

TechniSat®

DIGITY 1

for reception of "Free To Air"
DVB satellite programmes



Operating manual

DVB
Digital Video
Broadcasting

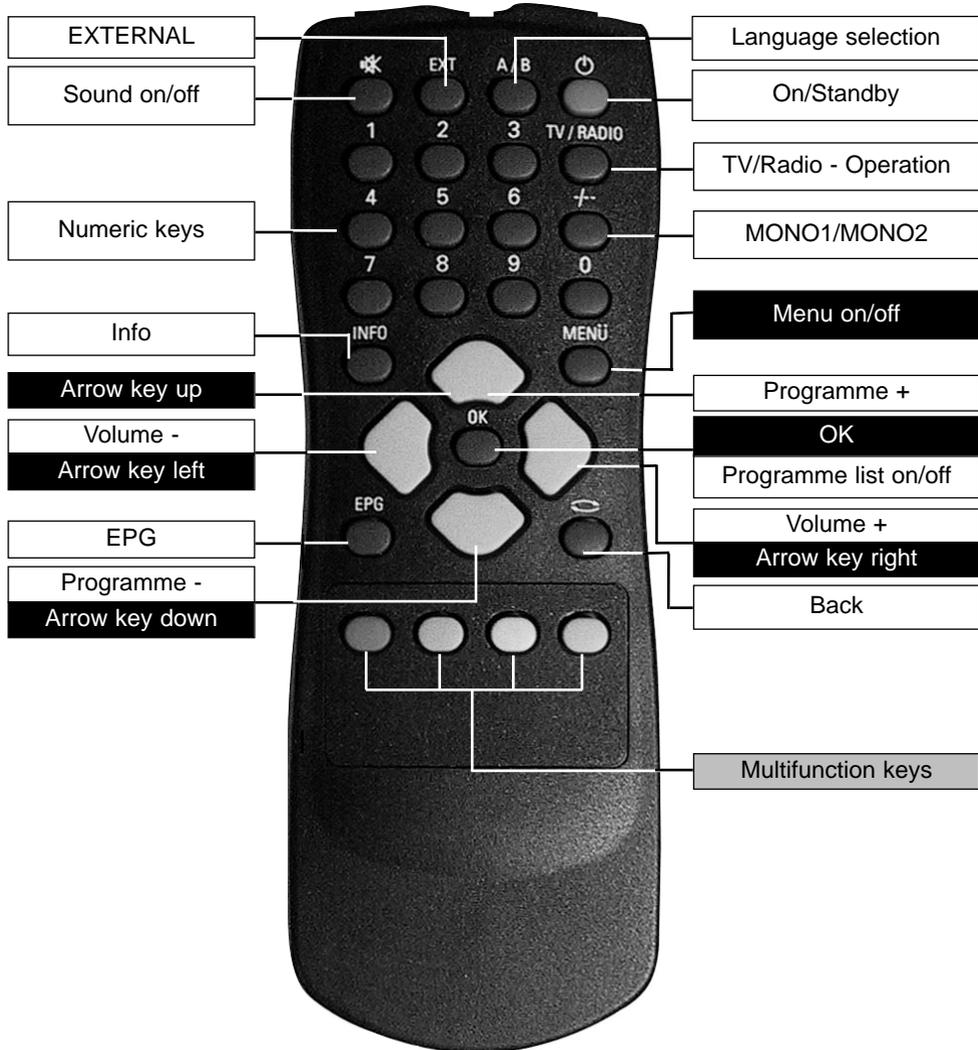


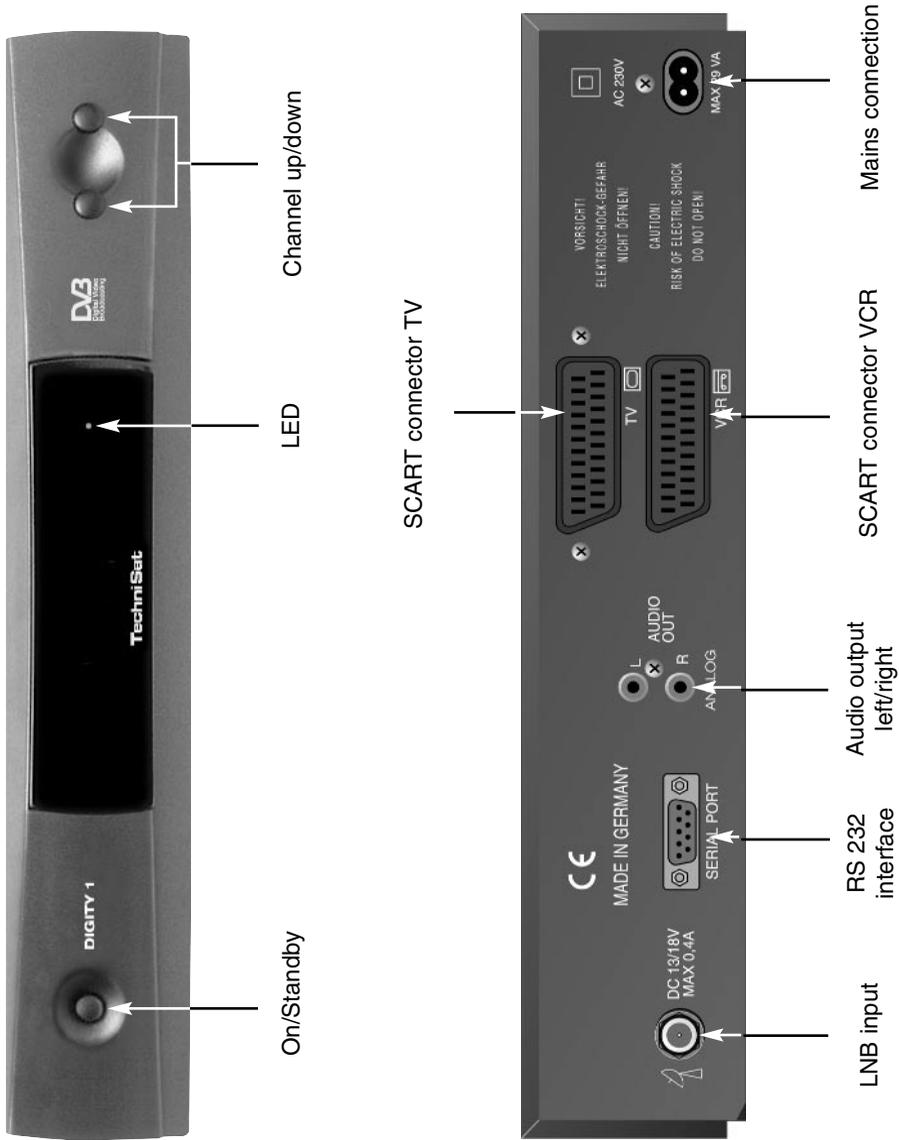
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Remote control unit





3 Please read this first

NOTE: English speaking customers - the default setting of your receiver is German. You should go directly to chapter 5 to change the setting to English (point 5.1 on page 10)

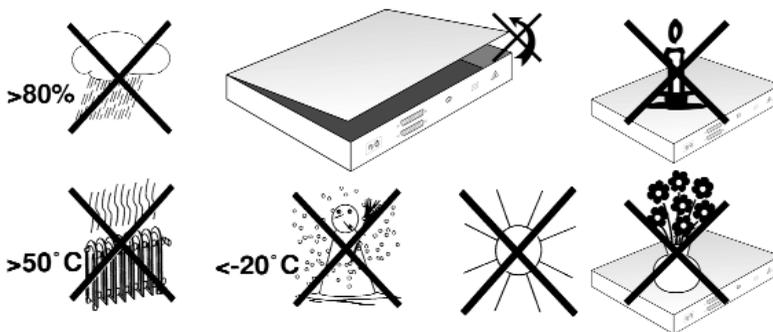
- > Before setting up and connecting your equipment, check whether you have received all items that should have been supplied with the unit.
The following items are supplied as standard:

1 Receiver	1 mains cable	1 remote control unit
1 operating manual	1 guarantee card	2 batteries (1,5V microcells AAA).
- > Insert the batteries supplied in the battery compartment of the remote control unit, ensuring polarity as indicated.
- > Before connecting the receiver, please read the safety notes as set out in **Chapter 3**.
- > **Chapters 4 and 5** describe the connection and adjustment of the receiver to the external unit (dish antenna, LNB, etc.), to the TV set, VCR, etc. These settings and adjustments need only be carried out once, and need only be modified if and when there is a change in your external unit, or when additional equipment is connected.
- > **Chapter 6** describes all functions required for everyday use, such as programme selection or setting the volume.
- > In **Chapter 7** you will find information on how to set new programmes, and on how to change the order of programmes in the list.
- > The technical terms used in the operating manual are explained in **Chapter 8**.
- > The technical data can be found in **Chapter 9**.
- > A troubleshooting guide, assisting you to identify and overcome faults can be found in **Chapter 10**.

