High Performance Digital Satellite Receiver

LEXIUM DBS7000

Operating manual

LEXIUM DBS7000   DIGITAL SATELLITE RECEIVER

CE
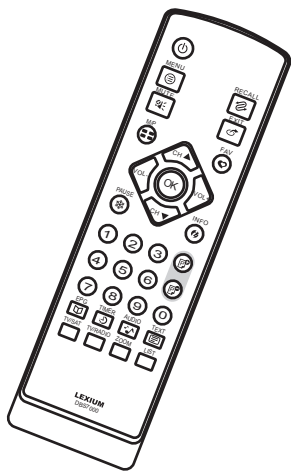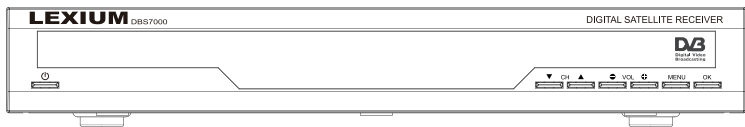
Preface

This operating manual will help you in the

- appropriate
- safe
- favourable

usage of the digital satellite receiver, in short, the "receiver". We assume that the user of the receiver has overall knowledge regarding the handling of audio and video equipment.

Each person who

- installs
- connects
- operates
- cleans
- disposes of

this receiver must be familiar with the entire content of this operating manual. Always keep this operating manual in the proximity of the receiver.

Style features

Specific style features have been used in different sections of the operating manual. Thus, you can easily differentiate whether it concerns

normal text,

- enumerations

  or
- ⇨ actions.

3

Contents

Safety instructions

Please read the safety instructions carefully before operating the receiver.
Please follow all warnings and instructions on the equipment and in the operating manual.

⚠ Basic safety instructions

Electrical connection

- Separate the receiver from the power source in case of operational disruptions. Please note: The receiver will remain live, even if it is turned off with the mains switch on the rear side.

- Do not expose the receiver to rain or any kind of humidity to avoid risk of fire and electric shock.

- Never open the casing. Otherwise, there is a risk of electric shock.

- Connect the receiver only to a professionally installed mains socket of 100–240 V~, 50–60 Hz.

- The total power consumption by the antenna connection of the receiver "LNB IN" must not exceed 300 mA.

- Pull out the mains plug from the socket if the equipment is not in use for a longer period of time. Only pull at the mains plug, not at the cable.

- In case of storms pull out the mains plug of the receiver from the socket.

- In case of a storm, loosen the LNB cable from the receiver.

6

- If foreign bodies or fluids enter the receiver, immediately pull out the mains plug from the socket. Ask a qualified person to check the equipment before operating it again. Otherwise, there is a risk of electric shock.
- Ensure that the power source (socket) is easily accessible.
- Do not bend or crimp the mains cable.
- If the mains cable is damaged, the receiver must be repaired by an expert before reusing it. Otherwise, there is a risk of electric shock.
- Never allow children to operate the receiver or to play with the antenna unit unless supervised.
- Always ask qualified personnel to carry out maintenance jobs. Otherwise, you are putting yourself and others at risk.
- Disconnect the receiver from the power source in case of operational disruptions.
- Spare parts must be ordered directly from the manufacturer
- Modifications of the device lead to an extinction of the manufacturer's liability.
- Remove the protection films.

⚠ **Caution!**
Note regarding separation from the mains supply. The Standby key of this device does not separate the device completely from the mains supply. In addition, the device consumes current in standby mode. To

separate the device completely from the mains supply, the mains plug must be pulled out of the socket.

Suitable location

- Place the receiver on a stable and even base.
- Avoid proximity to:
    - heat sources, like e. g. heaters,
    - naked flames, like e. g. candles,
    - devices with strong magnetic fields, like e.g. loudspeakers.
    - Never place receptacles filled with liquid (e. g. vases) on the receiver
- Avoid direct sunlight and places with an extremely high amount of dust.
- Never cover ventilation slits. Ensure adequate ventilation of the receiver.
- Do not place any heavy objects on the receiver.
- Humidity may settle in the receiver if it is brought into hot surroundings from a cold one. In this case, wait for about an hour before operating the equipment.
- Arrange the mains and antenna cable in such a manner that no-one steps or trips over them.

Correct battery handling

- Batteries may contain toxic agents. Ensure that batteries are not within the reach of children. Children may eat and swallow batteries.
- Batteries that are getting discharged may damage the remote control. If the receiver is not in use for a longer period of time, remove the batteries from the remote control.
- Batteries may contain toxic agents. Therefore, dispose of the batteries immediately in an ecologically accepted manner according to the prevailing statutory regulations. Never throw the batteries into normal household waste.
- Never expose the batteries to open fire or strong heat, as otherwise there is a danger of explosion.
- Replace the batteries always by batteries of the same type.

Explanation of safety instructions

The following categories of safety instructions are included in this operating manual:

⚠ **Danger!**

Instructions with the word DANGER give a warning against possible personal injuries.

⚠ **Caution!**

Instructions with the word CAUTION give a warning against possible material or environmental damages.

ⓘ   These instructions contain special information regarding an economic use of the receiver.

Appropriate use

The receiver is designed for receiving unencrypted digital satellite channels (free-to-air) for private use. It is exclusively meant for this purpose and must only be used for the same. This also includes paying attention to all information contained in this operating manual, especially in the safety instructions.

Any other usage is considered to be improper and may lead to material damages and even personal injuries. Moreover, it will result in the immediate loss of guarantee.

The manufacturer does not bear any liability for damages caused due to improper use.

Scope of supply

Check the scope of supply after purchase. The scope of supply may vary according to the type of the receiver. Please follow the information on the packaging.
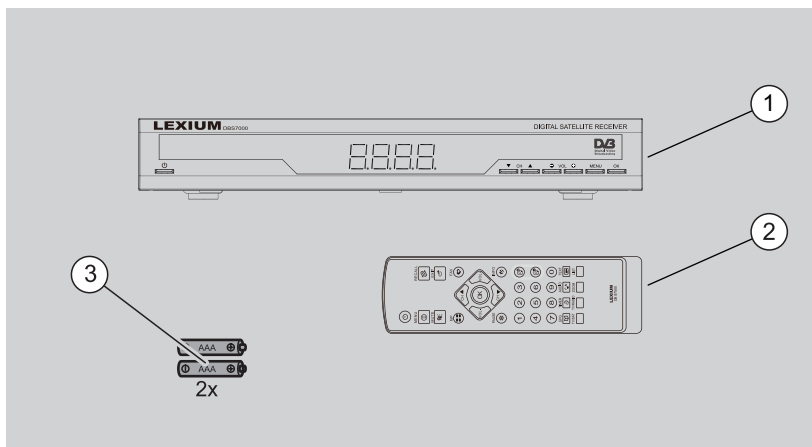
No.	Pieces	Description
1	1	Receiver
2	1	Remote control
3	2	Batteries type LR 03/AAA/1.5 V
-	1	Operating manual (not shown above)

Description

With this receiver you are able to receive unencrypted digital satellite channels (free-to-air) via satellite antenna.

