OPERATING INSTRUCTIONS
Linea FHDTV 100
Linea LED 100
with Chassis 611

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 9 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.

Your METZ-WERKE

2

Contents

Contents

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
  - Approx. 3.2 m (10.3 ft) for 42" screens
  - Approx. 4.2 m (13.8 ft) for 55″ screens
    This distance can also be reduced by one half for HDTV.

- 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.

- If you want to mount the TV set on the wall, only Metz wall brackets should be used. Furthermore, only specialists should carry out such work.

- The TV set should not be mounted on the ceiling.

- To prevent injuries, the TV set must be fastened safely to the floor / wall in accordance with the installation instructions.

- Strong tobacco consumption at the installation location of the 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 replace 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 (on the back of the TV set)

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

Power connector
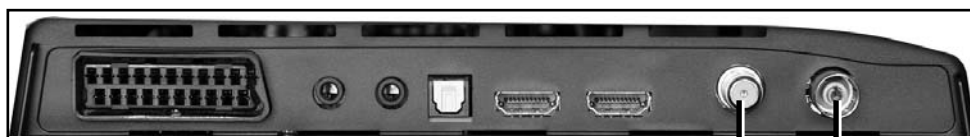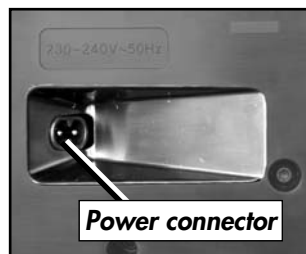
Antenna connector (Back of the TV set at the bottom)

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

DVB-S2   DVB-CT
Antenna connector

Switching on

Switch on the TV set with the main switch.

the TV set switches to programme position 1 or to the programmed initial programme position (see page 104)

Switching on

> **i** *If no other command is received from the remote control, a message will appear after approx. 10 minutes asking for one of the remote control keys to be pressed. If no command is received from the remote control, the TV set is switched to stand-by mode.*

1.2 Connecting and switching on

Switching on from stand-by mode

Use the numeric keys of the remote control to select any programme.
Programme position 1 is selected by pressing the key 🔘 or TV. If an initial programme position has been configured, this will be switched on. See also chapter 24 – Initial Programme Position.

The LED is green.

Switching off

You can switch the TV set to stand-by mode by pressing the key 🔘 on the remote control.

a) If EPG data is collected when the TV set is stand-by mode, the orange LED will light up (see also chapter 19.2 Collecting EPG data).

b) If the red stand-by indicator is on, we recommend cutting the power to the TV set by pressing the power switch.

Delivery contents

- TV set
- Remote control plus 2 AAA batteries
- Power cable
- User guide

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 jeopardize
  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.

- For maintenance and repair work, the power plug or the power-cord input of the TV represents a means to disconnect the device from the mains and must therefore be kept in a usable state in line with applicable standards.

- Lay the power cable so that nothing stands 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.

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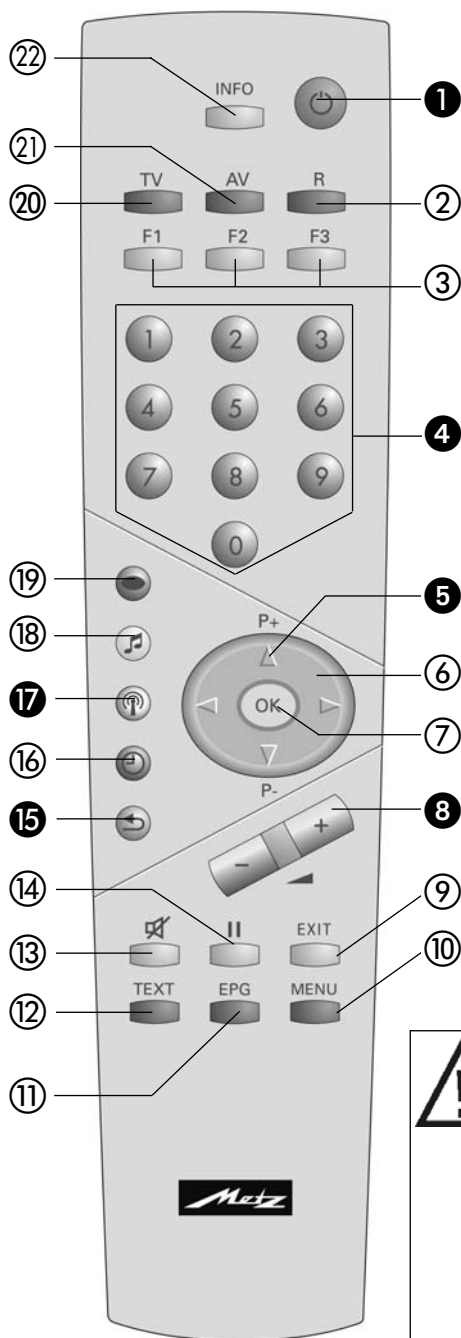
The remote control sends commands to the TV set by means of an infrared signal. You must point it towards the TV set when using it. Note that the remote control may interfere with the operation of other devices which use infrared signals (such as infrared headphones).

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.

The most important keys for normal use

❶ ON
Switches the TV set on with programme position 1 or the programmed initial programme position selected, or switches it OFF (to the standby state).

❹ Numeric keys (direct station selection).

❺ P+ /P- Selects the next/previous programme position.

❽ Volume control.
Setting can be changed in the menu.

⓯ Back to the previously selected station.

⓱ Displays the station table.

⚠ **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 The Remote Control

Overview of the functions of the keys

② Switch to DVB radio mode.
Switch on from the standby state into radio mode[1].

③ Function keys:
F1/F2/F3: **press briefly** to call the functions set in the factory.
F1/F2/F3: **press and hold** to display a selection of special functions.
AV: press to select one of the previously configured AV devices.

⑥ Cursor control key in the "Information" window and the "TV menu".

⑦ OK: confirmation key.

❽ Volume control; values can be set in the TV menu.

⑨ Exit key: exit from the menu without saving any changes you have made.

⑩ Open the TV menu.
In the menu: back to the main menu.

⑪ Open the electronic programme guide (EPG).

⑫ Open the Teletext window.

⑬ Mute.

⑭ Freeze frame.

❶❺ Back to the previously selected station.
In the TV menu: open the "Configuration" menu.

⑯ Display the date and time.
In the TV menu: open the "Timer" window.

❶❼ Display the station table.
In the TV menu: open the station table or the station features window.

⑱ Display the sound functions.
In the TV menu: open the "AV devices" window.

⑲ Display the picture functions.
In the TV menu: open the "picture and sound" window.

⑳ Back to the TV picture.
Switch from radio mode[1] to TV mode.
Switch on from standby mode into TV mode.
Split-Screen in Teletext

㉑ Display the AV menu "Replay/record".
Switch on from standby mode into AV mode.

㉒ Display the "Information" window. In the "Information" window:
back to the table of contents.

1) Possible only in DVB mode !

4 Daily Operation
sound and picture

Colour intensity	
Brightness	**65%**
Profil	

Sharpness	
Colour intensity	**50%**
Brightness	

Noise reduct.	
Sharpness	**7**
Colour intensity	

MPEG noise red.	
Noise reduct.	**light**
Sharpness	

Colour impr.	
MPEG noise red.	**med.**
Noise reduct.	

Sound mode	
Tone settings	**normal**
Sound mode	

Sound mode	
Volume	**50%**
Tone settings	

Speakers	
Sound mode	**Stereo**
Volume	

Haedphone 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 ▼ ▲ rocker switch and adjust it with the – + key.

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

Volume settings

Use the – + 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 ▼ ▲ rocker switch and adjust it with the – + key.

The individual sound characteristics can also be saved as default values for all programmes. 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 and management of programme positions

The TV set can store the settings for up to 3000 TV stations and 3000 radio stations in so-called programme positions. You can select any of these programme positions with the numeric keys, with the oval rocker key ▼▲ 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 programme positions are occupied, it automatically becomes the "hundreds" digit.

If less than ten programme positions are occupied, the first digit you enter automatically becomes the "units" digit.
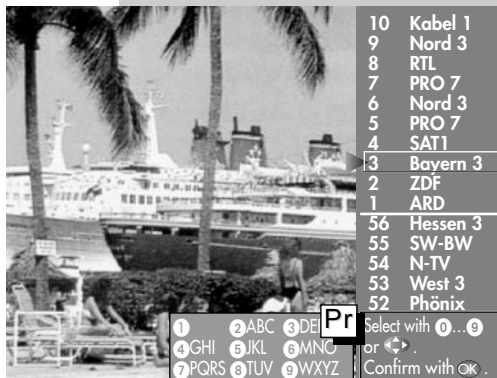
After pressing any numeric key, you have three seconds to press further numeric keys.

The programme can be changed immediately by pressing the **OK** button.

5 Selecting stations from the station table

In normal TV or radio [1] mode, you can display the station table by pressing the white 📷 key.

2 x 📷

- Programmes 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 programmes with the cursor control key ◄►. You can display the programme selected with the key "**OK**".

- 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.

10	Kabel 1
9	Nord 3
8	RTL
7	PRO 7
6	Nord 3
5	PRO 7
4	SAT1
3	Bayern 3
2	ZDF
1	ARD
56	Hessen 3
55	SW-BW
54	N-TV
53	West 3
52	Phönix

- 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 programme 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".

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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)

In the table of contents or the index, you can select

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 Programm Guide (EPG)

Select the underlined text with the cursor.
⊙ : further information   INFO : table of contents
Visited pages: ● back   ● forward

---

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 "**OK**" 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 "**OK**" 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

Opening the menu

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 "**OK**" 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 "**OK**" key, the current setting for the selected item is shown in the "Setting window" below the card file and can be adjusted with the **– +** key.

You can save the new setting by pressing the "OK" 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 **II** key.

MENU

Cursor   Subject*   Section*

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

Setting window

Related numeric keys

OK

OK

EXIT

II

* 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.

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
	Übersicht

2	Impressum
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 "**OK**" key to open the selected card.

Controlling Teletext with pages displayed:

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 BookMark
select
mark
▶ 100

00 01 02 03 04 05 06 07 08 09

Page number

Sub-pages

Blue key ⬤ – next subject.

Yellow key 🎵 – next section.

White key 🄿 – next page.

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 Videotext

F1 - 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.

F2 - Riddle key (display hidden text)

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

F3 – Marker overview [6]

If markers (bookmarks) have been set for a programme position, then a marker overview can be displayed and hidden using the **F3** key. This markers overview shows you where the markers are located. The numeric keys can be used to select specific markers.

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 "**OK**" 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 "**OK**" key to display its contents.

Setting marks in Teletext [6]

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

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.

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 programme 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 Videotext

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 programme 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 "**OK**" key and open any available page.

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

6) Not possible with an external receiver !

9 Selecting the Operating Mode

TV   AV   R

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

TV = TV mode

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

R   = DVB Radio mode [1]

1) Possible only in DVB mode !

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 programme your TV set to execute an automatic programme change at the EURO socket to which the AV device is connected.

Programming a programme change

☞ *This menu item is not available in a 2 ** menu (see Section 28, Scope of Operation).*

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

MENU

0	Function for F3	
9	Function for F2	
	EURO sockets	
7	DVB-C	
6	DVB-T	
5	DVB-S	
4	Analog-TV	
3	Country	
2	Language	
1	Operating	EURO 1

★ ★ ★
Picture-Volume
AV devices
Station table
Timer
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) or the cursor control key ▼ ▲ to select the menu item "EURO sockets".

• Press the "**OK**" key and then, in the setting window, use the **− + key** to select "Programme change on".

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

• 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.

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 programme 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 "AV devices".*

AV

5 Front-HDMI
4 HDMI2
3 EURO1
2 Camcorder/Foto
▶ **PC**

AV Select with **0**...**9**
or ✧
Confirm with **OK**

• 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 programme to the selected playback device.

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

• After watching the film from the AV device, press the "**TV**" 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 18. "Programming Function Buttons".*

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

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** or 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 pre-selected.

- 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: ⓿) to select the menu item "VCR".

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

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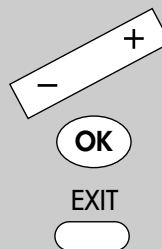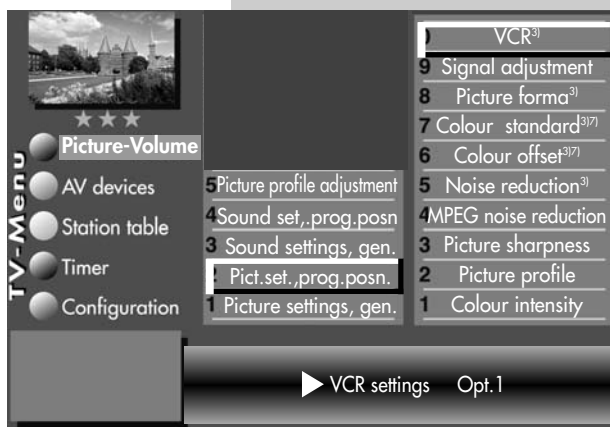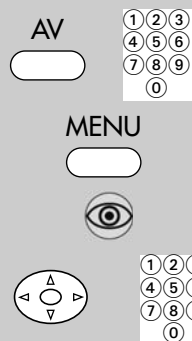
- Press the "**EXIT**" key to close the TV menu.

AV

MENU

	VCR[3]
9	Signal adjustment
8	Picture forma[3]
7	Colour standard[3][7]
6	Colour offset[3][7]
5	Noise reduction[3]
4	MPEG noise reduction
3	Picture sharpness
2	Picture profile
1	Colour intensity

Picture-Volume
AV devices
Station table
Timer
Configuration

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

▶ VCR settings   Opt.1
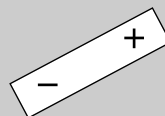
OK

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!
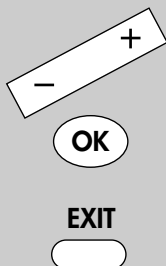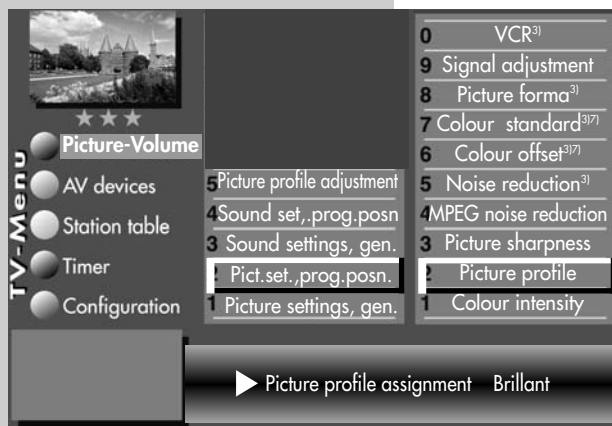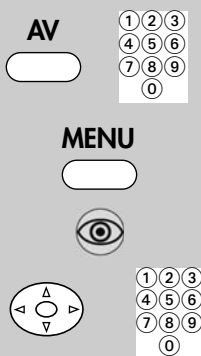
10.2 AV Playback
Picture profile

The picture profiles (see p. 31) can be allotted for individual AV programmes.

AV

①②③
④⑤⑥
⑦⑧⑨
⓪

MENU

◉

◁◇▷
△▽

①②③
④⑤⑥
⑦⑧⑨
⓪

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.

★ ★ ★	**0** VCR³⁾	• Press the cursor control key ▶ and select the "Brightness" menu item.
● **Picture-Volume**	**9** Signal adjustment	
● AV devices	**8** Picture forma³⁾	• Select "Picture profile" with the assigned numeric key.
● Station table	**7** Colour standard³⁾⁷⁾	
● Timer	**6** Colour offset³⁾⁷⁾	• Use the **– + key** to change the settings for „Picture profile selection".
● Configuration	**5** Noise reduction³⁾	
5 Picture profile adjustment	**4** MPEG noise reduction	• Save the changed setting with the key "**OK**".
4 Sound set,.prog.posn	**3** Picture sharpness	
3 Sound settings, gen.	**2** Picture profile	• Close "TV menu" with the key "**EXIT**".
2 Pict.set.,prog.posn.	**1** Colour intensity	
1 Picture settings, gen.		

▶ Picture profile assignment   Brillant

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

+

–

OK

EXIT

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

10.3 AV Playback Picture Format

Opening the menu

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

AV
① ② ③
④ ⑤ ⑥
⑦ ⑧ ⑨
⑩

MENU

◎

Setting the picture format:

- Select the AV programme position which delivers the picture by pressing the **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 ➋** to select the menu item "Pict. settings for Pr.".

- Use the corresponding numeric key (in the example: ➑) to select the function "Picture format".

- Use the **– +** 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.

① ② ③
④ ⑤ ⑥
⑦ ⑧ ⑨
⑩

Picture-Volume

Picture-Volume	0 VCR³⁾
AV devices	9 Signal adjustment
Station table	8 Picture format³⁾
Timer	7 Colour standard³⁾⁷⁾
Configuration	6 Colour offset³⁾⁷⁾
5 Picture profile adjustment	5 Noise reduction³⁾
4 Sound set,.prog.posn	4 MPEG noise reduction
3 Sound settings, gen.	3 Picture sharpness
2 Pict.set.,prog.posn.	2 Picture profile
1 Picture settings, gen.	1 Colour intensity

▶ Picture format   Auto. mode

+
–

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!

21

AV

①②③
④⑤⑥
⑦⑧⑨
⓪

MENU

◉

◁△▷▽

①②③
④⑤⑥
⑦⑧⑨
⓪
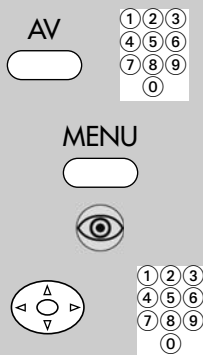
☞ *Some of the menu items are not available in a 2 ** menu.*

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:

• Press key **AV** briefly - the function programmed for **AV devices** (see Chapter 18 „Programming function buttons") is executed. Press button **AV** or approx. 3 seconds - the max. possible selection is displayed.

0	VCR[3]
9	Signal adjustment
8	Picture forma[3]
7	Colour standard[3][7]
6	Colour offset[3][7]
5	Noise reduction[3]
4	MPEG noise reduction
3	Picture sharpness
2	Picture profile
1	Colour intensity

★ ★ ★

Picture-Volume
AV devices
Station table
Timer
Configuration

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

▶ Noise reduction gen
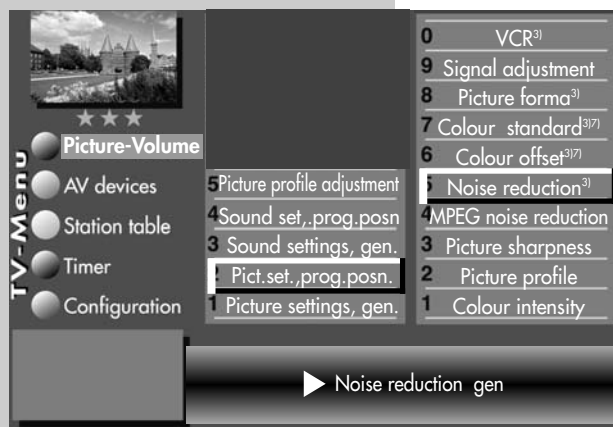
• Select the AV device that is to provide the picture with the numeric keys.
• Press the "**MENU**" key. The TV menu appears on the screen.
• Press the blue key ◉ The menu "Picture and sound" and the menu item "Picture settings, gen." is pre-selected.
• Use the cursor control key ▲ to select the menu item "Pict.set., prog.posn." and then press "**OK**".

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

• In the setting window, change the setting with the − + button.