Safety notes:

For your own protection, you should read these safety notes carefully before operating your new receiver.

The manufacturer cannot be held responsible for damage occurring through non-observance of the safety precautions described, or through inappropriate or improper handling and operation.



- > In order to ensure adequate circulation of air, place the unit on a smooth, even surface, and do not place any objects on top of the unit, as this contains circulation slits which conduct heat away from the interior of the unit.
- > Do not place any burning objects, such as a lit candle, on top of the unit.
- > Do not subject the unit to water or extreme humidity, and do not place any liquid-filled containers, such as vases, on top of the unit.

- > The receiver may only be operated in a temperate climate.
- > Never open the cover of the unit! You may be subject to an electrical shock. Any necessary opening of the unit may only be carried out by qualified personnel.

Operational breaks:

During a thunderstorm, or during prolonged periods of non-use, the unit should be disconnected from the mains.

In the following cases you should disconnect the unit from the mains, and consult a qualified technician:

- > if the mains cable or plug are damaged
- > when the unit has been exposed to dampness, or when liquid has entered the unit
- > in case of severe malfunction
- > in case of significant external damage

Disposal instructions:

The packaging of your receiver consists exclusively of recyclable materials. Please ensure they are recycled via the "Green Dot" or relevant local system.

Please note that the discarded batteries of the remote control unit, as well as any electronic parts, should not be disposed of with your domestic waste, but should be appropriately disposed of (through retail trade, or local system for electronic waste).

Important operating instructions

The use of a so-called "On Screen Display" (information presented on TV screen, see example) simplifies the operation of the receiver, and reduces the number of keys required on the remote control unit. All functions are displayed on the screen, and can be adjusted with a few key strokes. Related functions are grouped together in a "MENU". The function selected is highlighted in a different colour. In the bottom line, the function keys red, yellow, green and blue are represented by colour bars. These colour bars represent varying functions in the individual menus, which can be performed by pressing the appropriate coloured key (multi-function key) on the remote control unit. The function keys are only active when a brief description is displayed in the appropriate field.

Help:

Where available, a brief help text can be displayed or switched off again by pressing the **blue** function key.

Terms and key description that appear in the OSD menu are shown in **bold** type in this manual.

Example:

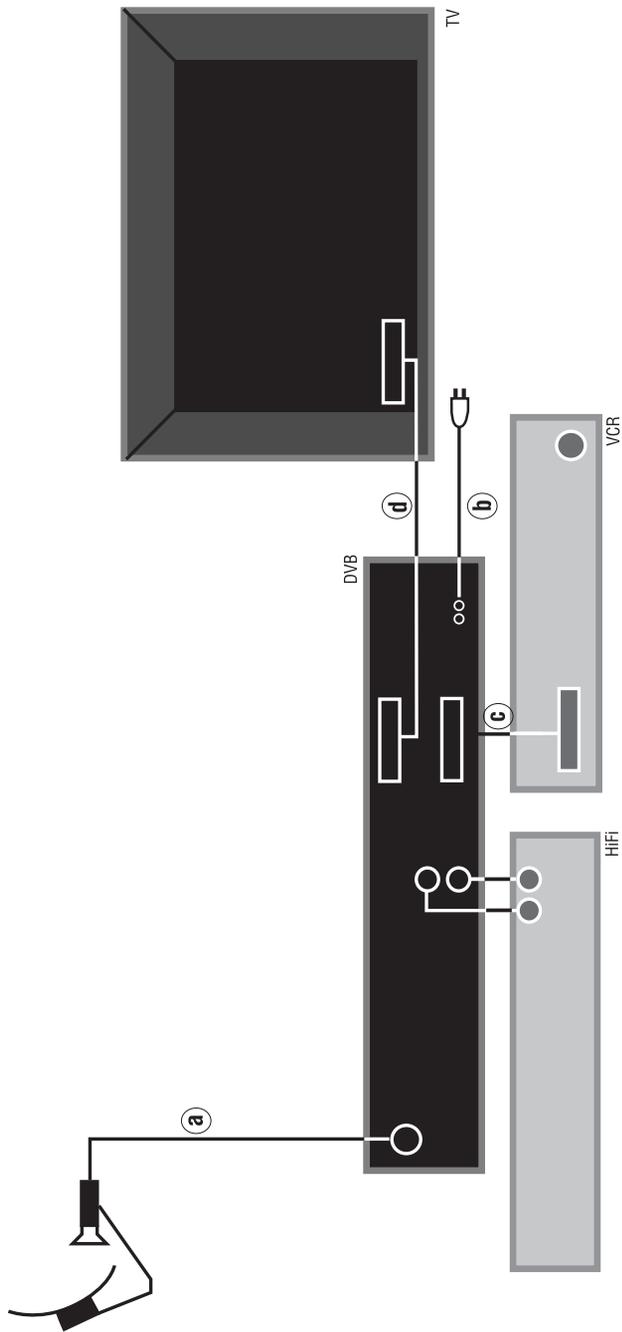
- > Press the **Menu** key to display the menu **Settings**.



- > Now select the menu line **OSD language**, by using the **arrow up/down keys** to highlight the appropriate line.
- > Confirm by pressing **OK**.
- > The menu can be switched off again by pressing the **Menu** key, or by repeatedly pressing the **Back** key.

Connecting the DVB receiver to a satellite installation

- a. Connection from LNB to LNB IN connection on DVB receiver
- b. Mains connection
- c. SCART connection between a VCR and the VCR-SCART connection on the DVB receiver
- d. SCART connection between the DVB receiver and the TV set



4 Connections

The various references below - **a b c** etc., refer to the diagram on page 8.

4.1 Mains connection

The receiver should be connected to the mains supply only after it has been connected to all other components in the system. This serves to avoid damage to both the receiver and to other components.

- b** Once you have made all other connections, use the mains cable supplied to connect the receiver to a mains socket 230V/50Hz.

4.2 External unit

- a** Connect the **LNB input** of the receiver to the LNB of your external unit, using a suitable coaxial cable. Note point 5 of the chapter on "Installation".

4.3 Connecting to a TV set

- d** Connect the receiver (**SCART socket TV**) to the TV set (SCART socket) by means of a SCART cable. If your TV set is appropriately equipped, it will switch automatically to AV, and thus to satellite reception, when the receiver is switched on.

4.4 Video cassette recorder (VCR)

- c** Connect the video player to the SCART socket **VCR**. During Play mode, the video player will send a switching signal to the receiver, and the Video player signal will automatically be sent to the TV set.
If your video player does not transmit a switching signal, use the **EXTERN** key of your receiver to switch it to the external input **VCR**. Pressing this key again will return you to normal operation.

4.5 Amplifier

In order to achieve the best possible sound quality, you can connect the receiver to a hi-fi amplifier. Use a suitable cable to connect the cinch sockets **Audio R** and **Audio L** of the receiver with an input socket of your hi-fi amplifier (e.g. CD or AUX; NOTE that the phono input is not suitable!).

4.6 Serial Interface RS 232

The RS 232 interface is used for pre-programming via a PC, and in order to update the operating software.

5 Installation

Now that you have connected your new receiver, and have commenced operating it, you can, if necessary, optimize its functions for your needs.