It is not necessary to program the receiver yet. The most important broadcasting stations and satellites have been pre-programmed.

The satellite antenna has to be directed towards the desired satellite.

The receiver will scan for further new channels as soon as you initiate the automatic scanning of broadcasting stations for this satellite. Satellites not preset may be added.

All receiver settings can be done easily using the user interface (menu) on the TV monitor.

The multilingual user interface supports following languages:

- german
- italian
- spanish
- greek
- english
- polish
- czech
- slovakian
- hungarian
- danish
- french
- swedish
- croatian
- dutch
- norwegian
- finnish
- slovenian
- turkish
- portuguese

The following satellites have been preset by the company:

Colour codes on this regional index: no data/L/S/Ka band | C band | C & Ku band | Ku band | moving

61.5°W	EchoStar 3	101.1°W	DirecTV 9S
	EchoStar 12	102.8°W	Spaceway 1
63.0°W	Estrela do Sul 1		DirecTV 10
65.0°W	Star One C1	103.0°W	AMC 1
70.0°W	Star One C2	105.0°W	AMC 15
72.0°W	Nahuel 1 *(incl. 1.7°)*		AMC 18
	AMC 6	107.3°W	Anik F1
72.5°W	DirecTV 1R		Anik F1R
	EchoStar 6	110.0°W	DirecTV 5
74.0°W	Horizons 2		EchoStar 10
75.0°W	Brasilsat B3		EchoStar 11
77.0°W	EchoStar 4 *(incl. 1.0°)*	111.1°W	Anik F2
	EchoStar 8	113.0°W	SatMex 6
78.0°W	Venesat 1	114.9°W	Solidaridad 2 *(incl. 1.1°)*
79.0°W	AMC 5	115.0°W	XM 4
82.0°W	Nimiq 4	116.8°W	SatMex 5
83.0°W	AMC 9	119.0°W	Anik F3
84.0°W	Brasilsat B4		EchoStar 7
85.0°W	AMC 16		DirecTV 7S
85.1°W	XM 3	121.0°W	EchoStar 9/Galaxy 23
87.0°W	AMC 3	123.0°W	Galaxy 12
89.0°W	Galaxy 28	123.0°W	Galaxy 18
91.0°W	Nimiq 2	125.0°W	Galaxy 14
91.0°W	Nimiq 1		AMC 21
	Galaxy 17	127.0°W	Galaxy 13/Horizons 1
92.0°W	Brasilsat B2 *(incl. 1.2°)*	129.0°W	Galaxy 27
93.1°W	Galaxy 25		Ciel 2
95.0°W	Galaxy 3C	131.0°W	AMC 11
95.0°W	Spaceway 3	133.0°W	Galaxy 15
97.0°W	Galaxy 19	135.0°W	AMC 10
99.0°W	Galaxy 16		EchoStar 5 *(moving 0.7°W/day)*
99.2°W	Spaceway 2	137.0°W	AMC 7
	DirecTV 11	139.0°W	AMC 8
101.0°W	AMC 2	148.0°W	EchoStar 1
	AMC 4		
	DirecTV 4S/8		

Other features of the equipment:
- Software update via satellite or via the RS232 connection on the rear side of the device.
- Saves the channel last watched (Last Channel Memory)
- LNB control logic (sound 0/22 kHz), max. current delivery for LNB 300 mA

- Symbol rate 2-35 MS/s and 950-2150 MHz input frequency
- Manual PID entry possible
- 3 keys at the frontage
- plug & play
- **The power draw in standby mode is 2W only.**
- 100–240 V~, 50/60 Hz mains connection
- 4500 channel storage locations
- Child lock (preset password: 0000)
- 1 favorites list and 8 channel groups
- Automatic scanning of broadcasting stations
- List editor for broadcasting stations
- Analogue sound output through Cinch connector (stereo), volume adjustment possible via remote control
- AC3 coaxial output (digital audio)
- HDMI-connection
- Loop-through-function in standby mode for the connection of an analogue receiver
- Super fast videotext with a memory of 800 pages
- Digital radio reception, background image for radio (background display)
- Additional channel information is displayed when the channel is changed.
- DiSEqC 1.0, 1.2, USALS is supported if an appropriate antenna unit is connected

- SWAP function (via Recall key)
- Screen aspect ratios can be set to 4:3, 16:9, and automatically (letterbox)
- 8x multi-functional timer linked with EPG, sleep timer
- Electronic Programme Guide EPG (up to 14 days in advance, channel-dependent)
- SCPC/MCPC reception standard C/Ku-band satellites
- Automatic selection of the TV standard with video converter
- Digital satellite finder for optical and acoustic adjustment of the paraboloidal-type reflector

ⓘ A suitable channel editor is additionally available through our hotline. Then you will be able to edit the channel lists of the receiver using your computer. Please read for this purpose the information on our website :

Connecting the receiver

The receiver is connected with your satellite antenna by means of a coaxial cable. If necessary, you have to prepare a coaxial cable before connecting the receiver.

ⓘ　The coaxial cable is not included in the scope of supply.

⚠ Caution!

Connect the receiver to the mains supply only after you have connected it to all equipment and the antenna properly. Otherwise, the receiver can suffer damages. The wire netting and the inner core of the coaxial cable carry current during operation.

LNB cable installation

(cp. installation diagram on the next page)

For the installation of the F connector on the coaxial cable you will need a knife (ideally a wire stripper) and side cutting pliers.

ⓘ   When stripping the isolation, neither the inner core or the foil nor the wire netting must be damaged.

⇨ Cut 8 mm of the coaxial cable at each end up to the inner core.

⇨ Carefully cut 10 mm of the outer insulation so that the wire netting is exposed.

⇨ Turn the wire netting backwards and wind it over the outer insulation in such a manner that it does not touch the inner core.

⇨ Remove the inner insulation together with the foil placed over it up to 2mm before reaching the wire netting.

⚠ **Caution!**
The wire netting and the foil must not touch the inner core. The foil must enclose the inner insulation and must not be damaged.

⇨ Rotate the F connector onto the turned-back wire netting until the connector touches the inner insulation.

ⓘ   The wire netting must not protrude from the back of the connector end.

⇨ Cut the inner core with a cable cutter in such a manner that it projects maximum 1 mm from the connector.

