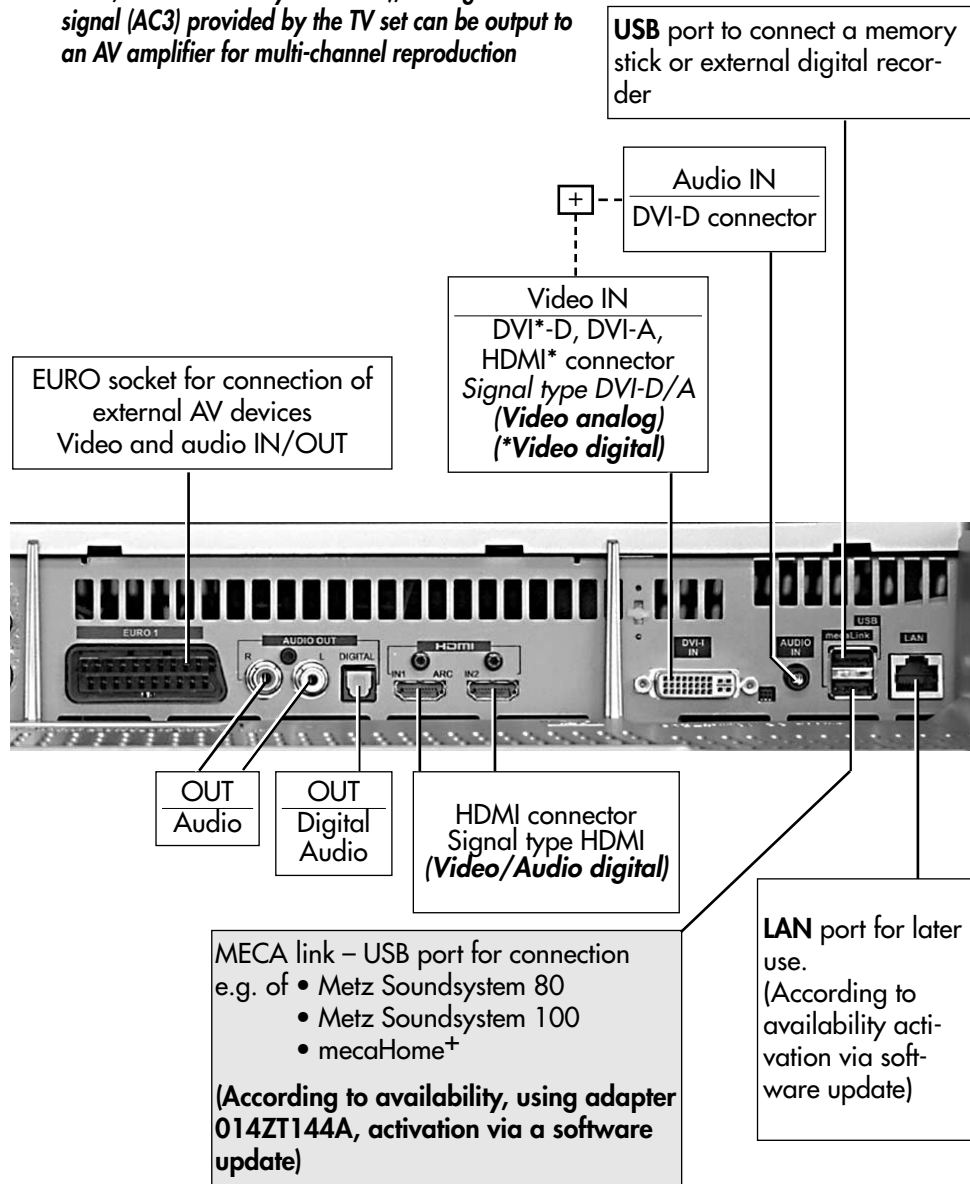
② USB socket

③ Headphone socket, diameter 3.5 mm

④ FBAS/Video in (e.g. digital camera or camcorder)

⑤ Audio in   R/L (e.g. camcorder)

29. Connections on the Rear of the Set (covered by a flap) Viewed from below

☞ *With the aid of an optical audio cable ("Toslink" cable, available from your dealer), the digital audio signal (AC3) provided by the TV set can be output to an AV amplifier for multi-channel reproduction*

USB port to connect a memory stick or external digital recorder

Audio IN
DVI-D connector

+

Video IN
DVI*-D, DVI-A,
HDMI* connector
Signal type DVI-D/A
(Video analog)
(*Video digital)

EURO socket for connection of external AV devices
Video and audio IN/OUT

OUT
Audio

OUT
Digital
Audio

HDMI connector
Signal type HDMI
(Video/Audio digital)

MECA link – USB port for connection
e.g. of • Metz Soundsystem 80
• Metz Soundsystem 100
• mecaHome+

(According to availability, using adapter 014ZT144A, activation via a software update)

LAN port for later use.
(According to availability activation via software update)

30. Registering AV Devices

i **AV** (audio/video) **devices** are external devices which deliver video and/or audio signals (such as video recorders, DVD players, DVD recorders, etc.) and which can be connected to TV sets.

All commonly available AV devices are listed in the menu "AV devices".

☞ *Note that you must always connect AV devices exactly as shown in the connection diagram in the TV menu of your TV set !*

Registering an AV device on the TV set

• Press the (MENU) key to open the TV menu.

• Press the yellow key 🎵 to open the menu "AV devices".

• Use the cursor control key to select the AV device you wish to register and press the □K key.

• Press numeric key ❷ and set the signal types (OUT/IN) that apply to the AV device with the **V-/V+** key and then confirm with the □K button.

Signal types:

(also see pages and the user's guide of the respective AV device).

There are different signal types for the transmission of picture signals. See next page.
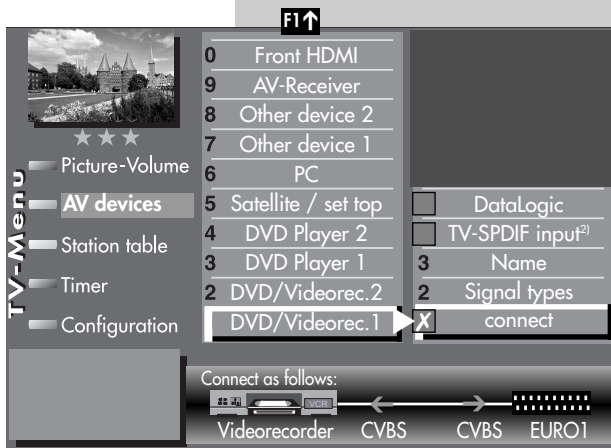
☞ *Caution! Connection of a new device may cause an existing connection diagram to be changed. If so, you must reconnect the AV devices accordingly.*

2) Possible only on sets equipped with this function.