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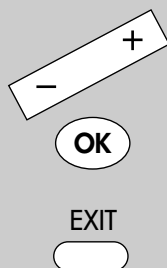
• Clear the "TV menu" with the "**EXIT**" button.

+
−

OK

EXIT

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

22

11. General Picture Settings | Opening the menu

☞ *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 programme positions and saved as **standard values** which can be recalled at any time by pressing the "**OK**" key.

MENU

⊚

◁ △ ▷ ▽

①②③
④⑤⑥
⑦⑧⑨
⓪

Opening the picture settings menu:

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

- 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".

- In the setting window, use the **– +** 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.

0 Signal adjustment
9 Picture profi selectl
8 Zoom/Panorama
7 Noise reduction
6 MPEG noise reduction
5 Picture sharpess
4 Color impr.
3 Colour intensity
2 Power options
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 **– +** key to select "Yes".

- Press the "**OK**" 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 programme positions, you can make settings for these positions which differ from the standard values. See the next sections. 11.1 and 11.2.*
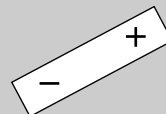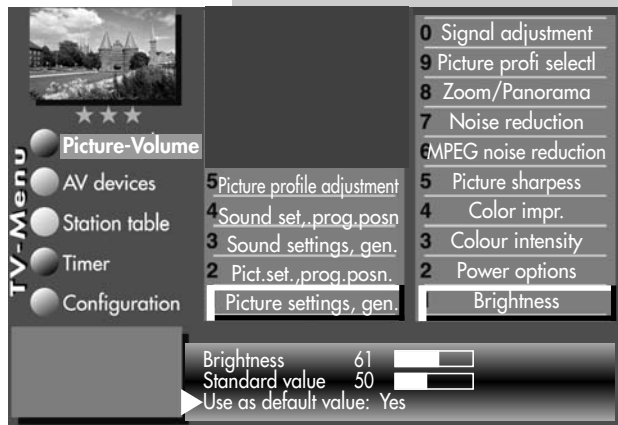
+ –

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.

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

Setting the power options:

- 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.

Picture-Volume	0 Signal adjustment
AV devices	9 Picture profi selectl
Station table	8 Zoom/Panorama
Timer	7 Noise reduction
Configuration	MPEG noise reduction
	5 Picture sharpess
5 Picture profile adjustment	4 Color impr.
4 Sound set,.prog.posn	3 Colour intensity
3 Sound settings, gen.	2 Power options
2 Pict.set.,prog.posn.	1 Brightness
1 Picture settings, gen.	

▶ Energy setup   Eco mode
Control   ambient light-dependent

- Use the cursor control key ◀▶▲▼ to select the menu item "power options" and press the "**OK**" button
- Use the -+ key to select the "Eco Mode", „Presentation", or "Picture Quality" setting.

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.

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• Save the set power option by pressing the **OK** button.
For the "Presentation" or "Picture Quality" settings, the types of control described under a) to e) can be set as well.

a) Off: he 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.

Picture-Volume	**0** Signal adjustment
AV devices	**9** Picture profi selectl
Station table	**8** Zoom/Panorama
Timer	**7** Noise reduction
Configuration	**6** MPEG noise reduction

★ ★ ★

TV-Menu

5 Picture profile adjustment	**5** Picture sharpess
4 Sound set,.prog.posn	**4** Color impr.
3 Sound settings, gen.	**3** Colour intensity
2 Pict.set.,prog.posn.	**2** Power options
1 Picture settings, gen.	**1** Brightness

Backlight 40%   nergy setup Presentation
Standard value 50%   Control ambient light-dependent
Use as default value: No   Level 69%

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.

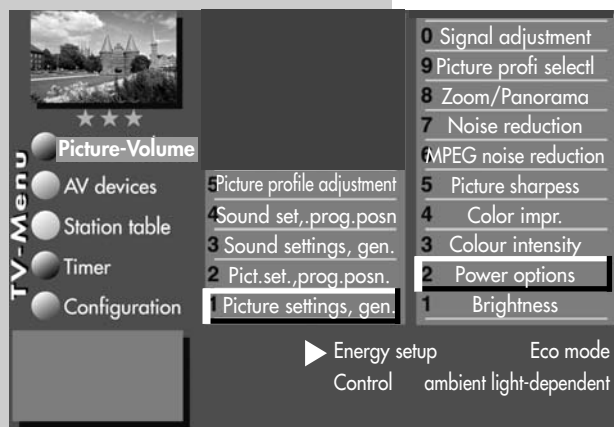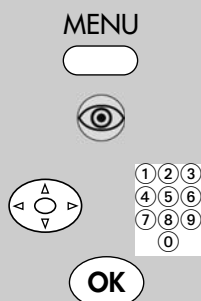• Press the "EXIT" key to close the TV menu.
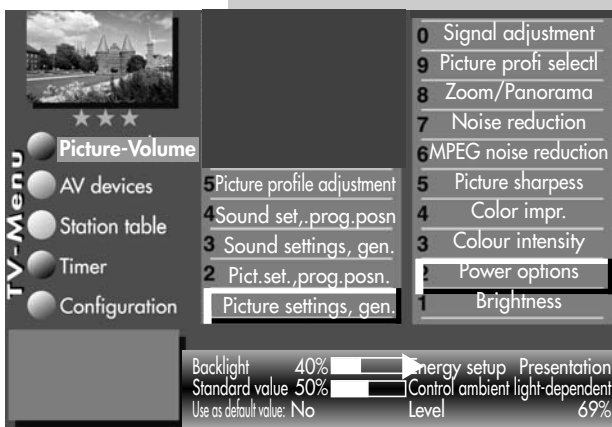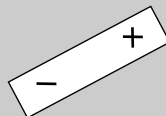
+
−

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.
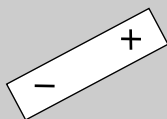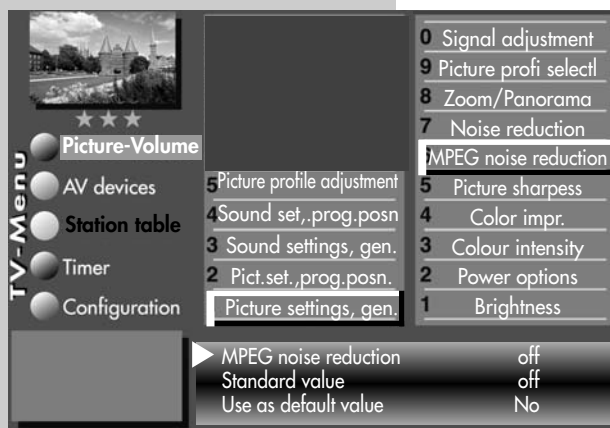
11 General Picture Settings
MPEG noise reduction

When TV programms or 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.

MENU

Set MPEG noise reduction:

• Call up 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.

0	Signal adjustment
9	Picture profi selectl
8	Zoom/Panorama
7	Noise reduction
	MPEG noise reduction
5	Picture sharpess
4	Color impr.
3	Colour intensity
2	Power options
1	Brightness

★ ★ ★
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.

TV-Menu

▶ MPEG noise reduction off
Standard value off
Use as default value No

• Use the corresponding numeric button (in the example ❶) 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 **– +** button.

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

OK

• Clear the TV menu with the "**EXIT**" button.

EXIT

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

Opening the menu

The settings in the "Signal adjustment" menu are optimised for the picture settings and should not be changed.

If the settings in the "Signal offset" and "Signal contrast" menus are changed, this will usually lead to a deterioration in picture quality.

Changes should generally only be made here if a connected analogue AV device (e.g. a video recorder) is providing an unsatisfactory picture.

MENU

◎

① ② ③
④ ⑤ ⑥
⑦ ⑧ ⑨
⓪

<u>Signal adjustment setting</u>
- 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 cursor control key ▶ to select the menu item "Brightness".

- Use the cursor control key ▲ to select the line "Signal adjustment".

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

★ ★ ★		▶ Signal adjustment
Picture-Volume		9 Picture profi selectl
AV devices		8 Zoom/Panorama
Station table	5 Picture profile adjustment	7 Noise reduction
Timer	4 Sound set,.prog.posn	6 MPEG noise reduction
Configuration	3 Sound settings, gen.	5 Picture sharpess
	2 Pict.set.,prog.posn.	4 Color impr.
	Picture settings, gen.	3 Colour intensity
		2 Power options
		1 Brightness

Signal-offset   61% ▭ Signal-Contrast 60% ▭
▶ Standard value 50% ▭ Standard value 80% ▭
Use as default value. No

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

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

- Press the "**OK**" key to save the new setting.

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

– +

OK

EXIT

27

MENU

👁

①②③
④⑤⑥
⑦⑧⑨
⓪
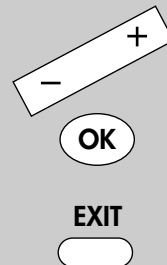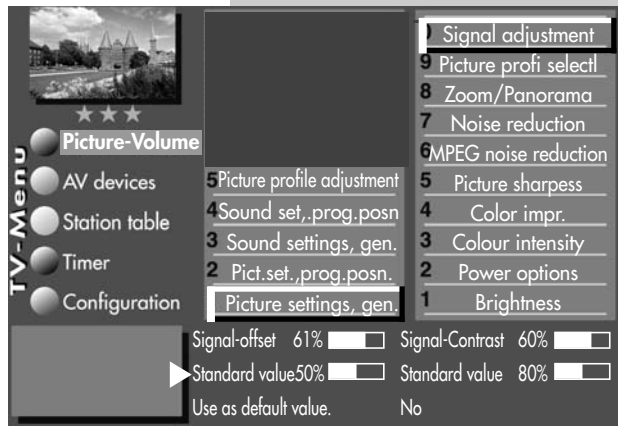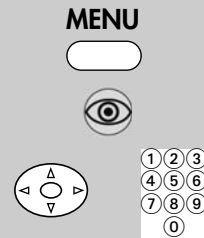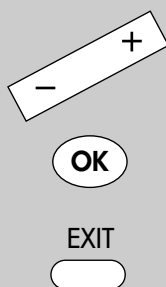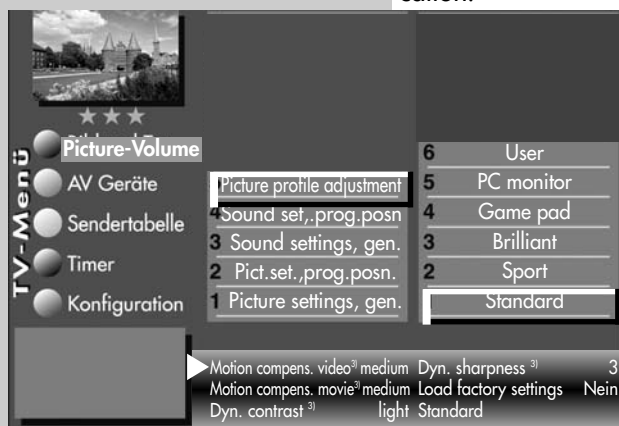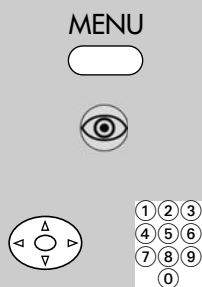
Picture profiles are a combination of very special picture parameters that make it possible to always create the best picture reproduction quality for different types of programmes or for replaying from different video sources.

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.

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:

★ ★ ★

Picture-Volume			6	User
AV Geräte	Picture profile adjustment		5	PC monitor
Sendertabelle	Sound set,.prog.posn	4	Game pad
Timer	3 Sound settings, gen.	3	Brilliant
Konfiguration	2 Pict.set.,prog.posn.	2	Sport
	1 Picture settings, gen.		Standard

TV-Menü

▶ Motion compens. video[3] medium   Dyn. sharpness [3]   3
Motion compens. movie[3] medium   Load factory settings   Nein
Dyn. contrast [3]   light   Standard

− +

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 „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 − + key.

• Press the "**OK**" button to save the new settings.

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

3) See glossary for an explanation.

11 General Picture Settings selected picture profile

Opening the menu

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

Selected Profile Standard[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 „Picture settings, gen." are pre-selected.

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

• Use the assigned numeric key to select "Picture profile selection".

• Use the **– +** 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 programme without the change being saved. See Chapter 4 for this.*

MENU

⊙

① ② ③
④ ⑤ ⑥
⑦ ⑧ ⑨
⓪

0	Signal adjustment	
	Picture profi selectl	
8	Zoom/Panorama	
7	Noise reduction	
6	MPEG noise reduction	
5	Picture sharpess	
4	Color impr.	
3	Colour intensity	
2	Power options	
1	Brightness	

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.

▶ Profile Standard[2]

+
–

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.

MENU

◎

①②③
④⑤⑥
⑦⑧⑨
⓪

☞ *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 border at the left and right.

★ ★ ★		**0** Signal adjustment
		9 Picture profi selectl
Picture-Volume		Zoom/Panorama
AV devices		Noise reduction
Station table	**5** Picture profile adjustment	**6** MPEG noise reduction
Timer	**4** Sound set,.prog.posn	**5** Picture sharpess
Configuration	**3** Sound settings, gen.	**4** Color impr.
	2 Pict.set.,prog.posn.	**3** Colour intensity
	Picture settings, gen.	**2** Power options
		1 Brightness

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

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".
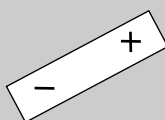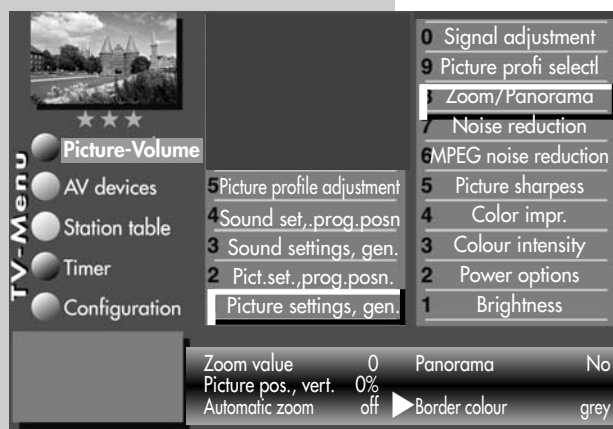
• Use the corresponding numeric keys (in this example: ❽ for Zoom/Panorama) to select the desired menu items.

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

• Use the **– +** key to change the settings for "Border colour".

– +

OK

EXIT

• 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".*

30

11 General Picture Settings
Zoom/Panorama einstellen

Opening the menu

☞ *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 programme positions.

MENU

◉

① ② ③
④ ⑤ ⑥
⑦ ⑧ ⑨
⓪

Setting the zoom/panorama mode:
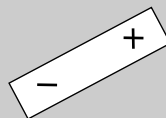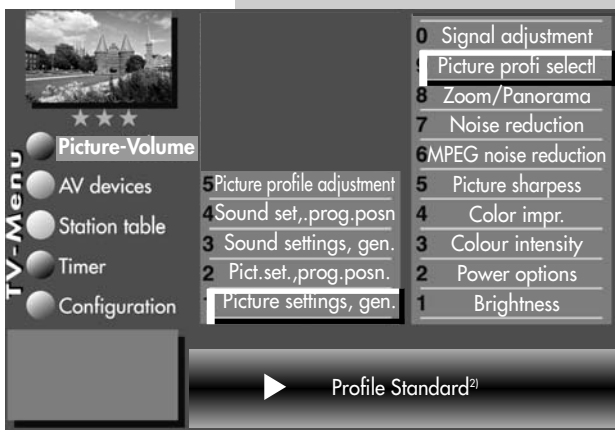
- Press the "**MENU**" key.
  The TV menu appears on the screen.

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

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

		0 Signal adjustment
		9 Picture profi selectl
★ ★ ★		Zoom/Panorama
● **Picture-Volume**		Noise reduction
● AV devices	5 Picture profile adjustment	MPEG noise reduction
● Station table	4 Sound set,.prog.posn.	5 Picture sharpess
● Timer	3 Sound settings, gen.	4 Color impr.
● Configuration	2 Pict.set.,prog.posn.	3 Colour intensity
	Picture settings, gen.	2 Power options
		1 Brightness

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

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

- 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 functions "Panorama" and "Zoom" can be combined with each other.*
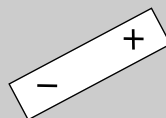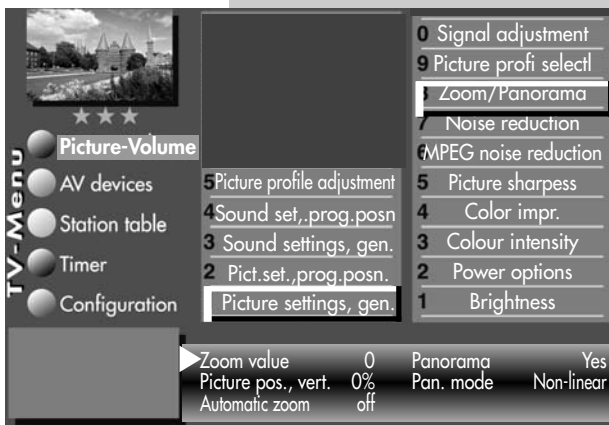
The number of subjects and sections depends on the selected scope of operation. Depending on the configuration of the TV set, the various menu items may be displayed in a different order and numbered differently.
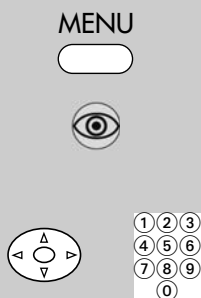
11.1 Picture Settings for Programmes via TV Menu

MENU

👁

① ② ③
④ ⑤ ⑥
⑦ ⑧ ⑨
⓪

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

If the standard values do not provide a satisfactory picture in some programme 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 programme 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.

★ ★ ★	**0**	VCR[3)]
	9	Signal adjustment
Picture-Volume	**8**	Picture forma[3)]
AV devices	**7**	Colour standard[3)7)]
TV-Menu	**6**	Colour offset[3)7)]
Station table	**5** Picture profile adjustment	Noise reduction[3)]
Timer	**4** Sound set,.prog.posn	MPEG noise reduction
Configuration	**3** Sound settings, gen.	**3** Picture sharpness
	Pict.set.,prog.posn.	**2** Picture profile
	1 Picture settings, gen.	**1** Colour intensity

▶ Noise reduction   light

Individual picture settings for programme position xy:

- Select the programme 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 pre-selected.

− +

OK
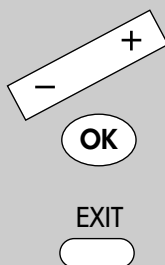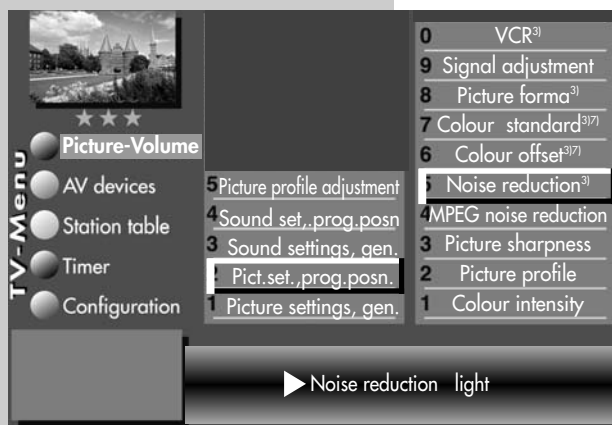
- Use the cursor control key ▲ to select the menu item "Pic. settings for Pr." And press the "**OK**" key.

- Use the corresponding numeric keys (in this example: ⑤ for noise reduction) to select the desired menu items.

EXIT

- In the setting window, use the − + key to change the setting.