5.1 OSD Language

This menu point gives you the option of setting the language according to your preferences. In order to select a different OSD language, proceed as follows:

- > Press the **Menu** key to display the **Main Menu**.

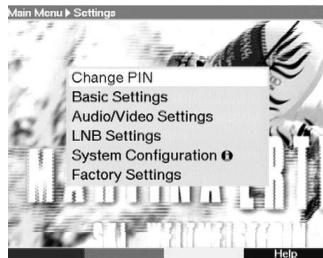


- > Now select the menu line **OSD Language**, which you can mark by means of the **arrow up/down keys**.
- > Confirm by pressing **OK**.
The sub-menu **OSD Language** will be displayed.
- > Use the **arrow up/down keys** to mark the language selected. Use the **arrow up/down keys** to move the marker up or down one line at a time, or use the **arrow left/right keys** to move forward or back one page at a time.
- > Store the selection by pressing the **OK** key.
- > Press the **Back** key to return to the **Main Menu**.

5.2 Basic settings

In order to obtain optimum use from your DVB receiver, you should adjust it to your personal preferences.

- > Press the **Menu** key to display the **Main Menu**.
- > Select the menu line **Settings** by means of the **arrow up/down keys**.
- > Confirm by pressing **OK**.
The sub-menu **Settings** will be displayed.



- > Select the menu line **Basic settings** by means of the **arrow up/down keys**.
- > Confirm by pressing **OK**.

The menu **Basic settings** will be displayed.



- > Use the **arrow up/down keys** to move the marker within the menu, and to change the individual settings as indicated. When selecting a menu item, please note any relevant information displayed on screen.

The following settings can be made:

5.2.1 Parental control setting:

Your unit can be set to resist unauthorised use by children. Any programmes that you have blocked in terms of the procedure in Points 7.2 or 7.3 can then only be viewed after entering a four-digit PIN number. When this line is marked, use the **OK key** to switch the parental control setting **on** or **off**.

5.2.2 Time difference GMT (hrs.)

Your unit is equipped with a clock. This is synchronised, by means of satellite reception, with Greenwich Mean Time. Thus all you have to do is to correct the time in accordance with your local time by means of the **OK key**. For germany, this means +1 hour, and +2 hours during Daylight Savings time (summer).

5.2.3 Country

This function provides for automatic switching between summer and winter time, by country. Go to the line **Country/State** and use the **arrow left/right keys** to select your home country.

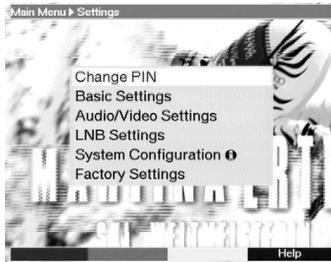
As this information is currently not broadcast by all programme providers, we advise that you presently leave the setting at **None**.

- > Press the **Back** key to return to the menu **Settings** or press the **Menu** key to return to normal operation. The settings are automatically stored in memory.

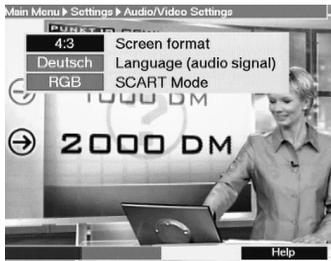
5.3 Audio/Video settings

In order to optimize the settings of your receiver in relation to the TV set, you can make further adjustments in the menu **Audio/Video settings** vornehmen.

- > Press the **Menu** key to display the **Main Menu**.
- > Mark the line **Settings** by pressing the **arrow up/down keys**.
- > Confirm by pressing the **OK** key.
The sub-menu **Settings** will be displayed.



- > Now mark the line **Audio/Video** settings by means of the **arrow up/down keys**.
- > Confirm by pressing **OK**.
The menu **Settings Audio/Video** will be displayed.



- > Use the **arrow up/down keys** to move the marker within the menu, and to change the individual items. When selecting a menu item, please also pay attention to any related on-screen displays.
The following settings/adjustments may be made:

5.3.1 Picture/image format of TV set:

Use the **arrow keys left/right** to select the appropriate picture format for your TV set, **4:3** or **16:9**. This function will automatically adjust the picture format to that of your TV set.

5.3.2 Language (Audio signal)

In this menu line, use the **arrow left/right keys** to select your preferred language. This function will ensure that, provided this language (sound track) is being broadcast, it will be selected automatically.

5.3.3 SCART-Mode

In this menu line, use the **arrow left/right keys** to set the appropriate mode for your TV set, **FBAS** or **RGB**. For standard sets, leave the default setting at **FBAS**.

- > Press the **Back** key to return to the menu **Settings** or press the **Menu** key to return to normal operating mode. The settings will be automatically stored in memory.

5.4 LNB-Setting/Adjustment of external unit/satellite selection

Once you have adjusted the receiver to your personal preferences, you should now, if necessary, still adjust the receiver in accordance with your dish antenna. The receiver is pre-programmed at the factory for reception of ASTRA and EUTELSAT by means of a Universal LNB (see annexure with technical terms. These programmes can be received without any further adjustments, if your receiving equipment permits this.

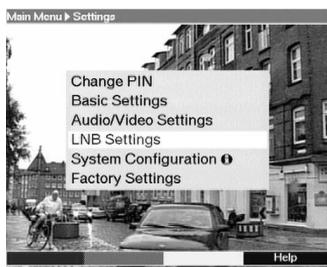
If, however, you wish to receive signals from another satellite, or if you are using a different

type of LNB, then you must adjust the receiver as follows :

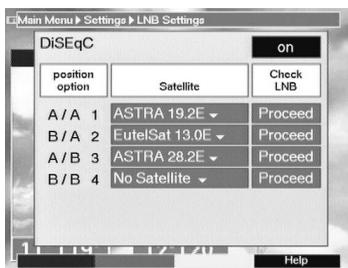
- > Press the **Menu**, key in order to display the **Main menu**.



- > Use the **arrow up/down keys** to mark the line **Settings**.
- > Confirm by pressing **OK**.
The menu **Settings** will be displayed.



- > Now mark the line **LNB Settings** by means of the **arrow up/down keys**.
- > Confirm by pressing **OK**.
The menu **LNB Settings** will be displayed.



The following adjustments can be made in this sub-menu:

5.4.1 Switch DiSEqC on or off

DiSEqC (**D**igital **S**atellite **E**quipment **C**ontrol) is a digital control signal used to control and switch DiSEqC-compatible components via the antenna cable.

If your external unit is equipped with DiSEqC components, you must switch on the DiSEqC-control:

- > Make adjustments in this line by means of the key **OK DiSEqC on or off**.
Since only one LNB can be addressed when the DiSEqC control is switched off, the menu is restricted to the configuration of a single LNB.

5.4.2 Setting the switching matrix and the LNB properties

The menu lists the four switching criteria of the DiSEqC control.

Your receiver has been pre-programmed, so that ASTRA will be received in switch position A/A and Eutelsat in switch position B/A of a multiswitch. If the switching matrix of your reception equipment be configured differently, or if it is set to receive other satellites, you can make the following settings/adjustments in your receiver.

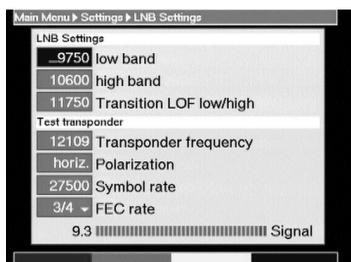
- > Use the **arrow up/down keys** to select the DiSEqC switch position (1-4) that you want to allocate to a particular satellite (e.g. **A/B 3 No Satellite**), by marking this line in blue.
- > Confirm by pressing **OK**.
A list of various satellites will now be displayed.
- > Use the **arrow up/down keys** to mark the satellite selected.
The **arrow up/down keys** will move the marker up or down one line at a time, while using the **Parrow left/right keys** will jump to the previous or next page.
If the satellite you are looking for is not specifically listed, select one of the spare positions, marked as **User1** to **User 14**.
- > Confirm by pressing **OK**.
The selected and marked satellite will now be inserted and shown at the previously marked position in the menu **>Settings>LNB**.