Opening the menu

(MENU)

🎵

▲

□K

❷

0	Front HDMI		
9	AV-Receiver		
8	Other device 2		
7	Other device 1		
6	PC		
5	Satellite / set top	☐	DataLogic
4	DVD Player 2	☐	TV-SPDIF input[2]
3	DVD Player 1	**3**	Name
2	DVD/Videorec.2	**2**	Signal types
	DVD/Videorec.1 ▶	**X**	connect

F1↑

★ ★ ★

Picture-Volume
AV devices
Station table
Timer
Configuration

TV-Menu

Connect as follows:

Videorecorder   CVBS   CVBS   EURO1

+ +
◇ □K
- -

▼

□K

(EXIT)

30. Registering AV Devices

Fully-wired SCART or Euro AV cable

FBAS:
Connection of a VHS video recorder, analogue Sat receiver, decoder, camcorder, photos etc. via a Scart or EURO AV cable or via a Cinch cable or a Hosiden cable.

For devices with higher picture quality (e.g. DVD players, Blu-Ray players, game consoles), the following applies:

YC:
Better quality through separation of brightness and colour information (SVHS/Hi8 video recorder) when connecting a VHS video recorder, analogue Sat receiver, decoder etc. via a Scart or EURO AV cable or a Hosiden cable

RGB:
Signal type with three video basic colours – Red, green, blue. Is usually needed to control a screen.

Cinch-cable

YUV
High-quality video signal (video components); consists of brightness (Y) and the two colour difference signals (U and V) and is transmitted using three lines.

HDMI-cable

HDMI:
Using this interface, digital picture and sound signals are transmitted over a line with very high bandwidth (suitable for HDTV).

DVI-cable

DVI-A /DVI-D:
With a DVI interface, you can choose between DVI-A (analogue, PC with VGA interface) and DVI-D (digital, PC with DVI interface).

- If you want, press the numeric key ❸ and specify another name for this AV device and then press the OK button..

- Use the cursor control key to select "Connect" and press the OK button. Connect the AV device to the respective EURO socket.

- Press the "**EXIT**" key to close the TV menu.

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30.1 Registering AV Devices Data Logic

> **i** "**Data Logic**" is a system which provides a dialogue between a TV set and a video recorder. This "intelligent" system offers the features such as:
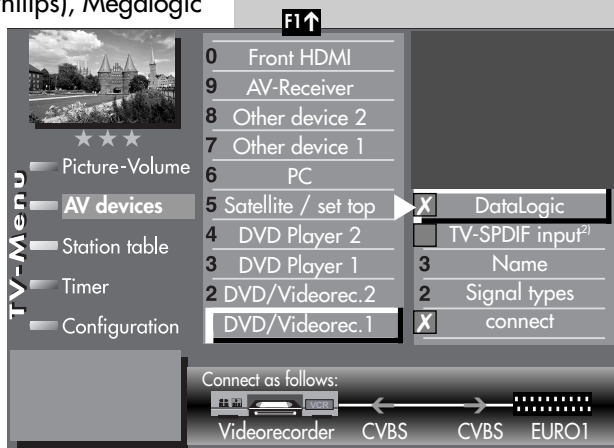
- Automatic transfer of the settings for terrestrial or cable TV stations (**not DVB**) to the video recorder.

- Immediate recording - the video recorder records the program currently displayed on the TV screen.

- Automatic switching to the AV program position.

- Direct control of the video recorder from the timer menu of the TV set.

- Automatic switching off of the video recorder when the TV set is switched to the standby state.

In the menu "AV devices" check **X** to the left of the field "Data Logic" for "DVD/Videorec. 1" and connect the video recorder to the EURO1 socket.

Comparable dialogue systems are: QLink (Panasonic), EasyLink (Philips), Megalogic (Grundig), SMARTLINK (Sony).

Registering a Data Logic video recorder on the TV set

- Press the (MENU) key to open the TV menu.

- Press the yellow key 🎵 to open the menu "AV devices".

- Use the cursor control key to select the AV device to be connected and press the ☐K key.

(MENU)

🎵

▲
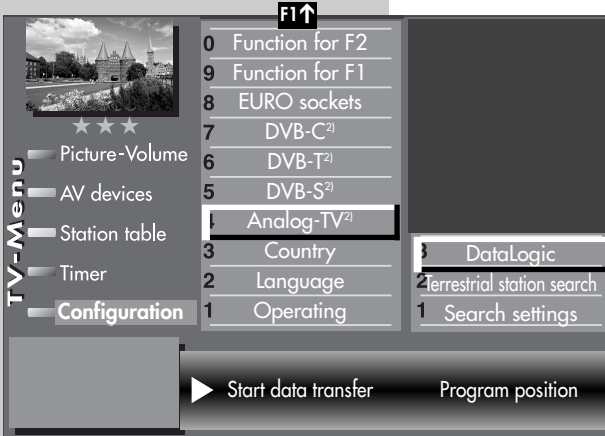

2) Possible only on sets equipped with this function.

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OK

EXIT

MENU

⋆

❹

• Press numeric key ❷, use the **V-/V+** key to select the correct signal types (OUT/IN) and press the ▯K key.
(See also the operating instructions of the AV device.)

• If desired, press numeric key ❸, enter a new name for the AV device and press the ▯K key.

• Use the cursor control key to select "Data Logic" and press the ▯K key.

• Use the cursor control key to select "Connect" and press the ▯K key. Then connect the AV device to the corresponding EURO socket.

Data Logic: transferring the station table

• Press the (MENU) key to open the TV menu.

> • Press the red key ⋆ to open the menu "Configuration".
>
> • Press numeric key ❹ to select "Analogue TV".
>
> • Press the ▯K key and then press numeric key ❸ to select "Data Logic".
>
> • Press the ▯K key to transfer the program positions from the TV set to the video recorder.

F1⬆		
0	Function for F2	
9	Function for F1	
8	EURO sockets	
7	DVB-C[2]	
6	DVB-T[2]	
5	DVB-S[2]	
	Analog-TV[2]	
3	Country	3 DataLogic
2	Language	2 Terrestrial station search
1	Operating	1 Search settings

★ ★ ★

Picture-Volume
AV devices
Station table
Timer
Configuration

TV-Menu

▶ Start data transfer   Program position

❸

OK

2) Possible only on sets equipped with this function.

Opening the menu

☞ *The signal type always refers to the input and output of the AV device.*

Some AV devices may use a composite video signal (FBAS) for recording and playback operations and an RGB signal for displaying their menus.