- Press the "**OK**" key to save the new setting.

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

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

11.2 Picture Settings for Programme via Station Table

Opening the menu

Individual picture settings for programme position xy:

- Select the programme 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 programme position highlighted.

- 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.

MENU

🌐

F2

▶ **8**

			0	Sound corrections
0010	Hessen 3		9	Colour standard[3) 7)]
0009	Südwest			Picture quality
0008	MDR			Picture correct.
0007	PRO 7		6	Enter logo
★ ★ ★	0006	RTL 2	5	Station contained in EPG
Picture-Volume	0005	RTL	4	Frequency/channel[5)]
AV devices	0004	SAT 1	3	CA module [7)]
Station table	0003	Bayern 3	2	Signal quality[5)]
Timer	0002	ZDF	1	DVB-prog. info[5)]
Configuration	0001	ARD		

▶ Picture sharpness   gen.   Noise reduction   gen.
                                 Colour offset   0
VCR   off

- Use the **– +** key to change the setting.
  "gen." means here that the new setting will overwrite the related general picture setting (see page 23).

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

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

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

– +

OK
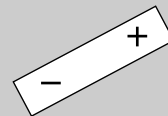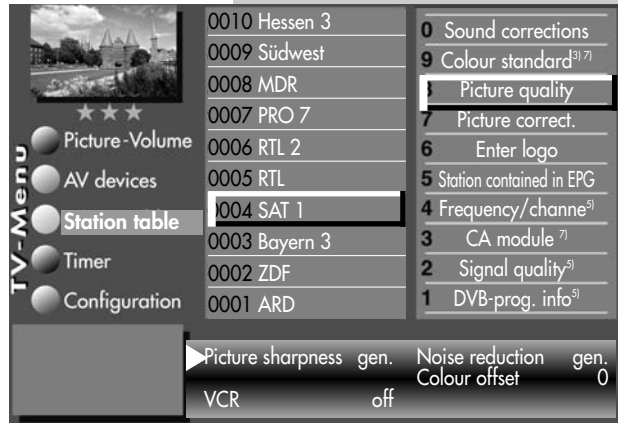
EXIT

3) See glossary for an explanation.
5) Available only for DVB stations!
7) Available only for analogue stations!
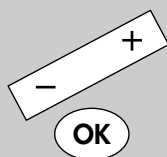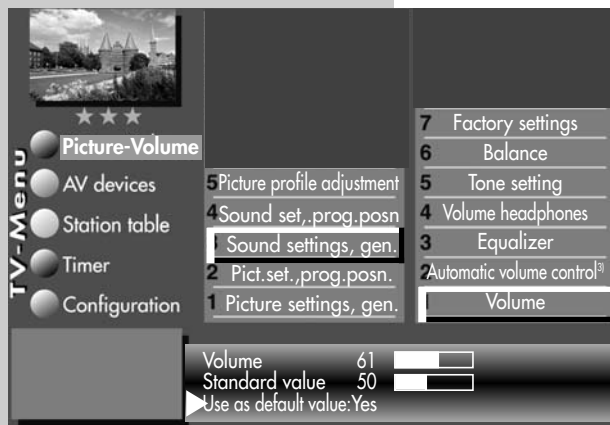
12 General Sound Settings

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

The sound settings volume, treble, bass, stereo wide and spatial sound can be set generally for all programme positions and saved as standard values which can be recalled at any time by pressing the "**OK**" key.

MENU

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

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

• Press the "**OK**" key to open the selected menu item for editing.

• In the setting window, use the **– +** 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 **– +** key to select "Yes".

• Press the "**OK**" 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 programme positions, you can make different individual settings for these positions. See sections 12.1.*

TV-Menu:

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

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

7 Factory settings
6 Balance
5 Tone setting
4 Volume headphones
3 Equalizer
2 Automatic volume control[3]
  Volume

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

3) See glossary for an explanation.

34

Automatic volume correction

Some TV stations transmit their commercials at a higher sound volume than that for the normal programme. 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 programme and the commercials. The setting made here applies to all programme positions.

MENU

Opening the volume correction 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 preselected.

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

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

▶ Volume control[3]   on

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

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

- Press the "**OK**" 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...".*
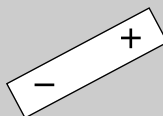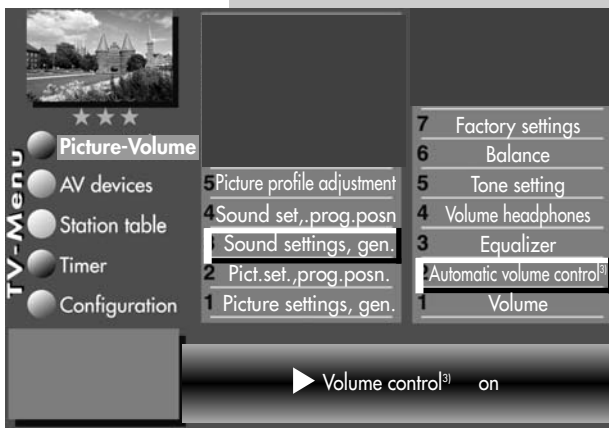
OK

EXIT

3) See glossary for an explanation.
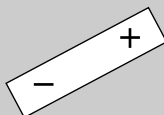
12 General Sound Settings

MENU

☞ *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:

• 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.

① ② ③
④ ⑤ ⑥
⑦ ⑧ ⑨
⓪

Picture-Volume

AV devices

Station table

Timer

Configuration

★ ★ ★

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

7 Factory settings
6 Balance
5 Tone setting
4 Volume headphones
  Equalizer
2 Automatic volume control[3]
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: ❸) to select "General sound settings".

• Use the corresponding numeric key (in the example: ❸) to select "Equalizer".

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

• Change the setting with the **– +** key.

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

• To save the new value press the **– +** key and select "Yes".

+
–

OK

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

EXIT

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

3) See glossary for an explanation.

12 General Sound Settings | 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 volume headphones:

- 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 "Sound settings for Pr.".

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

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

MENU

◎

1	2	3
4	5	6
7	8	9
	0	

★ ★ ★

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

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

7	Factory settings
6	Balance
5	Tone setting
	Volume headphones
3	Equalizer
2	Automatic volume control[3]
1	Volume

Vol. headphone   45% ▮▮▮
Standard value   50% ▮▮▮
▶ Use as default value. Ja

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

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

+
–

OK

EXIT

3) See glossary for an explanation.

12.1 Sound Settings for Programmes via TV Menu

MENU

◉

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

Volume correction

Various TV stations broadcast their programmes 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.

★ ★ ★

Picture-Volume
AV devices
Station table
Timer
Configuration

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

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: ❹) to select "Sound settings for Pr.".
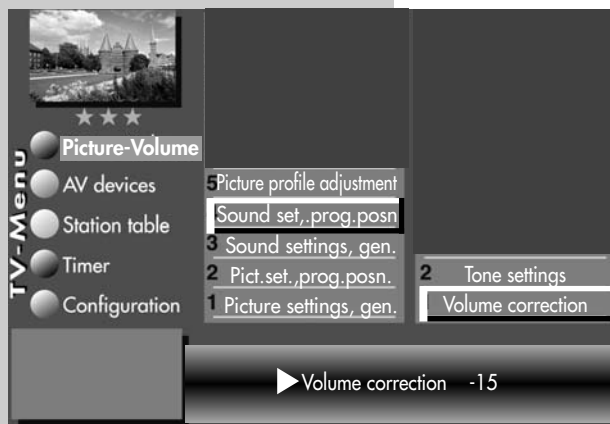
- Press the "**OK**" key and then, in the setting widow, use the **– +** key to change the setting.

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

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

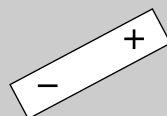☞ *Individual sound settings can also be made in the station table.*

+
–

OK
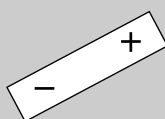
EXIT

12.1 Sound Settings for Programmes 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 programmes with a lot of speech, such as news stations. The setting "Normal" is better for music programmes.

MENU

◉

①②③
④⑤⑥
⑦⑧⑨
⓪

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: ❹) to select "Sound settings for Pr.".

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

• In the setting window, use the **– +** key to change the setting.

• Press the "**OK**" 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.*

− +

OK

EXIT

39

MENU

F2

▶

0
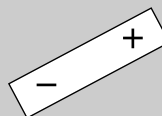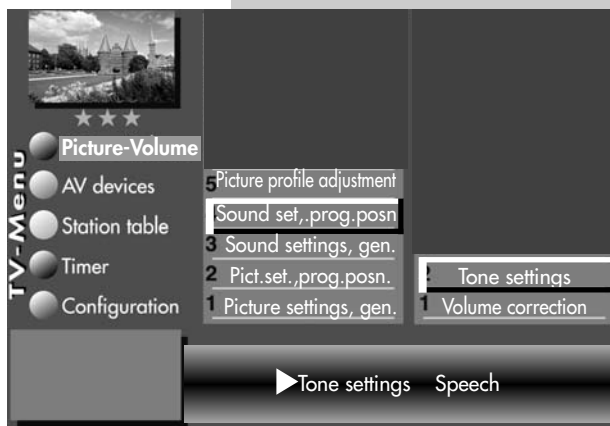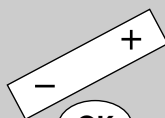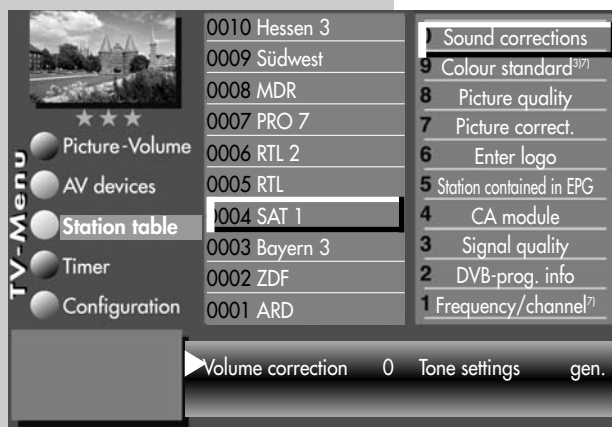
☞ *Some of the menu items are not available in a 2 ** menu.*

Making sound corrections:

• Select the programme position whose sound 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 programme position highlighted.

	0010 Hessen 3	0 Sound corrections
	0009 Südwest	9 Colour standard³⁾⁷⁾
	0008 MDR	8 Picture quality
★ ★ ★	0007 PRO 7	7 Picture correct.
⬤ Picture-Volume	0006 RTL 2	6 Enter logo
⬤ AV devices	0005 RTL	5 Station contained in EPG
⬤ **Station table**	0004 SAT 1	4 CA module
⬤ Timer	0003 Bayern 3	3 Signal quality
⬤ Configuration	0002 ZDF	2 DVB-prog. info
	0001 ARD	1 Frequency/channel⁷⁾

▶ 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 **– +** key to change the selected setting. "**gen.**" means here that the new setting will overwrite the **gen**eral sound settings (see pages 34).

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

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

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

+ − OK

EXIT

3) See glossary for an explanation.
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 🔇.

MENU

Activating the mute function
• Press the "**MENU**" key to open the TV menu.
• Press the red key 🔄 to open the "Configuration" menu.
• Press the "**OK**" key to move to the right side of the menu.
• Use the cursor control key ▲ or the corresponding numeric key (in the example: (❸) to select the menu item "Sound settings".
• In the setting window, use the **– +** key to set the function "Mute (2-stage)" to "On".
• Press the "**OK**" key to save the setting.

	0 Function for F3		
	9 Function for F2		
★ ★ ★	**8** EURO sockets	**8**	Subtitle
Picture-Volume	**7** DVBC		Data Logic adjustment
AV devices	**6** DVB-T	**6**	CI dialogue via
	5 DVB-S	**5**	EPG settings
Station table	**4** Analog-TV	**4**	Operating
Timer	**3** Country	**3**	Sound settings
	2 Language	**2**	HiFi output
Configuration	Operating	**1**	Init. prog.position

▶Mute (two-stage)   on Sound via   Loudsp.
Preselection of Sound 2 Channel 1

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

OK

EXIT

Preset value (Audio-Discription)
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).

41

12.4 Sound Settings HiFi-output

On the back of the TV set, there are audio sockets (see picture and page 112 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 chapter 12.6 Sound Settings, Overview.

The sound can be output via a **cinch 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.

AUDIO OUT

DIGITAL OUT
Optical
output

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 ❷.

• Set the desired parameters in the settings window with the **– +** key.

• Press the "**OK**" button to save the new settings.

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

0	Function for F3			
9	Function for F2			
8	EURO sockets	8	Subtitle	
7	DVB-C	7	Data Logic adjustment	
6	DVB-T	6	CI dialogue via	
5	DVB-S	5	EPG settings	
4	Analog-TV	4	Operating	
3	Country	3	Sound settings	
2	Language		HiFi output	
	Operating	1	Init. prog.position	

Picture-Volume
AV devices
Station table
Timer
Configuration

TV-Menu

▶ HiFi output   constant
Output level   50%

OK

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

EXIT

12.5 Sound Settings Speakers

The "hi-fi output" and "Sound settings" menu options are linked together. The link is described on chapter 12.6 Sound Settings, Overview.

Speaker settings

• Call up the TV menu with the "**MENU**" button.

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

• ress the "**OK**" button and change to the right column.

• With the cursor control key ▲ or the assigned numeric key ❸ in the example), select the „Sound settings" function.

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

• Set "Centre speaker" with the **– +** key.

• Press the "**OK**" button to save the new settings.

• Clear the TV menu with the "**EXIT**" button.

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

MENU

🔙

	1 2 3
	4 5 6
	7 8 9
	0

0	Function for F3	
9	Function for F2	
8	EURO sockets	8 Subtitle
7	DVB-C	7 Data Logic adjustment
6	DVB-T	6 CI dialogue via
5	DVB-S	5 EPG settings
4	Analog-TV	4 Operating
3	Country	3 Sound settings
2	Language	2 HiFi output
Configuration	Operating	1 Init. prog.position

Picture-Volume
AV devices
Station table
Timer

Mute (two-stage)   on   ▶Speakers   Center
Preselection of Sound 1

+
–

OK

EXIT

43

12.6 Sound Settings, Overview

„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 **– +** 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 **– +** button of the remote control.

12.6 Sound Settings, Overview

„HiFi output"	„Sound settings"	
HiFi output **„variabel"**	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 – + 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.

12.6 Sound Settings, Overview

	0 Function for F3				
	9 Function for F2			**8** Subtitle	
	8 EURO sockets	**8** Subtitle		**7** Data Logic adjustment	
★ ★ ★	**7** DVB-C	**7** Data Logic adjustment		**6** CI dialogue via	
Picture-Volume	**6** DVB-T	**6** CI dialogue via		**5** EPG settings	
AV devices	**5** DVB-S	**5** EPG settings		**4** Operating	
Station table	**4** Analog-TV	**4** Operating		**3** Sound settings	
Timer	**3** Country	**3** Sound settings		**2** HiFi output	
Configuration	**2** Language	**2** HiFi output		**1** Init. prog.position	
	Operating	**1** Init. prog.position			
	▶ HiFi output Headphone			▶ Speakers off	

„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 − + 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 − + Tbutton 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 − + button of the remote control. The headphone output on the front or side will also be changed.

12.7 Connecting Headphones

Headphone socket,
diameter 3.5 mm

The headphones connector (3.5 mm jack) is located on the left-hand side, see also Chapter 28 „**Connections to the set**".

Radio headphones can also be connected to the AUDIO OUT sockets on the back of the TV set, see also Chapter 28, „**Connections to the set**".
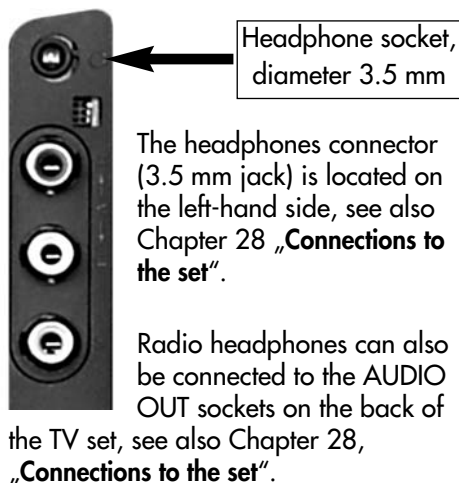
The sound settings for the radio headphones should then be set as described on page 44.

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.*
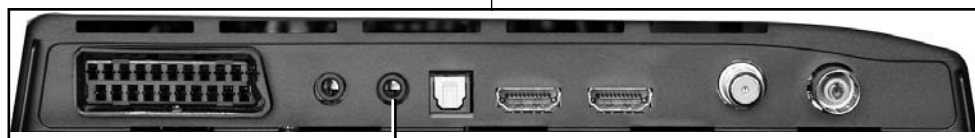
Audio OUT, jack Ø 3.5 mm
To connect a hi-fi amplifier or radio headphones, for example.
You will need an adapter cable to do this:
from a 3.5 mm stereo jack to a 2-cinch connector

12.8 Sound 1, Sound 2

When receiving a dual-language programme, 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 **– +** key to select Sound 1 or Sound 2.

Kopfh. Lautst.	
Kopfh.	Ton 2
Kopfh. Lautst.	

Ton über	
Ton-Mode	Ton 2
Balance	

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

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

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

MENU

◉

①②③
④⑤⑥
⑦⑧⑨
⓪

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

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

Activating the automatic zoom

• Press the "**MENU**" key. The TV menu appears on the screen.
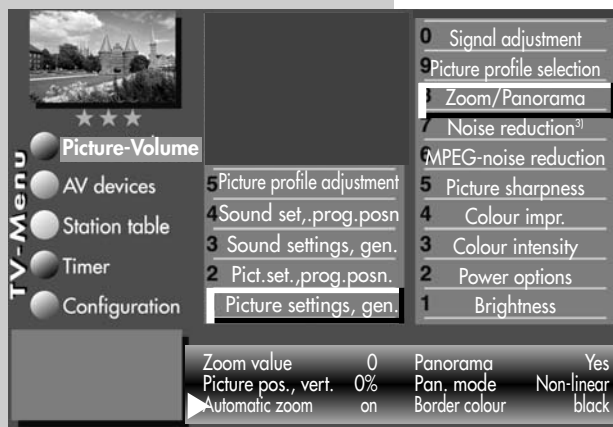
• Press the blue key ◉. The menu "Picture and sound" and the menu item "General picture settings" are pre-selected.

• 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".
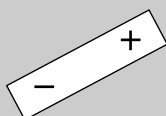
• Use the **– +** key to change the setting.

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

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

– +

OK

EXIT

14 Childlock

Opening the menu

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 programmes (Prog A ... Prog F) are exempted from the locking function (permitted programmes), or

c) all programmes, or programmes 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 "**OK**" key.

• In the setting window, use the cursor control key to select the menu item "Activate" and then use the **– +** 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 "**OK**" key to save the new setting.

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

MENU

⊙

①②③
④⑤⑥
⑦⑧⑨
⓪

＋

－

TV-Menu

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

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

OK
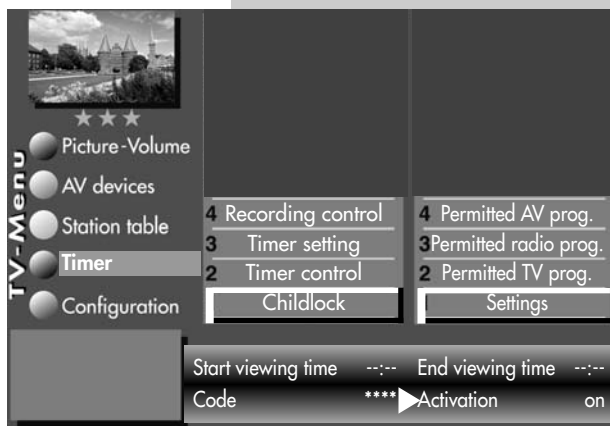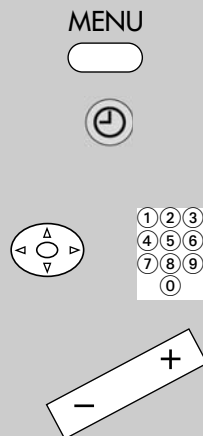
EXIT

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.

