

User manual

Digital HDTV Receiver SAT and DVB-T

***COMMON INTERFACE
HDMI***

ENGLISH

HD-Kombi-CI_engl.

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General instructions

Warranty

The period of warranty starts when buying the device. Please verify the exact date by sales check, delivery note, invoice, etc. Keep the documents carefully. Our warranty service refers to our warranty terms valid at the time of buying the apparatus.

In case you require technical service please take or send the device to your specialised dealer.



The unit is labelled with the CE-sign and therefore conforms with the general requirements of the European guideline 2004/108/EG concerning electromagnetic security.

Dumping hint for packaging

Any packaging material is recyclable and should principally be supplied to the recycling process.

Packaging and wrapping materials as plastic foils, etc. should never be available for children.

Safety Instructions

Before installing your digital satellite receiver, all security and operating instructions should be read carefully. The User's Manual should be kept for future reference.

All operating and using instructions must be followed.

The manufacturer undertakes no responsibility for damages or injury caused by non-observance of the safety instructions or by inappropriate handling of the apparatus.

Never allow children to operate this electrical device without supervisor.

ENVIRONMENTAL CONDITIONS

The receiver must be placed indoors in an area where it is protected against humidity, heat and cold. It should be set up on a straight and solid base.

Ensure a minimum distance of 10cm around the apparatus for sufficient ventilation. Ensure that the ventilation is not impeded by covering the ventilation openings with items, such as newspapers, table-cloths, curtains, etc.

The receiver should not be placed in direct sunshine or too close to a heater or radiator.

Use the apparatus in moderate climates only (not in tropical climates).

Do not place naked flame sources, such as lighted candles, on the apparatus.

Do not place any objects filled with liquids, such as vases, on the apparatus.

Take care that no foreign bodies or liquids are getting into the device.

Do not expose the apparatus to dripping or splashing liquids.

CONNECTING TO ANTENNA

Before connecting to the power supply the receiver must be cabled completely.

Attention:

The total current consumption of all devices (LNB, multiswitch, ...) connected to the IF-Input must not exceed 400mA.

The connected antenna must be grounded correctly. Please note and keep the corresponding VDE (safety) prescriptions.

CONNECTING TO MAINS SUPPLY (SAFETY FEATURE!)

Connect the mains cable to a well reachable mains supply socket 230V~ 50Hz only. Do not tilt, do not use disproportionate power and do not damage the receiver's power socket and its electrical connections when connecting the power cord. If the power cord should fail to fit, contact your supplier.

FAILURE

If the power cord or the power socket or its electrical connection is damaged, immediately unplug the mains cable from the mains supply socket.

Do not try to open or repair the receiver on your own! Any repairs must be carried out only by qualified specialist personnel.

If replacement parts are required, only original components are allowed to use. The use of unauthorised components may damage the apparatus and bear the risk of personal injury (risk of fire, electrical shock, etc.).

Image interference at programmes with a frequency of approx. 12480 MHz may be caused by cellular phones, which are located close to the receiver or the antenna cable. If so the distance between receiver and telephone should be enlarged until the problems disappear.

Cleaning and care

Before cleaning, unplug the device from the power supply.

For cleaning the casing, please use a soft, damp cloth. Do not use any washing-up liquids that affect the casing. Do not spray a cleaner towards the receiver

PLACEMENT

In touch with certain furniture surfaces it may happen that the receiver's rubber feet may rub off. You should place the device on a proper, heat resistant underground that is stable. Otherwise the receiver may fall and cause serious injury to people and serious damages to the device.

Do not use this product near water (e.g. bath tube, wash bowl ...).

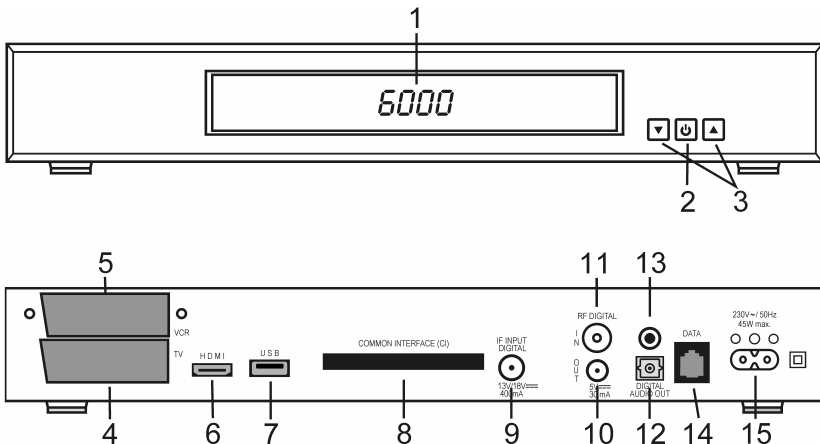
In case of thunderstorms, disconnect the receiver from the main power supply and disconnect the antenna cable from the receiver's IF input. This will prevent the apparatus from being damaged.

Control elements, front and rear panel**Front panel**

- 1 4-digit 7 segment LED display; shows channel number.

4 digit LED Display	
-	Receiver is in standby mode.
Channel number	Receiver is in power on mode.
rEC.	Timer record active
FAIL	LNB short cut

- 2 ON-/OFF button: Switches the receiver on (power on mode) or off (standby mode)
- 3 Channel up/down buttons: Increases/decreases channel counter



- 4 TV Scart socket for connecting a TV set
- 5 VCR Scart socket for connecting a video recorder or DVD player.
- 6 HDMI-Output for digital Audio and Video.
- 7 USB-socket for external mass storage device and softwareupdate (Option)
- 8 Common Interface slot.
- 9 IF Input Digital – F-Connector for antenna cable from LNB
- 10 RF Digital OUT – HF-output for connecting a HF cable to the antenna socket on the television or video recorder
- 11 RF Digital IN – Socket for the indoor or outdoor antenna
- 12 Optical socket for Digital Audio signal.
- 13 Electrical (Cinch) socket for Digital Audio signal.
- 14 RJ-11-Socket: Interface for softwareupdate
- 15 Power socket for connecting the receiver to the power supply by the power cord.

Connecting the receiver

Connecting a terrestrial antenna

Connect the antenna cable of the house or indoor antenna to the socket RF DIGITAL IN (11) of the receiver.

