

Operating manual  
- englisch -

# UFS 910 HDTV receiver for satellite reception



---

**KATHREIN**  
Antennen • Electronic

# PREFACE

Dear customer,

this Operating Manual is intended to help you make the fullest use of the extensive range of functions offered by your new HDTV satellite receiver.

We have tried to make the operating instructions as easy as possible to understand, and to keep them as concise as possible. To help you understand particular specialist terms that cannot be translated, we have added a short glossary at the end of the manual.

The power switch is an environmentally friendly feature. If you will not be using your receiver for a longer period, you should use the power switch to disconnect it from the power supply and save energy. For shorter breaks, you can use the remote control to switch the receiver to standby, which uses only a minimal amount of energy.

We wish you good reception and much pleasure using your new DVB HDTV satellite receiver.

Your  
KATHREIN team

## IMPORTANT INFORMATION

The channels available on the satellites and transponders are subject to continual change. In such cases, it is necessary to reset the channels as the factory preset programming corresponds to the situation on the date of manufacture. The information for these settings can be found on the Internet or in relevant magazines.

Your receiver is factory fitted with the latest software version. We are, however, constantly working on adapting the software to the wishes of our customers and to developments in technology. The "Software and Channel List Update" section contains additional information.

**Please keep the original packaging in case you need to return the product at any time!**

**Any modifications to the receiver software will invalidate the warranty!**

**You will have to bear the costs yourself for dispatching and repairing any receiver that requires attention due to modifications to the software other than those provided by Kathrein!**

**Therefore exclusively use software provided by Kathrein for your receiver. This is available by downloading from the satellite or from our Internet pages ([www.kathrein.de](http://www.kathrein.de)).**

**Make a note of the receiver's basic settings, so as to be able to restore them if necessary!**

**Included in the software for this receiver is software that is licensed under the GNU (General Public Licence). The source code of the program is obtainable under: <http://www.kathrein.de/linux/receiver/ufs910>**

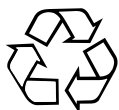
DiSEqC™ is a trademark of Eutelsat.

## DISPOSAL INSTRUCTIONS



Electronic equipment is not domestic waste - in accordance with directive 2002/96/EC OF THE EUROPEAN PARLIAMENT AND THE COUNCIL dated 27<sup>th</sup> January 2003 on used electrical and electronic appliances, it must be disposed of properly.

At the end of its service life, take this unit for disposal to an appropriate official collection point.



**Used batteries are special waste!**

Do not throw spent batteries into your domestic waste; take them to a collection point for old batteries!

# CONTENTS

<b>PREFACE .....</b>	<b>2</b>
<b>IMPORTANT INFORMATION .....</b>	<b>3</b>
<b>CONTENTS.....</b>	<b>4</b>
<b>SAFETY INSTRUCTIONS - IMPORTANT NOTES.....</b>	<b>6</b>
<b>RECEIVER FEATURES/SCOPE OF SUPPLY .....</b>	<b>7</b>
<b>CONTROLS, DISPLAYS AND CONNECTIONS .....</b>	<b>8</b>
VIEW OF FRONT PANEL (FLAP FOLDED DOWN) .....	8
VIEW OF REAR PANEL.....	8
<b>CONNECTION AND SET-UP .....</b>	<b>9</b>
<b>REMOTE CONTROL.....</b>	<b>11</b>
<b>FIRST INSTALLATION .....</b>	<b>12</b>
<b>OPERATING INSTRUCTIONS .....</b>	<b>20</b>
MENU CONCEPT .....	20
MENU TREE .....	21
ALPHANUMERIC INPUTS.....	22
LANGUAGE SELECTION - OSD .....	22
SYMBOL CODES FOR THE RECEIVER DISPLAY .....	22
<b>ON-SCREEN DISPLAYS (OSD) .....</b>	<b>23</b>
CHANNEL MESSAGES.....	23
CHANNEL INFORMATION.....	23
OPTION SELECTION.....	23
ERROR SIGNALLING .....	24
CHANNEL LIST - TV/RADIO .....	24
<b>EPG - ELECTRONIC PROGRAMME GUIDE.....</b>	<b>26</b>
CALL UP EPG .....	26
"CURRENT" VIEW .....	27
"COMING UP" VIEW (PROGRAMME LISTINGS) .....	28
CATEGORIES VIEW .....	29
SCAN FUNCTION.....	30
ADDITIONAL INFORMATION (i-BUTTON).....	31
RECORDING (TIMER).....	32
RECORD ONCE.....	33
RECORD DAILY .....	33
RECORD WEEKLY .....	34
RECORD USER-DEFINED.....	34
SERIES RECORDING .....	35
VIEW RECORDING SCHEDULE .....	36
<b>COMMON INTERFACE .....</b>	<b>37</b>
IMPORTANT INFORMATION .....	37
INSERTING THE SMARTCARD AND THE CA MODULE .....	37
<b>VIDEOTEXT (TELETEXT).....</b>	<b>39</b>
<b>EDIT CHANNEL LIST.....</b>	<b>40</b>
SELECTION OF THE LIST/CHANNELS TO BE EDITED .....	40
EDITING LISTS/CHANNELS.....	41
"LAST FUNCTION" MEMORY .....	42

# CONTENTS

MOVE CHANNELS .....	42
DELETE CHANNELS.....	42
SKIP CHANNELS .....	42
BLOCK CHANNELS .....	43
COPY CHANNELS TO THE FAVOURITES LIST .....	43
START BLOCK HIGHLIGHTING (HIGHLIGHTING SEVERAL CHANNELS) .....	43
EDIT FAVOURITES LISTS .....	44
REMOVE FROM THE FAVOURITES LIST .....	44
BLOCK CHANNELS .....	45
RENAME FAVOURITE LIST .....	45
START BLOCK HIGHLIGHTING (HIGHLIGHTING SEVERAL CHANNELS) .....	45
<b>CHANNEL SEARCH (CHANNEL SCAN) .....</b>	<b>46</b>
AUTOMATIC (CHANNEL) SCAN .....	46
MANUAL (CHANNEL) SCAN.....	48
CHANNEL SCAN WITH SERVICE ID.....	50
<b>PARENTAL CONTROL.....</b>	<b>52</b>
BLOCKING THE MAIN MENU .....	52
BLOCKING THE RECEIVER .....	52
SETTING A NEW CODE (PIN).....	53
<b>SETTINGS .....</b>	<b>54</b>
TV SETTINGS .....	55
CONFIGURING THE ON-SCREEN MENU .....	56
DATE AND TIME .....	58
COMMON INTERFACE .....	58
ANTENNA CONFIGURATION .....	58
<b>SERVICE MENU .....</b>	<b>59</b>
UPDATE SOFTWARE .....	59
FACTORY DEFAULT .....	61
<b>CONNECTING UP THE VIDEO/PVR .....</b>	<b>62</b>
RECORDING.....	62
PLAYBACK.....	62
<b>USING THE FRONT PANEL .....</b>	<b>63</b>
<b>TECHNICAL APPENDIX.....</b>	<b>64</b>
FEATURES .....	64
SCART SOCKET ASSIGNMENT .....	66
VHS/S-VHS SWITCHING.....	66
CONNECTION EXAMPLE.....	67
<b>SHORT TECHNICAL GUIDE .....</b>	<b>68</b>
<b>TROUBLESHOOTING.....</b>	<b>72</b>
<b>FOR YOUR NOTES .....</b>	<b>73</b>
<b>SERVICE .....</b>	<b>76</b>

# SAFETY INSTRUCTIONS - IMPORTANT NOTES

*This page contains important information about the operation, installation location and connection of the unit.*

*Read these instructions carefully before starting to use the unit.*



## Mains cable

Make sure that the mains cable (power supply cable) is not damaged. Units with a damaged mains cable must be disconnected from the mains (disconnect mains connector) and repaired by a qualified engineer before setup. Only use the power pack supplied (if available).

*Risk of death due to electric shock.*

## Cleaning

Disconnect the mains connector before cleaning the unit. Only use a dry cloth for cleaning and only clean the outer surface. Never open the unit.

*Touching the parts inside the unit carries a risk of death due to electric shock.*

## Playing children

Make sure that children do not push any objects into the ventilation slots.

*Risk of death due to electric shock.*



## Earth connection

The antenna system must be earthed as specified or equipotentially bonded. EN 60728/11 and any national regulations must be complied with.

*Danger due to surge voltages, lightning strikes.*

## Mains voltage

Only operate the unit with the specified mains voltage (marked on the rear of the unit or on the external power pack). The unit may only be connected to the mains and turned on once it has been connected to the antenna and to the TV set or the cable network and PC.

*If the mains voltage is too high, there is a risk of fire.*

## Repairs

Ensure that any repairs to your unit are carried out by qualified personnel. Opening the unit and attempting to repair it yourself voids all warranty claims.

Improper work on the unit can jeopardise the electrical safety of the unit.

*The manufacturer accepts no liability for accidents caused by the user opening the unit.*



## Connections

Incorrect wiring of the connections can lead to malfunctions or defects on the unit.

## Long periods of absence / storms

Always turn off the unit at the mains switch if you will be absent for a long time or there is a storm. If your unit does not have a mains switch, you can disconnect it from the mains by unplugging the mains connector. This also applies to the other equipment connected to the unit. Isolation from the cable network is also recommended. Note any timer programs (receiver) and turn the unit on again promptly before the recording time.



## Installation location

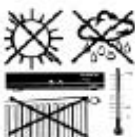
All electronic equipment generates heat. However, the heating of this unit lies within the permissible range. Sensitive furniture surfaces and veneers may become discoloured by the effects of constant heat over time. The feet of the unit can also cause colour changes to treated furniture surfaces. If necessary, place the unit on a suitable stable and flat base.



## Ventilation

The heat generated in this unit is adequately dissipated. However, the unit should never be installed in a cupboard or on shelves with inadequate ventilation. Never cover the cooling slots on the unit (e.g. with other equipment, magazines, tablecloths or curtains).

Do not place any objects on top of the unit and maintain a clearance of at least 10 cm above the unit, so that the heat generated can be dissipated with no obstructions.



## Moisture, sunlight, heat

Protect the unit against moisture, dripping and splashed water (do not place any filled objects such as vases on top of the unit). Do not place the unit close to a heater or expose it to direct sunlight and do not operate it in damp locations. Only use the unit in a moderate climate, not in tropical conditions.

## RECEIVER FEATURES/SCOPE OF SUPPLY

The new UFS 910 HDTV receiver allows reception of digital satellite TV and radio programmes. The receiver allows reception of both high resolution and also conventional TV.

The integral Common Interface offers capacity for two CA modules for pay-TV programmes and ensures future-proof operation.

The HDMI interface allows the receiver to be connected to a HDTV-capable TV set. In addition a YPbPr connection, a video composite connection and two Scart connections are provided.

Two Cinch sockets for stereo audio systems, an optical audio output for the Dolby Digital data stream are provided on the rear of the receiver. Three USB ports are provided, to allow for instance software updates from a USB stick.

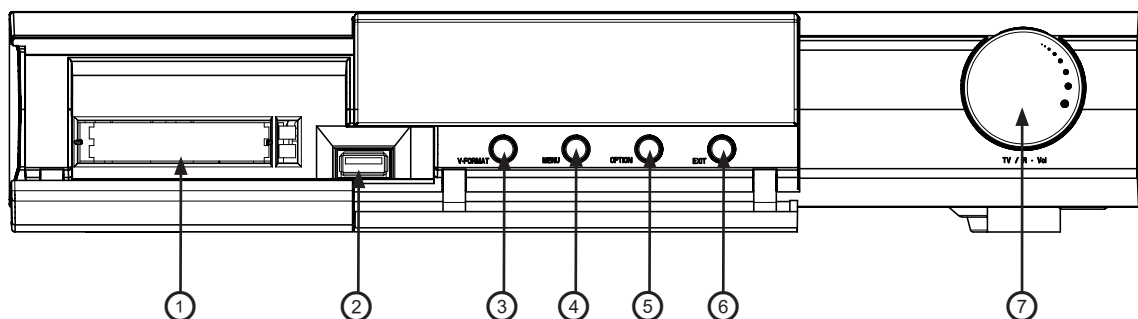
## PRODUCT PACKAGE

- Receiver UFS 910 (silver or black)
- Infra-red remote control
- Batteries
- Operating manual
- Safety instructions
- Scart cable
- Mains power cable

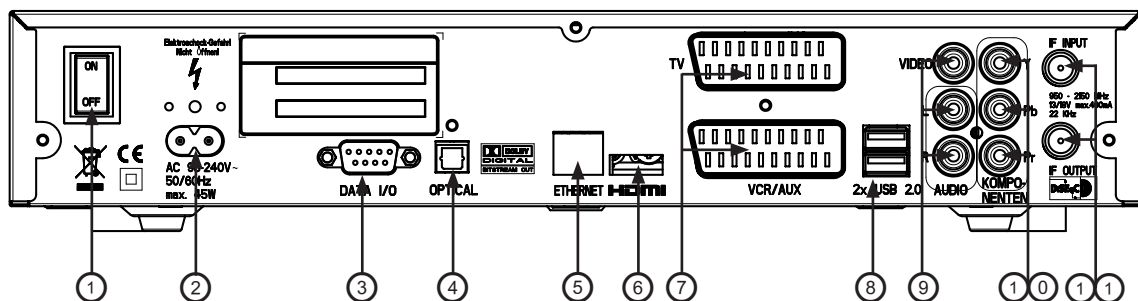
# CONTROLS, DISPLAYS AND CONNECTIONS

This section provides a brief description of all the controls, displays and connections. The button symbols presented here can also be found in the description of the operating steps.

## VIEW OF FRONT PANEL (FLAP FOLDED DOWN)



## VIEW OF REAR PANEL



### Front panel controls and displays

1. Common Interface for two CA modules for Pay-TV cards \*)
2. USB 2.0 port
3. V-format button for picture format selection (576p/720p/1080i)
4. Menu button to call up or exit menus or sub-menus
5. Options button to call up the manual sound selection menu
6. Exit button for quitting the menu
7. Multifunction control

### Rear panel controls and displays

1. On/Off switch (with mains disconnect)
2. Mains power cable
3. RS 232 port (for Service only)
4. Optical data stream output (SPDIF/ Sony Philips Digital Interface Format) for Dolby Digital AC 3 audio
5. Ethernet port
6. HDMI socket for connection to a TV set
7. 2 x Scart sockets (TV connection above, VCR-/AUX connection below)
8. 2 x USB 2.0 ports (USB-A connectors)
9. 3 x Cinch connections (composite colour video output above, L/R audio outputs below)
10. 3 x Cinch connections for component outputs (Y/Pb/Pr)
11. 2 x SAT-IF connections (input above, loop-through output below)

\*) CA modules and Pay TV cards are not included



## CONNECTION AND SET-UP

The following section is intended specifically for specialist dealers. You only need to pay attention to this section if you are carrying out the installation yourself.

The “Connection Examples” section provides a sample configuration.