It is not possible to make a general statement in this respect. The operating instructions of the AV device concerned may provide some indication.

If you connect such an AV device with the signal type "composite video" (FBAS) and recordings are played back correctly, but you cannot see the menu of the AV device, you must change the signal type in the menu "AV devices" to "RGB".
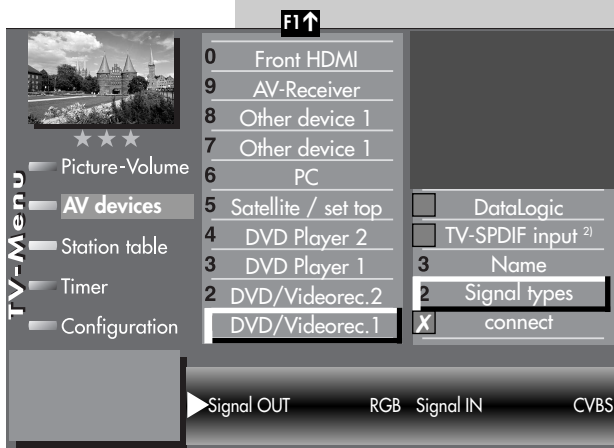
Setting the signal type

• Press the (MENU) key to open the TV menu.

• Press the yellow key 🎵 to open the menu "AV devices".

• Use the cursor control key to select the AV device whose signal type you wish to change and press the ☐K key.

• Press numeric key ❷, use the cursor control key to select " Signal OUT", and use the **V-/V+** key to change the setting to "RGB".

• Press the ☐K key to confirm your selection.

• Press the (EXIT) key to close the TV menu.

☞ *Caution ! This may cause an existing connection diagram to be modified. If so, you must reconnect the AV devices accordingly.*
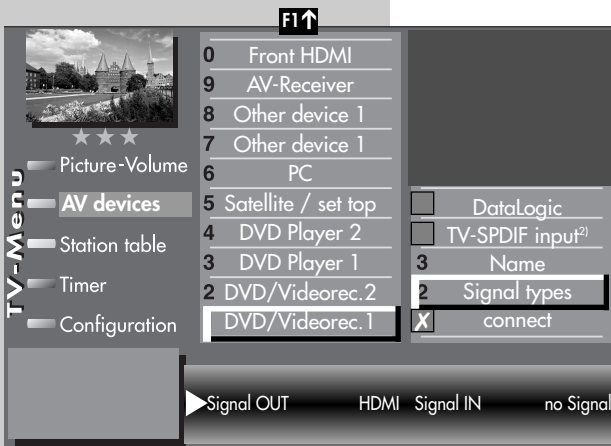
(MENU)

🎵

▶

❷

+ ◇ +
− −

F1↑

0	Front HDMI	
9	AV-Receiver	
8	Other device 1	
7	Other device 1	
6	PC	

★ ★ ★
Picture-Volume
AV devices
Station table
Timer
Configuration

TV-Menu

5	Satellite / set top	☐ DataLogic
4	DVD Player 2	☐ TV-SPDIF input [2]
3	DVD Player 1	3 Name
2	DVD/Videorec.2	2 Signal types
	DVD/Videorec.1	X connect

▶Signal OUT   RGB Signal IN   CVBS

◇ ☐K ◇

(EXIT)

2) Possible only on sets equipped with this function.

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☞ *The signal type always refers to the input and output of the AV device.*

AV devices equipped with a DVI or HDMI socket can be connected to the LCD TV with the aid of a DVI or HDMI cable, respectively.

The connected device must be registered in the menu "AV devices" with "Signal OUT" set to "DVI" or "HDMI", as applicable. Connection via a DVI or HDMI interface permits digital transfer of the picture signal from the device to the TV set. The sound signal must be connected with an additional Cinch or optical (Toslink) audio cable.

Setting the signal type DVI or HDMI

(MENU)

[♫]

▶

❷

• Press the (MENU) key to open the TV menu.

• Press the yellow key [♫] to open the menu "AV devices".

• Use the cursor control key to select the AV device whose signal type you wish to change and press the ☐K key.

• Press numeric key ❷, use the cursor control key to select " Signal OUT", and use the **V-/V+** key to change the setting to " RGB".

F1 ↑			
0	Front HDMI		
9	AV-Receiver		
8	Other device 1		
7	Other device 1		
6	PC		
5	Satellite / set top		DataLogic
4	DVD Player 2		TV-SPDIF input[2)
3	DVD Player 1	3	Name
2	DVD/Videorec.2	2	Signal types
	DVD/Videorec.1	X	connect

★ ★ ★
Picture-Volume
AV devices
Station table
Timer
Configuration

▶Signal OUT   HDMI Signal IN   no Signal

• Press the ☐K key to confirm your selection.

• Press the (EXIT) key to close the TV menu.

☞ *Caution ! This may cause an existing connection diagram to be modified. If so, you must reconnect the AV devices accordingly.*

☐OK

(EXIT)

2) Possible only on sets equipped with this function.

30.2 Registering AV Devices Setting signal types YUV[2)]

Opening the menu

Connection of external devices with YUV[2)] component output to the "COMPONENT IN" RCA jacks.

☞ *The signal type always refers to the input and output of the AV device.*

AV devices equipped with a YUV jack[2)] can be connected to the LCD TV by means of a YUV cable (see page 116). In the "AV Devices" menu, the connected AV device must be registered with signal OUT "YUV".

The connection of the analogue YUV source using the RCA jacks to the YUV input[2)] of the LCD TV depends on the output format of the signal source. For YUV, the sound must be connected in addition via a Cinch or optical audio cable (Toslink). Configure the following settings, depending on the output format of your signal source:

Setting the YUV[2)] Signal Type

- Enter the TV menu by pressing (MENU) .
- Press the yellow key 🎵 to open the "AV Devices" menu.
- Use the cursor control to select the AV device whose signal type you want to change and press □K.
- Press numeric key ❷, use the cursor control to select "Signal OUT", and use the **V-/V+** key to set "YUV" or "YUV (HD)".
- Confirm the setting by pressing □K.
- Exit the "TV Menu" by pressing (EXIT) .