This connection can supply an antenna with signal amplifier with a current of 5 VDC (max. 50 mA).

CAUTION:

The antenna current may be switched on only if the antenna really is an active indoor antenna with signal amplifier and is not already supplied with current through its own power supply (mains transformer or similar). Otherwise this could cause a short circuit or destroy your antenna.

The socket RF DIGITAL OUT (10) of the receiver can be connected via an HF cable to the antenna socket of your television (daisy chain function for analogue programmes).

Connecting a satellite antenna

Connect the coaxial cable of your satellite system with the socket IF-INPUT DIGITAL (9).

Caution: If, after connecting the receiver to the mains, the screen shows the message "Short circuit or overload at antenna input", there is a short circuit in the LNB cable or in the LNB. In this case the receiver must be disconnected from the mains immediately, until the short circuit has been remedied.

Connecting a television

Connect the socket TV (4) of the receiver via a scart cable with the corresponding scart socket of the television.

HDMI output (6)

If your receiver is connected to the TV by a HDMI-cable, audio- and videosignal are digital.

Connecting a video recorder

Connect the socket VCR (5) of the receiver via a scart cable with the corresponding scart socket of the video recorders.

If the video recorder is switched to playback function, the picture and sound signals of the video recorders will be transmitted by the receiver to the television (daisy chain operation).

Connecting a digital multi-channel amplifier


The receiver has an optical (12) and an electrical (13) DIGITAL OUT socket for a DOLBY DIGITAL signal. Connect the socket via a corresponding cable with your multi-channel amplifier.

Connecting a mains cable


Connect the mains cable supplied to the socket 230V~/50Hz (15) of the receiver.

Remote control

 MUTE. Sound ON/OFF

 Numeric input of channel numbers.
In Menu: Input of numeric parameters (frequency etc.)

 Displays Electronic Programming Guide (EPG)

 Displays Programm Info

 Volume control
In Menu: Change parameters or scroll lists

 Channel UP/DOWN
In Menu: selects menu lines

 Leave current menu or OSD (On Screen Display)

 Activates main menu


 Channel UP/DOWN


 Turns on Videotext




 ON/OFF button

 Shows list of stations

 Switches between RADIO- and TV-mode

 In menu: opens, confirms or modifies currently selected item

 Activates last selected channel.

 Choice of audio-channels

 Opens specified menus










 Volume control

 Opens the information menu

 In menu: Delete function

 No function

If external mass storage devices are connected:

 Fast rewind	 Playback button	 Pause button
 Fast forward	 Record button. Transfers EPG-date into record timer	 Setting and managing of markers
 Opens list of recordings	 Stop button	 Renaming records

How to insert batteries

Open the cover at the rear side of the remote control.

Insert two AAA type batteries (1.5V).

Attention: Take care of appropriate +/- polarity!

Note:

If the operational range of the remote control is getting smaller, it indicates that the batteries are almost consumed. Always replace both batteries.

Caution:

Do not heat, disassemble or recharge the batteries.

Consumed batteries are not allowed to be disposed in domestic refuse. They must be supplied to a facility, collecting and disposing exhausted batteries according to the EU environmental protection rules.

Initial installation

After reading the safety instructions (see chapter “safety instructions”) and finishing the actions explained in chapter “connecting the receiver” please use the supplied power cord for connecting the apparatus to the power supply. When running the receiver for the first time the “welcome menu” of the installation guide is displayed at the TV screen.

It helps you installing the most important settings.

Language of the menu

In the first step of the installation guide please select your language by using ▲ or ▼. Confirm your choice by **OK**.

Willkommen

Menüsprache [1/8]

Deutsch
English
Italiano
Polski
Français
Čeština
Türkçe

Country

In the next step please select your country. Therefore press ▲ ▼ and then **OK**. If you want to get back to the language selection, you have to use the EXIT button.

NOTE: The choice of the country affects the the channel list sorting.

Welcome

Country [1/9]

Germany
Austria
Italy
France
Poland

Antenna

In the next step please select the satellite whose channels are to be sorted first in the channel list (use ▲ or ▼). End the installation with **OK**.

A correction of the previous settings can be carried out by pressing **EXIT**.

Welcome

Antenna

Astra 19.2
Hot Bird
Turksat 1C
Sirius 2/3
Amos 1
Helas Sat 2

Antenna current

In the final step of the installation assistant, use the buttons ▼ or ▲ to select whether the antenna current for an active DVB-T indoor antenna should be switched on or off. Complete installation with **OK**.

You can make any corrections using the EXIT button

Welcome

Antennapower 5V

Off
On

CAUTION:

The antenna current may be switched on only if the antenna really is an active indoor antenna with signal amplifier and is not already supplied with current through its own mains transformer (or similar). Otherwise this could cause a short circuit or destroy your antenna.

The menu for automatic channel search and the search process will be started. During the search the window shows Status: scanning. The newly found TV and radio programmes will be listed. Once the search is complete, the message Status: complete is shown. Use **EXIT** to leave the search menu.


Please note:

New programmes found by the channel search will be added to the beginning of the list of stations. You can set out the order of stations as you wish, and delete programmes you do not want.

Operating the receiver

Switching receiver ON/OFF

You can switch on the receiver by pressing **OK**, **▲▼** or by using one of the numeric buttons **1...0**. The last activated channel will be displayed (e.g. 0015).

The digital receiver is switched into standby mode by pressing .

ATTENTION: Only by pulling the power cable the receiver is disconnected from the power supply completely.

TV & Radio mode


You can choose between the operation mode TV (viewing TV channels) and RADIO (listening to radio channels) by pressing **RADIO**.

Volume control & Muting

The volume level can be adjusted by pressing **◀▶** or **VOL ▲▼**. The corresponding scale is displayed on the screen.

Hint:

- It is not possible to change the volume level while the menu is active.
- The volume control only affects the audio output at the TV, VCR and AUDIO ANALOG OUT ports of the receiver.

By pressing the  button you can totally switch off the audio output (muting). For switching on again, simply use the same button.

Selecting a channel

1. Using the directional up/down keys

To change the channels stepwise press the buttons **▲▼**. In order to switch the channels quicker hold these buttons pressed longer.

2. Using the numeric keys (direct input)

One or more digit channel numbers can be input by using the numeric buttons **0...9** and pressing **OK**. Not available channel numbers are ignored.

