



Solea / Clarea / Pureo / Merio LED-TV

Operating instructions



Dear Customer,

thank you very much for choosing a Metz product.

We have created menu navigation in this TV set that provides you with an easy- to-understand user interface.

You can access the help menu during all modes of operation in order to make adjustments to your settings.

But before switching on for the first time, you should at any rate read chapters 1 to 5 and 9 of the user's guide.

In the box

- TV set with cable cover
- Remote control + two AAA batteries
- Power cord
- Operating instructions
- Datasheet
- Unit base

Operating instructions for the following LCD TV sets:

see accompanying datasheet.

Explanation

 **Hint, note**

 **Beware of health risks!**

"Metz-Werke GmbH & Co KG hereby declares that the following devices [Solea 42TW46, 47TW46, 55TW46, Clarea 42TW08, 47TW08, 55TW08, Pureo 32TW07, 42TW07, 47TW07, 55TW07 and Merio 32TW13] comply with the basic requirements and other relevant regulations of Guideline 1999/05/EC.

***Web address where you can find the declarations of conformity:
www.metz.de.***

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1 Proper use

This TV set is exclusively designed for the reception and playback 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 a maximum of 75% air humidity.

The TV set may 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 it is protected against moisture (rain, water spray, dew).

2 Installation instructions

- Make sure no bright light or sunshine falls on the screen. This can lead to reflections that impair the brilliance of the picture.
- The most favourable viewing distance is three times the screen diagonal, in sets with
 - 26" screen approx 2 m
 - 32" screen approx 2.4 m
 - 37" screen approx 2.8 m
 - 42" screen approx. 3.2 m
 - 47" screen approx. 3.5 m
 - 55" screen approx. 4.2 mThis distance can also be reduced by one half for HDTV.
- Antenna connecting cables and other components between the permanently installed antenna-/broadband plug and the radio receiver (e.g. TV set, video recorder) must comply with the Euro standard EN 60966-2-4.

- To connect the antenna and HDMI, you should use cables with good quality HF shielding to ensure effective contact with the connection ports. Shielding of > 85 dB is required for the antenna connection cable.
- If unauthorised cables and components are used, the operating permit of the radio receiver lapses.
- Use only Metz device stands to set up the TV set on a horizontal, non-slip surface.
- Heavy smoking in the vicinity of the LCD TV set can lead to nicotine and soot deposits behind the front panel glass and as a result to an impairment of the picture quality. Such deposits can only be removed by an expert. In extreme cases this can lead to permanent damage of the panel, making replacement of the panel necessary. Cleaning or replacement of the panel is not covered by the guarantee.

 If you want to mount the TV on the wall, we recommend using a Metz wall mount. If you decide a commercial wall mount solution, we ask to be noted that the connection must be executed properly. Due to the device the use of a Metz adapter plate may be required. The wall mount should only be performed by qualified persons. When using a third-party-solution we wish to emphasize that we have to exclude warranty, if the unit should be damaged caused by installing the Wall Mount.

- ⚠ 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.

3 Safety instructions

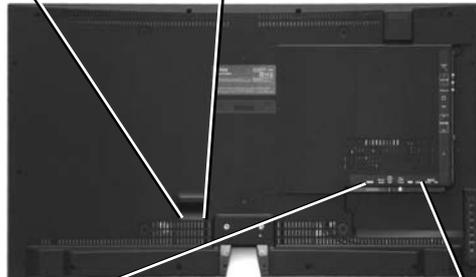
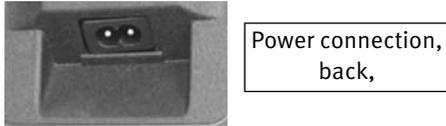
- ⚠ Set up the TV set on a firm, level and stable base!
- ⚠ Your set is designed for operation in dry rooms. If, as an exception, you operate the TV set outdoors, then please make sure that it is protected against moisture (rain, water spray, dew).
- ⚠ Do not expose TV set to dripping or splashes (e.g. rain)!
- ⚠ Unplug electrical equipment before cleaning!
- ⚠ Do not hold the remote control directly in front of your eyes and press a key! Infrared light!
- ⚠ The TV set may only be run with a power voltage of 230-240V~ 50Hz.
- ⚠ For maintenance and repair work the mains plug or the device plug-and-socket of the power cable of the TV set – in the meaning of the applicable standard – are to be regarded as the means for disconnection from the mains and kept in working order.
- ⚠ When laying the power cord make sure there are no objects resting on it and that no-one can trip over it!
- ⚠ Candles and other open flames must be kept away from this product at all times to prevent fire spreading.
- ⚠ The unit may only be opened and repaired by a qualified specialist.

RISK OF FATAL INJURIES !

Please contact your authorised dealer if any repairs are

- A cold device may only be turned on in a cold room once any condensation on the screen has evaporated.
- TV sets require adequate cooling. The openings at the back may not be covered by curtains, etc. The ventilation slits on the bottom of the set must remain freely accessible, since this is how the device draws in cool air.
- Make sure there is an adequate cooling air flow if you put your device into a built-in cabinet.
- Do not set up/suspend your device directly next to or above a heater; this could impair the device cooling.
- No burning candles or vessels with liquid may be placed on or above the TV set. Hot wax and liquids that get into the interior of the device destroy the electric components of your TV set. In these cases the electrical safety of the device can no longer be guaranteed.
- Thunder storms are a danger for electrical devices. If lightning hits the power cable or antenna, the device can be damaged, even if it is switched off. During thunder storms disconnect the mains plug and antenna plug from the socket or the TV set.
- No rechargeable batteries may be inserted in the battery compartment of the remote control. Only two LR03/AM4/AAA 1.5 V micro batteries may be used.
- This TV set is exclusively designed for the reception and playback of picture and sound signals.
- Do not display still pictures, logos, 4:3 formats with margins, etc for a long period. There is a risk that these still pictures could lead to markings on the screen.

- Soot and dust deposits can accumulate behind the front panel glass of the LCD TV set without a visible source of soot being present. These soot 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 are mentioned as the cause, see too the 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.
 - The screen surface should only be cleaned with a soft, dry cleaning cloth (e.g. microfibre cloth).
 - To remove stubborn dirt or smears, it is possible to clean the screen with a slightly damp, soft cloth. Also see Chap. 29.
-  Never use cleaning solution on the screen surface! If any cleaning solution penetrates beneath the screen's lower frame, it will result in irreparable damage to the components.



DVB-S2 DVB-C/-T
Antenna connection

4 Connecting, switching on and off

Power connection

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

Antenna connection (back of unit on the bottom)

Connect the TV to the antenna box with an antenna cable.

Switching on for the first time

Switch on the TV set with the power switch on the device. The orange or blue-red stand-by display is illuminated.

When the TV set is switched on for the first time, the "Installation Wizard" appears. It guides you through the settings that you have to make to start-up the TV set if the settings have not been done by the dealer. This includes the language, country, reception type and so on (see chapter 6).

Switching on

Switch on the TV set with the power switch on the device. The orange or blue-red stand-by display is illuminated.

After about 10 seconds the TV set switches automatically to program position 1 or the preset initial program position, see Chap. 21.

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. Unless a button is pressed on the remote control, the TV will switch to stand-by mode after 10 minutes.



Solea: power switch back right.

Switching on from stand-by mode

Use the numeric keys of the remote control to select any program.

Program position 1 is selected with the key  or if programmed, there is a switch to the initial program position, see Chapter 21.1.

Switching off with the remote control

Press the remote control key  .

The TV switches to stand-by mode and the LED display lights up.

When the LED display turns yellow or blue-red, the TV is in the process of collecting data for electronic program listings.

Switching off with the power switch

If the red LED display is illuminated or “EPG” appears in the display, the TV set is still gathering data for the electronic program guide.

5 The remote control

The remote control conveys commands to the TV set via infrared light. The remote control must always be directed at the TV set. Other infrared controlled devices or systems (e.g. infrared headphones) within its range could be destroyed.

Direct sunlight on the TV set may lead to disruptions, because the TV set is unable to recognise the infrared signals of the remote control. To enable the TV set to be controlled by the remote control, it cannot be switched off with the power switch.

No rechargeable batteries may be inserted in the battery compartment of the remote control!

Only two LR03/AM4/AAA 1.5 V micro batteries may be used.

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



-  ON, at program position 1 or at the programmed initial program position (Chapter 20.1)
- OFF, enter stand-by setting

If an external hard disk is connected:

-  When set to Play: Rewind
When set to time shift: Skip backwards -20 seconds
-  Open archive / in archive: Play
-  When set to Play: Fast forward
When set to time shift: Skip forwards one minute
-  Start direct recording / EPG direct recording
-  In TV mode: Start time shift
In TV mode: Freeze frame, if "Timeshift" has been switched off in the function overview
When set to Play: Still picture/Pause
When set to Play: press and hold: slow motion
-  Stop (when set to Play: Return to archive / when set to time shift: Switch to "Live")
-  Freeze frame
-  Select internal and external signal source (AV devices)
-  Select HbbTV.
-  Call up picture settings
-  Call up sound settings
-  Display date, time info on program.
When set to time shift: Display playback position
-  Open "Functions" (function keys)



Select list of TV stations

V+

Volume +

+P

Progr. +

V-

Volume -

-P

Progr. -



Cursor control key/Change value



Confirmation key
In the menu: Save



Mute/sound stop



Back to last program
In the menu: Go back



Leave Menu/Settings



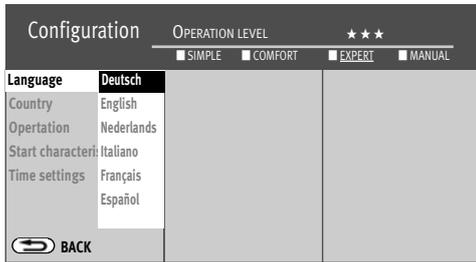
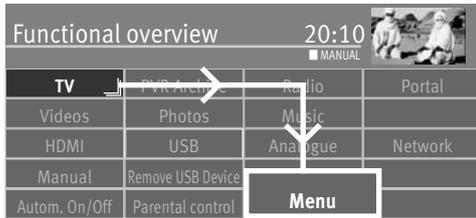
Call up video text



Call up the electronic program guide



Open "Functional overview" menu



6 Setting the language/country

Language selection in the menu

You can select the language under "Configuration".

All texts in the menus and in the Help (information) will be shown in the chosen language.

Setting the country

The setup location or country (e.g. Germany) must be entered after setup. This assigns the device its basic settings (e.g. channel raster, sequence of channel filing, etc).

Setting the language/country:

- Press button to open the "Functional overview".
- Select "Menu" with the cursor and press the button.
- Select "Configuration" with the cursor and press the button.
- Select "Language" or "Country" with the cursor in the context menu and press the button.
- Select your desired language or country with the cursor.
- Press the button to confirm your selection.
- Press the button to exit the menu.



Functional overview		20:10	
		MANUAL	
TV	PVR Archive	Radio	Portal
Video	Photos	Music	
Manual	USB	Analogue	Network
	Move USB Device	Filemanager	
Autom. On/Off	Parental control	Menu	



7 Help (Guide)

In designing the TV set we took care to configure it in a way that would make it fun for you as a user to get to know the device in the easiest, most convenient manner possible.

The Help Guide can answer many of the questions you might encounter once you have set up and switched on your TV.

Just press the blue button when the menu is displayed. The table of contents for the "Guide" appears on the screen. The "Guide" can also be programmed as a function button.

The "Guide" menu or help

You can select the point you are interested in the table of contents or key word index with the cursor control key.

Move cursor to the right or down,
browse the index forwards ...

Move cursor to the left or up,
browse the index backwards ...

... then press the key , so that you can read the explanatory text.

All underlined words, whether in the table of contents, key word index or explanatory text can be selected with the cursor. After pressing the key , the explanation is displayed.

You can browse the pages consulted backwards with the yellow button and forwards with the green button.

8 Menu control

The "Functional overview" gives you a selection of the TV's various functions.

Press the  button to access the Functional overview.



Once you have opened the Functional overview, you can select the individual functions using the cursor.

Confirm your choice by pressing the **OK** button.

To change your TV settings, select "Menu" in the Functional overview and open it with the **OK** button.

Select the menu item that you would like to change and press the **OK** button.

Change the parameters for the selected menu item with the cursor buttons and confirm by pressing the **OK** button.

The METZ logo shows the values set at the factory.

If you want to go back a step in the Functional overview or in the menu, press the  button.

Exit the menu with the  button.

9 Channel search

9.1 Setting the reception type

This TV set is equipped for up to four different reception types:

Analog-TV: The broadcasting technology that has existed for decades and which in the meantime can only be received via cable.

DVB-T: The digital broadcasting technology that can be received via the up to now customary house antenna or room antenna (depending on reception conditions). Ask your local TV dealer about this, or find out more at **“www.ueberall-tv.de”**.

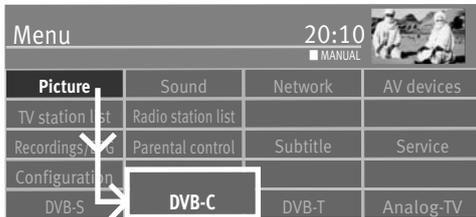
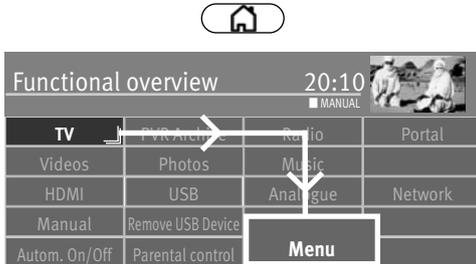
DVB-C: The digital broadcasting technology that can be received via a cable connection. Ask your local cable provider.

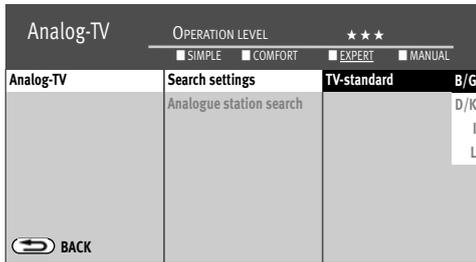
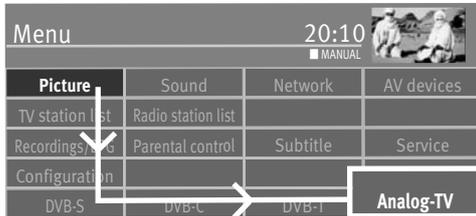
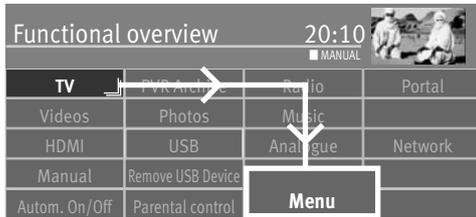
DVB-S(2): The digital broadcasting technology that can be received via a satellite. Ask your local TV dealer about this, or find out more at **„www.lyngsat.com/europe.html“**

Set the reception type that you have set up.

Setting reception type:

- Press  button to open the "Functional overview".
- Select "Menu" with the cursor and press the **OK** button.
- Select the window with the cursor for the desired receiving mode, e.g. "DVB-C" and press the **OK** button.





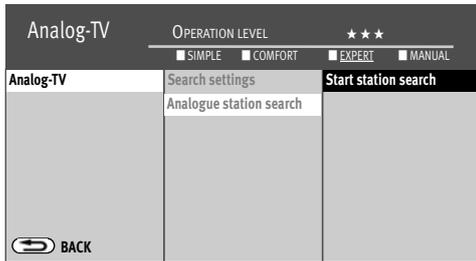
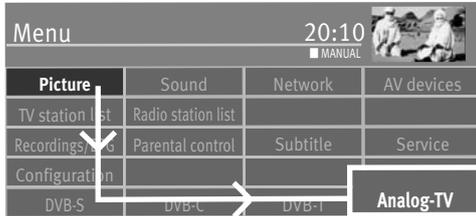
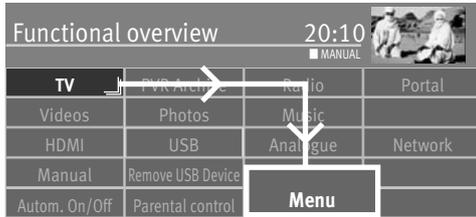
9.2 TV standard for analogue channels

There are various TV standards worldwide for pictures and sound. If the TV standard is set incorrectly, the sound reproduction is disrupted. In the case of the TV standard “L” the picture is also broadcast according to a different standard, as a result of which the TV standard must be selected before the channel search.

The B/G TV standard is set at the factory.

Setting the TV standard:

- Press button to open the "Functional overview".
- Select "Menu" with the cursor and press the button.
- Select "Analog-TV" with the cursor and press the button.
- Select "Search settings" or "TV-standard" with the cursor in the context menu and press the button.
- Select the desired TV standard in the context menu with the cursor and press the button.



9.2.1 Analogue TV channel search

The entire reception range is automatically searched during the channel search. The channels found are filed in the channel table, which is presented at the end of search process. You can move or delete channels that are found if you are not satisfied with the order. See Chapter "11 Edit channel list".

Carrying out a channel search:

- Press button to open the "Functional overview".
- Select "Menu" with the cursor and press the button.
- Select "Analog-TV" with the cursor and press the button.
- Select "Analogue station search" with the cursor in the context menu and press the button.
- Press the button and start the program search.

Once your channel search is complete the results are shown in a list of TV channels.



Functional overview		20:10	
		MANUAL	
TV	PVR Arch.	Radio	Portal
Videos	Photos	Music	
HDMI	USB	Analogue	Network
Manual	Remove USB Device		
Autom. On/Off	Parental control	Menu	



Menu		20:10	
		MANUAL	
Picture	Sound	Network	AV devices
TV station list	Radio station list		
Recordings/EPG	Parental control	Subtitle	Service
Configuration			
DVB-S	DVB-C	DVB-T	Analog-TV



Picture		OPERATION LEVEL	***
		<input type="checkbox"/> SIMPLE <input type="checkbox"/> COMFORT <input type="checkbox"/> EXPERT <input type="checkbox"/> MANUAL	
Picture settings, general	Color intens.		60%
Pict.set.,prog.posn.	Picture profile gen.	(Standard)	
Picture profile adjustment	MPEG noise reduction gen.	(medium)	
	Noise reduction gen.	(Automatic)	
	Picture format	Auto. mode	
	Picture sharpness		
	Signal adjustment		
	BACK		



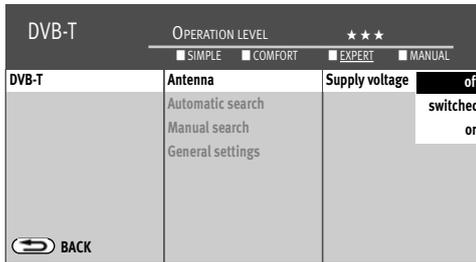
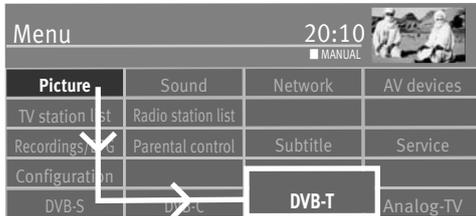
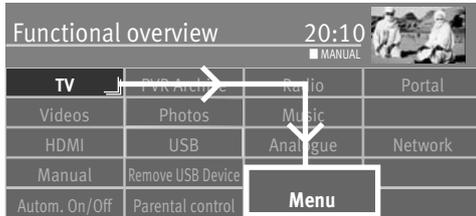
9.2.2 Colour standard for analogue channels

The colour standard is set to “Automatic” at the factory. Normally the TV set recognises the colour standard automatically.

If this automatic function in rare instances does not produce a satisfactory result, the colour standard can also be set manually for each program position.

Setting the colour standard:

- Press button to open the "Functional overview".
- Select "Menu" with the cursor and press the button.
- The "Picture" window is highlighted in red — press the button and open the context menu.
- Select "Pict.set.,prog.posn." with the cursor in the context menu and press the button.
- Select "Picture format" with the cursor in the context menu and press the button.
- Select colour standard from the context menu with the cursor and press the button.
- Press the button to exit the menu.



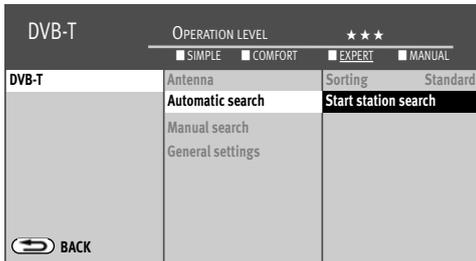
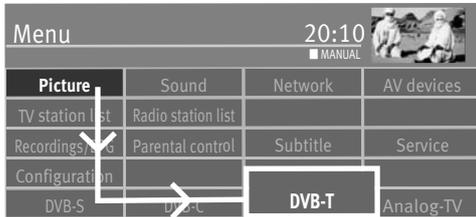
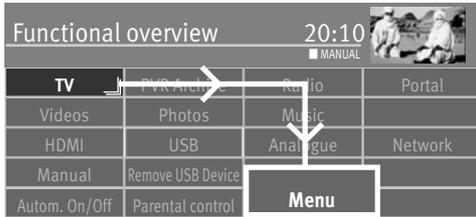
9.3 DVB-T, antenna supply

If an active antenna is used for the DVB-T reception, an antenna supply can be set.

- On:** The antenna supply is switched on permanently. This setting must be selected if a TV set with two DVB-T receivers is supplied via only one active antenna.
- Set:** The antenna supply is only active if a DVB-T program position has been selected (e.g. selection of a change-over relay with simultaneous use of DVB-T antenna & broadband cable).
- Off:** Setting with passive antenna or joint antenna systems.

Setting the antenna supply:

- Press button to open the "Functional overview".
- Select "Menu" with the cursor and press the button.
- Select "DVB-T" with the cursor and press the button.
- Select "Antenna" and "Supply voltage" with the cursor in the context menu and press the button.
- Select the desired antenna source with the cursor and press the button.
- Press the button to exit the menu.



