Digital Satellite Receiver

FREE TO AIR

ENGLISH

LC Mini SAT V.0155

Contents

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.

$C\epsilon$

The unit is labelled with the CE-sign and therefore conforms with the general requirements of the European guideline 89/336 EWG 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 retained for future reference.

All operating and using instructions should be followed.

Never allow children to operate this electrical device without supervisor.

ENVIRONMENTAL CONDITIONS

Protect the receiver against humidity, heat and cold. Allow 10cm space around the receiver for sufficient ventilation. Do not cover the receiver's ventilation openings with items like newspapers, tablecloths, curtains, etc. .

Do not place any objects filled with liquids, such as vases, on the satellite-receiver.

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

Do not expose the set-top-box (receiver) 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 300mA. The connected antenna must be grounded correctly.

Please note the VDE prescriptions.

CONNECTING TO MAINS SUPPLY (SAFETY FEATURE!)

Only connect the original mains adapter 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 mains adapter should fail to fit, contact your supplier.

FAILURE

If the mains adapter or the power socket or its electrical connection is damaged, immediately unplug the mains adapter from the mains supply socket. Do not try to open or repair the mains adapter or the receiver on your own! Service must be carried out only by experts at a proper service centre.
If replacement parts are required, only original components are allowed to use. The use of unauthorised components may result in risk of fire and electric shock.

Image interfaces by programmes with a frequency of approx. 12480 MHz (DSF etc.) can possibly be caused by cellular phones, which are located near the receiver or the antenna cabel. If so the distance between receiver and telephone should be enlarged until the problems stop to emerge.

Cleaning and care

Before cleaning, unplug the device from the mains adapter.
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 feet may rub off. You should place the device on a proper underground that is stable and not easily inflammatory. 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, …).

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.

Connecting the receiver

Connecting a satellite antenna

Connect your satellite system's coaxial cable to the IF-INPUT DIGITAL socket (3).
Warning: If, after connecting the receiver to the mains, the message "short circuit or antenna input overload!" is displayed on the screen, then there is a short circuit in the LNB cable or the LNB. In this case the receiver must be disconnected from the mains immediately until the short circuit has been dealt with.

Connecting a television

Use a scart cable to connect the TV socket (5) on the receiver to the corresponding scart socket on the television set.

Connecting a video recorder

Use a scart cable to connect the VCR socket (4) on the receiver to the corresponding scart socket on the video recorder.
When the video recorder is switched to playback mode, the video and sound signals will be relayed to the television via the receiver (loopthrough mode). This requires the digital receiver to be in standby mode.

Connecting a digital multi-channel amplifier (optional)

The receiver is optionally available with an AUDIO OUT socket (6) for a DOLBY DIGITAL signal. Use a suitable cable to connect this socket to your multi-channel amplifier.

Connecting an IR mouse (optional)

If you want to set up the receiver where it can't be seen, you can connect a so-called IR mouse to the RJ-11 socket (7). This must be positioned in such a way that it can receive the signals from the remote control. When installing the receiver, always be sure to follow the safety and installation instructions.

Connecting the mains adaptor

Connect the DC plug ofthe mains adaptor supplied with the unit to the socket DC-INPUT +12V (2) on the receiver.
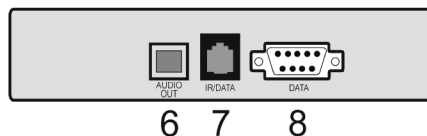
Control elements, front and rear panels

Front panel

1   4-digit display (optionally) shows channel number
1a   2color LED shows ON/OFF status

Display	LED	
-	red	Receiver in standby mode.
Channel	green	Receiver is ON
rEC.		Timer activated
FAIL		LNB short cut
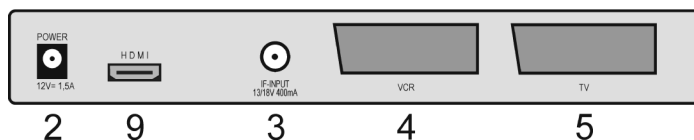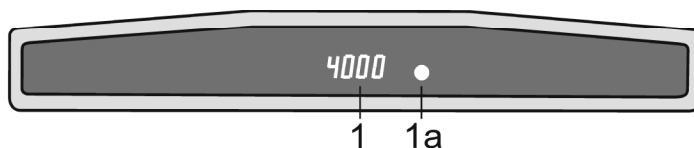
Rear panel