14 Childlock

b) Permitted programmes:

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 "**OK**" key and, in the setting window, enter the programme positions with the numeric keys or use the **– +** key to select the desired programme positions.

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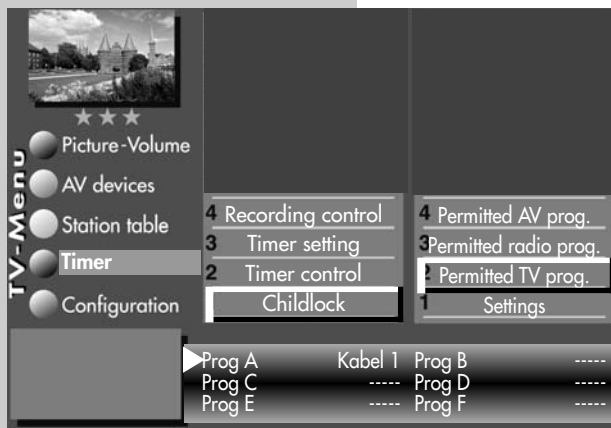
Press the "OK" key to save the settings.

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 "**OK**" 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".

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

TV-Menu

4 Recording control
3 Timer setting
2 Timer control
  Childlock

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

Prog A   Kabel 1   Prog B   -----
Prog C   -----   Prog D   -----
Prog E   -----   Prog F   -----

Factory setting
Code: 0000

50

☞ *The menu items "On time" and "Off time" are not available in a 2 ** menu.*

In the menu item "Timer control", you can programme 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 programmed delay (which can be set in steps of 15 minutes).

MENU

🕐

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 ❷ to select "Timer control".

TV-Menu

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

4 Recording control
3 Timer setting
  Timer control
  Childlock

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

▶ Time --:--

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

- Press the "**OK**" 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 ll key.*
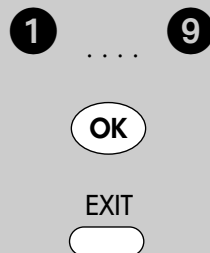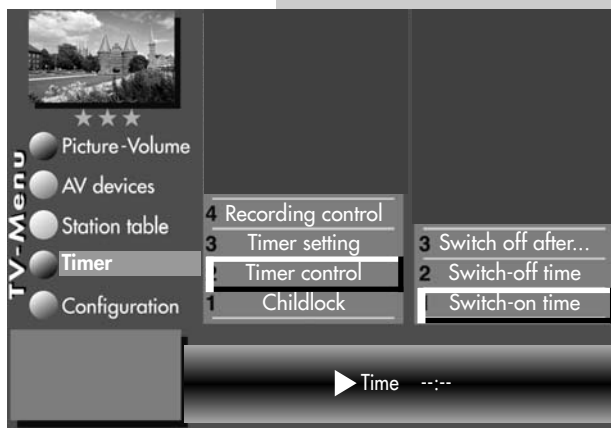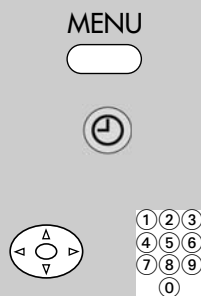
❶ . . . . ❾

(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.

15.1 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.

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

TV-Menu

4 Recording control
  Timer setting
2 Timer control
1 Childlock

3 Local time offset
2 Current date
  Current lokal time

▶ Time 20:00:00

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 "**OK**" key and then, in the setting window, enter the current time with the numeric keys.

• You can then start the internal clock precisely by pressing the "**OK**" key when the time you have entered is reached.

• Press the numeric key ❷ to select "Current date".

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

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

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

OK

❷

OK

EXIT

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
i 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 programme 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 programme position for the period programmed as the **overrun time**.

MENU

Setting the 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: ④) to select the menu item "Recording control".

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

• Press the "**OK**" key and then, in the setting window, use the **– +** key to set the desired lead or overrun time.

• Press the "**OK**" key to save the settings.
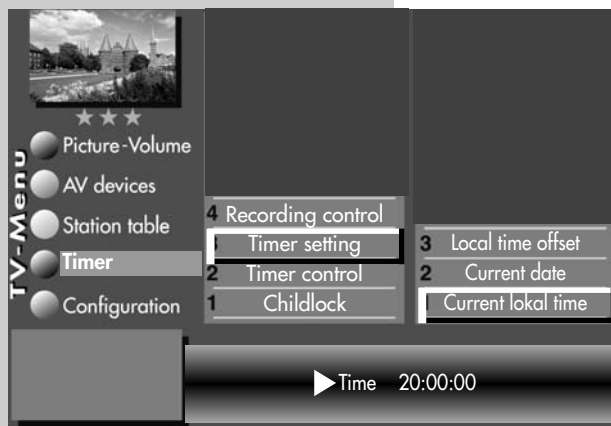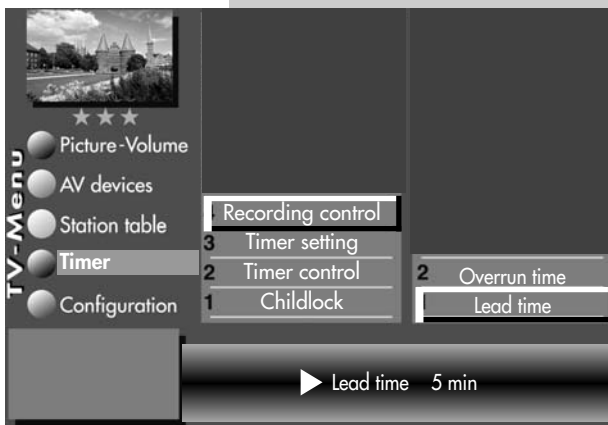
• Press the "**EXIT**" key to close the TV menu.

OK

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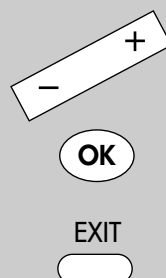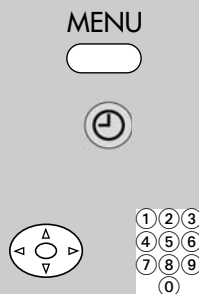
The number of subjects and sections depends on the selected scope of operation. Depending on the configuration of the TV set, the various menu items may be displayed in a different order and numbered differently.

15.2 Recording Control

<u>Application example:</u>

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

Set up a "manual timer" as described in Section 17, "Special Functions 2" or set a timer with the aid of the EPG as described in Section 19.3 "Using EPG, Recording a Programme". The timer recording does not use VPS.

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 programme position for ITV selected, whereby the screen remains dark but the programme is sent via the EURO socket to your recorder,

 or

- switched to the programme position for ITV if it is already switched on.

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

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

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:

- Connect the memory stick (exchangeable storage medium) to the USB socket /see chapter 28). The photograph display overview appears on the screen. The JPEG photograph display can also be started as follows:

  - Press the "F2" key for approximately 3 seconds. The maximum possible selection appears.

  - Press the numeric key ❹ to call up 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 "**OK**" key to open the image folder.

- Use the cursor control keys ▼ ▲ ◄ ► to select the individual images.

- Press the "**OK**" 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: Images that have already edited on a PC cannot be rotated or displayed.

- To delete the image, press the II key.

Press the "**EXIT**" key to exit the photograph viewer.

F2

❹

OK

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			
II Delete			

EXIT

Starting the zoom function:

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

- Use the **– +** 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 "**OK**" key for a magnified display of the selected image section.
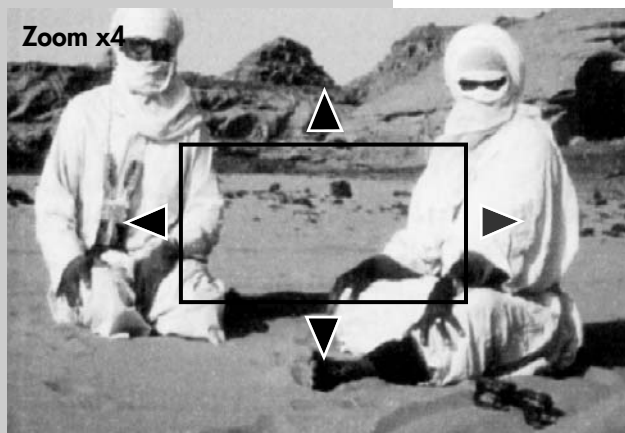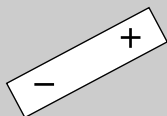
- Use the cursor control keys ◀ ▶ ▲▼ to scroll the magnified image section.

- Return to the full screen picture by pressing the "**OK**" key. The rectangular red frame will be displayed on the screen. The red frame will be hidden if you press the **–** key several times, the magnifier function will then be disabled.

Zoom x4
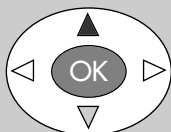
Opening the menu

Starting the slide show:

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

- Press the "**OK**" 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 **– +** key.

- Press the "**OK**" key to start the slide show.

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

- When the slide show is finished or stopped with "**OK**" or "**EXIT**", the photograph viewer appears again.

Press **EXIT** to return to the TV picture.

Slide Show

F2 Photo Viewer

OK Start ►
    Stop ■
II Pause II
●   Endless

– + Time 3s

Pictures	Aida	Beduinen	Strobo
W-Fuchs	Nacht	Claudia	Schlitten
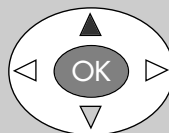
F2

OK

EXIT

⚠ *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.

If you wish to record a programme 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 programmes available to the recording device.

Setting a timer manually for a recording:

F2

9

• 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.

F1

• Press the **F1** key. The cursor is located at the left of the first line "Record". Use the **− + key** to set this menu item to "Yes".

Timer			
▶ Recording	Yes	Vorschau	17:23
Reminder	No	− + Mo Di Mi Do Fr Sa So 29.04.	
Pr ---			
Date	--.--.		
Start	--:--		
End	--:--		
VPS	No		
Recording device			
Videorecorder			

• If desired, press cursor control key ▼ and use the **− + 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 programme position (see the station table of the TV set) which is to make the programme available for recording.

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

17 Special Functions
Recording a programme with a timer

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

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

• Press the "**OK**" 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 **9** to open the timer menu.

• Use the cursor control key to select the timer you wish to clear and press **II** 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	Yes
Pr Sat1	
Date	13.10.
Start	22:45
End	23:40
VPS	No
Recording device	
Videorecorder	

Vorschau   17:23
– +Mo Di Mi Do Fr Sa So 29.04.
20:00 ✓✓ Das Erste   -20:15
Tagesschau
22:45 ✓✓ SAT 1   -23:40
Planetopia

59

17 Special Functions
Direct recording of a programme

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

F2

Starting a direct recording:

• 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.

Sonderfunktionen 2
2 Sprache der Sendung
9 Timer-Übersicht
0 Direktaufnahme

0

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

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

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

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

Opening the menu

Adjusting the picture format:

• Press the **F3** key.
If you press **F3** briefly, the function programmed for **F3** (see Section 18. "Programming the Function keys") is executed.
If you hold down **F3** for about two seconds, all possible selections are displayed.

• 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 **– +** key within five seconds.

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

Zoom / Picture position

After selecting the function "Zoom", you can adjust the zoom factor with the - + 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 ▼ ▲ rocker key to move the picture.

Standard 4:3

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

F3

> **Special functions 3**
>
> **1 Picture format**
> **2 Pic. form., vertikal**

❶

> **16:9 full picture**   **+**
> ▶ **Zoom**
> **Standard 4:3**   **–**

▲
▼

+
–

Panorama

With the aid of the panorama function, you can expand programmes 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.

Automatic

The TV set automatically chooses the optimum picture format (with DVB stations this is dependent on the programme).

17 Special Functions
Picture Position

Opening the menu

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 18., "Programming the Function keys") is executed. If you hold down **F3** for about two seconds, all possible selections are displayed.

- Press numeric key **2** to select the function "Picture position vertical".

- You can now use the **– +** 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.*

F3

2

Special functions 3

1 Picture format
2 Pic. form., vertikal

Various programs are transmitted with several audio channels (e.g. multilingual or ⬛⬛⬛⬛).

If you are receiving a multilingual programme the information box on the bottom left of the ⬛⬛een features the ⬛⬛ logo.

Pr 30   🖼 Stereo
arte
05.04.07

Press **F2** to see the list of available languages.

F2

Special fuctions 2

1 Normal/Speech
2 Language of progr.

9 Timer overview
0 Direct recording

Open menu:

• Press **F2**.
Press **F2** briefly to run the function programmed for the key (see Chapter 18. "Programming function keys").
Press **F2** for approx. 3 seconds and the max. possible selection is displayed.

❷

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

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

1 German
2 France

◁ OK ▷

⬛⬛⬛ Symbol in grey:
Other audio options e.g. dd = "Dolby digital" are available but are not selected.

⬛⬛⬛ Symbol in white:
One of the audio options has been selected.
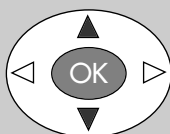
17 Special Functions
Select Subtitle

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.

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 **– +** key to set the "Subtitles" function to "on".

• If desired, a language can be selected here.

• Save the changed setting with the key "**OK**".

• Close "TV menu" with the key "**EXIT**".

Displaying subtitles - see next page.

0	Function for F3		
9	Function for F2		
8	EURO sockets		Subtitle
7	DVB-C	7	Data Logic adjustment
6	DVB-T	6	CI dialogue via
5	DVB-S	5	EPG settings
4	Analog-TV	4	Operating
3	Country	3	Sound settings
2	Language	2	HiFi output
Konfiguration	Operating	1	Init. prog.position

★ ★ ★

TV-Menü

▶ Untertitel   Ein   Sprachauswahl   Deutsch
                            Sprachauswahl   English
                            Sprachauswahl   Français

OK

+
−

OK

EXIT

Pr 2	🐾	□□ DOLBY DIGITAL	Stereo
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

3

• 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 functions2

2 Language of prog.
3 Subtitle

9 Timer overview
0 Direct recording

1 OFF
2 German
3 English

18 Programming the Function Keys

Opening the menu

The remote control has four function keys: F2, F3 and AV. You can programme these function keys (F2, F3 and AV) 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 left shows the functions available for the F2 key.

Programming function key 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 "**OK**" key and then use the cursor control key ▼ ▲ to select one of the available functions.

- Press the "**OK**" 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.*

F2

Special functions 2

1
2 Language of progr.

4 Photo Viewer
5 File manager

9 Timer overview
0 Direct recording

MENU

↰

▲   ▼

OK

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

▶ Function for F2   Timer overview

EXIT

67
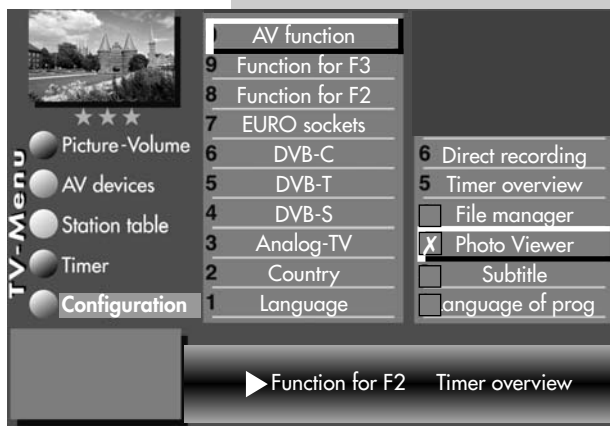
19 EPG

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. Programme details are broadcast digitally by each broadcaster exclusively for those programmes it offers.

19.1 Activating the EPG

MENU

The function is activated by pressing the button marked "EPG".

Factory EPG settings:

- EPG   On
- DVB-SI selection   TV
- Prog. selection in the channel table   all free
            slots***)**
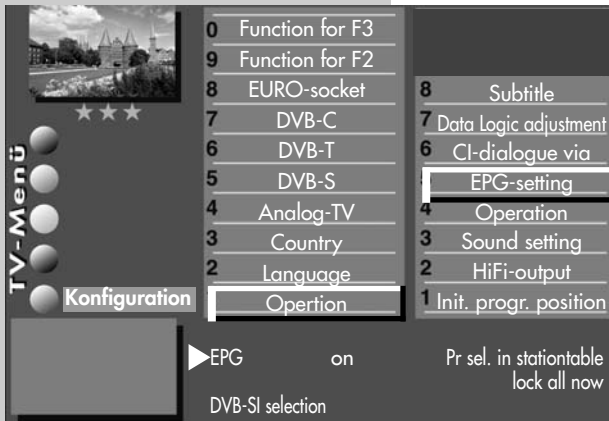
*) In the menu, "retain" is displayed, i.e. when you make an adjustment, this change is displayed in plain text after it is confirmed by selecting "**OK**" in the menu. "Retain" is then displayed in the menu as an indication that the previously confirmed setting has been retained.

0	Function for F3		
9	Function for F2		
8	EURO-socket	8	Subtitle
7	DVB-C	7	Data Logic adjustment
6	DVB-T	6	CI-dialogue via
5	DVB-S		EPG-setting
4	Analog-TV	4	Operation
3	Country	3	Sound setting
2	Language	2	HiFi-output
	Opertion	1	Init. progr. position

★ ★ ★

TV-Menü

Konfiguration

▶EPG   on   Pr sel. in stationtable
                                    lock all now
DVB-SI selection

Not possible with an external receiver !

68

19.2 Collecting EPG data

EPG data is broadcast by each station for its program contents. I

nformation 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 TV set is switched off with the power switch;

• 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 the TV set is switched to stand-by, the orange LED on the TV set will light up to show that the collection process is running. After completion of the collection process, the TV set switches to stand-by mode (red LED).

☞ *Do not switch off the TV set during the collection process. Give the TV set a chance to collect all EPG data at least one time.*

Not possible with a set top box
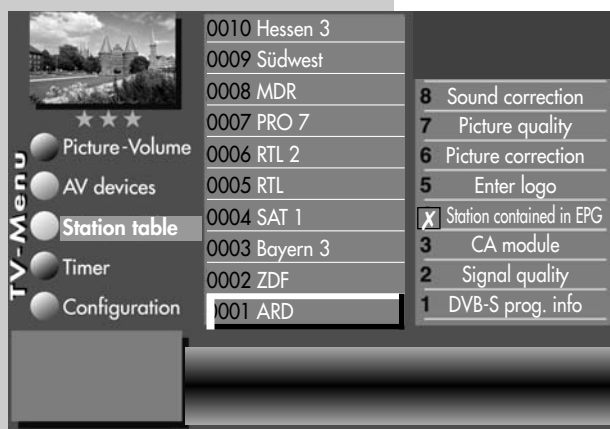
Exclude stations from the EPG TV guide:
You can decide which channels should appear in the EPG program guide.

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 (**✗**) with "**OK**".

- To exclude other channels from the EPG program guide, use ◀ ▶ ▲ and ▼ to select the channel and repeat the procedure.