☞ *Caution ! This may cause an existing connection diagram to be modified. If so, you must reconnect the AV devices accordingly.*
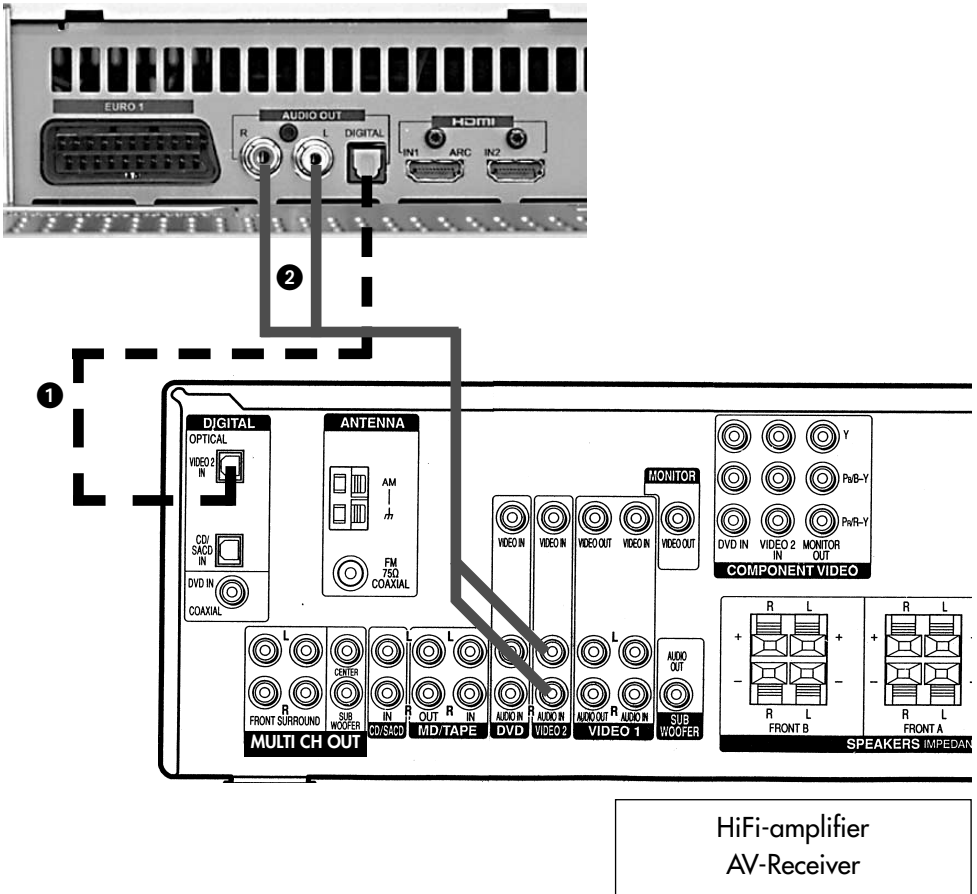
(MENU)

🎵

▶

❷

[cursor control + / − key image]

F1↑

★ ★ ★

TV-Menu		
▬ Picture-Volume	0	Front HDMI
▬ **AV devices**	9	AV-Receiver
▬ Station table	8	Other device 1
▬ Timer	7	Other device 1
▬ Configuration	6	PC
	5	Satellite / set top
	4	DVD Player 2
	3	DVD Player 1
	2	DVD/Videorec.2
		DVD/Videorec.1

☐ DataLogic
☐ TV-SPDIF input[2)]
3 Name
2 Signal types
X connect

▶ Signal OUT   YUV   Signal IN   no Signal

◇□K◇

(EXIT)

2) Possible only on sets equipped with this function.

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30.3 Connecting a Hifi Amplifier/AV Receiver

Metz LCD-TV

❶ Digital audio signal formats (depending on the source)
❷ analogue audio signal R+L (stereo)

30.3 Connecting a Hifi Amplifier/AV Receiver

Registering the AV Device with the TV

- Enter the TV menu by pressing "MENU".

- Press the yellow key ✆ to open the "AV Devices" menu.

- Use the cursor control key ▲ to select "Hifi Amplifier" in the device selection.

- Press "OK" twice, use the cursor control key ▲ to select "Signal Types", and press "OK"..

- For connection type ❶, select the signal type "Signal IN - SPDIF".
  For connection type ❷, select the signal type "Signal IN – Stereo".
  Confirm the setting by pressing "OK"
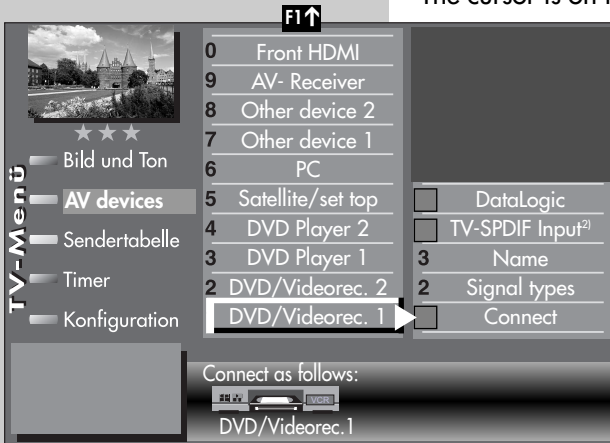
- Press the "**EXIT**" key to close the TV menu.

Sound:

- To configure the sound settings of the LCD TV, press the yellow key 🎵 and use the cursor control key ▼ to select the menu item "Sound via ...".

- For connection type ❶, use the **V-/V+** key to select "Sound via Hifi".
  The speakers of the LCD TV are muted. The sound (AC3 or stereo sound) is rendered over the speakers of the Hifi set.

- For connection type ❷, use the **V-/V+** key to select "Sound via surround".

The speakers of the LCD TV are used as the centre box. The sound (AC3 or stereo sound) is rendered over the speakers of the Hifi unit.

30.4 Removing AV Devices

☞ *This menu item is not available in a 2 ** menu.*

If desired, you can change the factory settings for AV devices (a video recorder on the EURO1 socket and a DVD player on the EURO2 socket[2]).

Removing an AV device from the TV set

- Press the (MENU) key to open the TV menu.

- Press the yellow key 🎵 to open the menu "AV devices".

- Use the cursor control key to select the device you wish to remove and press the ☐K key. The cursor is on the line "Connect".

(MENU)

🎵

▲

OK

F1↑			
0	Front HDMI		
9	AV- Receiver		
8	Other device 2		
7	Other device 1		
6	PC		
5	Satellite/set top	☐	DataLogic
4	DVD Player 2	☐	TV-SPDIF Input[2]
3	DVD Player 1	3	Name
2	DVD/Videorec. 2	2	Signal types
	DVD/Videorec. 1 ▶	☐	Connect

★ ★ ★

Bild und Ton

AV devices

Sendertabelle

Timer

Konfiguration

TV-Menü

Connect as follows:

DVD/Videorec.1

- Press the ☐K key again. A message is displayed, asking if you really want to change the connected device.

- Press the ☐K key again to remove the connected device.

- Press the (EXIT) key to close the TV menu.

