

# DVB cable receiver UFC 762si/sw



**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 cable receiver.

We have tried to make the operating instructions as easy as possible to understand, and to keep them as concise as possible.

If you will not be using your receiver for an extended period, you should use the power switch to disconnect it from the power supply to 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 C receiver.

Your

KATHREIN team

## RECEIVER FEATURES

The receivers UFC 762si and UFC 762sw are suitable for the reception of digital cable TV and radio channels.

The decoding systems for Conax and Cryptoworks are already integrated. In addition one Common Interface for a CA module is provided for decoding additional Pay-TV channels.

Despite their small size, these receivers have a comprehensive range of features, such as electrical and optical audio output for Dolby Digital (AC 3), Teletext with memory for 800 pages, and a 16-character alphanumeric display for showing the channel names.

## PRODUCT PACKAGE

- UFC 712si (silver) and UFC 712sw (black)
- Remote control RC 662
- Scart cable
- 2 Batteries AAA 1.5 V
- Power supply cable
- Operating Manual
- Safety Instructions

## IMPORTANT INFORMATION

The channels available are subject to continual change in the cable network. Accordingly it is necessary to update the channel presets when changes are made. The information for this reset 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 Update" section provides more information on this.

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



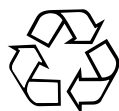
**In order to disconnect the UFC 762 from the mains completely, the mains plug must be unplugged from the wall socket! Therefore place the UFC 762 near to a wall socket and make sure the socket is accessible, so that at any time (e.g. during a thunderstorm or during a long absence) you can disconnect the receiver from the mains.**

## 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 concerning used electrical and electronic appliances, it must be disposed of properly.

At the end of its service life, take this receiver for disposal at a designated public collection point.



**Used batteries are special waste.**

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

## REFERENCE NOTE ON AUDIO MPEG INC. AND S.I.SV.EL, S.P.A:

This device employs legally protected technologies which are protected by patents in the USA as well as by intangible property laws in other countries.

Audio MPEG Inc. and Societa' Italiana per lo sviluppo dell'elettronica, S.I.SV.EL, S.P.A, have granted KATHREIN-Werke KG rights of use which are subject to certain restrictions. These restrictions must also be observed by you as a customer.

According to these, this device is only to be used by end customers for private, non-commercial purposes and for licensed content. Use for commercial purposes is not authorised. Utilisation of products or procedures sold or used with this device are not comprehended. With reference to licensed technologies, application of reversible procedures as well as dismantling of the device are both not permitted.

# CONTENTS

|  |           |
|--|-----------|
| <b>PREFACE .....</b>   | <b>2</b>  |
| <b>IMPORTANT INFORMATION .....</b>                                 | <b>3</b>  |
| <b>CONTENTS.....</b>   | <b>4</b>  |
| <b>SAFETY NOTES.....</b>   | <b>6</b>  |
| <b>CONNECTION AND SET-UP .....</b>                                 | <b>7</b>  |
| CONNECTING THE RECEIVER .....                                      | 7         |
| RF(HF) CONNECTION.....   | 7         |
| TV CONNECTION.....   | 7         |
| INSERTING BATTERIES INTO THE REMOTE CONTROL .....                  | 7         |
| <b>CONTROLS, DISPLAYS AND CONNECTIONS .....</b>                    | <b>8</b>  |
| <b>REMOTE CONTROL.....</b>   | <b>9</b>  |
| REMOTE CONTROL FUNCTION BUTTONS .....                              | 9         |
| <b>FIRST INSTALLATION .....</b>                                    | <b>10</b> |
| <b>OPERATION.....</b>  | <b>16</b> |
| USING THE REMOTE CONTROL .....                                     | 16        |
| CHANNEL SELECTION (TV AND RADIO).....                              | 16        |
| SELECTING A CHANNEL FROM THE CHANNELS LIST / FAVOURITES LIST ..... | 16        |
| BANNER .....   | 17        |
| VIDEOTEXT (TELETEXT).....  | 18        |
| ELECTRONIC PROGRAMME GUIDE (EPG) .....                             | 19        |
| SORT ORDER .....   | 19        |
| INFO (ADDITIONAL PROGRAMME INFORMATION) .....                      | 19        |
| TIMER PROGRAMMING FROM EPG .....                                   | 20        |
| AUDIO .....  | 21        |
| <b>COMMON INTERFACE .....</b>                                      | <b>22</b> |
| IMPORTANT INFORMATION .....  | 22        |
| INSERTING THE SMARTCARD AND THE CA MODULE .....                    | 22        |
| INSERTING THE CA MODULE INTO THE CI.....                           | 22        |
| INSERTING THE SMARTCARD INTO THE SMARTCARD READER .....            | 22        |
| <b>MAIN MENU.....</b>  | <b>23</b> |
| <b>BOX SETTINGS .....</b>  | <b>24</b> |
| VIDEO AND AUDIO SETTINGS.....                                      | 25        |
| LANGUAGE SETTINGS .....  | 26        |
| MENU SETTINGS.....   | 27        |
| MISCELLANEOUS SETTINGS.....  | 28        |
| RESTORE FACTORY SETTINGS.....                                      | 29        |
| <b>SEARCH FOR CHANNELS .....</b>                                   | <b>30</b> |
| AUTOMATIC SEARCH .....   | 31        |
| EXTENDED CHANNEL SEARCH .....                                      | 33        |
| MANUAL SEARCH.....   | 34        |

# CONTENTS

|  |           |
|--|-----------|
| <b>SORT CHANNELS.....</b>  | <b>35</b> |
| <b>TECHNICAL INFORMATION .....</b>                                 | <b>38</b> |
| CHANNEL INFORMATION.....   | 38        |
| SYSTEM INFORMATION AND SOFTWARE UPDATES VIA THE CABLE NETWORK..... | 39        |
| <b>TIMER .....</b>   | <b>40</b> |
| MANUAL TIMER SETTING .....   | 40        |
| AUTOMATIC TIMER SETTING.....                                       | 41        |
| DELETING A TIMER EVENT .....                                       | 41        |
| EDITING A TIMER.....   | 41        |
| <b>SECURITY .....</b>  | <b>42</b> |
| <b>CONDITIONAL ACCESS.....</b>                                     | <b>43</b> |
| CONAX CA - SMARTCARD READER.....                                   | 43        |
| CRYPTOWORKS CA - SMARTCARD IN THE SMARTCARD READER .....           | 44        |
| CHANGE MATURITY RATING .....                                       | 45        |
| CRYPTOWORKS - COMMON (CA MODULE).....                              | 46        |
| CHANGE MATURITY RATING .....                                       | 47        |
| <b>SOFTWARE UPDATE VIA INTERNET/SERVICE .....</b>                  | <b>48</b> |
| SOFTWARE UPDATE VIA INTERNET .....                                 | 48        |
| SERVICE .....  | 48        |
| <b>TECHNICAL APPENDIX.....</b>                                     | <b>49</b> |
| TECHNICAL FEATURES .....   | 49        |
| SCART SOCKET ASSIGNMENT .....                                      | 51        |
| VHS/S-VHS SWITCHING.....   | 51        |
| CONNECTION EXAMPLE.....  | 52        |

# SAFETY INSTRUCTIONS

*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.*

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## **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!*

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## **Connections**

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

## **Long periods of absence/storms/accessibility of the mains connector**

Always turn off the unit at the mains switch if you will be absent for a long time or there is a storm. 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. Ensure the mains connector is accessible at all times.



## **Installation location**

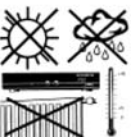
All electronic equipment generates heat. However, the heating of this unit lies within the permissible range. Sensitive furniture surfaces and veneers may become discoloured by the effects of constant heat over time. The feet of the unit can also cause colour changes to treated furniture surfaces. If 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, naked flames**

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! Do not expose the unit to any naked flame, such as from a candle! This constitutes a fire hazard!

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## CONNECTION AND SET-UP

The following section is intended specifically for specialist dealers. You need not refer to this section unless you are carrying out the installation yourself. The “Connection Example” section provides a sample configuration.

Do not connect the receiver to the mains until all installation work has been properly carried out. Refer also to the information in the “Safety Instructions” section.

### CONNECTING THE RECEIVER

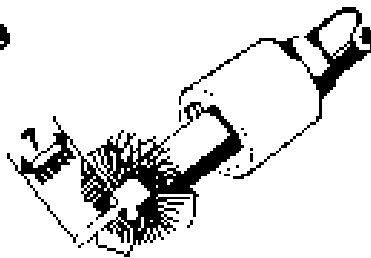
#### RF(HF) CONNECTION

Connect the RF input of the receiver to the antenna socket.

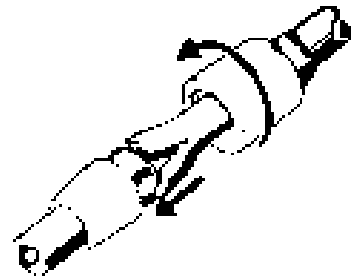
Use a coaxial cable with a standard IEC connector. If the IEC connector is not yet fitted to the cable, strip the insulation from the cable as shown in the following illustration and carefully fit the connector on to the end of the cable so that it is securely fitted.



Lengthwise slits (3x)



Bend back



Screw together



When fitting the connector, make sure that no wires from the braiding are touching the inner conductor, otherwise a short circuit will occur.

The quality of the reception signal depends on this connection!

#### TV CONNECTION

Connect the cable receiver (TV Scart socket) to the TV set using a Scart cable. If your TV has a stereo feature, you can receive the sound in stereo via the Scart connection. Connect the cable receiver to the video/DVD recorder using a Scart cable.

#### INSERTING BATTERIES INTO THE REMOTE CONTROL

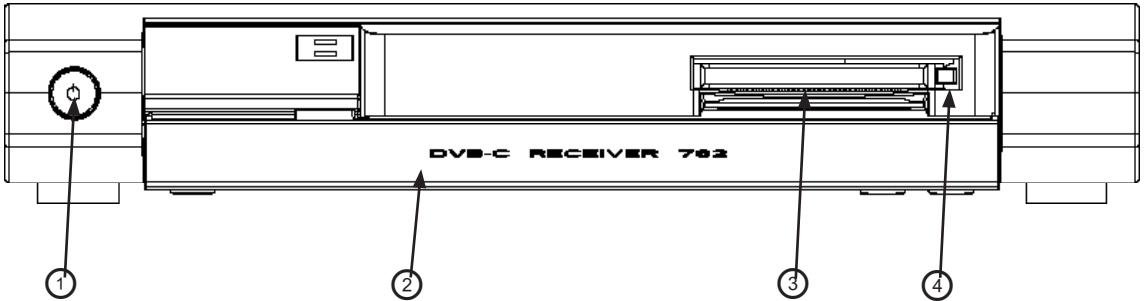
Remove the cover on the rear of the remote control.

Insert the two batteries supplied 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 into place.

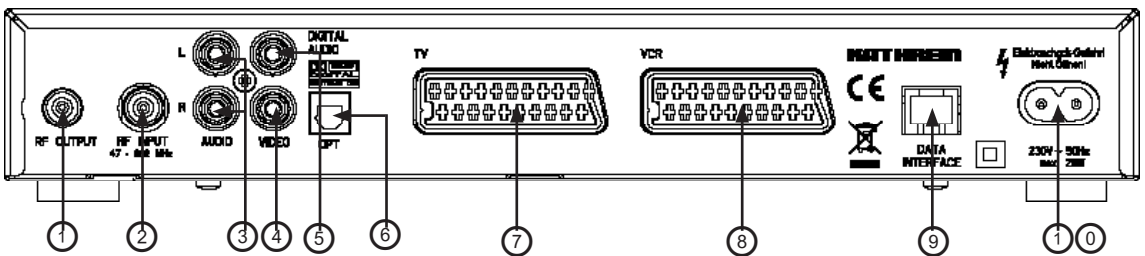
# CONTROLS, DISPLAYS AND CONNECTIONS

This section provides a brief description of all the controls, displays and connections.