Installation diagram
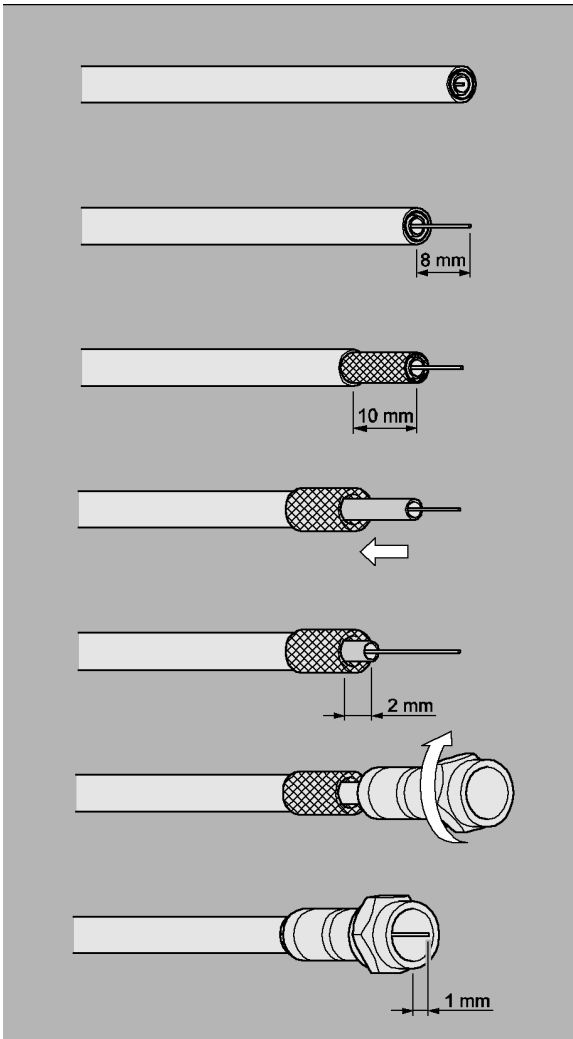
⇨ Fasten the F connector of the coaxial cable onto the "LNB IN" antenna connection of the receiver. Fasten the other end of the coaxial cable on the LNB.

Connection with the HDMI cable

⇨ Insert the HDMI cable in the HDMI socket of the receiver.
⇨ Connect the HDMI-Kabel to the TV set. Follow the operating manual of the TV set.
⇨ Insert the Cinch connector of the Cinch cable in the "AUDIO-R" and "AUDIO-L" sockets of the receiver if you want to connect a stereo system.

ⓘ The HDMI cable is not included in the scope of supply.

Connection diagram
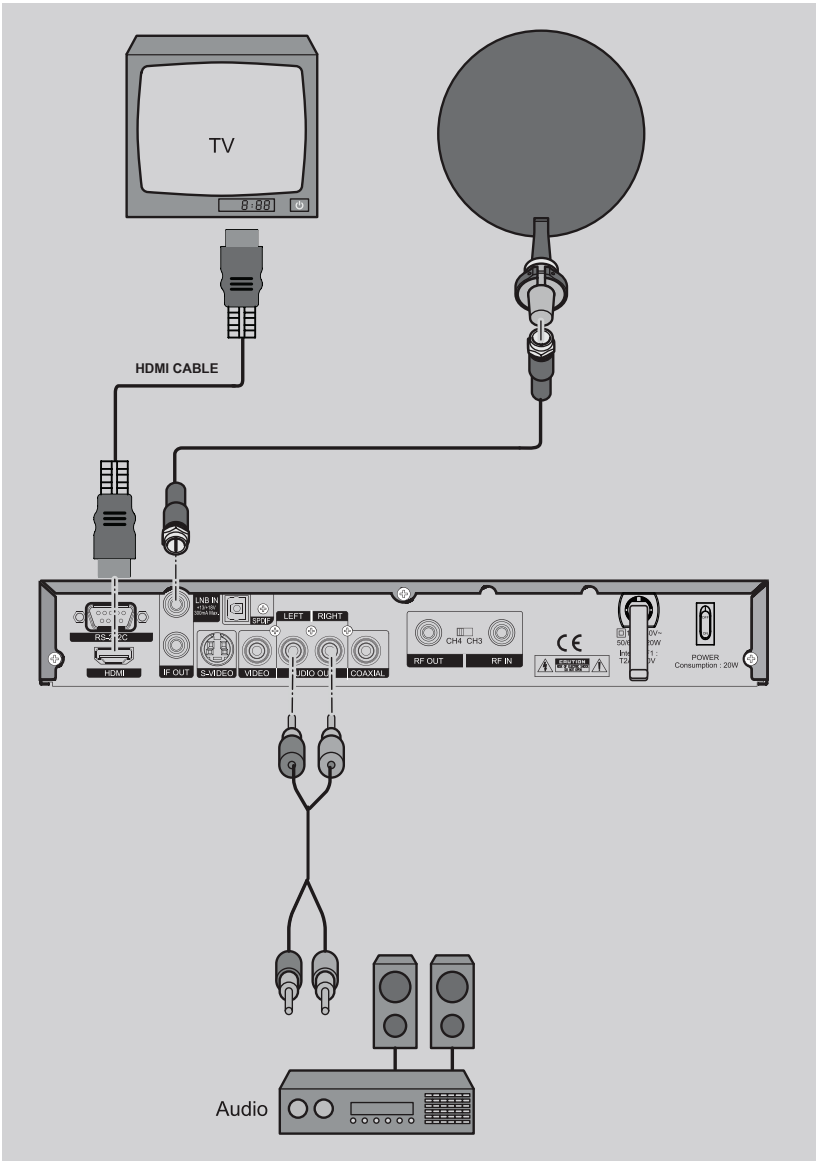
Audio connection mit Cinch-Kabel

If you want to connect a stereo system, connect it to the receiver with a cinch cable.

⇨ Connect the „AUDIO-R" and „AUDIO-L" sockets of the receiver to the audio inouts of the stereo system.

⚠ Caution!

Never connect the Phono input of your stereo system to the receiver; it may damage your stereo system. Strictly follow instructions for connecting the Cinch cable provided in the operating manual of your stereo system.

ⓘ   The Cinch cable is not included in the scope of supply.

ⓘ   Your TV set need not be switched on for radio reception. The audio is given out by the connected stereo system.
For choosing the radio station, you can use the radio list shown on your TV set as an orientation.