3. Using the channel list

By pressing the LIST button the last activated channel list or favourite list is displayed. Browse the channel list by pressing **◀▶** or **▲▼** and activate the desired channel by pressing **OK**.

When pressing key **LIST** twice the following menu appears:

Select List

Favourites List
Radio List
TV List
Alphabetic List

- Favourites List:** Your personal list of favourite channels
Radio List: List of stored Radio channels
TV List: List of stored TV channels
Alphabetic List: List of stored TV or RADIO channels in alphabetical order.

Choose the favoured list by pressing **▲ ▼** and activate it by pressing **OK**.

In alphabetic list mode the channels are sorted alphabetically. It helps you searching a certain channel. Therefore press **LIST** for displaying the alphabetic channel list and its char locator. Then enter the char locator menu by pressing **SWAP**. Use **▲ ▼** and **◀ ▶** for selecting the first letter of the searched channel and confirm by **OK**. If available the channel list shows the wished channel now.

For re-entering the channel list press **SWAP**, for activating the channel use **OK**.

4. Swap from current channel to the previous one:

Your receiver remembers the previous activated channel:

- By pressing **SWAP** you can switch from the current to the previous channel
- By pressing **SWAP** again switch back to the current channel

Every time you perform a channel change, the title and start/stop time of the current and the following programme are displayed in the channel change OSD (on screen display). Thereby the scale of progression below the programme number signals the temporal progress of the current programme.

If faded out you can display this information again by pressing **OK**.

Settings

The basic functionality of the receiver is defined in the *Settings* menu.

Usually the default settings of this receiver enable a quick installation, especially when connected to a satellite antenna that is directed to the ASTRA 19.2° satellite.

Merely the derivation of your local time against the GMT (Greenwich Mean time) time needs to be corrected, otherwise the displayed times may be wrong.

Hint:

At each on screen display the possible user inputs are explained in the help bar at the lower screen brink.

By pressing ◀ and ▶ you can change the corresponding settings. When leaving a menu (**EXIT** button) you will be asked to store the performed modifications (Yes) or to keep the previous settings (No). Please choose one of these possibilities by pressing ▲▼ and confirm your choice by **OK**.


Turn on the receiver by pressing ⏻.

For entering the main menu, please press the **MENU** button.

The main menu is displayed:



Main menu



Settings
Installation
Channel List
Timer
Information

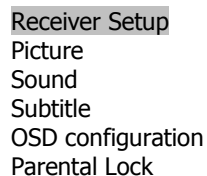
Press the **OK** button.

The following menu is displayed:



Settings

The first line *Receiver Setup* is marked.



Receiver Setup
Picture
Sound
Subtitle
OSD configuration
Parental Lock

Choose this menu item by pressing ▲▼ and confirm by **OK**.

Settings – Receiver setup

The following menu is displayed:

Receiver setup	
Time difference	+1.00 Std.
Menu language	English
Initial volume	93%

1) Time difference

When operating the receiver for the first time you should set the derivation between your local time and the received GMT time (Greenwich Mean Time) by pressing ◀ or ▶. For Central Europe the following settings are recommended:

Winter time: +1.00 hour
 Summer time: +2.00 hours

Note: This setting has to be updated at each summertime shift.

2) Menu language

Choose your language by pressing ◀ or ▶.

3) Initial volume

The initial volume after a power reset of the receiver is adjusted here by pressing ◀ or ▶.

Settings – Picture

For entering the Picture menu, select menu item *Picture* in the *Settings* menu and press **OK**. The following menu appears:

Picture	
Scart output TV	RGB
Display format	4:3
Display adjustment	Letterbox
Picture scaling:	
>Input 720x576	Output 1920x1080
>Input 1280x720	Output 1920x1080
>Input 1920x1080	Output 1920x1080

1) SCART output TV

The video output at the SCART socket can be modified by pressing ◀ or ▶. You can select among following options: *FBAS*, *RGB*, or *YUV*.

2) Display format

Use ◀ or ▶ for selecting the screen format of your TV set (4:3, 16:9).

3) Display adjustment

Use ◀ or ▶ for adjusting the video signal: pan & scan, letterbox, pillar box or centre.

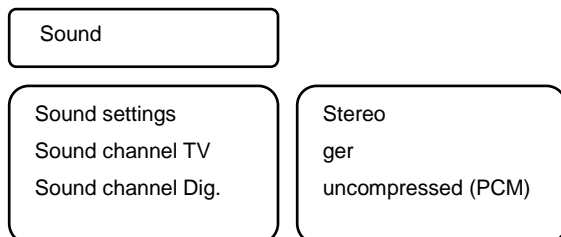
6) Picture scaling

Here you can choose the picture resolution.

720 x 576
1280 x 720
1920 x 1080

Press **EXIT** to leave this menu. For storing your modifications select **Yes** (◀ or ▶), for keeping the previous settings select **No**.
Confirm your choice by pressing the **OK** button.

Settings – Sound



1) Sound setting

Using ◀ or ▶ you can activate following audio modes: *Stereo, Mono left* or *Mono right*.

2) Sound channel TV

If the broadcasted programme offers different audio options you can select the desired audio output at the TV Scart by keys ◀/▶.

3) Sound channel digital

If the broadcasted programme offers a digital audio channel, you can use ◀/▶ for selecting the audio signal that is to be output at the digital audio port.

Press **EXIT** to leave the menu. If you want to save your modifications choose **Yes**, for restoring the previous parameters choose **No** (keys ◀/▶).
Confirm your choice by pressing the **OK** button.

Settings – Subtitle

Subtitle	
Subtitle Subtitle language	Off -

1) Subtitle

By using ◀/▶ you can activate/deactivate the display of DVB subtitles (if transmitted).

2) Language of the subtitle

To select the language of the subtitle you must use ◀ or ▶. If there is no subtitle available this is indicated by "-".

Use **EXIT** to leave the menu. If you want to save the modifications choose **Yes**, for restoring the previous parameters choose **No** (keys ◀/▶). Confirm your choice by pressing the **OK** button.

Settings – OSD Configuration

For entering the OSD configuration menu, please select menu item *OSD configuration* in the *Settings* menu and press **OK**. The following menu appears:

OSD configuration	
OSD transparency Display time OSD colour	10 % 5 s blue

1) OSD transparency:

You can set the transparency of the on screen graphics by pressing ◀ or ▶.