## VIEW OF FRONT PANEL (FLAP FOLDED DOWN)



## VIEW OF REAR PANEL



### Front panel controls and displays

1. On/Off switch
2. Display (cover folded down)
3. Common Interface and Smartcard reader for accepting a CA module and for Pay-TV cards \*)
4. Ejection button for the CA module

In addition there are three further buttons on the front of the display

- TV/R button for switching between TV and radio mode
- Channel select buttons (▼▲)

### Rear panel controls and displays

1. RF(HF) loop-through output
2. RF(HF) input
3. Audio outputs (L/R) cinch sockets
4. Video output (composite colour)
5. Electrical data stream output (SPDIF/ Sony Philips Digital Interface Format) for Dolby Digital AC 3 audio
6. Optical data stream output (SPDIF/ Sony Philips Digital Interface Format) for Dolby Digital AC 3 audio
7. Scart socket for TV connection
8. Scart socket for VCR-/AUX connection
9. RJ 11 data interface
10. Mains power cable

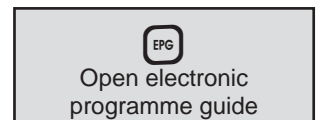
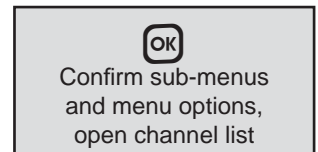
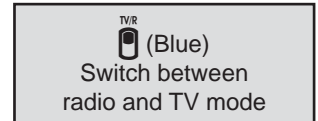
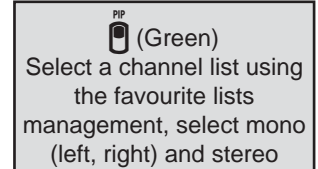
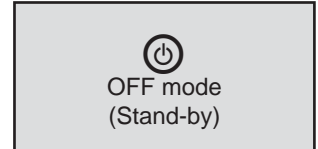
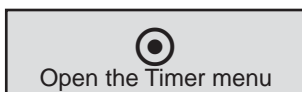
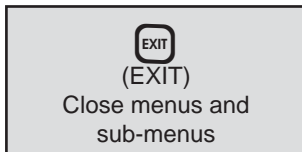
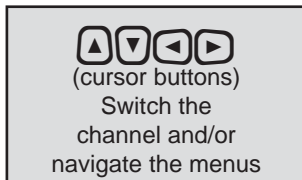
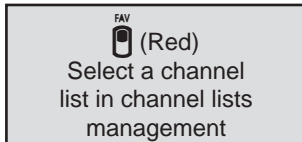
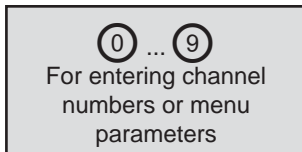
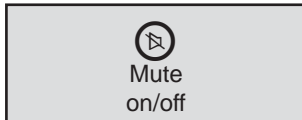
\*) CA module and Pay-TV cards (Smartcards) are not included



# REMOTE CONTROL

## REMOTE CONTROL FUNCTION BUTTONS

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



# FIRST INSTALLATION

Before using your receiver 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 receiver to the power supply until all installation work has been properly carried out.

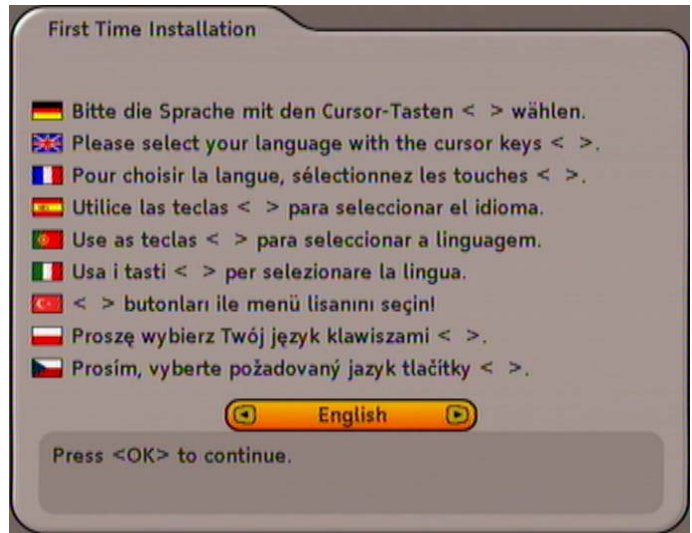
The guidance given in the “First Installation” section assumes that the receiver has been properly connected as per the “Safety Instructions” and “Connection and Set-Up” sections.

First switch your TV set on and select the AV channel slot. Connect your receiver to the mains and switch it on using the power switch on the front of the receiver. The following display appears:



Press the  button to start the first installation. The following display appears:

# FIRST INSTALLATION



Use the ◀▶ buttons to select the desired menu language. Pressing the OK button loads the desired menu language and calls up the next menu:



Press the ◀▶ buttons to select the desired country. Press the ▲▼ buttons to access the “Screen Format” line. Use the ◀▶ buttons to set the screen format for your TV set. Refer to the user guide / operating instructions for your TV set.

Press the ▲▼ buttons in the “TV Output Format” line. Use the ◀▶ buttons to select the signal that your TV set can process.

Press the ▲▼ buttons to access the “Network search” line.

# FIRST INSTALLATION

Use the ◀▶ buttons to select whether the network search should be “On” or “Off”. If the network search is set to “On” you will be shown the “Manual Search” in the next display. You should use this if your cable network operator has advised you of the frequency that can be searched.

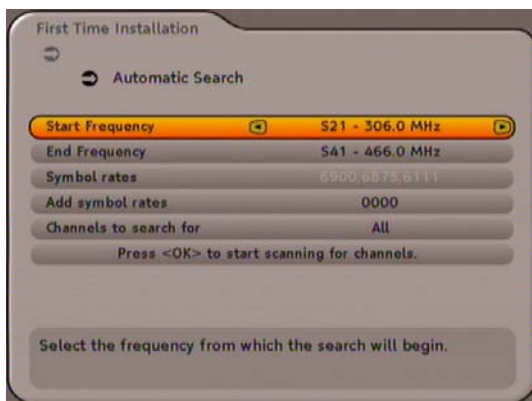
If you do not know the frequency or frequencies to be searched, set the network search to “Off”. You will

then be shown the “Automatic Search”. Press the ▲▼ buttons to access the line “Sorting”. Use the ◀▶ buttons to specify how the channels should be sorted in the channel list. You have the following options: “A to Z”, “Z to A”, by “Provider”, “Service ID” or “None”.

Press the ▲▼ buttons to access the next line. Press the OK button to go to the next menu:

**Note:** *The frequencies, symbol rates and modulation settings used, and the channels available, may be different for different cable network operators. So as to keep the search time as short as possible, you can ask your cable network provider in advance for information on which channels are transmitted on which frequencies with which symbol rates and with which sort of modulation, and then set up the search accordingly.*

## Network search “Off”

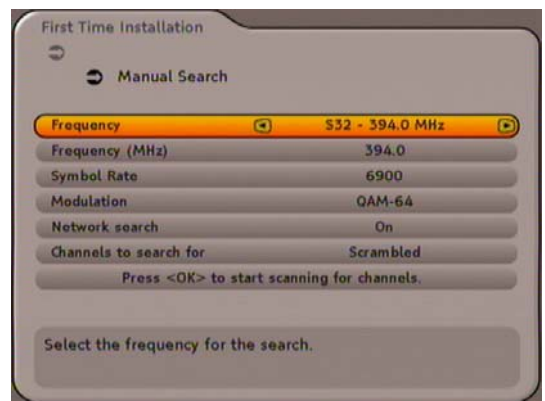


If you do not know the frequencies used by your cable network operator, use the ◀ button to select the lowest frequency permitted by the receiver for starting the search (keep the ◀ button pressed until the ◀ button is no longer shown in the start frequency line).

Press the ▲▼ buttons to access the next line.

Press the ▶ button to select the highest permitted by the receiver for ending the search (keep the ▶ button pressed until the ▶ button is no longer shown in the end frequency line).

## Network search “On”



If you know your cable network provider's frequency, use the ◀▶ buttons to set the desired start frequency for the search.

Press the ▲▼ buttons to access the next line. If necessary you can input the frequency again at this point, using the numeric pad buttons.

Press the ▲▼ buttons to access the next line. If necessary you can input the symbol rate again at this point, using the numeric pad buttons on the remote control.

Press the ▲▼ buttons to access the next line. If necessary you can set the type of modulation at this point, using the ◀▶ buttons.

Press the **▲▼** buttons to access the next line. If necessary you can add another symbol rate for the search for channels in addition to the usual one (shown in grey). You can use the numeric pad on the remote control to do this.

Press the **▲▼** buttons to access the next line.

If necessary you can use the **◀▶** buttons to change the network search settings again.

Press the **▲▼** buttons to access the next line.

Use the **◀▶** buttons to perform the settings for the channels to search for. You can select from "All", "Only encrypted" and "Only free to air".

Press the **▲▼** buttons to access the next line.

Pressing the **OK** button starts the search for channels.

Press the **▲▼** buttons to access the next line.

If necessary you can use the **◀▶** buttons to change the network search settings again.

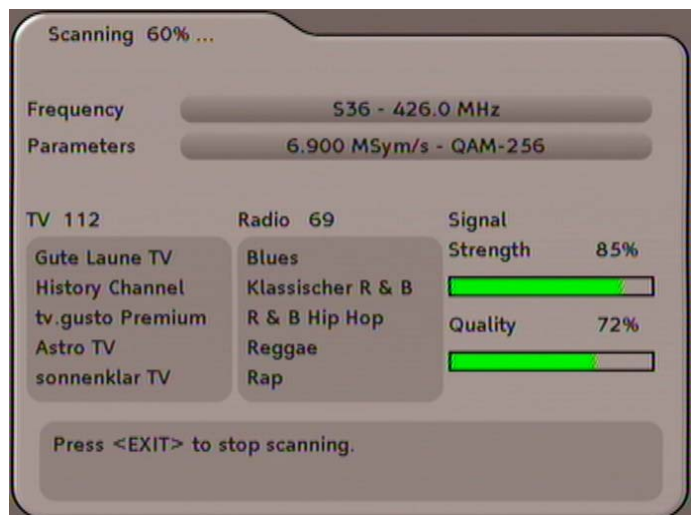
Press the **▲▼** buttons to access the next line.

Use the **◀▶** buttons to perform the settings for the channels to search for. You can select from "All", "Only encrypted" and "Only free to air".

Press the **▲▼** buttons to access the next line.

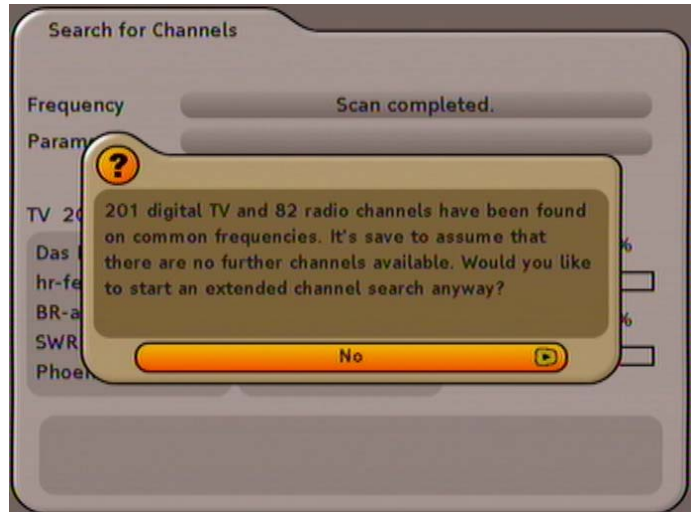
Pressing the **OK** button starts the search for channels.




The following display appears (example):



# FIRST INSTALLATION

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




If it happens that not all the channels available on the cable network are found, you can set the   buttons to "Yes" and start searching again by pressing the  button. Normally however this will not find any further channels.

At the same time press the  button.