9.3.1 DVB-T channel search, automatic

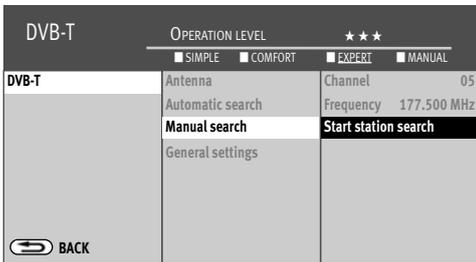
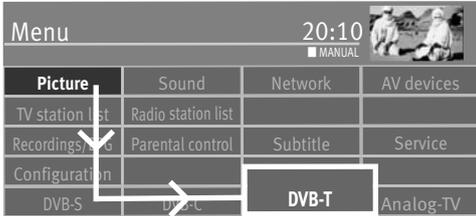
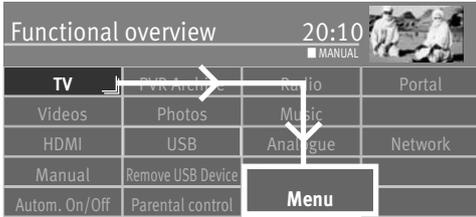
The reception range is searched for TV channels and radio channels in the automatic channel search. The channels found are stored in a TV channel and radio channel table.

You can move or delete channels that are found if you are not satisfied with the order. See Chapter "11 Edit channel list".

Carrying out an automatic search:

- Press button to open the "Functional overview".
- Select "Menu" with the cursor and press the button.
- Select "DVB-T" with the cursor and press the button.
- Select "Automatic search" and "Start station search" with the cursor in the context menu and press the button.
- Select "Free-to air programmes" or "All programmes" from the context menu with the cursor and press the button to start the channel search.

Once your channel search is complete the results are shown in a list of TV channels.



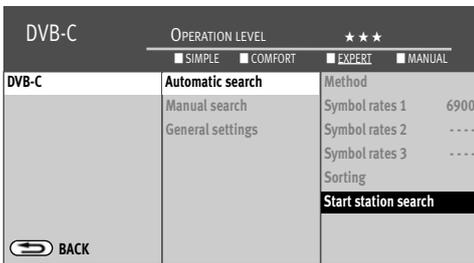
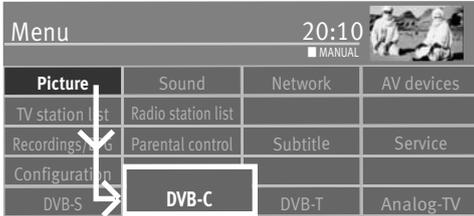
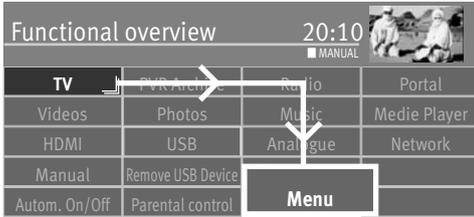
9.3.2 DVB-T channel search, manual

During the manual channel search the channel or frequency of the program to be set must be known.

Carrying out a manual search:

- Press button to open the "Functional overview".
- Select "Menu" with the cursor and press the button.
- Select "DVB-T" with the cursor and press the button.
- Select "Manual search" with the cursor in the context menu and press the button.
- Select the channel number or frequency with the cursor in the context menu and press the button.
- Enter the channel or frequency using the numeric keys and press the button.
- After entering the channel information, select "Start station search" with the cursor in the context menu and press the button.
- Select "Free-to air programmes" or "All programmes" from the context menu with the cursor and press the button to start the channel search.

Once your channel search is complete the results are shown in a list of TV channels.

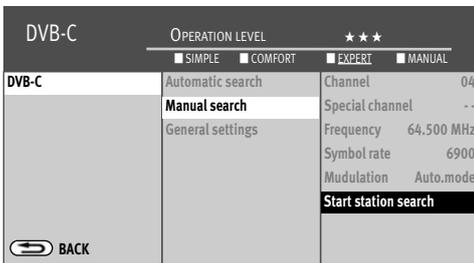
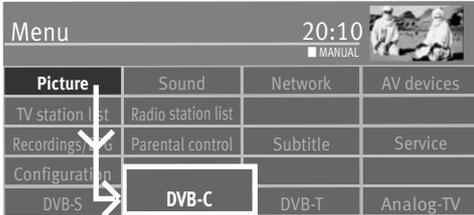
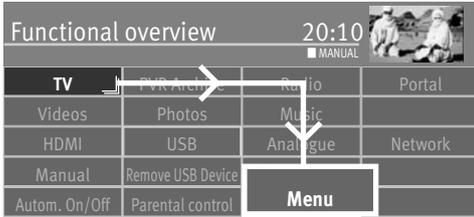


9.4 DVB-C channel search, automatic

The reception range is searched for TV channels and radio channels in the automatic channel search. The channels found are stored in a TV channel and radio channel table. See Chapter 21 for DVB radio mode. You can move or delete channels that are found if you are not satisfied with the order. See Chapter "11 Edit channel list".

Carrying out an automatic search:

- Press button to open the "Functional overview".
 - Select "Menu" with the cursor and press the button.
 - Select "DVB-C" with the cursor and press the button.
 - Select "Automatic search" and "Start station search" with the cursor in the context menu and press the button.
The symbol rates are preset for general cable networks. If you need other values, you will receive them from your cable network provider, or you must request them.
 - Select "Free-to air programmes" or "All programmes" from the context menu with the cursor and press the button to start the channel search.
- Once your channel search is complete the results are shown in a list of TV channels.



9.4.1 DVB-C channel search, manual

During the manual channel search the channel or frequency of the channel to be set must be known.

Carrying out a manual search:

- Press button to open the "Functional overview".
- Select "Menu" with the cursor and press the button.
- Select "DVB-C" with the cursor and press the button.

- Select "Manual search" with the cursor in the context menu and press the button.
- Select "Channel" or "Special channel" with the cursor in the context menu and enter the desired channel using 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 cursor keys or with the numeric keys.

- Select "Start station search" with the cursor in the context menu and press the button.
- Select "Free-to air programmes" or "All programmes" from the context menu with the cursor and press the button to start the channel search.

Once your channel search is complete the results are shown in a list of TV channels.



Functional overview		20:10	
TV		MANUAL	
Videos	Photos	Music	Medie Player
HDMI	USB	Analogue	Network
Manual	Remove USB Device	Menu	
Autom. On/Off	Parental control		



Menu		20:10	
Picture		MANUAL	
TV station list	Radio station list	Network	AV devices
Recordings	Parental control	Subtitle	Service
DVB-S	DVB-C	DVB-T	Analog-TV



DVB-S		OPERATION LEVEL	***
		<input type="checkbox"/> SIMPLE <input type="checkbox"/> COMFORT <input checked="" type="checkbox"/> EXPERT <input type="checkbox"/> MANUAL	
DVB-S	Aerial facility	Antenna	normal
	Astra 19,2°	Power compensat	Single aerial
	Hot Bird 13°	LNB supply voltage	Unicable
	Automatic search	DiSEqC System	Off
	Manual search		
	General settings		
	BACK		



EXIT

9.5 Setting the SAT system, antenna system

The sat antenna system must be reported to the TV set in the “DVB-S” menu.

Antenna

Normal

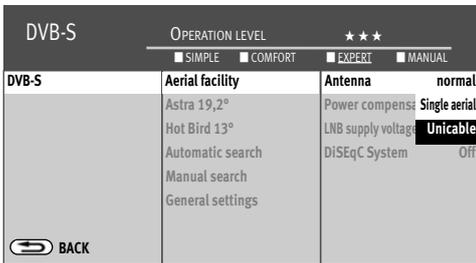
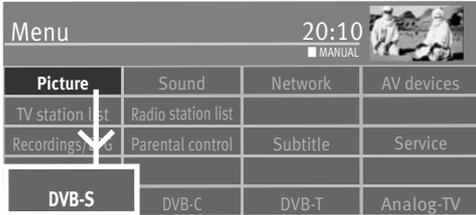
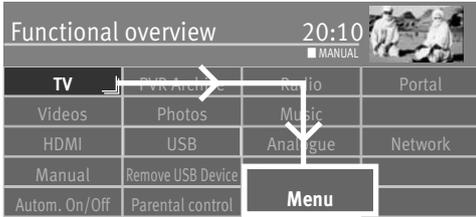
In the “Normal” setting, the DVB-S receiver in the TV set is supplied with the antenna cable.

Single cable (single cable distribution SDC)

With the “Single cable” setting, the DVB-S receivers have one feed line. The channel 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 channel 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.



9.5.1 Setting up the sat system, unicable

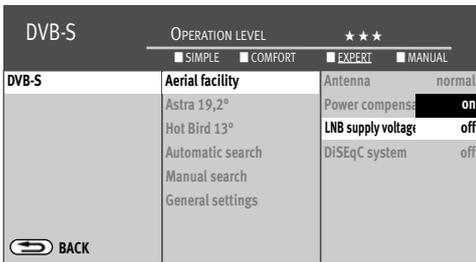
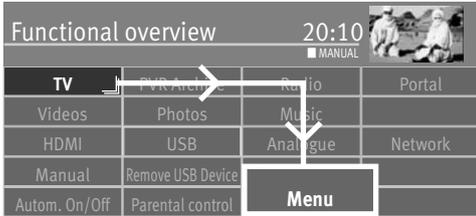
Each DVB-S receiver must be assigned a subscriber number (SCR no.) and the associated subscriber frequency (SCR freq.) from the frequency bank (see channel router or its user's guide).

Each subscriber number and subscriber frequency may only be assigned once.

The DVB-S receiver in the TV set requests the data for the desired channel from the channel router.

Setting the SCR no. and SCR freq.:

- Press button to open the "Functional overview".
- Select "Menu" with the cursor and press the button.
- Select "DVB-S" with the cursor and press the button.
- Select "Aerial facility" and "Antenna" with the cursor in the context menu and press the button.
- Select "Unicable" with the cursor in the context menu and press the button.
- Select "SCR1 no." or "SCR1 freq." with the cursor in the context menu and press the button. Enter the required data with the numeric keys.
- Press the button and confirm the data you have entered.
- Press the button to exit the menu.



9.5.2 Setting the sat system, LNB supply voltage

The settings of the sat. antenna system must be reported to the TV set in the “DVB-S” menu.

It is essential that the settings are carried out in ascending sequence LNB supply voltage, DiSEqC system ...etc as shown in the right column.

LNB supply voltage

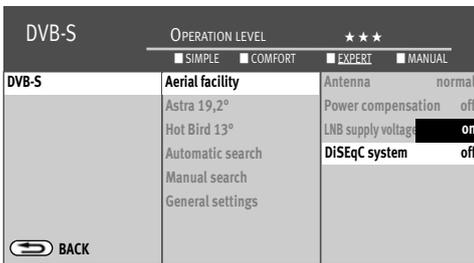
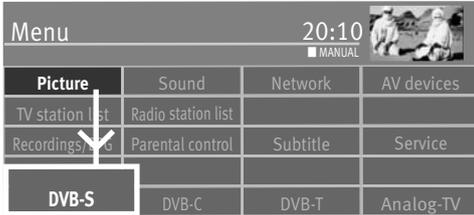
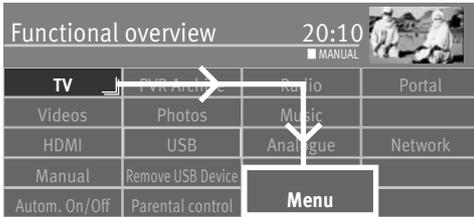
The LNB supply voltages are permanently set for selection of the polarisation (horizontal H = 18V, vertical V = 14V). Normally, you do not need to carry out any change.

If the correct voltage supply of the LNB is no longer guaranteed as a result of a long antenna cable, the supply voltage can be increased by 1V with the line compensation.

If changes are necessary, please take the following setting steps into consideration.

Changing the settings:

- Press button to open the "Functional overview".
 - Select "Menu" with the cursor and press the button.
 - Select "DVB-S" with the cursor and press the button.
 - Select "Aerial facility" and "LNB supply voltage" with the cursor in the context menu and press the button.
 - Select LNBsupply in the context menu, choose on or off with the cursor and press the button.
- If the TV set is connected to a "single cable SAT system", the LNB supply voltage must always be set to "Off".**



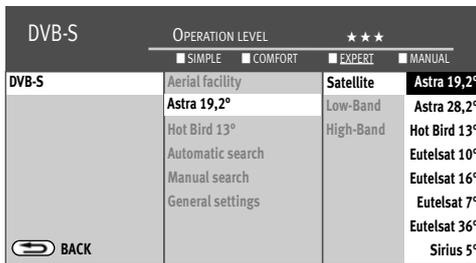
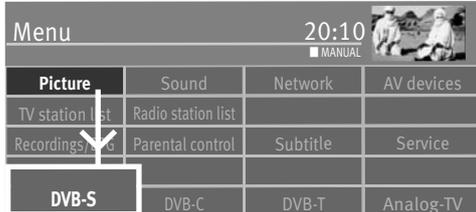
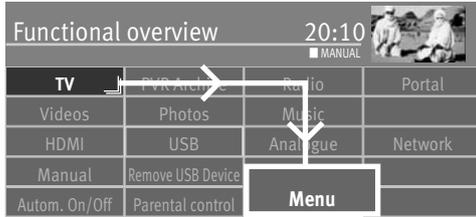
9.5.3 Set SAT system, DiSEqC system

With “DiSEqC” digital management of the satellite system via the existing antenna cable is possible and is a prerequisite for the reception of more than two satellites (e.g. Astra, Eutelsat, Hotbird).

Management of the satellite system without “DiSEqC” is no longer possible from three satellites (e.g. ASTRA 19.2°, Eutelsat 16°, Hotbird 13°).

Switching DiSEqC system on, -off:

- Press button to open the "Functional overview".
- Select "Menu" with the cursor and press the button.
- Select "DVB-S" with the cursor and press the button.
- Select "Aerial facility" and "DiSEqC system" with the cursor in the context menu and press the button.
- Turn on the "DiSEqC system" in the context menu using the cursor and press the button if DiSEqC components are integrated into your SAT antenna system.
- Press the button to exit the menu.



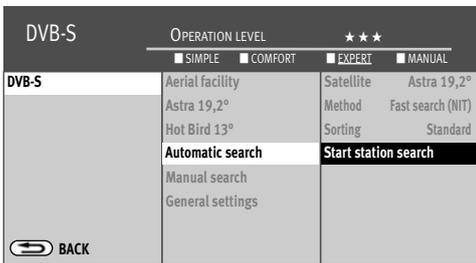
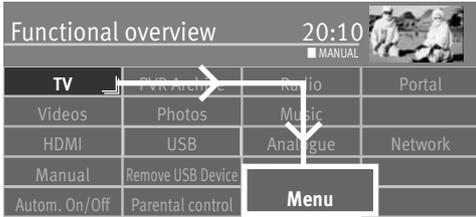
9.5.4 Set SAT system, selecting a satellite

Up to four satellites can be set in the "DVB-S" menu if "DiSEqC" is switched on.

The LNB frequency serves as toggle switch for the frequency band (high band - low band). The standard factory settings are low band 9.75 GHz and high band 10.60 GHz.

Setting additional satellites:

- Press button to open the "Functional overview".
- Select "Menu" with the cursor and press the button.
- Select "DVB-S" with the cursor and press the button.
- Select the desired satellite in the context menu with the cursor and press the button. If your satellite system is equipped to receive signals from two satellites, then you also have to configure the second satellite.
- Press the button to exit the menu.
- Select "Low band" or "High band" with the cursor. The settings depend on the components used of the satellite system. Please consult the data sheet or sticker of the LNB(s) used for the settings required.
- Confirm the settings by pressing the button.
- Close "Menu" by pressing the button.



9.6 SAT channel search, automatic

The reception range is searched for TV channels and radio channels in the automatic channel search. The channels found are stored in a TV channel and radio channel table. You can move or delete channels that are found if you are not satisfied with the order. See Chapter "11 Edit channel list".

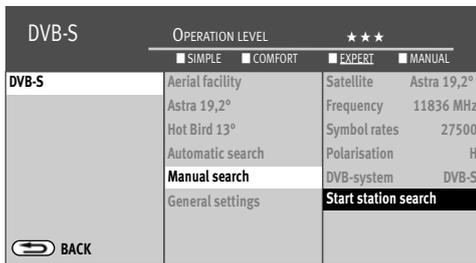
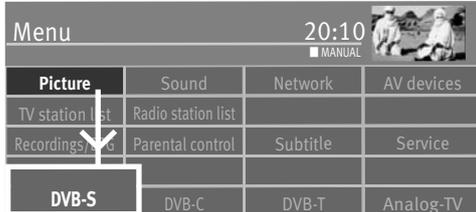
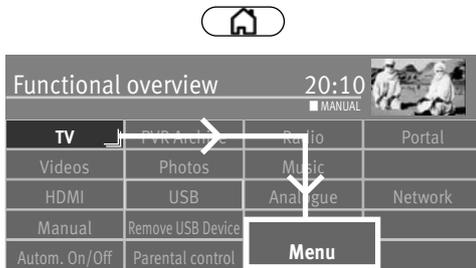
The search only works properly if the LNB frequencies have been correctly set and saved.

Carrying out an automatic search:

- Press button to open the "Functional overview".
- Select "Menu" with the cursor and press the button.
- Select "DVB-S" with the cursor and press the button.
- Select "Automatic search" with the cursor in the context menu and press the button.
- Select the desired satellite in the context menu with the cursor and press the button.
- Select "Start station search" with the cursor in the context menu and press the button.
- Select "Free-to air programmes" or "All programmes" from the context menu with the cursor and press the button to start the channel search.

The "Method" menu item should be set to channel search (factory setting). If the station search does not find all the stations, change the Method setting to "Precision search".

Once your channel search is complete the results are shown in a list of TV channels.



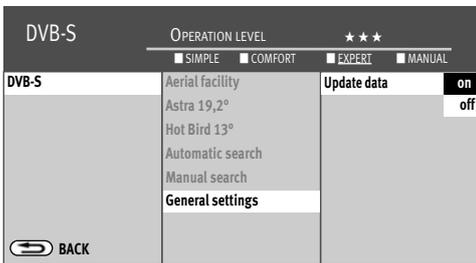
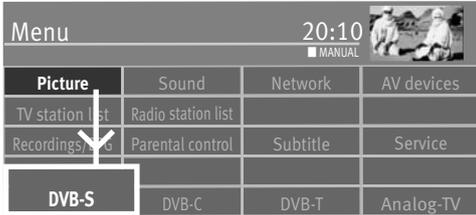
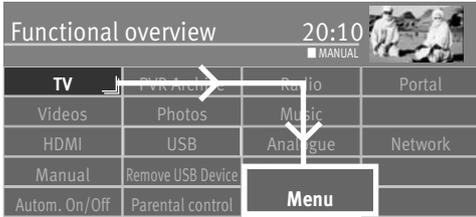
9.6.1 SAT channel search, manual

During the manual channel search the frequency, symbol rate and polarisation of the channel to be set must be known. Find out about the channel data e.g. at "www.lyngsat.de".

Carrying out a manual search:

- Press button to open the "Functional overview".
 - Select "Menu" with the cursor and press the button.
 - Select "DVB-S" with the cursor and press the button.
 - Select "Manual search" with the cursor in the context menu and press the button.
 - Select the desired satellite in the context menu with the cursor and press the button.
 - Use the cursor in the context menu to set the values "Frequency", "Symbol rates", "Polarisation", and "DVB system" for the channel you would like to find.
- For an HD SAT channel search, the information for the DVB system (e.g. DVB-S2) must also be entered.**
- Select "Start station search" with the cursor in the context menu and press the button.
 - Select "Free-to air programmes" or "All programmes" from the context menu with the cursor and press the button to start the channel search.

Once your channel search is complete the results are shown in a list of TV channels.



9.7 Updating channel search data

In the menu item “General settings” you can determine whether in the event of changes of channel parameters the data is to be updated in the non-volatile memory of the TV set too or not.

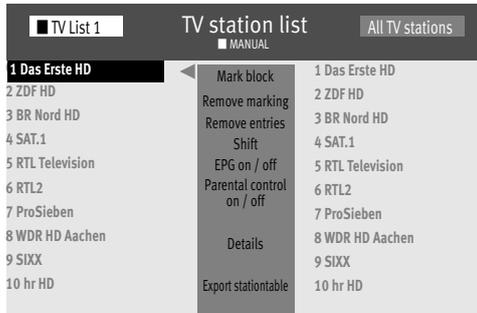
This update affects channels that change their broadcasting parameters for broadcasting regional programs during the regional window.

Setting a data update:

- Press button to open the "Functional overview".
- Select "Menu" with the cursor and press the button.
- Select "DVB-T", "DVB-C" or "DVB-S" or with the cursor and press the button.
- Select "General settings" with the cursor in the context menu and press the button.
- Press the button and use the cursor to select "on" and press the button.
- Press the button to exit the menu.

10 List of TV Channels

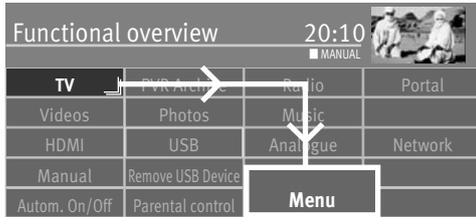
Once you have completed the channel search, the results are presented in a list (All TV channels) and then saved as a list of favourites as "TV List 1".



Under "Details", you can make the following changes/additions:

- Include channel in EPG yes/no (also see 24.2)
- Block channel (parental control settings) yes/no (also see 22.2)
- Delete or move channel under "Details"
- Image correction for colour intensity and signal contrast
- Image quality for sharpness and noise reduction (see Chap. 16.1.6) and film mode
- Volume correction (see 17.2.1)

The TV channel list can be opened while the TV is in use by pressing the **OK** button.



11 Edit channel list

Individual or multiple channels can be moved into the TV channel list or radio station list.

- Press button to open the "Functional overview".
- Select "Menu" with the cursor and press the **OK** button.
- Select "TV station list" with the cursor and press the **OK** button.

11.1 Moving channels

- Use the cursor to select the channel you would like to move.
- Press the **OK** button and highlight the channel.
- Change to the middle selection column using the cursor, select "Shift", and press the **OK** button. The cursor will move to the left channel list. Select the position where the channel is to be inserted and press the **OK** button. Alternatively, change to the middle selection column using the cursor, select "Insert here", and press the **OK** button.

11.2 Delete channel

It is possible to delete multiple channels from the channel list.

- Use the cursor to select the channel you would like to delete.
- Taste **OK** drücken und den Sender markieren.

Block selection

- Use the cursor to go to the first programme position and select **OK**.
- Use the cursor to go to the last programme position and select **OK**.
- Change to the middle selection column using the cursor, select "Mark block", and press the **OK** button.
- Use the cursor to change to the middle selection column.
- Use the cursor to select "Remove entries" and press the **OK** button.