Connection diagramm
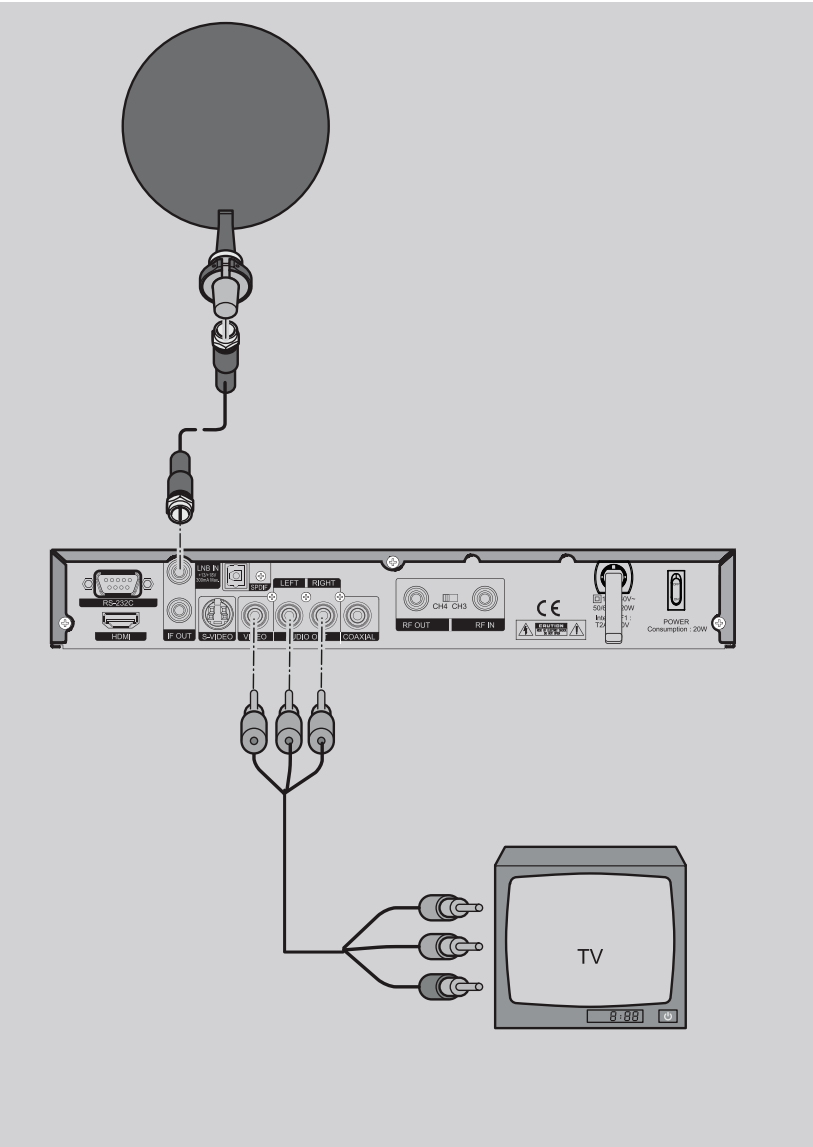
Connection of an audio-digital receiver

If you want to use 5-channel audio transmission (Dolby digital sound/AC3), you must connect your audio-digital receiver to the coaxial output of the receiver.

⚠ **Caution!**
Never connect the Phono input of your stereo system to the receiver; it may damage your stereo system. Strictly follow instructions for connecting the Cinch cable provided in the operating manual of your stereo system.

⚠ **Caution!**
Please follow strictly the information regarding connection in the operating manual of your audio-digital receiver.

ⓘ The coaxial cable is not included in the scope of supply.

ⓘ Your TV set need not be switched on for radio reception.
You must switch on the TV set if you want to receive TV sound through your stereo system.

Connection of the coaxial digital output

Insert the coaxial cable in the "COAXIAL" socket of the receiver.

Connect the coaxial cable to the audio-digital receiver.

Anschluss-Schema
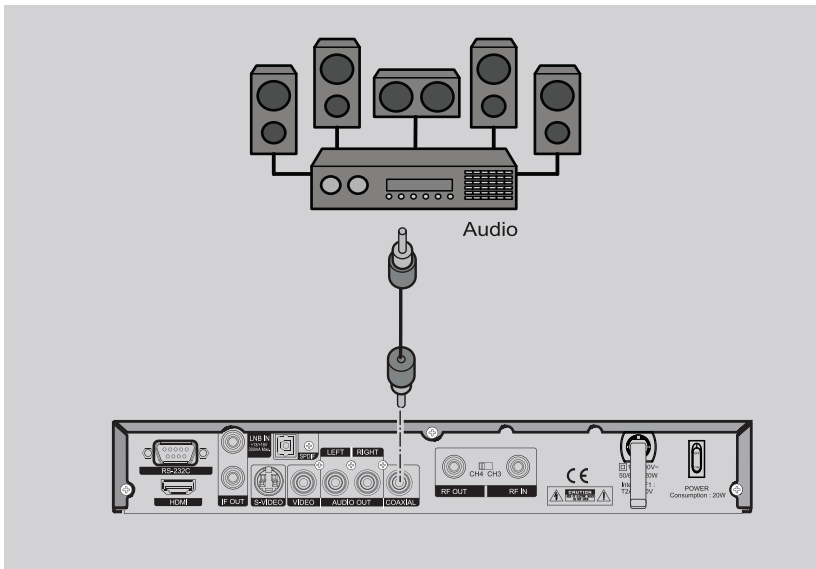
Getting started

Remote control

For the remote control two Micro type batteries
LR 03/AAA/1.5V are required.

⇨ Open the battery compartment.
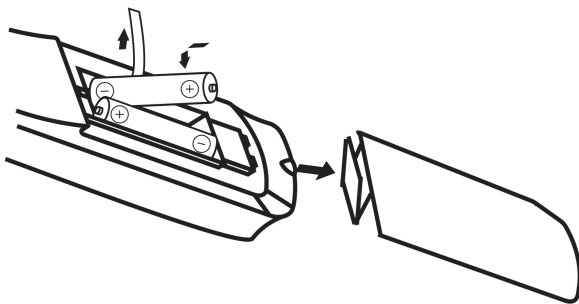
⇨ Insert two batteries into the battery compartment -
paying attention to the indicated polarities and push
the cover of the battery compartment carefully until it is
locked.

ⓘ   The strap in the battery compartment is intended
to make it easier for you to take out the batteries.
If you place the strap under the inserted batteries,
you can remove them by simply pulling it out.

⇨ Replace discharging batteries on time. Otherwise, the
sending capacity of the remote control will be too low.

⇨ Always replace both batteries simultaneously and use
batteries of the same type.

⇨ Check the batteries of your remote control at least once a year.

⇨ If one battery has leaked, wear protective gloves and clean the battery compartment with a dry cloth.

⚠ **Caution!**

Batteries may contain toxic agents that are hazardous to health and environment. Therefore, dispose of the batteries in any case according to the prevailing statutory regulations. Never throw the batteries into normal household waste.

The remote control transmits infrared signals to the receiver. Please refer to the overview of the remote control for the functioning of the keys.

⇨ Point the remote control towards the front side of the receiver and slightly press the corresponding key once.

The receiver

> ⚠️ **Caution!**
> Check that connections of all equipment and the antenna are proper before connecting the receiver to the mains.

⇨ Insert the mains plugs of the connected equipment in the mains socket and switch it on.

⇨ Switch on the AV channel of the TV set. If the receiver is connected via Scart and the TV set recognizes the switching voltage emitted by the receiver, it will switch automatically to the AV mode. If the receiver is connected via HDMI, it depends on the TV set if it switches automatically to the AV channel or you have to switch by yourself to the AV channel.

⇨ Insert the mains plug of the receiver in the mains socket. Turn on the mains switch on the rear side of the receiver. The device is in normal mode. The LED displays the current channel.

The receiver is supplied with preset TV channels and can be used directly. If you want to check if new channels are available, initiate a scan for broadcasting stations. Read the information further below for this purpose.

ⓘ   To get into standby mode, press the red key at top right of the remote control. The current time is displayed on the LED. The device consumes approx. 2W only. Currently, this is a very low value of power consumption.

Operation

Screen-inlays while switching channels

When a channel is switched, an information bar appears on the screen for 5 seconds.