The following display appears:



Pressing the  button confirms and loads the channels that were found into the channel list. The following display appears:

## FIRST INSTALLATION



Press the  button to confirm. The first installation is now complete and your settings will be saved. The receiver will automatically return to the TV picture.

# OPERATION

## USING THE REMOTE CONTROL

Press the **OK** button to confirm settings in the menus or to open sub-menus. Change the settings line by line and press the **OK** button to save your changes. Press the **EXIT** button to quit the menu or to switch from a sub-menu to the next higher menu level.

Use the **▲▼** buttons to navigate through the menus. Use the **◀▶** buttons to edit the individual fields. You can also key in values in the fields using the numeric pad.

The coloured buttons are used for the functions within the various sub-menus. These functions are displayed on-screen for the respective menus. In each menu a line is displayed at the bottom of the screen explaining the various functions available.

## CHANNEL SELECTION (TV AND RADIO)

You can select the channels directly in the order in which they are saved using the **Ⓢ** buttons. You can only select between the channels in the currently selected channel list or favourite channel list.

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

**When you first select an encrypted channel the receiver will display a screen requesting that you set up a Maturity Rating. Setting up the Maturity Rating is described in the “Conditional Access (Common Interface)” and “Setting up the Maturity Rating” chapters. If you do not set up a Maturity Rating, you will see this notice again when next you select an encrypted channel.**

## SELECTING A CHANNEL FROM THE CHANNELS LIST / FAVOURITES LIST

Open the currently selected channel list by pressing the **OK** button. The following display appears (example):

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

Press the **FV** button (red) to switch between the existing favourites lists and the channels list. Empty favourites lists are not displayed.

Use the **▲▼◀▶** buttons to select the desired channel and then press the

**OK** button twice.

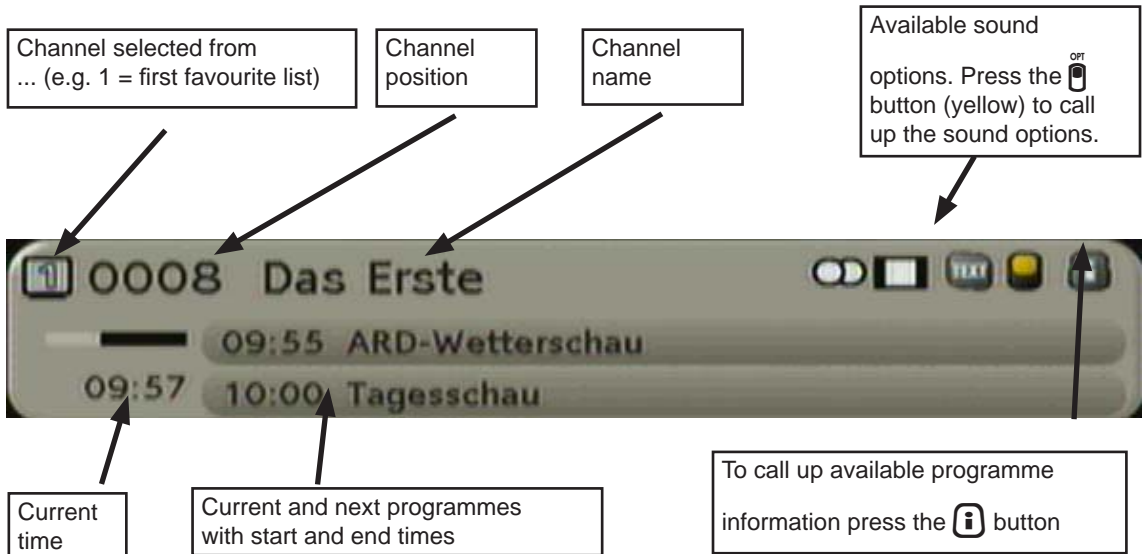







# OPERATION

## BANNER

When switching to a different channel or at the start of a new program the following information is displayed on the screen:

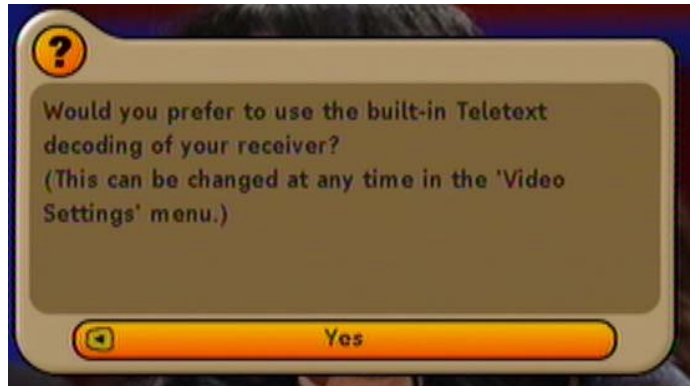


Press the  button to obtain additional information about the next programme. Press the  button to obtain additional information about the current programme. Press the  button to exit the additional information.

# OPERATION

## VIDEOTEXT (TELETEXT)

Press the **TEXT** button to open Teletext. When Teletext is called up for the first time you will be asked whether you wish in future to call up Teletext using the receiver remote control or as previously using the TV set remote control (see screen shot below). Use the **◀▶** buttons to select the desired variant and press the **OK** button to confirm.



When using Teletext via the receiver remote control:




You can open the required Teletext page using the number pad.


You can scroll back and forward using the **▲▼** buttons. Pressing the **TEXT** button again renders the Teletext display transparent.

To exit Teletext press the **EXIT** button.

# OPERATION

## ELECTRONIC PROGRAMME GUIDE (EPG)

Press the  button to open the electronic programme guide. The following display appears (example):











The screenshot shows the EPG interface for channel TV\*0006 3sat. At the top, there are tabs for the days of the week: Mon, Tue, Wed, Thu, Fri, Sat, Sun. The 'Mon' tab is selected and highlighted with an orange bar. Below the tabs, a list of programmes is displayed with their start times and names:


- 08:15 NDR Talk Show
- 10:15 Paradies der Störche - Naturreservat an der March
- 11:00 ZIB
- 11:15 Mittelmeer am Oberrhein
- 12:00 Verlorenes Spiel
- 13:45 Mit dem Zug von Berlin nach Bagdad
- 14:30 Bilderbuch Deutschland

At the bottom of the screen, there are three colored buttons: a red button labeled 'Morning', a green button labeled 'Afternoon', and a yellow button labeled 'Evening'. Below these buttons, the current date and time are displayed: '09:26 Mon 23 Jul 2007'. To the right of the date and time, there are two more buttons: a blue button labeled 'Set Timer' and a grey button with an information icon.




Callouts from the surrounding text boxes point to these elements:

- Weekdays:** Points to the day tabs (Mon, Tue, etc.).
- Channel location and name (change channel by pressing the  buttons):** Points to the channel name 'TV\*0006 3sat'.
- Pressing the  button (blue) sets up the timer for the selected programme:** Points to the 'Set Timer' button.
- List of the current programmes with data on their start times and names:** Points to the programme list.
- Shows all programmes for the afternoon ( button green) / morning ( button red):** Points to the 'Morning' and 'Afternoon' buttons.
- Current date and time:** Points to the '09:26 Mon 23 Jul 2007' display.
- Shows all programmes for the evening ( button, yellow):** Points to the 'Evening' button.
- Shows, if available, additional information on the selected programme ( button):** Points to the information icon button.


Use the  buttons to select the desired channel and use the  buttons to select the desired programme.

Use the  buttons to switch between the displayed days of the week. The selected day of the week and the selected programme are each indicated by an orange bar. The EPG shows you, provided the information is available, the current programmes on each channel.

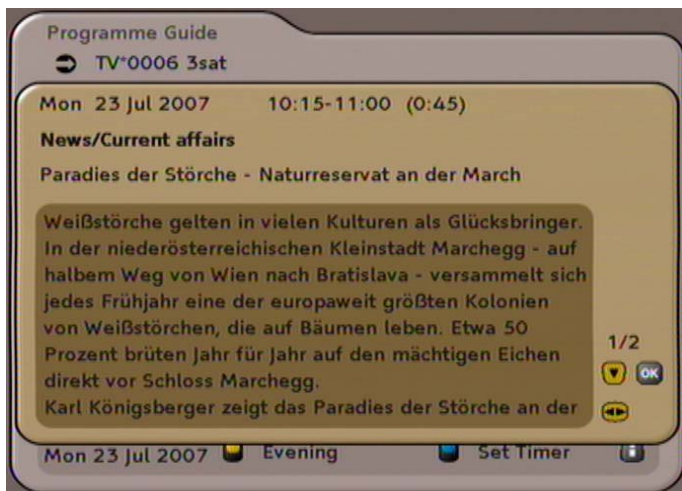
## SORT ORDER

Press the  button (red) to obtain the programmes for the morning, press the  button (green) to obtain the programmes for the afternoon, and press the  button (yellow) to obtain all the programmes for the evening.

## INFO (ADDITIONAL PROGRAMME INFORMATION)

Press the  button to obtain additional information on the selected programme (if available). The following display appears (example):

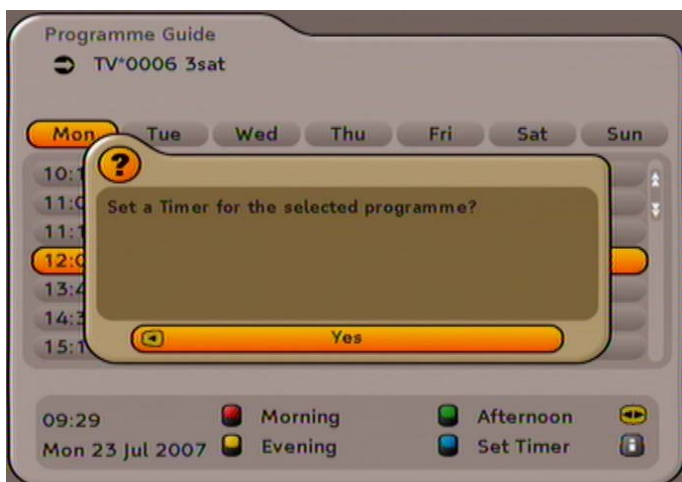
# OPERATION



Press the buttons to page through the additional information (if there is more than one page). Use the buttons to obtain additional information on the next programmes and press the button to exit the additional information again.

## TIMER PROGRAMMING FROM EPG

The receiver offers you the facility to use the (blue) button to load a programme directly from the EPG into the timer. Use the buttons to select the desired programme. An orange bar is placed behind the selected programme. Now press the (blue) button to load the selected programme into the timer. The following display appears (example):



The receiver asks once again whether a timer should be programmed for the selected programme. Use the buttons (Yes/No) and start the selection by pressing the button.







## OPERATION

The receiver copies the data available from the EPG directly to the information for programming the timer.

**You must program your external recorder identically to the receiver!**

Further information on creating and editing (changing/deleting) timers can be found in the "Timer" chapter.

## AUDIO

Press the  (yellow) button to display the audio and subtitle information (TV or radio) transmitted with the programme being received. Select the desired option using the   buttons and load it by pressing the  button. Press the  button to return to the TV picture. Press the  (green) button to allow selection of mono left, mono right, mono and stereo directly on the TV screen.



# 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!

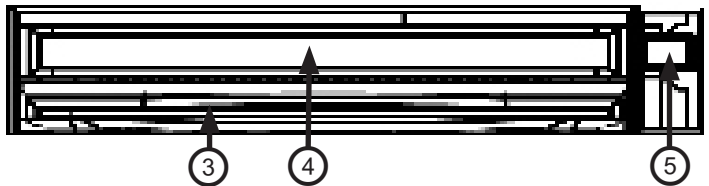
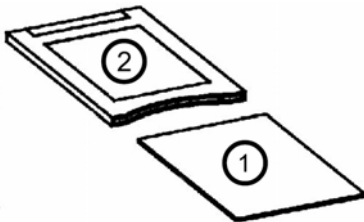
The Smartcard sold by the Pay-TV provider, specific to a particular encryption technology, is inserted into the CA module.

