OYSTER® V

Vision
INSTRUCTIONS FOR USE

ten Haaft®

CONTENTS

1. Operating the system

2. Automatic satellite swap

3. Service

Be sure to observe the operating manual and installation instructions provided.

1. OPERATING THE SYSTEM
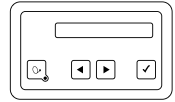
1.1 Menu guidance at control panel

The menu guidance of the Oyster® V systems adjusts itself to individual status of the external unit, showing only the steps that the system allows to be performed.

Search ASTRA1 = Display of the current operating status

- ⟲ = Stop antenna motion
- ✔ = Displays current search transponder, timeout, return to display
- ◀▶ = Scroll through the control level

ASTRA1 = Display of the current satellite

- ⟲ = Antenna retracts
- ✔ = Displays signal strength, timeout, return to display
- ◀▶ = Scroll through the control level

Sat search = Unfold the antenna

- ⟲ = Antenna unfolds
- ✔ = Antenna unfolds
- ◀▶ = Scroll through the control level

Continue search? = Option to continue the preceding action, e.g. search

- ⟲ = Antenna retracts
- ✔ = Continue search
- ◀▶ = Scroll through the control level

Follow-up optimisation = Option for the repeated optimisation

- ⟲ = Return to display
- ✔ = Start optimisation
- ◀▶ = Scroll through the control level

Stop = Stops the system

- ⟲ = Stop antenna motion
- ✔ = Stop antenna motion
- ◀▶ = Scroll through the control level

1. OPERATING THE SYSTEM

Retract = Retract the antenna

   ⟳ = Retract

   ✔ = Retract

Open Sleep = Antenna remains unfolded when the system is switched off

   ⟳ = Back

   ✔ = System switches back into Open-Sleep mode

   ◀▶ = Scroll through the control level

Continue retraction? = Option to continue the preceding action, i.e. retraction

   ⟳ = Antenna retracts

   ✔ = Antenna retracts

   ◀▶ = Scroll through the control level

Satellite swap = Branch-off into satellite swap menu

   ⟳ = Stop antenna motion

   ✔ = Opens the satellite swap menu, timeout, return to display

     ◀▶ = Switches through the list of satellites

     ⟳ = Return to main menu

     ✔ = Confirms the current selection, timeout, return to main menu

   ◀▶ = Scroll through the control level

Settings = Branch-off into settings menu

   ⟳ = Stop antenna motion

   ✔ = Opens the settings menu, see 1.2, timeout, return to display

   ◀▶ = Scroll through the control level

1. OPERATING THE SYSTEM

1.2 Settings

These settings can be made at the control panel or via the app.

Settings			
Satellite settings			
	Manual search		
		Azimuth	
		Elevation	
		Skew option	
	Manual transponder		
		Frequency	
		Polarisation	
		Symbol rate	
		FEC rate	
		Modulation rate	
		ONID	
		Active	
	Receiver control		
		Switch-on delay	
		Switch-off delay	
	DiSEqC allocation		
		Mode	
			Mode
		Sat 1 (manual)	
			DiSEqC position
			Satellite
		Sat 2 (manual)	
			...
		Sat 3 (manual)	
			...
		Sat 4 (manual)	
			...
		DiSEqC status	

1. OPERATING THE SYSTEM

Left / right changes the azimuth (in increments of 1°)
Left / right changes the elevation (in increments of 1°)
Left / right changes the skew angle (in increments of 1°)

Frequency in MHz
High / low
Symbol rate
Selection from a list of applicable FEC rates
"QPSK", "QPSK-S2" or "8PSK"
Network ID
"Yes" or "No". The display shows "Manual mode" when a manual transponder is active.
"Off", "Automatic" or "OpenSleep" (LNB Off switches the system into sleep mode with the antenna remaining unfolded)
Delay until the next check of the LNB voltage for power-up (3–90 sec.)
Delay until the next check of the LNB voltage for power-down (1–30 sec.)