0010 Hessen 3	
0009 Südwest	
0008 MDR	8 Sound correction
0007 PRO 7	7 Picture quality
0006 RTL 2	6 Picture correction
0005 RTL	5 Enter logo
0004 SAT 1	✗ Station contained in EPG
0003 Bayern 3	3 CA module
0002 ZDF	2 Signal quality
0001 ARD	1 DVB-S prog. info

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

TV-Menu

Not possible with a set top box

19.2 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 programme slot selected.

• Follow the steps described under "23. 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 **– +** key and save by pressing "**OK**".

Not possible with a set top box

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

EPG

F1 Sort the display by station list.

F2 Sort a station by the timetable.

F3 Sort all stations by time

☞ The display selected with the F1 , F2 , F3 button is retained after exiting the EPG display.

	Mon	Tue	**Wed**	Thu	Fri	Sat	Sun	30.10.
🕐 🕑	19:30	**20:00**	20:30	21:00	21:30			20:05

1 Das Erste	20:00-20:15	**Tagesschau**	
1 Das Erste	20:15-21:45	**Sportschau live**	
2 ZDF	19:25-20:15	**Küstenwache**	
2 ZDF	20:15-21:45	**Tausend mal berührt**	
3 hr-fernsehen	20:00-20:15	**Tagesschau**	
3 hr-fernsehen	20:15-21:00	**MEX. das marktmagazin**	
4 Bayerisches FS	19:45-20:15	**Dahoam is Dahoam**	
4 Bayerisches FS	20:15-21:00	**Die Landfrauenküche**	
5 WDR Köln	20:00-20:15	**Tagesschau**	
5 WDR Köln	20:15-21:00	**Das NRW Duell**	
6 SWR Fernsehen	20:00-20:15	**Tagesschau**	

★ ★ ★

⬤ All programmes

⬤ Interest

⬤ Time »

⬤ Time «

⬤ Record

F1 Sort. station table
F2 Sort. selected station
F3 Sort. time
◄◆► select
0...9 select time
OK view

Info

-> TEXT

◗ Select programme.

⬍ Scroll page forwards - backwards

OK Watch the selected programme set a reminder

🕐 🕑 Scroll time of day forwards/backwards

After pressing the F2 button, the station can be changed with the green button 🕑 the white button 🕑 .

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

blue: Programme selection of all programmes

yellow: User can set interests – or – programme selection in accordance with the set interests of the user

white: in F1 status, scroll time of day forwards, in F2 status, scroll stations forwards.

green: in F1 status, scroll time of day backwards, in F2 status, scroll stations backwards.

red: The selected programme is ready to be recorded (see pg. 69)

EXIT Back to TV picture.

– / + Day of week forwards/backwards.

EXIT

Not possible with an external receiver !

Select, watch, remind programme

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

• Press the "**OK**" button and

  - watch the selected programme if the program-
    me 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 con-
  tent description of the programme. It is not pos-
  sible to display the content description for all
  programmes.

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 **OK** button (✗).

• The markings (✗) can be
  deleted again with the "**OK**"
  button.

★ ★ ★	9 Arts/Culture
All programmes	8 Music/Ballet/Dance
Interest	7 Education/Science
	6 Children/School
	5 Sport
	4 Leisure
	Shows
	2 Current affairs
	1 Feature film

E P G

talk show
variety show
✗ game/quiz/contest
shows (general)

talk show
games/quiz/contest

Not possible with an external receiver !

Programme Information (Now Showing: ..)

Pr 4   Stereo   13:45 - 14:40
RTL   ◉ Skispringen: Top 50
04.01.06   11:35:12   14:40 - 15:00 Skispringen: Die Entscheidung

⏲

Erster Durchgang des dritten Springens der Viersch-
anzentournee auf der Bergisel-Schanze in Innsbruck

Pr 4   Stereo   13:45 - 14:40
RTL   ◉ Skispringen: Top 50
04.01.06   11:35:12   14:40 - 15:00 Skispringen: Die Entscheidung

EXIT

If you press the green key ◉ while a programme is running, or after changing to another programme position, information will be 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 programme

- The time bar shows the elapsed programme time.

- Broadcasting station

- Programme title

- Date and time

- Time details and title of the following programme

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

Repeatedly press the green key ◉ to view additional information about the following programme, provided the respective station broadcasts such information.

To hide the information, press "**EXIT**".

Not possible with an external receiver !

Selecting a programme for recording:

If you have a video recorder with the dialogue system, 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 29):

- 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 programme the TV timer (see also "Direct recording (OTR)").

- On the AV programme position of the video recorder, programme a timer with the data and time of the programme which will be provided by the TV timer.

EPG

Recording	Yes
Reminder	No
Pr 1	
Das Erste	
Date	01.05.
Start	22:45
End	23:40
VPS	no
Recording device	
Videorecorder	

Not possible with an external receiver !

20. Setting the Country and Language

MENU

⬅

①②③
④⑤⑥
⑦⑧⑨
⓪

☞ *The menu items "Language" and "Country" are not available in a 2 ** menu.*

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

0	Function for F3	Dansk
9	Function for F2	Suomi
8	EURO sockets	Norsk
7	DVB-C	Português
6	DVB-T	Español
5	DVB-S	Français
4	Analog-TV	Italiano
3	Country	Nederlands
	Language	☒ English
1	Operating	Deutsch

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

Selected language   English

0	Function for F3	Luxemburg
9	Function for F2	Italy
8	EURO sockets	☒ Great Britan
7	DVB-C	France
6	DVB-T	Finland
5	DVB-S	Germany
4	Analog-TV	Denmark
	Country	Belgiun
2	Language	Baltic states
1	Operating	Australia

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

Selected country   Great Britan

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.).

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 "**OK**" key and then use the cursor control key to select the desired language or country.

- Press the "**OK**" key to confirm your selection.

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

Opening the menu

This TV set is equipped for up to four different types of reception, depending on the configuration or retrofitting:

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.

DVB-S: **(for HD-TV)**
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.

MENU

<u>**Setting the reception mode**</u>

• 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".

TV-Menu		
★★★	0 Function for F3	
	9 Function for F2	
	8 EURO sockets	
	7 DVB-C	
Picture-Volume	DVB-T	
AV devices	5 DVB-S	
Station table	4 Analog-TV	4 General settings
Timer	3 Country	3 Manual search
Configuration	2 Language	Automatic search
	1 Operating	1 Antenna

▶ Start station search
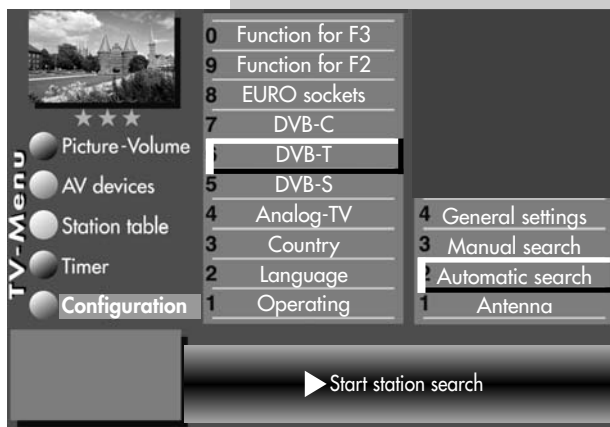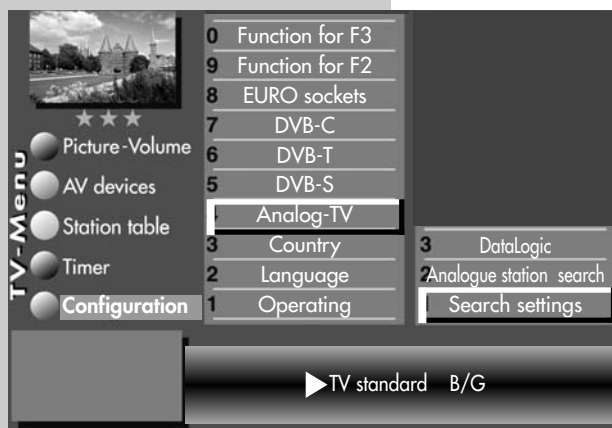
21.1 Setting Stations
TV-Standard for analogue stations

MENU

①②③
④⑤⑥
⑦⑧⑨
⓪

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.

The TV set is set in the factory to the TV standard B/G.

Setting the TV standard

0	Function for F3	
9	Function for F2	
8	EURO sockets	
7	DVB-C	
6	DVB-T	
5	DVB-S	
4	Analog-TV	
3	Country	3 DataLogic
2	Language	2 Analogue station search
1	Operating	Search settings

▶TV standard   B/G

Picture-Volume
AV devices
Station table
Timer
Configuration

TV-Menu

★ ★ ★

- 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: ④) to select "Analogue TV".
- The menu item "Search settings" is already selected.
- Press the "**OK**" key and, in the setting window, use the **– +** key to select the desired TV standard.
- Press the "**OK**" 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.

78

21.1 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 23., "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: (**4**) to select "Analogue TV".

• Use the corresponding numeric key (in the example: (**2**) to select "Terr. station search".

MENU

0	Function for F3	
9	Function for F2	
8	EURO sockets	
7	DVB-C	
6	DVB-T	
5	DVB-S	
	Analog-TV	
3	Country	3 DataLogic
2	Language	Analogue station search
1	Operating	1 Search settings

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

TV-Menu

▶Start stadion search

• Press the "**OK**" key and, in the setting window, confirm the menu item "Start station search" by pressing the "**OK**" 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 **II** key.

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.

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 programme position.

The colour standard is set in the factory to "Automatic".

MENU

(P)

F2

▶

6

Setting the colour standard [3] [7]

• Press the "**MENU**" key to open the TV menu.

• Press the white key (P) to open the station table.

• Press the **F2** key to enable editing of the station table.

• Use the cursor control key to select the programme position whose colour standard you wish to change.

	0010 Hessen 3	**0** Sound corrections
	0009 Südwest	**9** Colour standard[3][7]
	0008 MDR	**8** Picture quality
★ ★ ★	0007 PRO 7	**7** Picture correct.
Picture-Volume	0006 RTL 2	Enter logo
AV devices	0005 RTL	**5** Station contained in EPG
Station table	0004 SAT 1	**X** CA module[5]
Timer	0003 Bayern 3	**3** Signal quality[5]
	0002 ZDF	**2** DVB-prog. info[5]
Configuration	0001 ARD	**1** Frequency/channel[7]

TV-Menu

▶ Colour standard   SECAM

• Press the cursor control key ▶ to move to the left column.

• Use the corresponding numeric key (in the example: **9** to select "Colour standard".

+
−

OK

EXIT

• Use the **− +** key to select the desired colour standard, or to step through the available colour standards until the picture is displayed clearly.

• Press the "**OK**" key to confirm your selection.

• Press the "**EXIT**" key to close the TV menu.
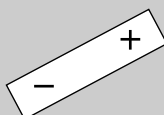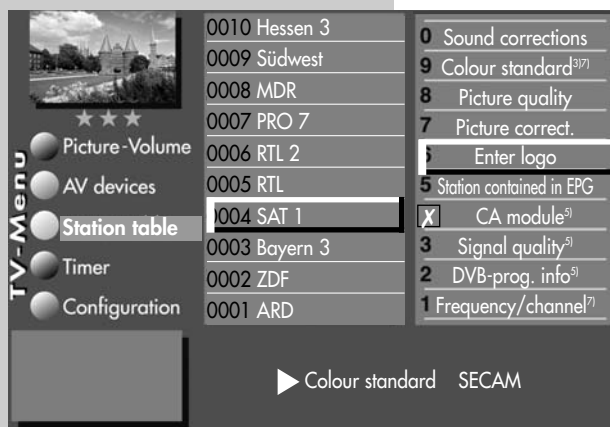
The number of subjects and sections depends on the selected scope of operation. Depending on the configuration of the TV set, the various menu items may be displayed in a different order and numbered differently.

3) See glossary for an explanation.
5) Can only be selected for DVB stations.
7) Available only for analogue stations!

21.2 Setting Stations
DVB-T, Antenna supply voltage

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-programmes (e.g. for controlling a relay to switch between DVB-T-antenna and broad-band cable, if they coexist).
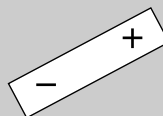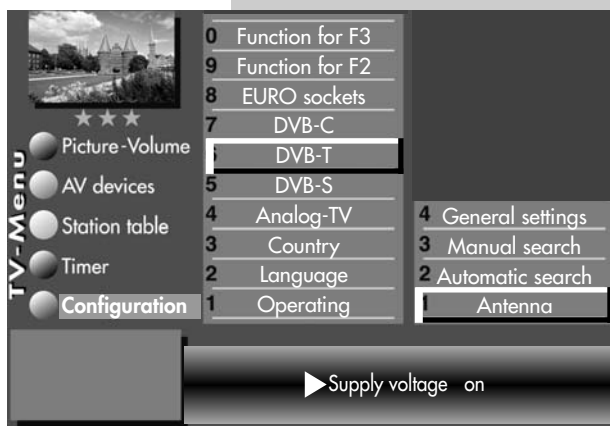
Off:
For a passive antenna or a community antenna

<u>Setting the antenna supply voltage</u>

MENU

- Press the "**MENU**" key to open the TV menu.

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

0	Function for F3	
9	Function for F2	
8	EURO sockets	
7	DVB-C	
	DVB-T	
5	DVB-S	
4	Analog-TV	4 General settings
3	Country	3 Manual search
2	Language	2 Automatic search
1	Operating	Antenna

TV-Menu

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

▶ Supply voltage on

- Use the corresponding numeric key (in the example: ❻) to select the function "DVB-T".

- Press the "**OK**" key and, in the setting window, use the **– +** key to select the antenna supply voltage.

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

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

+
–

OK

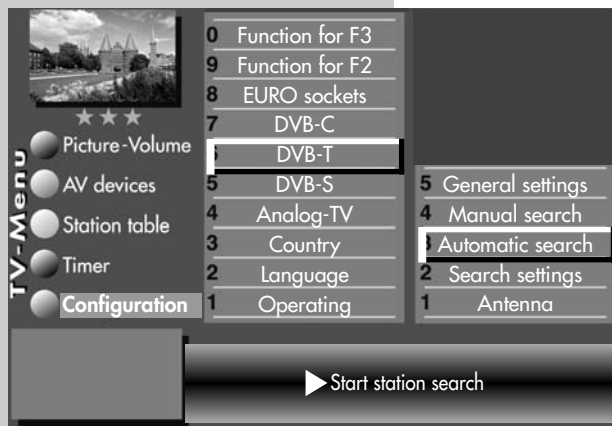EXIT

81

MENU

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 23., "Sorting stations".

Executing the automatic 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: **6**) to select " DVB-T".

• Make a selection with the assigned numeric key, in the example **2** "Automatic search".

• Press key "**OK**" and confirm the question about the station search with the corresponding numeric key:

1 freely receivable programmes[3)]
2 all programmes[3]
3 free + CICAM programmes[3)].

After pressing the corresponding numeric key the programme search begins.

OK

3) See glossary for an explanation.

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21.2 Setting Stations
Manual DVB-T station search

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: ⑥) to select " DVB-T".

• In the setting window "Antenna", you can switch the supply voltage for an antenna on or off with the − + key (see also page 79).

• Make a selection with the assigned numeric key, in the example ③, "Manual search".

• Enter the channel number or frequency in the setting window with the numeric keys. If additional data of a programme is known, then select the "Mod- parameter" menu item and change the setting to "manual" using the **− + key**. Additional data can now be entered.

• After entering the programme data with the cursor control key, select "Start programme search".

• Press key "**OK**" and confirm the question about the station search with the corresponding numeric key:
  ❶ freely receivable programmes[3]
  ❷ all programmes[3]
  ❸ free + CICAM programmes[3].

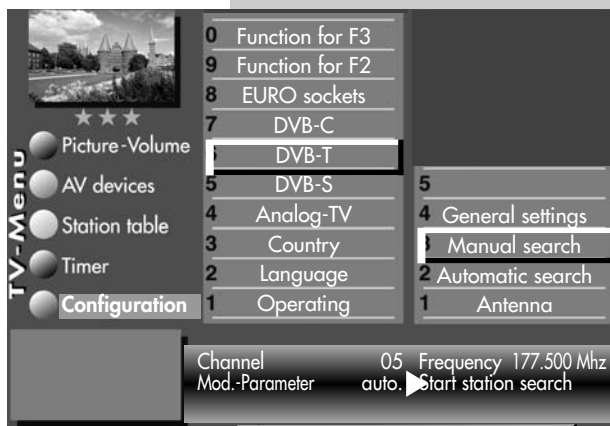After pressing the corresponding numeric key the programme search begins.

MENU

0	Function for F3
9	Function for F2
8	EURO sockets
7	DVB-C
	DVB-T
5	DVB-S
4	Analog-TV
3	Country
2	Language
1	Operating

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

5	
4	General settings
	Manual search
2	Automatic search
1	Antenna

Channel   05 Frequency 177.500 Mhz
Mod.-Parameter   auto. ▶Start station search

Transmission 8k Mode Modulation64 QAM
▶d. Parameter manuell Guard Intervall 1/8
Code rate   3/4   Start station search

3) See glossary for an explanation.

MENU

◄⊃

①②③
④⑤⑥
⑦⑧⑨
⓪

	0	Function for F3		
	9	Function for F2		
	8	EURO sockets		
★ ★ ★		**DVB-C**		
Picture-Volume	6	DVB-T		
AV devices	5	DVB-S		
Station table	4	Analog-TV		
Timer	3	Country	3	General settings
	2	Language	2	Manual search
Configuration	1	Operating		**Automatic search**

Symbol rate 1³⁾	6900	Precision search off
Symbol rate 2	6875 ►	Start station search
Symbol rate 3		

— +

►

OK

3) See glossary for an explanation.

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 23., "Sorting stations".

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 ❼ to select "DVB-C".

- The cursor is now on the menu line "Search settings".

- Press key "**OK**".The cursor is on symbol rate 1.

☞ *The most common symbol rates³⁾ 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 Ok.

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 programme search" with the cursor control key ►.

- Press key "**OK**" and confirm the question about the station search with the corresponding numeric key:

  ❶ freely receivable programmes³⁾
  ❷ all programmes³⁾
  ❸ free + CICAM programmes³⁾.

After pressing the corresponding numeric key the programme search begins.

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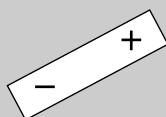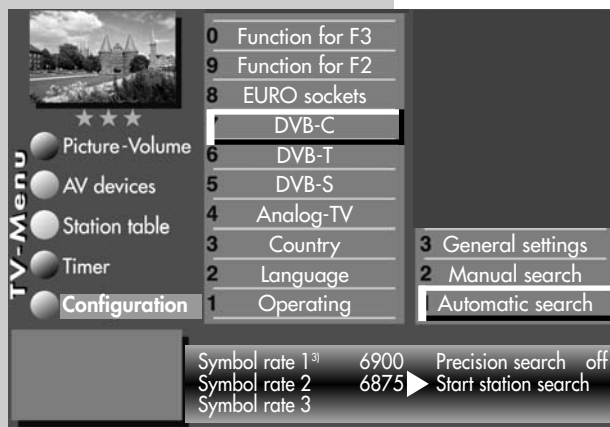## 21.3 Setting Stations
Manual DVB-C station search

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: **7**) to select "DVB-C".

- Make a selection with the assigned numeric key, in the example **2** "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 programme is known, then select the corresponding menu items "Modulation" and "Symbol rate" and change the setting using the **– +** key or with the numeric keys.

MENU

⬅

△	① ② ③
◁ ○ ▷	④ ⑤ ⑥
▽	⑦ ⑧ ⑨
	⓪

0	Function for F3
9	Function for F2
8	EURO sockets
	DVB-C
6	DVB-T
5	DVB-S
4	Analog-TV
3	Country
2	Language
1	Operating

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

TV-Menu

| **3** General settings |
| **2** Manual search |
| **1** Automatic search |

Channel	05	Cable channel	--
Frequency	64.500MHz	Symbol rate	6900
Modulation	Auto.mode	▶ Start station search	

- Select "Start programme search" with the cursor control button in the setting window.