12 Programme selection and information

12.1 Programme selection

The TV set can administer a maximum of 10000 TV and 3000 radio programme positions. These programme positions can be selected with the numeric keys or using the TV channel list.

When selecting via the numeric keys, the first numeric keys pressed indicates the fourth position after the decimal point. If fewer than 1000 program positions exist, the entry automatically moves to the third position after the decimal point. If fewer than 10 program positions exist, the entry automatically moves to the first position after the decimal point. After pressing a numeric key, you have a time window of three seconds to press additional numeric keys. The program can be changed immediately by pressing the **OK** key.

12.2 Programme selection using the TV channel list

During TV and radio operation, the TV channel list can be opened using the **OK** button.

- Use the cursor to select programmes from in the table that appears. Use the **P+/P-** button to jump to the next or previous 10 programmes.
You can display the program selected with the **OK** key.
- Press the white **F** button to open a keyboard. Use this keyboard to enter the name of the channel you would like to find.
- Select the **Confirm** field with the cursor and press the **OK** button to display it.
- Pressing the yellow **HD** button displays all HD channels stored in the channel list.
- Pressing the red **TV** button displays your favourite programme in the channel list.
- Pressing the green **TV** button again will display all channels in the channel list.

12.3 Programme information (... on now)

A pane appears at the bottom of the screen after switching to a new programme position or pressing the blue **INFO** key. The pane shows the following information:

- programme place number, audio mode (stereo/mono), programme start and end time, progress bar, channel, channel name, date and time of day, time and name of next programme.



To hide the information press the **EXIT** key or wait about six seconds.

13 Everyday handling

13.1 Changing picture settings

The picture settings can be accessed via the green key . The settings box with the individual functions (see picture) appears on the key left of the screen.

Select and adjust the desired function using the cursor.

13.2 Volume settings

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

13.3 Changing the sound settings

The sound settings can be accessed via the yellow key .

The settings window appears on the screen with the individual functions.

Select and adjust the desired function using the cursor.



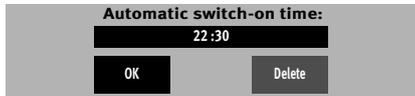
14 Time settings

14.1 Setting the sleep timer

The sleep timer switches the TV set off after a period you set (15 min steps).

Setting the sleep timer:

- Press  button to open the "Functional overview".
 - Select "Autom. On/Off" with the cursor and press the **OK** button.
 - Select "Sleep timer" with the cursor in the context menu and press the **OK** button.
 - If 15 minutes are enough, click on the "OK" box and press the **OK** button.
 - For a longer duration, select the "+15 min" box and press the **OK** button to increase the sleep timer in 15 minute increments.
 - For a shorter duration, select the "-15 min" box and press the **OK** button to decrease the sleep timer in 15 minute increments.
 - Once you have set the time, select "OK" and press the **OK** button.
- Once the set time has expired, the TV switches to stand-by mode.



14.2 Setting the automatic on and off times

The TV can be programmed to switch on or off at specific times.

The switch-on time switches on the TV set automatically at a time you set.

The switch-off time switches off the TV set automatically at a time you set.

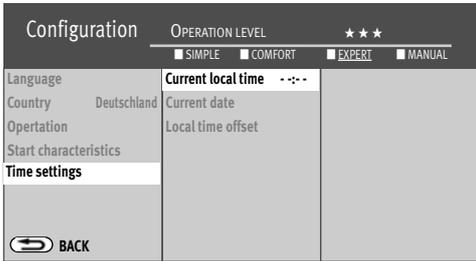
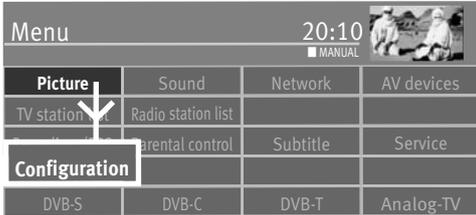
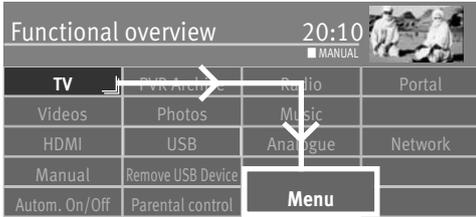
Setting switch-on time, switch-off time:

- Press button to open the "Functional overview".
- Select "Autom. On/Off" with the cursor and press the **OK** button.
- Select "Autom. On" or "Autom. Off" with the cursor in the context menu and press the **OK** button.
- Use the numeric keys to enter the desired time.
- Select "OK" with the cursor and press the **OK** button.

When the time of the "Switch-on time" is reached, the TV set is switched on from the stand-by mode (red LED on). The automatic switching on must be activated with any key of the remote control, otherwise the TV set switches back to stand-by mode after about 10 minutes. After automatic switch on message is displayed, you must press the **OK** key. This ensures that the TV set does not remain switched on when you are not at home.



The programmed switch-on/switch-off time must be deleted in the menu if the process is not to be repeated every day.



14.3 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.

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.

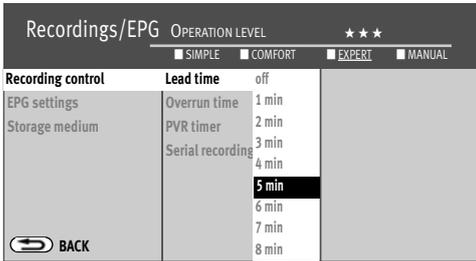
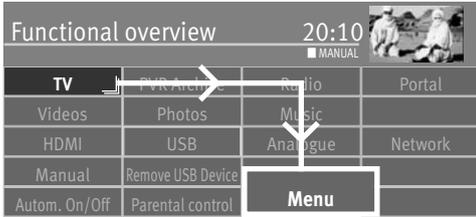
In almost all cases, you will not need to do this. Even the changeover between winter time and summer time is executed automatically.

Setting the time and date manually:

- Press button to open the "Functional overview".
- Select "Menu" with the cursor and press the button.
- Select "Configuration" with the cursor and press the button.
- Select "Time settings" with the cursor in the context menu and press the button.
- Select the desired menu item with the cursor and press the button.
- Use the numeric keys to enter the time or date and confirm using the button.
- Press the button to exit the menu.

The local time offset is the difference between the local time where the TV set is installed and Greenwich Mean Time (GMT). The TV set normally detects this time offset and also the additional changeover to summer time. If the local time is not correct, verify your country settings.

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



14.4 Recording control (setting lead and delay times)

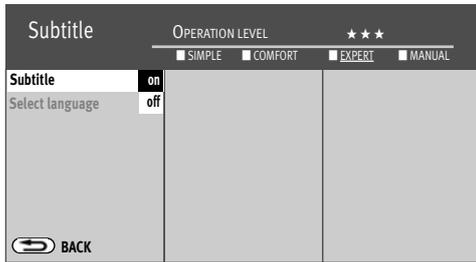
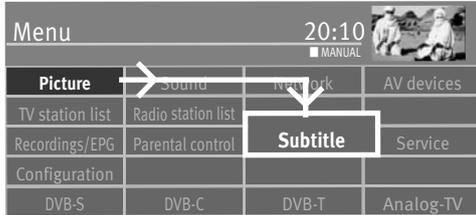
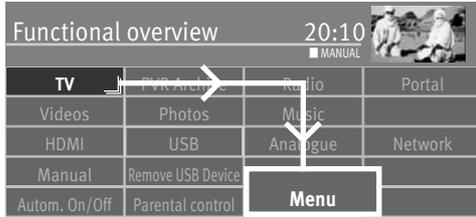
You can set the lead and delay times for a recording under "Recordings/EPG" in the menu.

Example: You want to record a TV programme on the internal hard disk or, via USB recording, on an external hard disk (also see Annex B) and you programme the recording timer with the EPG. According to the EPG (electronic programme guide, also see Chapter 25), the starting time for the recording is 21:10, and the end time is 21:35. To account for any delays in the programme, you set the lead and overrun times to five minutes each. That means that your recording begins at 21:05 (5 minutes lead time) and ends at 21:40 (5 minutes overrun time).

When using an external AV device (e.g. video recorder, hard disk recorder, etc.) the timer data given in the example must also be used for the AV device.

Setting the lead time and overrun time:

- Press button to open the "Functional overview".
- Select "Menu" with the cursor and press the **OK** button.
- Select "Recordings/EPG" with the cursor and press the **OK** button.
- Select "Lead time" with the cursor in the context menu and press the **OK** button.
- Select the desired time (1 min – 60 min) and press the **OK** button.
- Select "Overrun time" with the cursor in the context menu and press the **OK** button.
- Select the desired time (1 min – 60 min) and press the **OK** button.
- Press the button to exit the menu.

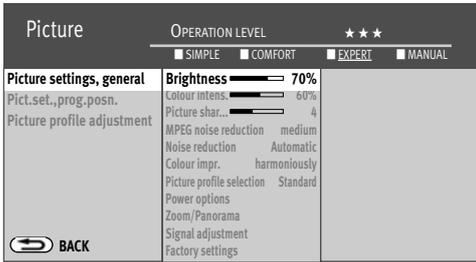
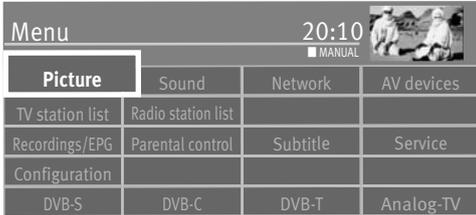
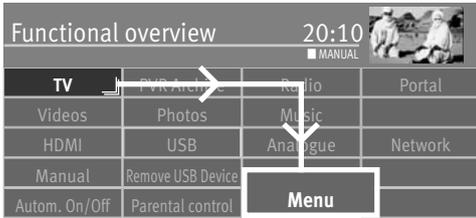


15 Subtitles

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 menu.

Activating subtitles:

- Press button to open the "Functional overview".
- Select "Menu" with the cursor and press the button.
- Select "Subtitle" with the cursor and press the button.
- Use the cursor to select "on" or "off" and press the button.
- Select "Select language" with the cursor in the context menu and press the button.
- Set the desired language with the cursor and press the button.
- Press the button to exit the menu.



16 Picture settings

16.1 General picture settings

The image settings (brightness, colour intensity, sharpness, MPEG noise reduction, noise reduction, contrast, image profile, zoom/panorama) can be set and saved globally for all programmes.

If the changed settings are not satisfactory, they can be set back to the factory settings.

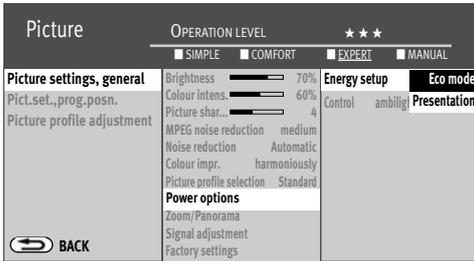
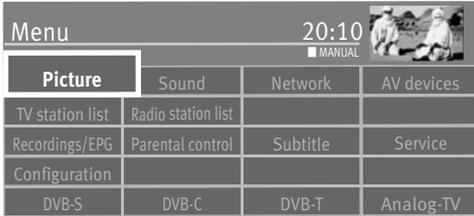
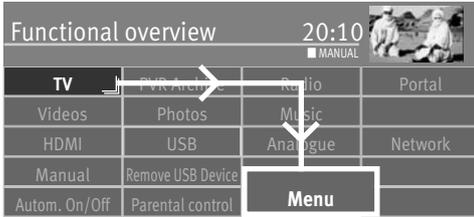
- Press button to open the "Functional overview".
- Select "Menu" with the cursor and press the button.
- Select "Picture" with the cursor and press the button.
- Select "Factory settings" with the cursor in the context menu and press the button.

Calling up picture settings:

In the following example the brightness is changed. The picture settings colour intensity, picture sharpness and noise reduction can be set correspondingly.

- Press button to open the "Functional overview".
- Select "Menu" with the cursor and press the button.
- Select "Picture" with the cursor and press the button.
- Select the various parameters with the cursor in the context menu and press the button.
- Set the desired setting with the cursor and press the button.
- Press the button to exit the menu.

If the setting for individual programme positions does not produce a satisfactory result, it is possible to make other settings. See chapter 16.2.



16.1.1 Selecting power options

Three different power options can be set in the “Power options” menu item.

Eco mode

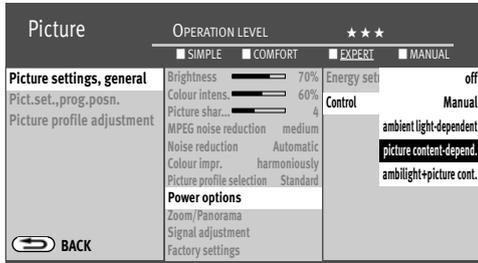
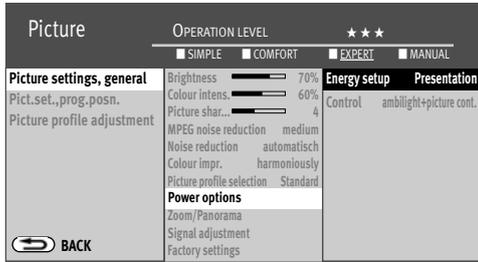
The “Eco mode” setting is a good compromise between energy consumption and picture quality. In addition, the TV set switches to stand-by mode if no keys are pressed for four hours. “Eco mode” is the preferred setting for normal home operation.

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.

Setting a energy setup:

- Press button to open the "Functional overview".
- Select "Menu" with the cursor and press the button.
- Select "Picture" with the cursor and press the button.
- Select "Energy setup" with the cursor in the context menu and press the button.
- Set the desired setting with the cursor and press the button.
- Save the power option set by pressing the key.



Under the “Eco mode” setting the control types described under a) and b) - see next page – can in addition be set.

For the “Presentation” settings, the types of control described under a) to e) can be set as well.

a) Off:

Brightness is set to maximum (maximum power consumption).

b) Room light dependent:

The brightness is governed by the room light and always provides the same picture appearance regardless of changes in room lighting.

c) Depending on picture:

The brightness is governed by the picture content. In the case of dark picture content, the brightness is reduced to increase contrast.

d) Manual:

The brightness is set to a fixed value in the menu.

e) Dependent on room light+picture content:

Combination of b) room light dependent and c) picture content dependent

The level control indicates the level of brightness currently in operation.

The brightness of the screen is automatically adjusted, depending on the power option set.

The brightness of the screen has influences the device’s power consumption.

- Press the **EXIT** button to exit the menu.



Functional overview		20:10	
■ MANUAL			
TV	PVR Arch.	Relio	Portal
Videos	Photos	Music	
HDMI	USB	Analogue	Network
Manual	Remove USB Device		
Autom. On/Off	Parental control	Menu	



Menu		20:10	
■ MANUAL			
Picture	Sound	Network	AV devices
TV station list	Radio station list		
Recordings/EPG	Parental control	Subtitle	Service
Configuration			
DVB-S	DVB-C	DVB-T	Analog-TV



Picture	OPERATION LEVEL		★ ★ ★
	■ SIMPLE	■ COMFORT	■ EXPERT ■ MANUAL
Picture settings, general	Standard	Motion compensat. video	light
Pict.set., prog. posn.	Sport	Motion compens. movie	light
Picture profile adjustment	Brilliant	Local contrast	off
	Game pad	Colour accentuation	medium
	PC monitor	Dynamic black level	Yes
	User	Load factory settings	No
BACK			



16.1.2 Configuring picture profiles

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

The “Standard” picture profile is a good compromise for all types of transmission, and is set at the factory.

In order to obtain the maximum picture reproduction quality in particular cases, it is useful to assign the appropriate picture profile to a specific application.

If you are technically inclined, you can also adjust each individual picture profile yourself and create a separate additional picture profile according to your individual taste.

Picture profile settings:

- Press button to open the "Functional overview".
- Select "Menu" with the cursor and press the button.
- Select "Picture" with the cursor and press the button.
- Select "Picture profile adjustment" with the cursor in the context menu and press the button.
- Set the desired setting with the cursor and press the button.
- Press the button to exit the menu.



Functional overview		20:10	
TV		MANUAL	
Videos	Photos	Music	Portal
HDMI	USB	Analogue	Network
Manual	Remove USB Device	Menu	
Autom. On/Off	Parental control		



Menu		20:10	
Picture		MANUAL	
Sound	Network	AV devices	
TV station list	Radio station list		
Recordings/EPG	Parental control	Subtitle	Service
Configuration			
DVB-S	DVB-C	DVB-T	Analog-TV



Picture	OPERATION LEVEL		***
	<input type="checkbox"/> SIMPLE	<input type="checkbox"/> COMFORT	<input checked="" type="checkbox"/> EXPERT <input type="checkbox"/> MANUAL
Picture settings, general	Color intens.	60%	
Pict.set.,prog.posn.	Picture profile gen. (Standard)		
Picture profile adjustment	MPEG noise reduction gen.(medium)		
	Noise reduction gen.(Automatic)		
	Picture format Auto.mode		
	Picture sharpness		
	Signal adjustment		
	BACK		



EXIT

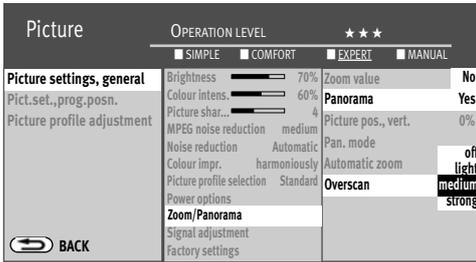
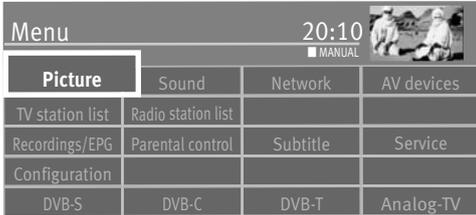
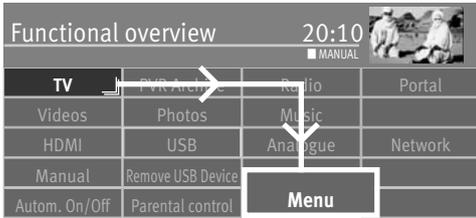
16.1.3 Assigning a selected picture profile

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

Assigning a selected picture profile:

- Press button to open the "Functional overview".
- Select "Menu" with the cursor and press the **OK** button.
- Select "Picture" with the cursor and press the **OK** button.
- Select "Picture settings, general" or "Pict.set.,prog.posn." with the cursor in the context menu and press the **OK** button.
- Select "Picture profile" with the cursor in the context menu and press the **OK** button. Select the desired image profile in the picture that appears using the cursor and press the **OK** button.
- Press the button to exit the menu.

An image profile can be changed temporarily while a programme is in progress.



16.1.4 Setting zoom/automatic zoom/panorama/image position/overscan

The image settings (zoom, image position vertical, automatic zoom, overscan, and panorama;

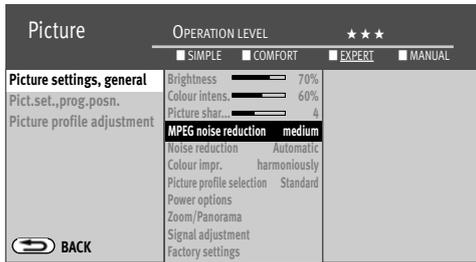
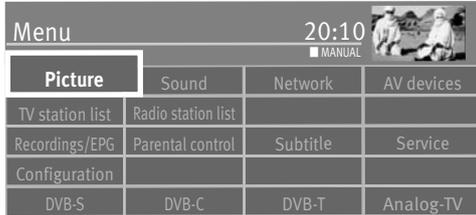
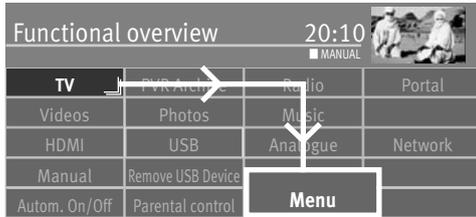
see Terms for definitions) can be globally applied to all programmes and saved.

Setting zoom/panorama/overscan mode:

- Press button to open the "Functional overview".
- Select "Menu" with the cursor and press the button.
- Select "Picture" with the cursor and press the button.
- Select "Zoom/Panorama" with the cursor in the context menu and press the button.
- Select the desired parameter with the cursor and press the button.
- Change the desired parameter with the cursor and press the button.
- Press the button to exit the menu.



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



16.1.5 MPEG noise reduction

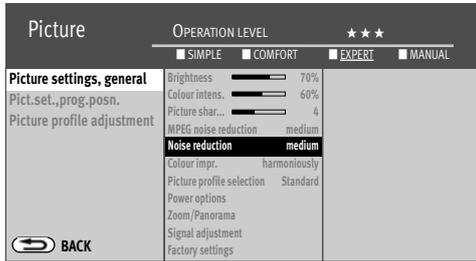
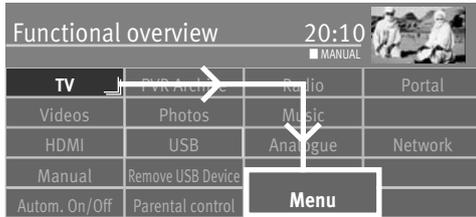
The menu item “MPEG noise reduction” is not displayed if MPEG noise reduction has already been changed in the menu item “Pict. Set., prog.posn”.

System related digital picture errors can occur in TV programs that were produced digitally. These picture defects can appear as a rectangular pattern (formation of tiny blocks) in moving areas.

These picture faults can be reduced using MPEG noise reduction. The rectangular pattern (formation of tiny blocks) can be corrected in the “MPEG noise reduction” menu item.

Setting MPEG noise reduction:

- Press button to open the "Functional overview".
- Select "Menu" with the cursor and press the button.
- Select "Picture" with the cursor and press the button.
- Select "MPEG noise reduction" with the cursor in the context menu and press the button.
- Choose the desired setting "light", "medium", "strong", or "off" and press the button.
- Press the button to exit the menu.

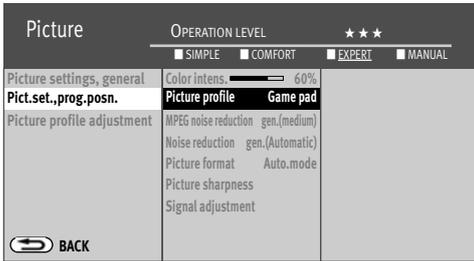
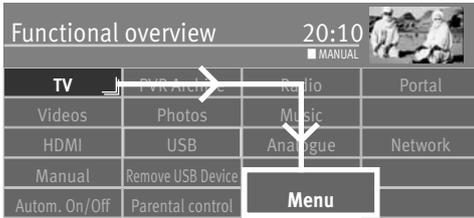


16.1.6 Noise reduction

Faults can occur in the event of unfavourable reception conditions, an antenna signal that is not strong enough or in very old films. Noise reduction can be enabled to compensate for a "noisy" picture.