2   Connector for mains adapter 12VDC
3   IF Input Digital – Connector for LNB
4   VCR-Scart port for connecting to the video recorder
5   TV-Scart port for connecting to the TV
9   HDMI-Output for digital Audio and Video (optionally)

Left side

These connectors are optional. i.e. not all units have these connections. This depends on the configuration options of the receiver.

6   Optical Outputsocket for DOLBY DIGITAL-Signal.
7   RJ-11-Socket: Connection for an Infraredmouse and Interface for softwareupdate
8   RS232 interface for connecting to a PC in order to use further PC-based functions of the receiver

Remote control

⏻   ON-/OFF-Key: Switches receiver in "Standby"
    or "Power On" mode

🔇   Mute: Turns sound on/off

0-9   Numeric input of channel numbers.
          In Menu: Input of numeric parameters (frequency, etc.)

i/EPG   Displays Electronic Programme Guide (EPG)

LIST   Shows list of stations.

VOL◄ ► Volume control
           In menu: Change parameters or scroll lists

CH▲▼   Performs channel change (up/down).
           In menu: selects menu lines

TV   Switches between RADIO and TV mode

RADIO Switches between RADIO and TV mode

SWAP   Activates last selected channel.
           In menu: Swaps between lists and replaces channels.

OK   In menu: Opens, confirms or modifies currently
           selected item

EXIT   Leave current menu or OSD (On Screen Display)

MENU   Activates main menu (back with EXIT)

Red button In video and audio menus: Moves cursor downwards.
                Delete-function in menu "Channel list".

Green button   No function.

Yellow button   Opens the information menu.

Blue button (TEXT) Turns on video text

F1   Activates Audio-menu

F2   Activates Timer-menu

⏹   No function

⏺   No function

7
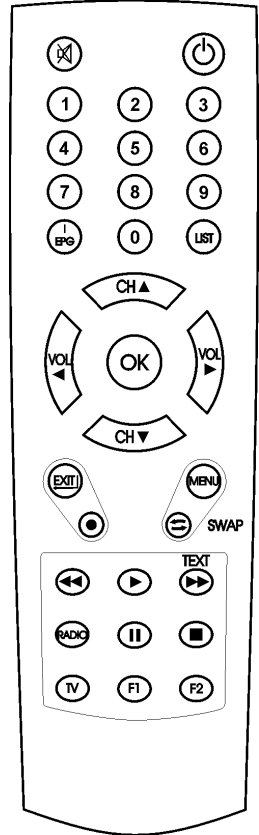
How to insert batteries

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.

Willkommen

Language of the menu

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

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

Initial installation

Satellite

In the last 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                │
└─────────────────────────┘

┌─────────────────────────┐
│  Satellite              │
└─────────────────────────┘