- Press key "**OK**" and confirm the question about the station search with the corresponding numeric key:

  1 freely receivable programmes[3]
  2 all programmes[3]
  3 free + CICAM programmes[3].

After pressing the corresponding numeric key the programme search begins.

OK

3

– +

3) See glossary for an explanation.

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MENU

⬅

①②③
④⑤⑥
⑦⑧⑨
⓪

− +

OK
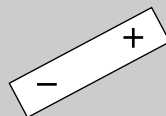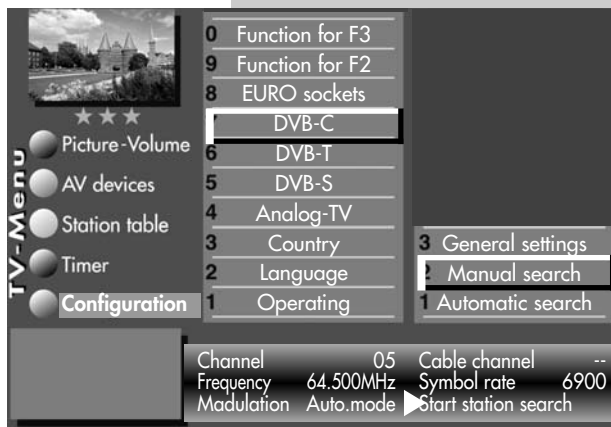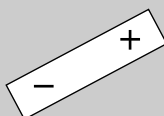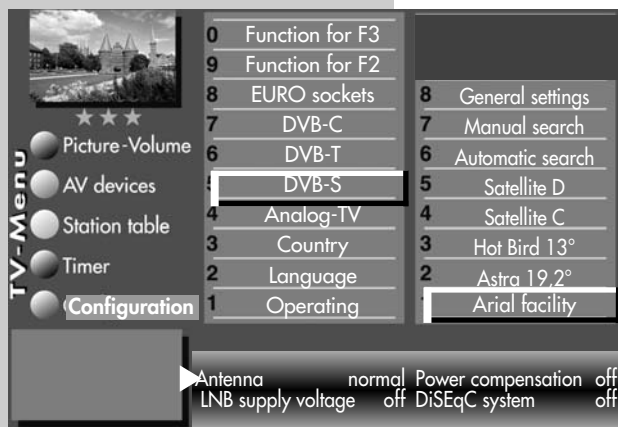
EXIT

i The sat. antenna system must be reported to 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.

Single Cable (Single Cable Distribution SDC)

With the "Single cable" setting, the DVB-S receivers have one feed line. The programme 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 programme 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.*

21.4 Set-up of satellite system Unicable

Each DVB-S receiver must be assigned a sub-scriber number (SCR no.) and the associated sub-scriber 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 programme 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.

	0	Function for F3		
	9	Function for F2		
	8	EURO sockets	8	General settings
★ ★ ★	7	DVB-C	7	Manual search
Picture-Volume	6	DVB-T	6	Automatic search
AV devices		DVB-S	5	Satellite D
Station table	4	Analog-TV	4	Satellite C
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	SCR2 no.	4
SCR1 freq.	1284 MHz	SCR2 freq.	1632 MHz

- Press the "**OK**" button and the "Arial facility" setup window opens.
- Use the cursor control buttons to select "Antenna" and then the **– +** 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 "**OK**" button.
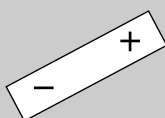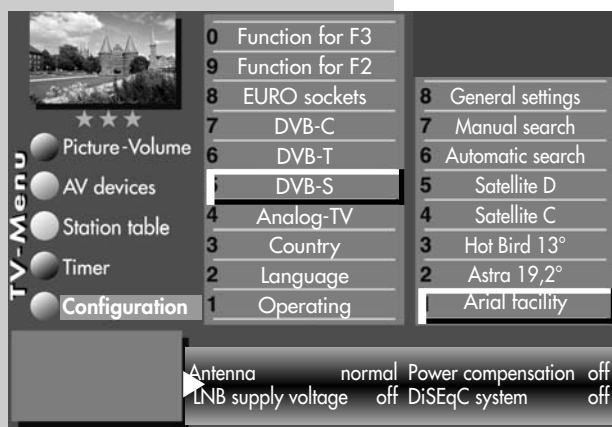- Clear the "TV menu" with the "**EXIT**" button.
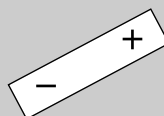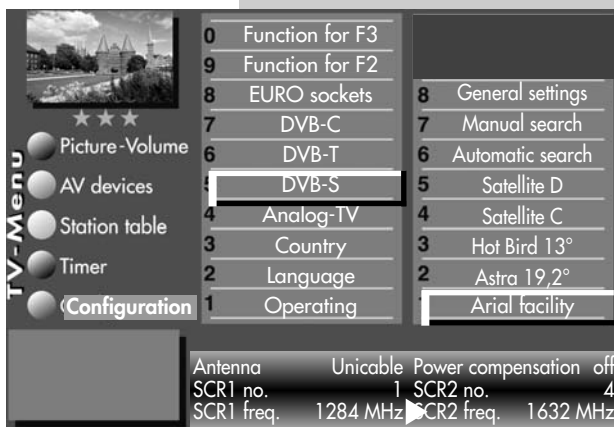
OK

EXIT

21.4 Set-up of satellite system LNB supply voltage

MENU

①②③
④⑤⑥
⑦⑧⑨
⓪

| i | The settings of the satellite antenna system must be entered in the menu "Configuration" so that the TV set knows them. |

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

0	Function for F3	
9	Function for F2	
8	EURO sockets	8 General settings
7	DVB-C	7 Manual search
6	DVB-T	6 Automatic search
5	DVB-S	5 Satellite D
4	Analog-TV	4 Satellite C
3	Country	3 Hot Bird 13°
2	Language	2 Astra 19,2°
1	Operating	Arial facility

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

TV-Menu

Antenna   normal   Power compensation   off
LNB supply voltage   off   DiSEqC system   off

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

+ −

OK

EXIT

• 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 "**OK**" button and the "Arial facility" setup window opens.
• Use the cursor control buttons to select "LNB supply voltage" and then use the - + button to set the LNB supply voltage on or off.
• Confirm the setting by pressing the OK 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".*

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21.4 Set-up of satellite system DiSEqC system

Opening the menu

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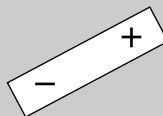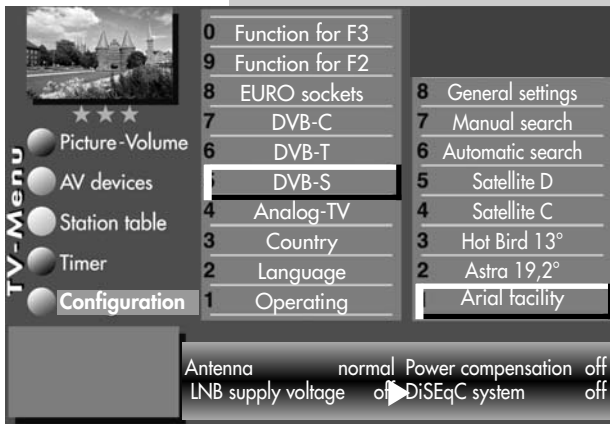
☞ *This menu item is not available in a 2** menu.*

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 ⑤ to select "DVB-S".
- Press the "**OK**" button and the "Arial facility" setup window opens.
- Use the cursor control buttons to select "DiSEqC" and then use the **- +** button to set DiSEqC on or off.
- Press the "**OK**" key to confirm the new setting.
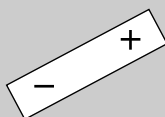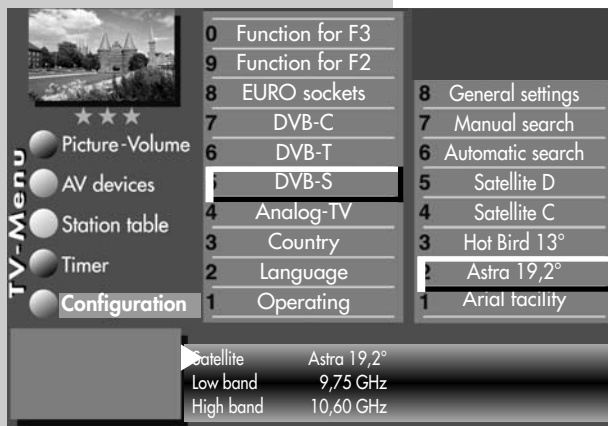- Press the "**EXIT**" key to close the TV menu.

★ ★ ★	**0** Function for F3	
○ Picture-Volume	**9** Function for F2	**8** General settings
○ AV devices	**8** EURO sockets	**7** Manual search
○ Station table	**7** DVB-C	**6** Automatic search
○ Timer	**6** DVB-T	**5** Satellite D
● **Configuration**	**5** DVB-S	**4** Satellite C
	4 Analog-TV	**3** Hot Bird 13°
	3 Country	**2** Astra 19,2°
	2 Language	Arial facility
	1 Operating	

Antenna   normal   Power compensation   off
LNB supply voltage   off ▶ DiSEqC system   off

\+
\-

OK

EXIT

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MENU

①②③
④⑤⑥
⑦⑧⑨
⑩

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

• 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 **− +** key to select the desired satellite. The most common satellites are displayed one after the other, together with the symbol rates for each one. Depending on the satellite, it may be neces-

0	Function for F3		
9	Function for F2		
8	EURO sockets	8	General settings
7	DVB-C	7	Manual search
6	DVB-T	6	Automatic search
	DVB-S	5	Satellite D
4	Analog-TV	4	Satellite C
3	Country	3	Hot Bird 13°
2	Language	2	Astra 19,2°
1	Operating	1	Arial facility

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

TV-Menu

Satellite	Astra 19,2°
Low band	9,75 GHz
High band	10,60 GHz

sary to set additional **symbol rates** manually if the selected satellite uses different symbol rates and you wish to find the related transponders in an automatic station search.

• 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 OK key to confirm the new settings.

• Press the EXIT key to close the TV menu.

+
−

OK

EXIT

21.5 Setting the stations
Automatic search

Opening the menu

The DVB-S station search scans the entire reception band for **TV** and **radio stations** and stores them in separate TV and radio station tables. For details of the DVB radio mode, see Section 26 in the operating instructions for the TV set.

If you are not satisfied with the order in which the stations are stored, you can move stations to other positions in the table or delete them. For further details, see Section 23, "Sorting stations" in the operating instructions for the TV set.

☞ *The station search will function correctly only if the LNB frequencies have been set and stored correctly.*

Executing the automatic station search

MENU

- 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 ❻ to select "Automatic search".

	0	Function for F3		
	9	Function for F2		
	8	EURO sockets	8	General settings
★★★	7	DVB-C	7	Manual search
Picture-Volume	6	DVB-T	6	Automatic search
AV devices	5	DVB-S	5	Satellite D
Station table	4	Analog-TV	4	Satellite C
Timer	3	Country	3	Hot Bird 13°
	2	Language	2	Astra 19,2°
Configuration	1	Operating	1	Arial facility

Satellite   Astra 19,2°   ▶Start station search

- In the setting window, use the **– +** key to select the desired satellite.
- Use the cursor control key ▶ to move to the menu line "Start station search".
- Press key "**OK**" and confirm the question about the station search with the corresponding numeric key:

  ❶ freely receivable programmes[3]
  ❷ all programmes[3]
  ❸ free + CICAM programmes[3].

After pressing the corresponding numeric key the programme search begins.

OK

EXIT

3) See glossary for an explanation.

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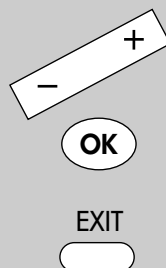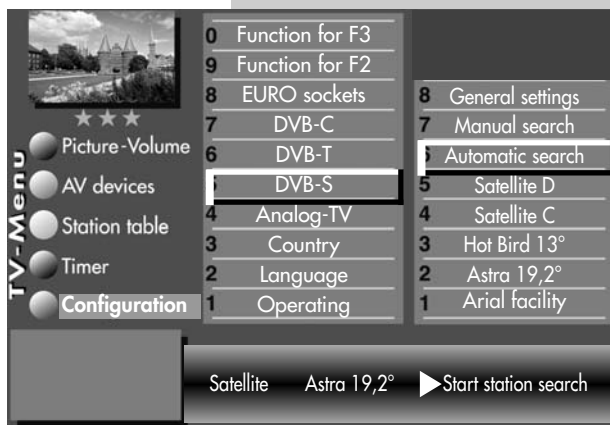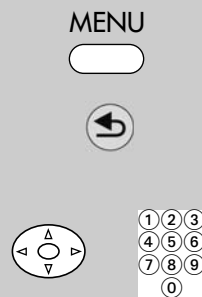
21.5 Setting the stations
Automatic search

If necessary, the stations can also be sorted, moved, or deleted. See Chapter 23 for this.

21.5 Setting the stations
Manual search

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 5 to select "DVB-S".
- Select the menu option "Manual search" with the assigned numeric keys. In the example it is 6.
- The cursor then moves to "Satellite". If more than one satellite is available, use the **– +** key to select the desired satellite.

21.5 Setting the stations Manual search

Opening the menu

- In the setting window, use the cursor control key ▶ to select the menu line "Frequency".
- Use the numeric keys or the **− +** key to set the frequency.

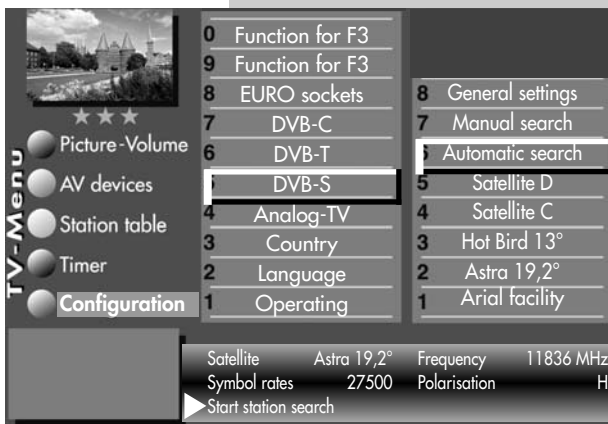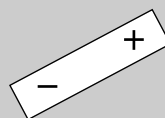☞ *For a HD station search, the information for the DVB system (e.g. DVG-S) must also be entered.*

- If all the data has been entered, use the cursor control key in the settings window to access the „Start programme search" menu item and confirm with the key "**OK**".

- Press key "**OK**" and confirm the question about the station search with the corresponding numeric key:

  ❶ freely receivable programmes[3]

  ❷ all programmes[3]
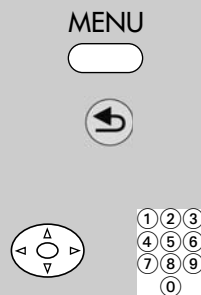
  ❸ free + CICAM programmes[3].

After pressing the corresponding numeric key the programme search begins.

If necessary, the stations can also be sorted, moved, or deleted.
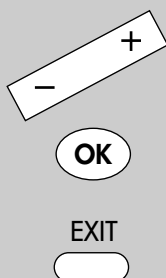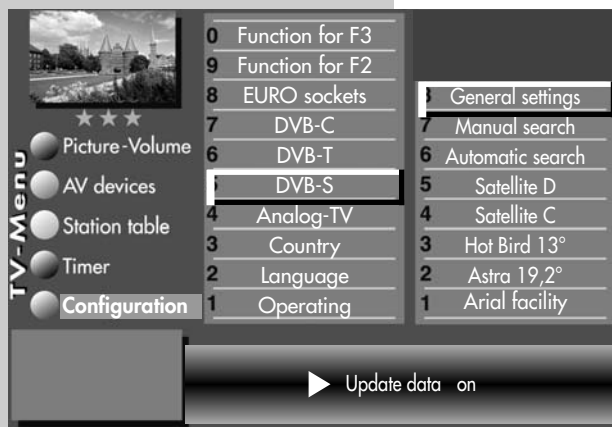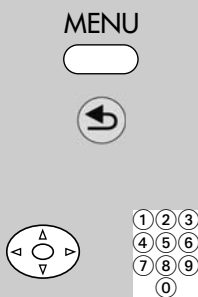
See Chapter 23 for this.

MENU

0	Function for F3		8	General settings
9	Function for F3		7	Manual search
8	EURO sockets			Automatic search
★ ★ ★	7	DVB-C	5	Satellite D
Picture-Volume	6	DVB-T	4	Satellite C
AV devices		DVB-S	3	Hot Bird 13°
	4	Analog-TV	2	Astra 19,2°
Station table	3	Country	1	Arial facility
Timer	2	Language		
Configuration	1	Operating		

Satellite	Astra 19,2°	Frequency	11836 MHz
Symbol rates	27500	Polarisation	H
▶ Start station search			

OK

MENU

⬅

① ② ③
④ ⑤ ⑥
⑦ ⑧ ⑨
⓪

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 programmes.

Setting the data update function

• 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".
>
> • The cursor is located on the line "LNB supply voltage".
>
> • Press the appropriate numeric key (in this example ❽ to select "General settings".
>
> • In the setting window, use the − + key to set "Update data" to "On".

0	Function for F3	
9	Function for F2	
8	EURO sockets	General settings
★ ★ ★	7 DVB-C	7 Manual search
Picture-Volume	6 DVB-T	6 Automatic search
AV devices	DVB-S	5 Satellite D
Station table	4 Analog-TV	4 Satellite C
Timer	3 Country	3 Hot Bird 13°
	2 Language	2 Astra 19,2°
Configuration	1 Operating	1 Arial facility

▶ Update data   on

• Press the "**OK**" key to confirm the new setting.

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

+
−

OK

EXIT

21.6 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.
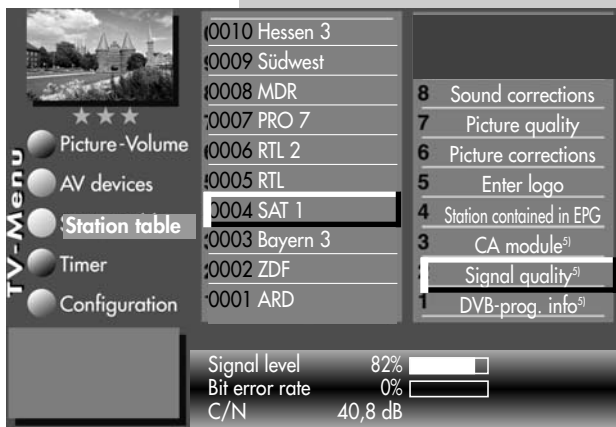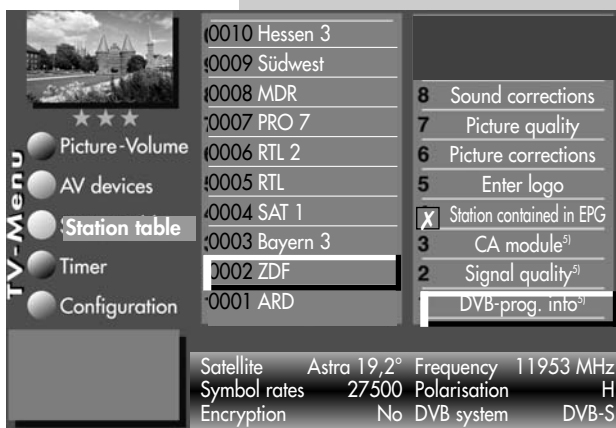
MENU

(𝒫)

F2

▶

- Select the programme 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 programme 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.