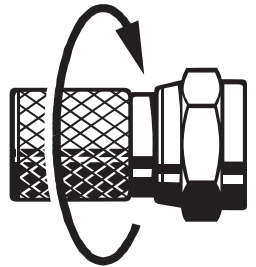
Do not connect the unit to the power supply until all installation work has been properly carried out. Refer to the information in the “Safety Instructions” section.

### CONNECTING THE UNIT (SAT-IF CONNECTIONS)



**Connect the Sat IF input on the receiver to the satellite reception system. Use a coaxial cable with a standard F connector.**

If the F standard connectors are not yet fitted on the cable, strip the insulation from the cable as shown in the following illustration and carefully twist the F standard connectors on to the ends of the cables until they are securely seated.



**When fitting the connector, make sure that no wires from the braid are touching the inner conductor, so no short circuit can occur.**

**The quality of the reception signal depends on this connection!**

### RECEPTION REQUIREMENTS



**Make sure that your own satellite antenna system is equipped at least with a universal LNB for digital reception in the high-band range.**

### RECEPTION SYSTEM PRESETS

The presets for the control signals have been made for standard reception systems, i.e. 14/18 V for polarity reversal and 22 kHz switching signal for low/high band changeover on multi-feed reception systems.

## CONNECTION AND SET-UP

### TV AND VIDEO RECORDER CONNECTION

Connect the satellite receiver (TV Scart socket) to the TV set using a Scart cable (see "Connection Example"). If your TV has a stereo feature, you can receive the sound in stereo via the Scart connection. Use a further Scart cable to connect the satellite receiver (VCR/Scart socket) to the video recorder/PVR. For system reasons, the same video signals are to be found at the TV Scart socket as at the video cinch output.



**If you are recording using an external video recorder, remember not to operate the receiver during recording, otherwise all the on-screen displays will appear on your recording.**

### AUDIO CONNECTION

If you want to play the sound on your hi-fi system, connect the audio cinch sockets to the input sockets on the hi-fi system, using an appropriate cable (see "Connection Example").

### OPTICAL/ELECTRICAL DIGITAL OUTPUT

The fibre-optic output and the electrical digital output are intended for the connection of a Dolby Digital system (see "Connection Example").

### INSERTING BATTERIES INTO THE REMOTE CONTROL


Remove the cover on the rear of the remote control.

Insert the two supplied batteries into the remote control. Ensure correct polarity of the batteries; the + and - markings are indicated inside the battery compartment.

Slide the cover back into the housing until it locks in place.


## REMOTE CONTROL

 Sound on/off

 Switch on/input digits for channels, timer etc.


 Call up the main menu, exit the menu and return to the TV picture

 Call up favourites selection

 "Current programmes" view in EPG switch over to V-format


 Volume

 Exit menu step by step

 Changing channel in the programme guide (EPG)

 Transparent videotext

 Currently not used

 (red) Recording in EPG, editing in channel list



 Stand-by

 Videotext (Teletext)


 (yellow) Call up channel options sound/subtitles selection

 (blue) Switch between TV/radio

 Call up channel messages channel information


 AV mode


 Channel selection up/down

 Input confirmation call up channel list

 Cursor buttons

 Call up EPG (programme guide)

 Changing channel in the programme guide (EPG)

 Stop recording/playback

The button symbols shown here can also be found in the description of the operating steps.

# FIRST INSTALLATION

Before using your unit for the first time, read the “Safety Instructions” and “Connection and Set-Up” sections.

The “Connection Examples” section provides a sample configuration.

Do not connect the unit to the power supply until all installation work has been properly carried out.

The guidance given in the “First Installation” section assumes that the receiver has been properly connected, as per the “Safety Instructions” and “Connection and Set-Up” sections.





First switch your TV set on and select the AV channel slot. Switch on your receiver at the power switch at the rear of the unit. The following display appears:



Also pay attention to the bars at the bottom of the on-screen display! This provides hints on what to do next.

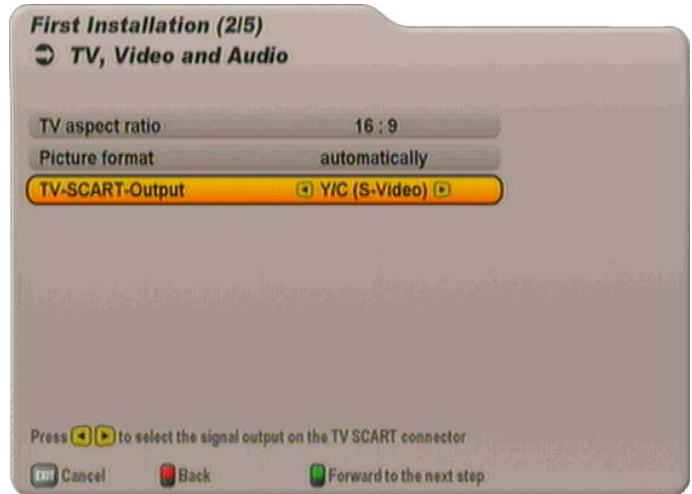
Select the menu language you want using the   buttons. Available options: German, English, French, Italian, Spanish, Czech, Dutch and Turkish.





Press the  (green) button to move to the next menu.

**Note:** *If you are unsure whether you chose the right option from a previous menu, you can go back a step at any time during the first installation process by pressing the  (red) button.*

# FIRST INSTALLATION

The following display appears:



Use the     buttons here to select the settings for your TV set.

**When doing this, refer to the operating instructions for your TV set!**

## TV format

Select the TV's picture format. Either

4:3 or  
16:9

## Screen display


Here you select the type of screen display, depending on the setting of your TV format:

- TV format "4:3": Pan & Scan or Letterbox
- TV format "16:9": Always 16:9 or automatic

## TV Scart signal output

Select the type of video signal at the TV Scart socket here. Select the signal that your TV set can process.

- CVBS – Colour Video Baseband Signal
- RGB – Red/Green/Blue signal (not currently available) or
- Y/C – S-Video signal (luminance/chrominance)

Press the  (green) button to move to the next menu.

# FIRST INSTALLATION

The following display appears:



Select the setting here to match your reception system using the ◀▶ buttons. You have the following options:

- DiSEqC™1.0
- LNB only



When selecting the satellite(s), make sure that your reception position is aligned to the desired satellite(s)!



# FIRST INSTALLATION



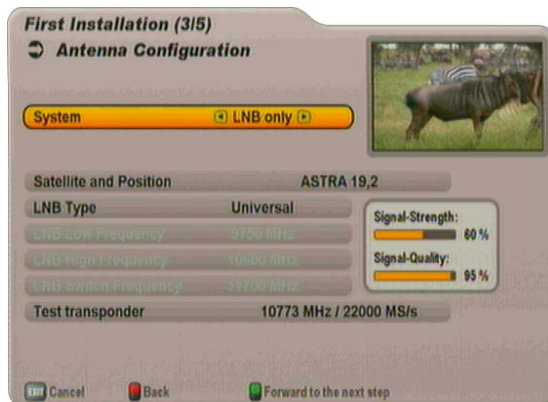
## System

Select the setting here to match your reception system using the buttons. If your reception system is DiSEqC™-capable, at “System” select “DiSEqC™ 1.0” (allows switch-over from receiving one satellite to receiving another one). If your reception system is not DiSEqC™-capable, select the setting “LNB only”.

Press the button to move to the next menu item.

For ease of understanding, the further explanations of the first installation are split into two columns.

The description on the left refers to installation of a non-DiSEqC™-capable system (“LNB only” setting) and on the right to installation of a DiSEqC™-capable system.



## Satellite and position

Use the buttons to select the desired satellite whose signal is to be received by the tuner.

When you have selected your desired satellite, use the buttons to switch to the selection of the “LNB Type”.



## Number of satellites

Press the button to select the satellite to be received.

The following display appears:



# FIRST INSTALLATION



## LNB settings

Here use the buttons to select the LNB type used in your system. The choice is between “Universal” and “User-defined”.

Universal:

No further input required, since all necessary frequency ranges are covered by a universal LNB.

User-defined:

If you choose not to use a universal LNB, you must here set the frequency ranges for which your LNB was configured.

Use the buttons to select the frequency range to be changed (low, high or limit frequency).

Use the buttons or the digital input buttons to set the exact frequency for which your LNB was configured.

## Test transponder

To check whether the settings that you have made are correct, use the buttons to move to the “Test transponder” field.

Use the buttons to select the required transponder from the various ones listed. If your settings are correct, you will see at the top right of the screen the live signal of a channel for the currently selected transponder.

If you are not receiving a signal, check your settings again and if necessary call for expert help.



Use the buttons to select how many satellites (max. 4) you would like to receive with your reception system. The following display appears (example):





Use the buttons to select the first satellite slot. Press to access the menu for the satellite settings. The following display appears (example):







# FIRST INSTALLATION

## Satellites and position

Use the   buttons to set the desired satellite (selection from 17 pre-programmed options).

## LNB settings



Here use the   buttons to select the LNB type used in your system. The choice is between “Universal” and “User-defined”.



Universal:

No further input required, since all necessary frequency ranges are covered by a universal LNB.

User-defined:

If you choose not to use a universal LNB, you must here set the frequency ranges for which your LNB was configured.



Use the   buttons to select the frequency range to be changed (low, high or limit frequency).

Use the   buttons or the digital input buttons to set the exact frequency for which your LNB was configured.

## Test transponder


To check whether the settings that you have made are

correct, use the   buttons to move to the “Test

transponder” field. Use the   buttons to select the required transponder from the various ones listed. If your settings are correct, you will see at the top right of the screen the live signal of a channel for the currently selected transponder.

**If you are not receiving a signal, check your settings again and if necessary call for expert help.**

You have now completed all settings for the first satellite.

Press the  button to return to the “Satellite Selection Menu” and perform the settings in the same way for the remaining satellites.

**The notes on first installation are unified once again from this point!**

When you have finished configuring the satellite press  (green). The receiver then automatically calls up the selection menu for the channel scan. Continue by selecting the item (Execute Channel search).

# FIRST INSTALLATION



## Perform channel scan

Use the [left/right arrow] buttons to select (yes or no) whether you wish to start a channel scan. It is not essential to start a channel scan; instead you can use the factory pre-programmed channels. However the channels do change from time to time (e.g. their frequencies change), which the receiver does not automatically detect, and can then be found only by performing a channel scan.

If you selected “No”, you can press the [PP] (green) button to skip directly to the next item of the first installation.

If you selected “Yes”, you can press the [down arrow] button to progress to the next selection item.

## Channel scan mode

Use the [left/right arrow] buttons to select whether you wish to scan “free & scrambled”, “only free” or “only scrambled” channels.

**To view encrypted channels you need the appropriate CA (Conditional Access) module and a valid smart card together with a valid subscription to a Pay-TV provider.**

Press the [down arrow] button to move to the next selection item.

## Network scan

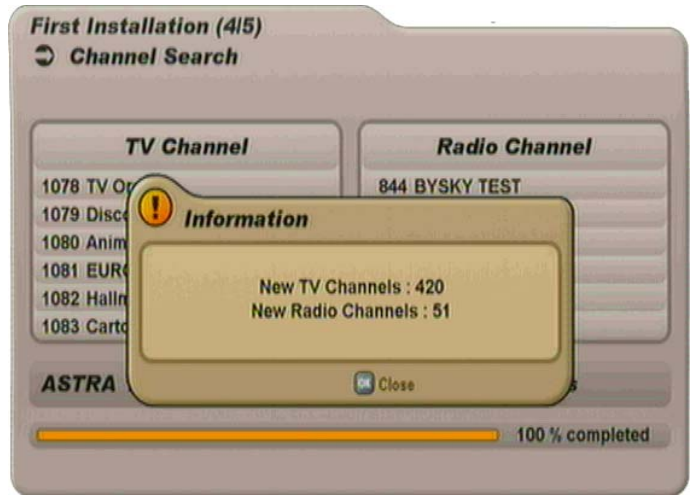
If you set the network search to “Off”, only the factory stored transponders of the satellites you previously selected will be scanned for new and as yet unlisted channels.

If you set the network scan to “On”, the transponder network enables additional transponders that have not yet been stored to be located. They are then stored and scanned for new channels in the same way as the existing transponders.

Press the [PP] (green) button to start the channel scan, or if you set channel scan to “Off” you are guided straight to the next item in the first installation process.

When the scan has been completed, you will see the following message (example):

# FIRST INSTALLATION



Use the **OK** button to move to the next step of the first installation. The following display appears:



## Set Local Time

Use the **◀▶** buttons to set the time zone variation from UTC (formerly GMT) (e.g. for Germany +1 hour).

Use the **▲▼** buttons to switch to the “Automatic clock change” field. Use the **◀▶** buttons to select whether the receiver should automatically change over to and from summer and winter time. If “On” is selected, the receiver automatically sets itself to the right time. If “Off” is selected, the field for manual selection of summer and winter time is displayed below.

Use the **◀▶** buttons to perform the setting.

Press the **PP** (green) button to close first installation and return to the main menu.

# OPERATING INSTRUCTIONS

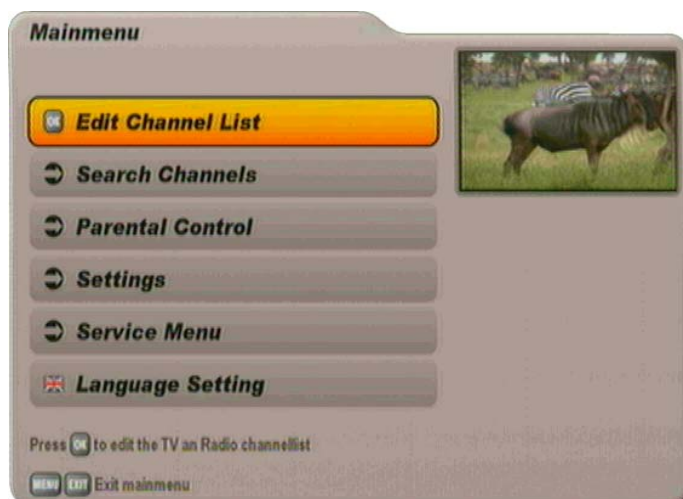
## MENU CONCEPT

The structure of the menu concept is based on logical operating sequences. The programme showing on the current selected channel always appears in the top right-hand corner of the screen.

**You will find detailed descriptions of the selected menu items in the relevant sections of the operating manual!**

**Note:** *The selected menus, sub-menus and positions, as well as the parameters to be set, are each highlighted in colour. The menus are self-explanatory.*

Pay attention to the bar at the bottom of the on-screen display! This provides hints on what to do next.



Press the **MENU** button to access the main menu, and use the **▲▼** buttons to select the sub-menus.

Press the **OK** button to access the sub-menus. Use the **▲▼** buttons to select the sub-menu options.


The settings under the various options are made either by pressing the **◀▶** buttons or using the numeric pad.

You can exit the main menu and sub-menus, and the various options, step-by-step by pressing the **EXIT** button (the settings/changes you made are saved). Press **MENU** to return directly from one of the menus to the TV picture (the settings/changes you made are saved).