Four presets can be selected: "ten Haaft" (default), "manual" (Sat 1 – 4), "NL Canal Digitaal" and "NL Joyne" (two Fastscan presets)

"Off" or 0 – 255 (position number of satellite)
Name of satellite to be shown for this position

... as with "Sat 1"

... as with "Sat 1"

... as with "Sat 1"

1. OPERATING THE SYSTEM

General settings

Language
Display

Brightness
Colour
Fade-out

Antenna Light

Active
Brightness

WiFi

Active
Channel

Information

Antenna type
Software version UF
LNB offset
Signal information
Error messages
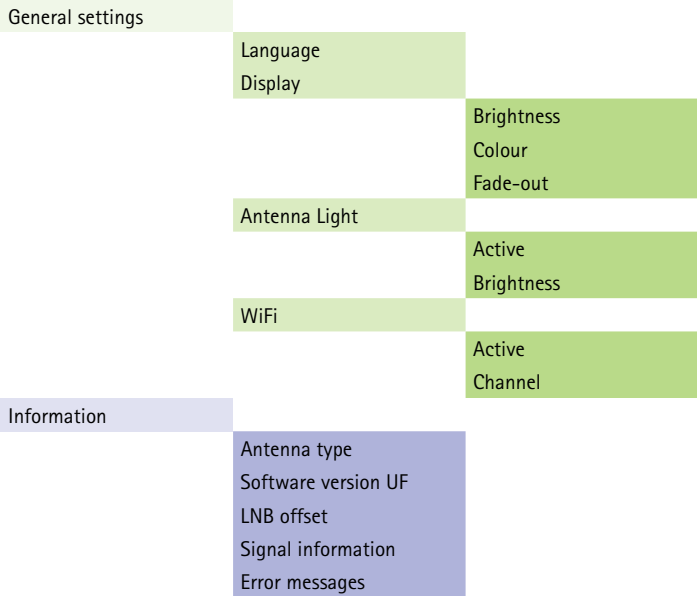
1. OPERATING THE SYSTEM

Left / right changes the language (languages list)

Brightness 20% – 100%
Colour 0% – 100%
Fade-out time 2–60 sec.

"Yes" or "No"
Brightness 20% – 100%

"Yes" or "No"
Channel number

Display of corresponding data
Display of corresponding data
Display of corresponding data
Signal level, BER, ONID/TSID, ... (depending on technical conditions and availability -> tuning to effective signal)
Scrolling through the error protocol list

1. OPERATING THE SYSTEM

1.3 ten Haaft® app

1) Load the ten Haaft® app onto your mobile device (smartphone or tablet). You can download this app free of charge from the Google Play Store or iTunes Store.
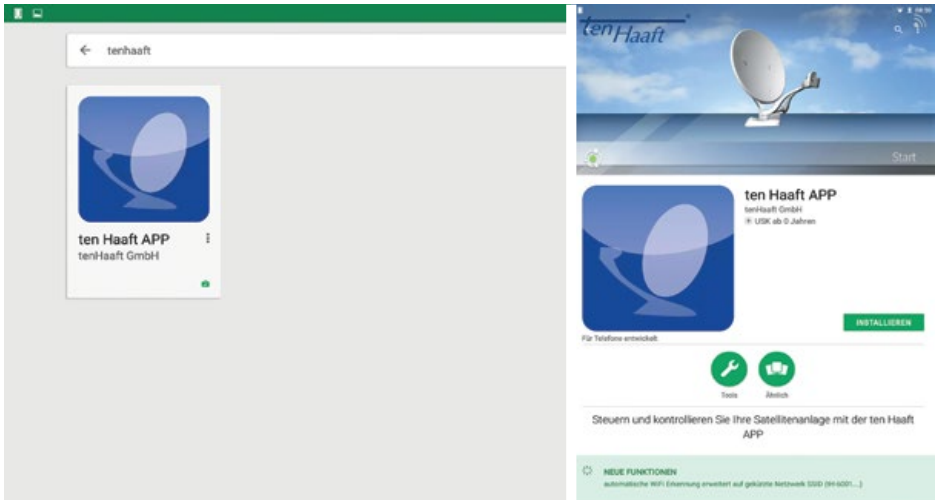
2) Once you have downloaded and installed the app, open it.