2) Display time:

By using ◀ or ▶ you can modify the display duration of the channel change graphics (1-10 seconds).

3) OSD colour:

You can choose the colour of the OSD display by pressing ◀ or ▶.

Press **EXIT** to leave this menu. If you want to store your modifications select **Yes** by pressing ◀ or ▶. For the restoring the previous settings you have to choose **No**. Confirm your choice by using **OK**.

Settings – Parental lock

Your receiver is equipped with a parental lock. This secures the receiver against unauthorised use. When the parental lock is activated, the receiver can only be switched on after entering a 4-digit PIN code.

In the Main menu, use the **CH▲▼** buttons to move the cursor to the line *Parental lock* and press the **OK** button.

Parental Lock

Device Lock
Change PIN

Parental lock – device lock

To activate or deactivate the device lock, move the cursor to the line *Device lock* and press **OK**. The following menu will appear:

Device Lock

Lock device

No

Use the **VOL◀▶** buttons to switch the device lock on or of. When the lock is activated, the PIN code must be entered when switching on the receiver.

Press **EXIT** to leave the menu. Use the **VOL◀▶** buttons to choose whether you want to store the changes made (Yes) or keep the previous settings (No). Confirm your choice with the **OK** button.

Parental Lock – changing the PIN

To change the PIN code, move the cursor to the line *Change Pin* and press **OK**. The following menu will appear:

Change PIN

New PIN
Confirm PIN

* * * *
* * * *

The PIN code is set at the factory to *0000*. Using the code *9976*, the receiver can always be switched on, regardless of what PIN code has been set.

Use the **CH▲▼** buttons to move the cursor to the line *New PIN* and press the **OK** button. Use the **0-9** buttons to enter a 4 digit PIN code, then press **OK**. Use the **CH▼** button to move the cursor to the line *Confirm PIN* and press the **OK** button. Now confirm your entry by entering your chosen PIN code one more time, then press **OK**. Press **Exit** to leave the menu. Use the **VOL◀▶** buttons to choose whether you want to store the changes made (Yes) or keep the previous settings (No). Confirm your choice with the **OK** button.

WARNING

You must not forget the PIN code. Should this happen, please contact your specialist dealer!

Installation

The menus „Antenna configuration“ and „Channel search“ will differ depending on the type of signal received, **DVB-T (terrestrial)** or **SAT (satellite receiver system)**.

In the main menu, select the line *Installation* using ▲▼ and confirm with **OK**. The Installation menu will appear:

Installation

Antenna configuration
Channel search
Factory reset
Softwaredownload

Use the buttons ▲▼ to make your selection and confirm with **OK**.

Installation – antenna configuration DVB-T

Select the line *antenna configuration* using ▲▼ and confirm with **OK**.

In the line antenna, use the ◀ ▶ buttons to select *Terrestrial*.

Antenna configur...

Antenna

Terrestrial

Antenna power

Off

In the line *antenna power* you can switch the current for active indoor antennas (without mains transformers) on and off using the ◀ ▶ buttons.

CAUTION

The antenna power may be switched on only if the antenna really is an active indoor antenna with its own signal amplifier and is not already supplied with current through a transformer (or similar). Otherwise this could cause a short circuit or destroy your antenna.

Use **EXIT** to leave the menu. If you want to save the modifications choose **Yes**, for restoring the previous parameters choose **No** (keys ◀/▶). Confirm your choice by pressing the **OK** button.

Installation – Antenna configuration

Choose the required line by pressing ▲▼ and enter your preferred settings with **OK**.

1) Antenna:

Contains all available satellites. By using ◀ or ▶ you can select the satellite your LNB is directed to. After pressing **OK** you can rename the selected satellite name.

Antenna configuration

Antenna
Antenna power
LOW band
HIGH band
DiSEqC switch
Toneburst switch

1 Astra 19.2
On
9.750
10.600
A
A

2) Antenna power

Here you can switch on/off the supply voltage for the LNB (◀ or ▶).

DiSEqC mode

DiSEqC 1.2

3) LOW Band

The oscillator frequency for LOW band can be fine adjusted by pressing ◀ or ▶. For directly entering the frequency press **OK** and use the numeric buttons **1-0** then.

4) HIGH Band

The oscillator frequency for HIGH band can be fine adjusted by pressing ◀ or ▶. For directly entering the frequency press **OK** and use the numeric buttons **1-0** then.

5) DiSEqC switch

If your receiver is connected to a satellite antenna system that receives *several* satellites (multi feed antenna system) via a DiSEqC controlled switch unit: Specify the input of the DiSEqC switch, where the selected LNB (line 1) is connected to (◀/▶).

6) Toneburst switch

If your receiver is connected to a satellite antenna system that receives *two* satellites (multi feed antenna system): Specify the input of the A/B-Switch where the selected LNB (line 1) is connected to (◀ or ▶).

7) DiSEqC mode

Choose the required DiSEqC mode by pressing ◀ or ▶.

For fixed antennas select *DiSEqC 1.0*, for motorized antennas *DiSEqC 1.2* is required.

Press **EXIT** to leave the menu. If you want to store the modifications choose **Yes** by pressing ◀ or ▶. For the previous settings you have to choose **No**. You confirm the new settings by pressing the **OK** button.

Attention:



If you have selected DiSEqC mode “DiSEqC 1.2” than the menu item *Motor settings* appears in the previous menu *Installation*. There you will find all necessary parameters for setting up your motorized antenna system.

Installation – channel search DVB-T

You can choose between automatic (antenna) and manual (transponder) channel search. The automatic channel search checks the whole VHF and UHF range for programmes you can receive.

Automatic channel search

In the Installation menu, move the cursor using the buttons ▲▼ onto the line *Channel search* and press the **OK** button. The following menu will appear:

Channel search		
Antenna Search mode Encrypted	Terrestrial Antenna No	<input type="checkbox"/> Lock BER: 0
Start scan		
		Level: 77 C/N: 24dB
	Select and change	Back

Performing an automatic channel search

1. Select the line *Antenna* using ▲▼ and *Terrestrial* using the ◀ or ▶ buttons.
2. Select the line *Search mode* using ▲▼ and *Antenna* using the ◀ or ▶ buttons.
3. In the line *Encrypted*, select whether the channel search should also include encrypted channels, using the ◀ or ▶ buttons.
No = encrypted channels will be ignored.
Yes = encrypted channels will be included in the search.
4. Move the cursor onto the line *Start scan* using the ▲▼ buttons and start the search process by pressing the **OK** button.