Continue to work your way through the **Menu >Settings>LNB**, until the data in this menu corresponds with that of your reception unit. Any switching criteria not required should be set to the position **No Satellite**.

5.4.3 Additional settings

Now that you have adjusted the switching matrix of your DVB receiver to correspond with your reception unit, you should now check the additional parameters of your reception unit, and, where necessary, make further corrections.

- > Use the **arrow left/right keys** to move the marker to the column **LNB-Test**.
- > Now use the **arrow up/down keys**, to mark the field **Continue**.in the line in which you want to check or alter the settings.
- > Confirm by pressing **OK**.
The menu **>LNB>Check** will now be displayed, showing the DiSEqC setting selected (e.g. **A/A 1**).



The following settings may be made:

LOF low band

LOF (Local oscillator frequency) is the frequency used by an LNB to convert the frequency received into the so-called 1. Intermediate Frequency, which can then be interpreted by the

receiver. So-called Universal LNBs operate with 2 LOFs, in order to cover the entire reception range of from 10.7 to 11,8 GHz (low-band) and from 11,7 to 12,75 GHz (high band). When this line is marked, use the numeric keys to enter the LOF frequency of the low band of your LNB.

LOF high band

When this line is marked, use the **numeric keys** to enter the LOF frequency of the high band of your LNB.

Switchover LOF low/high

When this line is marked, use the **numeric keys** to enter the frequency at which your LNB switches over from low-band to high-band.

Transponder test

The following points of this menu should only be entered if you want to test the satellite signal by means of a self-configured satellite (User 1 to 14).

Transponder frequency

When this line is marked, use the **numeric keys** to enter a frequency on which digital programmes are broadcast.

Polarisation

Use the **arrow up/down keys** to enter the desired polarisation plan (**horizontal** or **vertical**).

Symbol rate

The symbol rate expresses the volume of data transmitted per second. This could be, for instance, 27500 (27500 symbols per second). Use the **numeric keys** to enter the appropriate symbol rate.

FEC Rate

Press the **OK** key to display a window, in which you can use the **arrow up/down keys** to select the desired FEC rate (**1/2**, **2/3**, **3/4**, **5/6**, **6/7** or **7/8**).

If you do not know the FEC rate, select **Auto** in this line.

Press the **OK** key to accept this setting.

Signal

If you have entered the information relating to the test transponder correctly, this line will display the signal strength.

6 Operation

6.1 Switching on and off

- > Switch on the receiver by pressing the **On/Standby** key on the receiver or on the remote control unit.
- > Pressing this key again will switch off the receiver.
- > The receiver is now in standby mode.

6.2 Programme selection

6.2.1 Using the Programme up/down keys

- > You can move up and down the programme list one slot at a time by pressing the **Programme up/down keys** on the receiver on the remote control unit.

6.2.2 Using the numeric keys

- > You can use the numeric keys to enter the desired programme slot number directly.

For example

- | | |
|--|-------------------------------|
| 1 | for programme slot 1 |
| 1 , then 4 | for programme slot 14 |
| 2 , then 3 , then 4 | for programme slot 234 |

When entering programme numbers consisting of several digits, you have approx. 3 seconds time after pressing a key to complete the entry.

If you wish to enter a programme number consisting of only one or two digits, you can speed up the selection process by keeping your finger pressed down on the last digit a little longer.

6.2.3 Using the programme list (on screen):

- > Press the **OK** key.
A programme list will now be displayed.



When TV mode is selected, only TV programmes will be displayed, and when Radio mode is selected, only radio programmes will be displayed. The currently selected programme is highlighted in yellow.

- > Now you can use the **arrow up/down keys** to mark the desired programme.
- > Press the **OK** key to select the marked programme.
- > Use the **arrow up/down keys** to move the marker up or down in the list one line at a time.
- > Use the **arrow left/right keys** to move backward or forward one page at a time.

6.2.3.1 Selecting programme list:

In order to facilitate the finding of programmes, your receiver provides four programme lists. You can thus, if you like, programme one list only with sports programmes, one with news programmes, etc. (see Point 7.1).

- > Press the **Ok** key.
The active programme list will be displayed.



- > You can now use the **green** function key to open a window with the four programme lists (**Video A**, **Video B**, **Video C** and **Video D**). The active programme list is highlighted in yellow.

- > Now use the **arrow up/down keys** to select the desired programme list.
- > Confirm by pressing **OK**.
The selected list will now be displayed. As described above the desired programme can be selected and set.

6.2.4 Calling up blocked/restricted programmes

If a programme is selected that is blocked by the child-proof feature, the prompt **PIN-Number** will appear on the screen.

- > Use the **numeric keys** to enter your PIN number.
The selected programme will now be shown.

In order to make things convenient for viewers, the PIN number need be entered only once per operational cycle. The child-proof feature is only activated again the next time the set is switched on.

6.2.5 Information box

Each time the programme is changed, an information box is briefly displayed, showing the programme name as well as the list number. In addition, other programme characteristics are shown, such as **TxT** for teletext, **16/9** for 16/9 format broadcasts, **A/B** for various audio channels (e.g. multi-lingual movie or various radio stations) and a key is displayed for encrypted programmes.

6.3 Volume control

You have the facility to regulate the volume of your receiver. This facilitates use of the receiver, since you have all important functions on one remote control, and will only rarely have to operate the remote control of your TV set. When the receiver is switched on, sound will be reproduced at the volume level last set.

- > Adjust the volume of your receiver by means of the **Lautstärke +** key to make it louder, and the **Lautstärke -** key to reduce volume.
- > Press the **Sound on/off key** to mute the sound, press the key again to turn the sound on again.

6.4 Selecting a different language

If a programme is broadcast in several languages, you can use the following procedure to select a different language:

- > Press the **Language Selection key**.
If more than one language is being broadcast, a list of currently broadcast languages will be displayed on screen.
- > Use the **arrow up/down keys** to mark the selected language.
- > Confirm by pressing **OK**.

You can now listen to the soundtrack in the selected language. Your receiver is also equipped to receive mono broadcasts. When these are current, you can use the **MONO1/ MONO2** to switch between the audio channels MONO1 and MONO2.

6.5 Switching between TV and Radio

The receiver has been pre-programmed with both TV and radio programmes. When receiving a radio programme, the TV image is switched off, and only the programme name is displayed on screen.

- > Use the **TV/Radio** key to select radio reception for your receiver.
The receiver will now switch to the radio programme last selected.
- > Pressing the **TV/Radio** key again will return you to the last TV programme selected.

6.10 Teletext

6.10.1 Using the teletext decoder of the TV set

In so far as it is broadcast, teletext is available on your TV set. In order to view teletext, use the remote control unit of your TV set. Should you experience problems, such as overlapping of teletext and picture contents, you should set your receiver to **FBAS mode** (Point 5.3).

6.10.2 Using the internal teletext decoder

If your TV set is not equipped with a teletext decoder, you can, if it is broadcast, receive teletext with the receiver.

- > Select the programm you wish teletext informations from.
- > Press the **red** function key to switch the teletext on.
- >> Use the **numeric key pad** to enter the required page.
- > To turn to the next or forward page use the **green** or the **red** function key.
- > Press the **Back** key to return to normal operation.

6.11 Electronic Programme Guide

The EPG function (Electronic Programme Guide) allows you to display various programme selections and the contents of various programmes on the TV screen. This enables you to gain a quick overview of the programmes of the day and their contents, and, where available, also of the next few days.

6.11.1 Calling up the Electronic Programme Guide

- > Switch on both your receiver and the TV set.
 - > Press the **EPG** key on the remote control unit of your receiver.
- The electronic programme guide of the programme currently selected will be displayed on the screen, showing information relating to today's programme of this channel

Time	Programme
13:00	Die Oliver Geissen Show
14:00	Bärbel Schäfer
15:00	Der Schwächste fliegt
16:00	Das Jugendgericht
17:00	Die Nanny
17:30	Unter uns
18:00	Guten Abend RTL
18:30	EXCLUSIV - Das Star-Magazin
18:45	RTL aktuell
19:10	Explosiv - Das Magazin
19:40	Gute Zeiten, schlechte Zeiten
20:15	Medicopter 117 - Jedes Leben zählt
21:15	Im Namen des Gesetzes
22:15	UEFA Champions League: Countd ...