# OPERATING INSTRUCTIONS

## MENU TREE

### Mainmenu


Call up the menu by pressing the  button





# OPERATING INSTRUCTIONS

## ALPHANUMERIC INPUTS

Use the displayed keypad (see figure to the right) for entry of favourites names or search terms by selecting numerals for the desired letters/digits. You can write with upper or lower

case letters ( button). Use the numeric pad to select the desired character. About two seconds after selection of the character, the cursor moves automatically to the next position.

The  button allows you to delete your entry character by character.

When you have selected all the characters, press the  button to save your entry and start a scan to find the desired expression.



## LANGUAGE SELECTION - OSD

The language for the on-screen display is set as follows:













 →   → Language selection →  →   → German → 

Available options: German, English, Italian, French, Dutch, Spanish, Czech and Turkish.

After you have performed the settings, press the  or  button to exit the main menu. You will then return to the TV picture.

## SYMBOL CODES FOR THE RECEIVER DISPLAY

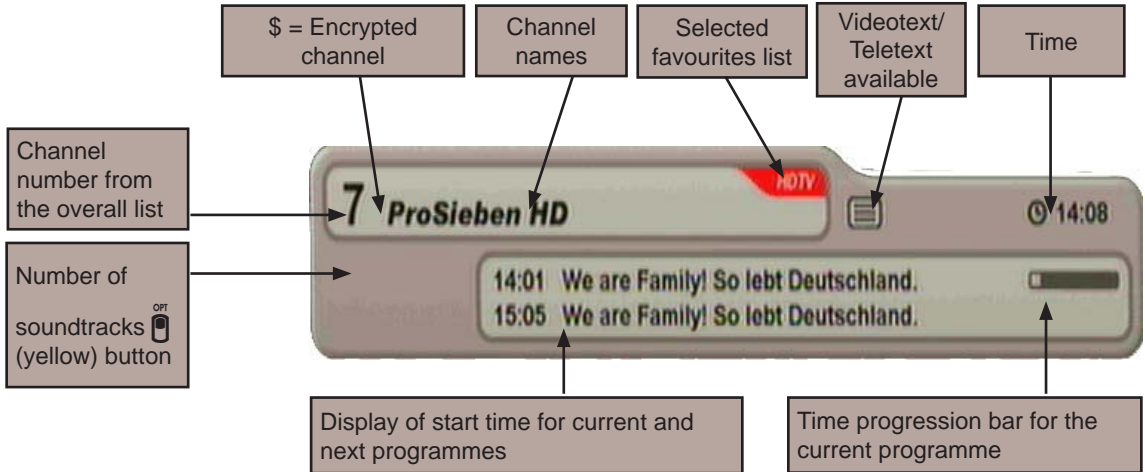
Various symbols are occasionally shown in the receiver display above the normal display (channel name). These are not shown permanently, they are shown only for specific functions, procedures or channel features.

	This symbol indicates that a Dolby Digital soundtrack is available on the currently selected channel (call up by pressing the  (yellow) button and select by pressing the   buttons)
	This symbol appears after pressing the  button (mute) and vanishes when the button is pressed again (sound on)
	This symbol indicates that you are receiving in radio mode (call up by pressing the  (blue) button)
	This symbol indicates that an encrypted channel has been selected
	This symbol appears whilst the receiver is recording under a program control (the signal is forwarded from the receiver via the VCR Scart socket to an external recorder)
	This symbol indicates that the USB sockets on the unit are available for use.
	This symbol indicates that the transmission currently selected is being broadcast in HDTV quality.

## ON-SCREEN DISPLAYS (OSD)

### CHANNEL MESSAGES

#### TV CHANNEL MESSAGES



Channel information is shown for a few seconds each time the channel is changed (this can be changed under "Settings", "Adjust Displays") or displayed continuously by pressing the **i** button.

#### RADIO CHANNEL MESSAGES

The information for the current radio channel has the same layout.

### CHANNEL INFORMATION

Press **i** twice to view information on the current channel, if transmitted by the channel provider. Use the **▲▼** buttons to scroll through the pages. By pressing the **◀▶** buttons you can obtain information on the next following programmes on the current channel. Press the **i** or **EXIT** button to exit the display.

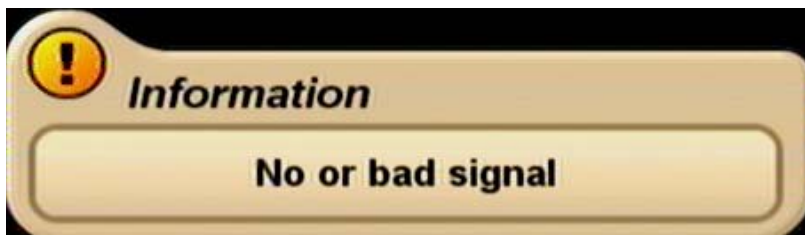
### OPTION SELECTION

Press the **OFF** (yellow) button once to view further soundtrack selection options, if these are transmitted by the channel provider. Use the **▲▼** buttons to scroll through the available selection options. Press the **OFF** (yellow) button again, or press the **EXIT** button to exit this display again.



## ON-SCREEN DISPLAYS (OSD)

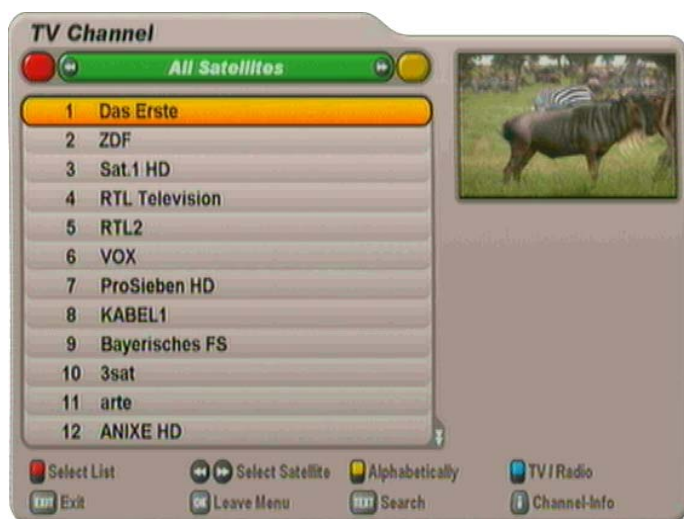
### ERROR SIGNALLING



"No or bad signal" indicates that an error has occurred in the reception system or in the receiver settings, or that the transponder is not sending.

Check the Sat IF connection and the LNB configuration. If you have changed settings, compare them against the basic settings (provided you had made a note of them as suggested).

### CHANNEL LIST – TV/RADIO



Also pay attention to the bars at the bottom of the on-screen display! This provides hints on what to do next.

Press the **OK** button to access the channel list.

Calling this up displays the channel selection/sorting list from which you selected the last channel. At the top right you will see the selected channel list (TV or radio channels) displayed.

Press the **TV/R** (blue) button to switch between the TV and radio channel lists.










To the right of it you see the current channel list sort order as selected by you.




## ON-SCREEN DISPLAYS (OSD)

The channel list can show channels sorted by various selection and sorting criteria.


### Selection and sorting options:

- Press the  (red) button to call up the favourites list selection. The   buttons allow you to scroll through the existing favourites lists
- Press the  (green) button to return to the overall list (all satellites). Use the   buttons to choose between the received satellites (display all channels from a satellite) and the list of "New channels" (provided by channel scan).
- Press the  (yellow) button to see an alphabetic listing. This shows all the channels sorted alphabetically, or the ones beginning with the selected initial letter. Use the   buttons to make the selection.

### Search function:








- Press the  button to start the search. The numeric pad buttons allow you to input the desired search expression for the channel that is sought (see also "Operating Instructions", "Alphanumeric Input").

Press the  button to start the search (see screenshot below for an example of a search result)

Press  to view the following items of information on a channel (see screenshot on the right as an example):


- Signal strength
- Signal quality
- Transmitting satellite
- Frequency (MHz)
- Polarisation
- Symbol rate

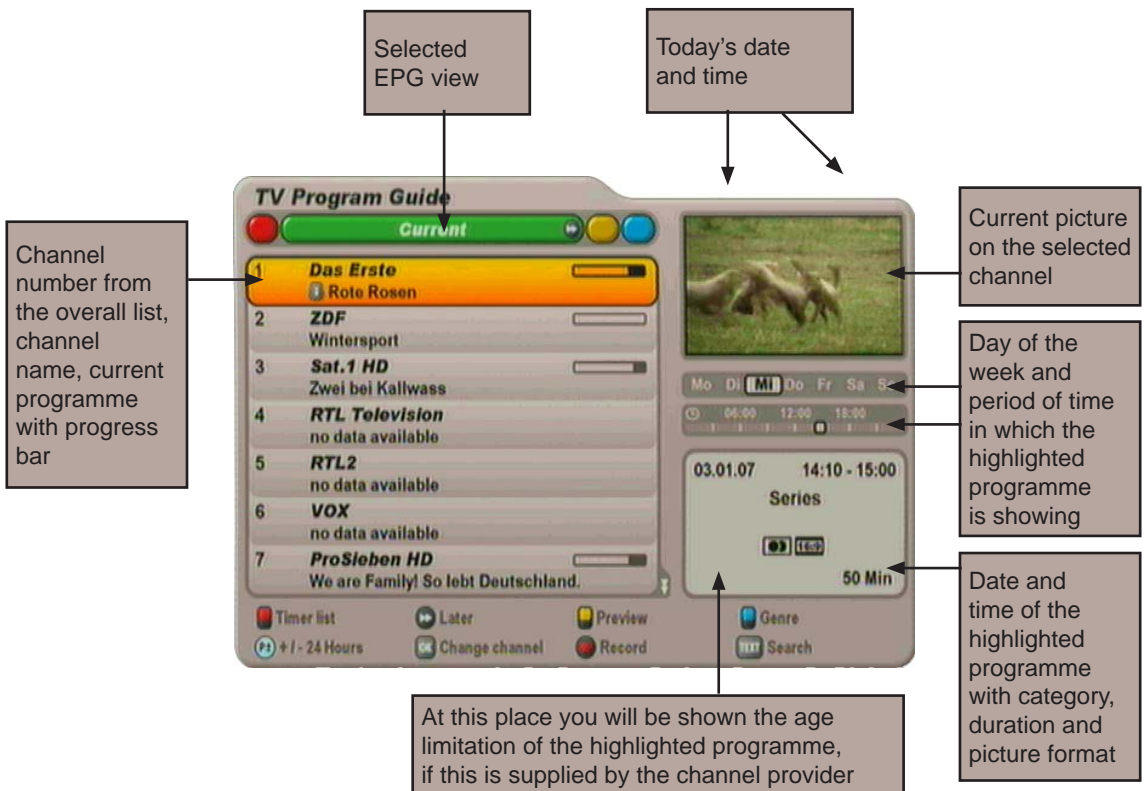



The cursor buttons (   ) are used to navigate within the respective channel list view to select the desired channel. The selection of the desired channel is confirmed by pressing the  button. You will now hear and view the currently selected channel in the small window at the top right. To exit the channel list and return to the TV picture, press the  button again, or press the  button.

# EPG - ELECTRONIC PROGRAMME GUIDE

## CALL UP EPG












The EPG is called up by pressing the  button. Each time the EPG is called up, you will automatically be shown the “Current” view, irrespective of which view you were shown the last time you exited the EPG. The following display appears (example):











**Note:** *If you had selected a favourites list before calling up the EPG, you will see in the EPG only the data for the channels that are included in your channel list. Press the  button a second time to view the EPG for all channels.*

# EPG - ELECTRONIC PROGRAMME GUIDE

## Selection options:

-  (red) button Calls up the recording schedule (display of all pre-programmed recordings)
-  button Jump the "Current" view forwards by 15 minutes
-  (yellow) button Call up a preview of the currently highlighted channel
-  (blue) button Call up the category selection (sorting the programmes by categories such as movies, sport, series ...)
-  button (P+) jump forwards 24 hours in the EPG, (P-) jump backwards 24 hours in the EPG (e.g. into "Current" and into "Coming up")
-  button Selects the currently highlighted channel in all views. Pressing the  or  button again closes the EPG and the selected channel is shown again on the TV screen
-  (red dot) button Adds a programme to the recording settings
-  button Search for a particular programme or programme content (input the search expression using the numeric pad on the remote control, see also the sections "Operating Instructions", "Alphanumeric Input")
-  button If present, shows further information on the selected programme.


Navigation within each view is always performed using the cursor buttons (). The  buttons allow you to select individual channels/programmes, and the  buttons allow you to scroll from page to page of the currently selected list.

Pressing the  or  button exits the EPG again and returns to the TV picture.









**You see information on the current or next following programmes in the EPG only if it is supplied by the channel provider. If no EPG data are available the receiver, instead of showing information on the current programme, shows the message "No data available".**


## „CURRENT“ VIEW



The "Current" view can be called up at any time in EPG by pressing the  (green) button. This is then automatically displayed every time the EPG is started (see screenshot "Calling up EPG").

In the "Current" view you see all channels displayed in the order of the overall channel list. Provided that EPG data has been supplied by the channel provider, the receiver shows for each channel the current programme being shown, with start time, finish time, and progression bar.


You can use the cursor buttons () or the keypad buttons to select the desired channel and if available you can use the  button to call up further information on the desired programme. The  button

## EPG - ELECTRONIC PROGRAMME GUIDE

allows you to look ahead in 15-minute steps to future programmes for the channels (press the  button to return to the current time).

If you wish to view the programme currently being shown on a channel, you need not exit the EPG, just select the desired channel and press the  button. At the top right of the screen you will see the current TV picture for the selected channel. The picture however only appears once the  button has been pressed. Previously what you saw was the picture of the old channel that had previously been selected, even though the EPG was no longer set to that channel.






### “COMING UP” VIEW (PROGRAMME LISTINGS)



The “Coming up” view (programme listings) can be called up at any time in EPG by pressing the  (yellow) button.

Also pay attention to the bars at the bottom of the on-screen display! This provides hints on what to do next.




In the “Coming up” view you will see all the programmes that will be shown in the previous “Current” list of selected channels. Provided that EPG data has been supplied by the channel provider, the receiver shows the programmes that will be shown on the selected channel for several days in advance.

You can use the cursor buttons (, , , ) to select the desired programme and if available you can use the  button to call up further information on the desired programme.


You can use the ,  buttons to scroll through the channels in the order of the overall channel list (the channels can also be selected by inputting digits with the keypad); you remain however in “Coming up”.

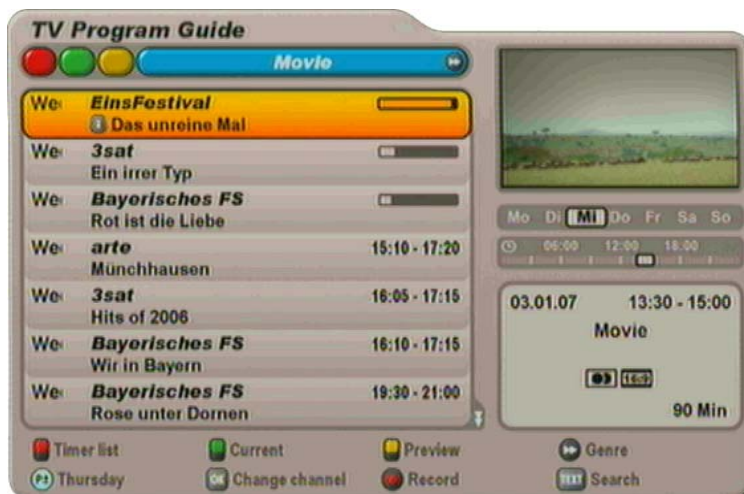
The  button allows you to scroll backwards and forwards a day at a time.