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



## INSERTING THE SMARTCARD AND THE CA MODULE

### INSERTING THE CA MODULE INTO THE CI



The Common Interface (CI) (4) of the UFC 762si/sw can accept one CA (Conditional Access) module. The CI slot is under the display at the right of the front panel.

The CA module (2) draws in the Smartcard (1) (chip contacts pointing upwards and towards socket strip) which it then inserts into the CI slot (4).


Insert the Smartcard into the CA module without excessive force. This also applies to inserting the CA module into the CI slot. Do not use excessive force, and follow the instructions supplied with the Smartcard and the CA module.

To remove the module, press the relevant eject button (5).

### INSERTING THE SMARTCARD INTO THE SMARTCARD READER

The Smartcard is inserted into the Smartcard reader (Cryptoworks embedded) (3) in exactly the same way as into the CA module, except that in this case the chip contacts point downwards.


# MAIN MENU


Press the  button to open the main menu. The following display appears:



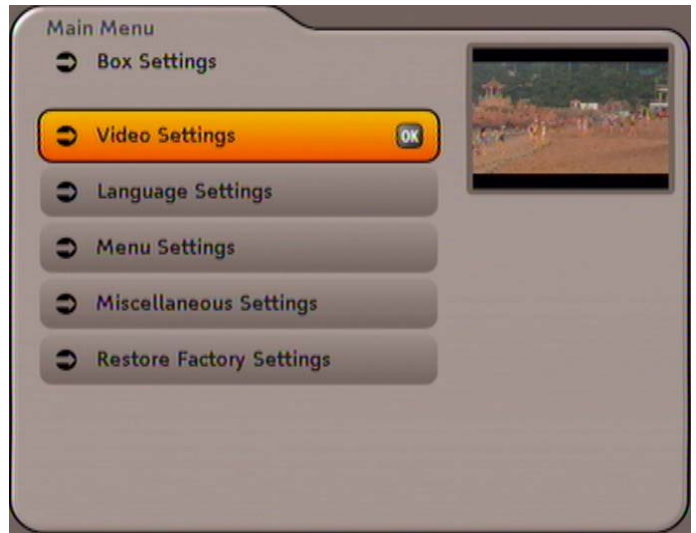
Seven sub-menus are available, as detailed below:

- 1) **Box Settings**  
Various facilities are available for setting the picture, the language, the menu and for resetting to the factory settings
- 2) **Search for Channels**  
Automatic, Extended and Manual Searches
- 3) **Sort Channels**  
Organisation of the favourites lists (adding channels to and removing channels from the favourites lists, sorting the favourites lists)
- 4) **Technical Information**  
Programme and system information
- 5) **Timer**  
Setting and changing the timer
- 6) **Security**  
Locking the receiver, locking menus, maturity rating, changing the receiver PIN
- 7) **Conditional Access**  
Smartcard reader and Common Interface

Use the   buttons to select the desired sub-menu and press the  button to open the menu.

To quit the menu and save the changes, press the  button.

# BOX SETTINGS



Five submenus are available, as detailed below:

- 1) **Video Settings**  
Specifying the video settings
- 2) **Language Settings**  
Setting the menu, subtitle and audio language
- 3) **Menu Settings**  
Specifying various menu settings
- 4) **Miscellaneous Settings**  
Time Zone Adjustment, the audio output format, the automatic output of Dolby Digital, the audio delay (if used) and the sorting of the channel list
- 5) **Restore Factory Settings**  
Restore Factory Settings

Use the **▲▼** buttons to select the desired sub-menu and press the **OK** button to open the menu.



To quit the menu and save the changes, press the **EXIT** button.





# BOX SETTINGS

## VIDEO AND AUDIO SETTINGS

Also pay attention to the bars at the bottom of the on-screen display! These provide information on what to do next.

Use the   buttons to select the line you want to change. Use

the   buttons to make the changes.



### Screen Format:

Select your TV's format here. Either 4:3 (letterbox 14:9), 4:3 (letterbox 16:9), 4:3 (Pan & Scan/CCO) or 16:9/wide-screen TV

### Picture Scaling:

Here select how the receiver should display a picture which does not match its pre-set format. For screen format 4:3: Either "Letterbox 14:9", "Letterbox 16:9", or "Pan & Scan/CCO" For screen format 16:9 / wide-screen TV: Either "Stretched", "Zoom" or "Pillarbox"

### TV Output Format:

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

### **Refer to the operating instructions for your television set!**

You can choose from the following settings: RGB (Red/Green/Blue signal), S-video (luminance/chrominance) and CVBS (Colour Video Baseband Signal)

### VCR Output Format:

Select the type of video signal that should be present at the VCR Scart socket. Select the signal that your external recorder can process. Available options: S-video and CVBS

### **Refer to the operating instructions for your recorder!**

### AFD Automatic:

This function corrects the screen format automatically if the broadcast screen format varies from that displayed

### Teletext:

You can select whether the Teletext is controlled by the TV remote control (external, Teletext signal is processed by the TV set) or by the receiver remote control (internal, Teletext signal is processed by the receiver).

## BOX SETTINGS

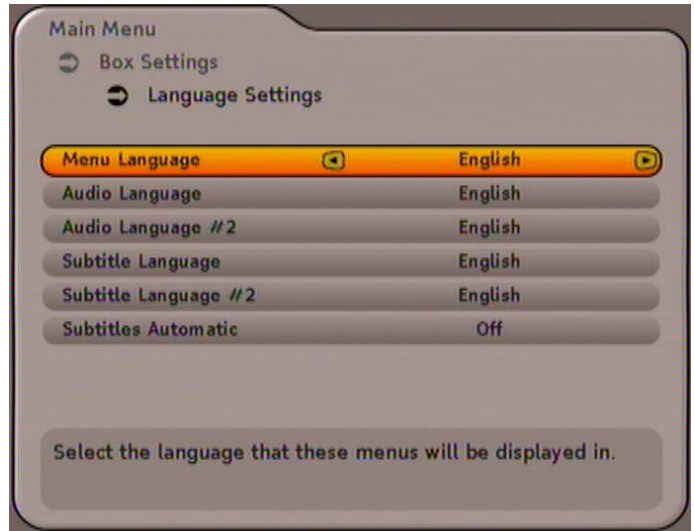
### Restore Default Settings:

Here you can restore the default settings for picture and sound

To quit the menu and save the changes, press the **EXIT** button.

## LANGUAGE SETTINGS

Also pay attention to the bars at the bottom of the on-screen display! These provide information on what to do next.



Use the **▲▼** buttons to select the line you want to change. Use the **◀▶** buttons to make the changes.

### Menu Language:

Select the required menu language. Available options: German, English, French, Spanish, Portuguese, Italian, Turkish, Polish, Czech and Russian.

### (First) audio language and second audio language:

Select here the required audio languages. Available options: German, English, French, Spanish, Portuguese, Italian, Turkish, Polish, Czech, Russian, Swedish, Finnish, Danish, Norwegian, Dutch, Slovakian, Catalan, Basque, Greek, Icelandic, Welsh and Gaelic.

### (First) subtitle language and second subtitle language:

Select here the required subtitle language. Available options: German, English, French, Spanish, Portuguese, Italian, Turkish, Polish, Czech, Russian, Swedish, Finnish, Danish, Norwegian, Dutch, Slovakian, Catalan, Basque, Greek, Icelandic, Welsh and Gaelic.

### Subtitles Automatic:

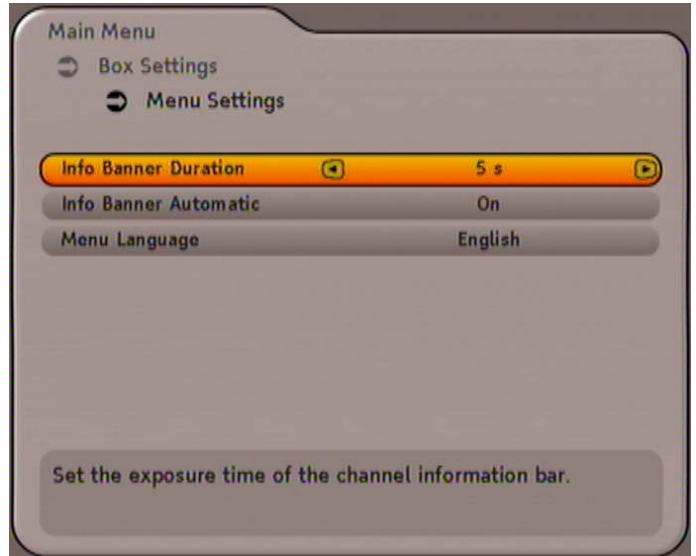
Here you can set whether subtitles are displayed automatically or not.

To quit the menu and save the changes, press the **EXIT** button.

# BOX SETTINGS

## MENU SETTINGS

Also pay attention to the bars at the bottom of the on-screen display! These provide information on what to do next.



Use the **▲▼** buttons to select the line you want to change. Use the **◀▶** buttons to make the changes.

### Info Banner Duration:

Here you can set the following banner display times: “Permanent”, “None” and then in 1-second steps up to 15 seconds.

### Info Banner Automatic:

Here you can set whether the info banner is automatically displayed at the start of a broadcast or not.

### Menu Language:

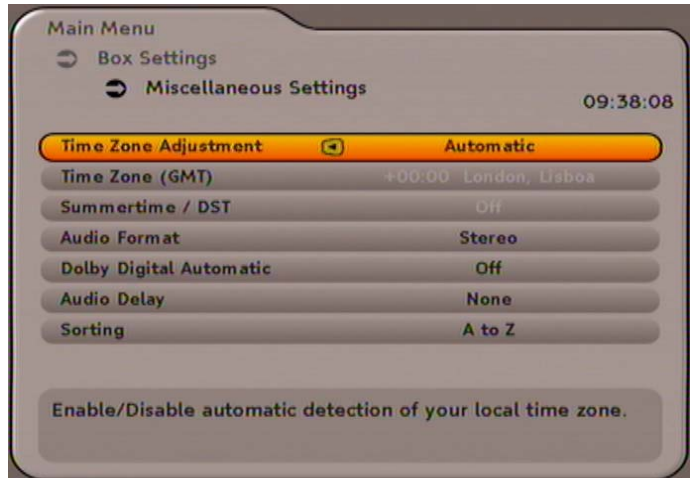
Here you can set the following menu languages: German, English, French, Spanish, Portuguese, Italian, Turkish, Polish and Czech.

To quit the menu and save the changes, press the **EXIT** button.

# BOX SETTINGS

## MISCELLANEOUS SETTINGS

Also pay attention to the bars at the bottom of the on-screen display! These provide information on what to do next.



Use the **▲▼** buttons to select the line you want to change. Use the **◀▶** buttons to make the changes.

### Time Zone Adjustment:

Here you can set whether the time zone is set automatically or manually.

### Time Zone (GMT):

Here you can manually set the time zone (available only if “Time Zone Adjustment” is set to “manual”).

### Summer Time / DST:

This menu item switches summer time on and off (available only if “Time Zone Adjustment” is set to “manual”).

### Audio Format:

Select the standard audio output format here. You have the choice between “Mono (from the right channel)”, “Mono (from the left channel)”, “Mono (total)” and “Stereo”. These audio operating modes “Mono from the left channel” etc. are important if you wish to hear two different languages for the TV programme simultaneously (DUAL operating mode).

### Dolby Digital Automatic:

Here you can select whether the receiver should automatically deliver Dolby Digital sound (when broadcast) to the Dolby Digital output.

### Audio Delay:

Here you can select whether the sound should be output with a delay of (100/200/300/400 or 500 milliseconds). You can use this in the event that the sound and picture are not output synchronously at the TV set. If no delay is required, set the delay to “None”.

### Sorting:

Here you can specify the sorting of the channel lists. You can select from “Channel providers” (such as ARD), “A to Z” (alphabetic) or “None”. To quit the menu and save the changes, press the **EXIT** button.