The following functions are available:

6.11.2 Programme preview for next few days

In as far as this is provided by the broadcaster, you can use the **arrow right key** to display information relating to the programme for the next few days, for the current channel. Press the **arrow left key** to return to the previous table of information.

6.11.3 EPG Information

In as far as this is broadcast, you can use the EPG function to obtain information on the content of various programmes:

- > Mark the relevant programme by means of the **arrow up/down keys**.

- > Press the **EPG** key in order to display the information.
You can scroll through lengthy texts with the aid of the **arrow up/down keys**, and you can page through them with the aid of the **arrow left/right keys**.
- > Press the **Back** key to return to the previous table of information.

6.11.4 Switching EPG off

- > Press the **Back** key to return to normal operation.

6.12 Timer

Your receiver is equipped with a timer. This allows you to make video recordings even in your absence. Timer operation is indicated by a blinking light on the LED display. Timer operation can be switched off by pressing the **On/Standby** key.

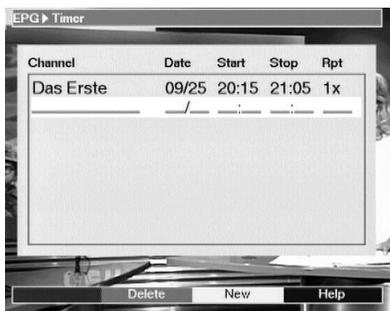
In order to programme the timer, proceed as follows:

6.12.1 Programming via EPG:

- > Select the channel on which the programme to be recorded is broadcast.
- > Press the **EPG** key.
The EPG table of the selected channel will be displayed.
- > Use the **arrow up/down keys** to mark the selected programme.



- > Press the **yellow** function key (Record).
The data relating to the selected programme will be taken over into the timer memory, and will be displayed on screen for control purposes.



- > Press the **green** function key in order to delete the marked timer.
- > Press the **Back** to return to the EPG screen, in order to execute further programming

or

- > Press the **TV/Radio** key to return to normal operation.

The receiver will now select the chosen programme at the programmed time, and will, unless otherwise selected, return to standby mode after the programme has ended.

6.1.2.2 Manual Programming/Changing timer settings

In addition to the option of programming the timer via the EPG, you can also programme the timer manually. In order to do this, proceed as follows:

- > Select the next programme list, to get to the programme you wish to record (Point 6.2.3.1).
- > Press the **Menu** key to call up the Main Menu. The **Main Menu** will be displayed.
- > Mark the line designated **Timer**.
- > Confirm by pressing **OK**. The menu **Main Menu Timer** will be displayed.



- > Press the **yellow** function key (New) to go to timer programming, to programme a new event.
- > To change an existing timer setting, mark this by means of the **arrow up/down** keys. Press the **yellow** function key (Modify) in order to access the settings of the marked timer.



Proceed as follows with the programming:

Source

- > Use the **arrow keys** to mark the column **Source**, then use the **OK** key to enter the desired source (**TV** or **Radio**).

Channel

In this line you should select the TV channel on which you want to record a programme:

- > Mark the appropriate line **Channel** by means of the **arrow keys**.
- > Press the **OK** key.
A programme list will be displayed.
- > Use the **arrow keys** to select the desired programme.
- > Confirm by pressing **OK**.
The selected programme will now be taken over into the timer menu.

Date

- > Use the **arrow keys** to mark the column **Date**.
- > Use the **numeric keys** to enter the date on which you wish to record a programme.

Start

- > Use the **arrow key right** to mark the column **Start**.
- > Use the **numeric keys** to enter the starting time for the timer in this line.

Stop

- > Repeat the steps as described under "Start" to enter the stopping/ending time.

In order for all events to be considered, there should be a break of at least one minute between the stopping time of one timer setting and the starting time of the next timer setting!

Repeat (optional)

- > Use the **arrow key right** to mark the column **Rpt**.
- > Press the **OK** key.
A selection window will be shown, with several repeating suggestions.
 - 1x** Timer on
 - T** Daily repeat
 - 1xW** Repeat once a week
 - 1-5** Repeat only on weekdays
 - 6-7** Repeat only on weekends
- > Select the desired function by means of the **arrow up/down keys**.
- > The setting will be stored by pressing the **OK** key.
- > When you have completed the programming, press the **yellow function key** in order to store the data in memory.
- > Press the **TV/Radio** key to return to normal operation.

Important Note!!!

Please ensure that the correct current time is displayed in the information window. If this not the time, switch reception to a TV channel such as ZDF, that broadcasts current time, for at least 30 seconds. This will enable your receiver to read the correct time into memory.

7 Changing the basic programming**7.1 Configuring programme lists**

This chapter describes how you can change the pre-programming of your receiver, and how you can change the user programme lists to suit your preferences. This function is also required to sort newly found programmes into the lists after a programme scan has been performed.

The following information provides a better understanding of the process:

To facilitate the finding of programmes, your receiver provides four user programme lists.

This means that, for instance, you can programme one list exclusively with sports programmes, another with news programmes. etc..

Each user programme list contains all programmes that you have specifically included, using the procedure described below. This chapter also describes how you can delete programmes from the list, and how you can block programmes from unauthorised use (child protection).

Use the **OK** wkey to call up the programme list, this will display the user programme list currently active. You can modify the lists of TV programmes while in TV mode, and the lists of radio programmes while in Radio mode.

7.1.1 Selecting a programme list

- > Press the **Ok** key.
The active user programme list will be displayed. The type will be displayed in the top line (e.g. **Video A**).

Favorite lists		Video A	1/153
1	Das Erste	19.2E	
2	ZDF	19.2E	PR
3	ProSieben	19.2E	
4	SAT.1	19.2E	
5	RTL Television	19.2E	
6	RTL2	19.2E	
7	Super RTL	19.2E	
8	VOX	19.2E	
9	KABEL1	19.2E	
10	tm3	19.2E	
11	SÜDWEST RP	19.2E	

category selection edit mode

- > Now use the **green** function key (Selection) to open a window with the four user programme lists (**Video A, Video B, Video C** and **Video D**).
- > Use the **arrow up/down keys** to select the desired programme list.
- > Confirm by pressing **OK**.
The selected list will now be displayed.

7.1.2 Entering programmes in the programme list

To add a programme to the selected programme list, proceed as follows:

- > Press the **red** function key (category). This will open a selection window in order to switch between the user list and the main memory list. This main memory list contains all available programmes. You have the option of displaying the main memory list according to **Providers** or sorted alphabetically (**ABC...**).
- > Use the **arrow up/down keys** to select the desired programme listing (e.g. Providers)
- > Confirm by pressing **OK**.

Provider		ARD	1/18
✓	arte	19.2E	
✓	B1 Berlin	19.2E	
✓	Bayerisches FS	19.2E	
✓	BR-alpha	19.2E	
✓	Das Erste	19.2E	
✓	EinsExtra	19.2E	
✓	EinsFestival	19.2E	
✓	EinsMuXx	19.2E	
✓	hessen fernsehen	19.2E	
✓	MDR FERNSEHEN	19.2E	
✓	N3	19.2E	

category selection Video A edit mode

This list will show the programmes sorted by provider.

- > Press the **green** function key (Selection) in order to display a list of providers, from which one can be selected.



- > Use the **arrow keys** to mark the provider selected.
- > Confrim by pressing **OK**.
A list of programmes relating to the selected provider will be displayed. Programmes that have already been entered in the selected user list are marked with a check sign.

a) Selecting programmes

In order to add a programme to a user list, or to delete a programme, proceed as follows:

- > Press the **blue** function key (edit mode).
The coloured function keys can now be used to execute the following functions:

b) Select user list:

- > Press the **yellow** function key repeatedly to switch around between the user lists **Video A, B, C, D**. The selected list will be displayed in the **green** function field.

c) Entering into the user programme list

- > Now use the **arrow up/down keys** to select a programme that you want to include in the list.
- > Press the **OK** key to proceed to the selection mode.
The programme selected will be marked on the right hand side with a small cross, and the menu display will become transparent, with the picture visible in the background.
- > Use the **arrow up/down keys** repeatedly to mark additional programmes you wish to include in the list.
- > When you have completed marking programmes in this way, press the **green** function key in order to accept the marked programmes into the programme list selected.
- > If you wish, you can proceed to select a further user list in order to add programmes from the list displayed into this user list.