☞ *Caution ! This may cause an existing connection diagram to be modified. If so, you must reconnect the AV devices accordingly.*

EXIT

2) Possible only on sets equipped with this function.

31. Copying between AV Devices Direct recording

Opening the menu

☞ *Re-recording is only possible from the front sockets (see p. 115) on the EURO1 socket or EURO2 socket[2)] or from the EURO1 socket to the EURO2 socket[2)].*

If you wish to copy a recording from one of the AV devices connected to your TV set (such as a DVD player) to another connected AV device (such as a video recorder), you must do this by means of a direct recording operation. In this case, the signal arriving at one of the EURO sockets is redirected to the other EURO socket, from where it can be recorded.

Example: you have a DVD player and a video recorder connected to the EURO sockets of the TV set (see Section 30).

Programming a direct recording for copying:

- Press the ◻/AV key and use the corresponding numeric key to select the DVD player (playback device).

- Press the **F2** key.
  Briefly pressing **F2** executes the function which is programmed for this function key (see Section 18, "Programming function keys").
  Pressing and holding **F2** for about three seconds displays all functions available for this function key.

- Press **numeric key 0** to open the timer menu. The timer window displays the AV program position (DVD player), the current date and a time window of two hours.

- If two hours is insufficient for the copying operation, use the numeric keys to enter a later end time.

○/AV

2

▶ 2	**DVD-Player**
1	**Videorecorder**

AV Select with 0...9
or ◄◆►
Confirm with OK

F2

0

Recording	Yes
Reminder	No
Pr AV 2	
VD-Player	
Date	01.05.
Start	22:45
End	23:40
VPS	no
Recording device	
Videorecorder	

Change with ▬ +
◆ :select
OK :save the timer

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31. Copying between AV Devices Direct recording

- Use the cursor control key ▼ to select the line "Recording device".
  If only one such device exists, it is then displayed. If further recording devices exist, you can select the desired device with the aid of the **V-/V+** key.

- Press the ☐K key to save the settings.

- On the playback device (in this example, the DVD player) start the film which is to be copied.

- On the recording device (in this example, the video recorder), select the AV program position (in most cases AV1).

- On the recording device, start a direct recording by pressing the appropriate button (**REC** or **OTR**, etc.).

The TV set is now set up so that the signal coming from the playback device is connected directly to the recording device.

32. Inserting/Removing CA Modules

The LCD TV has two slots (CI1 / CI2) for CA modules at the top (card reader for smartcards or decoder cards).

To insert the CA module, open the lid on the top of the LCD TV and insert the CA module in one of the slots as shown in the pictures. Press the CA module down until the unlocking bar is lifted up.
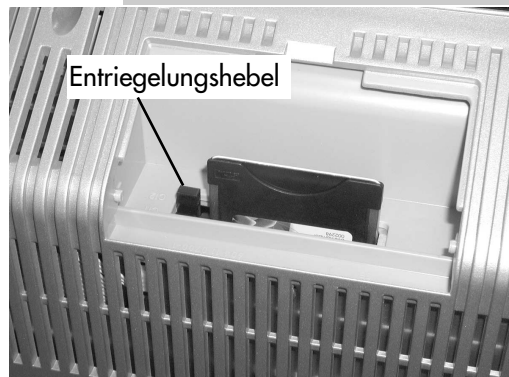
Close the lid.

The LCD TV is now ready to decode the respective station.

Chip

Front view

Back/top view (without lid)

Entriegelungshebel

Back view (without lid) with inserted module

33. Connecting a PC: PC [VGA] ➜ TV set [DVI-A]

Start your PC and preset the resolution to 1024 x 768p 60 Hz. Exit windows and turn the PC off.

VGA ➜ DVI-A setting

- Call up the TV menu with the key (MENU) .
- Open the "AV devices" menu with the yellow button 🎵 .
- Use the cursor control key ▲ to select the "PC" AV device and then press the key ☐K. Use the cursor control key ▲ to go to the "Signal types" menu item and press. ☐K. the settings must be made as shown in Figure 1a.
- Exit the menu with the key (EXIT). . Press the key ☐/AV for approx. three seconds and then select the AV device "PC".
- Connect the VGA output of the graphic card of the PC with the DVI input of your TV set with a multimedia cable (VGA, 15pol. (plug) to DVI (plug) (Picture 2).

- Switch the PC on. When the picture of the PC is shown on your TV for the first time, a box is displayed on the bottom edge of the screen with the resolution that has been set, e.g.:

> Video: 1024 x 768 60Hz

☞ *You can call up this information at any time by pressing the green 🕐 button.*

While Windows is starting, data is exchanged between the graphics card and the TV. The possible resolutions are determined in the process.

When the start-up procedure is finished, you can set the resolution as you wish (recommended = 1360 x 768 - 60 Hz.) in the Windows menu "Display characteristics".

For PC sound from the speakers of your TV, see page 132.

---

fig. 1a

0	Front HDMI
9	AV-Receiver
8	Other device 1
	Other device 1
6	PC
5	Satellite / set top
4	DVD Player 2
3	DVD Player 1
2	DVD/Videorec.2
1	DVD/Videorec.1

Picture-Volume
AV devices
Station table
Timer
Configuration

TV-Menu ★ ★ ★

F1↑

3 Name
2 Signal types
X Connect

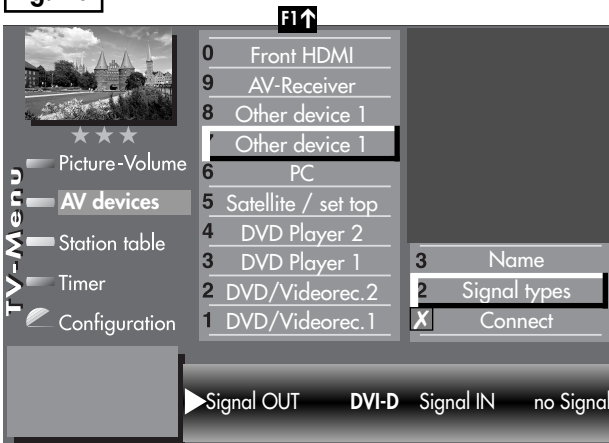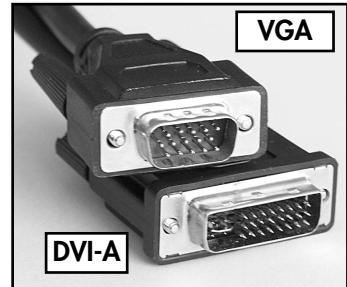▶Signal OUT   **DVI-D** Signal IN   no Signal

fig. 2

VGA

DVI-A

33. Connecting a PC: PC [DVI-D] ➜ TV set [HDMI]

Start your PC and preset the resolution to 1024 x 768p 60 Hz. Exit windows and turn the PC off.