# BOX SETTINGS

## RESTORE FACTORY SETTINGS



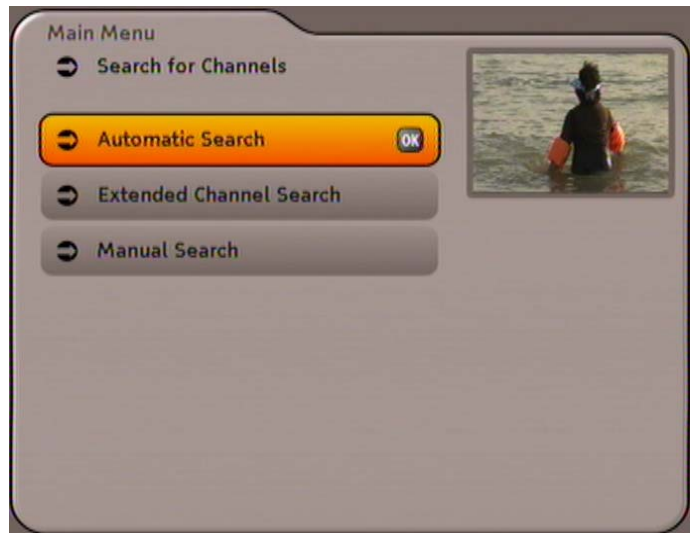
Here you can restore all the settings to the pre-programmed factory settings.



**All your personal preferences (favourites lists, channel sorting, etc.) will be deleted!**

Use the ◀▶ buttons to change to “Yes” and confirm the restore by pressing the OK button.

## SEARCH FOR CHANNELS



Select the search you want using the **▲** **▼** buttons and call up the desired sub-menu by pressing the **OK** button. You can choose between:

### Automatic Search:

Here you can initiate a search over the preset broadcasting frequencies for the receiver or over the range of frequencies that you select.

### Extended Channel Search:

Here you can initiate a search over all the broadcasting frequencies that can be received by your receiver.

### Manual Search:

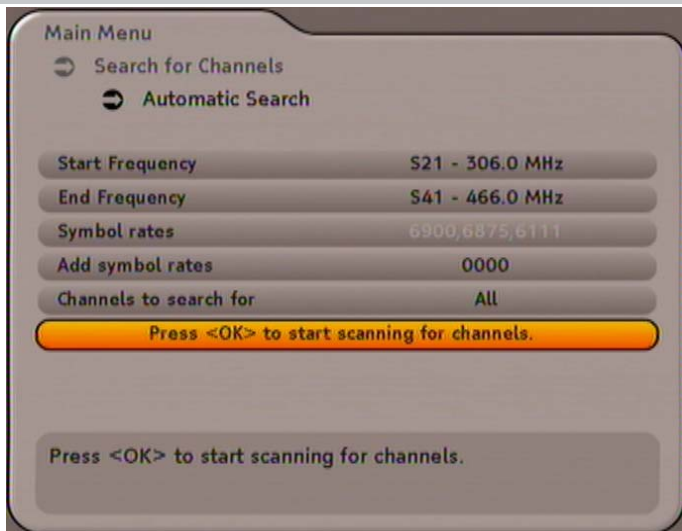
Here you have several setting options for initiating a selective search.

# SEARCH FOR CHANNELS

## AUTOMATIC SEARCH



The frequencies and symbol rates, and the channels available, may be different for different cable network operators. So as to keep the search time as short as possible, you can ask your cable network provider in advance for information on which programmes are transmitted on which frequencies and channels and with which symbol rates, and then set up the search accordingly.



Use the buttons to select the start frequency for the search.

Press the buttons to access the next line.

Use the buttons to select the end frequency for the search.

Press the buttons to access the next line. If necessary you can input further symbol rates at this point, using the numeric pad buttons on the remote control.

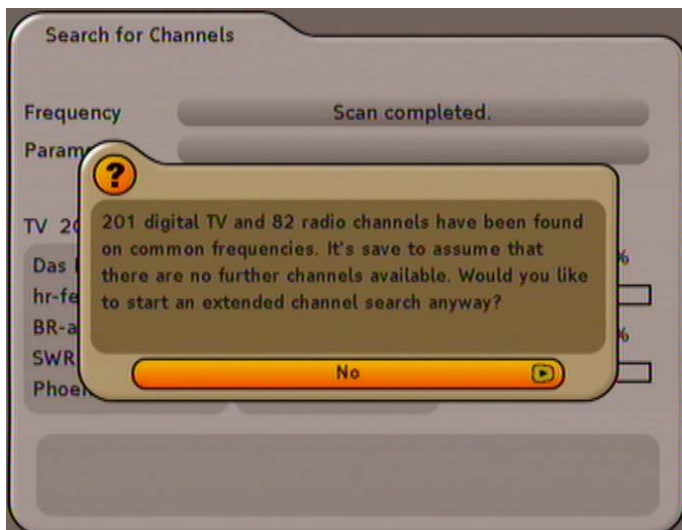
Press the buttons to access the next line. Use the buttons to perform the settings for the channels to search for. You can select from "All", "Only encrypted" and "Only free to air".




Press the buttons to access the next line. Press the button to start scanning for channels.



## SEARCH FOR CHANNELS





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



If it happens that not all the channels available on the cable network are found, you can set the   buttons to "Yes" and start searching again by pressing the  button. Normally however this will not find any further channels.

At the same time press the  button.

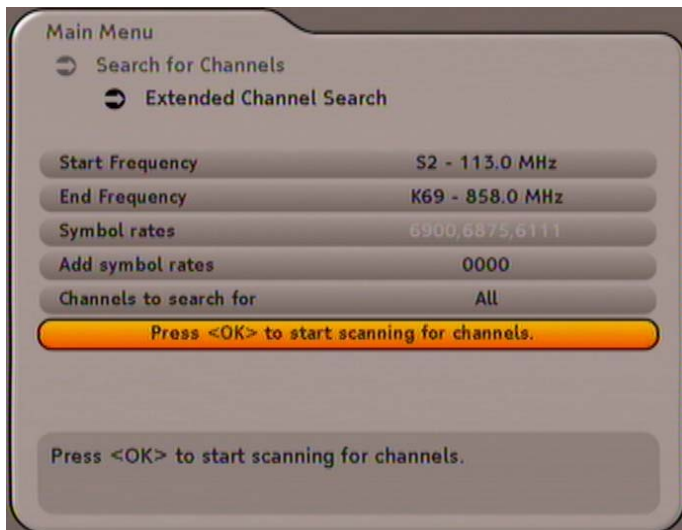


Use the   buttons to select whether you wish to add new channels to the old ones, to replace the old channel list or to discard the new channels. Press the  button to confirm your selection. Press the  button to exit the menu and return to the TV picture.







# SEARCH FOR CHANNELS

## EXTENDED CHANNEL SEARCH



The pre-setting in this search is automatically set to the lowest start frequency and the highest end frequency available in the receiver. This ensures that all frequencies that the receiver is capable of receiving are searched for available channels.

You can however use the   buttons at any time to set the properties of the search. Use the   buttons to select the lines to be edited.

If you require additional symbol rates you can use the numeric pad to add these in the line "Add symbol rates".

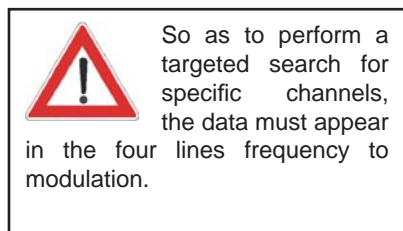
You can furthermore use the "Channels to search for" line to select whether "All" channels (free to air and encrypted) should be searched, or "Only encrypted" or "Only free to air" channels.











Press the   buttons to access the last line. Pressing the  button starts the "Search for Channels".





The rest of the procedure (and displays) is identical to the automatic search.





# SEARCH FOR CHANNELS





## MANUAL SEARCH



Use the   buttons to select the transmission channel (with transmission frequencies) that is to be searched. Press the   buttons to access the next line. If the displayed transmission frequency does not match your data, you can use the numeric pad to enter it here manually. Press the   buttons to access the next line. If the displayed symbol rate does not match your data, you can also use the numeric pad to enter it here manually. Press the   buttons to access the next line. If the displayed modulation does not match your data, you can use the   buttons to enter it here manually.

Press the   buttons to access the next line. If the displayed modulation does not match your data, you can use the   buttons to enter it here manually.

Press the   buttons to access the "Network search" line. Use the   buttons to select whether the network search should be "On" or "Off". If the network search is "On", the networking between individual cable transponders is used to find new cable transponders that have not yet been saved. These too are then searched for new channels.

Press the   buttons to access the next line. Use the   buttons to perform the settings for the channels to search for. You can select from "All", "Only encrypted" and "Only free to air".





Press the   buttons to access the next line. Pressing the  button starts the "Search for Channels".

The rest of the procedure (and displays) is identical to the automatic search.


## SORT CHANNELS

Four favourites lists for TV and four for radio are available to you for sorting the channels within the channel lists. You can make up each favourites list with any channels you like. TV and radio channels cannot however be mixed within a single favourites list!



Pressing the  (blue) button toggles between the TV and radio favourites lists. Changes are executed in the same way in both sets of lists. Use the   buttons and the  button to call up the desired favourites list to which you wish to add channels or from which you wish to delete channels.



Before you start to assign channels to favourites lists you can filter the existing channels using certain criteria. Press the  (yellow) button to go to the "Filter channels" menu:

# SORT CHANNELS

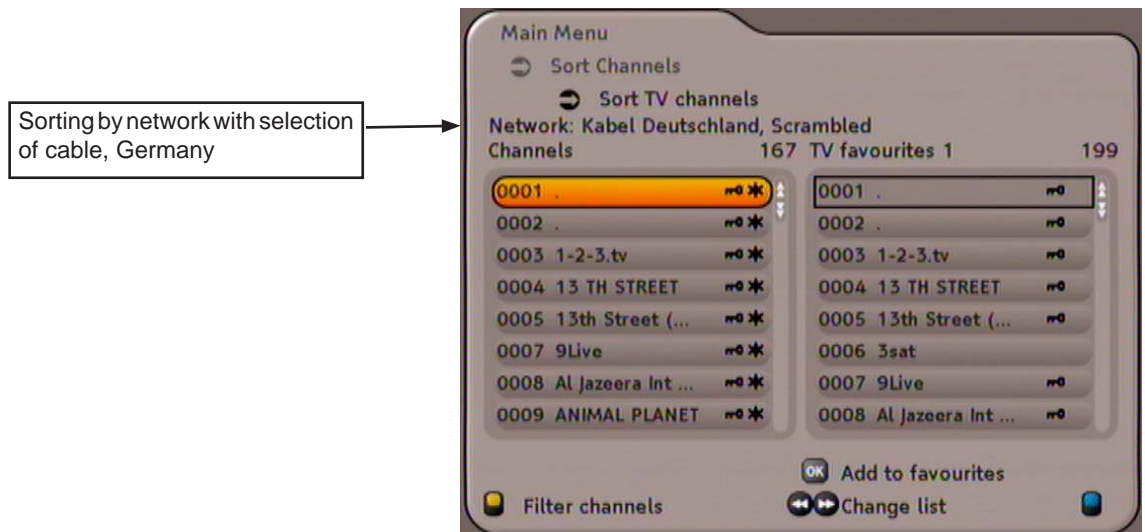
The following display appears:



Use the buttons here to select the lines to be edited and use the buttons to perform the settings. You have the following selection options:

- Channels: "All", "Only free to air" or "Only encrypted"
- Filter by: "No other filters", "Network" (e.g. cable, Germany) or "Providers" (e.g. ARD)
- Network (available only if "Network" selected under the item "Filter by"): e.g. Cable Germany
- Sorting: "Number" (numbering from the channel list), "A-Z" or "Z-A"

After you have made all the settings, use the buttons to go to the "OK" line and press the button. Your sorting for assigning channels from the channel list to the favourites list will be loaded. The following display appears (example):



# SORT CHANNELS

Use the **▲▼** buttons to identify the desired channel in the channel list that you wish to load into the favourites list. Press the **OK** button and the channel will be added to the favourites list. A channel that is included in any of the four favourites lists is marked in the channel list with a “\*”.