In this information bar, you will find the following indications:

	Channel name
	Received satellite
	Current date
	Current time (According to the presetting in menu item "Time").
	Storage location
TTX symbol	This symbol is displayed if the selected broadcasting station offers Teletext.
EPG symbol	This symbol is displayed if the selected broadcasting station offers an electronic programme guide.
Heart symbol	The heart symbol is displayed if you have included the channel in your favorite list.
Channel-group	The corresponding channel-group symbol is displayed if you have included the channel in your

29

symbol	channel list. An overview of the channel-group symbols is provided on the next page.
Info	Information on the current and the following programme "Now" – "Next"
Info	Information on the currently active channel list

Channel-group symbols

Symbol	Channel group
	Sport
	News
	Music
	Movie
	Shopping
	Education
	Leisure

ⓘ Should the current programme belong to the general channel group, no symbol will appear.

User interface on the TV screen

You can do individual settings of your receiver using the menus in the user interface. For this purpose, both the receiver and the TV set need to be switched on and

connected by Cinch cable or a HDMI cable.

Press the "MENU" key. The main menu will be displayed. By pressing the "EXIT" or the "MENU" key, you can exit this menu again. When you exit the main menu, an information bar appears on the screen for 5 seconds.

Navigation within the menus

Top (arrow 1):   menu name
                    (the corresponding function symbols
                    are displayed at the bottom)
Middle (arrow 2):   sub-menu or menu items
Below (arrow 3):   The information bar shows you the
                    keys with which you can navigate
                    in the current menu.
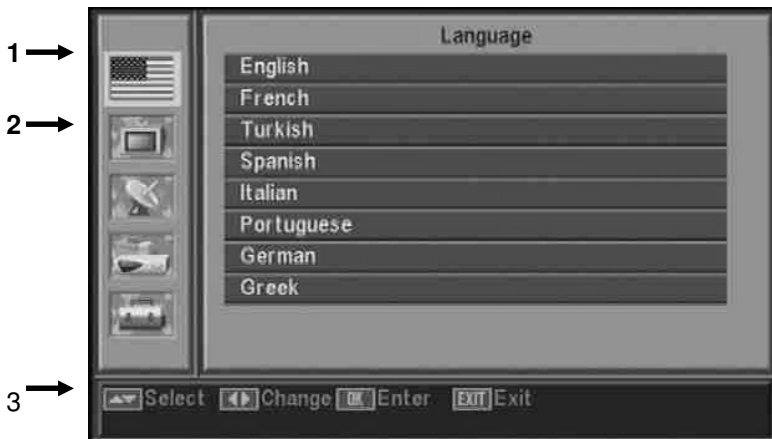
Menu structure

Main menu	Sub-menu	Description
Language (symbol corresponding country flag)	Language	Selection of the language in which the OSD menu is to be displayed.
Channel (symbol: TV) Page: 34	TV Channel List	Page: 34
	Radio Channel List	Page: 34
	Delete All	Page: 34
Installation (symbol: satellite antenna) Page: 44	Antenna Setup	Page: 44
	TP Scan	Page: 45
	Preset Scan	Page: 45
	Auto Scan	Page: 46
System Setup (symbol: Receiver) Page: 48	Audio Language	Page: 48
	TV System	Page: 48
	Channel setup	Page: 48
	Time & Timer setting	Page: 49
	OSD Setting	Page: 49
	Parental Lock	Page: 49
	LNB Power	Page: 50
Tools (symbol tool case) Page: 54	Default Value	Page: 54
	Software-Update	Page: 54
	Game	Page: 54
	Information	Page: 54

Menu navigation

Use the keys "CH▲", "CH▼", "V+", and "V-" to navigate within the menus. The selected menu items are marked. Confirm your selection with the "OK" key. By pressing the "EXIT" key you can exit the menu again. Changes must be confirmed additionally. Apart from this, the numerical keys are required in further sub-menus.

ⓘ   In each menu, an information bar will be displayed containing all selection options.

Example: Setting the receiver to summer time.

Press the "MENU" key, select "System Setup", press the OK key, then go to "Time & Timer setting", press the "OK" key, enter Time and press the "OK" key again. Set "GMT+02:00" in the item GMT Offset. Quit menu by pressing the "EXIT" key.

ⓘ   Setting for Central European summer time: GMT+02:00 winter time: GMT+01:00

Channel (symbol: TV)

Sub-menu	Description
TV channel list	**1** Favorite, **2** Move, **3** Find, **4** Sort, **5** Edit, **6** Type, ▲ ▼ Select, ◄► Group, **OK** Enter, **EXIT** Exit
Radio channel list	as indicated above
Delete all	Deletion of the complete channel list. For this purpose: Enter password (default value 0000) and confirm warning message with Yes.

1 Favorite

By pressing the 1 key you can determine your favourite channels. Next to the corresponding channels, a heart symbol will be displayed.

2 Move

By pressing the 2 key, the move symbol will appear behind the marked channel. By pressing the keys CH▲ and CH▼, the channel will be moved to the desired position. The procedure must be confirmed with OK.

3 Find

Channel scan function. By entering letters in the appearing keyboard, a filtered channel scan is possible. By pressing the keys CH▲, CH▼, V- and V+, you can mark the desired letter. Confirm the marked letter by pressing the OK key.

4 Sort

Sorting of the complete channel list according to the offered options. The list must be confirmed with OK. As long as the existing list has not been overwritten, the last status before confirming can be restored.

5 Edit

ⓘ This option is not available in the favourites list or a channel group.

After entering the password (default value 0000), new selection options will appear.

Sub-menu	Description
Edit	**1** Delete, **2** Skip, **3** Lock, **4** Create, **5** Edit, **6** Del all, ▲ ▼ Select, **V- V+** Group, **P+P-** Page, **EXIT** Exit

1 Delete

By marking with the 1 key, selected channels can be marked to be deleted. Please confirm your selection and the safety message by pressing the "OK" key.

2 Skip

By marking with the 2 key, selected channels can be marked to be skipped. Please confirm your selection and the safety message by pressing the "OK" key. Then, the selected channels are skipped when zapping. A direct input is still possible.

3 Lock

By marking with the 3 key, selected channels can be marked to be locked. Please confirm your selection and the safety message by pressing the "OK" key. Then, the selected channels require the entry of a password (parental lock).

4 Create

By pressing the 4 key, the menu "Create" will be displayed. Here, a new channel can be created.

Option	Description
Satellite	Satellite selection (example:Galaxy 19)
TP Index	Select the new transponder on the selected satellite.
TP Frequency	Data corresponding to the selection of the created transponder.
Symbol Rate	Data corresponding to the selection of the created transponder.
Polarity	Data corresponding to the selection of the created transponder.
Name	Determination of the channel name. By pressing the OK key, an editing mask will be displayed. By pressing the keys CH▼ , CH▲ , V- and V+, the curser can be moved over the keyboard. The selected field is marked yellow. To select it press the OK key. The cursor jumps to the next place. Select the symbol group with the keys 1, 2 and

	3 of the remote control. For deleting a symbol mark the "Del" field and press the OK key. Select the "OK" field as soon as the channel name is complete and press the "OK" key to confirm. The changed channel name will be accepted. If you want to exit the keyboard without any change, press the EXIT key or mark the "Exit" field and press the OK key.
Video PID	Video PID input with the 0-9 keys of the remote control
Audio PID	Audio PID input with the keys 0-9 of the remote control
PCR PID	PCR PID input with the keys 0-9 of the remote control
Save	To exit **with** saving changes select save and confirm by pressing the OK key.
Exit	To exit **without** saving changes select save and confirm by pressing the OK key.