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

Satellite   Astra 19,2°   Frequency   11953 MHz
Symbol rates   27500   Polarisation   H
Encryption   No   DVB system   DVB-S

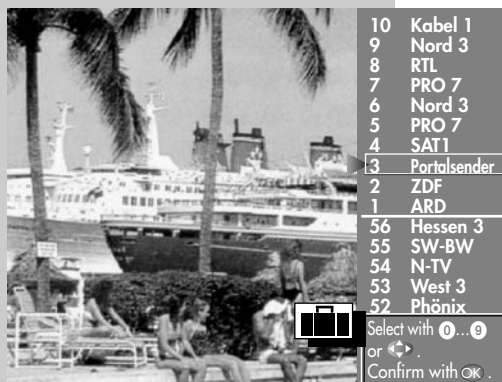|		
★★★	0010 Hessen 3	
Picture-Volume	0009 Südwest	
AV devices	0008 MDR	8 Sound corrections
Station table	0007 PRO 7	7 Picture quality
Timer	0006 RTL 2	6 Picture corrections
Configuration	0005 RTL	5 Enter logo
	0004 SAT 1	4 Station contained in EPG
	0003 Bayern 3	3 CA module[5]
	0002 ZDF	Signal quality[5]
	0001 ARD	1 DVB-prog. info[5]

Signal level   82%
Bit error rate   0%
C/N   40,8 dB

21.7 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. 21) 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

Select with 0...9
or ◄►.
Confirm with OK.

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

Select with 0...9
or ◄►.
Confirm with OK.

22. Station Logo

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 programme 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: ❻) 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 **II** key.

- Set the desired logo by repeatedly pressing the various numeric keys. The lowercase letters are displayed after the uppercase letters.

- Press the "**OK**" key to save the new logo.

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

Opening the menu

MENU

🛜

F2
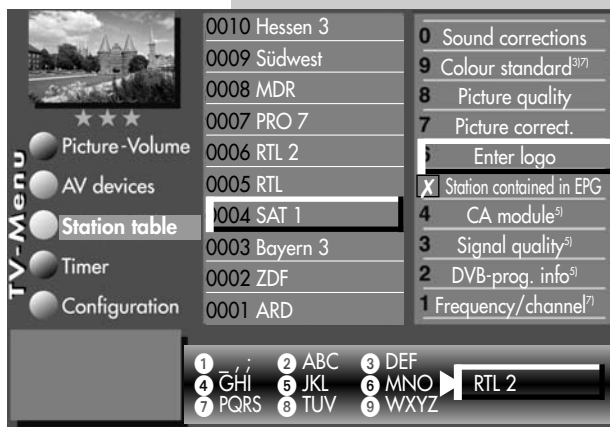
▶

❻

	0010 Hessen 3	**0** Sound corrections
	0009 Südwest	**9** Colour standard[3)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)]

❶ _ , . :	❷ ABC	❸ DEF	
❹ GHI	❺ JKL	❻ MNO ▶	RTL 2
❼ PQRS	❽ TUV	❾ WXYZ	

OK

EXIT
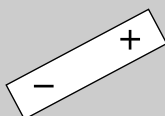
3) See glossary for an explanation.
5) Can only be selected for DVB stations.
7) Available only for analogue stations!

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 programme position that is to be copied, moved, or deleted.

OK

- Press the "**OK**" button and mark the programme position (prog. 0006 in the example).

0̂010	Hessen 3	0̂020	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

★ ★ ★

TV-Menü
- Bild und Ton
- AV Geräte
- **Sendertabelle**
- Timer
- Konfiguration

Markieren mit OK (langer Tastendruck = Block markieren).
Neue Position mit Cursor bestimmen.
– + verschieben/kopieren, ΙΙ löschen.
Alle Markierungen löschen mit ● .

Copy:

- When copying, afterwards use the cursor to select the programme position where the station is to be inserted.

- Use the **+** key to copy the station

Move :

- When moving, select the programme position where the programme position is to be moved.
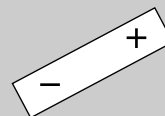
- Use the **–** key to move the station.

Delete:

- If the station is to be deleted, then press the ΙΙ button.

- When you are finished, clear the "TV menu" using the "**EXIT**" button.
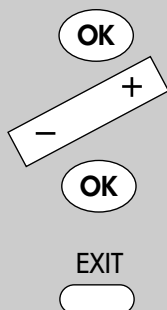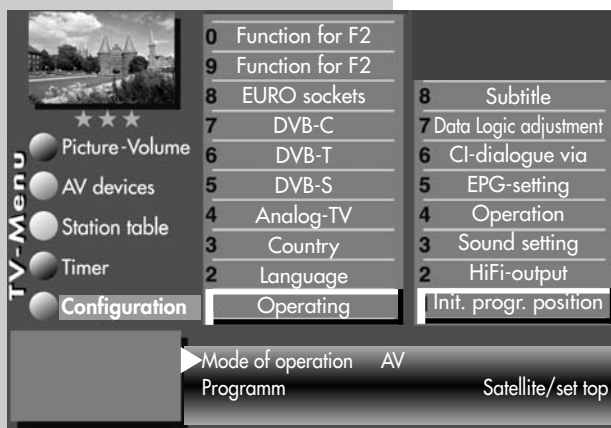
+
–

EXIT

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.

MENU

- Use the white button 🛈 to retrieve the station table.

- Use the cursor control key to select the first programme position that is to be copied, moved, or deleted.

- Press the "**OK**" button and mark the programme position (prog. 006 in the example).

OK

- Use the cursor control key to select the last programme position that is to be copied, moved, or deleted.

- Press down the "**OK**" button until all stations between the first and last station position are marked.

Copy:

- When copying, afterwards use the cursor to select the programme 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 programme 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 **II** button.

- When you are finished, clear the "TV menu" with the "**EXIT**" button.

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

TV-Menü
- ★ ★ ★
- Bild und Ton
- AV Geräte
- **Sendertabelle**
- Timer
- Konfiguration

Markieren mit OK (langer Tastendruck = Block markieren).
Neue Position mit Cursor bestimmen.
– + verschieben/kopieren, II löschen.
Alle Markierungen löschen mit ● .

+
−

EXIT

MENU

⬅

①②③
④⑤⑥
⑦⑧⑨
⓪

You can define an initial program position for this TV set. The preferred use for the initial programme position is to switch to the AV programme position when using an external receiver

Initial programme position settings

☞ *This menu option cannot be set in a 2** menu*

- Press the "**MENU**" key to open the TV menu.
- Use the red button ⬅ to open the "Configuration" menu.

	0	Function for F2		
	9	Function for F2		
★ ★ ★	8	EURO sockets	8	Subtitle
Picture-Volume	7	DVB-C	7	Data Logic adjustment
AV devices	6	DVB-T	6	CI-dialogue via
Station table	5	DVB-S	5	EPG-setting
	4	Analog-TV	4	Operation
Timer	3	Country	3	Sound setting
	2	Language	2	HiFi-output
Configuration		Operating		Init. progr. position
	▶Mode of operation AV			
	Programm			Satellite/set top

- 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 **– +** key to set the desired mode of operation (TV, Radio or AV).

- Then select "Programme". If you have selected TV as the mode of operation, you can now set the desired programme (e.g. 004 for "RTL"). With the AV mode of operation, you can select an external AV connection like EURO 2, HDMI, etc. as an external AV connection.

OK

+
–

OK

EXIT

- Press the "**OK**" button to save the new settings.

- Clear the "TV menu" with the "**EXIT**" button.

☞ *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 programme position appears.*

100

25 DVB Radio Mode

Opening the menu

To switch from TV mode to DVB radio mode, press the "**R**" key.

The screen is automatically blanked after about 30 seconds.

☞ *Note: The screen can be switched on and off manually with the blue key ◉.*

To switch from DVB radio mode to TV mode, press the "**TV**" key.

Setting DVB radio stations

The available DVB radio stations are automatically detected during a station search (see Section 21) and stored in a separate station table at the operating level for radio mode.

The radio station table can be sorted (see Section 23) and the station logos can be changed (see Section 22).

☞ *DVB radio stations are administered in the same basic way as DVB TV stations. Chapters 12 /14 / 15 and 19 to 19.3 also apply to radio programmes.*

R

TV

26 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:

- Selection of programme positions with the numeric keys, the oval ▼ ▲ rocker key or the white key 📷.

- Opening Teletext.

- Displaying help information (INFO).

- Playing back films from a video recorder or DVD player by pressing the "**AV**" 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.

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.

- Use the **- +** key to select the desired scope of operation and press the "**OK**" 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:

- Timer control (sleep timer)

- Childlock

- Timer control (sleep timer)

- Automatic station search

- 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.

MENU

	0	Function for F3		
	9	Function for F2		
	8	EURO sockets	8	Subtitle
★ ★ ★	7	DVB-C	7	Data Logic adjustment
Picture-Volume	6	DVB-T	6	CI-dialogue via
AV devices	5	DVB-S	5	EPG-setting
Station table	4	Analog-TV		Operation
Timer	3	Country	3	Sound setting
	2	Language	2	HiFi-output
Configuration		Operating	1	Init. progr. position
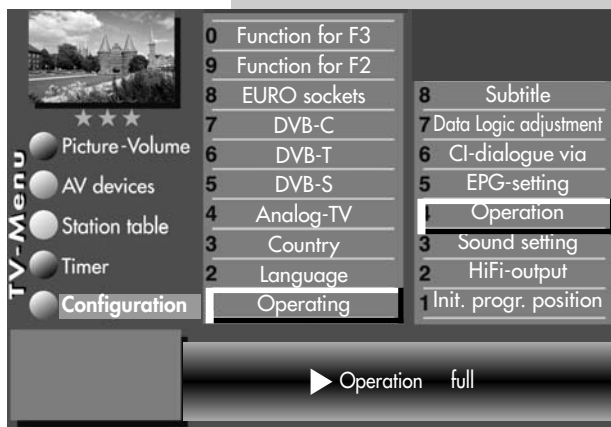
▶ Operation   full

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 programme position".

- Press the numeric key ❹ to select "Scope of operation".

- In the setting window, use the **– +** key to select the desired scope of operation.

- Press the "**OK**" key to save the new setting.

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

OK

EXIT
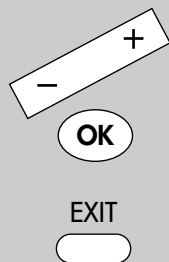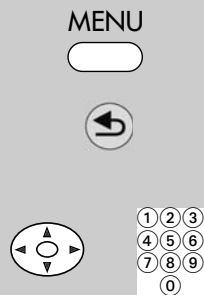
27 Cleaning the TV Set

⚠️ **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 shokks.

Headphone socket, diameter 3.5 mm

Audio in   R/L (e.g. camcorder) Cinch

FBAS/Video in (e.g. digital camera or camcorder) Cinch

Slot for the CA module
See also chapter 31 for more information
on using a CA module.

MECA link – USB port for connection e.g. of

- **Metz Soundsystem 80**
- **Metz Soundsystem 100**
- **mecaHome⁺**

USB port to connect a memory stick
or external harddisk

- **Photo Viewer**
- **USB-Recording**

HDMI connector
Signal type HDMI
(Video/Audio digital)

28 Connections on the Rear of the Set bottom

EURO sockets for connection
of external AV devices
Video and audio IN/OUT

Antenna connection
DVB-S2

Antenna connection
DVB-C/T

Audio IN Ø 3,5 mm
e.q. MP3-Player

Audio OUT Ø 3,5 mm
z.B. Hifi Amplifier

HDMI connector
Signal type HDMI
(Video/Audio digital input)
or when connected to a PC:
Signal type
DVI-D / HDMI

Digital Audio OUT (SPDIF)

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 extracted for external processing.

28.1 Connecting a Hifi Amplifier

Connecting

The audio signal of the TV set is always available in digital ❶ (SPDIF) and analogue ❷, without having to configure any additional settings.

Digital ❶: use an optical audio cable (Toslink) to connect the SPDIF digital sound output socket of the TV set to the SPDIF digital sound input socket of the hi-fi amplifier.

Analogue ❷: use a 3.5 mm stereo jack to 2-cinch connector adapter cable to connect the AUDIO OUT socket of the TV set to the AUDIO IN cinch sockets (hi-fi amplifier).

28.1 Connecting a Hifi Amplifier/AV Receiver

Sound reproduction

- To access the sound reproduction settings on an LCD TV set, press the yellow key 🎵, then use the cursor control key ▼ to select the "Loudspeakers" menu option.

- Use the **– + key** in Connection Type to activate the option "**Loudspeakers off**". The loudspeakers of the TV set will now be muted. The sound will be reproduced via the loudspeakers of the hi-fi system.

Metz LCD-TV
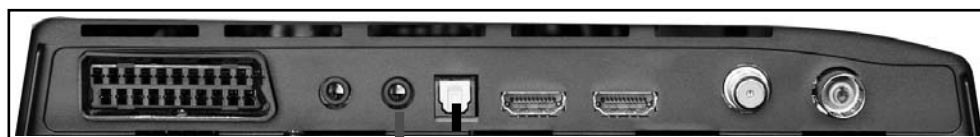
❶ Digital audio signal formats depending on the source)

❷ analogue audio signal R+L (stereo)

HiFi-Amplifier / AV-Receiver

MENU

🎵

① ② ③
④ ⑤ ⑥
⑦ ⑧ ⑨
   ⓪

+
−
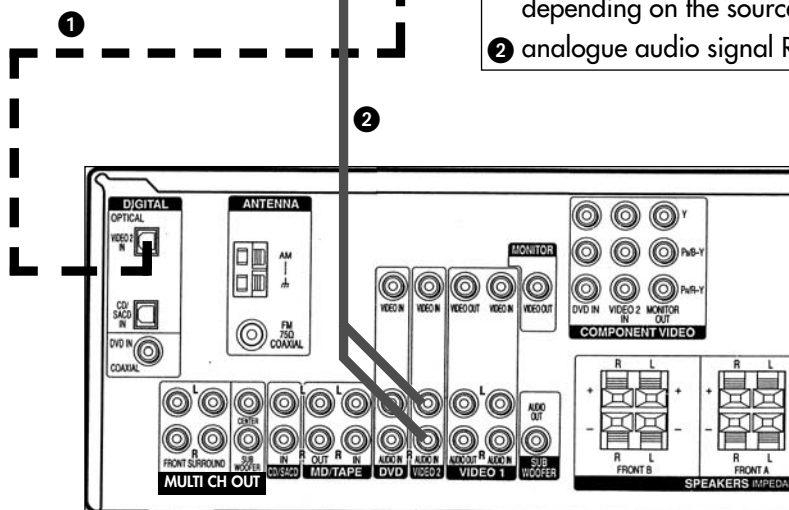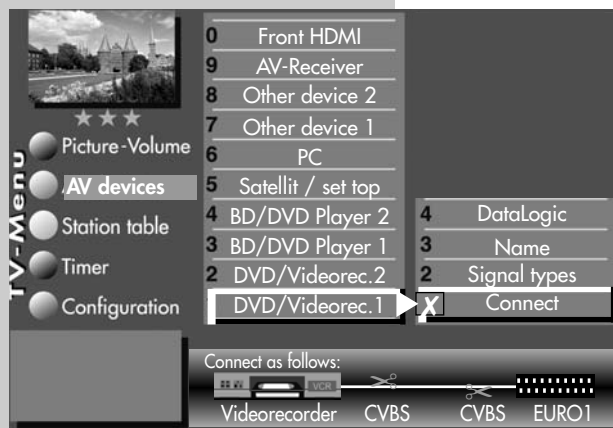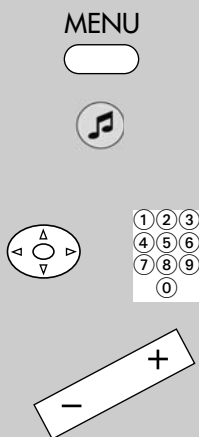
i | **AV** (audio/video) **devices** are external devices which deliver video and/or audio signals (such as video recorders, DVD players, DVD recorders, etc.) and which can be connected to TV sets.

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 "**OK**" key.

0	Front HDMI
9	AV-Receiver
8	Other device 2
7	Other device 1
6	PC
5	Satellit / set top
4	BD/DVD Player 2
3	BD/DVD Player 1
2	DVD/Videorec.2
	DVD/Videorec.1

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

TV-Menu

4	DataLogic
3	Name
2	Signal types
X	Connect

Connect as follows:
Videorecorder   CVBS   CVBS   EURO1

• Press numeric key ❷ and set the signal types (OUT/IN) that apply to the AV device with the − + key and then confirm with the "**OK**" button.

There are different signal types for the transmission of picture signals. See next page.

OK

☞ *Caution! Connection of a new device may cause an existing connection diagram to be changed.*
If so, you must reconnect the AV devices accordingly.

29 Registering AV Devices

Signal types:

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.

HDMI-cable

HDMI:
Using this interface, digital picture and sound signals are transmitted over a line with very high bandwidth (suitable for HDTV).

MENU

♪

①②③
④⑤⑥
⑦⑧⑨
⓪

+

−

0   Front HDMI
9   AV-Receiver
8   Other device 2
7   Other device 1
6   PC
5   Satellit / set top
4   BD/DVD Player 2   4   DataLogic
3   BD/DVD Player 1   3   Name
2   DVD/Videorec.2   2   Signal types
     DVD/Videorec.1   X   connect

▶ Signal OUT   RGB   Signal IN   CVBS

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

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.

☞ *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 "**OK**" key.

• Press numeric key ❷, use the cursor control key to select " Signal OUT", and use the − + key to change the setting to " RGB".

• Press the "**OK**" 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.*

29.2 Registering AV Devices
Setting signal type HDMI

Opening the menu

☞ *The signal type always refers to the input and output of the AV device.*

AV devices equipped with a HDMI socket can be connected to the LCD TV with the aid of a HDMI cable, respectively.
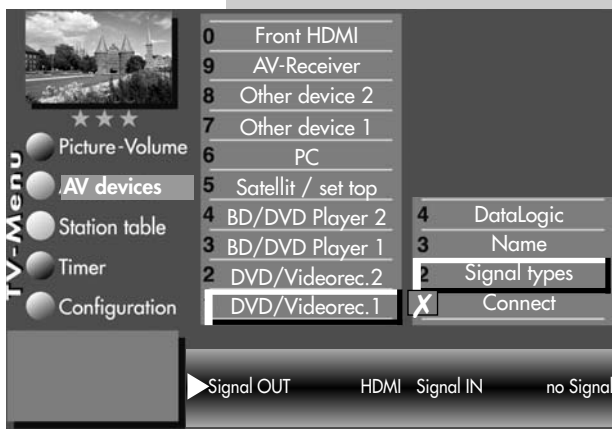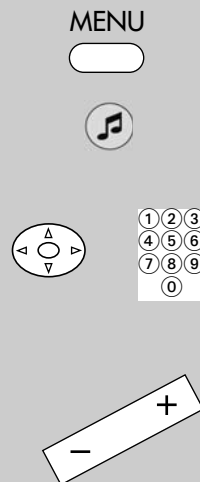
The connected device must be registered in the menu "AV devices" with "Signal OUT" set to "HDMI" as applicable. Connection via HDMI interface permits digital transfer of the picture signal from the device to the TV set.

Setting the signal type HDMI

• 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 "**OK**" key.

• Press numeric key ❷, use the cursor control key to select " Signal OUT", and use the **–** **+** key to change the setting to " HDMI".