Using the  (red dot) button you can load the selected programme into the recording settings (see item “Recording”).

# EPG - ELECTRONIC PROGRAMME GUIDE








## CATEGORIES VIEW

The “Categories” view can be called up at any time in EPG by pressing the  (blue) button.




In the “Categories” view you can see all programmes sorted by category and starting time. The following categories are available for selection: Movies, Series, Sport, Children’s programmes, Chat shows, News, Magazines/Reportage, Art/Culture, Science/Education, Music, Leisure and Adult programmes.

Programmes can be assigned to the above categories only if the EPG data has been supplied by the channel provider.

Select the required category using the   buttons. You can then use the cursor buttons (, , , ) to select the desired category and if available you can use the  button within each category to call up further information on the desired programme.

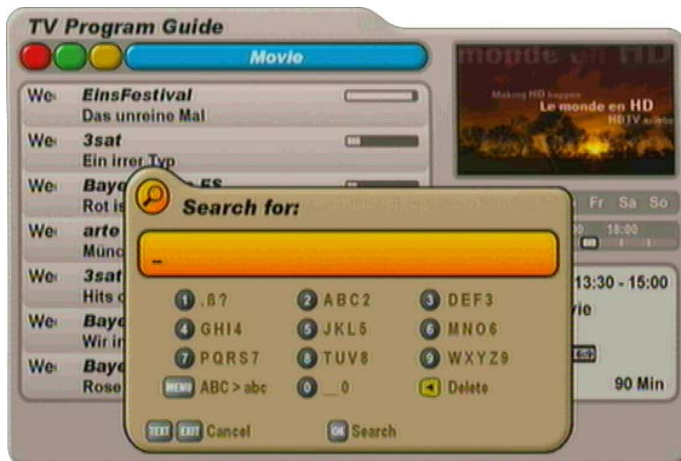
The  button allows you to scroll backwards and forwards a day at a time.

Using the  (red dot) button you can load the selected programme into the recording settings (see item “Recording”).

# EPG - ELECTRONIC PROGRAMME GUIDE

## SCAN FUNCTION

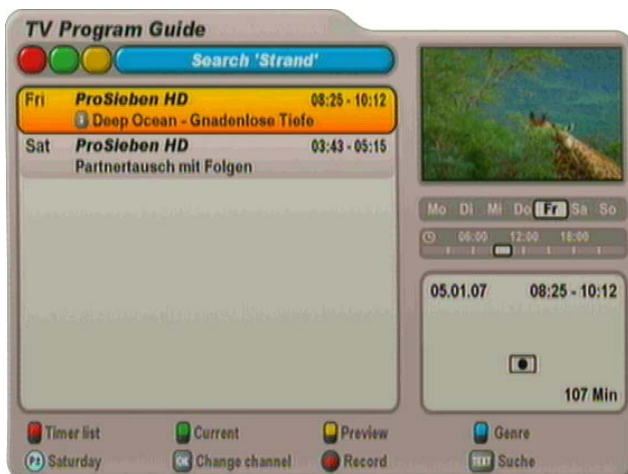
The scan function can be called up at any time in EPG by pressing the **TEXT** button.



The scan function allows you to search for programmes based on their additional information or their name. Use the keypad to input the desired search expression (see also "Operating Instructions" "Alphanumeric Input").

When you have input the desired search expression, press the **OK** button to start the scan.

You can then use the cursor buttons (**▲▼◀▶**) to select the desired programme from the search result and if available you can use the **i** button to call up further information on the desired programme.



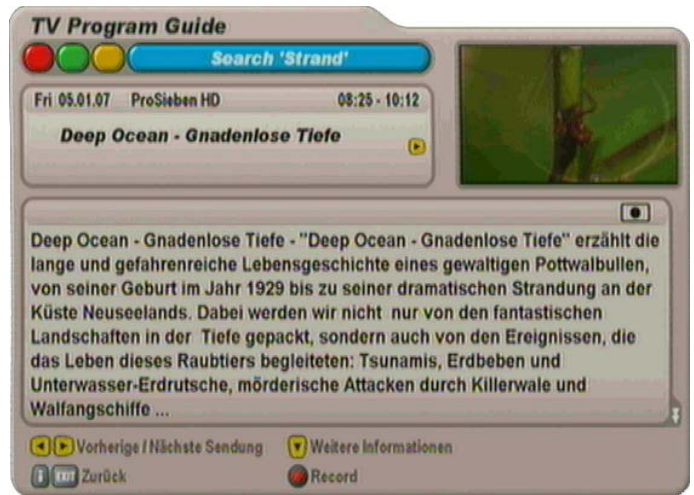
Using the **●** (red dot) button you can load the selected programme into the recording settings (see item "Recording").



# EPG - ELECTRONIC PROGRAMME GUIDE

## ADDITIONAL INFORMATION (i-BUTTON)

The additional information can always be called up by pressing the **i** button whenever the “i symbol” appears in front of the program name (see screenshot on the right). First however the channel must be selected. The following display appears (example):



The additional information available for a programme is displayed in its own window. By pressing the **i** button, if available, you can call up further additional information on the selected programme.

The **◀▶** buttons enable you to display the additional information for the preceding or following programmes in the order of the previously selected list (see header). This always assumes that the data has been supplied by the channel provider.


Using the **●** (red dot) button you can load the selected programme into the recording settings (see item “Recording”).

Press the **i** or **EXIT** button to exit the additional information.

# EPG - ELECTRONIC PROGRAMME GUIDE

## RECORDING (TIMER)


The  (red dot) button allows you to set up a programme at any time for recording on an external recorder.

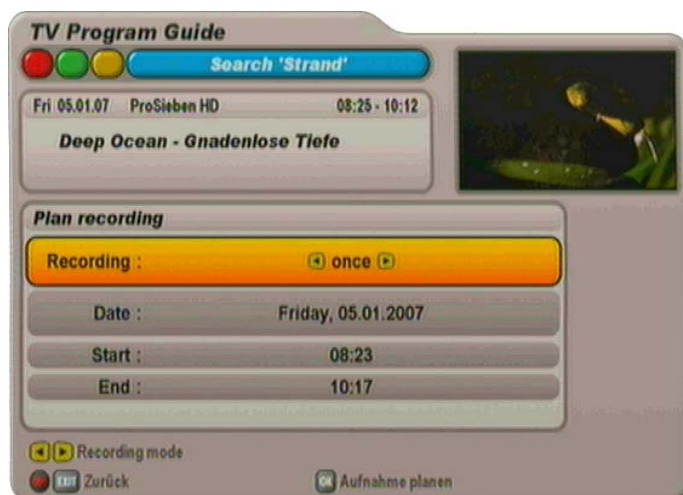
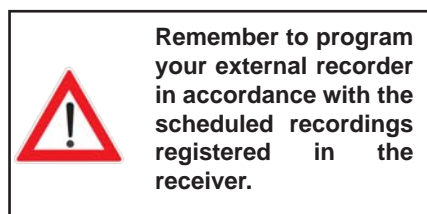
The programme to be recorded can be selected in any of the EPG views, provided the  (red dot) button appears at the bottom of the screen display.

### Programme present in the EPG:

Select the desired programme and press the  (red dot) button. The following display appears (example):






### Programme not present in the EPG:

Select any programme on the channel on which the desired programme is to be transmitted at a later time and press the  (red dot) button (starting and finishing times together with the recording date must be input manually). The following display appears (example):



Use the   buttons to select the desired recording mode. The recording mode options available are:

- **Once:** The recording will be performed once
- **Daily:** The recording will be performed daily at a time specified by you
- **Weekly:** The recording will be performed once a week on the same day and at the same time
- **User-defined:** The recording will be performed on days specified by you at times specified by you
- **Series recording:** The selected programme will be set up by the EPG for recording every time it is transmitted (may even be on different channels). This function does however require a daily update of the EPG data (the data are updated automatically when switching off into stand-by mode).





Use the cursor buttons (   ) to select the further items and use the keypad to complete the settings. When all settings have been made, press the  button to save the recording settings. You can view the scheduled recordings in the recording schedule view of the EPG (see item "Recording schedule").











# EPG - ELECTRONIC PROGRAMME GUIDE


## RECORD ONCE

Use the   buttons to select the recording mode “once” (see screenshot item “Recording (timer)”).

Use the   buttons to switch to the selection field “Date” and use the   buttons to select the desired recording date.




Use the   buttons to switch to the selection field “Start” and use the   buttons to select the desired recording starting time.





Use the   buttons to switch to the selection field “End” and use the   buttons to select the desired recording finishing time.

When all settings have been made, press the  button to save the recording settings. You can view the scheduled recording in the recording schedule view of the EPG (see item “Recording schedule”).


## RECORD DAILY

Use the   buttons to select the recording mode “daily” (see screenshot below).

Use the   buttons to switch to the selection field “Start” and use the   buttons to select the desired recording starting time.

Use the   buttons to switch to the selection field “End” and use the   buttons to select the desired recording finishing time.




When all settings have been made, press the  button to save the recording settings. You can view the scheduled recording in the recording schedule view of the EPG (see item “Recording schedule”).

# EPG - ELECTRONIC PROGRAMME GUIDE





## RECORD WEEKLY







Remember that the day of the week for the desired programme is loaded in the recording schedule and you can make no further manual corrections to it!

Therefore before pressing the  (red dot) button, select the programme on the day of the week that in future you will wish to make the weekly recording.

Use the   buttons to select the recording mode “weekly” (see screenshot below).



Use the   buttons to switch to the selection field “Start” and use the   buttons to select the desired recording starting time.







Use the   buttons to switch to the selection field “End” and use the   buttons to select the desired recording finishing time.







When all settings have been made, press the  button to save the recording settings. You can view the scheduled recording in the recording schedule view of the EPG (see item “Recording schedule”).





## RECORD USER-DEFINED

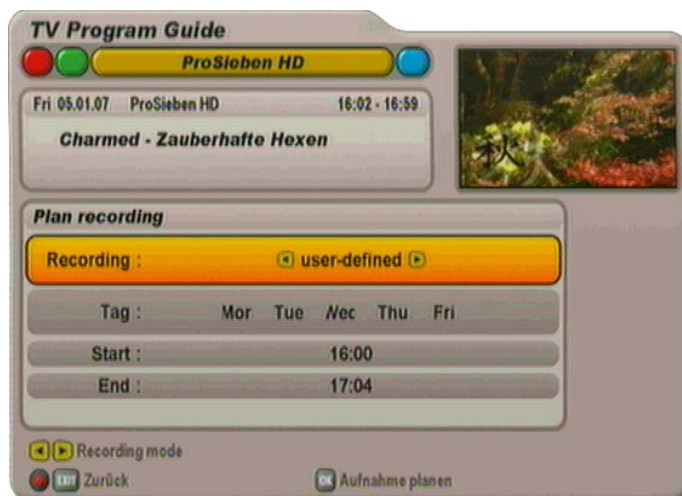
Use the   buttons to select the recording mode “user-defined” (see screenshot below).


Use the   buttons to switch to the selection field “Day” and use the   buttons to select the desired recording day. Press the  button to fix the selection (the day will be shown in red letters). If necessary the receiver will suggest some days to you; you can accept these suggestions or deactivate them again using the cursor buttons and pressing the  button once.

Use the   buttons to switch to the selection field “Start” and use the   buttons to select the desired recording starting time.

## EPG - ELECTRONIC PROGRAMME GUIDE


Use the   buttons to switch to the selection field “End” and use the   buttons to select the desired recording finishing time.





When all settings have been made, press the  button to save the recording settings. You can view the scheduled recording in the recording schedule view of the EPG (see item “Recording schedule”).

### SERIES RECORDING



**Series recording depends on the EPG data being kept up to date at all times. The receiver automatically updates the EPG data when the unit is switched off by pressing the  button. Updating is important because it enables the receiver to recognise for purposes of recording any changes to scheduled transmission times of the series, provided these were incorporated in the EPG data supplied by the channel provider in advance of the latest EPG update.**


Use the   buttons to select the recording mode “Series recording”.

In series recording the start and finish of recording are taken automatically by the receiver from the EPG data. You can only specify a lead-in and run-out time to be sure to record the complete programme even if transmission times may vary slightly. The setting of lead-in and run-out time is done using the   buttons or the keypad.

When all settings have been made, press the  button to save the recording settings. You can view the scheduled recordings in the recording schedule view of the EPG (see item “Recording schedule”).



# EPG - ELECTRONIC PROGRAMME GUIDE






## VIEW RECORDING SCHEDULE


The “Recording schedule” view can be called up at any time in EPG by pressing the red  button.



The recording schedule view shows you all the recordings that are scheduled.


The   buttons allow the recordings to be sorted into “once-only recording” or “Repeating” recordings.

The cursor buttons (   ) allow you to select a recording. The  button allows you to switch over the channels on which the recording is scheduled.

The  (red dot) button allows you to delete a recording that had been scheduled. If this is a series recording you will additionally be asked whether you wish to cancel the recording of only one episode or whether you wish to record no further episodes of this series (see screenshot). Selection is performed using the

  buttons and is confirmed using the  button.



The  button allows you to skip backwards and forwards through the future scheduled recordings, a day at a time.

# COMMON INTERFACE

## IMPORTANT INFORMATION

Always follow the operating instructions from your Pay-TV provider and the instructions supplied with the Smartcard and the CA module!

Smartcards and CA modules are not included with this product!

The cards and modules are issued by the respective Pay TV providers, and contain the subscriber data and details of the channels for which the subscriber has paid. These channels are always encrypted.

Contact the Pay TV provider if you are interested in subscribing to a particular Pay TV channel.

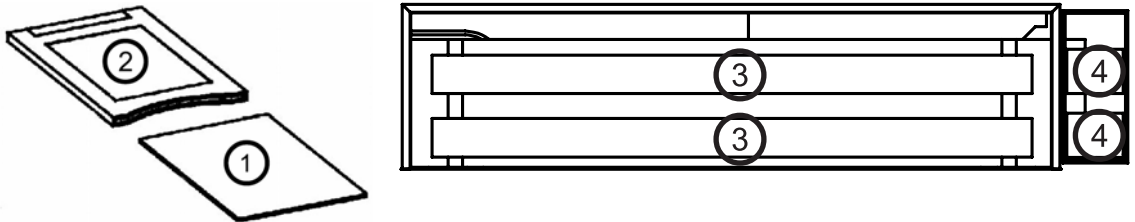
You are responsible for the use of the Smartcard in the CA!

The Smartcard sold by the Pay TV provider, specific to a particular encryption technology, is inserted into the CA module.