Setting the noise reduction:

- Press button to open the "Functional overview".
- Select "Menu" with the cursor and press the button.
- Select "Picture" with the cursor and press the button.
- Select "Noise reduction" with the cursor in the context menu and press the button.
- Choose the desired setting "light", "medium", "strong", "Automatic" or "off" and press the button.
- Press the button to exit the menu.

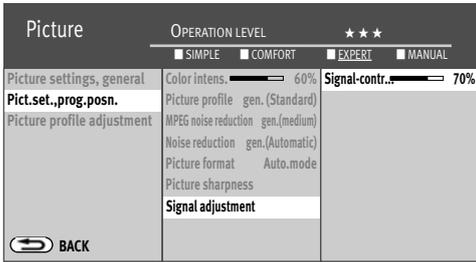
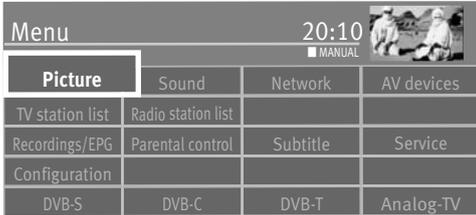
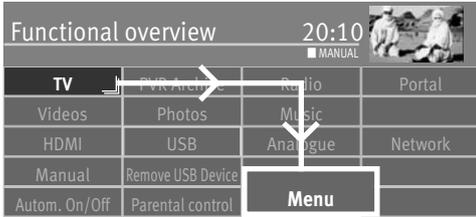


16.2 Picture settings for program

If the general settings for individual programme positions do not produce a satisfactory result, it is possible to configure custom settings for "Pict.set.,prog.posn." for nearly all "Picture settings, general". This custom setting applies only to the selected programme position and overrides the general settings.

Divergent picture settings for this program position:

- Select the program position whose picture settings you wish to adapt.
- Press button to open the "Functional overview".
- Select "Menu" with the cursor and press the button.
- Select "Picture" with the cursor and press the button.
- Select "Pict.set.,prog.posn." with the cursor in the context menu and press the button.
- Select the desired parameter with the cursor and press the button.
- Change the desired parameter with the cursor and press the button.
- Press the button to exit the menu.



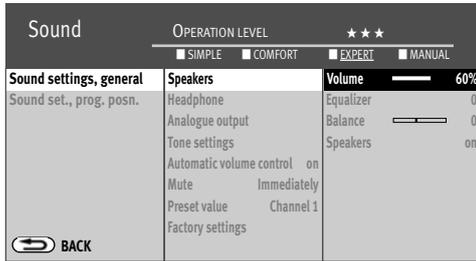
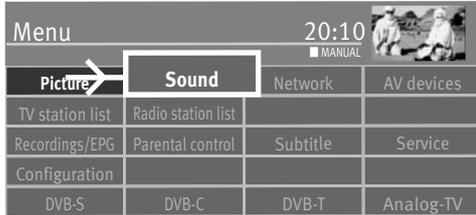
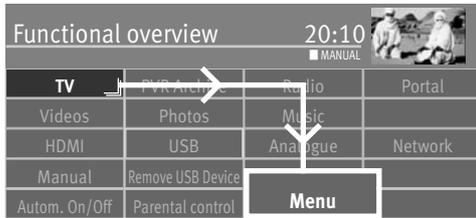
16.2.1 Adjusting the signal for a programme

The settings in the "Signal adjustment" menu are optimised for the picture settings and should not be changed. If the settings in the "Signal-contr..." menus are changed, this will usually lead to a deterioration in picture quality.

It is recommended that changes only be made if an AV device (such as a video recorder) is connected and does not generate a satisfactory image.

Setting signal adjustment:

- Press button to open the "Functional overview".
- Select "Menu" with the cursor and press the button.
- Select "Picture" with the cursor and press the button.
- Select "Signal adjustment" with the cursor in the context menu and press the button.
- Select "Signal-contr..." with the cursor in the context menu and press the button.
- Set the desired setting with the cursor and press the button.
- Press the button to exit the menu.



17 Sound settings

17.1 Volume, bass, and treble

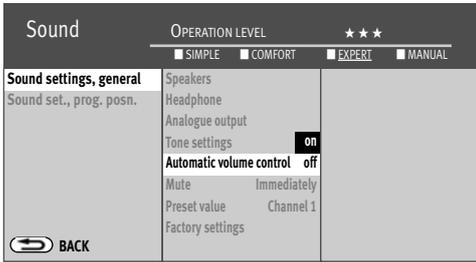
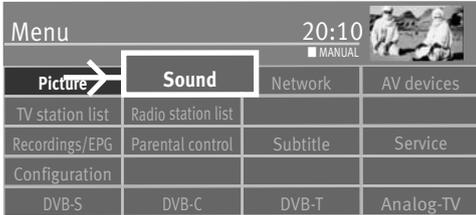
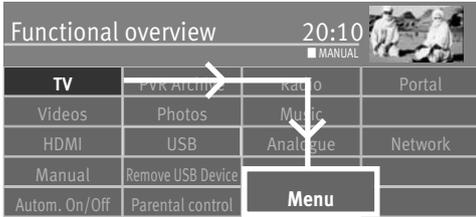
The volume, bass, and treble can be set globally for all programmes.

If the changed settings are not satisfactory, they can be set back to the factory settings.

- Press button to open the "Functional overview".
- Select "Menu" with the cursor and press the button.
- Select "Sound" with the cursor and press the button.
- Select "Factory settings" with the cursor in the context menu and press the button.

Setting the volume, bass, and treble:

- Press button to open the "Functional overview".
- Select "Menu" with the cursor and press the button.
- Select "Sound" with the cursor and press the button.
- Select the "Speakers" and the desired setting with the cursor in the context menu and press the button.
- Set the desired value with the cursor and press the button.
- Press the button to exit the menu.



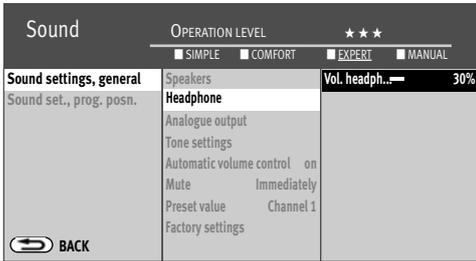
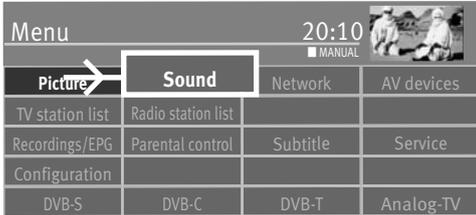
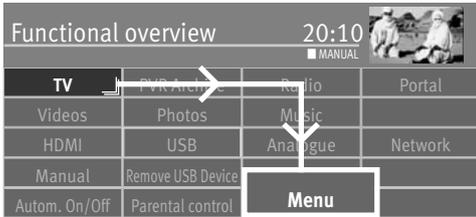
17.1.1 Automatic volume adjustment

Various broadcasting channels broadcast advertising louder than the actual program. To avoid having to reach for the remote control during the many advertising breaks, you can switch on the automatic volume adjustment.

Consequently, volume differences can on the whole be balanced with volume adjustment switched on. The setting chosen here applies to all program positions.

Calling up volume adjustment:

- Press button to open the "Functional overview".
 - Select "Menu" with the cursor and press the button.
 - Select "Sound" with the cursor and press the button.
 - Select "Speakers" and "Automatic volume control" with the cursor in the context menu and press the button.
 - Select "on" or "off" with the cursor and press the button.
 - Press the button to exit the menu.
- The "Automatic volume control" in the menu "Sound settings, general" does not cancel the "Volume corr." in the menu "Sound set., prog. posn."**



17.1.2 Headphone volume

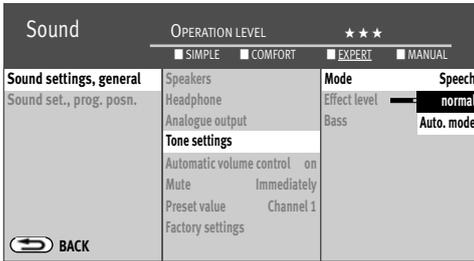
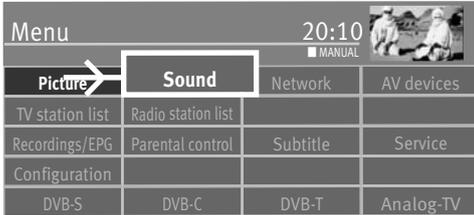
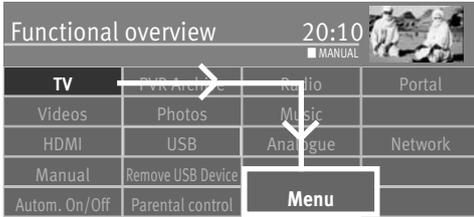
The headphone volume can be set to a basic volume which can also be adopted as a standard value.

The device loudspeakers are not affected by this setting.

Calling up headphone volume:

- Press button to open the "Functional overview".
- Select "Menu" with the cursor and press the button.
- Select "Sound" with the cursor and press the button.

- Select "Headphone" and "Vol. headph..." with the cursor in the context menu and press the button.
- Set the headphone volume with the cursor and press the button.
- Press the button to exit the menu.



17.1.3 Sound settings generally

In the menu "Tone Setting", the speech intelligibility can be adapted to your personal needs.

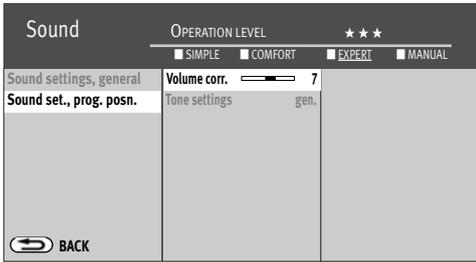
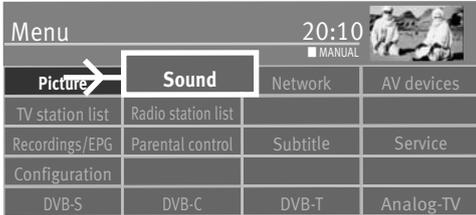
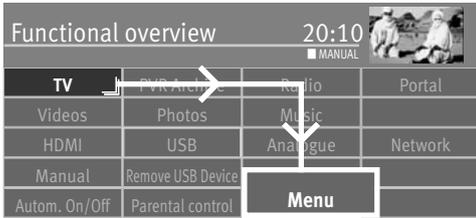
The tone setting can be set to "Auto. mode", "normal" or "Speech".

The "Bass" can be turned on or off. For music playback, the position "normal" is recommended.

When set to "Auto. mode" a dynamic modulation is made of the speech intelligibility by evaluating the signal during the broadcast.

Selecting Sound settings:

- Press button to open the "Functional overview".
- Select "Menu" with the cursor and press the button.
- Select "Sound" with the cursor and press the button.
- Select "Tone settings" with the cursor in the context menu and press the button.
- Set the "Mode" or "Effect level" with the cursor and press the button.
- Set the desired mode or value with the cursor and press the button.
- Press the button to exit the menu.



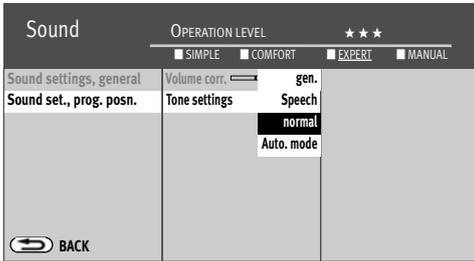
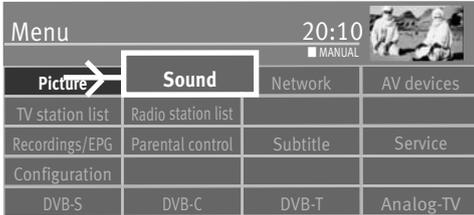
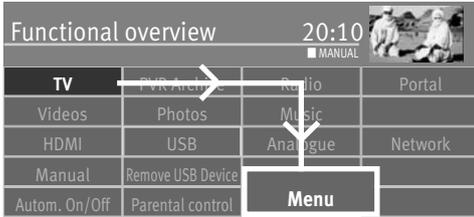
17.2 Sound settings for program

17.2.1 Volume correction

Broadcasting channels broadcast at different volumes. This volume difference can be adjusted through a correction of the volume setting. The adjustment is also retained when calling up the default values.

Setting volume correction:

- Press button to open the "Functional overview".
- Select "Menu" with the cursor and press the button.
- Select "Sound" with the cursor and press the button.
- Select "Sound set., prog. posn." with the cursor in the context menu and press the button.
- Press the button, set the desired value with the cursor, and press the button.
- Press the button to exit the menu.



17.2.2 Sound settings for programme position

The sound setting, as it was made in Section 17.1.3 for all programs can be changed here for a single program location. On presets that offer a mixed program, that speech and music share in mixed form, we recommend the "Auto. mode" setting.

It is recommended to use the "Language" setting for programme positions that normally broadcast language programmes (such as news), for instance N-TV, etc. The effect strength for the language emphasis can be adjusted in 10 increments for the "Language" setting.

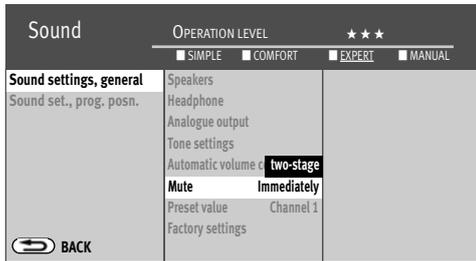
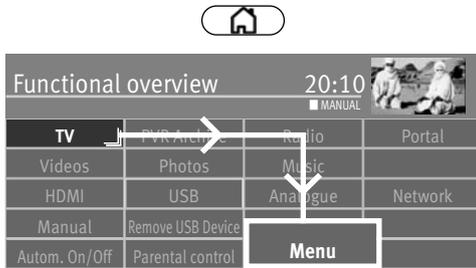
The "Auto. mode" setting dynamically adjusts speech intelligibility by analysing the signal while a programme is being broadcast.

The setting "Normal" is recommended for music playback.

Setting tone:

- Press button to open the "Functional overview".
- Select "Menu" with the cursor and press the button.
- Select "Sound" with the cursor and press the button.
- Select "Sound set., prog. posn." and "Tone settings" with the cursor in the context menu and press the button.
- Set the desired setting with the cursor and press the button.
- Press the button to exit the menu.

17.3 Program mute, preset value sound 2



In the menu "Sound settings, general" volume reduction (sound stop two-stage) can be set. The activated mute function means the volume in the TV mode can be reduced in two stages with the mute key .

Program mute, preset value sound 2:

- Press button to open the "Functional overview".
- Select "Menu" with the cursor and press the **OK** button.
- Select "Sound" with the cursor and press the **OK** button.
- Select "Mute" with the cursor in the context menu and press the **OK** button.
- Select "two-stage" with the cursor and press the **OK** button.
- Press the button to exit the menu.

In normal TV mode press the key mute

- once – the volume is reduced by 12 points.
- once more within the next five seconds – the volume is reduced to "00".
- Press the mute key again and the volume is returned to the normal value.

17.4 Audio/language selection

Various programs are broadcast with several audio channels (e.g. **multilingual or Dolby digital**).

If a multilingual channel like this is selected, this is shown with a logo in the information box at the lower left of the screen.

Use the cursor to see the list of available languages.

Open menu:

- Press the yellow  button.
- Select "Audio track" with the cursor.
- One of the languages offered can be set with the cursor control key.



Symbol in black:

Other audio options e.g. dd = "Dolby digital" are available, but none of the additional sound options offered are selected.

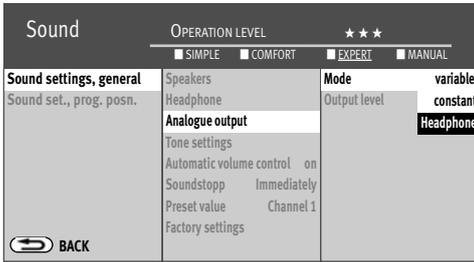
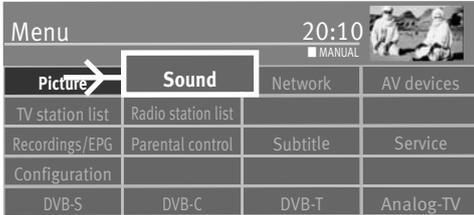
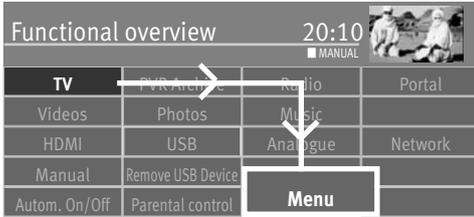


Symbol in white:

Digital sound selected.

Dual channel (audio description)

During films for the blind, the scenes are described in the dialogue intervals. Under the "Preset value" menu, select "Channel 2" when viewing films for the blind (audio description).



17.5 Analogue output

It is possible to connect an AV device to the TV using the audio outputs (see page 65, 76) located on the back of the TV.

Analogue sound can be transmitted from the AV device using a 3.5mm stereo headphone jack whereas digital sound requires an optical audio cable connection ("Toslink" at stores specialising in accessories).

 **The "Analogue Output" menu need only be configured if the TV uses the AUDIO OUT port (3.5mm stereo jack) to the AV device, such as HiFi receiver, wireless headphones, surround decoder, etc.**

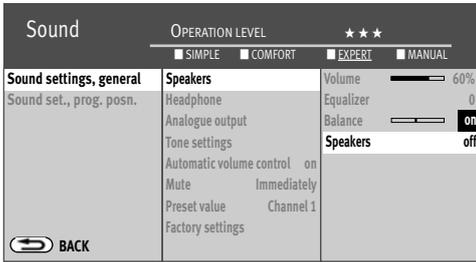
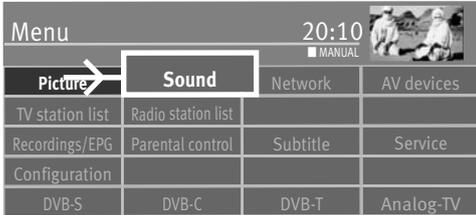
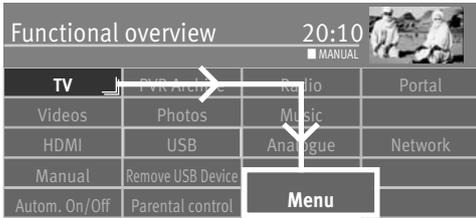
The "Analogue output" menu and "Sound settings, general" are interconnected.

This interconnection is described on pages 63-64.

Digital sound cannot be controlled using the optical output.

Hi-fi output settings:

- Press  button to open the "Functional overview".
- Select "Menu" with the cursor and press the  button.
- Select "Sound" with the cursor and press the  button.
- Select "Analogue output" with the cursor in the context menu and press the  button.
- Press the  button and use the cursor to select the desired parameters. Then press the  button.
- Press the  button to exit the menu.



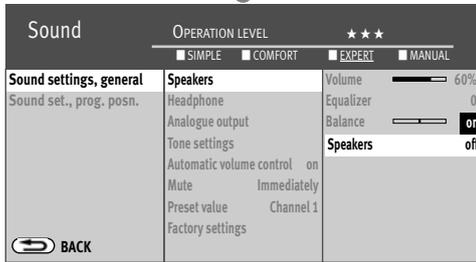
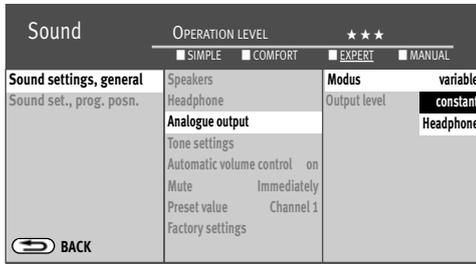
17.6 Switching the loudspeaker on/off

Settings in the "Analogue output" and "Sound settings, general" menu items are only necessary if the TV set is connected to AV devices, for example hi-fi receivers, radio headphones, surround decoders etc.

The "Analogue output" and "Sound settings, general" menu items are linked together. The link is described on pages 63-64 .

Hi-fi output settings

- Press button to open the "Functional overview".
- Select "Menu" with the cursor and press the button.
- Select "Sound" with the cursor and press the button.
- Select "Speakers" with the cursor in the context menu and press the button.
- In the right-hand column, select the "Loudspeaker" menu and press the button.
- Select "Speakers on" or "Speakers off" with the cursor and press the button.
- Press the button to exit the menu.



17.6.1 Selecting the sound output

The following settings for sound output are pos:

a) "constant" mode and loudspeaker "on"

The volume level on the "**AUDIO OUT port**" on the back of the TV remains set to "constant" in the %-value in the menu.

Sound output also occurs via the speakers of the TV set.

The volume of the TV set speakers can be changed with the **V+/V-** key of the remote control.

b) "constant" mode and loudspeaker "off"

The volume level on the "**AUDIO OUT port**" on the back of the TV remains set to "constant" in the %-value in the menu.

There is no sound **output** via the speakers of the TV set.

The symbol for the mute setting does not appear on the screen.

The volume cannot be changed with the **V+/V-** key of the remote control.

c) "variable" mode and loudspeaker "on"

The volume level on the "**AUDIO OUT port**" on the back of the TV can be adjusted.

Sound output also occurs via the speakers of the TV set.

The volume of the TV set loudspeakers and the volume level on the "**AUDIO OUT port**" can be changed with the **V+/V-** buttons on the remote control

d) "variable" mode and loudspeaker "off"

The volume level on the "**AUDIO OUT port**" on the back of the TV can be adjusted.

There is no sound **output** via the speakers of the TV set.

The symbol for the mute setting does not appear on the screen.

The volume on the "**AUDIO OUT port**" can be changed with the **V+/V-** buttons on the remote control.

e) "Headphone" mode and loudspeaker "on"

The volume level on the "**AUDIO OUT port**" on the back of the TV can be adjusted. Sound output also occurs via the speakers of the TV set. The volume of the TV set speakers can be changed with the **V+ / V-** buttons on the remote control. Change the volume level on the "**AUDIO OUT port**":

- press the yellow key .
- Select "Headph. Vol." with the cursor control key.
- Use the cursor to change the volume.