Now two windows are shown, listing the newly found TV and radio programmes. The “Status” window shows how far the search has progressed.

- Display: *Scanning* => Search is active
- Display: *Complete* => Search is finished.

You can leave this menu by pressing **EXIT**. If not finished, the channel search algorithm is aborted. If new channels are found, you are asked to store them (**Yes**). Select your choice by ◀/▶ and confirm with **OK**. If selected YES the new channels are stored at the end of the channel list now.

Installation – Channel search SAT

This digital receiver is pre-programmed with most digital TV- and RADIO channels of following satellites:

- Astra 19.2° East,
- Hot Bird 13° East,
- Türksat 1C 42° East,
- Sirius 2/3 5° East,
- Amos 1 4° West,
- Hellas Sat 2 39° East

If you want to see a list of all programmed channels just open the channel list for TV or RADIO mode by pressing **LIST**.

As the broadcasters quite often add new channels to their downlinks or change the parameters of already distributed channels, we recommend to perform a channel search every now and then.

For getting into the corresponding on screen dialog, please enter the Main Menu (key **MENU**); from there step into the *Installation* menu, select line *Channel search* and press **OK** for entering the *Channel Search* menu:

Channel search

<p>Satellite</p> <p>Search mode</p> <p>Encrypted</p> <p>Frequency</p> <p>Polarisation</p> <p>Symbol rate</p>	<p>Astra 19.2</p> <p>Transponder</p> <p>No</p> <p>12.187 GHz</p> <p>Horizontal</p> <p>27.500 MS</p>	<p>QPSK</p> <p>FEC</p> <p>BER: 0</p>
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Start scan

	<p>Level: 234</p> <p>C/N: 9dB</p>

Channel search

1. Press **▲▼** for moving the cursor to line *satellite*. There select the satellite you want to scan (**◀** or **▶**).
2. Move the cursor to line *search mode* (**▲▼**). There use **◀/▶** for selecting the desired search mode.

Transponder: In this mode a certain transponder (channel) is scanned only. Therefore you have to specify this transponder by entering its frequency, polarisation and symbol rate.

Satellite: In this mode all stored transponders of the selected satellite are scanned for new channels.

3. In line *Encrypted* you can specify whether you want to search for encrypted channels, too.
No = encrypted channels are ignored
Yes = encrypted channels are searched, too

The following settings are used only in search mode *Transponder*.

4. *Frequency:*
For entering the frequency of the desired transponder please select line *Frequency*. Then press **OK** and use the numeric input buttons **1...0** for entering the 5 digit frequency. Confirm your inputs by **OK**.
5. *Polarisation:*
In menu item *Polarisation* you can set the polarisation (vertical or horizontal) of the desired transponder by using **◀** or **▶**.
6. *Symbol rate:*
For entering the symbol rate of the desired transponder please select line *Symbol rate*. Then press **OK** and use the numeric input buttons **1...0** for entering the 5 digit symbol rate. Confirm your inputs by **OK**.

For starting the Channel search please navigate to line *Start scan* (keys **▲▼**) and press the **OK** button on your remote control.

Now a new menu is displayed with two lists displaying the founded TV and RADIO channels. Thereby the „Status:“ graphic keeps you informed on the progression of the channel search:

- Status *scan* => search algorithm is active
- Status *end* => search algorithm is finished

You can leave this menu by pressing **EXIT**. If not finished, the channel search algorithm is aborted. If new channels are found, you are asked to store them (**Yes**). Select your choice by **◀/▶** and confirm with **OK**. If selected YES the new channels are stored at the end of the channel list now.

Installation – Factory reset

This menu item allows you to reset the receiver to its default factory status. Afterwards the receiver starts up with the Welcome Screen (initial installation) again.

Installation – Software download

With this function the operating software of the receiver, it's menu texts and channel list can be updated via Astra 19.2" (East). Nevertheless, your satellite antenna system must receive this satellite. Your currently active channel list is not changed by a software update.

Attention:

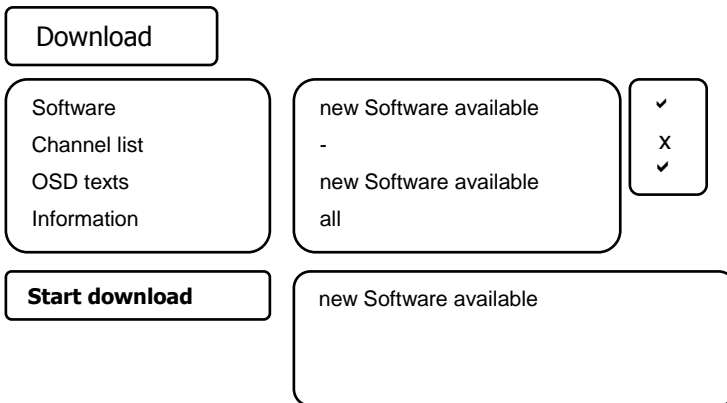
- In case of a software update the current operating software will be erased and a new software version will be installed.
- When updating the channel list the factory default channel list will be replaced by a new one.
- When updating the OSD texts, all menu texts are erased and actualised.

The update process is subdivided into following steps:

1. Open Update Menu:

Enter the *Installation* menu, select line *Software download* and confirm with **OK**.

The *Download* menu for controlling the update process is opened and the search for the download channel starts automatically.



Please wait until this search is completed. It may take a few minutes. When the download stream is found the receiver verifies whether there are available new versions of the operating software, OSD texts and channel list. The result is shown in the *Download* menu behind the corresponding menu items (marked by ☑).

If there are no new data available this is signalled by a „-“.

You can leave the download menu by **EXIT**.