Store your card and PIN code securely when not in use!



## INSERTING THE SMARTCARD AND THE CA MODULE



The Common Interface (CI) (3) on the UFS 910 is suitable for the use of two CA (Conditional Access) modules. These two CI slots are on the front right behind the display.

The CA module (2) receives Smartcard (1) (chip contacts pointing upwards and towards socket strip) and is then inserted into one of the two CI slots (3).

The Smartcard should be inserted into the CA module without exerting too much force. This also applies to inserting the CA module into the CI slot!

Do not force the card in; and follow the instructions supplied with the Smartcard and the CA module.

To remove the module, press the relevant eject button (4).

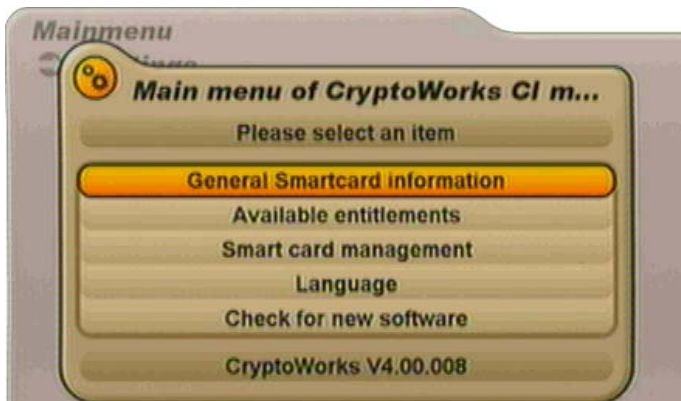
## COMMON INTERFACE

You can find out which Conditional Access modules are in the CI slots on the UFS 910 and which Smartcard is in which CA module from the “Mainmenu” under “Settings”, and the “Common Interface” menu.

Confirmation is by pressing the **OK** button.

Use the **▲▼** buttons to select one of the two slots in which the CA module is located (“Module inserted”) and then press the **OK** button. You will then see the menu generated by the CA module.

**The screenshots below depend on the specific module and card, and so are only intended as examples:**



From this menu, your card and your PIN code allow you to access various channels from your Pay-TV provider.

“CryptoWorks” has been selected as an example here. The details can be different for each CA module. Always follow the instructions supplied by your Pay-TV provider!

**Note:** *The module displays may be shown in English, even if you have selected German as the menu language, because the menu is generated directly by the module!*



Information for Conax, SECA, Viaccess and CryptoWorks users:


Note that with monthly activation intervals, the channel providers have different procedures for activating Pay TV cards. Activation may therefore be a few days before or after the beginning of a new month. During this activation period, the CA module and card must be in the slot, and the receiver must be turned on a set to the booked Pay TV channel. Follow the instructions from the Pay TV provider.


If your Pay TV card is then still not enabled, we recommend you briefly withdraw the CA module with the card out of the slot, with the receiver switched on, and then re-insert it.

**This information has nothing to do with the properties of the unit; it is merely intended to assist you.**

The various items can be selected using the **▲▼** buttons and called up using the **OK** button. Press the **EXIT** button to exit the menu again.

## VIDEOTEXT (TELETEXT)

This symbol  in the channel notification shows you whether Videotext/Teletext is available for the selected channel.







When you press the  button, the receiver processes the Videotext/Teletext service data for your TV set to display, even when the signal is encrypted.

During the scan, the page which is being searched for is displayed in the top left-hand corner with the time and date displayed at the top right.



When the scan is finished, the Videotext/Teletext being broadcast by the relevant encrypted provider appears:





You have several options for calling up the desired pages:

- Input with number pad
- Page-by-page using the   buttons
- Selection using the options indicated by the coloured buttons  (red),  (green),  (yellow) and  (blue)

Press the  or  button to exit Videotext/Teletext.




## EDIT CHANNEL LIST


Select the “Edit TV-Channellist” menu using the menu button , the   buttons on the main menu and .

Also pay attention to the bars at the bottom of the on-screen display! This provides hints on what to do next.







Press the  button to close the information display for editing channels and channel lists. When the menu is called up, the standard setting is for the receiver to show the “All Satellites” channel list with all channels available on the satellites that are being received.











## SELECTION OF THE LIST/CHANNELS TO BE EDITED

Press the  (blue) button to switch between the TV and radio channel lists. Radio channels are edited in the same way as TV channels.

Editing favourites lists is explained as a separate item.

### Selection options:

-  (blue) button      Switch between radio and TV channels
-  (green) button      Call up satellite channel lists
-  (yellow) button      Call up the channel lists, sorted alphabetically
-  button      Search for a specific channel (input the search expression using the numeric pad on the remote control, see also the sections “Operating Instructions” “Alphanumeric Input”)


The channel list chosen is generally that sorted by categories (satellites, favourites and alphabetic) using the   buttons (the standard list shown on calling up is the “All Satellites” channel list). Selection of channels in the list is performed using the cursor buttons (   ). The   buttons allow you to select individual channels, and the   buttons allow you to scroll from page to page of the currently selected list.



# EDIT CHANNEL LIST




## EDITING LISTS/CHANNELS



When you have selected the channel or channel list to be edited, press the  (red dot) button to call up the edit menu. You have the following edit options:

- **Move:**  
Channel can be moved within the current list to another channel slot
- **Delete:**  
Delete the channel from the current list
- **Skip:**  
Channel will be skipped when zapping through the channels
- **Lock:**  
Channel can be viewed only by inputting a PIN
- **To Favorite:**  
Channel can be assigned to any favourites list
- **Start Blockselection:**  
Several channels can be highlighted at the same time and edited together
















As soon as you exit the menu under which you made the edit changes, you will be asked if you wish to save the changes. Use the   buttons to select either "Yes, save changes" or "No, discard changes". Confirm your selection with the  button.

## EDIT CHANNEL LIST







### “LAST FUNCTION” MEMORY

The last editing action performed is saved on the  button, so by pressing the  button for other channels you will repeat the action without having to all up the edit menu again. As soon as you leave the current display, this option lapses and becomes available again only after the edit menu has been called up and an action selected.

### MOVE CHANNELS

Use the   buttons to select the channel to be moved from the current channel list (use the  (green) button to switch to the overall list, use the  (yellow) button to switch to the alphabetically sorted list). Press the  button to call up the edit menu and use the   buttons to select the “Move” function. Confirm the command by pressing the  button. The channel you previously selected will now be shown inset slightly from the left. Now use the cursor buttons (   ) or the keypad to select the new desired position for the channel, and confirm the new channel slot by pressing the  button.

### DELETE CHANNELS







Use the   buttons to select the channel to be deleted from the current channel list. Press the  button to call up the edit menu and use the   buttons to select the “Delete” function. Confirm the command by pressing the  button.




**A deleted channel can be rediscovered only by performed another channel scan (see section “Channel scan”)!**

The channel you previously selected will be deleted (from the favourites lists also!).







### SKIP CHANNELS

Use the   buttons to select the channel to be skipped from the current channel list. Press the  button to call up the edit menu and use the   buttons to select the “Skip” function. Confirm the command by pressing the  button.

The channel you previously selected is now shown in grey text. When zapping the channels this channel will in future be skipped and no longer shown in the channel list (called up using the  button). This function can be restored again using the edit menu (select: “Restore to zap list”).

## EDIT CHANNEL LIST









### BLOCK CHANNELS

Use the   buttons to select the channel to be blocked from the current channel list. Press the  button to call up the edit menu and use the   buttons to select the “Lock” function. Confirm the command by pressing the  button. you are now prompted to enter the PIN code (factory default setting: 0000).

The channel you previously selected is now shown with a padlock to its right. In future this channel can be viewed only by inputting the four-digit PIN code.

This function can be restored again using the edit menu (select: “Remove block”).








### COPY CHANNELS TO THE FAVOURITES LIST




Use the   buttons to select the channel to be copied from the current channel list. Press the  button to call up the edit menu and use the   buttons to select the “To Favorite” function. Use the   buttons to select the favourites list into which the channel is to be copied. The channel remains in the satellite channels list. Confirm the command by pressing the  button.

The channel you previously selected is now shown with an “F” and a yellow field in the channels list. The “F” shows that it is a favourite channel; the black dot in the yellow field shows in which of the eight favourites lists the channel can be found.

See the item “Editing favourites lists” for information on how to delete a channel from a favourites list.

### START BLOCK HIGHLIGHTING (HIGHLIGHTING SEVERAL CHANNELS)

Use the   buttons to select the channel from which you want to highlight further channels. You can only select channels that are listed in succession in your selected channel list. Press the  button to call up the edit menu and use the   buttons to select the “Start Blockselection” function. Use the   buttons to highlight the desired channels, starting from the previously highlighted channel and working upwards or downwards. The highlighted channels will be highlighted in yellow and marked with a tick at the left side.

When you have highlighted the channels that you wish to select, press the  button to call up the edit menu once again and use the   buttons to select the desired function (“Move”, “Delete”, “Skip”, “Lock” or “To Favorite”).

The selected function can now be used in the same way as described for the respective items in this section for a single channel.

## EDIT CHANNEL LIST

### EDIT FAVOURITES LISTS



When you have selected the favourite list to be edited (called up using the <sup>FAV</sup> (red) button and selected using the buttons), press the (red dot) button to call up the edit menu. You have the following edit options:

- **Remove from the Favourites List:**  
The channel will be removed from the Favourites List
- **Lock:**  
Channel can be viewed only by inputting a PIN
- **Rename Favourites List:**  
The Favourites List can be renamed
- **Start Blockselection:**  
Several channels can be highlighted at the same time and edited together



### REMOVE FROM THE FAVOURITES LIST

Use the buttons to select the channel to be removed from the Favourites List you have selected. Press the button to call up the edit menu and use the buttons to select the "Remove from Favourites List" function. Confirm the command by pressing the button.

The channel you previously selected is now removed from the Favourites List (but not deleted from the overall satellite list).

## EDIT CHANNEL LIST

### BLOCK CHANNELS







Use the   buttons to select the channel to be blocked in the Favourites List you have selected. Press the  button to call up the edit menu and use the   buttons to select the “Lock” function. Confirm the command by pressing the  button. you are now prompted to enter the PIN code (factory default setting: 0000).

The channel you previously selected is now shown with a padlock to its right. In future this channel can be viewed only by inputting the four-digit PIN code.








The channel is also blocked on all other channel lists. You need not additionally block the channel in the other channel lists.




This function can be restored again using the edit menu (select: “Remove block”).

### RENAME FAVOURITE LIST

Use the   buttons to select the Favourites List to be renamed. Press the  button to call up the edit menu and use the   buttons to select the “Rename Favourites List” function. Confirm the command by pressing the  button. A keypad will now be displayed with which you can enter the desired name alphanumerically using the numeric pad on the remote control. See also the section “Operating Instructions”, “Alphanumeric Input”)

### START BLOCK HIGHLIGHTING (HIGHLIGHTING SEVERAL CHANNELS)

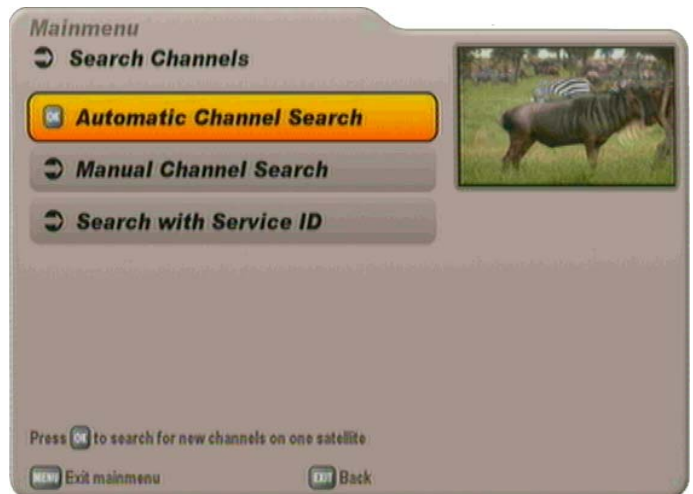
Use the   buttons to select the channel from which you want to highlight further channels. You can only select channels that are listed in succession in your selected Favourites List. Press the  button to call up the edit menu and use the   buttons to select the “Start blockselction” function. Now use the   buttons to highlight the desired channels, starting from the previously highlighted channel and working upwards or downwards. The highlighted channels will be highlighted in yellow and marked with a tick at the left side.

When you have highlighted the channels that you wish to select, press the  button to call up the edit menu once again and use the   buttons to select the desired function (“Remove from the Favourites List” or “Remove lock”).

The selected function can now be used in the same way as described for the respective items in this section for a single channel.

## CHANNEL SEARCH (CHANNEL SCAN)

Select the “Search Channels” menu using the menu button **MENU**, the **▲▼** buttons on the main menu and **OK**.



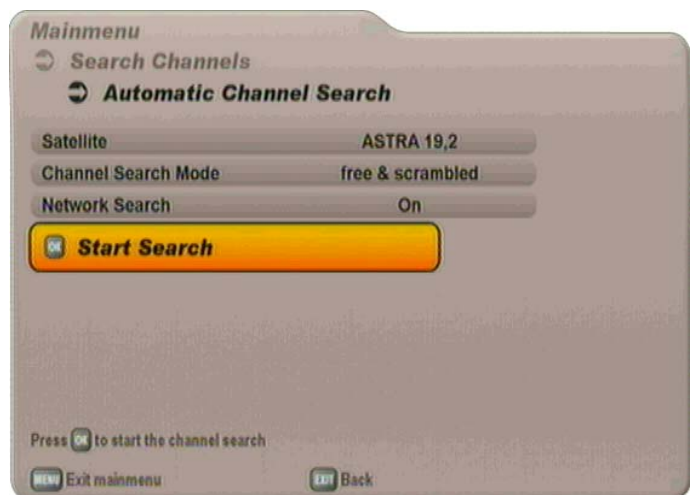
Also pay attention to the bars at the bottom of the on-screen display! This provides hints on what to do next.

You have three options for a channel scan.

- Automatic scan - all transponders for the satellite you selected will be scanned
- Manual scan - only the selected transponder for the satellite you selected will be scanned
- Channel scan with service ID - Search for a specific channel using its service ID

Select the scan type you want to rename using the **▲▼** buttons and confirm with **OK**.



## AUTOMATIC (CHANNEL) SCAN



The **▲▼** buttons allow you to select different sets of parameters for the scan.



# CHANNEL SEARCH (CHANNEL SCAN)

## Satellite

Select the satellite to be scanned, using the   buttons. Make sure your reception system is aligned to the selected satellite. You can scan only one satellite at a time. If you have connected a multi-feed reception system (e.g. reception of ASTRA 19.2° East and HOTBIRD 13° East), you must repeat this procedure once for each satellite. You can however start the first installation again, in the course of which a channel scan of all the satellites you selected is performed.

Press the  button to move to the next selection item.



## Channel scan mode

Use the   buttons to select whether you wish to scan “free & scrambled”, “only free” or “only scrambled” channels.