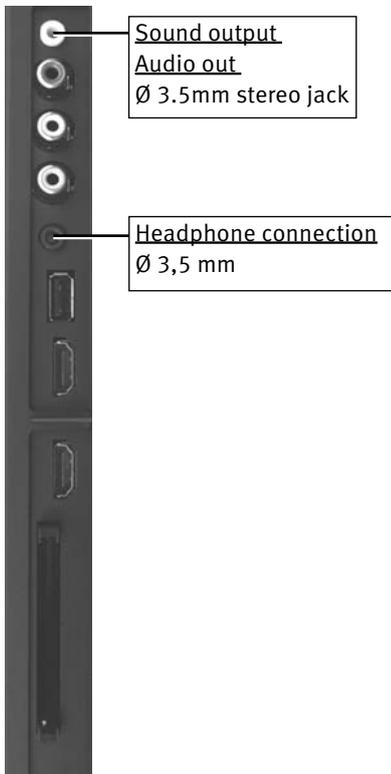
The headphone output on the front or side will also be changed.

f) "Headphone" mode and loudspeaker "off"

The volume level on the "**AUDIO OUT port**" on the back of the TV can be adjusted.

There is no sound **output** via the speakers of the TV set.

The symbol for the mute setting does not appear on the screen. The volume of the TV set speakers can be changed with the **V+ / V-** buttons on the remote control.



17.7 Connecting headphones

The headphone jack is located on the side.

Wireless headphones can also be connected to the "**AUDIO OUT port**" on the back of the TV.

The sound settings for the radio headphones should then be set as described on page 64.

We recommend headphones with impedance that is not less than 32 Ω. For headphones with less impedance (approx. 8 Ω), the dynamic range is smaller.

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

17.8 Sound 1, Sound 2

In dual channel programs, you can switch from Sound 1 to Sound 2

- Press the yellow  key.
- Select "Audio track" with the cursor.
- Use the cursor to make desired changes to the sound settings.

18 Video text

Video text is another free information service of the broadcasting channels. There are different ways of browsing in this electronic newspaper.

18.1 Calling up video text

- Press the  key. The video text will appear.

The next video text pages can be shown in increasing order with the cursor.

If particular pages are to be selected, enter the page number with the numeric keys. If video text sub-pages are available, the page numbers are shown as white. You can browse through these video text pages using the left/right cursor keys.

18.1.1 Double font size

You can change the font size of the video text using the yellow  button.

- The first time you press the yellow  button, the upper half of the text page increases.
- Pressing the yellow  button a second time switches on the lower half of the text page.
- Pressing the yellow  button a third time switches to full page view.

18.2 Video text comfort functions

Press the  button when the video text appears to display the comfort functions. You can select the functions with the cursor. Pressing the  button will open the selected comfort function.

18.2.1 Structure

- Press the  button to open the comfort functions.
- Select "Structure" with the cursor and press the  button.

The grouping appears on the left side of the screen regardless of the channel's video text editing. Use the cursor to display the next video text pages. The selected video text page is displayed automatically.

- Press the  button to go back to the normal video text view.

18.2.2 Cursor on (cursor page selection)

- Press the **OK** button to open the comfort functions.
- Select "Cursor on" with the cursor and press the **OK** button.

By pressing the **OK** button the page is stopped and the cursor appears next to the first three-digit page number. Use the cursor to highlight the currently displayed page. This function makes sense for content pages (e.g. page 100, 200, etc.) in order to select particular headlines. Once the desired page number is highlighted, press the **OK** button to display the page.

18.2.3 Search by keyword

It is possible to search video text by keyword.

- Press the **OK** button to open the comfort functions.
- Select "Search for keyword" with the cursor and press the **OK** button.
- Use the cursor to write the keyword, e.g. "Formula 1", on the keyboard that appears.
- Use the cursor to select the field "Whole word" or "Partial word" and press the **OK** button.

Press the **OK** button to initiate the video text keyword search. A spinning circle in the video text headline indicates that the search is in progress. The number of pages found on which the keyword occurs is shown to the right of the circle.

- Use the **P+/P-** keys to select the pages.
- Press the  button to exit search mode.

18.2.4 Large TV screen / Small TV screen

When video text is displayed, the current programme appears in a small screen to the left. This moving image can be enlarged or shrunk.

- Press the **OK** button to open the comfort functions.
- Select "Large TV picture" with the cursor and press the **OK** button.

Resetting the function:

- Press the **OK** button to open the comfort functions.
- Select "Small TV picture" with the cursor and press the **OK** button.

18.2.5 Reveal hidden text

- Press the **OK** button to open the comfort functions.
- Select "Reveal hidden text" and press the **OK** button.

This function will cause hidden text such as VPS times to appear.

18.2.6 Setting markers for a video text page

As a video text reader, you will want to read particular pages repeatedly, e.g. stock market, news, weather, etc.

You can set markers according to your personal selection to find these pages quickly.

Call up the page that is to be provided with a marker.

- Press the **OK** button to open the comfort functions.
- Select "Marked page" with the cursor and press the **OK** button.

 ***A maximum of 10 markers can be used for a single programme position.***

18.2.7 Select next video text page marker

In the opened video text the video text pages provided with markers can be browsed in sequence with the green button.

- Press the **OK** button to open the comfort functions.
- Select "Next marked page " with the cursor and press the **OK** button.

18.2.8 Video text, delete markers

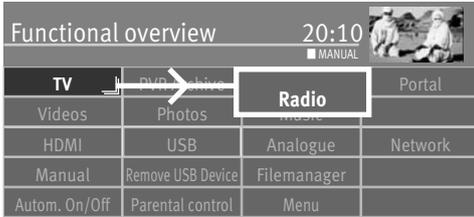
Call up video text page whose marker is to be deleted.

- Press the **OK** button to open the comfort functions.
- Select "Delete bookmark" with the cursor and press the **OK** button.

18.2.9 Video text, subtitles

The TV set provides the option of showing subtitles. When a program with subtitles begins the sender fades in the information on which panel the subtitles can be found.

- Open the video text with the **TEXT** key.
- Enter the page number on which the subtitles are to be broadcast with the numeric keys.



19 Radio mode

If your TV set is connected to a router via the network port, you can choose to listen to the radio on DVB or on the Internet.

- Press button to open the "Functional overview".
- Select "Radio" with the cursor and press the button.
- Use the cursor to select "DVB" or "Internet" and press the button.

19.1 DVB radio

During the channel search (see Chapter 10), DVB radio stations are searched automatically and saved at the radio level in a station table.

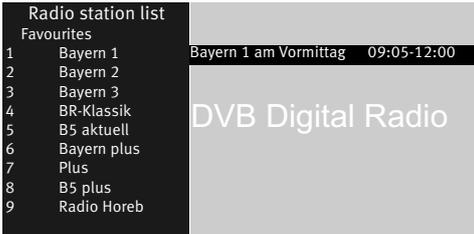
Use the button to open the station table in DVB radio mode. Select a radio station using the cursor keys and press the button.

After about 30 seconds, the screen automatically turns dark. Any button pressed on the remote control switches the screen back on.

Back to the TV programme

- Press the button.
- Select "TV" with the cursor and press the button.

DVB radio programmes are handled just like DVB TV programmes.



19.2 Internet radio



With the "TuneIn Radio" option, you can access more than 40,000 radio stations using your TV set. "TuneIn Radio" also plays podcasts, has a search function, and provides information using radio stations from the surrounding area (local radio).

You can find your station of choice by using the TuneIn radio search.

The user can perform the search, for example, by using a keyword such as the station name, category or genre.

Follow the instructions on the screen.

Back to the TV programme

- Press the **EXIT** button.
- Select "TV" with the cursor and press the **OK** button.

 **The different menu items can be selected with the cursor control button. Open the menu item with the **OK** button.**



Example of a local radio in your catchment area

Select the menu item "Local Radio" using the cursor and press the **OK** button. All the radio stations around your location (in Nuremberg for example) will be shown.

For additional information or if you want to change the location, you can find out more at the TuneIn website: <http://tunein.com/support/get-started/>

F



- No function
- Videos
- Photos
- Music
- PVR archive
- Media player
- Timer
- Portal
- Filemanager
- Picture format
- Subtitle on/off
- Sleep Timer
- Automatic on
- Automatic off
- Parental control
- TV mode
- DVB radio mode
- Internet radio mode
- AV mode
- Remove USB device
- Manual
- Memorize curret programme
- Screen off
- Stop recording

F



- Execute
- Shift
- Preferred
- Remove

20 The F-button

The F-button  (function key) on the remote control can be programmed for different functions in connection with the numeric keys 0-9. The programmed function is then built into the menu and can be triggered immediately as a quick setting.

Programming function

- Press the  button. An overview opens on the screen.
- Select the slot with the cursor (in example 6) that should be used.
- Press the  button and open the selection list.
- Use the cursor to make your selection and press the  button. The selection will be transferred to the overview.

Setting a preferred function

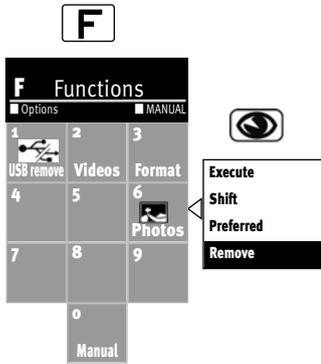
It is possible to configure a favourite function in the function key selection overview. The favourite function will be indicated with a diamond symbol.

- Press the  button. An overview opens on the screen.
- Use the cursor to choose the position that should be marked "Preferred".
- Press the green  button to open the context menu.
- Select "Preferred" with the cursor and press the  button.

Moving a function

It is possible to move a favourite function to another position in the function key selection overview.

- Press the  button. An overview opens on the screen.
- Use the cursor to select the position you would like to move.
- Press the green  button to open the context menu.
- Use the cursor to select "Shift" and press the  button.
- Select the new position with the cursor and press the  button.



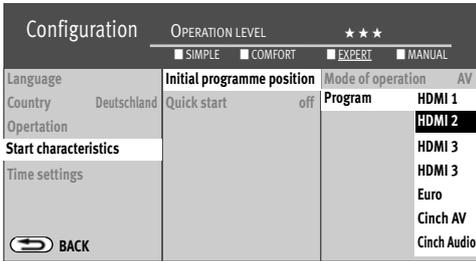
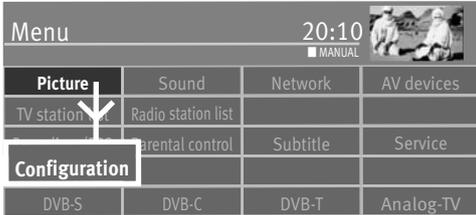
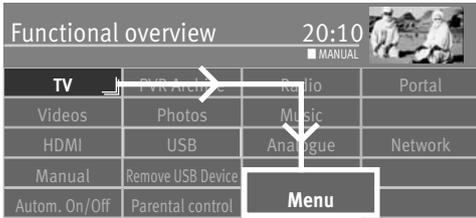
Removing a function

It is possible to move a favourite function to another position in the function key selection overview.

- Press the **F** button. An overview opens on the screen.
- Use the cursor to select the position you would like to remove.
- Press the green  button to open the context menu.
- Use the cursor to select "Remove" and press the **OK** button.

Executing a function

- Press the **F** button and then the numeric key for the function you would like to execute.
- To execute the favourite function, press and hold the **F** button until the function appears on the screen.



21 Start Up

21.1 Initial program position

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

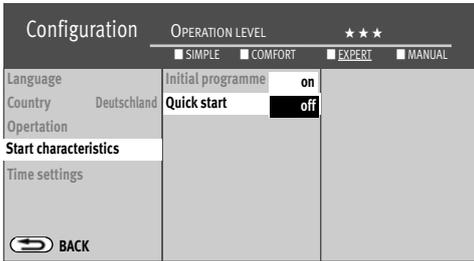
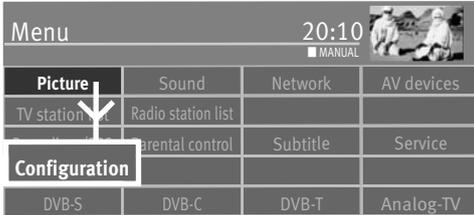
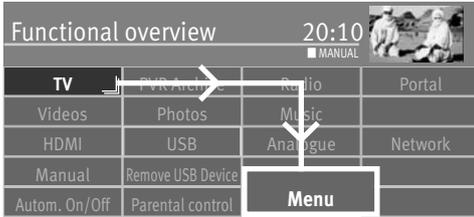
Initial program position settings

- Press button to open the "Functional overview".
- Select "Menu" with the cursor and press the button.
- Select "Configuration" with the cursor and press the button.
- Select "Start characteristics" with the cursor in the context menu and press the button.
- Select "Mode of operation" with the cursor in the context menu and press the button.
- Use the cursor to select the desired mode of operation (TV, radio, or AV) and press the button.

If AV mode is selected:

- Select "Program" with the cursor in the context menu and press the button.
- Use the cursor to select a programme position.
- Press the button to confirm your selection.
- Press the button to exit the menu.

The device will be set to this programme position next time it is switched on.



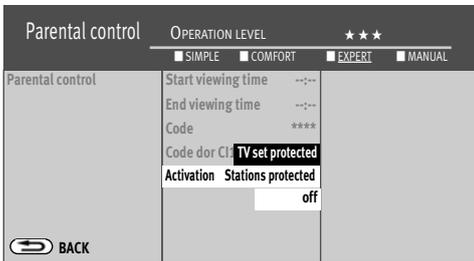
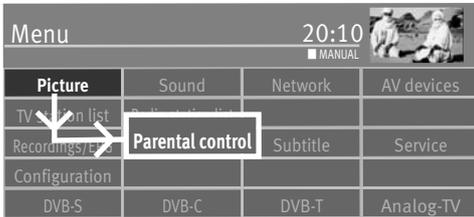
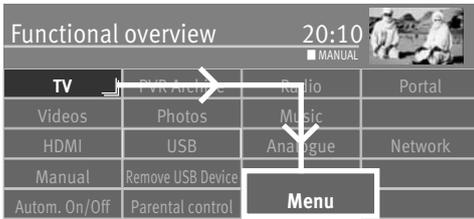
21.2 Quick start

The device starts up faster from standby mode if this function is activated.

However, this will also significantly increase power consumption during standby.

Switch on quick-start

- Press button to open the "Functional overview".
- Select "Menu" with the cursor and press the button.
- Select "Configuration" with the cursor and press the button.
- Select "Start characteristics" with the cursor in the context menu and press the button.
- Select "Quick start" with the cursor in the context menu and press the button.
- Use the cursor to select "on" or "off" and press the button.
- Press the button to exit the menu.



22 Parental control

22.1 Child-safe basic settings

- Press button to open the "Functional overview".
- Select "Menu" with the cursor and press the button.
- Select "Parental control" with the cursor and press the button.
- If desired, use the cursor to select "Start viewing time" and "End viewing time" and press the button.
- Use the cursor to select "- : - :", enter a time with the numeric keys, and then save with the button.
- Select "Code" with the cursor, press the button, and enter your 4-digit personal code with the numeric keys. **Make a note of the code number!**
- Use the cursor to select "Activation" and press the button.
- Select "TV set protected" with the cursor and press the button.

22.2 Activate parental control

With the childlock function, you can:

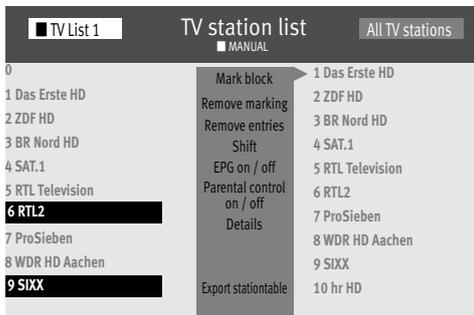
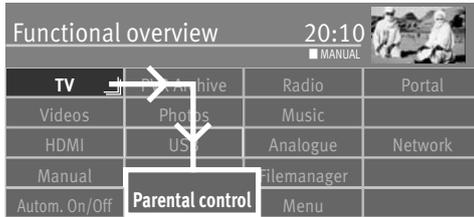
- Activate a general TV lock (a1) or unlock it within a specific timeframe (a2).
- Select (b1) and block (b2) a specific station

a1): Locking the TV set in general to prevent unauthorised use

- Press button to open the "Functional overview".
- Select "Parental control" with the cursor and press the button.
- Select "TV set protected" and press the button.
- Save the setting with the button.

a2): If you want to unlock the TV within a specific timeframe, then:

- Select "Start viewing time" and "End viewing time" with the cursor in the settings window (see 21.1) and set the time using the numeric keys. Incorrectly entered times can be deleted.



- Select "Code" with the cursor control key and enter your personal four-digit code with the numeric keys. **Make a note of this code!**

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

- Close "Functional overview" with the **EXIT** button and turn off the TV.

b1): Locking selected stations

- Press **Home** button to open the "Functional overview".

- Select "Parental control" with the cursor and press the **OK** button.

- Select "Mark block" with the cursor and press the **OK** button.

- Save the setting with the **OK** button.

b2): Activate station block for selected stations

- Press **Home** button to open the "Functional overview".

- Select "Menu" with the cursor and press the **OK** button.

- Select "TV List 1" with the cursor and press the **OK** button.

- Select the programme positions you would like to block from the channel list with the cursor and press the **OK** button.

Block selection

- Use the cursor to go to the first programme position and select **OK**.

- Use the cursor to go to the last programme position and select **OK**.

- Change to the middle selection column using the cursor, select "Mark block", and press the **OK** button.

- Change to the middle selection column using the cursor, select "Parental control on/off", and press the **OK** button.

- The selected channels are blocked, and a symbol appears in the channel list.

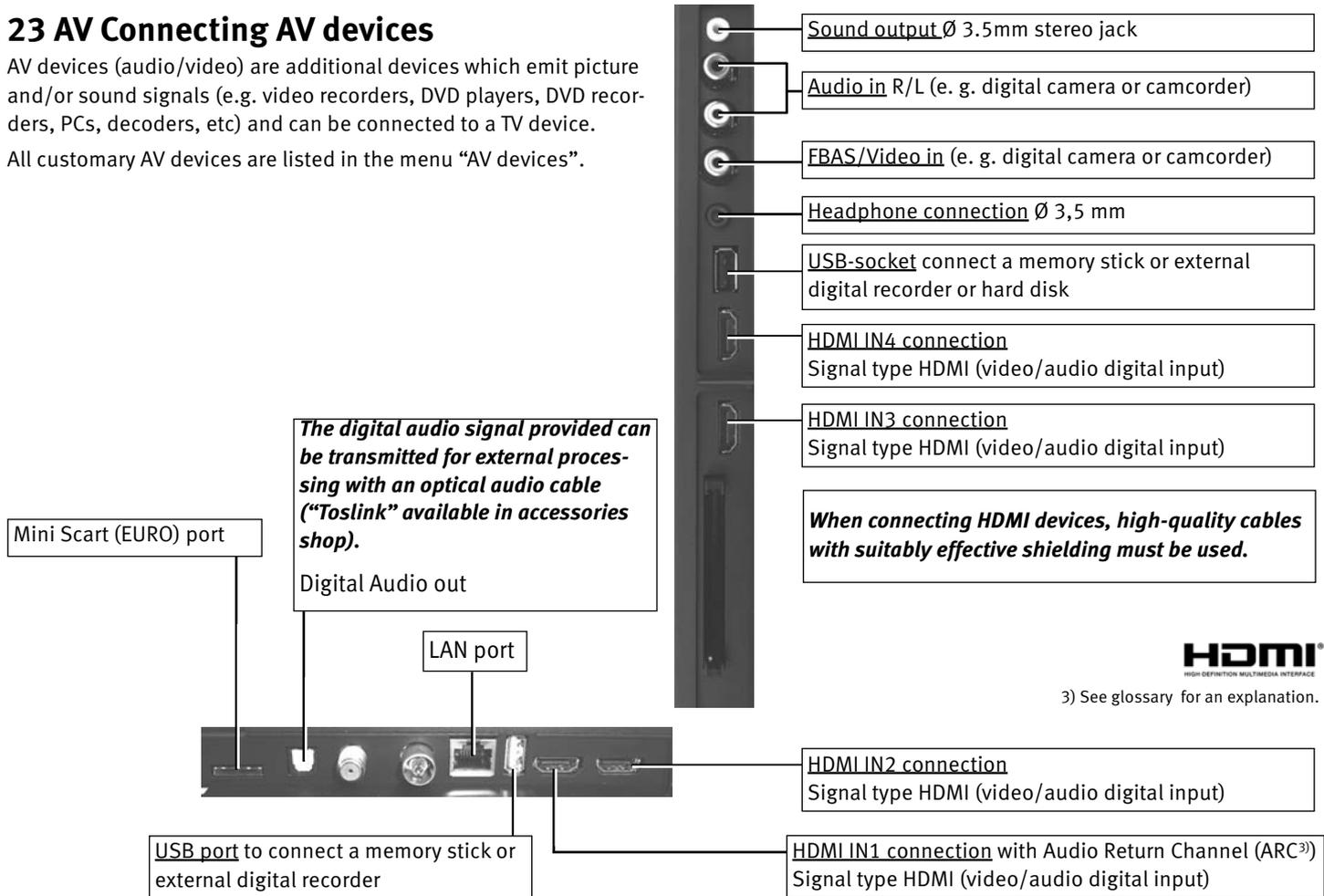
- Press the **EXIT** button to exit the menu.

The channels can be activated again by repeating the process.

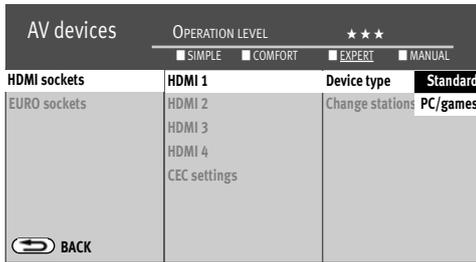
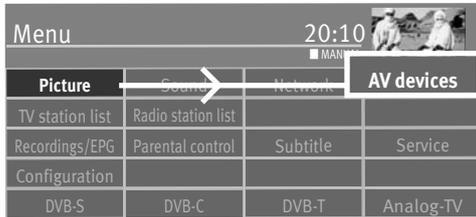
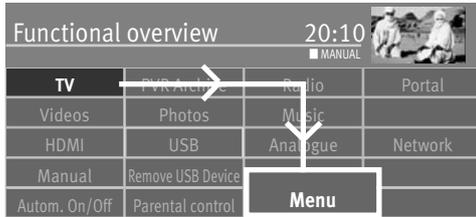
23 AV Connecting AV devices

AV devices (audio/video) are additional devices which emit picture and/or sound signals (e.g. video recorders, DVD players, DVD recorders, PCs, decoders, etc) and can be connected to a TV device.