Setting DVI-D ➜ DVI-D

- Call up the TV menu with the key (MENU)
- Open the "AV devices" menu with the yellow button 🎵 .
- Use the cursor control key ▲ to select the "PC" AV device and then click the key ☐K . Use the cursor control key ▲ to go to the "Signal types" menu item. The settings must be made as shown in Figure 1b.
- Exit the menu with the key (EXIT). Press the key ☐/AV for approx. two seconds and then select the AV device "PC".
- Use a commercial multimedia cable (DVI-D ➜ DVI-D, **fig. 3**) to connect the DVI-D output of the graphics card of the PC to the DVI-D input of your TV set.
  Switch the TV on.
- Switch the PC on. When the picture of the PC is shown on your TV for the first time, a box is displayed on the bottom edge of the screen with the resolution that has been set, e.g.:

> Video: 1024 x 768 60Hz

☞ *You can call up this information at any time by pressing the green ⊙ button.*

While Windows is starting, data is exchanged between the graphics card and the TV. The possible resolutions are determined in the process.

When the start-up procedure is finished, you can set the resolution as you wish (recommended = 1360 x 768 - 60 Hz.) in the Windows menu "Display characteristics".

---

fig. 1b

F1↑	
0	Front HDMI
9	AV-Receiver
8	Other device 1
	Other device 1
6	PC
5	Satellite / set top
4	DVD Player 2
3	DVD Player 1
2	DVD/Videorec.2
1	DVD/Videorec.1

★ ★ ★

Picture-Volume
AV devices
Station table
Timer
Configuration

TV-Menu

3	Name
2	Signal types
X	Connect

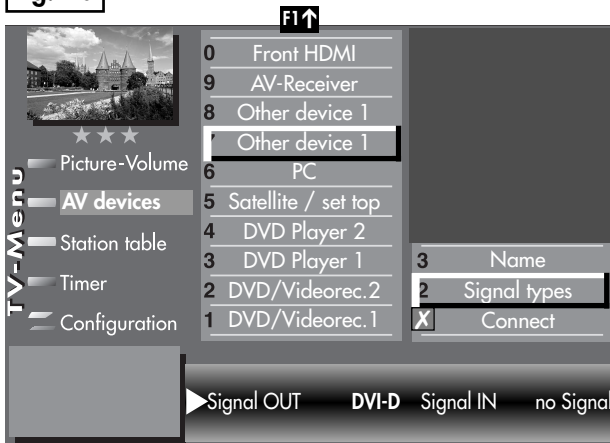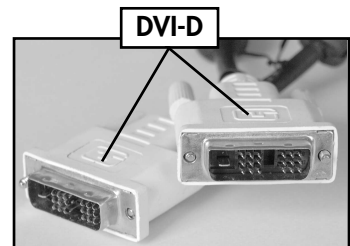▶ Signal OUT   **DVI-D**   Signal IN   no Signal

fig. 3

DVI-D

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33. Connecting a PC: PC [HDMI] → TV set [HDMI]

If the graphics card of your PC has an HDMI output, then you can also use it to connect to the TV. To do this, proceed as described in this chapter (connect PCl (*PC [DVI-D]* → TV set *[DVI-D]* and in the menu AV - PC - Signal Types - Signal OUT, select the HDMI setting.

☞ *In this setting, sound is also transmitted via the HDMI cable but it must support the HDMI output of the graphics card of your PC.*

33.1 Connecting a PC: sound from the speakers of TV

Use a commercial audio cable with 3.5 mm stereo jack plugs to 3.5 mm stereo jack plugs to connect the Audio Line output of the sound card to the Audio-In input of the TV.

Audio-In of TV

Speaker output of PC sound card

Audio-In
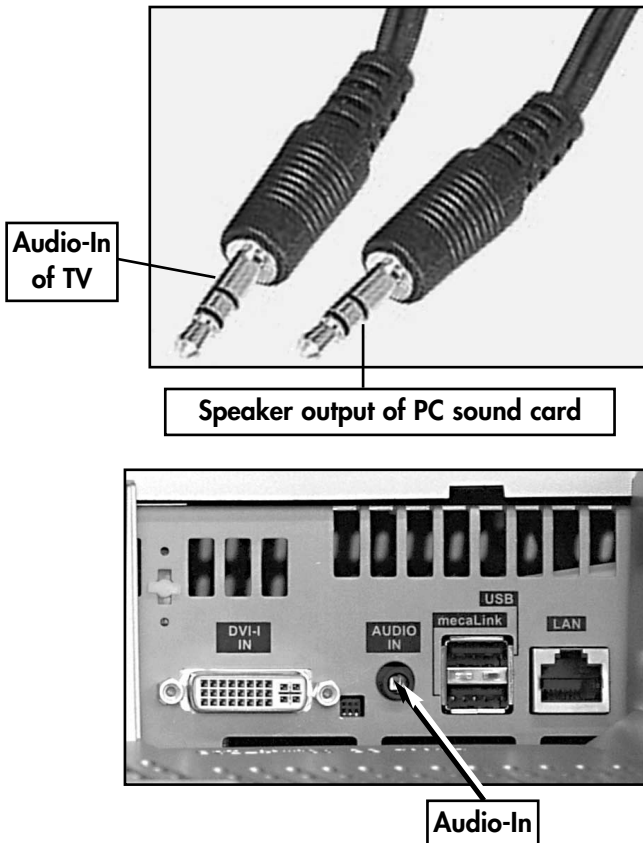
34. Glossary

Automatic zoom

When the automatic zoom function is active, programs broadcast in "widescreen format" (such as those in the 16:9 format) are expanded to fill as much of the screen as possible.

If this function is inactive, the format of such programs is not adjusted automatically.

AV program position

AV devices have one or more connection sockets, depending on the model. The designations of these sockets are marked on the device (e.g. AV1).

On the AV device, you can select which socket you want to use. The selected socket is shown on the display of the AV device (e.g. A1 for socket AV1).

Motion compensation, movie

"Motion compensation, movie" improves the picture display for black and white or cinema movies. Motion becomes smoother and a more three-dimensional picture appearance results.

Motion compensation, video

"Motion compensation video" improves the picture display for studio recordings, e.g. the news or documentaries.

Picture position, vertical

With widescreen films, subtitles are sometimes transmitted in the black area at the bottom of the screen. You can move the picture upwards on the screen to ensure that these subtitles remain visible.