7.1.3 Deleting programmes

a) Deleting from user list

If you use the above procedure to mark those programmes with a cross that are already in the user list, i.e. have a check mark on the right-hand side, these marked programmes will be deleted from the user list. However, the programme remains in the main memory list, and can be added to the user list again at any time.

b) Deleting from main memory list

By pressing the **red key** (Delete) you can delete programmes from the main memory list, after confirming the instruction.

- > Mark the programmes to be deleted as described above.
- > Press the **red** (Delete) function key.
The query "Really delete program(s)?" will be displayed.
- > Press the **arrow left/right keys** to select **Yes** or **No**.
- > Confirm entry by pressing **OK**.

7.1.4 Sorting programmes

In order to sort the programmes in a user programme list in the order most convenient to you, proceed as follows:

- > Call up a programme list display by pressing the **OK** key.
- > Use the **green** function key to select the programme list you wish to change/sort (Point 7.1.1).
- > Press the **blue** function key (edit mode).
- > Use the **arrow up/down keys** to mark the programme you wish to place at a different position in the list.
- > Press the **yellow** function key to select the function **Sort**.
A double arrow will be displayed next to the programme selected.
- > You can now use either the **arrow up/down keys** or the **numeric keys** to place the programme at any desired position in the programme list.
- > Press the **yellow** function key. The programme will be stored at the new position.
- > When you have completed configuring the programme list in this manner according to your preferences, press the **Back** key twice to return to normal operation.

7.1.5 Blocking programme access (Parental control feature)

You have the option of blocking access to any programme. A blocked programme can only be viewed on the screen once you have entered your personal PIN number, after selecting the programme. Once this number has been entered, access remains unblocked until the receiver is switched off again (standby).

In order to block access to a programme, proceed as follows:

- > Call up a programme list by pressing the **OK** key.
- > Use the **green** function key to select the programme list in which you wish to block one or more programmes (Point 7.1.1).
- > Press the **blue** function key (edit mode).
- > Now use the **arrow up/down keys** to mark the programme you wish to block.
- > Now press the **green** function key to select the function **Parental control**.
The symbol **P18** will appear next to the programme selected.
- > Repeat this procedure as often as necessary until all programmes you wish to block have been marked.
- > When you have completed configuring the programme list according to your preference, press the **Back** key twice to return to normal operation.
- > In order to activate the parental control feature, you must still enter your personal PIN number under the following point **Change PIN**. Then you must switch on the parental control feature as described in **Point 5.2 (Basic Settings)**.

7.2 Changing the PIN

The PIN number is set at the factory to **0000** in order to activate the parental control feature, you must enter a personal PIN number in place of the factory setting.

Please note! Do not forget your PIN number. If you do forget it, please consult your retailer or serviceman!

In order to change the PIN number, proceed as follows:

- > Press the **Menu** key to call up the **Main Menu**.
- > Use the **arrow up/down keys** to mark the line **Settings**.
- > Confirm by pressing **OK**.
The sub-menu **Settings** will be displayed.
- > Use the **arrow up/down keys** to mark the line **Change PIN**.
- > Confirm by pressing **OK**.
- > Now use the **numeric keys** to enter the current PIN number (factory setting 0000).
- > Now use the **numeric keys** to enter the desired new personal PIN number.
- > Repeat this entry.
- > When you have completed entering the PIN number in this manner, press the **Back** key twice to return to normal operation.

Please note that the parental control feature must still be activated as described in Point 7.3.

7.3 Cancelling blocking of individual programmes

In order to remove the parental control feature for individual programmes, proceed as in Point 7.2. After entering your personal PIN number, select the desired programme, and press the **OK** key to remove the control feature.

When you have completed configuring the programme list according to your preference in this manner, press the **Back** key twice to return to normal operation.

7.4 Programme Search

As mentioned before, your receiver is pre-programmed to receive signals from the ASTRA and EUTELSAT satellites. In order to receive new programmes, or other satellites, there are various options of searching for programmes by means of a programme scan.

1. Satellite:

- a) **All**, in order to scan all satellites selected in the menu LNB Settings (Point 5.4) for available programmes
- b) **Satellite**, in order to scan only the selected satellite for programmes or bouquets

2. Transponder:

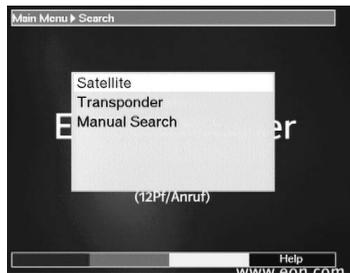
Select this scanning option in order to search only a particular transponder of a satellite. This will search individually for all programmes of a transponder.

When the scan has been completed, the screen will display information on the number of programmes your receiver found, and how many of these are new. New programmes are stored in the main programme memory list and can then be entered in the user lists as described in **Point 7.1**.

- > Call up the **Main Menu** in order to commence your programme search.



- > Use the **arrow up/down keys** to mark the line **Search**.
 - > Confirm by pressing **OK**.
- The sub-menu **>Search** will be displayed.



- > Now use the **arrow up/down keys** to select the search method you wish to employ.

7.4.1 Satellite

When you activate this search mode, all active satellites (Point 5.4) and transponders will be scanned for programmes.

- > Use the **arrow up/down keys** to select the menu line **Satellite**.
- > Press the **OK** key to display the sub-menu.
- > Press the **OK** key again in order to display the table for the active satellite.



- > Use the **arrow up/down keys** to mark the line **All**, in order to scan all active satellites for programmes, or select a specific satellite in order to search for programmes only from that source.
- > Choose by pressing the **green** function key whether you want so search only for freely available programmes (**Search all free**) or whether you also want to search for encrypted programmes (**Search all**).
- > Confirm by pressing the **red** function key ("Start search").
The scan will commence. Please note further information that appears on screen.

- > Press the **red** function key again to end the scan.
- A full scan may take more than 15 minutes.
Please also note any additional information provided on screen.

7.4.2 Transponder

Use this menu point to search for programmes specifically from a particular transponder (see Point 9 Technical Terms. For this, it is necessary to enter the transponder data.

- > Use the **arrow up/down keys** to mark the line **Transponder**.
 - > Confirm by pressing **OK**.
- The menu **>Search>Transponder** will be displayed.



Satellite

In this line, mark the satellite on which the selected transponder is installed.

- > Use the **arrow up/down keys** to mark the line **Satellite**.
 - > Press the **OK** key to display a table of active satellites.
 - > Use the **arrow up/down keys** to mark the desired satellite.
 - > Confirm by pressing **OK**.
- The selected satellite will now be displayed in the line Satellite.

Transponder frequency

- > Use the **arrow up/down keys** to mark the line **Transponder frequency**.
- > In this line, enter the required frequency by means of the **numeric keys**.

Symbol rate

The symbol rate indicates the volume of data transmitted per second. For instance, this can be 27500 (27500 symbols per second).

- > Use the **arrow up/down keys** to mark the line **Symbol rate**.
- > Use the **numeric keys** to enter the desired symbol rate.

Polarisation

- > Use the **arrow up/down keys** to mark the line **Polarisation**.
- > In this line, use the **OK** key to enter the polarisation plane (**horizontal** or **vertical**) on which the desired programme is broadcast.
- > Use the **green** function key to select whether you want to search only freely receivable programmes (**Search all free**) or whether you also want to search encrypted programmes (**Search all**).
- > Confirm by pressing the **red** function key ("Start search").
The scan will commence. Please note further information displayed on screen.
- > Press the **red** function key again to end the search.