All customary AV devices are listed in the menu “AV devices”.



3) See glossary for an explanation.



Registering AV devices

- Press button to open the "Functional overview".
- Select "Menu" with the cursor and press the **OK** button.
- Select "AV devices" with the cursor and press the **OK** button.
- Use the cursor to select the port(s) from the context menu to which you would like to connect an AV unit and press the **OK** button.

For EURO ports:

Signal-IN "FBAS" (CVBS) for Camcorders, VHS-Videorec.

Signal-IN "YC" for SVHS-Videorec., Decoder.

Signal-IN "RGB" for units that output an RGB signal (see the AV unit's manual).

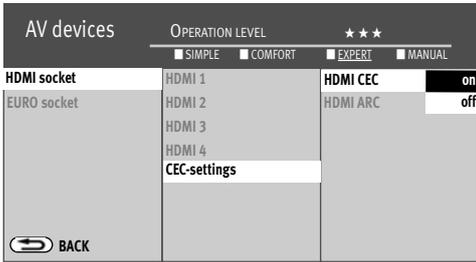
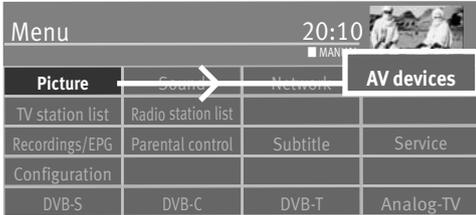
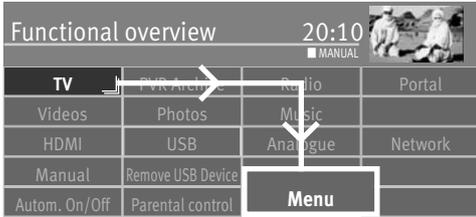
For HDMI ports:

Unit type: "Standard" for DVD players, DVD recorders, etc.

Unit type: "PC/Games" for game consoles

Unit type: "PC/Games" for connecting a computer

- Set the desired setting with the cursor and press the **OK** button.
- Press the button to exit the menu.



23.1 HDMI CEC function

With **C**onsumer **E**lectronics **C**ontrol (CEC), you can use the Metz remote control to operate the basic functions of any connected AV devices. To enable CEC, the AV device must support the HDMI CEC functions and be connected to the TV set over an HDMI cable. The general purpose of the CEC function is to simplify cabling while providing integrated control.

CEC settings

- Press button to open the "Functional overview".
- Select "Menu" with the cursor and press the button.
- Select "AV devices" with the cursor and press the button.
- Select "HDMI socket" with the cursor in the context menu and press the button.
- Use the cursor to select "CEC-settings" and press the button.
- Use the cursor to select "HDMI CEC" and press the button.
- Use the cursor to select "on" and press the button.
- Press the button to exit the menu.

23.2 HDMI ARC function

Once the CEC function has been switched on, an audio return channel (= ARC) can be activated or deactivated on the HDMI cable. If "HDMI ARC on" has been selected, the audio return channel will be activated automatically when the TV set is switched on, if a CEC and ARC-capable AV receiver / HiFi amplifier has been connected to the HDMI-socket "IN1 (ARC)".

EPG

Electronic programm guide (EPG) 20:05

Record Configurations Record timer Manual

Mo	Tu	We	Th	Fr	Sa	Su
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31	1	2	3	4	5	6
7	8	9	10	11	12	13

0001	Das Erste HD	20:00-20:15	Tagesschau
0011	hr Fernsehen	20:00-20:15	Tagesschau
0013	WDR Köln	20:00-20:15	Tagesschau
0015	SWR Fernsehen	20:00-20:15	Tagesschau
0020	SR Fernsehen	20:00-20:15	Tagesschau
0006	NDR FS MV	20:00-20:15	Tagesschau
0007	Einsfestival	20:00-20:15	Tagesschau
0012	mdr	20:00-20:15	Tagesschau
0019	MDR Sachsen	20:00-20:15	Tagesschau

Time frame:
 20:00-22:00

Show programmes from:
 20:00

Sort list according to ...
 Station table



Recordings/EPG OPERATION LEVEL ★★★

SIMPLE COMFORT EXPERT MANUAL

Recording control	EPG	on
EPG settings	EPG Data for ...	off
Storage medium		

BACK



Recordings/EPG OPERATION LEVEL ★★★

SIMPLE COMFORT EXPERT MANUAL

Recording control	EPG	TV
EPG settings	EPG Data for ...	TV & Radio TV(short) TV&R(short)
Storage medium		

BACK

24 EPG (Electronic Programme Guide)

EPG (Electronic Program Guide) is an electronic program guide for many TV and radio programs.

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

DVB-SI (Digital Video Broadcasting-Service Information) is a service provided by different broadcasters. Program details are broadcast digitally by each broadcaster exclusively for those programs it offers.

EPG Settings

- Press the **EPG** button to open the EPG.
- Press the green button and open "EPG settings".
- Select "EPG" with the cursor in the context menu and press the **OK** button.
- Use the cursor to select "on" or "off" and press the **OK** button.
- If "on" has been selected, set "EPG Data for ..." with the cursor and press the **OK** button.
- Use the cursor to select "TV", "TV (short)" or, if a radio station is shown in the electronic programme guide, "TV & Radio", "TV & Radio (short)" and press the **OK** button.
- Press the **EXIT** button to exit the menu.

24.1 Collecting EPG data

EPG data is broadcast by each channel for its program contents. Information will therefore vary accordingly. Switch your TV to stand-by mode so that EPG data can be compiled or alternatively updated.

The orange or blue-red LEDs will be illuminated when EPG data is being compiled.

 ***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

The unit's TV channel list shows all known channels and provides information on them in the programme guide, unless you have made a different selection in the favourite channel list (see next page).



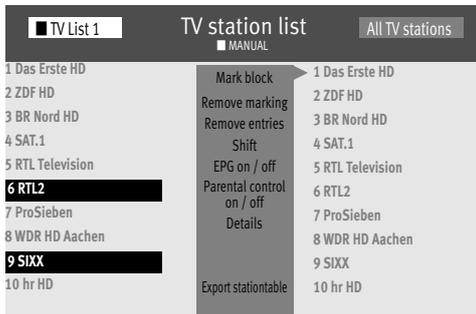
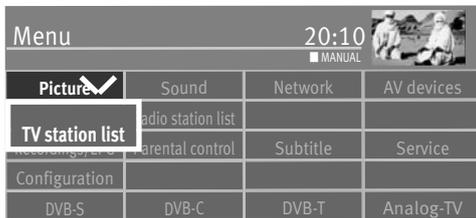
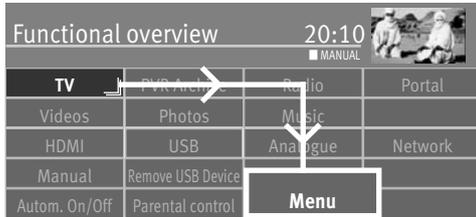
New TV stations are not automatically added to the EPG station list after another station search. You will have to do this manually.

The collection process will be halted or stopped if:

- the TV set is switched off using the power switch.
- a recording is programmed in the “Recordings/EPG” menu.
- a “timer recording” is running or will begin in an hour.

If the TV set is switched to stand-by mode while processing data, the light diode illuminates orange or blue-red to indicate that data is still being processed.

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



24.2 Exclusion of one or more channels from the EPG

- Press button to open the "Functional overview".
- Select "Menu" with the cursor and press the **OK** button.
- Select "TV station list" with the cursor and press the **OK** button.
- Use the cursor to select the programme positions in the channel list that are to be removed from the EPG list and mark them with **OK** .

Block selection

- Use the cursor to go to the first programme position and select **OK** .
- Use the cursor to go to the last programme position and select **OK** .
- Change to the middle selection column using the cursor, select "Select block", and press the **OK** button.
- Change to the middle selection column using the cursor, select "EPG on/off", and press the **OK** button.
- The selected channel is no longer available for EPG programming and the symbol disappears.
- Press the button to exit the menu.

The channel can be put back into the EPG list by repeating the procedure.

EPG

Electronic programm guide (EPG) 20:05

Record Configurations Record timer Manual

Mo	Tu	We	Th	Fr	Sa	Su
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31	1	2	3	4	5	6
7	8	9	10	11	12	13

0001	Das Erste HD	20:00-20:15	Tagesschau
0011	hr Fernsehen	20:00-20:15	Tagesschau
0013	WDR Köln	20:00-20:15	Tagesschau
0015	SWR Fernsehen	20:00-20:15	Tagesschau
0020	SR Fernsehen	20:00-20:15	Tagesschau
0006	NDR FS MV	20:00-20:15	Tagesschau
0007	Einsfestival	20:00-20:15	Tagesschau
0012	mdr	20:00-20:15	Tagesschau
0019	MDR Sachsen	20:00-20:15	Tagesschau

Sort list according to ...

- Station list
- Selected station
- Start time



EXIT

24.3 Sort EPG list by ...

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

The list can be sorted by "Station list", "Selected station", and "Start time".

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

Sorting the list

- Press the **EPG** button to open the EPG.
- Select "Sort list according to ..." with the cursor in the context menu and press the **OK** button.
- Select the desired function "Station list", "Selected station" or "Start time" with the cursor and press the **OK** button.
- Press the **EXIT** button to exit the menu.

24.4 EPG: Selecting a programme

- Press the **EPG** button to open the EPG.
- Select the desired channel with the cursor in the context menu and press the **OK** button.
- Select "Switch to" with the cursor in the context menu and press the **OK** button.

Electronic programm guide (EPG) 20:05

Record Configurations Record timer Manual

Mo	Tu	We	Th	Fr	Sa	Su
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31	1	2	3	4	5	6
7	8	9	10	11	12	13

20:00-20:15	Das Erste HD	Tagesschau
-------------	--------------	------------

Cancel Record Switch to

Tagesschau

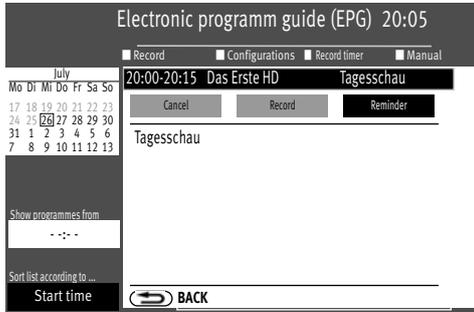
Show programmes from

Sort list according to ...

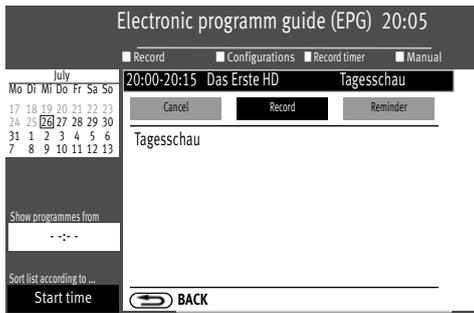
Start time

BACK

EPG



EPG



24.5 EPG: Sending reminder for a programme

- Press the **EPG** button to open the EPG.
- Select an upcoming programme with the cursor in the context menu and press the **OK** button.
- Select "Reminder" with the cursor in the context menu and press the **OK** button.
- The programme is marked in the list with an alarm symbol.
About 1 minute before the start time, the text "Coming next ..." will appear.
- Select "Switch to this programme" from the context menu and press the **OK** button to confirm.

24.6 EPG: Recording a programme (single or series)

- Press the **EPG** button to open the EPG.
- Select an upcoming programme with the cursor in the context menu and press the **OK** button.
- Select "Registrare" with the cursor in the context menu and press the **OK** button.
- Select "Show details" with the cursor in the context menu and press the **OK** button.
- Select the recording device in the context menu and press the **OK** button.
- In the detail menu, it is possible to:
 - select the type of recording (single, series).
 - configure parental control settings.
 - prevent accidental deletion (only for "PVR internal" or "PVR external").
 - set a "Priority".
 - select a folder on the hard disk

25 Metz Media System

Metz turns your TV into a multimedia centre.

The integrated Metz Media System allows you to play videos or music and display photos on your TV – it simply “retrieves” the digital data from your PC, your network attached storage (NAS) or your digital camera, for example.

You can set up your own multimedia network at home and control this simply and conveniently using your Metz remote control.

But that’s not all, as your Metz Media System also allows you to access numerous online services using **HbbTV**, a new platform for providing additional services via TV sets. You can obtain further information on the TV channel you are currently viewing via a DSL Internet connection – or watch missed programs via the media library of the respective channel.

Media Player¹⁸⁾

The Media Player enables you to play films, photos and music files from various components in your home network, such as a PC, notebook or network attached storage (NAS), on your TV set.

HbbTV^{15) 16) 17)}

HbbTV (Hybrid broadcast broadband TV) is a new industry standard for connecting TVs with the Internet. The broadcasting companies transmit a digital data stream together with their TV programs, which also includes a web address.

Once the  logo appears, a connection can be established between the TV set and the Internet portal of the channel by clicking the red  key.

Up-to-date program information can then be displayed, for example, or programs that have been missed can be retrieved via the TV media library.

The broadcasting channels are exclusively responsible for the availability, look and button assignment of the applications.

Metz assumes no guarantee for the functionality!

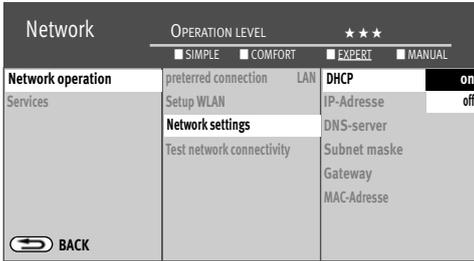
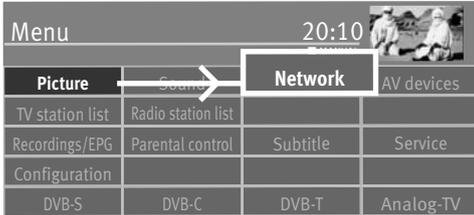
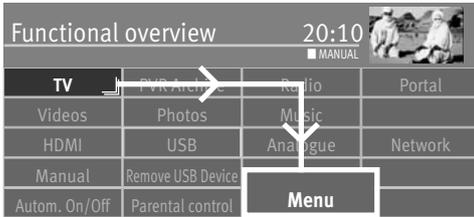
HbbTV bietet auch einen umfangreicheren Videotext und eine ausführliche Programmvorschau.

15) not available with analogue reception.

16) Recommended: at least a 5000 kbit/s DSL connection.

17) HbbTV availability is dependent on the channel and is therefore not offered in all countries.

18) This product is protected by certain intellectual property rights of Microsoft. Use or distribution of such technology outside of this product is prohibited without a license from Microsoft.



25.1 Network (LAN or WLAN)

25.1.1 Network configuration – automatic LAN or WLAN configuration

Requirements: The TV set is connected to your router via the LAN port and a network cable or via the USB port with a WLAN stick.

- Press button to open the "Functional overview".
- Select "Menu" with the cursor and press the **OK** button.
- Select "Network" with the cursor and press the **OK** button.
- Select "preferred connection" with the cursor in the context menu and press the **OK** button.
- Select "LAN" or "WLAN" with the cursor in the context menu and press the **OK** button.
- Select "Network settings" with the cursor in the context menu and press the **OK** button.
- Select "DHCP" with the cursor in the context menu and press the **OK** button.
- Use the cursor to select "on" and press the **OK** button.

Parameters like DNS server, IP address, subnet mask and gateway are identified automatically and entered.

If the menu item "preferred connection" has an **"LAN"** or **"WLAN"** next to it, the TV set will log on automatically each time it is switched on using the power switch.

25.1.2 Testing the network connection

Once a connection has been established successfully, the cursor is located next to "Network settings".

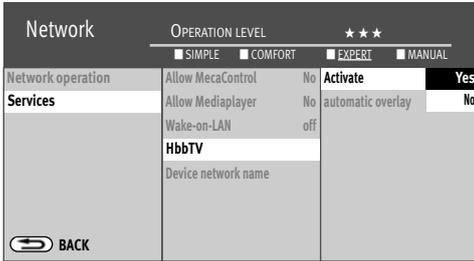
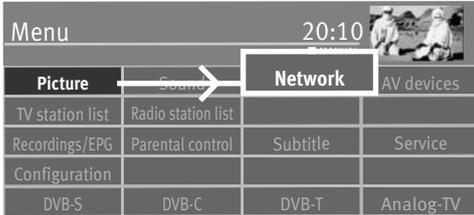
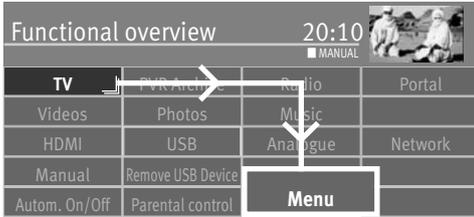
- Use the cursor to select the "Test network connectivity" menu item.
- Press the **OK** button.

The connection test is carried out.

If the message "Connection test successful!" appears, press the **OK** key to test the transmission speed of your DSL connection. The transmission speed should be at least 5000 kbit/s, in order to ensure images can be displayed smoothly, for example, when you view a program via the media library.

- Press the **EXIT** button twice and exit the "Functional overview".

The TV is now connected to the Internet and can, for example, make use of the new **HbbTV** television services.



25.2 HbbTV

HbbTV is not available in all countries.

Broadcasting channels that provide HbbTV services can be recognised by a red logo in the bottom left-hand corner of the screen.

Programme information will be displayed at the bottom of the screen after pressing the blue button. The logo appears within seconds for broadcasting channels that offer HbbTV.

Press the red button to see the offers of the channel. They can be selected and confirmed with the cursor .

Switching HbbTV on/off

- Press button to open the "Functional overview".
- Select "Menu" with the cursor and press the .
- Select "Network" with the cursor and press the .
- Select "Services" with the cursor in the context menu and press the .
- Select "HbbTV" with the cursor in the context menu and press the .
- Press the and select "Activate no" with the cursor.

To activate the "Start applications" of the channel:

- Press the and select "automatic overlay, yes" with the cursor.
- Press the button to confirm your selection.
- Press the button to exit the menu.

If you want to hide the "Start applications" when you are watching television, then select "No" under "automatic overlay".

During playback from the media library, the logo is displayed in the upper left-hand corner of the screen. Some of the keys on the remote control are then blocked and certain functions, such as teletext, EPG, etc., are unavailable. HbbTV is not available during PVR playback or when the time shift function is being used.

25.2.1 Accessing HbbTV

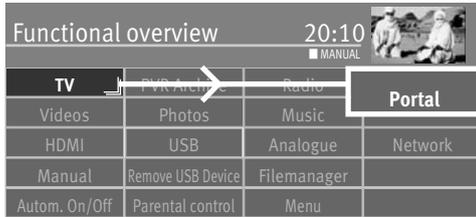
- Switch to a channel that offers HbbTV.
- Press the red key . Once a connection has been established to the Internet portal of the channel in question, the  logo moves to the upper left-hand corner of the screen. The Functional overview appears.
- To navigate the HbbTV menu, use the coloured cursor keys and the  button.

 ***The views and control options within the HbbTV menus are dependent on the respective provider and can therefore differ from channel to channel.***

- Press the  key to confirm your selected settings.
It may take some time, after pressing a key, before the TV set displays the selected settings.

25.2.2 Exiting HbbTV

- HbbTV can be exited by pressing the red  key or the  key.



26 Internet Portal

The Internet portal is a constantly growing platform on the Internet for interactive TV applications. You can open Internet sites directly with an integrated Web browser.

Open the Internet portal

- Press button to open the "Functional overview".
- Select "Portal" with the cursor and press the **OK** button.
- Use the cursor to select the desired language and press the **OK** button.
- Read the terms and conditions of business closely, select them and accept them with **OK**.
- Select "OK" with the cursor and press the **OK** button.
- Use the cursor to select the desired app, Internet for example, and press the **OK** button.
- Press the **OK** button twice and use the keyboard on the screen and the cursor to enter a new Internet address, www.metz.de for example.
- Select "OK" with the cursor and press the **OK** button.
- Press the button to exit the menu.

27 Opening the Media Player

The Media Player enables you to play videos, photos and music files from various components in your home network, such as a PC, notebook or network attached storage (NAS), on your TV set.

- Press the  button to open the "PVR Archive".

or

- Press  button to open the "Functional overview".

- Select "Videos", "Photos" or "Music" with the cursor and press the  button.

or

- Programme the "Media Player" with the  button (see chap. 19).



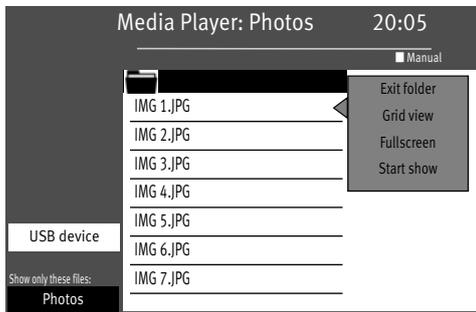
27.1 Using the media player

Operation of the Media Player can vary depending on the media files (audio/photo/video).

In the opened Media Player, use the cursor to select the source (e.g. "USB device") and press the  button. Continue navigating with the cursor and the .

27.1.1 Photos – 15-photo overview

- In the opened Media Player, select an image from the Image Overview.
- Select "Grid View" with the cursor and press the  button. In grid view, use the cursor to select the images.
- Press the yellow  button and use the cursor to select one of the following function: "Fullscreen", "Start show" or "List View" and then press the  button.
- Press the  button to return to the previous view.



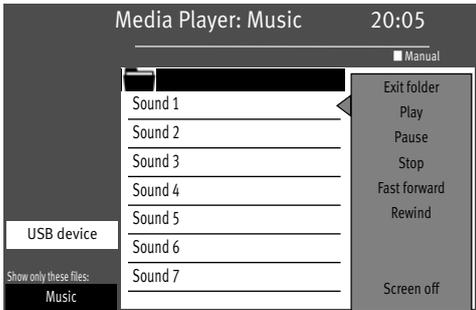


27.1.2 Start show

- In the opened Media Player, select an image from the Image Ove.
- If an image is shown in "Full-size Format", press the **OK** button.
- Select the function with the cursor (e.g. Start Slideshow) and press the **OK** button.