Picture profile

Standard: Compromise for all applications
Sports: Setting for sports stations or sports programs
Brilliant: Setting for animated films, DVD players and Blue Ray players
Games: Preferred setting for recordings from game consoles
PC Monitor: Preferred setting for recordings from a connected PC.
User: Your self-configured picture profile

Code

The settings for the childlock function are protected by a four-digit code: you can enter any desired code, but you should note it for future use. If you have forgotten your code, please consult your local dealer.

Dyn. image sharpness

The "Dynamic image sharpness" setting facilitates an automatic increase to the sharpness of the picture in the event of a low level of sharpness.

34. Glossary

Dyn. Contrast

The "Dynamic contrast" setting facilitates an automatic increase of the picture contrast in the event of a low level of picture contrast.

Fine search

During the station search with a stipulated symbol rate, the channels are synchronised at the centre of the channel. If this setting does not lead to a satisfactory result, fine tuning can then be set. The search operation takes considerably longer with the fine search set.

Backlighting

The backlighting (given in %) is the basic value that is set in accordance with the light conditions in the room in which the TV set is located. The basic setting should be carried out in a dark room so that black picture content is still black.

Image sticking

Images that remain unchanged for a long time (several hours), such as still pictures, result in "image sticking", i.e. lasting shadow formation.
Such images should be avoided if at all possible. This effect is reversible and disappears again after a short time.

Tone settings

The tone can be set to either "Normal" or "Speech". In the setting "Speech", the bass and treble components of the sound signal are set to make speech as easy to understand as possible. The setting "Normal" is recommended for music programs.

Volume correction

The various stations broadcast their sound at different volumes. The TV set can automatically compensate for these differences in the volume. This function remains active even if the standard sound settings are recalled.

Search setting

1 free-to-air programs, all non-encrypted stations are sought.
2 all programs, all non-encrypted and encrypted stations are sought. If a CA module and smart card are inserted, the corresponding encrypted stations are released.
3 free and CICAM programs, all non-encrypted and all encrypted [programs] for the smart card inserted in the CA module, are sought.

Standard values

The standard values are the settings (such as brightness, sound volume, colour, etc.) which are the same for all program positions.

Panorama

The panorama function can be used to expand "normal" TV programs broadcast in the 4:3 format to fill the full width of a 16:9 screen. This is done by expanding the picture width accordingly.

34. Glossary

Noise reduction

This function allows you to improve the picture quality of "snowy" pictures which result from poor reception conditions. Various levels of noise reduction can be selected and the settings can be made separately for each program position.

Symbol rate (baud rate)

The symbol or baud rate describes the data volume that is transmitted per second. The time required for the search function increases in proportion to the symbol rate.

VCR

The VCR function provides an optimal picture quality when playing back recordings from tape devices such as camcorders or video recorders.

Forced mono

It may happen that your TV set switches to stereo mode although the program you are watching is not broadcast with stereo sound. This is normally due to the local reception conditions. If you set the selected program position to "forced mono" all programs received at this program position are reproduced with mono sound.

35. Problem, Possible cause, Remedy

Problem	Possible cause	Remedy
TV set does not react to commands from the remote control	• No line of sight between the remote control and the TV set. • Sunlight is shining directly on the infrared window of the TV set. • Batteries of the remote control are exhausted. • TV set has been switched off with the main power switch. • Fault in the internal processor.	• Remove any obstacles between the units. • Prevent sunlight from shining on the set. • Replace the batteries. • Switch on the TV set with the main power switch. • Switch off the TV set with the main power switch, wait a few seconds and then switch it on again.
The message "Enter code" is displayed when the TV set is switched on.	• The childlock is active and was programmed to disable all stations.	• Enter the code you used when programming the childlock.
The TV set will not switch to a selected program position. A teddy bear is displayed instead.	• The childlock is active and was programmed so that only the stations shown in the list beside the teddy bear may be selected.	• Enter the code you used when programming the childlock.
You have switched off the TV set with the ⏻ key, but the green LED remains on.	• EPG data are currently being collected from the programmed EPG station.	• None. When all data have been collected, the TV set will switch itself off automatically.
No sound is output on the TV speakers	• "Speaker off" or "Speaker centre" is set in the "Configuration" – "Operation" – "Sound settings" TV menu.	• In the "Configuration" – "Operating" – "Sound settings" TV menu, set "Speakers on"

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35. Problem, Possible cause, Remedy

Problem	Possible cause	Remedy
Direct recording of an analogue terrestrial station (received via roof antenna or cable) with Data Logic does not work.	• The Data Logic video recorder is not connected to the roof antenna or cable outlet with a suitable cable.	• Connect the Data Logic video recorder to the roof antenna or cable outlet with a suitable cable.
General problems with an external AV device connected to the TV set.	• The AV device has not been registered in the TV set.	• Open the menu "AV devices", select the device with the cursor, set the signal types (OUT/IN) correctly and press the □K key. Make sure that you connect the AV device as shown in the connection diagram.
Data Logic does not work.	• The Data Logic video recorder with data transfer has not been registered correctly. • The Scart cable does not have all pins connected through.	• Open the menu "AV devices" and register the Data Logic video recorder as video recorder 1 with "Data Logic On". • Use a Scart cable in which all pins are connected through.

35. Problem, Possible cause, Remedy

Problem	Possible cause	Remedy
A film in 16:9 format is played back from an AV device, but is displayed in 4:3 format.	• The picture format for this program position has not been set correctly in the TV menu.	• Select the AV program position and set the picture format to 16:9 or "Automatic" (see Chap. 10.4).
The menu of a connected AV device (such as a DVD player) is not visible on the TV screen.	• The AV device has been registered in the TV menu with the signal type "Composite video".	• Register the AV device with the signal type "RGB" (see Chap.30.2).

36. Upgrade Kits

• **PVR hard disc 095 NS 1727 (500 GB)**

for the digital recording and playback of DVB programs (including HDTV). Also offers the option of time shift TV (timeshift mode).

• **PVR hard disk 095 NT 1418 (750 GB)**

for the digital recording and playback of DVB programs (including HDTV). Also offers the option of time shift TV (timeshift mode)

• **EC-Modul 033 NT 1444 (Encoder-Modul)**

Also enables the recording of analogue TV programs in conjunction with the hard disc recorder.
Only possible in conjunction with an ET module.

• **DVB-CTS2 twin Nachrüstsatz 088NT2664 (ET-Modul)**

Tuner for the reception of digital terrestrial, digital cable and digital satellite and satellite HDTV stations for TV and radio programs. The DVB upgrade kit is installed in the TV instead of the CT or S2 tuner no additional remote control is required.