2. Selection of available data:

Depending on their availability in the update stream you can select the download of following data by pressing ▼ ▲:

- | | | |
|-----|----------------------|---|
| a.) | <i>Software:</i> | Operating software |
| b.) | <i>Channel list:</i> | Channel list |
| c.) | <i>OSD texts:</i> | All menu texts displayed on the screen |
| d.) | <i>Information:</i> | Information concerning the available download data e. g. version number, innovations, etc.. |

If you want to update one of the options a.) to c.) press **OK** at the corresponding menu item. If required by the receiver, it may happen that there are selected additional menu items automatically.

In line *Information* you can specify, if you want to receive further information on the selected data (keys ◀ ▶):

- | | |
|-----------------------|---|
| <i>All :</i> | Information on all available data |
| <i>None:</i> | Information on none of the available data |
| <i>Software:</i> | Information on the new software version. |
| <i>OSD texts:</i> | Information on the new menu texts. |
| <i>Channel list :</i> | Information on the new channel list. |

Hint:

If you like to read these information before doing the update, please leave menu items a.) to c.) inactive (⊗) and specify the desired information at d.). Then start downloading these data. When received, you can view the information at menu items a.) to c.) by pressing the **yellow** button. For leaving the corresponding on screen graphic use **EXIT** please.

3. starting the update:

The update-/download process is started as follows:

- select the desired data pressing **OK** at a.), b.) or c.) (mark changes from ⊗ to ✓)
- select *None* at menu line *Information* (keys ◀ or ▶).
- Start the update procedure by pressing **OK** in line *start download*.

You are informed about the download process immediately when the first data are received. As the reception of the data happens blockwise, several minutes may pass between the single data blocks. When the first and second data block are received (100%), the data are stored. The storage process is signalled by flashing the numbers in the LED display. Please wait until all data blocks are received.

When the update is completed, the receiver automatically restarts and turns into Stand By mode.

Attention:

As long as the storage process has not begun, the download can be cancelled by pressing **EXIT** at any time. When the first data have been stored cancelling is no longer possible. An interruption of the update process (e. g. by pulling the power cable) may damage the operating software receiver and the receiver does not work any more!

Hint:

If the download includes a new channel list, the receiver needs to be reset to factory default status for activating this list (after download is completed and receiver was restarted).

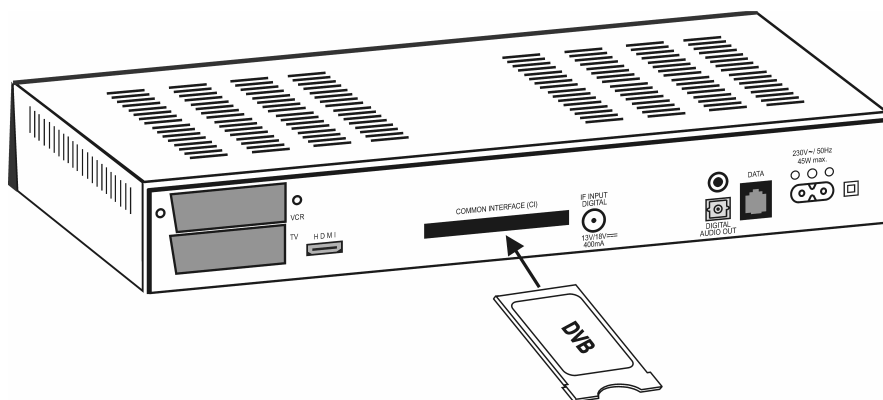
Installation – Common Interface (CI)

Common Interface (CI) is an interface for DVB receivers such as digital receivers (including set-top boxes).

The digital receiver and CI modules can receive and process all unencrypted and certain encrypted digital satellite stations.

Encrypted satellite channels can only be viewed with a CI module suitable for the encryption system and the appropriate smart card.

On the back of the digital receiver there is a Common Interface slot where CI modules from various providers can be inserted. You can insert the provider's smart card into the CI module in order to enable the encrypted satellite stations you want to see.



Insert the CI module into the „COMMON INTERFACE“ slot.

Notes:

Push the module carefully into the slot. Do not use force and make sure the module is straight. Follow the operating instructions for the CI module.

In the main menu, select „Installation“ with ▲ or ▼ and press **OK** to confirm.

A submenu generated by the CI module appears on the screen.

Select the submenu of the CI module with ▲ or ▼ and press **OK** to confirm.

- For more information on using the CI module, see the menus shown or its instruction manual.

Press **EXIT** to leave the menus.

Installation

Antenna configuration
Channel search
Factory reset
Software download

CryptoWorks

Installation – Motor settings

Your digital receiver is able to drive a motorized antenna (DiSEqC Level 1.2).

Therefore you have to enter the Antenna Configuration menu and select DiSEqC mode 1.2 first.

Then please enter menu *Motor Settings* for setting up your motorized antenna system.

Motor settings	
Satellite Antenna position	Astra 19.2 2
Frequency Polarisation Symbol rate	11.836GHz Horizontal 27.500MS
Adjust motor	
Level: 99% C/N: 12dB	<input type="range"/> <input type="checkbox"/> QPSK <input type="checkbox"/> FEC
Select and change	Back

1) Satellite:

Select the satellite you want to receive (keys ◀ ▶). The corresponding pre-installed antenna position and the parameters of a default transponder on this satellite are displayed in the remaining lines.

2) Antenna position

Use ◀ ▶ to define a number that is assigned to the current motor position. Each position is referenced by these values.

3) Frequency

For locating the selected satellite it is necessary to specify a default transponder (channel) on this satellite. If necessary modify the frequency by keys ◀ ▶ or by direct numeric key input 1...0 (press **OK** first).

4) Polarisation

By using ◀ ▶ the polarisation of the transponder (horizontal or vertical) is selected.

5) Symbol rate

The symbol rate of transponders is selected by keys ◀ ▶ or by direct numeric key input 1...0 (press **OK** first).

6) Adjust motor

Enter this line for sending the following commands to the motor.

Motor commands:

- Button ►: turns antenna eastwards
- Button ◄: turns antenna westwards
- Button OK: stops the motor
- Button 1: Sets East limit
- Button 2: Sets West limit
- Button 3: Deletes the limits
- Button 4: Turns to position
- Button 5: Alignment East
- Button 6: Alignment West
- Button 7: Corrects the antenna position
- Button 8: Saves the current antenna position

Green button: Starts the channel search on the selected satellite.

Initial installation of a motorized antenna system:

Firstly install the motor and the antenna according to the specifications of the manufacturer (see corresponding User Manuals).