In the "Start show" mode, the following functions are available:

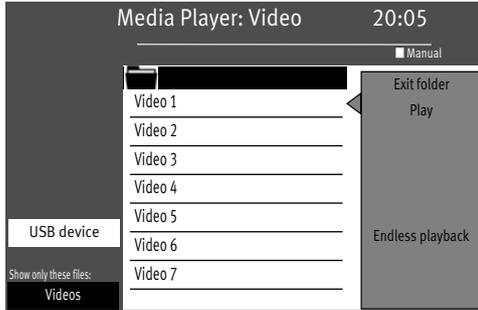
- return to grid view
 - manual navigation
 - Change images every 10 seconds or the hold time
 - Start show (endles)
- Press the  button to return to the previous view.



27.2 Music

- Select a song from the music overview in the opened media player.
- Use the cursor to select "Play" in the selection column and press the **OK** button. The piece of music will be played.
- Use the cursor in the selection column to select various functions. Press the **OK** button once or multiple time to execute this function.

27.3 Videos



- Select a video from the video overview in the opened media player and press the **OK** button. The video will begin to play.
- Use the cursor in the selection column to select various functions. Press the **OK** button to execute the function.

27.4 Data formats

The following file formats are supported:

Photos : .jpg; .png

Audio: .mp3; .mp4; .aac; .ac3; .m4a; .wma;

Video:

Container formats	Video Codec	Audio Codec	Common file extensions
3gp	MPEG-2 Part 2 (H262) AVC/MPEG-4 Part 10 (H264) MPEG-4 Part 10 (Xvid) Windows Media Video9 (WMV)	AAC / HE_AAC AC3 MP3 MPEG 1 MPEG-2 Part-3 Windows Media Audio9 Windows Media Audio10	.3gp
Audio Video Interleave			.avi
Advanced Streaming Format			.wmv, .asf
Flash Video			.flv, f4v,
Quicktime Movie			.mov
Matroska			.mkv
MPEG 4			.mp4, m4v
MPEG 2 TS			.mts, .ts, .tsp, .mpg, .mpeg2; .mpeg
MPEG-PS	.vob		

 **Solea TV sets are equipped with an internal hard disk at the factory. Clarea TV sets can be equipped with an internal hard disk later. For Clarea and Pureo TV sets it is possible to connect an external hard disk (not included with the TV set) to a USB port.**

28 USB recording to hard disk / PVR functions

 ***Solea TV sets are equipped with an internal hard disk at the factory. Clarea TV sets can be equipped with an internal hard disk later. For Clarea and Pureo TV sets it is possible to connect an external hard disk (not included with the TV set) to a USB port.***

PVR (Personal Video Recording) makes it possible to record TV or radio programmes to an external hard disk or suitable USB storage device using the USB port (USB recording).

For PVR recordings to an external hard disk that is connected to the USB port, record and playback functions are possible simultaneously. While a programme is being recorded, you have the possibility of playing back an already-recorded programme at the same time.

An **EPG (Electronic Programme Guide)** is available for recording TV programmes with your PVR.

External hard disks allow for a large number of recordings, which can be managed using a PVR archive. You can equip the recordings with a deletion protection. Parental control can be set for each individual recording.

 **We recommend using external hard disks as USB storage devices.**

Memory sticks can only be used to a limited extent. There are two reasons for this: First, they must have sufficient storage capacity for recording programmes (min. 8 GB). Second, they must have minimum read and write speeds.

28.1 Hard disk instructions

Hard disk drive

A hard disk drive is very sensitive. The hard disk may fail if it is used improperly or in an unsuitable environment. Indications of this are if the playback is unexpectedly blocked and noticeable mosaics appear in the picture, among other things.

If the hard disk drive fails, playback of recordings is impossible. In such a case, please contact your specialist dealer.

Important recordings on the hard disk

The hard disk is not intended to serve as a permanent memory for your recordings. Data and/or recordings that are important to the user should also be backed up on an external storage medium, a DVD for example.

METZ cannot assume any liability for recorded material that is lost or damaged as a result of a malfunction or disruption of the hard disk, whether directly or indirectly.

Installation and handling

- Do not subject the TV set to shocks or vibrations, especially if the TV set is in operation.
- Place the TV set on an even, stable surface that is free of vibrations.
- Do not cover or block the cooling vents or other ventilation openings on external hard disk devices or the TV set.
- Do not set up the TV set in places where it can get very hot or moist or where the TV set is exposed to rapid temperature changes.

- Do not transport the TV set while it is switched on and also not directly after switching it off.
- The hard-disk recorder must be shut down before switching off the LCD TV set. Press the green key  for this on the remote control and wait until "Please wait" disappears from the display. Now the LCD TV set can be switched off with the power button on the TV set.

Notes regarding external hard disks

Connect the external hard disk to the TV set via USB socket. Before an external hard disk can be used, it must be formatted as described in Chapter 26.2.

28.2 Format external hard disk

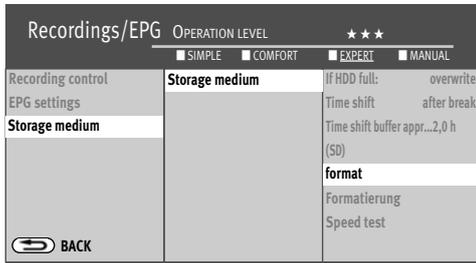
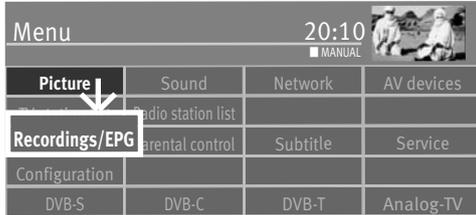
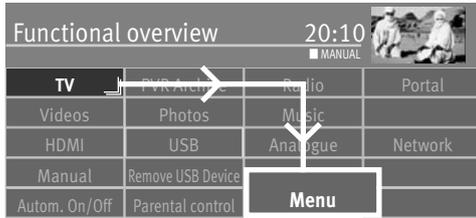
An external hard disk up to a capacity of 1 terabyte is certainly suitable and must be formatted as the **“Primary partition”** in **“NTFS”**.

If the external hard disk is **“FAT32”** formatted, you will be asked to have it formatted by the TV set.



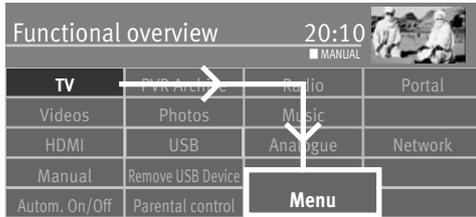
If the external hard disk is not recognised, please verify the partitioning of your PC!

This must be a PRIMARY partition, not Extended. Once you have connected the external hard disk, you have to format the TV set (in NTFS).



Format external hard disk on the TV set:

- Press  button to open the "Functional overview".
- Select "Menu" with the cursor and press the  button.
- Select "Recordings/EPG" with the cursor and press the  button.
- Select "Storage medium" with the cursor in the context menu and press the  button.
- Select "format" with the cursor in the context menu and press the  button.



28.3 Settings for the internal/external hard disk

A variety of settings can be selected for the internal/external hard-disk recorder in this menu:

If the HDD is full . . .

If the hard disk is full, **no more recordings** are carried out or the oldest are released for **overwriting**.

Time shift (delayed viewing)

Time shift mode runs permanently or is started by pressing the  key (pause). It can also be switched off.

Speed test

If you want to use a USB memory stick for USB recording, we recommend carrying out a speed test first of all. The colour displayed in the test bar let you know whether your USB stick is suitable for USB recording.

Red : speed of the media is not suitable.

Yellow : media only suitable to a limited extent due to its speed, e.g. not suitable for HD programmes.

Green : speed of the media is suitable.

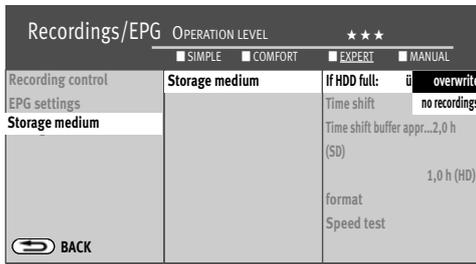
Formatting (only for use with external USB storage media)

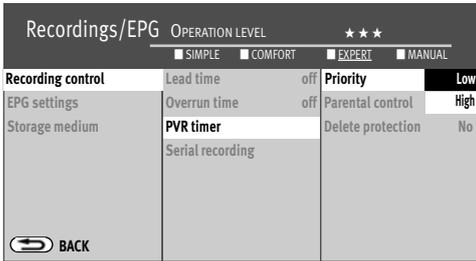
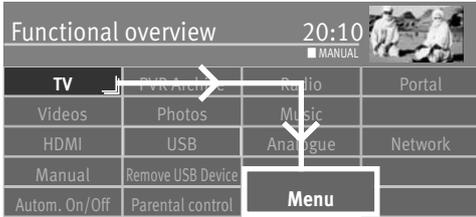
The external **USB storage device** should be configured and formatted for PVR.

Any data stored on the storage media will be deleted.

To adjust settings for external hard disk:

- Press  button to open the "Functional overview".
- Select "Menu" with the cursor and press the **OK** button.
- Select "Recordings/EPG" with the cursor and press the **OK** button.
- Select "Storage medium" with the cursor in the context menu and press the **OK** button.
- Select the desired function in the shortcut menu with the cursor and press the **OK** button.
- Use the cursor in the context menu to select the desired function.
- Press the  button to exit the menu.





28.3.1 Programmateur PVR, réglages de base

You can configure general settings to the PVR timers.

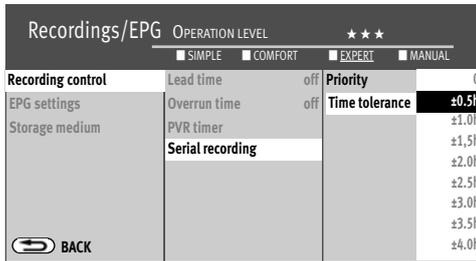
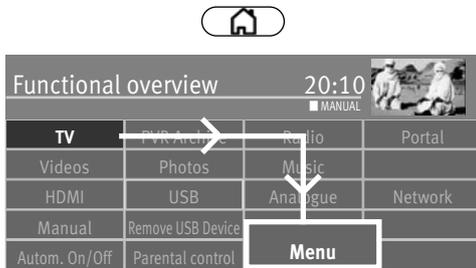
Priority: The timer priority can be set to "Low" or "High". A timer with high priority will be considered before a timer with low priority.

Parental control: It is possible to programme parental controls for the timer recording(s). To ensure that parental controls are effective, they must be switched on (see chap 22).

Deletion protection: A timer recording can be programmed with deletion protection.

Setting the PVR timer basic settings:

- Press button to open the "Functional overview".
- Select "Menu" with the cursor and press the button.
- Select "Recordings/EPG" with the cursor and press the button.
- Select "PVR timer" with the cursor in the context menu and press the button.
- Select "Priority" with the cursor in the context menu and press the button.
- Use the cursor to assign the desired priority to your selection and press the button.
- If desired, use the cursor to select "Parental controls" and "Delete protection".
- Press the button to exit the menu.



28.3.2 Basic settings for series timers

Series times can be assigned general settings.

Priority: The timer priority can be set to "Low" or "High". A timer with high priority will be considered before a timer with low priority.

Example: series timer is set with "High" priority and a PVR timer with "Low" priority is set for nearly the same time. The programme with the series timer will be recorded and the programme with the PVR timer will not be recorded.

Time tolerance: For series timers, a slightly larger time window is created with buffer time before and after the planned programming time to account for special occasions, such as live broadcasts or sporting events that may result in delays or deviations.

Setting the PVR timer basic settings:

- Press button to open the "Functional overview".
- Select "Menu" with the cursor and press the button.
- Select "Recordings/EPG" with the cursor and press the button.
- Select "PVR timer" with the cursor in the context menu and press the button.
- Select "Time tolerance" or "Priority" with the cursor in the context menu and press the button.
- Use the cursor to select the desired time tolerance or alternatively priority and press the button.
- Press the button to exit the menu.

28.4 Delayed television viewing (Time shift)

This applies only to Solea TV sets or to connections with an external hard disk via a USB port.

The TV set stores the recordings in temporary digital storage (time shift buffer).

The temporary digital storage is sufficient for recording approx. 130-300 min (SD) and 70-120 min (HD=HDTV programs). This information only represents approximate values, which can vary

depending on the volume of data in the recording. When using an internal or external mass storage device (hard disk), the recording duration is much longer.

- Pause the program with the key  .

The program is recorded in the temporary storage.



The name of the “paused” program appears in the upper left corner of the screen. The green key  can be used to reveal the status display (play bar), which gives you information about the current position in time shift mode. The time since the program was “paused” or alternatively recorded (10:15:00 in the example) is shown on the left below the bar display.

During pause mode, you can also change to a different program position¹², to watch the news for example. Then, in addition to the name of the program, a symbol  appears as a sign that the program is “parked”.

When the news is over, you can press the key  again to continue the previously paused program without having missed anything. The time shift bar fills in with colour in accordance with the length of the pause. Everything that is further in the past than the set time is lost.

- Press the  key again to continue watching the paused and recorded program.
- Press the blu key  and show the play bar.
- Press the  button or  several times briefly to skip ahead in playback by +1 minute or to rewind by -20 second increments.
- Press and hold the button to double the speed of these functions. Repeat this to  rewind or  fast-forward the recording at up to 32x normal speed.

The time since the program was “paused” (in the example the program was paused 10:15 min. ago) is shown on the left next to the bar display. The time that the replay lags behind the live broadcast is shown below the bar display (03:25 min in the example).

In pause mode the program can be forwarded or rewound in 10% increments.

If you want to return to the current status of the program (“Live”) from time shift mode, then press the blu key  If you want to return to the current status of the program (“Live”) from time shift mode, then press the  (Stop) for the “LIVE picture” of the current program.



 ***If the TV set is in standby mode or switched off, the recording will be lost Alternatively, you can also create a regular recording from the recording stored in the time shift buffer.***

28.4.1 Saving time shift buffer as recording

 ***This function is only available if a hard disk recorder is installed in the TV set.***

Let us assume you are in time shift mode and are watching a current programme, which has already filled at least 13 minutes of the time shift buffer. Now you wish to save the partially recorded programme.



28.4.2 Direct recording of a program

If you want to record a program that is already running, you program a direct recording. This direct recording programming ensures that the program running is prepared for recording.

Program direct recording:

- Press the  button (record) to open the recording window.
- Use the cursor to select "Show details" and press the  button.
- Select "Recording device" with the cursor, press the  button, and adjust the recording device if necessary. The default setting for the recording device is usually "PVR ...".
- Press the  button to initiate the recording device.
- Select "OK" with the cursor and press the  button.

Other parameters (deletion protection, parental controls, and priority) can be changed, like the recording device.

28.4.3 Configuring a programme as a series recording

- Press the  button (record) to open the recording window.
- Use the cursor to select "Show details" and press the  button.
- Select "Recording device" with the cursor, press the  button, and adjust the recording device if necessary. The default setting for the recording device is usually "PVR ...".
- Press the  button to initiate the recording device.
- Use the cursor to select "Schemes" and press the  button.
- Select the type of recording with the cursor. "Series timer (EPG)" are series with different broadcast times. "Series timer daily", "Series timer weekly", and "Series timer Mo-Fr" are for series that have the same daily broadcast time.

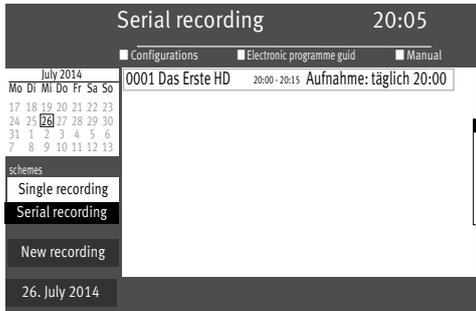
Other parameters (deletion protection, parental controls, and priority) can be changed, like the recording device.

28.4.4 Recording plan (Overview of programmed recording timers)

- Press  button to open the "Functional overview".
The "TV" window is selected.



- Press the  button.
- Use the cursor to select "Record timer" and press the  button.



- Use the cursor to select "Schemes" and press the  button.
- Select "Single recording" or "Series recording" with the cursor and press the  button.
Depending on your selection, the appropriate overview opens in the recording planning window.

29 The PVR Archive

 *The PVR archive is only available if the TV set has a built-in internal hard disk or when an external hard disk is connected.*



29.1 Playing programs from the PVR archive

- Press the  button to open the "PVR Archive".
- Select the desired recording with the cursor control key.
- Press the  key and play the selected recording.

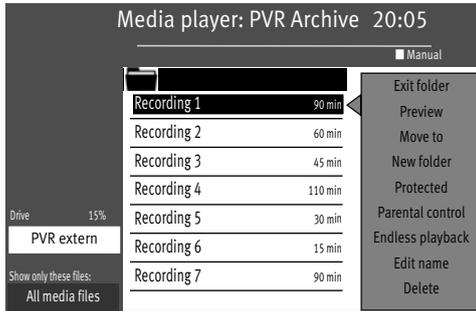
If the recording has already been opened the following message appears:

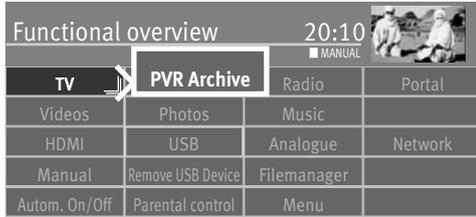
- Select "Playback from the beginning" or "Playback from last position" with the cursor.
- Press the  button. Playback begins.

Playback can be paused with the  button. Playback is paused. The archive opens.

29.2 Pause playback, Rewind, Fast-Forward

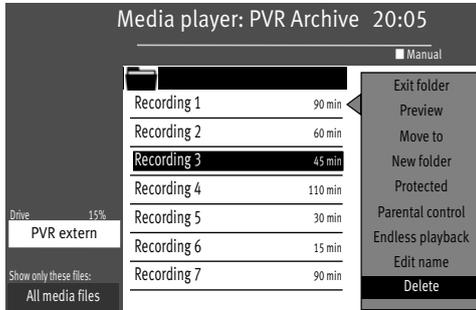
- Playback can be paused with the  button. The recording pauses on a freeze frame. To resume playback, press the  button again.
- While paused, press the  button or  several times briefly to fast-forward or rewind in 10% increments.
- During playback, press the  button or  several times briefly to skip ahead in playback by +1 minute or to rewind by -20 second increments.
- During playback, press and hold the  button or  to double the rewind or fast-forward speed. Repeat this to  rewind or  fast-forward up to 32x normal speed.
- Press the  button or the  button to stop fast-forwarding or rewinding.





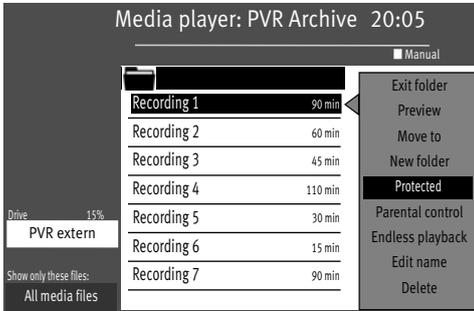
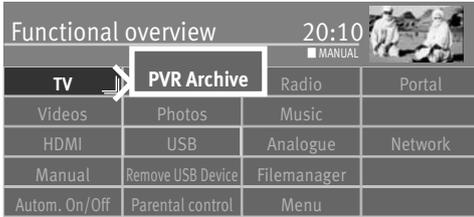
29.3 Deleting programs from the PVR archive

- Press button to open the "Functional overview".
- Select "PVR Archive" with the cursor and press the **OK** button.
- Select the desired recording with the cursor.
- Select "Delete" with the cursor and press the **OK** button.
The following notice appears to confirm that you would like to delete the recording.
- Select "OK" with the cursor and press the **OK** button.
- Press the button to exit the menu.



29.4 Slow motion

- During playback hold down the key for approx. two seconds to enable slow-motion.
- Use the **OK** key or the key to stop slow-motion and return to normal replay mode.



29.5 Delete protections

Delete protection prevents recordings from being automatically overwritten when the hard disk is full. Delete-protected files can only be deleted manually after the delete protection has been deactivated.

29.5.1 Activating deletion protection

- Press button to open the "Functional overview".
- Select "PVR Archive" with the cursor and press the **OK** button.
- Select the recording with the cursor that you would like to protect against deletion.
- Use the cursor to select "Protected" and press the **OK** button. A "shield symbol" appears on the upper left of the screen.
- Press the button to exit the menu.

29.5.2 Désactiver le protégé

- Press button to open the "Functional overview".
- Select "PVR Archive" with the cursor and press the **OK** button.
- Select the recording that is protected with the cursor. The "shield symbol" appears.
- Use the cursor to select "Protected" and press the **OK** button. The "shield symbol" on the upper left of the screen disappears.
- Press the button to exit the menu.



Functional overview		20:10	
TV	PVR Archive	Radio	Portal
Videos	Photos	Music	
HDMI	USB	Analogue	Network
Manual	Remove USB Device	Filemanager	
Autom. On/Off	Parental control	Menu	



Media player: PVR Archive 20:05		Manual
Recording 1	90 min	Exit folder
Recording 2	60 min	Preview
Recording 3	45 min	Move to
Recording 4	110 min	New folder
Recording 5	30 min	Protected
Recording 6	15 min	Parental control
Recording 7	90 min	Endless playback
		Edit name
		Delete

Drive 15% PVR extern

Show only these files:
All media files



29.6 Parental control

The Parental control function is set in much the same way as delete protection. If you activate the childlock for a recording, the system will not play back the recording until the viewer has provided the 4-digit code that you entered when you activated the childlock.

29.7 Continuous playback

With this function you can continually have a recording continually repeated.

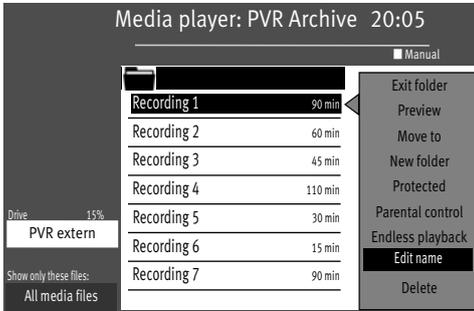
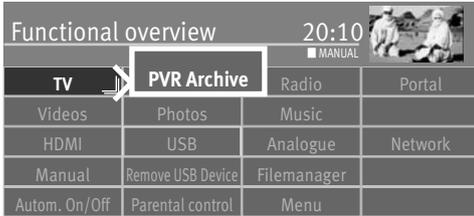
29.7.1 Activating endless playback:

- Press button to open the "Functional overview".
- Select "PVR Archive" with the cursor and press the **OK** button.
- To loop playback, select the desired recording with the cursor.
- Use the cursor to select "Endless playback" and press the **OK** button.