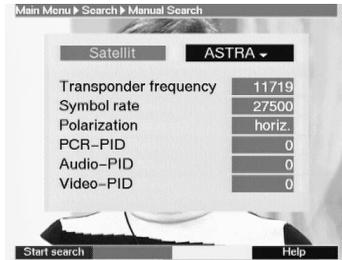
7.4.4 Manual Search

If you are unable to find a specific programme by means of the search methods described under 7.4.1 and 7.4.2, it may be necessary to enter additional programme-specific PID numbers for this programme. These numbers can be found either in the Internet, or you may have to contact the programme provider to obtain the information.

To perform a manual search, call up the menu **>Search >Manual Search**.

- > Use the **arrow up/down keys** in order to mark the line **Manual Search**.
- > Confirm by pressing **OK**.

The menu **>Search>Manual Search** will be displayed.



This menu differs from the **Transponder** nmenu only in terms of the menu points **PCR-PID**, **Audio-PID** and **Video-PID**.

- > Proceed as described under Point 7.4.3.
- > Then, use the **arrow up/down keys** to mark the lines **PCR-PID**, **Audio-PID** and **Video-PID**, entering the appropriate numbers by means of the **numerical keys**.

7.4.5 After the scan

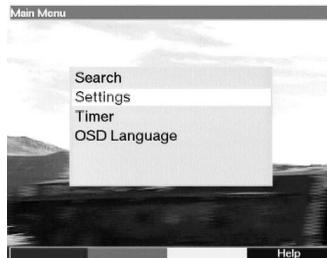
You can follow the scan of the transponder on screen while it is in progress. When the scan is completed, the number of transponders found, the total number of programmes found as well as the number of new programmes found will be displayed.

- > Press the **yellow** function key ("Select") to access the main memory programme list, in order to configure the programme lists.
- > Press the **green** function key to display a table of options.
- > Now use the **arrow up/down keys** to select **All**, to display all programmes, or **All new**, to display only newly found programmes.
- > You can now proceed as described in Chapter 7.1 in order to distribute the individual programmes to the various user lists.

7.5 Restore default basic programming/ Delete all

You can return to the default LNB settings, programmed at the factory, at any time. You may also, if the programme list is out of date due to changes in the programme providers, delete this completely, in order to carry out a new scan. Please note that after carrying out the Delete function you must then run a programme scan, and then copy the desired programmes from the main memory list into the various user lists.

- > Press the **Menu** key to display the **Main Menu**.



- > Use the **arrow up/down keys** to mark the line **Settings**.
- > Confirm by pressing **OK**.
The sub.menu **>Settings** will be displayed.



- > Now use the **arrow up/down keys** to mark the menu line **Factory settings**.
- > Confirm by pressing **OK**.
The sub-menu **>Factory settings** will be displayed.



7.5.1 Activating default setting

This function allows you to go back to the default setting programmed in the factory, at the same time deleting your own settings.

- > Use the **arrow up/down keys** to mark the menu line **Restore Factory Settings**.
- > Press the **OK** key.
The prompt "Really restore factory settings?" will be displayed.
- > Use the **arrow left/right keys** to select **Yes** or **Abort**.
- > Confirm by pressing **OK**.

7.5.2 Delete all programmes

This function serves to completely delete all programme memory.

- > Use the **arrow up/down keys** to mark the menu line **Delete all programmes**.
- > Press the **OK** key.
The prompt "Do you really want to delete all programmes?" will be displayed.
- > Use the **arrow left/right keys** to select **Yes** or **Abort**.
- > Confirm by pressing **OK**.
Please also note information displayed on screen.

7.6 System configuration

You can access specific equipment data under this menu item.

- > Use the **arrow up/down keys** to mark this line in the sub-menu **Settings..**
- > Confirm by pressing **OK**.
- > Press the **Menu** key to return to normal operation.

8 Technical Terms

Antenna cable:

Connecting cable between the modulator of the satellite receiver and the antenna input socket of the TV set; used as an alternative if no SCART socket is available

AV: see SCART

Coaxial cable:

Cable connecting the LNB to the satellite receiver, used to carry the signals received as well as to provide power to the LNB.

Data compression/MPEG1/MPEG2:

In order to transmit the current TV standard (625 lines and an image repeating frequency of 50 Hz), one arrives at a digital data volume of 216 MBit/s. This would require enormous bandwidths not available either with terrestrial nor with satellite broadcast technology. A data compression system is thus employed to reduce the amount of data transmitted. In Europe, MPEG-2 has been defined as the worldwide standard for data compression. MPEG-2 is an expansion of the original MPEG-1 standard.

External unit:

Term used for the complete system installed out of doors, consisting of the parabolic/offset dish antenna as well as one or more LNBs, used to receive signals from one or more satellites.

Deemphasis:

Adjustment of the audio frequency band to the broadcast signal, this is determined by the broadcast parameters of the satellite

DiSEqC:

Digital Satellite Equipment Control: a digital switching signal used to control DiSEqC-compatible components of the external unit via the antenna cable.

DVB:

Digital Video Broadcasting: a universal digital broadcast standard used for images, graphics, sound and text, i.e. for data in any form, and in any quality, appropriate to the type of data.

Frequency:

Physical dimension, indicates the waves or oscillations per second, the unit of measurement is Hertz (Hz)

Frequency range:

a) Satellite resp. LNB:

11 GHz range from 10,70 GHz to 11,70 GHz, 12 GHz range from 11,70 GHz to 12,75 GHz

b) Receiver: Intermediate frequency or 1.IF 950 to 2150 MHz

Unit of frequency	Term	Oscillations p. second
1 Hz	1 Hertz	1
1 kHz	1 Kilohertz	1.000
1 MHz	1 Megahertz	1.000.000
1 GHz	1 Gigahertz	1.000.000.000

Intermediate Frequency (IF):

The frequency range broadcast by a satellite cannot be transmitted via a cable connection. The LNB thus converts the signal to an interim frequency range of 950 to 2050 MHz, which enables the signal to be received and processed by the receiver.

1. IF = Interim Frequency,

LNB/LNC (Low Noise Block converter):

The receiving unit at the focal point of the parabolic dish antenna, it converts signals from the frequency range of the satellite into the intermediate frequency of the receiver

LOF:

Local oscillator frequency, stated in terms of MHz or GHz, varies according to LNB as well as according to the frequency range received.

Reception frequency of the receiver = Broadcast frequency of the satellite - LOF

Modulation at 22 KHz

This, in addition to 14/18 Volt switching, serves to switch between two LNBs. In Universal LNBs it serves to switch to high band

Modulator

Switching mechanism in a satellite receiver or video recorder, serves to facilitate connection via antenna cable

Mode:

determines whether a mono or stereo programme is received

Multyfeed:

External unit, consisting of one parabolic dish and several LNBs, used to receive signals from several satellites

Parabolic dish antenna:

Dish formed in parabolic shape, made of metal or coated synthetic material, focuses the electromagnetic waves received from a satellite in a focal point (where the LNB is mounted)

Polarisation plane:

In order to better utilize the frequency range, satellites broadcast neighbouring programmes with opposite polarization (horizontal and vertical, or dextro-rotatory and laevo-rotatory). In order to receive both polarisation planes one needs either two single LNBs or one V/H-LNB.

Receiver: see Satellite receiver**Satellite:**

Description of satellite, usually a name in conjunction with the orbital position,

ASTRA 19° East

EUTELSAT 13° East

Satellite receiver:

The signals received and converted by the LNB cannot be processed by the TV set. The satellite receiver modulates and processes them in such a way that audio and video signals (AV) are created at its outputs, which are fed on to the TV set.

SCART:

Connector plug/socket found on TV sets, video recorders, satellite receivers and other home electronic equipment, used to transmit audio (sound) and video (picture) signals (AV).

Software Update:

Digital television is a new medium. Apart from improved sound and image quality, it also provides the facility for interactive services. These new services are continually being developed and improved by programme providers. In order to use these services it may occasionally be necessary to update the software of the receiver.