• Press the "**OK**" 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

🎵

①②③
④⑤⑥
⑦⑧⑨
⓪

+
−

0	Front HDMI
9	AV-Receiver
8	Other device 2
7	Other device 1
6	PC
5	Satellit / set top
4	BD/DVD Player 2
3	BD/DVD Player 1
2	DVD/Videorec.2
X	DVD/Videorec.1

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

TV-Menu

4	DataLogic
3	Name
2	Signal types
X	Connect

▶ Signal OUT   HDMI   Signal IN   no Signal

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.
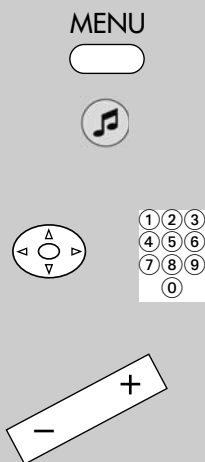
29.3 Registering AV Devices Data Logic

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:

Comparable dialogue systems are:
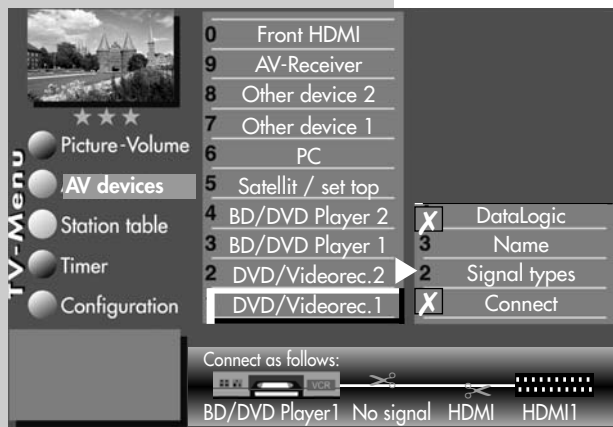QLink (Panasonic), EasyLink (Philips), Megalogic (Grundig), SMARTLINK (Sony).

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.
- Direct recording - the video recorder records the programme currently displayed on the TV screen.
- Automatic switching to the AV programme 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.

Registering a Data Logic video recorder on the TV set

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 EURO socket.

MENU

- 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 "**OK**" key.
- Press numeric key **②**, use the **– +** key to select the correct signal types (OUT/IN) and press the "**OK**" key.

0	Front HDMI	
9	AV-Receiver	
8	Other device 2	
7	Other device 1	
6	PC	
5	Satellit / set top	
4	BD/DVD Player 2	X DataLogic
3	BD/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

Connect as follows:
BD/DVD Player1   No signal   HDMI   HDMI1

(Signal types FBAS = Video, YC = S-Video. See also the user guide of the respective AV device, e.g. video recorder).

- If desired, press numeric key ❸, enter a new name for the AV device and press the "**OK**" key.

- Use the cursor control key to select "Data Logic" and press the "**OK**" key.

- Use the cursor control key to select "Connect" and press the "**OK**" key. Then connect the AV device to the corresponding EURO socket.

OK

❸

▲ **OK**

OK

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 "**OK**" key and then press numeric key ❸ to select "Data Logic".

- Press the "**OK**" key to transfer the programme positions from the TV set to the video recorder.

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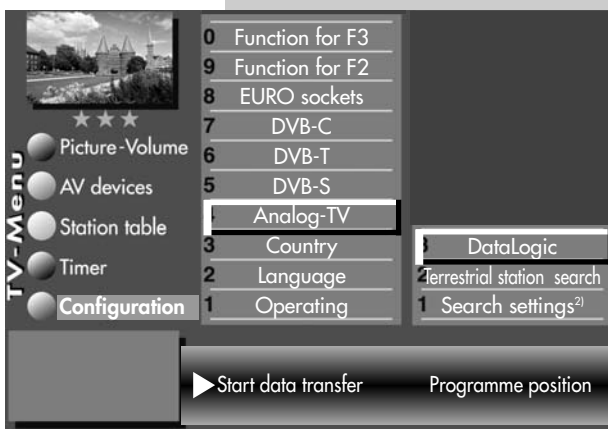
MENU

🔄 ❹ ❸

	0 Function for F3	
	9 Function for F2	
	8 EURO sockets	
★ ★ ★	7 DVB-C	
Picture-Volume	6 DVB-T	
AV devices	5 DVB-S	
Station table	Analog-TV	DataLogic
Timer	3 Country	Terrestrial station search
Configuration	2 Language	1 Search settings[2)]
	1 Operating	

▶ Start data transfer   Programme position

OK

EXIT

113

MENU
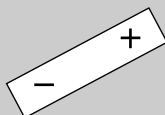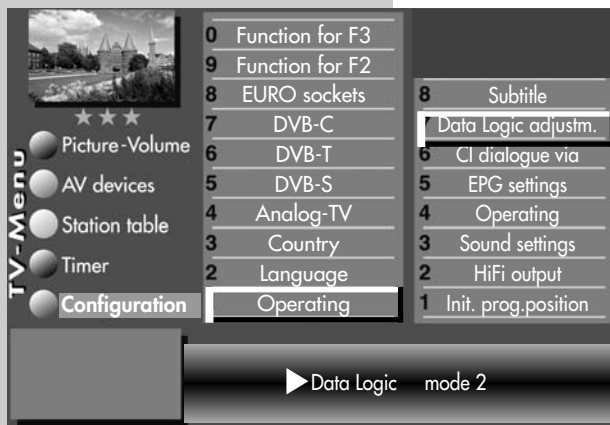
Data Logic Mode 1 / Mode 2
Factory setting is **Mode 1**.

If the recording is stopped by the Data Logic Videorecorder (self-dependent, 5-10sec. after the start of the recording), switching to **Mode 2** could solve this problem.

DataLogic mode settings

• Call up the TV menu with the "**MENU**" button.

	0 Function for F3		
	9 Function for F2		
★ ★ ★	**8** EURO sockets	**8** Subtitle	
Picture-Volume	**7** DVB-C	Data Logic adjustm.	
AV devices	**6** DVB-T	**6** CI dialogue via	
Station table	**5** DVB-S	**5** EPG settings	
Timer	**4** Analog-TV	**4** Operating	
	3 Country	**3** Sound settings	
Configuration	**2** Language	**2** HiFi output	
	Operating	**1** Init. prog.position	

▶ Data Logic   mode 2

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

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

• Select the menu option "DataLogic settings" with the assigned numeric key. In the example it is **7**

• Set the desired parameters in the settings window using the **– +** key.

• Press the "**OK**" key to confirm your selection.

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

+
–

OK

EXIT

29.5 Removing AV Devices

Opening the menu

☞ *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 EURO socket).

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 "**OK**" key. The cursor is on the line "Connect".

- Press the "**OK**" key again to remove the connected device.

- Press the "**EXIT**" key to close the TV menu.
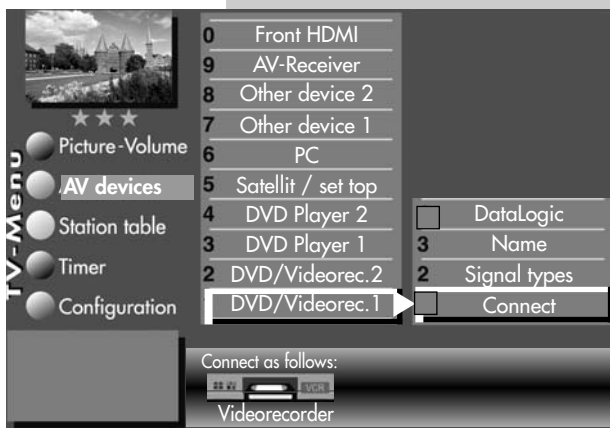
0	Front HDMI	
9	AV-Receiver	
8	Other device 2	
7	Other device 1	
6	PC	
5	Satellit / set top	
4	DVD Player 2	DataLogic
3	DVD Player 1	3 Name
2	DVD/Videorec.2	2 Signal types
	DVD/Videorec.1	Connect

Connect as follows:
Videorecorder

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

MENU

🎵

OK

☞ *Caution ! This may cause an existing connection diagram to be modified. If so, you must reconnect the AV devices accordingly.*

EXIT

30 Copying between AV Devices Direct recording

Example: you have a camcorder and would like to copy the recording on the camcorder to a video recorder for archiving.

Use a cinch cable to connect the camcorder to the front cinch input sockets on the left-hand side.

The 3 cinch sockets are coloured:

Yellow: video signal.

White: audio left, **Red**: audio right.

Now connect the video recorder to the EURO socket of the TV set using a EURO AV cable.

AV **2**

```
5 Front-HDMI
4 HDMI2
3 EURO1
▶ Camcorder/Foto
1 PC

AV   Select with 0...9
     or   ◄◆►
     Confirm with OK.
```

Prepare direct recording for copying

• Press the AV key and select Front (camcorder, player) using the respective numeric key **2**.

The TV set switches to the AV programme position of the connected camcorder.

Press the F2 button for approx. 3 seconds - the **Special Functions 2** menu appears.

F2 **0**

```
Recording       Yes
Reminder        No

Pr  AV 4
Front

Date        18.05.
Start       18:00
End         18:25

Recording device
▶ DVD/Videorec.1

Change with - + .
  ◆  select.
OK save the timer.
```
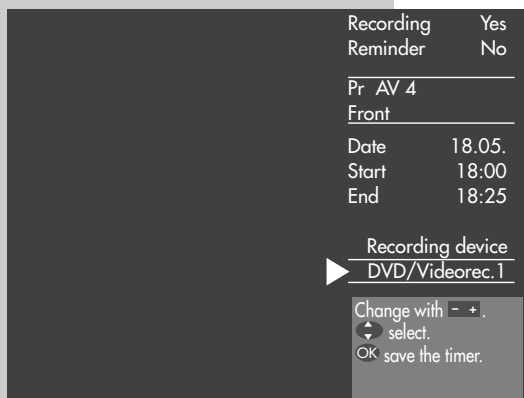
• Press numeric key **0**. The recording menu opens. The AV programme slot (Front), the current date, the start and end time and also the recording device are displayed.

• Use the cursor key ▼ to select the menu option and enter the date, start and end time. Now select the recording device line. If there is only one recording device, it will be displayed here. If there is more than one, you can use the **– + key** to select a different recording device.

• Save the settings by pressing "**OK**".

30 Copying between AV Devices Direct recording

- Select the AV programme position on the recording device (a video recorder in the example here), this is usually AV1 (depending on the selected EURO socket).

- Start instant recording on the recording device (a video recorder in the example here) by pressing the appropriate button (REC or OTR etc.).

- Start the recording on the player (a camcorder in the example here), which you want to archive.

The recording that is currently running is displayed on the screen. The TV set is now configured to pass on the signal provided by the player to the recording device.

☞ *If you want to see the television programme that is currently running, simply press the TV key. The copy process will continue running in the background.*
If you want to review the copy process, press the **AV key** and select Front (camcorder, player) using the respective numeric key ❷.

F2

End direct recording

After the copy process has finished, press the F2 key for approx. 3 seconds - the Special Functions 2 menu will then appear.

Press the numeric key ❶ to exit the recording function.

Special functions 2

2 Language of prog.
3 Subtitle

9 Timer overview
0 Direct recording

❶

31 Inserting/Removing CA Modules

The TV set has a slot for a CA module on the left-hand side (card reader for a Smartcard or deco-ding card).

1 Insert the CA module into the slot and push until it snaps into place.

2 Now insert your Smartcard (decoding card) into the CA module.

The TV set is now ready to decode the encoded station.

To remove, pull the Smartcard and the CA module out.

32 Connecting a PC to the TV set: HDMI ⌋ HDMI

Opening the menu

Connecting

⚠ *With this generation of device there is no possibility to replay an analogue PC signal, for example, from a 15-pin VGA connector.*

☞ *The AV device menu is factory set to connect a PC via the HDMI 2 connector.*

HDMI [PC] to HDMI [TV set]

Switch the PC and TV set on with the power switch and use an HDMI cable to connect the HDMI sokket of the PC to the HDMI 2 socket of your TV set.

After connecting the PC, data is exchanged between the graphics card and the TV. The possible resolutions are determined during this process.

Using the TV set as a PC monitor

Press the AV key. The choice of possible devices and/or connectors is shown.

Press the numeric key 1 as shown in the example or use the cursor control key ❶ to move the cursor to the PC option, then press **OK**.

The device selection menu will disappear and you will see the PC picture.

IN1   IN2

HDMI sockets
Back side of TV set
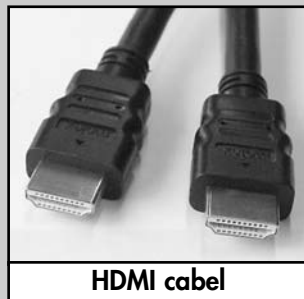
HDMI cabel
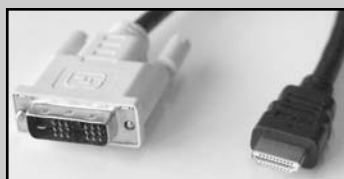
DVI-D - HDMI adapter cable
(see also chapter 32.1)

5 **Front-HDMI**
4 **HDMI2**
3 **EURO1**
2 **Camcorder/Foto**
▶ **PC**

AV Select with ❶...❾
or ◀✛▶
Confirm with OK.

32.1 Setup DVI-D] HDMI connection
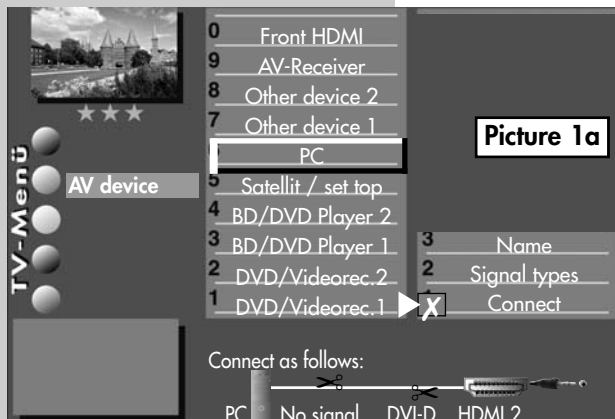
DVI-D [PC] to HDMI [TV set]

Alternatively, if your PC has a DVI socket instead of an HDMI socket, you can also connect your PC to the TV set using a DVI-D socket to HDMI socket adapter cable. If this option is used, the signal type must also be changed.

Open the TV menu by pressing the "**MENU**" button.

Open the AV device menu with the yellow key 🟡.

Use the cursor control key ▲ to select the AV device PC and then press "**OK**".

Now select (✗) the Connect menu option using the "**OK**" key (Picture1a).

0	Front HDMI	
9	AV-Receiver	
8	Other device 2	
7	Other device 1	
6	PC	**Picture 1a**
5	Satellit / set top	
4	BD/DVD Player 2	
3	BD/DVD Player 1	3 Name
2	DVD/Videorec.2	2 Signal types
1	DVD/Videorec.1 ▶ ✗	Connect

AV device TV-Menü

Connect as follows:

PC | No signal | DVI-D | HDMI 2

▲ **OK**

0	Front HDMI	
9	AV-Receiver	
8	Other device 2	
7	Other device 1	
6	PC	**Picture 1b**
5	Satellit / set top	
4	BD/DVD Player 2	
3	BD/DVD Player 1	3 Name
2	DVD/Videorec.2	Signal types
1	DVD/Videorec.1	✗ Connect

AV device TV-Menü

▶Signal-OUT   DVI-D   Signal-IN   No signal

Use the cursor control **key ▲** to go to the SIGNAL TYPES menu option and press OK. Use the **– + key** to select DVI-D and press "**OK**". The settings must be configured as shown in Figure 1b.

Exit the TV menu with the "**EXIT**" **key**.

For PC sound from the speakers of your TV set, see also chapter 32.2.

When the start-up procedure is finished, you can set the resolution as you wish (recommended = 1920 x 1080 - 60 Hz.) in the Windows menu "Display characteristics".

32.2 Connecting a PC: sound from the speakers of TV

☞ *With the HDMI setting, sound is also transmitted via the HDMI cable. This must, however, be supported by the HDMI output of the graphics card of your PC.*

<u>*Or:*</u> *if you have connected your PC via a "DVI-D to HDMI" adapter cable:*

Use a standard audio cable (3.5 mm stereo jack to 3.5 mm stereo jack) to connect the Audio Line output of the sound card of your PC to the Audio-In input of the TV.
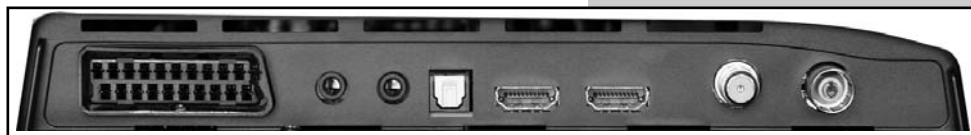
Audio IN ∅ 3,5 mm

33 Glossary

AV programme 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.

Picture profile

Standard: Compromise for all applications
Sports: Setting for sports stations or sports programmes
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.

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 programmes.

33 Glossary

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.

Standard values

The standard values are the settings (such as brightness, sound volume, colour, etc.) which are the same for all programme positions.

Panorama

The panorama function can be used to expand "normal" TV programmes 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.

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 programme 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.

Search setting

1 freely receivable programmes, all non-encrypted stations are sought.

2 all programmes, 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 programmes, all non-encrypted and all encrypted [programmes] for the smart card inserted in the CA module, are sought.

☞ *Menu option 3 only appears if a CA module has been inserted.*

VCR

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

Automatic zoom

When the automatic zoom function is active, programmes 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 programmes is not adjusted automatically.

34 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 programme 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"

34 Problem, Possible cause, Remedy

Problem	Possible cause	Remedy
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 "OK" key. Make sure that you connect the AV device as shown in the connection diagram.
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 programme position has not been set correctly in the TV menu.	• Select the AV programme position and set the picture format to 16:9 or "Automatic" See Ch. 11. **General Picture Settings**
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 Ch. 29, **Registering AV Devices**. Set signal type RGB

35 Upgrade Kits

- **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

- **Metz Soundsystem LS 5.1 W
  (014LR5143)**
  The Metz sound system 80/100 is upgraded with a rear speaker system.
  This turns a 2.1 Surround System into a 5.1 Surround System.

- **mecaHome+ radio control unit
  (017ZR10G3)**
  Innovative technology from Metz and Moeller ensures effective couch management.

For further information and other retrofit kits, please contact your TV dealer.

You can also find further information on our homepage: www.metz.de.

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36 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):

See accompanying datasheet

36 Technical Data

Supported input 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 (format is source dependent)
Audio IN: Analog Stereo (Line-IN)
Audio OUT: Analog Stereo (Line-OUT)

DIGITAL AUDIO OUT   SPDIF (Linear PCM Stereo bzw. Dolby Digital, depending on source)

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)
Haedphone OUT: Headphone impedance >= 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.

GB

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.

Errors excepted. Subject to changes !

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3 Administration and development
4 Storage/Dispatch
5 Mecablitz production
6 TV production
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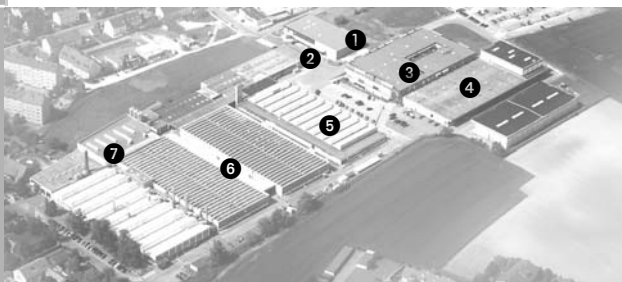
Metz - Werke GmbH & Co. KG - Zirndorf near Nürnberg

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.

Metz - always first class.