Use the **◀▶** buttons to switch between the channel list and the favourites list. You have the options of deleting individual channels from the favourites list, deleting all channels from the favourites list and moving individual channels around within the favourites list.

## Deleting a channel:

Use the **▲▼** buttons to select the channel you wish to delete and press the **FAV** (red) button. The channel immediately disappears from the favourites list; no confirmation message is issued.

## Deleting All Channels:

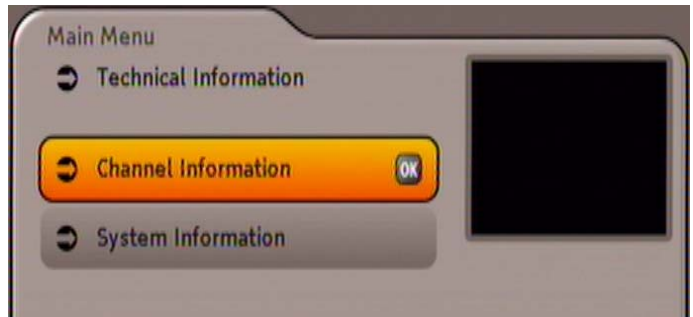
Pressing the **OPT** (yellow) button immediately deletes all channel from the favourites list; no confirmation message is issued.

## Moving channels:

Use the **▲▼** buttons to select the channels that you wish to move. Pressing the **OK** highlights the channel name. Now use the **▲▼** buttons to select a new position for the channel and once again press the **OK** button.

When you have finished editing the favourites list, press the **EXIT** button. Use the **◀▶** buttons in the screen that is displayed to select whether you wish to save the changes (selection “Yes”) or not save the changes (selection “No”) or whether you wish to cancel the session (selection “Cancel”). Confirm your selection with the **OK** button. You can now repeat this procedure for other favourites lists or by repeatedly pressing the **EXIT** button return to the TV picture.

## TECHNICAL INFORMATION



Use the **▲** **▼** buttons and the **OK** button to select the desired menu.

### Channel Information:

Here you can view the following channel information: frequency, parameters, network, provider, service ID, Teletext PID, audio and video PID, signal strength and signal quality.

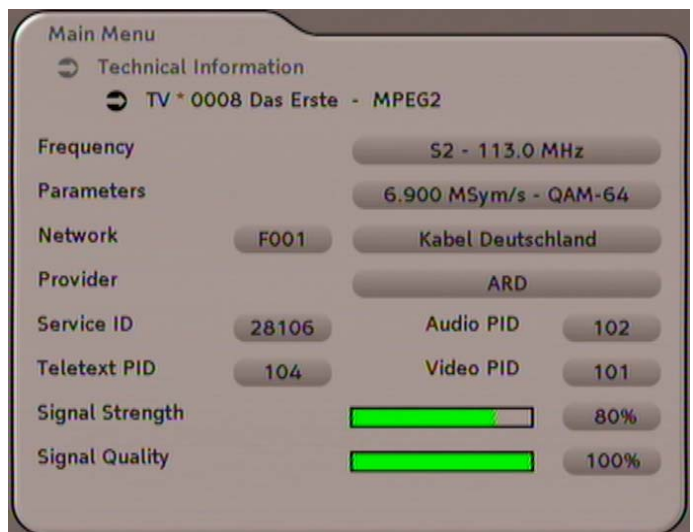
### System Information:

Here the following information is provided: hardware version, system key, MAC address, product, software version, update software and operating hours.

In addition this submenu offers the facility to perform software updates.

## CHANNEL INFORMATION

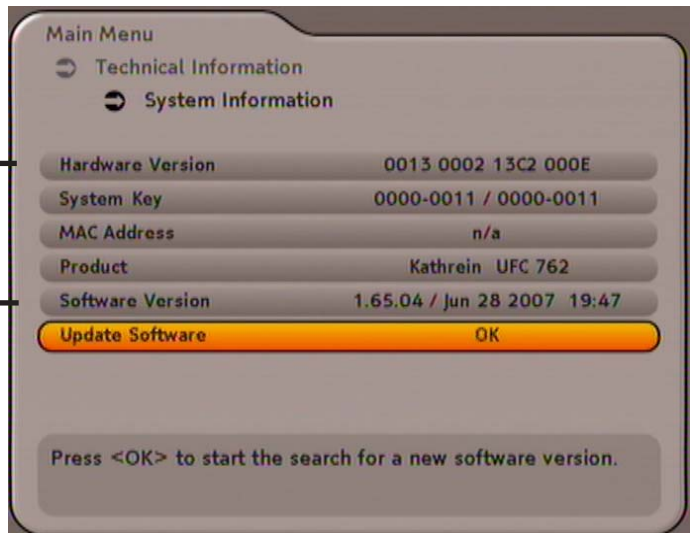
You cannot change or delete any data here. This menu is merely for viewing the reception data for the currently selected channel.



# TECHNICAL INFORMATION

## SYSTEM INFORMATION AND SOFTWARE UPDATES VIA THE CABLE NETWORK

These items cannot be changed, they are merely to provide information about the current hardware and software versions.

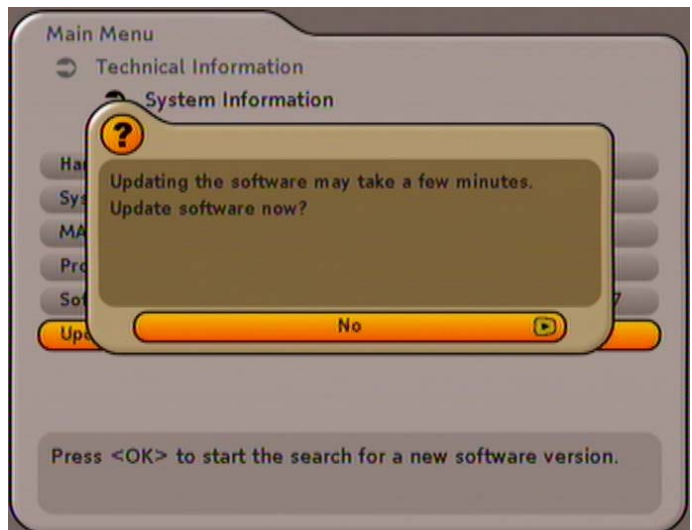


Press the **OK** button to confirm the start of a search for new available software or press the **EXIT** button to cancel the session. The following display appears:



Whether the new software is available in your cable network depends on the respective cable network provider!

If the new software is not available in your cable network you can however update the receiver using the PC. For this please refer to the "Software Update via the Internet" chapter.



In the following information window, use the **◀▶** buttons to select "Yes" and start the update by pressing the **OK** button.

The receiver will now automatically search for new software. This process can take a few minutes. If no new updates are available, a message will be displayed accordingly and you can return to the TV picture by

pressing the **EXIT** button.

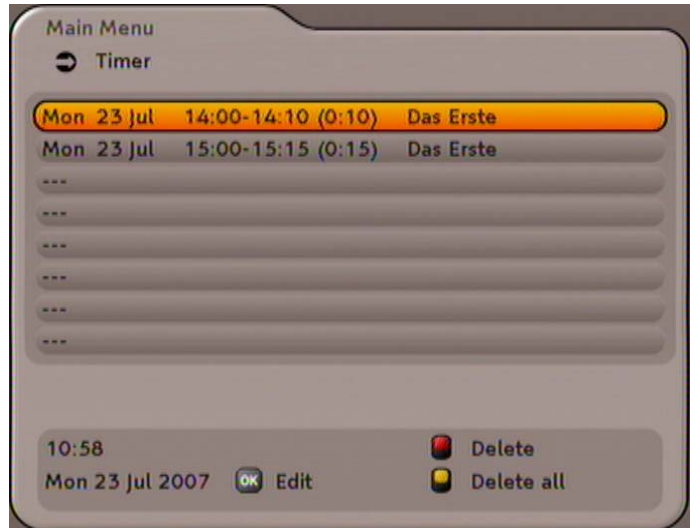
If new updates are available, follow the instructions displayed in the menu.

# TIMER

Press the **MENU** button to open the main menu. Use the **▲▼** buttons to select the "Timer" menu and press the **OK** button (calls up the time menu directly by means of the **●** (red dot) button on the TV screen). The following display appears (example):

Note: *You must program your external recorder identically to the receiver.*

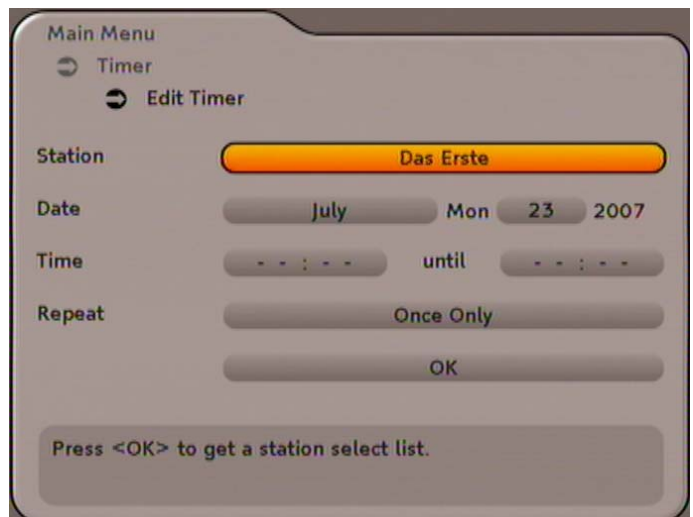
*If timer recording is started in stand-by mode, the receiver switches back to stand-by when recording is finished.*



## MANUAL TIMER SETTING





Use the **▲▼** buttons to select the next free timer slot. If you wish to record a radio transmission, press the **TVR** (blue) button to switch to the radio channel list. By pressing the **OK** button on an empty timer slot you can set up a timer manually.

The following display appears (example):









## TIMER

Use the   buttons to select the line you want to change. Make the changes using the   buttons and the numeric pad.

### Station:

Set here the channel on which the program to be recorded will be broadcast. Pressing the  button brings up a display of the channel list. Use the   buttons and the  button to select the desired channel.




### Date:

Set the date for the recording here.

### Time:

Here set the start and end times of the recording.

### Repeat:







Set the cycle for the recording here. The selections available are "Once Only", "Daily", "Weekly" and "Monday to Friday". Once you have made all the settings, use the   buttons to select "OK" and confirm the timer entries by pressing the  button.

You can now program further timer events in the same way or press the  button to quit the Timer menu.











## AUTOMATIC TIMER SETTING

You can copy the data for the timer directly from the EPG (see "Operation" section, "Timer Programming From EPG").

## DELETING A TIMER EVENT

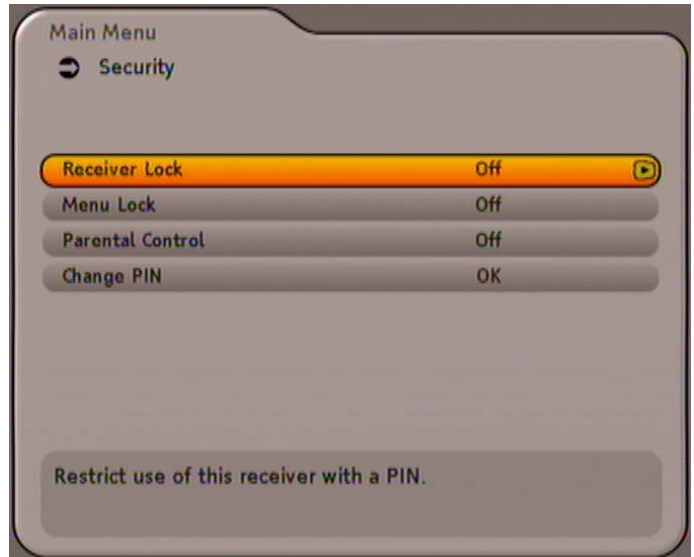
To delete a timer event, use the   buttons to select the timer line to be deleted and then press the  (red) button. Use the   buttons to select "Yes" to confirm the deletion and press the  button.