┌─────────────────────────┐
│  Astra 19.2             │
│  Hot Bird               │
│  Turksat 1C             │
│  Sirius 2/3             │
│  Amos 1                 │
│  Helas Sat 2            │
│                         │
└─────────────────────────┘
```

ATTENTION:

- If this installation is not finished (e. g. by power failure) or if the receiver is reset to factory default status, the apparatus starts with the Welcome screen again.

- During summer time please adjust the time difference in menu „Receiver Setup". It is necessary for displaying the times, EPG, … correctly and avoiding mistakes at timer records.

- If you use a DiSEqC-Switch in your reception system you may need to adjust the pre-installed settings in menu *Installation – LNB configuration*. Following settings are pre-installed:

DiSEqC Switch input	Satellite	
A	Astra	19.2° Ost
B	Hot Bird	13° Ost
C	Sirius 2/3	5° Ost
D	Amos 1	4° West

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**.

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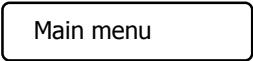
Hint:
At each on screen display the possible user inputs are explained in the help bar at the lower screen brink.

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**.
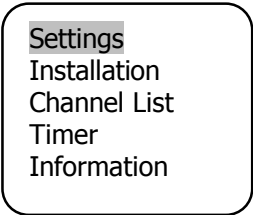
Turn on the receiver by pressing ⏻.
For entering the main menu, please press the **MENU** button.
The main menu is displayed:

> Main menu

> Settings
> Installation
> Channel List
> Timer
> Information
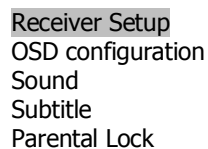
Press the **OK** button.
The following menu is displayed:

> Settings

The first line *Receiver Setup* is marked.

> Receiver Setup
> OSD configuration
> Sound
> Subtitle
> Parental Lock

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

Settings – Receiver setup

Receiver setup

Scart output TV
Time difference
Menu language
Display format
Display adjustment
HDMI output

RGB
+1.00 hrs
English
4:3
Letterbox
22_720x576i

1) SCART output TV
The video output at the SCART socket can be modified by pressing ◄ or ►. You can select among following options: *CVBS*, *RGB [Option]*, *YUV* or *Y/C*.

2) 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.

3) Menu language
Choose your language by pressing ◄ or ►.

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

5) Display adjustment
Use ◄ or ► for adjusting the video signal: pan & scan, letterbox, pillar box or centre.

6) HDMI output (optionally)
If your receiver is connected to the TV by a HDMI-cable, than in this line of the menu the digital video-format is indicated.
Use ◄ or ► for changing the video-format (720x576p, 1920x1080i, 1280x720p).
For an optimal function of the HDMI-connection your TV should use EDID- (Extended Display Indentification DATA) and DDC-function (Display Data Channel).
If your TV has a resolution of 720x576i (i=interlaced), you will get the best picture quality.
After changing the settings you see no picture. After 2-3 seconds you should see the picture on the TV, if not, please change the video-format by using ◄ or ► until you can see a picture.

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 – OSD Parameters

For entering the OSD configuration menu, please select menu item *OSD configuration* in the *Settings* menu (see page 13) and press **OK**. The following menu appears:

OSD configuration

OSD transparency	10 %
Display time	5 s
OSD colour	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 – Sound

Sound

Initial volume	100 %
Sound settings	Stereo
Sound channel TV	deu
Sound channel Dig	Same as TV

1) Initial volume
The initial volume after a power reset of the receiver is adjusted here by pressing ◄ or ►.

2) Sound setting
Using ◄ or ► you can activate following audio modes: *Stereo*, *Mono left* or *Mono right.*

3) Audio channel TV
If the broadcasted programme offers different audio options you can select the desired audio output at the TV Scart by keys ◄/►.

4) Audio 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 – DVB Subtitling

Subtitle

| Subtitle | Off |
| Subtitle language | - |

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 – Child lock

Your receiver is equipped with a child lock. This secures the receiver against unauthorised use. When the child lock ist 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 *Child lock* and press the *OK* button.