5 Edit

By pressing the 5 key, the editing menu will be displayed. Here, you can change the individual parameters as desired.

Option	Description
Name	Changes the name of the currently selected channel.

	By pressing the OK key, an editing mask will be displayed. By pressing the keys CH▼ , CH▲ , V- and V+, the curser can be moved over the keyboard. The selected field is marked yellow. To select it press the OK key. The cursor jumps to the next place. Select the symbol group with the keys 1, 2 and 3 of the remote control. For deleting a symbol mark the "Del" field and press the OK key. Select the "OK" field as soon as the channel name is complete and press the OK key. The changed channel name will be accepted. If you want to exit the keyboard without any change, press the EXIT key or mark the "Exit" field and press the OK key.
Video PID	Video PID input with the 0-9 keys of the remote control
Audio PID	Audio PID input with the keys 0-9 of the remote control
PCR PID	PCR PID input with the keys 0-9 of the remote control
Save	To exit **with** saving changes select save and confirm by pressing the OK key.
Exit	To exit **without** saving changes select save and confirm by pressing the OK key.

6 Del(ete) all

Via the 6 key you can mark all channels to be deleted. Thereafter, individual channels can be deselected again by pressing the 1 key. Please confirm your selection and the safety message by pressing the "OK" key.

6 Type (channel group)

Here, you can assign selected channels to determined channel groups (Types) as desired. Please confirm selection and safety message by pressing the "OK" key. You can exit the menu by pressing the "EXIT" key.

Specifications

Receiver	
Dimensions in mm (W×D×H)	280 × 170 × 46
Weight in grammes	Receiver 959 g Remote control 80 g (without batteries)
Range of input frequency	950 MHz ~ 2150 MHz
IF band width	55 MHz / 8 MHz (below 5MS/s)
LNB power supply	13/18 GS, 0.30 A max. Overload protection
LNB control	22 KHz ± 2 KHz, 0.6 V pp ± 0.2 V
DiSEqC control	Version 1.0, Version 1.2, tone burst A/B
Symbol rate	2 ~ 35 MS/s
Input speed	Max. 15 Mbit/s
Error correction (FEC)	1/2, 2/3, 3/4, 5/6, 7/8, auto
Aspect ratio	4:3 letterbox, 4:3 PanScan, 16:9
Video resolution	720 x 576 (Pal), 720 x 480 (NTSC)
Audio mode	Left, right, stereo, AC3 digital sound
Connection options	
LNB IF input	Type F, IEC 169-24
RCA (CINCH)	Audio L, R
COAXIAL	Digital audio output
HDMI	HDMI connection

Power supply	
Input voltage power pack	100-240 V ~, 50/60 Hz
Power consumption	approx. 20W (operation with Single LNB approx. 2W (standby)
Operating temperature	0 ºC ~ +40 ºC
Storage temperature	– 40 ºC ~ + 65 ºC

Glossary

AC	Alternating Current Connection for alternating current
DC	Direct Current Connection for direct current
Cinch connector	Coaxial connector for connecting TV set or stereo system.
DiSEqC	Digital Satellite Equipment Control Digital system, with which the receiver can control different components of the external unit. It is especially used for selecting from multiple satellite positions (for example Astra and Eutelsat).
EPG	Electronic Programme Guide
IF connector	Coaxial connector for LNB antenna cable.
FTA	Free-to-air services Free-of-charge services that can be received without a special decoder.
HDMI	Connection for digital transmission of audio and video signals.
LNB	Low Noise Block Amplifier / Converter A device at the centre of the antenna, which converts high-frequency incoming signals from satellites into a low-frequency range and amplifies them simultaneously.
Mute	Key of the remote control for turning off sound

OSD	On-screen display Menu control displayed on the screen.
PID	Identification number of a received data stream The PIDs ensure that a channel is received completely.
Receiver	Receiver unit, which converts signals from the antenna into video and audio signals.
SCART	A 21-pole connector for connecting the TV set to the receiver.
Swap function	Switches between current channel and channel last watched.
Transponder	Satellite frequency. Several digital channels can be broadcasted simultaneously on a transponder.
VCR	Abbreviation for Video Cassette Recorder.
YUV	YUV is a signal formed by one brightness (Y) and two colour difference signals (UV). This signal is transmitted over three individual cables.

Installation (symbol: satellite antenna)

Sub-menu	Description	
Antenna setup	Satellite	Satellite selection (example: Galaxy 19)
	LNB Type	Select LNB type (default value is Universal)
	22K	22KHz activation, (Note: with LNB type Universal, activation occurs automatically)
	DiSEqC	Select DiSEqC level
	DiSEqC Switch	Select DiSEqC command Example: Astra and Hotbird double reception Astra = 1 / 4 Hotbird = 2 / 4 Disable for positioner: Not enabled
	Positioner	By pressing the "OK" key you will go to DiSEqC positioner menu. Please refer to the operating manual of your DiSEqC motor for help.
	Polarity	H (Horizontal), v (vertical), H/V (automatic operation)

TP Scan (manual channel scan)	With this scanning function, you can scan the preset frequencies (transponders) individually. The transponder details can be changed manually. The procedure is initiated with "Scan".	
	Satellite	Selection of the satellite to be scanned
	TP Index	Frequency selection The selection options are displayed **1** Add, **2** Delete, **3** Delete all **See following table for TP Index.**
	TP Frequency	Setting of the frequency
	Symbol Rate	Setting of the symbol rate
	Polarity	H = horizontal, V = vertical
	Scan Mode	All = encrypted and unencrypted channels Free = only unencrypted channels
	Search	Start scan by pressing the OK key. The channels and frequency found are added.
Preset Scan	Scanning of preset frequencies (transponders). (Normal automatic scan)	
	Satellite	Selection of the satellite to be scanned

	Scan Mode	All = encrypted and unencrypted channels Free = only unencrypted channels
	Scan Channel	Selection between TV and radio or only TV or only radio
	Search	Start scan by pressing the OK key.
Auto Scan (unique function that can be used without any previous knowledge),	Here you can scan a selected satellite (example:Galaxy 19) completely to search for new channels. For this purpose, no special information is needed. You can choose between free-to-air channels and all TV and radio channels. The procedure is initiated via "Scan". The signal strength and quality is displayed permanently.	
	Satellite	Selection of the satellite to be scanned
	Scan Mode	All = encrypted and unencrypted channels Free = only unencrypted channels
	Scan Channel	Selection between TV and radio or only TV or only radio
	Search	Start scan by pressing the OK key. The channels found are added.