**To view encrypted channels you need the appropriate CA (Conditional Access) module and a valid smart card together with a valid subscription to the respective Pay-TV provider.**

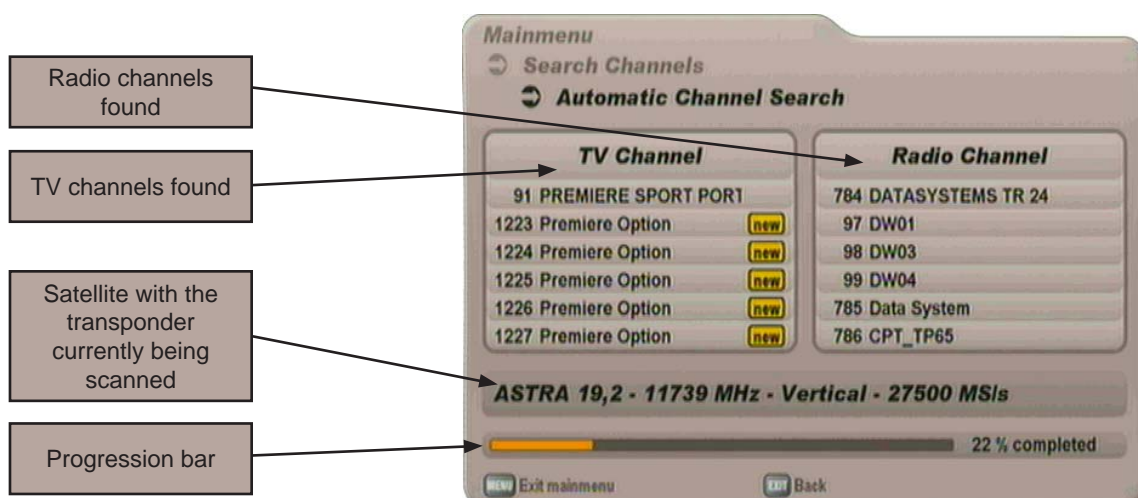
Press the  button to move to the next selection item.

## Network scan

Use the   buttons (On/Off) to select whether a network scan should be performed. If you set the network scan to “Off”, only the factory stored transponders of the satellites you previously selected will be scanned for new as yet unlisted channels.

If you set the network scan to “On”, the transponder network enables additional transponders that have not yet been stored to be located. They are then stored and scanned for new channels in the same way as the existing transponders.

When you have made your settings, use the   buttons to select “Start Search” and press the  button to start scanning. You can cancel the scan at any time by pressing the  button. During the scan you will see the following message (example):





## CHANNEL SEARCH (CHANNEL SCAN)

Newly found channels are identified with the designation “New” after the channel name. After completion of the scan, you will see the following message (example):



Press the **OK** button. You will be asked whether you wish to save the changes or not. Selection is performed using the **▲▼** buttons and is confirmed using the **OK** button. If you select “Yes, save changes”, the newly found channels will be added to the end of the channel list. Then press the **EXIT** button to exit the menu. The channel list is called up on to the TV screen by pressing the **OK** button (see also section “On-screen displays” “Channel list TV/Radio”).





After a scan (of whatever type) the receiver shows all newly found channels in the channel list under the rubric “New Channels”. You will find this rubric in the Channel List at the end of the green satellite channel lists (selection using the **◀▶** buttons).



## MANUAL (CHANNEL) SCAN



## CHANNEL SEARCH (CHANNEL SCAN)



The   buttons allow you to select different sets of parameters for the scan.

### Satellite

Use the   buttons to select the satellite on which the transponder you wish to scan is located. Make sure your reception system is aligned to the selected satellite. You can scan only one transponder at a time. If you wish to scan several transponders on a satellite, you should start an automatic scan of the transmitting satellite.

Press the  button to move to the next selection item.



### Transponder frequency

Use the   buttons (transponder frequency already saved) or the keypad (transponder frequency not yet saved) to select the transponder frequency on which the channel being sought is transmitted. At the bottom right of the screen display, the receiver shows the current signal strength and signal quality of the selected transponder.



Press the  button to move to the next selection item.

**The selection items: DVB type, FEC, polarisation and symbol rate need be input only if the transponder has yet to be saved.**

### DVB type

Press the   buttons to select whether the scan should be for standard channels (DVB-S (SD)) or for HDTV channels (DVB-S2 (HDTV)).

### FEC

Press the   buttons to select the applicable error rate (Viterbi rate). There is no need to input the error rate when scanning for standard channels. Instead a fixed display of "Automatic" appears. When scanning for HDTV channels you must input the correct error rate (either QPSK 1/2, 2/3, 3/4, 3/5, 4/5, 5/6, 8/9, 9/10 or 8PSK 2/3, 3/4, 3/5, 5/6, 8/9, 9/10)



### Polarisation

Press the   buttons to select the correct polarisation (horizontal or vertical)

### Symbol rate

Use the keypad to enter the appropriate symbol rate.

### Channel scan mode

Use the   buttons to select whether you wish to scan "free & scrambled", "only free" or "only scrambled" channels.

**To view encrypted channels you need the appropriate CA (Conditional Access) module and a valid smart card together with a valid subscription to the respective Pay-TV provider.**

Press the  button to move to the next selection item.

## CHANNEL SEARCH (CHANNEL SCAN)

### Network scan

Use the **◀▶** buttons (On/Off) to select whether a network scan should be performed. If you set the network scan to “Off”, only the factory stored transponders of the satellites you previously selected will be scanned for new as yet unlisted channels.

If you set the network scan to “On”, the transponder network enables additional transponders that have not yet been stored to be located. They are then stored and scanned for new channels in the same way as the existing transponders.

When you have made your settings, use the **▲▼** buttons to select “Start Search” and press the **OK** button to start scanning. You can cancel the scan at any time by pressing the **EXIT** button. During the scan you will see a display that shows you the progress of the scan and the channels found so far. Newly found channels are identified with the designation “New” after the channel name.

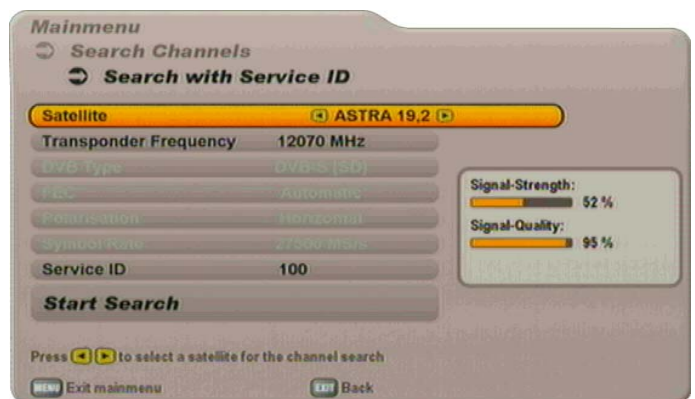
After completion of the scan, you will see the following message (example):

Press the **OK** button. You will be asked whether you wish to save the changes or not. Selection is performed using the

**▲▼** buttons and is confirmed using the **OK** button. If you select “Yes, save changes”, the newly found channels will be added to the end of the channel list. Then press the **EXIT** button to exit the menu. The channel list is called up on to the TV screen by pressing the **OK** button (see also section “On-screen displays” “Channel list TV/Radio”).



## CHANNEL SCAN WITH SERVICE ID



The **▲▼** buttons allow you to select different sets of parameters for the scan.



### Satellite

Use the **◀▶** buttons to select the satellite that is transmitting the channels to be scanned. Make sure your reception system is aligned to the selected satellite.

Press the **▼** button to move to the next selection item.

## CHANNEL SEARCH (CHANNEL SCAN)



### Transponder frequency





Use the   buttons (transponder frequency already saved) or the keypad (transponder frequency not yet saved) to select the transponder frequency on which the channel being sought is transmitted. At the bottom right of the screen display, the receiver shows the current signal strength and signal quality of the selected transponder.

Press the  button to move to the next selection item.

**The selection items: DVB type, FEC, polarisation and symbol rate need be input only if the transponder has yet to be saved (see manual (channel) search).**

### Service ID






Using the   buttons or the keypad, enter here the service ID of the channel being sought.


When you have made your settings, use the   buttons to select “Start Search” and press the  button to start scanning. You can cancel the scan at any time by pressing the  button.

During the scan you will see a display that shows you the progress of the scan.





After completion of the scan, you will see the following message (example):

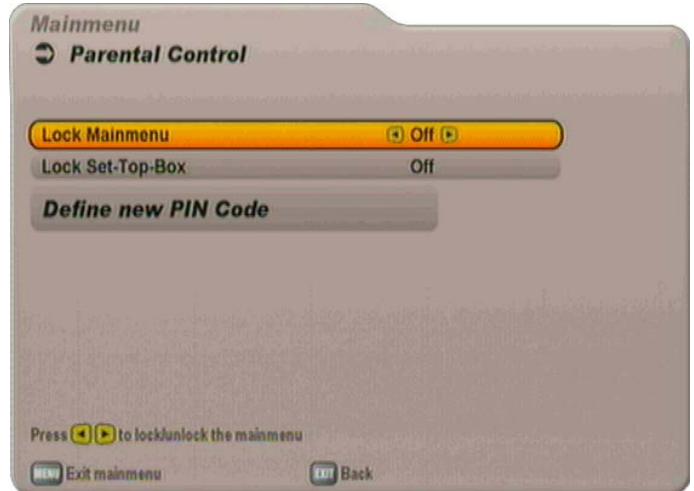


Press the  button. You will be asked whether you wish to save the changes or not. Selection is performed using the   buttons and is confirmed using the  button. If you select “Yes, save changes”, the newly found channels will be added to the end of the channel list. Then press the  button to exit the menu.



The channel list is called up on to the TV screen by pressing the  button (see also section “On-screen displays” “Channel list TV/Radio”).

## PARENTAL CONTROL



Select the „Parental Control“ menu using the menu button , the   buttons on the main menu and . You are now prompted to enter the PIN code (factory default setting: 0000). After entering the PIN using the keypad you are shown the following display:





Also pay attention to the bars at the bottom of the on-screen display! This provides hints on what to do next.


Select the parameters to be changed using the   buttons.

## BLOCKING THE MAIN MENU

Use the   buttons (On/Off) to select whether the main menu should be blocked. If the menu is blocked, changes can be made only by entering the four-digit PIN code.



## BLOCKING THE RECEIVER

Use the   buttons (On/Off) to select whether the receiver should be blocked. If the receiver is blocked, it can be operated only by entering the four-digit PIN code after it is switched on (factory setting: 0000).

Press the  button to exit the menu again.

## PARENTAL CONTROL

### SETTING A NEW CODE (PIN)

Press  to replace the old PIN with a new one. Enter the new (four-digit) PIN. For security you must repeat the new PIN code once again. Confirm the change of PIN code by pressing the  button.



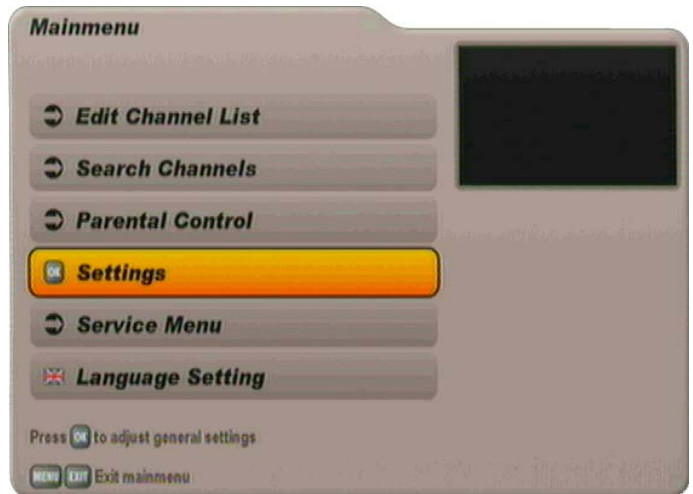
**Keep your password in a safe place, so that you always have access to your channels even if you might have forgotten it.**

**If you have forgotten your password, you must contact your dealer, who will be able to unlock your receiver for you.**

# SETTINGS

The selected menus, sub-menus and positions, as well as the parameters to be set, are each highlighted in colour. The menus are self-explanatory to a great extent.

Pay attention to the bar at the bottom of the on-screen display! This provides hints on what to do next.



Select the "Settings" menu using the menu button **MENU**, the **▲▼** buttons on the main menu and **OK**.



Press **OK** to access the "TV, Video and Audio" menu. The following display appears (see next page):

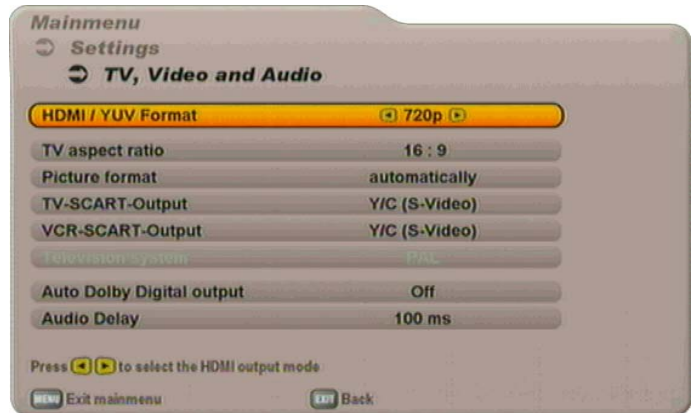
Use the **▲▼** buttons to select the further options. If there is another sub-menu layer, press the **OK** button to open it. If there are no more sub-menus, make the settings using the **◀▶▲▼** or number pad.

Press the **EXIT** button to save your settings and return to the previous menu. Press the **MENU** button to return directly to the TV picture, the changes will also be saved.



# SETTINGS


## TV SETTINGS



### HDMI MODE

Use the ◀▶ buttons to select the resolution that your TV set can process. Either

- 576p (resolution 720 x 576, transmission of full-screen images)
- 720p or (resolution 1280 x 720, transmission of full-screen images)
- 1080i (resolution 1920 x 1080, transmission of half-screen images)

The  (green) button can be used to switch between resolution setting whilst watching.

### TV FORMAT

Here you can use the ◀▶ buttons to select the picture format for your TV. Either

- 4:3 or
- 16:9 format.

### SCREEN DISPLAY

Use the ◀▶ buttons here to select the type of screen display:

- Pan & Scan
- Letterbox
- Automatic (only if the “16:9” TV format was selected)
- Always 16:9 (only if the “16:9” TV format was selected)



### TV SCART SIGNAL OUTPUT

Here you can use the ◀▶ buttons to select the type of video signal at the TV Scart socket. Select the signal that your TV set can process. **When doing this, refer to the operating instructions for your TV set!**

- FBAS – Composite baseband signal (colour/picture/blanking/synchronous signal)
- RGB – Red/Green/Blue signal (not currently available) or
- Y/C – S-Video signal (luminance/chrominance)



# SETTINGS

## VCR SCART SIGNAL OUTPUT

Here you can use the   buttons to select the type of video signal at the VCR Scart socket. Select the signal that your external recorder can process. **When doing this, refer to the operating instructions for your recorder!**



- FBAS – Composite baseband signal (colour/picture/blanking/synchronous signal)
- Y/C – S-Video signal (luminance/chrominance)

## TV STANDARD



Here, you can use the   buttons to specify whether your TV set is a

- PAL or
- NTSC set.