```
Parental Lock
```
```
Device Lock
Change PIN
```

Child 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 fof. 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.

Child Lock – changing the PIN

To change the PIN code, move the cursor to the line *Change Pin* and press **OK**. The followin 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, the 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

This digital receiver is pre-installed already and is ready for use with most satellite antennas and LNB configurations without further fittings. Changes in menu *LNB configuration* directly effect the reception characteristics of your receiver and should only be done by specialists.

After entering the Main Menu, select line *Installation* by using ▲▼ and confirm with **OK**.

The following menu is displayed:

Attention:
If DiSEqC mode "DiSEqC 1.0" is selected in the
LNB configuration menu, the line *Motor settings*
is not displayed.

Press ▲▼ to select the desired menu item and
confirm with **OK**.

Installation

Antenna configuration
Channel search
Factory reset
Software download
Motor settings

Installation – Antenna configuration

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

Antenna configuration

Antenna	1 Astra 19.2
Antenna power	On
LOW band	9.750
HIGH band	10.600
DiSEqC switch	A
Toneburst switch	A

DiSEqC mode	DiSEqC 1.2

Installation – Antenna configuration

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.

2) Antenna power
Here you can switch on/off the supply voltage for the LNB (◄ or ►).

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 (see page 23).

Installation – Channel search

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

Satellite	Astra 19.2	QPSK
Search mode	Transponder	FEC
Encrypted	No	BER: 0
Frequency	12.187 GHz	
Polarisation	Horizontal	
Symbol rate	27.500 MS	

Start scan

————————————	Level: 234
————————————	C/N: 9dB

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.
    Satellites: 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* **CH ▲▼**) 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.
Chapter *Channel List* (page 25) describes how to sort the channel list.

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.

```
┌──────────────────┐
│  Download        │
└──────────────────┘

┌──────────────────┐  ┌──────────────────────┐  ┌──────┐
│ Software         │  │ new Software available│  │  ✔   │
│ Channel list     │  │ -                     │  │  x   │
│ OSD texts        │  │ new Software available│  │  ✔   │
│ Information       │  │ all                  │  └──────┘
└──────────────────┘  └──────────────────────┘

┌──────────────────┐  ┌──────────────────────┐
│ **Start download** │  │ new Software available│
└──────────────────┘  │                      │
                      └──────────────────────┘
```
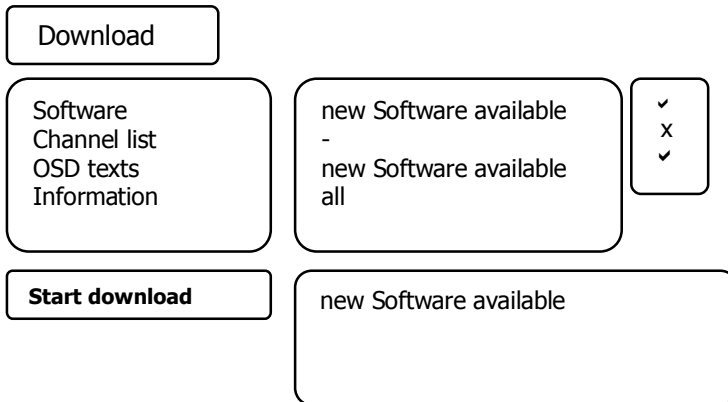
Please wait until this search is completed. It may take a few minutes. When the download stream is found the receiver verifies whether there are available new versions of the operating software, OSD texts and channel list. The result is shown in the *Download* menu behind the corresponding menu items (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.)   *Software*:   Operating software
   b.)   *Channel list*:   Channel list
   c.)   *OSD texts*:   All menu texts displayed on the screen
   d.)   *Information*:   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 ◄ ►):

   All :   Information on all available data
   None: Information on none of the available data
   Software: Information on the new software version.
   OSD texts: Information on the new menu texts.
   Channel list :   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).

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
Edit favourites list
Delete antenna
```

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

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

Timer

Sleep timer
Record timer

Timer – Sleep Timer

In menu *Timer* use the ▲ ▼ buttons to select line *Sleep Timer* and press **OK**.
The following menu appears:

Sleep timer

Switch-off time   00:00 o`clock

Activate timer

Set Switch-OFF time:

1.   Enter the time edit mode in line *Switch-off time* by pressing **OK**
2.   Insert the time the receiver is to switch off by using **0**-**9** and **OK**
3.   Select line *Activate timer* with ▲▼
4.   Activate your settings by pressing **OK**
5.   Press **EXIT** to leave menu.

The digital receiver turns OFF at the specified time (Standby).