Supply voltage:

LNBs are provided with electrical current via the coaxial cable. In order to achieve this, the receiver supplies a voltage of 14 or 18 Volt

Transponder:

This has the task of processing one or more programmes on board the satellite. It receives data from the ground station, amplifies them, and broadcasts them back to earth

Universal LNB:

Term used to describe a three-band LNB, capable of receiving the ranges FFS (10,70 - 11,70 GHz), BBS (11,70 - 12,50 GHz) and FFS High Band (12,50 - 12,75 GHz). The complete range is generally divided into two bands:

Low Band: 10,70 - 11,80 GHz; LOF 9750 MHz

High Band 11,70 - 12,75 GHz ; LOF 10600 MHz

Viaccess

Digital encryption standard

9 Technical Data**DBS-Tuner:**

Input frequency range	950 2150 MHz
Input level range	- 60 dBm ... - 25 dBm
DBS-Tuner Input	F - Buchse
Input impedance	75 Ohm
AFC capture range	+/- 3 MHz
Demodulation	Shaped QPSK
Symbol rate	15 ... 30 Mbaud/s, MCPC
FEC	Viterbi and Reed-Solomon
Viterbi rates	1/2, 2/3, 3/4, 5/6, 7/8, automatic adjustment
Roll-off Factor	35 %

Demultiplexing: in accordance with ISO 13818-1

Video decoding:

Video compression	MPEG-2 and MPEG-1 compatible Up to MP@ML (main profile @ main level)
Video standard	PAL / 25 Hz
Active image area	720 Pixel x 576 lines
Image format	4 : 3 / 16 : 9
Image material 16:9	Automatic adjustment for 16:9 TV sets (via SCART) Letterbox Filtering for 4:3 TV sets

Audio decoding:

Audio compression	MPEG-1 & MPEG-2 Layer I and II
Audio Mode	Dual (main/sub), Stereo
Sampling frequencies	32 kHz, 44.1 kHz, 48 kHz,

Memory capacity:

FLASH memory	0,5Mbytes
SDRAM (CPU)	2 MBytes
SDRAM (CPU)	2 MBytes
EEPROM	1 kByte

Audio Parameters:**Input analogue:**

Input levels L/R	0,5 V r.m.s. (nominal)
Input impedance	> 40 kOhm

Output analogue:

Output levels L/R	0,5 V r.m.s. (nominal)
Output impedance	600 Ohm
THD	> 60 dB (1 kHz)
Crossover	< - 65 dB
Initial volume	Memorizes last set value

Video Parameters:**Input:**

Input level FBAS	1 Vs-s +/- 0.3 dB into 1 kOhm
Input level RED	0,7 Vs-s +/- 0.1Vp-p into 75 Ohm
Input level GREEN	0,7 Vs-s +/- 0.1Vp-p into 75 Ohm
Input level BLUE	0,7 Vs-s +/- 0.1Vp-p into 75 Ohm

Video/Tele text

Tele text filtering	corresponding to ETS 300 472 standard
Reading in tele text files	(FBAS) corresponding to ITU-R BT.653-2 lines: 6-22 and 320-335

TV-SCART:

Output:	switchable FBAS or RGB r
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VCR-SCART:

Eingang:	FBAS oder RGB
Output:	FBAS

Serial Interface RS 232:

Type	RS 232, bi-directional
Bitrate	38,4 kBit/s
Connecting plug	D-SUB 9 pin plug
Function	Updating of operational software

LNB Power supply:

LNB current	400 mA max.; double insulated
LNB voltage vertical	<14,0V no load, > 11,5 V at 400 mA
LNB voltage horizontal	< 20V no load, > 17,2 V at 400 mA
	LNB switched off in standby mode
22 kHz-Modulation:	22 kHz, amplitude 0.6 V +/- 0.2 V

Programme memory/Satellite positions:

500 TV programmes
500 RADIO programmes

Number of active satellite positions:

max.4 (DiSEqC 1.0, SAT POSITION / SAT OPTION)

EPG Data:

EPG preview

Timer:

32 events, up to 1 year ahead

OSD Languages:

German, English

Remote control system: RC-5

Modulation frequency 36 kHz

Infrared wavelength 950 nm

Power supply:

Power supply switch:

Power consumption:

< 11,5 W (in operation, horizontal polarisation / 400 mA LNB current

< 9,5 W (in operation, without LNB)

< 8,3 W (Standby mode)

Input voltage:

180 V.... 250 V / 47...63 Hz alternate current

General:

Ambient temperature +15°C...+35°C

Humidity < 80%

Dimensions(WxDxH): 305 mm x 135 mm x 65 mm

Weight/mass: 0,8 kg

10 Troubleshooting Guide

Problem	Possible cause	Solution
No picture, no sound, LED not lighted	No mains current	Check mains plug and cable
No picture, no sound, LED on	Short circuit in LNB connection	Switch unit off, repair short-circuit, switch unit on again
	Defective or missing cable connection	Check all cable connections
	Defective LNB	Replace LNB
	Wrong external unit set on receiver	Adjust setting (see Point 5.4)
	Antenna incorrectly aligned	Adjust antenna
Temporary square blocks in picture, temporary freeze in picture, no sound, screen temporarily black, shows information "no signal".	Strong rain or snow conditions	Remove snow from antenna
	Antenna incorrectly aligned	Adjust antenna position
	Dish size may be too small for location	Use larger antenna dish
	Object blocking line of sight between satellite and dish (e.g. tree)	Mount dish differently to ensure line of sight
Sound OK, blue screen	Radio mode on	Switch to TV mode
Sound OK, no picture	Scart plug not properly inserted in Scart socket	Check SCART connections
No reception of signals previously received	Antenna alignment out or defective	Check antenna
	Programme is being broadcast on another transponder	Proceed with programme scan (see Point 7.4)
	Programme is no longer being broadcast	None
Remote control not working	Batteries are spent	Replace batteries
Various programmes not shown in programme list	Wrong programme list selected	Select another programme list (Pt. 6.2.3.1)
Programmes such as Pro /, Sat 1, TM 3, Kabel 1, DSF and HOT temporarily not available	Interference from DECT telephones	Increase distance between receiver and DECT base station
Unit not responding	Defective data stream - unit blocked	Disconnect mains plug for 5 seconds, then switch unit on again

Dear customer,

we would like to repeat that, in case you experience the following problems, you should at first try to remedy the technical problem yourself, using the tips provided, before contacting customer services.

The unit is not working properly (controls do not respond, picture frozen...)

- > Disconnect the mains plug for about 5 seconds.
- > Then switch the receiver on again.

If the problem still persists, contact your customer services.

Your unit carries the CE logo and complies with all appropriate EU standards

Subject to alterations and errors. Correct as of 06/02

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Brief instructions for daily use

Switching on and off

- > Switch the receiver on by pressing the **On/Standby** key on the remote control unit.
- > Press the key again to switch the receiver off again.
- > The receiver is now in standby mode.

Programme selection

6.2.1 Using the programme up/down keys

- > Use the **programme up/down keys** on the remote control unit to move up or down by one programme slot at a time.

6.2.2 Using the numeric keys

- > Use the **numeric keys** to enter the desired programme number directly.

For example

1	for programme slot 1
1, then 4	for programme slot 14
2, then 3, then 4	for programme slot 234

When entering multi-digit programme numbers, you have approx. 3 seconds after pressing each digit to complete the entry.

If you wish to enter a programme number consisting of only one or two digits, you can speed up the selection process by holding down the key of the last digit for a little longer.

Volume control

You have the facility to adjust the volume of your receiver. This facilitates use of the receiver, as it combines all important functions on the receiver remote control unit, so that you will rarely have to use your TV set remote control unit. When the receiver is switched on, sound will be reproduced at the volume level last set.

- > Adjust the volume of your receiver by using the **Volume +** key to make it louder, and the **Volume -** key to reduce volume.
- > Press the **Sound on/off** key to mute the sound, press the key again to switch the sound back on again.

TV/Radio switching

The receiver has been pre-programmed for both TV and radio programmes. When the latter is selected, the TV image is switched off, and only the programme name is displayed.

- > Use the **TV/Radio** key to switch the receiver into radio mode.
The receiver will now play the last radio programme selected previously.
- > Press the **TV/Radio** key again to display the last TV programme selected previously