## AUTOM. DOLBY DIGITAL OUTPUT

Here you can use the   buttons to select whether the receiver should automatically output the Dolby Digital signal (if this is transmitted).

## AUDIO DELAY

Here you can use the   buttons to set a delay in milliseconds, if the sound output from your receiver is out of synch with the TV picture (lip synchronicity). The delay can be set in 10 millisecond steps from 10 ms up to 200 ms.






## CONFIGURING THE ON-SCREEN MENU





# SETTINGS

## FUNCTIONAL SCOPE



Here you can configure the functional scope of your receiver. You can choose between “High”, “Normal” and “Low”. The following table shows which functions are available at each configuration step.

	 (red) button	 (yellow) button	 (blue) button	 button	 button
High	Select favourites	Select options	TV/Radio	AV changeover	Channel list
Low	Not assigned	Not assigned	Not assigned	Not assigned	Programme Guide
Normal	Select favourites	Select options	TV/Radio	Not assigned	Programme Guide



## DISPLAY DURATION OF CHANNEL MESSAGE

Use the   buttons to select the time after which you want the on-screen channel message display to be automatically cancelled. The selections available are “Off”, 1, 2, 3, 4, 5 or 6 seconds.



## DISPLAY VOLUME BAR

Use the   buttons (On/Off) to specify whether the volume bar is displayed when adjusting the volume.







## RECEIVER FRONT DISPLAY BRIGHTNESS

Use the   buttons to set the brightness of the receiver front display. Select the most comfortable setting for the ambient lighting.

## RECEIVER FRONT DISPLAY IN STANDBY

Use the   buttons to set whether the receiver front display should be switched on or off in stand-by mode (display of time).

## OSD POSITION ALIGNMENT

Press the  button to align the on-screen displays on the TV screen. Now you can use the cursor buttons (   ) to determine the position of the on-screen display. When you have achieved the desired position, press the  button to fix the selected position.



# SETTINGS

## DATE AND TIME



### Set Local Time

Use the [Left][Right] buttons to set the time zone variation from UTC (formerly GMT) (e.g. for Germany +1 hour).

Use the [Up][Down] buttons to switch to the "Automatic clock change" field.

### Automatic time setting

Use the [Left][Right] buttons to select whether the receiver should automatically change over to and from summer and winter time. If "On" is selected, the receiver automatically sets itself to the right time. If "Off" is selected, the field for manual selection of summer and winter time is displayed below. Use the

[Left][Right] buttons to perform the setting.

Press the [EXIT] button to exit the menu again.

## COMMON INTERFACE

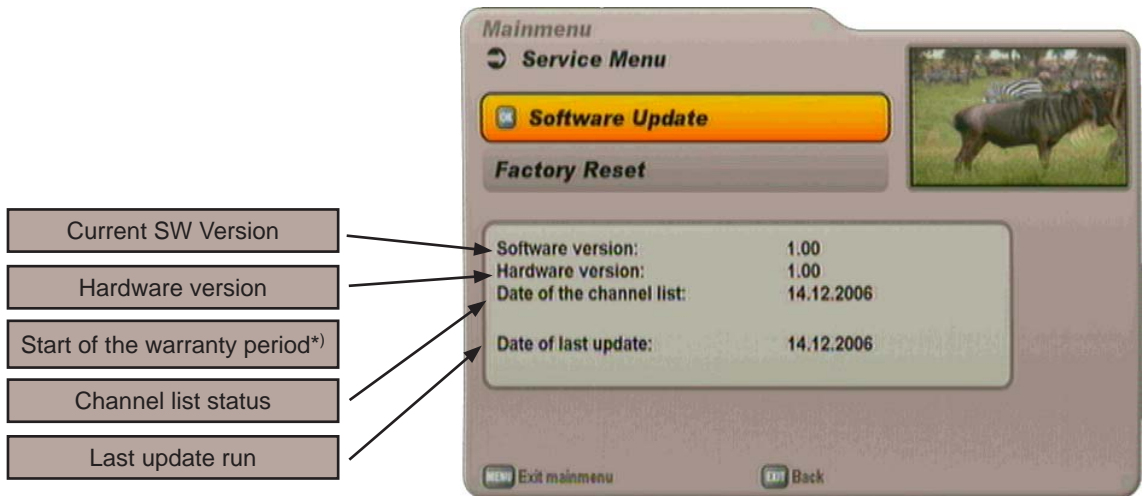
See "Common Interface" section

## ANTENNA CONFIGURATION

See "First Installation" section, pages 13ff

## SERVICE MENU

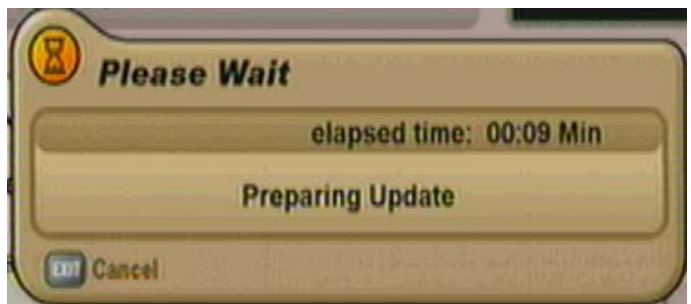
Select the “Service” menu using the menu button **MENU**, the **▲▼** buttons on the main menu and **OK**. The following display appears:



## UPDATE SOFTWARE

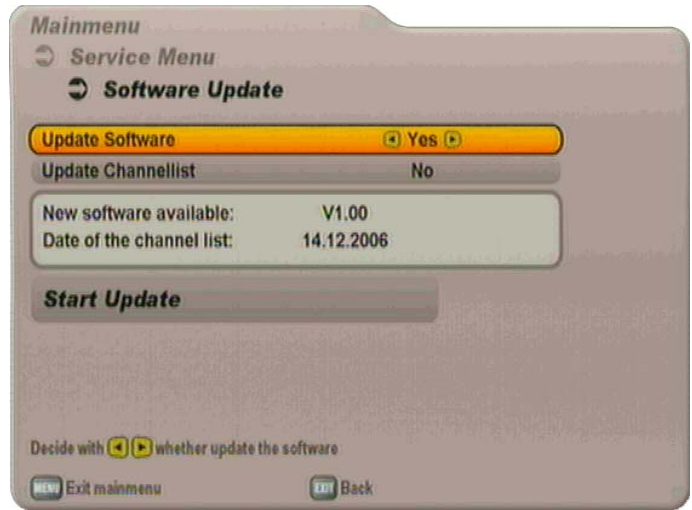
You can also check manually whether new software is available.

Use the **▲▼** buttons to switch to “Software Update” and to call it up press the **OK** button. The following display appears:



\*) Start of the statutory warranty period of two years

# SERVICE MENU



Also pay attention to the bars at the bottom of the on-screen display! This provides hints on what to do next.

## UPDATE Software

If new software is available (but only then), use the buttons (No/Yes) to select whether you wish to load the new software that is available. If you are unsure whether you wish to load the new software, you can initially set the reply to “No”. If you do agree to the changes, you can then proceed to download the software.

## Channel list

Select the required satellite using the buttons. Available options:

- **“only update”**: Your existing list will only be updated, any new channels found will be added at the end of the channel list. The sort sequence of your channel list remains unchanged; the only change is that the channel data (transmission frequency etc.) are updated
- **“do not load”**: Your existing list will not be edited (nor updated nor overwritten)
- **“overwrite”**: Your existing channel list will be completely superseded by a new list of available channels. Your personal channel sorting will be lost. If you select “overwrite”, you will additionally see displayed the line “pre-sorted for”. Use the buttons to switch to this line and use the buttons to select the desired pre-sorting. Your available options are for instance Germany and Austria.

When you have made your settings, use the buttons to select “Start Update” and press the button to start updating.

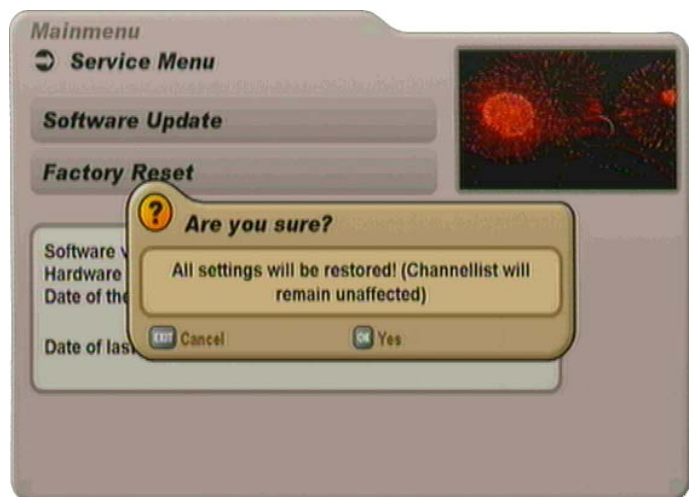
The following display appears (see example on next page):

## SERVICE MENU



## FACTORY DEFAULT

You can select the “Service” menu using the **MENU** menu button, the **▲▼** buttons in the main menu and **OK**. Use the **▲▼** buttons to switch to “Factory Reset” and to call them up, press the **OK** button. The following display appears:



Press the **OK** button to load the factory default settings. The channels and favourites lists remain unchanged.



## CONNECTING UP THE VIDEO/PVR

For details of how to connect your external recorder to the receiver refer to the connection diagram provided at the end of this manual and the instructions for the external recorder.

## RECORDING

In order to make a PVR recording (Record), the satellite receiver must be switched on or the timers must be pre-programmed (see “EPG” “Recording (timer)” section).

## PLAYBACK

For VCR/PVR playback you must have previously set the UFS 910 Scart socket to “VCR mode” (Scart changeover), using the ① button, so that the signal path is set up from the VCR or PVR/AUX Scart socket to the TV Scart socket.

In this setting, the picture from the external recorder is switched through to the TV set during playback.

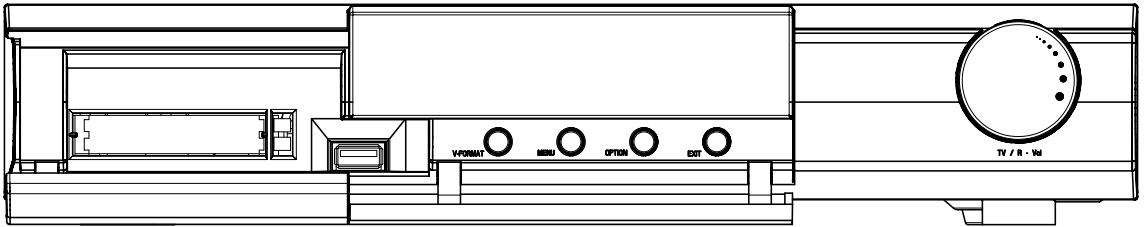
Pressing the ① button again restores priority to the UFS 910 “Scart → Sat” signal. In the setting “Scart → TV” (TV mode) the internal tuner of the TV set has priority and you cannot then see the signal from the receiver on the screen if you switch the TV set to the AV channel.

The settings “VCR mode” and “TV mode” are shown in the display on the receiver.

## USING THE FRONT PANEL

If you have misplaced your remote control, or if the batteries are flat, you can still operate your receiver from the front panel.

### BACKUP OPERATION



The front panel houses four buttons and the multifunction control (from now on referred to as “the control”).

#### **V-format button:**

Pressing the “V-format” button allows you to select from the 576p, 720p and 1080i picture formats.

#### **Menu button:**

Press the Menu button to access the main menu. Move to the various sub-menu items by rotating the control. Select the sub-menus by pressing the middle of the control. Press the Menu button to exit the selected menu and save your changes. Press the Exit button to quit the menu.

#### **Option button:**

Press the option button to access the sound options menu. Make the selection for the programme you want to view by rotating the control and confirm the selection by pressing the middle of the control.

#### **Stop/Exit button:**

This is used for quitting the on-screen display and for cancelling procedures

#### **Multifunction control:**

- Rotate the control to switch channels.
- Press the control button twice to switch between TV and radio reception.
- Press and hold down the control button to switch the receiver to Standby mode.

Tap the control button to restart the receiver.



**Because there are no number buttons, no password/PIN-protected functions can be displayed.**

# TECHNICAL APPENDIX

## FEATURES

- Reception of digital satellite TV channels and radio programmes in DVB-S and DVB-S2 transmission standards
- Video decoding of MPEG-2 and MPEG-4/H.264 signals
- 16-character alphanumeric display shows channel names and transmitter information
- 4000 channel memory positions
- Kathrein Convenience EPG with timer programming <sup>1)</sup>
- Common interface for two CA modules <sup>2)</sup>
- HDMI output for connecting a HDTV-capable TV set
- Optical audio output for Dolby Digital data stream (AC 3)
- YPbPr output
- Cinch sockets for AV signals (composite CVBS, stereo audio)
- One USB 2.0 port on the front of the unit and two USB 2.0 ports at the rear of the unit for SW updates from a USB stick
- Multi-function control on the front of the unit for ease of operation
- Comp. colour, RGB- and Y/C signal output programmable via Scart socket
- Software updates via satellite and from a USB stick (both the operational software and the programme lists can be updated)
- Language selection for multilingual broadcasts
- Channel scan
- Programme position sort function
- Automatic date and time generation via DVB data stream
- On-screen display (OSD) in 8 languages (D, GB, F, I, E, CZ, NL, TR)
- DiSEqC™1.0 control signal and SCR single cable system control signal (from Q1/2007)
- Operational system based on LINUX
- Power switch
- Included in delivery: Infrared remote control, batteries, operating manual, safety instructions, Scart cable, power supply cable

<sup>1)</sup> Display of information only if broadcast by the programme provider

<sup>2)</sup> CA modules and Smart cards not included

## TECHNICAL APPENDIX

Type	CE	UFS 910si	UFS 740sw
Order no.		20210105	20210089
Colour		Silver	Black
RF range			
Sat IF band	MHz	950-2150	
Input level band	dBµV	44-83	
TV system, Video			
Modulation, FEC, demultiplexer		DVB-S/DVB-S2 standard	
Video resolution		576i, 576p, 720p, 1080i	
Video decoding		MPEG-2, MPEG-4-compatible	
Input data rate	MSymb/s	2-45	
TV system, Audio			
Decoding		AC 3, MPEG-4 (AAC-HE), MPEG-1, layers 1, 2 and 3	
Sampling rate	kHz	32/44,1/48	
Memory			
Flash RAM	MB	16	
SDRAM	MB	128	
Processor clock speed	MHz	200	
Power Supply			
Power supply voltage	V/Hz	230 (+/-15 %)/50	
LNB supply (horiz./vert.)	V/mA	14/18; Max.	
Control signal	kHz	22; ToneBurst; DiSEqC™1.0	
Connections			
Sat IF input/output		2 x F socket	
TV/VCR connection		2 x Scart sockets	
Video output (analogue)		3 x Cinch sockets (YPbPr)	
Video output (analogue)		1 x Cinch socket, composite	
Video output (digital)		1 x HDMI with HDCP	
Audio output (analogue)		2 x Cinch sockets	
Audio output (digital)		Standard fibre-optic (SPDIF)	
Data interface			
Common Interface		For 2 CA modules	
USB		3 x 2.0	
RS 232		1	
Ethernet		1	
General			
Ambient temperature	°C	Max. + 5 to + 40	
Unit dimensions (W x H x D)	mm	342 x 67 x 273	