3) The app will then identify whether a connection to a ten Haaft® FeatureBox has already existed (which is not the case at initial installation). It then automatically opens the QR scanner.
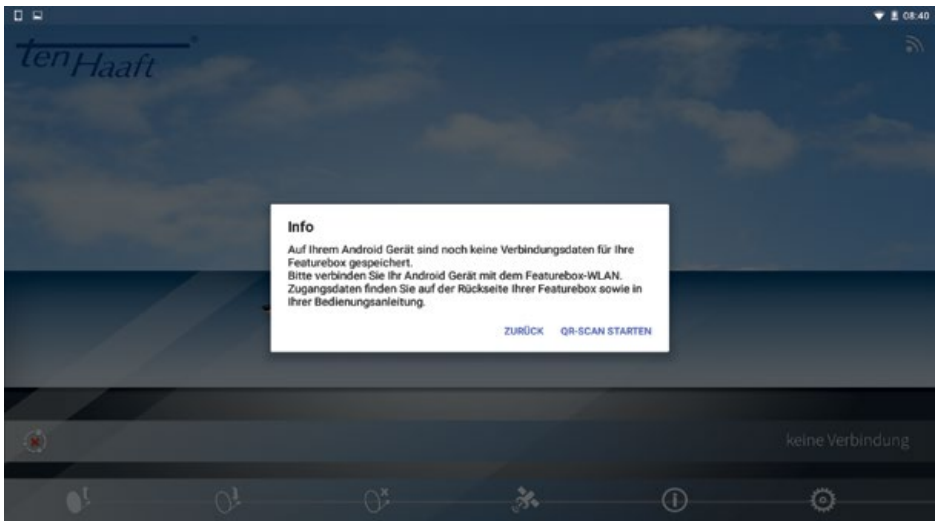
1. OPERATING THE SYSTEM

4) Scan the QR code on the sticker.
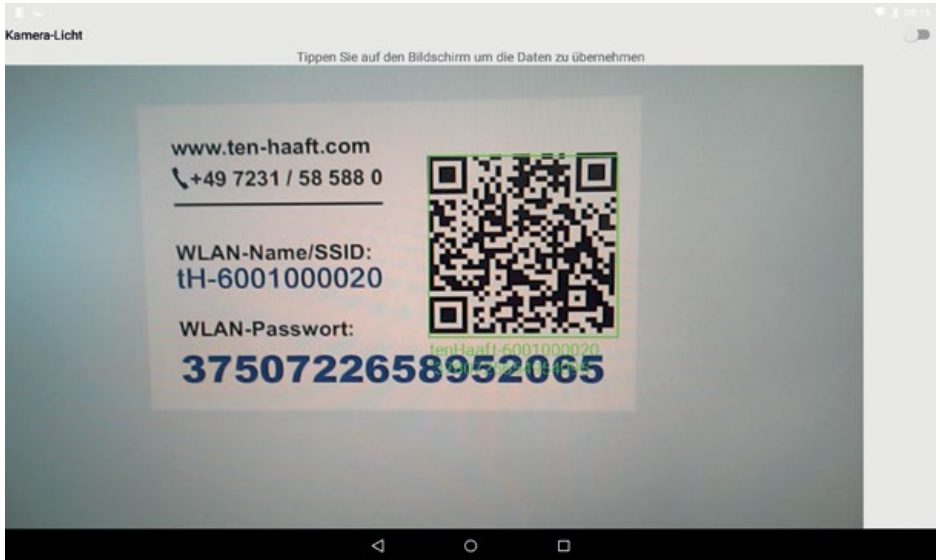
Note that your FeatureBox is provided with three identical stickers when leaving the factory. These stickers specify the Wi-Fi name/SSID and the Wi-Fi password for your FeatureBox. Each FeatureBox has a unique name and password!

One of the stickers is attached at the factory to the FeatureBox, another one is on the manual. The third sticker can be attached for your reference anywhere you like.

The sticker on your FeatureBox always has priority for the system operation!

1. OPERATING THE SYSTEM

5) For Android, the FeatureBox will automatically connect to the app via WiFi. For Apple, the WiFi connection of the FeatureBox must be selected in the device settings. The app indicates its connection to the WiFi system.
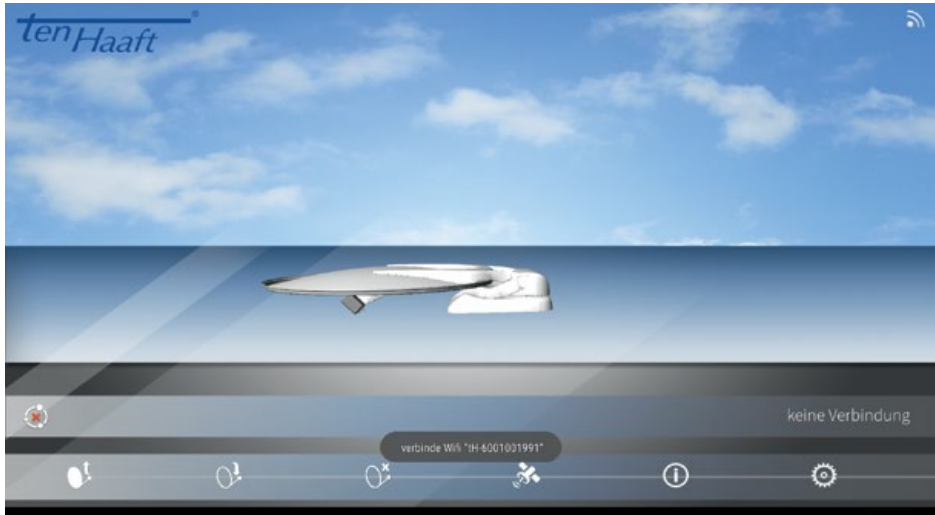
1. OPERATING THE SYSTEM