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)       │   │ 1                          │
│ Start at                   │   │ 00:00 o`clock              │
│ Stop time                  │   │ 00:00 o`clock              │
│ Date of recording          │   │ 21.09.05                   │
│ Station                    │   │ 7 ProSieben                │
│ Repetitions                │   │ nothing                    │
└────────────────────────────┘   └────────────────────────────┘

┌────────────────────────────┐
│  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** .

```
┌────────────────────────────┐
│  TV List                   │
└────────────────────────────┘

  ┌──────────────────────────┐
  │ 1 Das Erste              │
  │ 2 ZDF                    │
  │ 3 RTL Television         │
  │ 4 SAT.1                  │
  │ 5 KABEL1                 │
  │ 6 RTL2                   │          ┌──────────────────┐
  │ 7 ProSieben              │          │  Astra 19.2       │
  └──────────────────────────┘          └──────────────────┘
```

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.

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

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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** buttons two further charts with channel, software and hardware information are displayed. With **PR** +/- or ▲▼ and **BACK** 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.

Audio settings

If a certain channel offers different audio options (e.g. languages) these are displayed in the audio sub-menu of the channel change on screen graphic.

With the **red** button on the remote control you can select the desired option/language. Activate your choice by **OK**.

[1/2]
German
English

SPDIF – AC 3 mode (Option)

If a channel offers a digital audio sound (SPDIF/AC-3) this is displayed in the audio sub-menu of the channel change graphic, too. By using the **red** button on your remote control you can select this AC-3 mode and activate it (**OK**).

[1/2]
German
AC-3

If you own a HIFI amplifier and a digital Audio signal is broadcasted by the provider you can enjoy this excellent sound. Therefore you have to connect the DIGITAL AUDIO port of the receiver with the corresponding input port of your amplifier.

Using serial interface

The serial data interface offers you the possibility to connect the receiver to a PC. Therefore you need a PC and serial cable with 1:1 pin assignment (i.e. all pins are connected directly).
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.

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	Mains adapter 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 *Receiver setup* and set time difference correctly
Timer is activated at the wrong time	Difference between local time and GMT is set incorrectly.	Enter menu *Receiver setup* 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

# *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

Pb   Cd   Hg
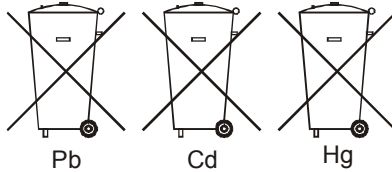
Hints for disposal

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.

Technical data

General	• 4000 channels • 30 satellites (individually activate able) • On screen video text and VBI video text
Fast-OSD	• quick channel change (zapping) • no delay at on screen graphic display • big type for better readability • concise help for all menus • OSD transparency and OSD display duration adjustable
EPG	• Electronic Programme (EPG)
Channel list editor	• copy, replace, delete • blockwise operations
Channel search	• automatic channel search • identification of encrypted channels • manual channel search
Further details	• DiSEqC control (Level 1.2) • Display for signal strength and quality • Separate audio output settings for SCART and Digital • SWAP function • Plug & Play by pre-programmed channel list for Astra 19,2° East, Hot Bird 13° East, Türksat 1C 42° East, Sirius 2/3 5° East, Amos 1 4°West and Hellas Sat 2 39° East • DVB subtitling • Software updates via satellite • DATA interface for updates and channel list transfer; updates available via website
Hardware **CPU** **HDMI** **Video** **Audio**	 • 32 bit RISC CPU • with Upscaler (optionally) • 2 × SCART with FBAS, Y/C, YUV or RGB support (Optionally) • 16:9 signal • Audio-DAC (Optionally) • Optical audio out (Optionally) • Volume control • VCR connection to TV
Reception	• 2 – 45 MSym/s • DiSEqC 1.0 und DiSEqC 1.2 control
Handling	• Remote control, rare panel control
Power requirement	• +12 Volt • Standby mode about 6W
Batteries for remote control	• 2x1.5V (size AAA)
Surrounding temperature	• +5°C to +40°C
Dimensions	• B x H x T: 230 x 35 x 140 mm
Weight	• Ca. 580g

Subject to change without prior notice. Errors in interpretation excepted.