The setting "Endless playback" will remain active even if you start watching other TV programmes in the archive.

29.7.2 Deactivating endless playback:

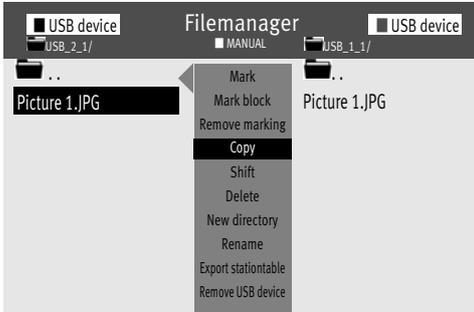
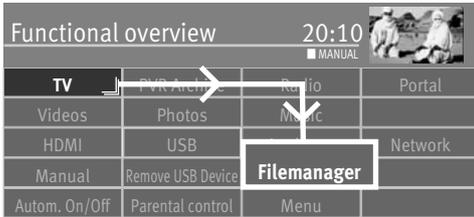
- Press button to open the "Functional overview".
- Select "PVR Archive" with the cursor and press the **OK** button.
- To loop playback, select the desired recording with the cursor.
- Use the cursor to select "Endless playback" and press the **OK** button.



29.8 Change file name

If you do not like the name of a TV program you recorded, you can change the name.

- Press  button to open the "Functional overview".
 - Select "PVR Archive" with the cursor and press the  button.
 - Select the recording using the cursor key whose name is to be changed.
 - Use the cursor to select "Edit name" and press the  button.
- On the keyboard that appears, delete the name and enter a new one.



30 The “File Manager”

With the “File Manager”, data on a USB data storage medium and the built-in hard-disk can be managed and processed, similar to a file manager on a PC.

Plug the memory stick (removable storage medium) into the USB port while the TV is switched on and running.

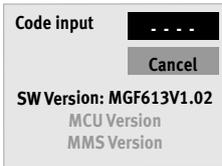
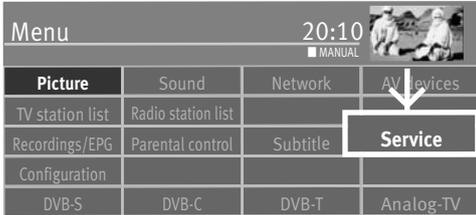
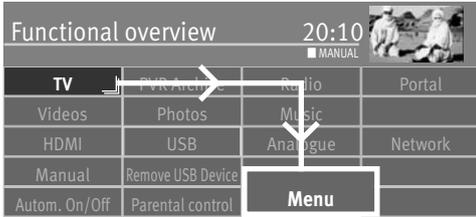
Call “File Manager”

- Press button to open the "Functional overview".
- Select "Filemanager" with the cursor and press the button.

- Select the source medium with the cursor and press the button.
- Select the target medium with the cursor and press the button.
- Select the file to be copied with the cursor.
- Change to the grey middle selection column using the cursor; select, for instance, "Copy"; and press the button.

The copying process begins.

The copying process can also run in stand-by mode. This means that the image is turned off and the unit will shut itself down once the copying process has finished.



31 Software update

This requires that the TV set be connected to the Internet.

Updates to the firmware will be provided at irregular intervals on the Metz homepage.

First of all, you should check the firmware version of your TV set.

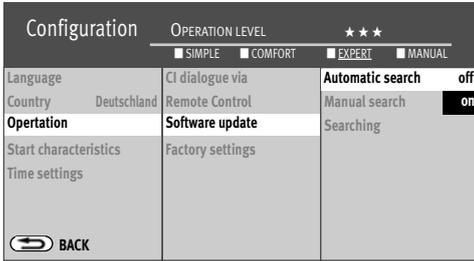
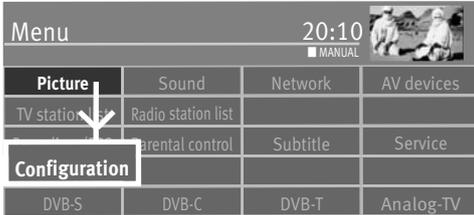
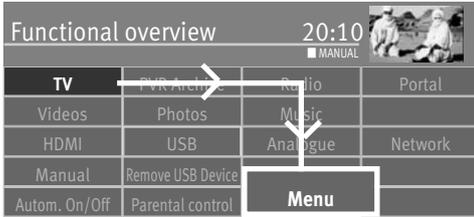
- Press button to open the "Functional overview".
- Select "Menu" with the cursor and press the button.
- Select "Service" with the cursor and press the button.

The "Code input" window appears:

Write down the software version.

- Start your PC and go to the homepage www.metz.de to the Television category. The menu item Software Download appears in the grey bar on the right edge.
- Click "Query". The device overview is opened.
- Select your TV set based on the device family or alternatively device code and press the button. The "Downloads" window is opened. Use the version and date to check whether a more up-to-date version of the firmware is offered.

If the firmware on the homepage is newer, click Download and accept the terms and conditions of use. Download the new software onto your PC, unzip the ZIP file and copy the unzipped file, which ends with ".pUSB" to a USB stick. The USB stick must be formatted with FAT32. When you select the "Software Update" function, the connection is established automatically.



To conduct a software update:

- Press button to open the "Functional overview".
- Select "Menu" with the cursor and press the button.
- Select "Configuration" with the cursor and press the button.

- Select "Configuration" with the cursor and press the button.
- Select "Operation" with the cursor in the context menu and press the button.
- Select "Software-Update" with the cursor in the context menu and press the button.
- Press the button and select "Automatic search" or ".
- Press the button and select "off" or "on".
- Press the button to confirm your selection.
- Press the button to exit the menu.

OR

- Press the button and select "Manual search".
Search will be started immediately.

Alternatively, it is possible to install software version updates by connecting a USB stick to the TV unit. The required firmware can be found at www.metz.de in the TV menu.

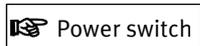
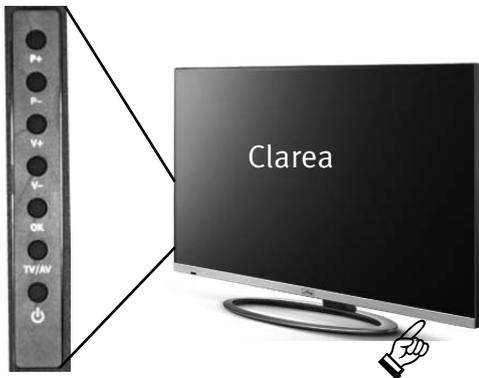
32 Operation without remote control

(only possible with Clarea and Pureo)

This mode is only intended for emergency operation if the batteries of your remote control are empty or the remote control is unavailable.

Switching on

Press power switch on TV set . After about 20 seconds the TV set is switched on at program position 1 or at the programmed initial program position (Chap. 2.1).



Solea: power switch-back right.

You can also activate the following functions on the device without remote control:

Volume :

Press the "V-" or "V+" button to change the volume.
Press "OK" to save the changed volume.

Program selection:

Press "P-" or "P+" to change the programme.

Switching from TV to AV or radio programme:

Press the "TV/AV" button to switch between operating modes.



33 Inserting / removing a CA module

The TV set has a port for a CA module (card-reader for SmartCards or encryption cards).

Insert CA module as shown in the pictures in one of the slots as far as possib.

The LCD TV set is now ready to decode the encoded channels.



34 Glossary

ARC (audio return channel)

An audio return channel has been implemented in the HDMI 1.4 version to reduce the cabling effort between various HDMI components.

The audio return channel is always useful if a TV set integrated in a home cinema system has a built-in digital tuner, DVD or Blu-ray player or another source of digital-/sound material.

The ARC function can establish an “audio return channel” via the HDMI cable to the AV device. In other words, the same cable that is normally responsible for transporting data from the AV device to the TV set in this case transfers audio data in the opposite direction. The audio return channel makes the audio cable (Toslink) previously required in addition to the HDMI cable superfluous.

The audio return channel supports all formats, which can also be transmitted via conventional TV SPDIF connection - among others, these are Dolby Digital, DTS and PCM audio. However, formats that cannot be transmitted via S/PDIF, e.g. all HD audio formats, are not supported by the audio return channel.

Motion compensation

“Motion compensation, film” improves the picture display for black and white or cinema films. Motion becomes smoother and a more three-dimensional picture appearance results.

Vertical picture position

In the case of some wide screen films subtitles are broadcast in the lower black strip. To ensure these subtitles remain visible when enlarged, you can move the picture upwards.

Picture profile

Standard: Compromise for all applications.

Sports: Setting for sports channels or sports programs.

Brilliant: Setting for animated films, DVD players and Blue Ray players.

Games: Preferred setting for recordings from game consoles.

PC Monitor: Preferred setting for recordings from a connected PC.

User: Your self-configured picture profile.

Code

The settings for parental control are secured with a four-digit numerical code, which you can set. Make a note of the code number entered. If you have forgotten the code number, consult your specialist dealer.

DHCP

The **D**ynamic **H**ost **C**onfiguration **P**rotocol permits assignment of the network configuration to clients by a server.

A client is a computer program that establishes contact with another computer program on a server, in order to make use of its services.

DHCP enables computers to be connected automatically to an existing network, without the need for any manual configuration.

The client must simply be configured to retrieve an IP address automatically. When a computer connected to the network is started, it can automatically retrieve an IP address, the subnet mask, the default gateway and also DNS server and, if in use, WINS server details from a DHCP server.

Dyn. contrast

The "Dynamic contrast" setting facilitates an automatic increase in picture contrast in the event of a low level of picture contrast.

Fine search

During the channel 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.

Gateway

A gateway is a network transition used in telecommunications, for example in next Generation networks and in IP telephony.

These gateways convert digital voice, audio or image information from one network format to another. Transcoding of data may also occur in this connection.

Brightness

Die Helligkeit (Angabe in %) ist der Grundwert, der entsprechend den Lichtverhältnissen im Raum, in dem das TV-Gerät steht, eingestellt wird. Die Grundeinstellung sollte in einem dunklen Raum so durchgeführt werden, dass schwarze Bildinhalte noch schwarz sind.

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 not permanent and disappears again after a short time.

IP-Adress

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 not permanent and disappears again after a short time.

Volume correction

Broadcasting channels broadcast at different volumes. These volume differences can be automatically adjusted between channels.

Panorama

"Normal" programs in 4:3 format can be adjusted to the 16:9 format of the picture screen with the panorama function. The picture width is widened here to fill the screen.

Noise reduction

Setting option to improve picture quality of optically noisy "snow pictures" in the event of unfavourable reception conditions. Depending on the degree of disturbance, different correction options are provided, which can be set individually for each program position.

Subnet

The term subnet is used to define an individual portion (sub-network) of an Internet Protocol (IP) network.

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.

Station search

- 1 Freely receivable channels,
all non-encrypted channels are sought.
- 2 All channels,
all non-encrypted and encrypted channels are sought.
If a CA module and smart card are inserted, the corresponding encrypted channels are released.

Automatic zoom

The active automatic zoom permits showing programs in wide screen format (e.g. programs in 16:9 format) as far as possible in a format filling manner on the screen.

If this function remains switched off, these film formats are not automatically adjusted.

35 Upgrade Kits

for Clarea TV sets

- **PVR hard disk 095NW1510 (500 GB)**

for the digital recording and playback of DVB channels (including HDTV). Also offers the option of postponing the TV schedule (timeshift mode).

- **PVR hard disk 095NW1631 (1 TB)**

for the digital recording and playback of DVB channels (including HDTV). Also offers the option of time shift TV (timeshift mode) including remote control RM19.

- **Bluetooth 050NW1109**

for wireless playback with wireless headphones or music playback from a smartphone to the Metz TV set.

for Pureo/Merio TV sets

- **USB WiFi Adapter 051NW1008**

for connecting to a wireless network. This Metz add-on unit can be connected simply using one of the two USB ports.

for Solea TV sets

- **Bluetooth 050NW1109**

for wireless playback with wireless headphones or music playback from a smartphone to the Metz TV set.

For more information and to further upgrade kits, please contact your dealer or visit us on the website at www.metz.de.

36 Problem, Possible causes, Remedy

Problem	Possible cause	Remedy
TV set does not respond to remote control	<ul style="list-style-type: none"> • No direct line of sight contact between remote control and TV set. • Direct sunlight shining on infrared window of TV set. • Remote control batteries flat. • TV set switched off with the power switch. • Processor fault 	<ul style="list-style-type: none"> • Establish sight contact. • Avoid sunlight exposure. • Replace batteries. • Switch on the TV set with the power switch. • Switch the TV set on and off with the power switch
After switching on, the message “Code entry” appears on the screen.	<ul style="list-style-type: none"> • Perental control was programmed and all programs have been blocked. 	<ul style="list-style-type: none"> • Enter the code number with which you programmed parental control.
The TV set was switched off using the  button, but the yellow or blue-red light diode is still on.	<ul style="list-style-type: none"> • EPG data of the electronic program guide are being collected. • A recording is running 	<ul style="list-style-type: none"> • None; once the data has been collected in full the TV set will switch off automatically.
No sound is output on the TV speakers	<ul style="list-style-type: none"> • In the "Sound" menu under "Sound Settings, general", "Speaker off" is selected. 	<ul style="list-style-type: none"> • In the "Sound" menu under "Sound Settings, general", "Speaker on" is selected.
No EPG data available or only certain data	<ul style="list-style-type: none"> • The TV set was unable to collect any data, because it was switched off with the power switch on the TV set. 	<ul style="list-style-type: none"> • Switch TV set to stand-by mode only with the key  of the remote control. (see Chapter 25.2 Collect EPG data)

Problem	Possible cause	Remedy
<p>No channel reception. Channel or frequency change by the broadcasters.</p>	<ul style="list-style-type: none"> • The reception data of a channel have been changed by the channel provider. 	<ul style="list-style-type: none"> • Find out more e.g. at “www.lyngsat.de” for DVB-S “www.ueberall-tv.de” for DVB-T e.g. “www.kabeldeutschland.de” for DVB-C on the changed data of the channel. <p>Carry out a manual channel search with the new reception data of the channel, on this see Ch.9.3.2, 9.4.1 and 9.6.1. The channels found will be added to the end of the channel table</p> <ul style="list-style-type: none"> • Automatic channel search searches the entire reception area and adds all (in the case of DVB-S several hundred) channels found to the end of the channel table.
<p>One channel displays picture faults (stripes or formation of tiny blocks)</p>	<ul style="list-style-type: none"> • The signal quality is poor. 	<ul style="list-style-type: none"> • Reception, especially for DVB-S, is disrupted by a bad weather front at the reception location or at the broadcasting station. This can also occur with the DVB-C which is supplied via DVB-S to the cable network.

37 Technical data

Mains voltage:230 -240 V~ 50 Hz

Antenna input:75 Ohm

Channel coverage: . .DVB-T, DVB-C, analogue 48-862MHz
DVB-S/S2 950-2150MHz

Operating temperature range: +5°C bis +35°C bei 75 % air humidity

Energy consumption values see separate data sheet

In- and output signals supported

HDMI IN

PC	640x480p	60 Hz
	800x600p	60 Hz
	1024x768p	60 Hz
	1280x800p	60 Hz
	1280x1024p	60 Hz
	1360x768p	60 Hz
	1440x900p	60 Hz
SDTV	1680x1050p	60 Hz
	720(1440)x480i	60 Hz
	720x480p	60 Hz
	720(1440)x576i	50 Hz
HDTV	720x576p	50 Hz
	1280x720p	60 Hz
	1920x1080i	60 Hz
	1280x720p	50 Hz
	1920x1080i	50 Hz
	1920x1080p	24 Hz
	1920x1080p	25 Hz
	1920x1080p	30 Hz
	1920x1080p	50 Hz
	1920x1080p	50 Hz
	1920x1080p	60 Hz

HDMI IN 3D

HDTV	1920x1080p	60 Hz	Side-by-Side (half)
	1920x1080p	60 Hz	Top-and-Bottom
	1920x1080p	50 Hz	Side-by-Side (half)
	1920x1080p	50 Hz	Top-and-Bottom
	1920x1080p	24 Hz	Framepacking
	1920x1080p	24 Hz	Side-by-Side (half)
	1920x1080p	24 Hz	Top-and-Bottom
	1920x1080p	30 Hz	Framepacking
	1920x1080p	30 Hz	Side-by-Side (half)
	1920x1080p	30 Hz	Top-and-Bottom
	1920x1080p	25 Hz	Framepacking
	1920x1080p	25 Hz	Side-by-Side (half)
	1920x1080p	25 Hz	Top-and-Bottom
	1920x1080i	60 Hz	Side-by-Side (half)
	1920x1080i	50 Hz	Side-by-Side (half)
	PC	1280x720p	60 Hz
1280x720p		60 Hz	Side-by-Side (half)
1280x720p		60 Hz	Top-and-Bottom
1280x720p		50 Hz	Framepacking
1280x720p		50 Hz	Side-by-Side (half)
1280x720p		50 Hz	Top-and-Bottom

HDMI IN 3D

PC	640x480p	60 Hz
	800x600p	60 Hz
	1024x768p	60 Hz
	1280x800p	60 Hz
	1280x1024p	60 Hz
	1360x768p	60 Hz
	1440x900p	60 Hz
	1680x1050p	60 Hz

HDTV

1920x1080p 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 (CVBS) IN: PAL 576i 50Hz, NTSC 480i 60Hz, SECAM 576i 50Hz, PAL 60

Audio IN: Analog Stereo (Line-IN)

Audio OUT: Analog Stereo (Line-OUT)

DIGITAL AUDIO OUT SPDIF (Linear PCM Stereo or Dolby Digital, depending on source)**AUDIO OUT** Analogue Stereo (Line-OUT)**Front AV**

FBAS (CVBS) IN: PAL 576i 50Hz, NTSC 480i 60Hz, SECAM 576i 50Hz, PAL 60

Audio IN: Analogue Stereo (Line-IN)

Headphone OUT: Headphone impedance ≥ 32 Ohm**Errors excepted. Subject to changes !**

38 Cleaning the device

 **Switch off the device with the power switch before cleaning !** **Improper handling and cleaning can cause irreparable damage to the screen. Consequently, pay attention to the rules on handling and caring for the device.**

- Handle the screen surface very carefully and gently.
- Avoid any mechanical stress to the screen surface by knocking, shocks, pressure, scratching, scraping, etc, since this can lead to damage.
- Avoid contact with pointed, sharp or hard objects.
- The screen surface must be preserved against dirt.

Care and cleaning:

Switch off and unplug the device before cleaning.

Take care that water or other liquids never gets into the device, since these can cause damage to the device.

 Unplug the set immediately if foreign bodies like water, other liquids, metal parts, etc get into the screen. Never attempt to touch the inside of the set with any objects or with your hands. Danger of electric shock or accident.

- Cleaning of the screen surface must occur with a soft, dry cleaning cloth (e.g. microfibre cloth).
- If significant soiling nevertheless occurs, the screen surface can be cleaned with a slightly moist, soft cloth.
A special TFT cleaning solution (commercially available at specialised dealers) is the perfect cleaning solution.

 Never use cleaning solution on the screen surface!
If any cleaning solution penetrates beneath the screen's lower frame, it will result in irreparable damage to the components.

Battery Disposal

Do not dispose of batteries with domestic rubbish! Please return spent batteries to collecting points should they exist in your country.

Please only return fully discharged batteries. Normally, batteries are fully discharged if the device they power

- switches itself off and indicates “batteries spent”
- they no longer function flawlessly after prolonged use.

To prevent short circuits, please cover the battery poles with adhesive tape strips.

These symbols can be found on batteries containing harmful substances:



Pb = the battery contains lead

Cd = the battery contains cadmium

Hg = the battery contains mercury

Li = the battery contains lithium



Your Metz product was developed and manufactured with high-quality materials and components which can be recycled and/or re-used.



This symbol indicates that electrical and electronic equipment must be disposed of separately from normal garbage at the end of its operational lifetime.

Please dispose of this product by bringing it to your local collection point or recycling centre for such equipment.

This will help to protect the environment in which we all live.

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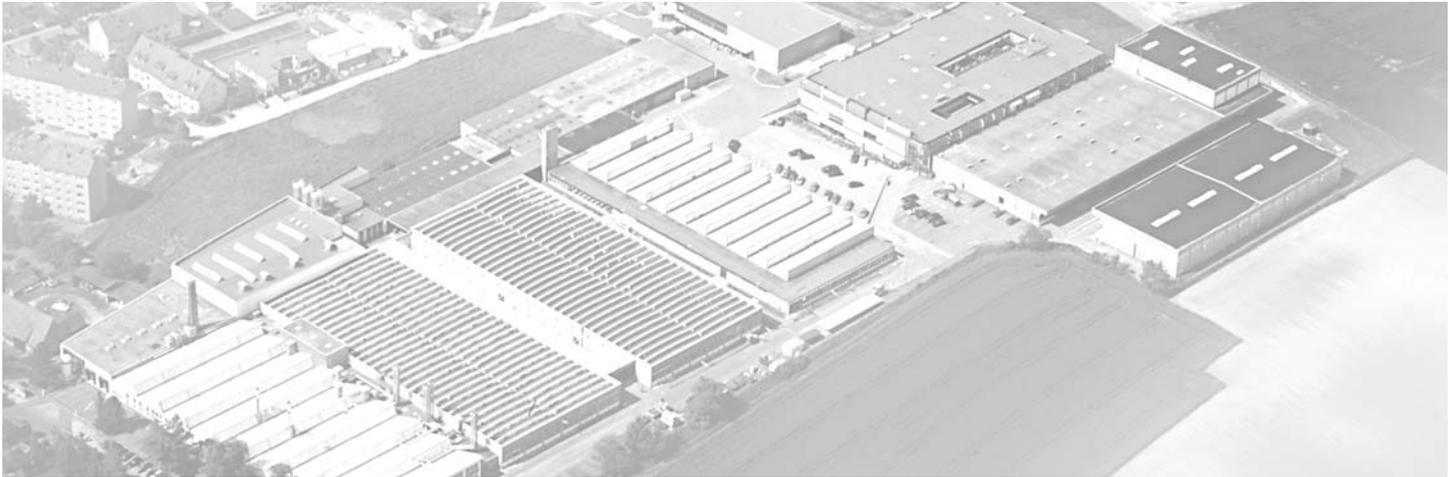
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V1.05

614 47 2019.A1