Table for the TP Index

No.	Sub-menu	Description
1	Add	Create new frequency (transponder): Menu item "TP frequency": Frequency: set desired frequency Menu item "Symbol rate": set corresponding symbol rate Menu item Polarity: set corresponding polarisation The new frequency (transponder) is created after execution. When exiting the menu confirm the safety message by pressing the OK key. Only after confirmation the new frequency will be created. For scanning the newly created frequency, initiate the menu item "Scan".
2	Delete	Delete the selected transponder. When confirming the safety message, the transponder and all channels on it will be deleted.
3	Del(ete) all	When confirming the safety message, all transponders and all channels on them will be deleted.

System Setup (symbol: receiver)

Sub-menu	Description	
Audio Language	First Audio	Preselection of audio language (if offered by the broadcasting station)
	Second Audio	Preselection of audio language (if offered by the broadcasting station)
TV System	Display Mode	Selection of the transmission system Default selection: HDMI 576i
	Aspect Mode	Selection of the aspect ratio Default selection: 4:3 Letterbox
	Video Output	CVBS/CVBS+S-Video
	Dolby Digital	Enable (On) / disable (Off)
Channel setup	Start-up channel: Determination of the desired TV or radio channel appearing when switching on the receiver	
	Boot on Channel	Enable (On) / disable (Off)
	Mode	TV = the start-up channel is a TV channel Radio = the start-up channel is a radio channel
	Startup Channel:	By pressing the OK key, a channel list will be displayed

		for selecting the start-up channel. Confirm the selected channel by pressing the OK key.
Time & Timer Setting	Time	Optional input of time and time zones. **See following table for time setting.**
	Timer	**See following table for timer setting.**
OSD Setting	Subtitle Display	Enable / disable
	OSD Timeout	Menu display time (OSD time lock)
	OSD Transparency	Menu transparency
	Load Default OSD Setting	OSD default value can be restored
Parental Lock (password settings)	Factory password: 0000	
	Installation Lock	Deactivation of password input in the Installation menu
	Channel Lock	Deactivation of password input for locked channels (parental lock)

	New Password	Input of a new password. (Make sure you will remember the new password)
	Confirm Password	Confirm new password.
LNB Power	Enabling and disabling LNB power supply. ON is preset.	

Table for time setting

Sub-menu	Description
GMT Usage	Enable / disable
GMT Offset	Setting of the location-dependant divergence to Greenwich Mean Time
Date	Enabled if sub-menu "GMT Usage" is disabled: Time input with the keys 0-9 of the remote control
Time	Enabled if sub-menu "GMT Usage" is disabled: Time input with the keys 0-9 of the remote control
Time Display	Enabling / disabling of the time display on the TV screen.

ⓘ   If GMT Usage is enabled, time in the standby mode on the front panel of the receiver is set automatically.

Table for timer setting

Sub-menu	Description
Timer Number	Selection of timer number 1-8.
Timer Mode	Type of repetition (once, daily, weekly, monthly, yearly, off). With the setting "Off", the timer will be disabled.
Timer Service	Switching between programme timer (TV or radio channels) and reminding function (message).
Wakeup Channel	**With the timer service setting "Message",** you have following options: Birthday, Anniversary, and General **With the timer-service setting "TV Channel" or "Radio Channel",** you can select channels
Wakeup Date	Date input with the keys 0-9 of the remote control
On Time	Time input with the keys 0-9 of the remote control
Duration	Input duration of the event with the keys 0-9 of the remote control.

ⓘ **However, the timer can also be programmed via the EPG mode. Example**:

Press the "EPG" key. Via the 1 key you will then get an event list. By using the keys CH▲ and CH▼, you can select the desired event. After

displaying the details by pressing the "OK" key,
the result can be taken over directly to the timer
by pressing the 2 key.

Tools (symbol: tool case)

Sub-menu	Description
Default Value (requires password input)	Reset receiver to the default value. All changes are cancelled. If the receiver is reset to the default values via the OSD menu, the language selection appears in the main menu after completion of the procedure. Now, switch off the receiver with the mains switch. As soon as 5 seconds have passed, you can switch it on again. In the condition as supplied to the customer, the receiver starts in normal mode. **Please note:** **the default values are restored if you keep the standby key at the front side of your receiver pressed for more than 10 seconds.**
Software-Update	**Please note:** **A software update has NOTHING to do with a scan for new TV channels. Therefore, please initiate an automatic scan.** By means of a software update you can load new operation software in case of need. An update via satellite or RS232 is also possible.
Game	Here, the three games Tetris, Snake and Othello are available.
Information	Technical details

Keys with special functions

Switch between TV and SAT

With the "TV/SAT" key you can switch between TV and satellite functions. (This function has to be provided by your TV set).

⇨ Press the "TV/SAT" key until you have set the desired function.

Switch between TV and radio

With the "TV/Radio" key you can switch between TV and the radio function.

Now, the receiver transmits a radio channel and shows a background image.

⇨ To return to the TV channel, press the "TV/Radio" key of the remote control.

ZOOM

With the zoom function you can enlarge a section of the image.

⇨ Press the "ZOOM" key. With each pressing of the "ZOOM" key, a section of the image will be enlarged gradually.

⇨ Select the image section with the keys CH▼, CH▲, V- and V+.

By pressing the "EXIT" key, you can exit this mode.

LIST

Press the "LIST" key once.

Here you have the option to edit the channel list as already described earlier under menu item "Channel".

AUDIO

With the "AUDIO" key you can select the audio track if a broadcasting station offers multi-channel sound. Additionally, you can enable the Dolby Digital mode here. (For this purpose you will additionally need a Dolby Digital system. The connection is made on the rear of the device via the COAXIAL socket).

EPG

Electronic Programme Guide. To activate this function, please press the "EPG" key. The channel list will be displayed.

With the keys CH▲ and CH▼, you can select a channel. With the keys P+ and P-, you can jump 10 channels up or down. On the right side, the current and the following event will be displayed.

For getting detailed information on the current event, press the 2 key. Press the 1 key to display the complete event list of the selected channel. With the keys V+ and V-, you can scroll between the days. With the keys CH▲ and CH▼, you can scroll up and down the events.

You will get detailed information on a selected event (programme) by pressing the 1 key. A selected event of a channel will be taken over directly to the timer by pressing the 2 key.

TEXT

Teletext is an information system displaying Teletext on your TV set. For Teletext reception, the selected channel must support this function. The TTX symbol appears when channels are changed. Comparing our receiver with others you will notice that our Teletext is extremely fast.

⇨ Press the "TEXT" key to start Teletext.

⇨ For switching off Teletext, press the "EXIT" or "TEXT" key.

Using Fasttext functions

The coloured keys on the remote control are meant for Fasttext and are enabled after invoking another Teletext page. These functions will be available for some channels only. You can get there directly by pressing the small coloured keys on the remote control.

⇨ Press the desired key.

M/P

Press the "M/P" key to go to the multi-picture mode. Now, 9 channels will appear simultaneously on your screen, starting with the current channel.