## TECHNICAL APPENDIX

### SCART SOCKET ASSIGNMENT

Signal	Pin no.	TV	VCR/AUX
Right audio output	1	X	X
Right audio input	2		X
Left audio output	3	X	X
Audio earth	4	X	X
Blue earth	5	X	X
Audio left input	6		X
Blue signal	7	X	X
Switching voltage	8	X	X
Green earth	9	X	X
Data signal	10		
Green signal	11	X	X
Data signal	12		
Red earth	13	X	X
Data earth	14		
Red signal (C)	15	X	X
Blanking signal	16	X	X
Video earth	17	X	X
Blanking signal earth	18	X	X
Video output (FBAS/Y)	19	X	X
Video input	20		X
Connector shield	21	X	X

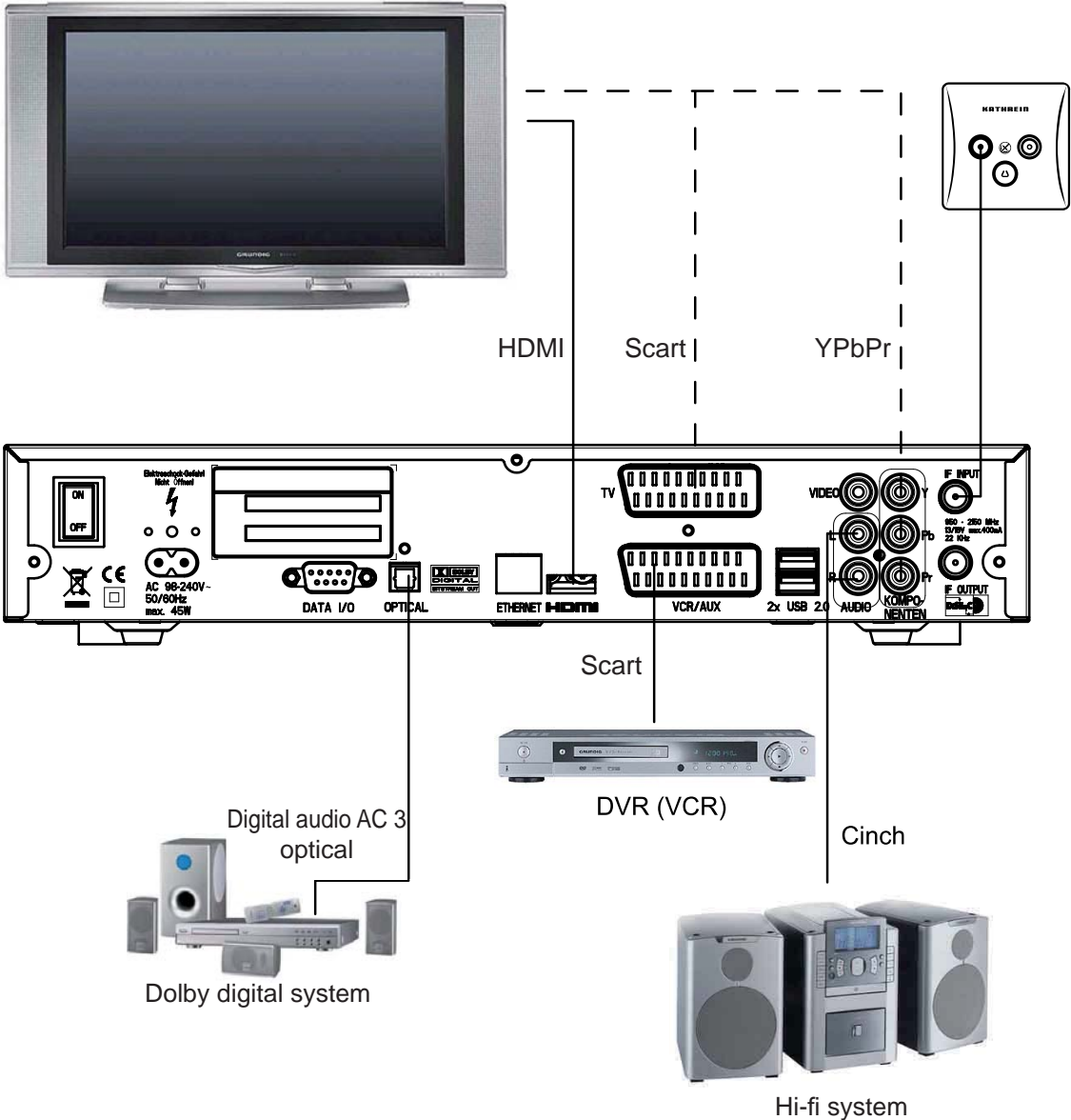
### VHS/S-VHS SWITCHING

The Scart sockets are switchable between VHS and S-VHS. The switch is made by selecting "Mainmenu", "Settings", "TV, Video and Audio".

VHS (RGB): The red signal is connected to terminal 15, the composite colour output to terminal 19.  
For S-VHS (C/Y): The Y output is connected to pin 19, the C output to pin 15.

# TECHNICAL APPENDIX

## CONNECTION EXAMPLE



## SHORT TECHNICAL GUIDE

### **AC3**

Output for Dolby Digital signal

### **ASTRA**

SES (Société Européenne des Satellites) satellite system. Analogue and digital transponders in the frequency range 10.7-12.75 GHz.

### **AV programme pos.**

Preferred programme slot on TV set for external connections such as Scart and HDMI

### **CAM – Conditional Access Module**

Decryption decoder, which uses a smart card to decrypt the encrypted radio and TV signals.

### **Channel package**

The channel package for a digital transponder normally includes several TV and radio channels. Each channel package has a fixed assignment for the transponder transmission frequency, for polarisation (horizontal or vertical), for the symbol rate and for the Viterbi rate or error rate.

### **CI – Common Interface**

Internationally standardised interface for CA modules

### **Conditional Access (CA) system**

Controls user access to services and programmes which are encrypted for reasons of copyright or for commercial reasons.

### **Data rate**

Data bits transmitted per second. Is expressed in kbit/s or Mbit/s. The higher the data rate the better the quality of the transmitted signal.

### **Data reduction**

Compression of video and audio signals. Redundant information is discarded.

### **DiSEqC™**

DiSEqC™ (Digital Satellite Equipment Control) is a communication system between a satellite receiver (master) and the peripheral satellite components (slaves), such as LNBs, multi-switches, rotating antenna systems.

It is a single master/multi-slave system, i.e. there is only ever one master in the satellite system. All activities start from the master.

### **DiSEqC™ components**

If DiSEqC™ switching matrices are cascaded, the master receiver must transmit the DiSEqC™ signal several times, so that all DiSEqC™ multi-switches in the cascade receive their commands.

These days, DiSEqC™ components (slaves) must be reverse compatible, i.e. respond to the analogue switching criteria from receivers that are only equipped with H/V and 22 kHz control signals.

A DiSEqC™ switching matrix will work with analogue switching criteria until the DiSEqC™ command from the master is received. All analogue switching criteria are then ignored.

### **Dolby Digital 5.1**

Dolby Digital is a sound transmission that allows digital surround sound to be output on a home cinema system.



# SHORT TECHNICAL GUIDE

## **DVB – Digital Video Broadcasting**

DVB-S refers to the transmission method (S = satellite, C = cable, T = terrestrial).

## **DVB-S2**

An enhanced DVB-S signal for HDTV with better quality.

## **Eb/No ratio**

The Eb/No ratio is a measure of the signal to noise ratio of a digital signal. The value is not identical to the C/N value familiar from analogue reception technology. At Eb/No values below 5 dB no reception is normally possible.

## **EUTELSAT**

European Satellite operator, based in Paris. Many orbit positions and European customers. Transponders in the frequency range 10.7-12.75 GHz.

## **FEC**

FEC is the abbreviation for Forward Error Correction. A technique for reducing the error rate of data transmission. Additional bits are inserted into the data stream, so that error-correction algorithms can be used on reception. The FEC error rate corresponds to the Viterbi rate.

## **HD – Ready**

This is a label created by the EICTA (European Information, Communications and Consumer Electronics Industry Technology Association) for equipment that is capable of reproducing HDTV.

## **HDCP – High-bandwidth Digital Content Protection**

Encryption system which protects the HDMI and DVI interfaces for secure transmission of video and audio data. HDCP should be used in Europe for HDTV standard transmissions.

## **HDMI – High Definition Multimedia Interface**

Digital interface for digital video and audio data transmission (preferred for HDTV).

## **HDTV – High Definition Television**

High-resolution TV with a resolution up to 6 times sharper than PAL or NTSC, however it is incompatible with them, because the broadcasting uses the DVB-S2 transmission and the MPEG-4 compression .

The principal features of HDTV are the larger picture format (16:9), the doubled number of scanning lines (currently 625, increased to 1,250) and digital sound quality.

## **High Band**

Satellite frequency range between 11.7 GHz and 12.75 GHz.

## **H.264**

Another designation for MPEG-4.

## **LNB – Low Noise Block Converter**

Converts the satellite downlink frequencies to 1.Sat-IF.

## **Low Band**

Satellite frequency range between 10.7 GHz and 11.7 GHz.

## SHORT TECHNICAL GUIDE

### **MPEG-2**

MPEG is the abbreviation for Moving Picture Experts Group, a working group that formulates internationally applicable standards for the digital compression of video and audio. MPEG-2 has established itself as the standard for compression of digital TV signals. MPEG-2 works up to a data rate of 100 Mbit/s.

### **MPEG-4**

A further development of MPEG-2 with even higher data compression, intended for HDTV transmissions.

### **NID**

The channel identification number is also referred to as the Network ID or NID.

### **OSD – On-Screen Display**

Displays by the receiver on the TV screen (e.g. main menu)

### **PAL**

Analogue TV standard

### **Pay TV**

Television channels available on subscription (e.g. PREMIERE). Encrypted transmitters which can be decrypted only by using the appropriate smart card. As a rule these services are subscription-only.

### **PCMCIA**

Standard for internal decoder interface for pay TV

### **PID**

The PID (Packet IDentification) number is an identification number for video signals and audio signals in the digital data stream of DVB-MPEG -2 signals. The receiver uses the PID number to create a unique assignment for the video and audio data transmission. The PCR PID is the identification number for the synchronisation signal. The PID PCR is normally identical to the video PID. For programmes broadcast in multiple languages, the audio PD can be entered manually to assign a different language to the TV programme. After the PID is entered, the digital receiver automatically selects the audio data identified by the PID number from the data stream and assigns it to the video signal.

### **PIN**

Personal Identification Number. For this unit the PIN is a 4-digit numeric code which must be input to unblock the unit to allow access to certain functions and channels.

### **QAM – Quadrature-Amplitude-Modulation**

Digital modulation process with phase shift keying, which is used for transmissions in cable networks.

### **QPSK – Quadrature Phase Shift Keying**

Digital modulation process used for satellite transmission. (8PSK is also used in connection with HDTV)

### **Receiver**

Satellite receiver

### **RGB**

Video signal made up of three individual colour signals (red, green, blue)

## SHORT TECHNICAL GUIDE

### **SAT-IF signal**

Receiver input signal

### **Scart cable**

21-pin connecting cable (e.g. receiver/TV)

### **Smartcard**

Card from Pay TV provider to decode its channels

### **Stand-by**

Standby mode

### **Symbol rate**

The symbol rate describes the quantity of data that is transmitted per second. The symbol rate is measured in MSymbols/s and is equal to the number of symbols received per second.

### **Time-shift function**

Time-shifted playback

### **Timer function**

Clock function for pre-programmed switch on and off times

### **Transponder**

A transponder is a satellite channel which transmits TV and radio signals. A satellite has several transponders.

Analogue transponders transmit only one TV channel and possibly multiple radio channels on the transmission frequency.

Digital transponders simultaneously transmit several TV and several radio programmes at a transmission frequency. If a channel provider is broadcasting several TV channels via a digital transponder, we refer to this as the provider's channel package. The terms "digital transponder" and "channel package" have the same meaning.

### **VCR/DVR connection**

Connection for an external recorder (such as a video or DVD recorder)

### **Video-Bit-Rate**

The video bit rate describes the quantity of data from the digitised video signal that is transmitted per second.

### **Viterbi rate**

The Viterbi rate (code rate, error rate) characterises the error protection used by the programme provider. The DVB standard provides the following values: 1/2 - 2/3 - 3/4 - 5/6 - 7/8

## TROUBLESHOOTING

In the event of a malfunction, first check all the cable connections and operating states:

1. Receiver and TV set power plugs are connected to wall socket
2. Antenna cables on receiver input
3. Receiver and TV set correctly connected by a Scart or cinch cable
4. Audio connections are made to Hi-Fi or Dolby Digital system as appropriate
5. Receiver and TV set (Hi-Fi/Dolby Digital system) are switched on (check power indicators)
6. Receiver is responding to remote control

A selection of troubleshooting tips is offered below.

Problem	Cause	Remedy
"No or bad signal!" warning appears on some or all channels	Antenna signal of satellite reception system missing or faulty. Incorrect LNB frequencies set in "Antenna Configuration" menu.	Consult an antenna specialist to have it checked and repaired as necessary. On "Installation" menu check LNB configuration for the satellite in question: High L.O. "10,600" GHz, Low L.O. "9,750" GHz, and Limit frequency L.O. "11,700 MHz", and change as necessary.
Remote control no longer responding	Receiver or remote control command set may have been unintentionally changed	Set infrared code 1, as described in operating manual under "Remote Control RC 660"; check batteries
Wrong time being displayed	"Summer Time" setting wrong. An incorrect time was imported from the reception signal	On "Settings" - „Date and Time Setup“ menu check "Summer Time Enabled" and change as necessary Switch off receiver at mains switch from current channel, e.g. ARD or ZDF, wait 10 seconds and then switch back on
The following channels cut out or "No or bad signal!" appears: PRO 7, SAT1, Cable 1, DSF, N 24, Tele 5, 9 Live, HSE 24 and Sonnenklar TV	DECT telephones operate on the same frequency as these channels. Interference may occur due to inadequate level or poor shielding of cable	Consult your antenna specialist
Black or blue screen, no on-screen displays	Scart connection to TV deactivated by accidentally pressing the 0 button	Keep pressing the 0 button until the TV picture reappears on-screen

**FOR YOUR NOTES**

**FOR YOUR NOTES**

**FOR YOUR NOTES**

## SERVICE

If, despite studying this operating manual, you still have questions about getting started with the unit or using it correctly, or if unexpected problems occur, please contact your specialist dealer.