Thereafter enter the on screen menu *Settings – Installation – LNB configuration* of this digital satellite receiver and set menu item *DiSEqC mode* to DiSEqC 1.2.

Then you have to limit the rotating area of the antenna eastwards and westwards. Therefore enter menu *Motor settings*, select line *Adjust motor* and set the East Limit and the set West Limit. Maybe you have to delete the pre-installed limits first and move the antenna to the West Limit and press key "2" for setting the new West limit. Of course this procedure must be performed for the East Limit, too.

Please pay attention that the satellite dish must not collide with barriers, e. g. housetop, roof, balcony, etc..

Thereafter please use menu items 1) to 5) to direct your antenna to the desired satellite and tune your receiver until a picture is seen on the screen or a valid signal is detected.

You can recognize this from the signal bars appearing in yellow colour and the FEC and QPSK marks displayed in green colour.

When you have adjusted the satellite dish correctly, the antenna position is stored under the number displayed in line *Antenna position*.

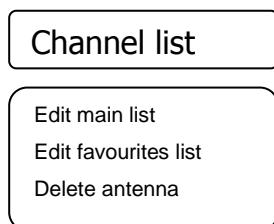
In case you want to receive further satellites these steps must be repeated.

Channel list

You can resort and/or erase TV and radio channels found in the course of an automatic channel search. This function is available for all TV and radio channels.

For entering the corresponding on screen dialog, please press the **Menu** key to enter the *Main Menu*, then select menu item *Channel List* and confirm with **OK**.

Following sub-menu appears:



Channel list – Edit main list

This sub-menu enables you to erase or move certain channels in the channel list. For entering this menu simply enter **OK** at line *Edit main list*.

a) Erase channels

Select the channel to be erased with **▲▼** and mark it with **OK**. You can select more channels by pressing **▲▼** and **OK**. To erase them press the **red button**.

b) Sort channels

Select the channel to be sorted by using **▲▼** and mark it with **OK**. You can select further channels by pressing **▲▼** and **OK** (max. 20 channels can be selected at the same time). Use **▲▼** to select the position where to insert the marked channels and confirm with the **yellow button**.

Channel list – Edit favourites list

This sub-menu allows you to add your favourite channels to the favourites list. Therefore please press **OK** in line *Edit favourites list*.

Now two lists are displayed:

- the Main list: all stored channels are listed (max. 4000).
- the favourites list: contains your favourite channels (max. 4000).

Now you can select your favourite channels from the Main list and copy them into the favourites list:

Select the channels you like to add to the favourites list by using **▲▼** and mark them with **OK**. Then press button **SWAP** to enter the favourites list. There use **▲▼** to select the position where to insert the channel and press **OK**. With **SWAP** you return to the main list again.

Use **EXIT** to leave the channel list menu. By pressing **◀▶** you can store your modifications (**Yes**) or keep the previous settings (**No**). Confirm your choice by **OK**.

In radio mode you can create your own favourites list for radio programmes, too.

Channel list – Delete Antenna

This dialog allows you to delete all channels of the selected satellite from the channel list. Therefore please enter menu *channel list* and select menu item *Delete Antenna* (**OK**).

Delete Antenna

Select the satellites to be erased with **▲▼** and mark them with **OK**. For erasing their channels from the channel list please press the **red button** on your remote control.

For leaving this menu please press **EXIT**. If the “Save?” popup appears, please select if you want to store your modifications (**Yes**) or keep the previous settings (**No**). Confirm your choice by pressing **OK**.

Timer

You can use the record timer functionality to programme a recording for a connected video recorder. Totally 10 record timers can be activated.
Or you can use the sleep timer to specify a time at which the receiver is to switch into standby mode.

Therefore please enter the *Main menu* by pressing **Menu**; then select menu item *Timer* and confirm with **OK**.

Timer

Record timer
Sleep timer

Timer – record timer

Use **▲▼** to select line *Record timer* in menu *Timer* and press **OK**.
The following menu appears:

Record timer

Timer index (1...10)

Start at

Stop time

Date of recording

Station

1

00:00 o'clock

00:00 o'clock

21.09.05

7 ProSieben

Activate timer

Programming a record timer:

1. Select line *Timer index (1...10)* with **▲▼**
2. There select timer place with **◀▶**
3. Select lines *Start at*, *Stop time* or *date of recording* with using **▲▼** and confirm with **OK**
4. Enter the required time or date by pressing **0-9**
5. Confirm your input with using **OK**
6. Select line *Station* with **▲▼** and confirm with **OK**
7. Select a channel with **▲▼** or **◀▶** and confirm with **OK**.

-
8. Select line *Repetitions* with ▲▼ and use ◀ ▶ to specify the number of repetitions of this record.
 9. Select line *Activate timer* and activate the programmed record timer by pressing **OK** there (text *Activate timer* changes to *Deactivate timer*).

The receiver will switch on at the programmed time and signals a timer record by displaying "rEC." in the 4 digit LED Display. If you want to abort a record, please enter the record timer menu and deactivate the timer by pressing the *Deactivate* button.

If you push one of the buttons ▲▼ or ◀▶, following menu appears:

Record active. Stop?

Yes No

Choose „Yes“ to stop the record or „No“ to continue the record.

Hint: Please make sure that the local time of the receiver is set correctly and the video recorder is programmed, too.

Information

Enter the main menu, there use ▲▼ to select line *Information* and press **OK**.

In the upper section of the menu the channel parameters of the activated channel are displayed.

In the lower section of the menu the signal qualities are displayed.

- *Level*: The further the bar turns right the better the reception.
- *C/N*: The further the bar turns right and the higher the dB value, the better the signal quality.

Hint:

The power of the signal depends on the antenna set up and also on the currently activated channel. Please remember this if you want adjust your antenna by controlling the signal power.

After pressing the ◀▶ or the **yellow** button two further charts with channel, software and hardware information are displayed. With ▲▼ you can change the channel.

Use **EXIT** to leave this menu.

Videotext

Press the **TEXT** button to display the videotext of the current channel. The first site to be seen is site number "100".

In order to view a specific page, use the buttons **0-9** to enter the three-digit page number. Your input is displayed in the left corner on the screen. When the site number is input completely the receiver starts to search the corresponding site. Because the video text sites are sent site by site it may take some seconds until the required site is found. Enter "100" at any time to return to the home page of the videotext.