## EDITING A TIMER

To edit a timer event, use the   buttons to select the timer line to be edited and then press the  button. Use the   buttons to select the item to be changed. Make the changes using the   buttons and the numeric pad. Once you have made all the settings, use the   buttons to select "OK" and confirm the timer entries by pressing the  button.

# SECURITY

Press the **MENU** button to open the main menu. Select the “Security” menu using the **▲▼** buttons and press the **OK** button. Enter the receiver PIN (factory setting “0000”) and confirm it by pressing the **OK** button. The following display appears (see example below):



Use the **▲▼** buttons to select the lines to be changed and use the **◀▶** buttons to perform the settings. After you have made all the changes to the settings you can quit the menu again by pressing the **EXIT** button (your setting will be loaded).

## Receiver Lock:

If the receiver lock is set to “On”, when the receiver is switched on it will request input of the PIN.

## Menu Lock:

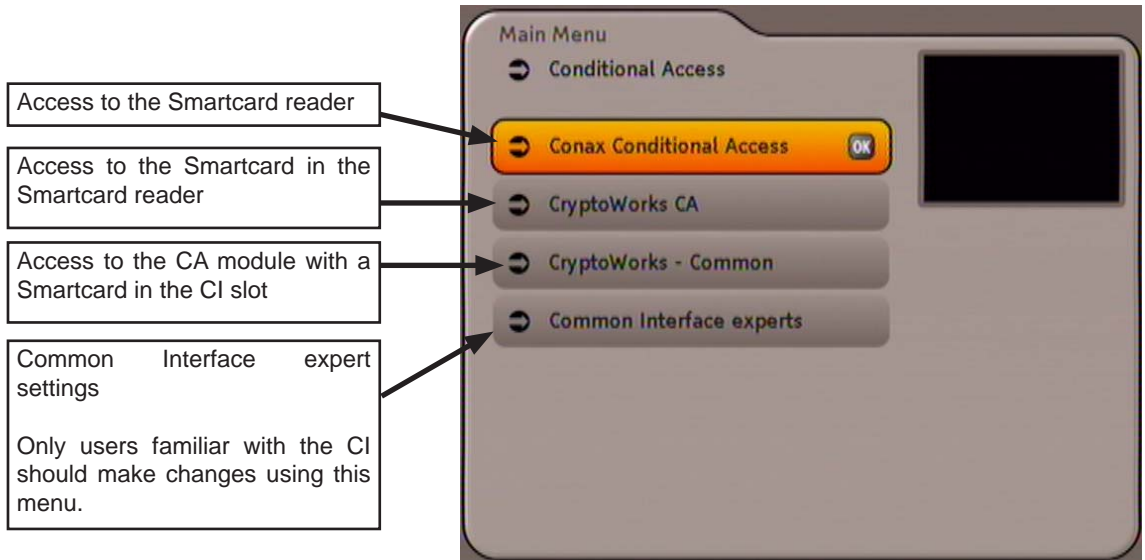
If the menu lock is set to “On”, when the main menu is called up it will request input of the PIN.

## Change PIN:

Press the **OK** button – you will be requested to input the old PIN. Confirm the input by pressing the **OK** button. You must now input the new PIN and confirm it by pressing the **OK** button. For security you must input the new PIN a second time. Press the **OK** button to acknowledge the displayed message. The receiver PIN has now been changed.

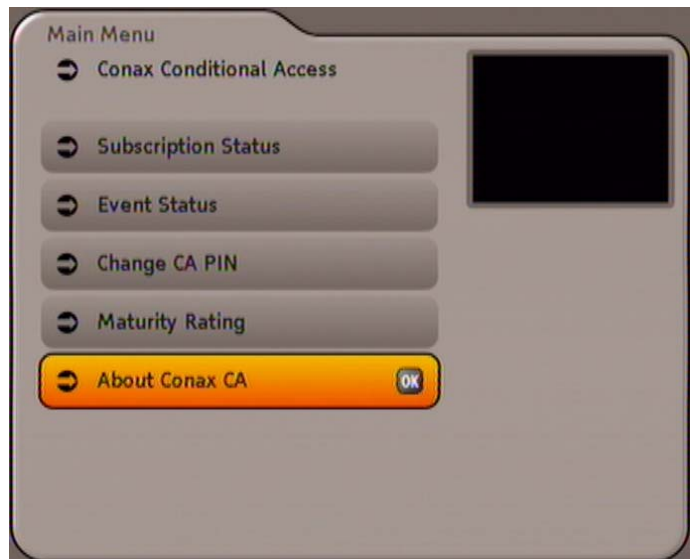
## CONDITIONAL ACCESS

Press the **MENU** button to open the main menu. Select the "Conditional Access" menu using the **▲▼** buttons and press the **OK** button. The following display appears:



## CONAX CA - SMARTCARD READER

Press the **OK** button to call up the menu. The following display appears:

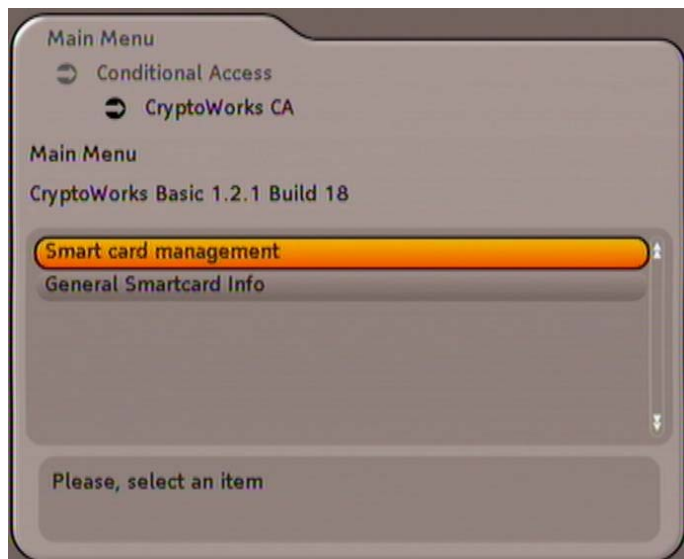


Use the **▲▼** buttons to select the desired menu, and press the **OK** button to open it. The menus depend on the Smartcard that is used. Please follow the instructions and information displayed by the receiver.

## CONDITIONAL ACCESS

### CRYPTOWORKS CA - SMARTCARD IN THE SMARTCARD READER

Press the **OK** button to call up the menu. The following display appears:




Use the **▲** **▼** buttons to select the desired menu, and press the **OK** button to open it. The menus depend on the Smartcard that is used. Please follow the instructions and information displayed by the receiver.

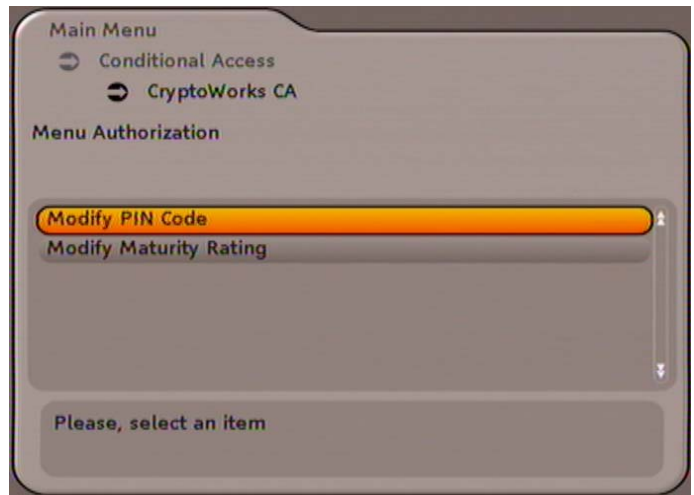
# CONDITIONAL ACCESS

## CHANGE MATURITY RATING

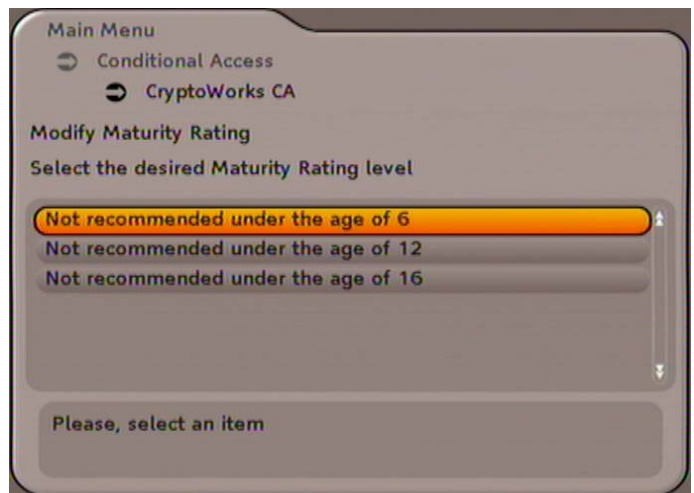
Use the **▲▼** buttons to select the “Smartcard management” menu, and press the **OK** button to open it. If requested, enter the Smartcard PIN and confirm by pressing the **OK** button. Enter the new Smartcard PIN and confirm by pressing the **OK** button. For security you must enter the new Smartcard PIN a second time and confirm by pressing the **OK** button. Press the **EXIT** button to exit the menu.



When you first select an encrypted channel the receiver will display a screen requesting that you set up a Maturity Rating. If you do not set up any maturity rating, you will see this notice again when next you select an encrypted channel.






Use the **▲▼** buttons to select the “Change Maturity Rating” menu, and press the **OK** button to open it.



Use the **▲▼** buttons to select the desired minimum age. Press the **OK** button to acknowledge loading your selection (often the Smartcard PIN will be requested after changing the maturity rating).

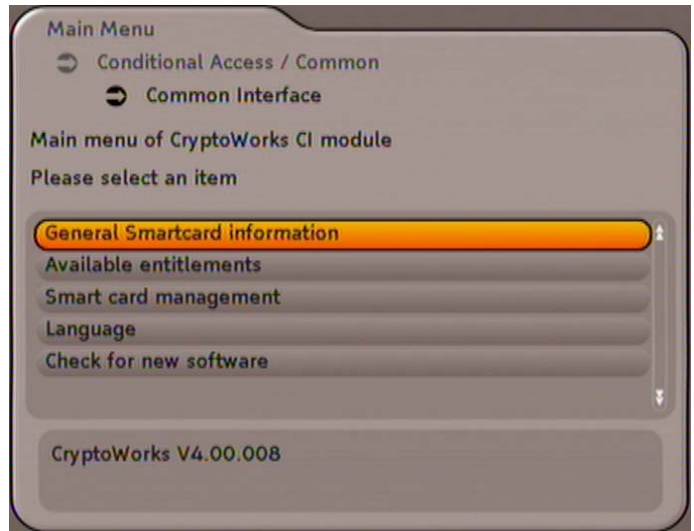
# CONDITIONAL ACCESS

## CRYPTOWORKS - COMMON (CA MODULE)

This menu informs you which CA module is fitted to your receiver and which Smartcard is present in the CI slot. Select the "CryptoWorks - Common" menu using the   buttons and press the  button to open it. 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.**

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!*



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.



Information for Conax, SECA, Viaccess and CryptoWorks users:

Note that with monthly activation intervals, the programme 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 receiver; it is merely intended to assist you.**


The various items can be selected using the   buttons and called up using the  button. Press the  button to exit the menu.