• **Double-CI+ slot 020NT120A**

For decoding two different encrypting systems.
In the case of PVR use for recording an encrypted station while simultaneously watching another encrypted station.

• **mecaHome+ radio control unit 017ZR10G3**

Innovative technology from Metz and Moeller ensures effective couch management.
(Only in combination with the 014ZT144A adapter)

• **Metz Soundsystem 80 (014LR7043)**

Active 2.1 Virtual Surround System for home theatre and hi-fi enjoyment

• **Metz Soundsystem 100 (014LR9048)**

Active 2.1 Virtual Surround System for home theatre and hi-fi enjoyment

36. Upgrade Kits

• **Metz Soundsystem LS 5.1 W (014LR5143)**

Active 5.1 Virtual Surround System for home theatre and hi-fi enjoyment

• **Adapter RS232 on USB 014ZT144A**
for connecting Metz Sound Systems 80 and 100 and mecaHome+ radio control unit.

• **LAN-network connecting**
after an update by the specialist dealer the LAN socket can be released.

For further information and other retrofit kits, please contact your TV dealer.

You can also find further information on our homepage: www.metz.de.

37. Technical Data

Mains voltage:
230-240 VAC, 50Hz

Antenna input:
75 Ohms, unbalanced DIN 45325

Channel coverage:
Standard channels 2 - 12, 21 - 69
Special channels S1 - S20, S21 - S41,
S42 ... S46 (Belgium channels OIR)

Operating temperature range:
+5°C to +35°C at 75 % air humidity

Energy consumption per hour (Wh):

Multiply the power consumption in W by 1 hour

Stand-by   < 0,3 W

37. Technical Data

Power consumption		Power consumption**	Power consumption in eco mode (condition on delivery) (IEC 62087 Ed. 2)	Music output power to DIN 45324 into 4Ω (at 1 kHz) (sinusoidal power) *) into 8Ω
HDTV inside	Axio pro 26 LED CTS2 Z	ca. 63 W	ca. 49 W	2 x 20 W (2 x 12 W)
HDTV inside	Axio pro 32 LED 200 CTS2 Z	ca. 87 W	ca. 59 W	2 x 20 W (2 x 12 W)
HDTV inside	Axio pro 37 LED 200 CTS2 Z	ca. 109 W	ca. 69 W	2 x 20 W (2 x 12 W)
HDTV inside	Axio pro 42 LED 200 CTS2 Z	ca. 130 W	ca. 79 W	2 x 20 W (2 x 12 W)
HDTV inside	Linus 32 LED 200 CTS2 Z	ca. 89 W	ca. 61 W	2 x 20 W (2 x 12 W)
HDTV inside	Linus 37 LED 200 CTS2 Z	ca. 110 W	ca. 70 W	2 x 20 W (2 x 12 W)
HDTV inside	Linus 42 LED 200 CTS2 Z	ca. 132 W	ca. 80 W	2 x 20 W (2 x 12 W)
HDTV integriert	Caleo 37 LED 200 Media twin R	ca. 111 W	ca. 73 W	2 x 20 W (2 x 12 W)
HDTV integriert	Caleo 47 LED 200 Media twin R	ca. 130 W	ca. 80 W	2 x 20 W (2 x 12 W)
	DVB-Radio mode	—	ca. 25 W	—

Power consumption

** The power consumption was determined with the
Backlighting-Control off (see p. 29). Depending on the parameters set then, the
value shown here can be lower and therefore mean save power.

37. Technical Data

Supported in and output signals

HDMI IN

SDTV	640x480p	60 Hz
	720(1440)x576i	50 Hz
	720(1440)x480i	60 Hz
	720x576p	50 Hz
	720x480p	60 Hz
HDTV	1920x1080p	24Hz/ 50Hz/ 60Hz
	1920x1080i	50Hz/ 60Hz
	1280x720p	50Hz/ 60Hz
PC	640x480p	60 Hz
	800x600p	60 Hz
	1024x768p	60 Hz
	1280x800p	60 Hz
	1280x1024p	60 Hz
	1360x768p	60 Hz
	1400x1050p	60 Hz
	1440x900p	60 Hz
	1600x1200p	60 Hz
	1680x1050p	60 Hz

HDMI Audio: Linear PCM Stereo 32kHz/ 44.1kHz/ 48kHz

EURO1
RGB IN: 576i 50Hz, 480i 60Hz
Y/C IN: PAL 576i 50Hz, NTSC 480i 60Hz
FBAS IN: PAL 576i 50Hz, NTSC 480i 60Hz, SECAM 576i 50Hz, PAL 60
FBAS OUT: Yes (dependent on the AV-equipment)
Audio IN: Analog Stereo (Line-IN)
Audio OUT: Analog Stereo (Line-OUT)

DIGITAL AUDIO OUT SPDIF (Linear PCM Stereo bzw. Dolby Digital, dependent on the AV-equipment)

AUDIO OUT   Analog Stereo (Line-OUT)

AUDIO IN   Analog Stereo (Line-IN)

Front AV
FBAS IN: PAL 576i 50Hz, NTSC 480i 60Hz, SECAM 576i 50Hz, PAL 60
Audio IN: Analog Stereo (Line-IN)
Headphone OUT: Headphoneimpedance >= 32 Ohm

Battery disposal

Do not dispose of batteries with domestic rubbish! Please return spent batteries to collecting points should they exist in your country.

Please only return fully discharged batteries. Normally, batteries are fully discharged if the device they power

• switches itself off and indicates "batteries spent"

• they no longer function flawlessly after prolonged use.

To prevent short circuits, please cover the battery poles with adhesive tape strips.

These symbols can be found on batteries containing harmful substances:

Pb = the battery contains lead

Cd = the battery contains cadmium

Hg = the battery contains mercury

Li = the battery contains lithium

Your Metz product was developed and manufactured with high-quality materials and components which can be recycled and/or re-used.

This symbol indicates that electrical and electronic equipment must be disposed of separately from normal garbage at the end of its operational lifetime.

Please dispose of this product by bringing it to your local collection point or recycling centre for such equipment.

This will help to protect the environment in which we all live.

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Errors excepted. Subject to changes !

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Metz - Werke GmbH & Co. KG - Zirndorf near Nürnberg

❶ Service Centre
❷ Training Centre
❸ Administration and development
❹ Storage/Dispatch
❺ Mecablitz production
❻ TV production
❼ Plastics technology

Core competence in the areas of electronics and plastics technology to form the basis of the excellent reputation of the Metz Werke that has been built up throughout the world over a period of many decades.

Metz offers quality made in Germany:
Consumer electronics, mecablitz flash units,
plastics technology and industrial electronics.

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