With the keys CH▼, CH▲, V- and V+, you can move the yellow marking bar. The marked channel is displayed in real time. All other channels are displayed as freeze images.

To enable the desired channel, mark it and then press the "OK" or "EXIT" key.

By pressing the "EXIT" key, you will leave the multi-picture mode. The channel you marked last will appear as complete image on your screen.

MUTE

By pressing the "MUTE" key, the sound will be turned off. By pressing the "MUTE" key again, the sound will be turned on again.

FAV

⇨ Press the "FAV" key.

On the screen you will see the favorite list selected by you.

⇨ Select a channel out of the favorite list by pressing the CH▲ and CH▼ keys.

⇨ With the keys V+ and V-, you can switch between the favorite list and the channel groups.

⇨ Press the "OK" key to select.

⇨ Press the "FAV" key to switch between the favorite list and the channel groups. Select with the V- and V+ keys.

⇨ To exit the favorite list or the channel group, press the 1 key.

RECALL

By pressing the "RECALL" key, you will return to the previously selected channel.

INFO - acoustic signal for directing the satellite antenna

For this purpose, press the "INFO" key. Apart from the current reception parameters, you will get information on the signal strength and quality. Additionally, you can enable an acoustic signal by pressing the 1 key.

ⓘ An acoustic signal will be emitted by the TV set. The higher the signal, the better the direction of the antenna.

0 - Sleep timer

You can go to the sleep timer in normal mode by pressing the 0 key.

By pressing the 0 key again, you will have following setup options: off, 10, 30, 60, 90, 120 minutes. After this time, the receiver will be switched off automatically.

PAUSE

For this purpose. press the "PAUSE" key. The TV image will be "frozen". By pressing the "PAUSE" key again, it will be disabled.

Uninstalling the receiver

⇨ Separate the receiver and connected equipment from the power supply.

⇨ Loosen the LNB cable from the receiver.

⇨ Take the batteries out of the remote control, if you will not use the receiver for a longer period of time.

⇨ Pack the receiver, the cables and the remote control in a cardboard box.

⇨ Store the receiver and all accessories in a dry and dust-free room.

⇨ Protect the receiver from frost.

Cleaning

⚠ Caution!

The receiver must not become wet. Never clean it with a wet cloth.
Do not use any cleaning agent containing solvents like petrol or thinners for cleaning. These agents may damage the surface of the casing.

⇨ Clean the casing of the receiver with a **dry** cloth.

⇨ Clean the display of the receiver with a slightly wet cloth.

Tips & tricks/trouble shooting

Symptom	Possible cause and remedy
Satellite cannot be found, or no signal	Example:Galaxy 19 1 key (default setting: "Das Erste") "INFO" key ("Das Erste", FR11837) Signal AND quality are both at 0% Direct vertical reflector to the south. Turn some millimetres to the left, wait approx. 3 seconds and repeat, until signal AND quality are displayed. With a signal of approx. 60%, the black background disappears and the TV image will be displayed. For changing the satellite please select a current channel out of the preset channel list and then press the INFO key.
Frontal display dark	The mains cable is not connected. Connect the mains cable with the power source.
No sound or image, but receiver menus are displayed	The antenna is not directed towards the satellite. Direct the antenna properly.
	No signal (with symbol). Check the cable connection from the LNB to the receiver and from the receiver to the connected equipment. Direct the antenna.

Frontal display shows channel location. The TV set does not display any image.	The system is not connected properly. Check connection of the SCART cable or HDMI cable.
	The TV set is not in AV mode. Switch the TV set to the respective AV input.
Poor image, blocking error, formation of small blocks, sound stops	The antenna is not directed exactly towards the satellite. Direct the antenna more precisely. For this purpose, use the "Info" key of the remote control. The signal strength will be displayed for directing the antenna properly.
	The LNB is defective. Replace the LNB.
No image, no sound, signal strength and signal quality OK	The satellite antenna has been directed to a **wrong** satellite.
Bad reception of: DSF, etc.	Wireless telephone is disturbing (DECT standard). Move your telephone to another place.
System crash (receiver cannot be operated anymore.)	Should it come to the improbable case of a system crash, separate the receiver from the mains supply. Connect it again after 10 seconds. With this, the problem can be solved usually. Please note: a software crash is not a malfunction and no guarantee will apply. For technical equipment (e.g. also PC, radio network, etc.) a software crash can be solved simply and quickly by following this procedure.

The remote control does not work.	The batteries are exhausted. Replace the batteries.
	The remote control is not directed properly. Aim the remote control towards the front side of the receiver and ensure that there is no obstacle between the remote control and the receiver.
Channel has received new frequency and is not transmitted anymore with the current data	Delete the corresponding channel and carry out an automatic scan.
Exit favourites list	Press the FAV key and the 1 key.
Password	The default password is 0000.
Cannot remember personal password	Please contact the service hotline if you have forgotten your personal password.
Operating manual in additional languages	On the website www. this operating manual is available for download in additional languages.
Channel-list editor	On the website www. a channel-list editor is available for download.
Default value	The default settings are restored if you keep the standby key at the front side of your receiver pressed for more than 10 seconds. Caution! By doing this, your personal settings will get lost.

If a problem cannot be rectified in spite of this, please contact your specialized dealer or the manufacturer.

Disposal

European disposal directive 2002/96/CE

Never throw the receiver into normal household waste. Ask your municipal authorities or local government about different methods for disposing of the equipment in an eco-friendly and proper manner.

Never throw the batteries into normal household waste. Batteries may contain toxic agents. Therefore, it is essential to dispose of the batteries according to the prevailing statutory regulations and the statutory return obligation. Ask your municipal authorities or local government about different methods of disposal in an eco-friendly and proper manner. Hand over used batteries to a collection centre. With this you will make a positive contribution to pollution control.

Remote control

1	Standby	Switches on and to the standby mode
2	ZOOM	Enlarges TV image
3	LIST	Invokes TV channel list
4	TIMER	Invokes timer
5	TEXT	Invokes Teletext
6	MUTE	Turns off sound
7	M/P	Multi-picture function, invokes thumbnail view
8	V+	Increases volume/cursor moves to the right
9	OK	In normal mode: invokes current channel list In a menu: confirms menu item
10	CH ▼	Switches to the next lower channel location/ cursor moves down
11	FAV	Invokes own favourites list
12	RECALL	Switches to previously selected channel
13	PAUSE	Stills the frame
14	INFO	Displays reception data of the current channel (satellite-finder function)
15	0–9	Selects channel directly, numerical input
16	P–	In normal mode: changes channel group In TV channel list: Ten-key block commutation
17	P+	In normal mode: changes channel group In TV channel list: Ten-key block commutation
18	V–	Decreases volume/cursor moves to the left
19	CH ▲	Switches to the next higher channel location/ cursor moves up
20	MENU	Invokes main menu
21	EXIT	Exits menu or menu item
22	AUDIO	Changes audio mode
23	EPG	Invokes Electronic Programme Guide (if offered by the broadcasting station)
24	TV/SAT	Switches between terrestrial and satellite antenna
25	TV/RADIO	Switches between TV and radio mode