# CONDITIONAL ACCESS

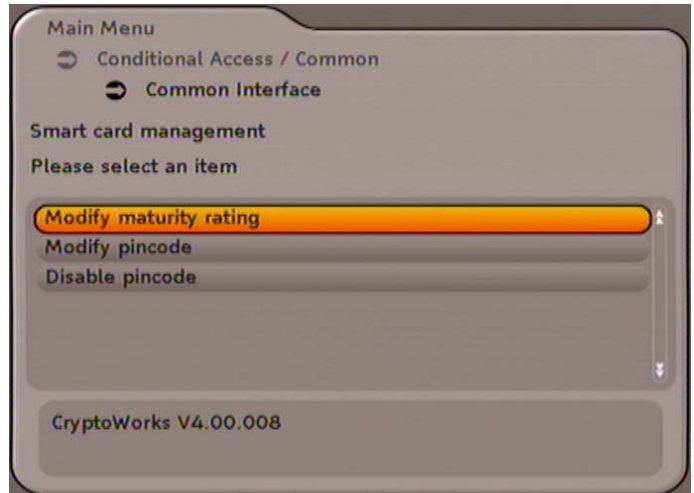
## CHANGE MATURITY RATING




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

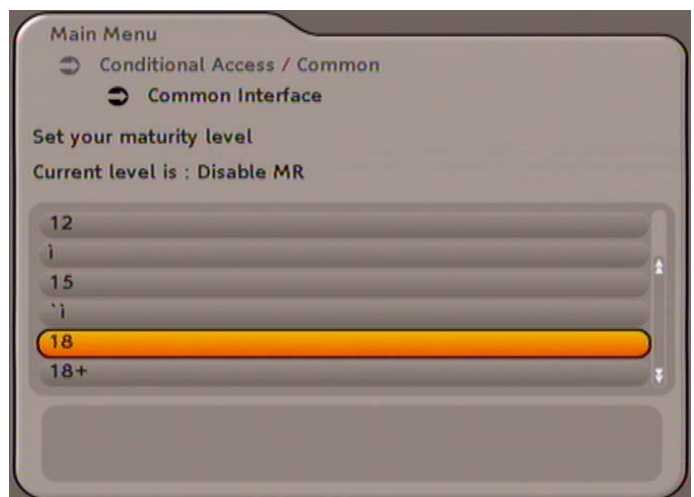
Use the   buttons to select the “Smartcard management” menu, and press the  button to open it. The following display appears (example):






Many CAM modules request you to set up the maturity rating when you insert the Smartcard. If you do not set up any maturity rating, you will see this notice again when next you select an encrypted channel.



In this case use the   buttons to select the “Modify maturity rating” menu. If requested, enter the Smartcard PIN and confirm it by pressing the  button. The following display appears:



Use the   buttons to select the desired minimum age. Press the  button to acknowledge loading your selection:

# SOFTWARE UPDATE VIA INTERNET/SERVICE

## SOFTWARE UPDATE VIA INTERNET

**NOTE!** *Updating requires a PC and a software cable (RJ 11 to Sub-D 9-pin)!*

If there is a new software release for your DVB-C receiver you can download it from:

<http://www.kathrein.de>  
under "Service/Software and Download/Receiver"

The website also provides information and tips on software updating via the receiver's RJ 11 data interface. The required cable (RJ 11 to RS 232) can be ordered from our service centre, ESC in Grassau, at the following address:

**ESC Electronic Service  
Chiemgau GmbH  
Bahnhofstraße 108**

**83224 Grassau, Germany**

Tel.: +49 8641 9545-0  
Fax: +49 8641 9545-35 & 9545-36  
e-mail: [service@esc-kathrein.de](mailto:service@esc-kathrein.de)  
Internet: <http://www.esc-kathrein.de>

**Note:** *Factory settings must be restored following a successful software download.*

## SERVICE

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



# TECHNICAL APPENDIX

## TECHNICAL FEATURES

- Reception of digital cable TV and radio channels
- 2,000 channel memory positions
- 16-character alphanumeric display with status icons for indication of channel names and transmission information
- Conax and Cryptoworks decoding system embedded
- Common Interface for one CA module <sup>1)</sup>
- Integrated Smartcard reader <sup>1)</sup>
- Electronic programme guide (EPG) with detailed information <sup>2)</sup>
- Suitable for software download via cable <sup>3)</sup> and PC
- 4 favourite channel lists
- Automatic date and time generation via DVB data stream
- On Screen Display (OSD) in 9 languages (D, GB, F, I, E, CZ, TR, PL, P)
- 8 timers; can also be programmed from the EPG
- Language selection for multilingual broadcasts
- Optical and electrical audio output for Dolby Digital data stream (AC 3)
- Composite colour, Y/C and RGB signal output programmable via the Scart socket
- Cinch sockets for AV signal
- Videotext decoder with 800 page memory capacity and videotext generation
- Automatic 4:3 and 16:9 format recognition (choice of viewing format)
- Search for Channels
- Power switch
- An additional IR sensor can be connected
- Compatible with the UFO<sup>®</sup>*compact*-processing system
- Product package: Infrared remote control, batteries, operating manual, safety instructions, Scart cable, power supply cable

<sup>1)</sup> CA module and Smartcards are not included with this product

<sup>2)</sup> Only displayed if this information is broadcast by the programme provider

<sup>3)</sup> Dependent on the cable network operator's structure

# TECHNICAL APPENDIX

| Type                               |              | UFC 762si                       | UFC 762sw      |
|------------------------------------|--------------|---------------------------------|----------------|
| Order no./colour                   |              | 20210101/silver                 | 20210102/black |
| <b>RF properties</b>               |              |                                 |                |
| Input frequency range              | MHz          | 47-862                          |                |
| Input level range                  | dB $\mu$ V   |                                 |                |
| Demodulation:                      |              | QAM 16, 32, 64, 128, 256        |                |
| <b>TV system, video</b>            |              |                                 |                |
| Modulation, FEC, demultiplexer     |              | DVB-C standard                  |                |
| Video resolution                   |              | CCIR 601 (720 x 576)            |                |
| Input data rate                    | MSymb/s      | 1.7-7, 15                       |                |
| Decoding                           |              | MPEG-1 and 2 compatible         |                |
| Bit rate                           | MBit/s       | 1.5-15                          |                |
| Frequency range                    | MHz          | 0.02-5                          |                |
| Output voltage                     | V            | 1                               |                |
| S/N                                | dB           | > 53                            |                |
| <b>TV system, audio</b>            |              |                                 |                |
| Decoding                           |              | MPEG-1 and 2, layer 1 and 2     |                |
| Sampling rate                      | kHz          | 32/44,1/48                      |                |
| Frequency range                    | kHz          | 0.04-20                         |                |
| Voltage                            | mV           | 770                             |                |
| S/N                                | dB           | > 65                            |                |
| <b>Memory</b>                      |              |                                 |                |
| Flash-RAM/SDRAM                    | MB           | 4/ 16                           |                |
| Processor clock speed              | MHz          | 150                             |                |
| <b>Power supply</b>                |              |                                 |                |
| Power supply voltage               | V/Hz         | 230 ( $\pm$ 10 %)/50            |                |
| Power consumption (power/standby)  | W            | 22/< 2                          |                |
| <b>Connections</b>                 |              |                                 |                |
| RF input/output                    |              | IEC socket/pin                  |                |
| TV/VCR output                      |              | 2 x Scart sockets               |                |
| Video output                       |              | Cinch socket                    |                |
| Audio output (analogue)            |              | 2 x Cinch sockets               |                |
| Audio digital output (electrical)  |              | Cinch socket                    |                |
| Audio digital output (optical)     |              | Standard OWG (IEC 952)          |                |
| Data interface                     |              | RJ 11 socket                    |                |
| Common Interface/Encryption system |              | 1/Conax, Cryptoworks integrated |                |
| <b>General</b>                     |              |                                 |                |
| Permissible ambient temperature    | $^{\circ}$ C | +5 to +40                       |                |
| Dimensions (W x H x D)             | mm           | 280 x 49 x 190                  |                |
| Weight                             | kg           | < 2                             |                |

Preliminary data. Technical data subject to change.

## 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       |

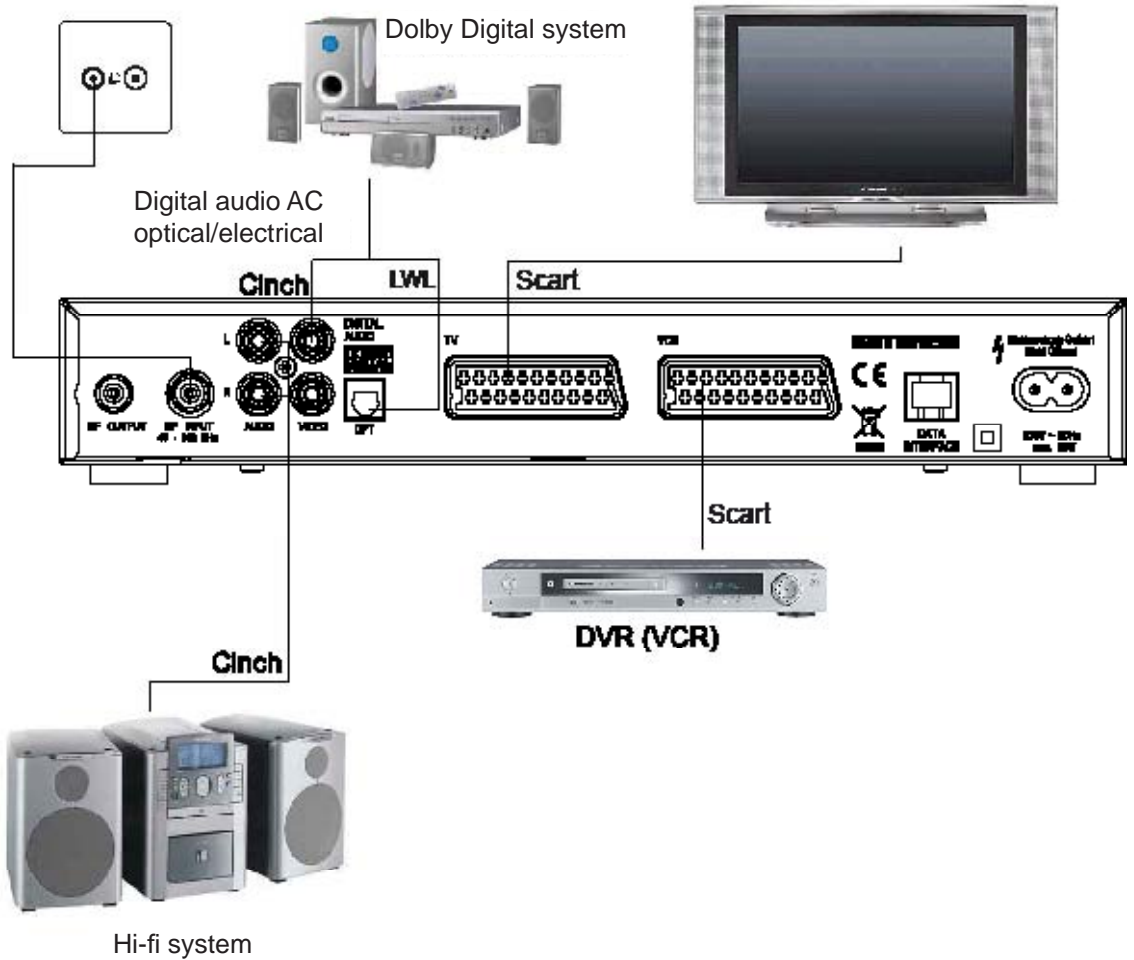
### VHS/S-VHS SWITCHING

The Scart sockets are switchable between VHS and S-VHS. The changeover is made by selecting "Main Menu", "Settings", "TV picture settings".

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



936.3235/-0807/ZWT - Technical data subject to change.

## Free Manuals Download Website

<http://myh66.com>

<http://usermanuals.us>

<http://www.somanuals.com>

<http://www.4manuals.cc>

<http://www.manual-lib.com>

<http://www.404manual.com>

<http://www.luxmanual.com>

<http://aubethermostatmanual.com>

Golf course search by state

<http://golfingnear.com>

Email search by domain

<http://emailbydomain.com>

Auto manuals search

<http://auto.somanuals.com>

TV manuals search

<http://tv.somanuals.com>