You may use ▲▼ to quickly page through the complete videotext section of a particular TV channel.

If you press the **TEXT** button again you can switch into the mixed mode (background transparent). Use the **TEXT** button to return to the normal mode.

For leaving the video text please press **EXIT**.

EPG – Electronic Programme Guide

Almost all TV and radio broadcasters provide further information on their programme. Your receiver stores and decodes these data and displays them in the so called Electronic Programme Guide (EPG).

This programme preview is activated by using the **EPG** button. The appearing list contains all programmes of the current channel.

With **▲▼** or **◀▶** you can select the programme you want to be informed about. You can get more detailed information by pressing **OK**.

Also you can use the EPG list to program a record timer very easily: Just press the **yellow button** and activate the record timer in the corresponding menu.

Please use **EXIT** to leave this on screen dialog.

Using serial interface

The serial data interface "DATA" offers you the possibility to connect the receiver to a PC. Therefore you need a PC and serial cable (On the PC-side a female SUB-D connector with 9 or 25 pins and on Receiver-side a RJ11 plug with 6 pins).

Via this connection you can perform software updates and channel lists up- and downloads. The required information and software tools are available at the manufacturer's homepage.

Make a contribution to environmental protection

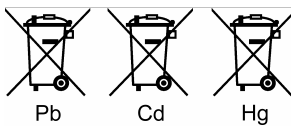
Do not throw batteries into domestic waste. As a consumer you are obliged to return used batteries. You can bring them to a public collection station in your commune or elsewhere where batteries of the same type are sold.

The following signs can be found on batteries including harmful substances:

Pb = battery includes lead

Cd = battery includes cadmium

Hg = battery includes mercury



Hints for disposal

If your device is once disused you should not just throw it into domestic waste. Surely there is a collecting point for old devices where it can be collected and recycled.



Trouble-shooting

Every electric device can have a malfunction. It does not automatically mean that it is defective. In most cases it happens because of a feed cable, plug-and-socket connections or access mistakes. Please control the following items before taking the receiver to your specialised dealer:

Problem	Possible causes	Help, Tips
Receiver can not be turned ON	Power cable not connected to mains	Check if power cord is plugged in correctly. Try another electric device at the same power socket.
	Batteries of the remote control are not inserted / inserted faulty	Check batteries
No or bad picture	TV set is running on wrong channel	Check set up of the TV set
	Scart cable is damaged or plugged in incorrectly	Replace or plug in the Scart cable correctly
No audio	Volume is set too low	Increase volume
	Cable damaged or plugged in incorrectly	Check cable and ports
Remote control does not work	Distance to big	Come closer to receiver, point remote control directly towards receiver
	Batteries are exhausted or inserted incorrectly	Insert batteries correctly
	IR receiver is covered or not reachable by the IR signal	Remove barriers between remote control and receiver
	Timer is activated	Deactivate timer
Time is displayed wrongfully	Difference between local time and GMT is set incorrectly.	Enter menu <i>Receiver setup</i> and set time difference correctly
Timer is activated at the wrong time	Difference between local time and GMT is set incorrectly.	Enter menu <i>Receiver setup</i> and set time difference correctly
Channel Change On Screen graphic shows: „short circuit or overload at the antenna input“	Coaxial cable damaged	Check coaxial cable and F-plug
	LNB damaged or defective	Check or exchange LNB
Interference at programmes with a frequency at about 12480 MHz	Interference may be caused by cellular phones (DECT) near the receiver	Eep more distance between cellular phone and receiver/antenna cable.
No picture, Channel change on screen graphic shows "No valid signal!"	Cable is defect or plugged in incorrectly	Check cable and ports
	Channel has changed transponder	Perform channel search
	Satellite antenna is not installed correctly	Re-Adjust satellite antenna
	Incorrect Settings in menu „Settings“	Correct settings or restore the factory default status

Technical Data

General	<ul style="list-style-type: none"> • Memory for 4000 programmes • Video text and video text generating for playback on TV
Fast OSD	<ul style="list-style-type: none"> • Quick channel switching for zapping • No delay in building menus • Large typeface for better legibility • Easily understandable online help for all menus • OSD transparency and length of superimposition can be set
EPG	<ul style="list-style-type: none"> • Electronic Programme Guide for max. 64 days
List of stations editor	<ul style="list-style-type: none"> • Copying, moving, deleting • Operates in blocks
Channel search	<ul style="list-style-type: none"> • Completely automatic channel search • Recognition of unencrypted programmes • Manual transponder search
Further	<ul style="list-style-type: none"> • Simple installation through menu-based installation assistant • Display of signal strength and quality • Separate setting of audio outputs for SCART and Digital • Jump back to previous station with a single button • Serial interface for updates and list of stations, updates available from the Website
Hardware	
CPU	<ul style="list-style-type: none"> • 32 bit RISC CPU
Video	<ul style="list-style-type: none"> • 2 × SCART with RGB, FBAS, YUV or Y/C support • 16:9 signalling
Audio	<ul style="list-style-type: none"> • 24bit Audio DAC • Stereo output • 32-level volume controls
A/V	<ul style="list-style-type: none"> • VCR through line to TV
Reception	<ul style="list-style-type: none"> • DVB-T: 174–862 MHz (Band III, IV, V), DVB-S: 950–2150 MHz • DVB-T: 7 or 8 MHz bandwidth switching
Antenna current	<ul style="list-style-type: none"> • DVB-T: +5 V, max. 30 mA, SAT: +14/+18 V, max. 400 mA
Controls	<ul style="list-style-type: none"> • Remote control, front controls
Mains connection	<ul style="list-style-type: none"> • 230 V AC, 50 Hz
Power consumption	<ul style="list-style-type: none"> • In operation approx. 10 W (not including LNB) • In standby approx. 4 W
Batteries for rem. control	<ul style="list-style-type: none"> • 2x1.5 V (size AAA)
Environmental temp.	<ul style="list-style-type: none"> • +5 °C to +40 °C
Dimensions	<ul style="list-style-type: none"> • W x H x D: 325 x 55 x 140 mm
Weight	<ul style="list-style-type: none"> • approx. 800 g

Technical modifications and mistakes remain reserved.