6) Your FeatureBox is now connected to your mobile device (see green dot)
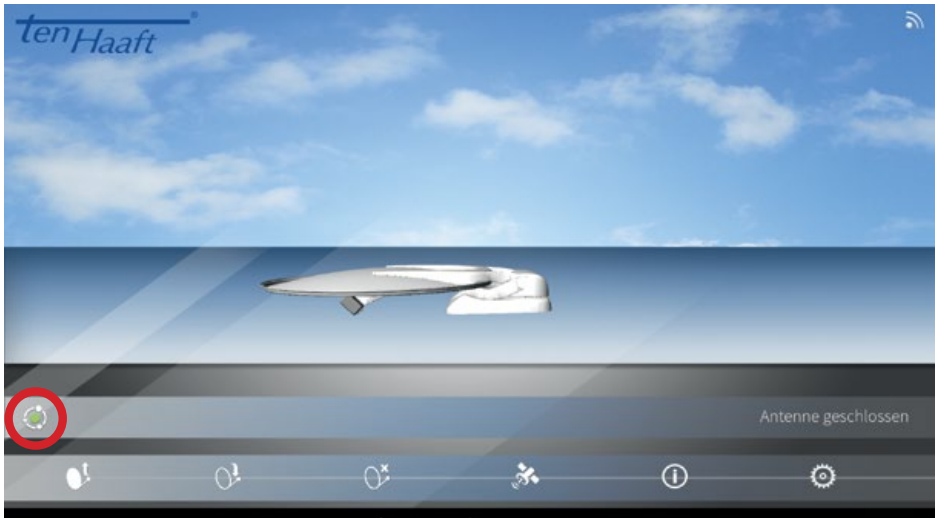
Please contact us if you have any further questions! You can call us at +49 (0) 7231 / 58 588 0.

2. AUTOMATIC SATELLITE SWAP

2.1 Automatic satellite swap via DiSEqC™

In most cases you will aim your automatic satellite system at one specific satellite only. Of course, your system can also receive many other satellites, allowing you to watch e.g. Dutch, Swiss, French, Spanish or other channels. You can select a satellite manually at any time via the control menu.

However, your system can also readjust to a different satellite automatically when you change to the corresponding channel. This may be necessary in countries where the channels are broadcast via different satellites. Using the automatic satellite swap requires some settings to be made at your TV set or receiver, and possibly also at your satellite reception system. If these settings are not defined at all or are incorrect, the automatic satellite swap will not work or a wrong and hence useless satellite will be received. The automatic satellite swap can be performed using the DiSEqC™ feature (disabled at the factory).

The Automatic satellite swap of your Oyster® VISION satellite system has been **disabled** at the factory to avoid problems and malfunctions! If you wish to use this function, you can enable it at any time via the menu system. However, it is then mandatory to adjust the settings of your TV set or receiver!

Changing the DiSEqC™ settings of your Oyster® systems only makes sense is specific cases, for example when using a "FastScan Receiver" (Netherlands, Belgium, and some other countries).

If you wish to use the antenna system together with an external device (TV/receiver - not made by ten Haaft) supporting the "Fast-Scan" feature (Benelux, Scandinavia, possibly other countries), you need to change the DiSEqC settings in your control unit (Vision III control box/FeatureBox). The DiSEqC settings are determined by the Fast-Scan station list. You can read them out via the control panel and adjust them at the control unit.

The devices Oyster TV and HD Europe Receiver of ten Haaft support the "Fast-Scan" feature – no adjustment of the DiSEqC settings required.

2.2 Settings at the Vision control unit

To be able to use the automatic satellite swap by means of the DiSEqC™ capability of your TV set or receiver, you first need to enable the DiSEqC™ function in the menu of your antenna system.

2. AUTOMATIC SATELLITE SWAP

2.3 Enabling DiSEqC™ at the TV set

The settings required at the TV set or receiver are usually provided in a menu item called "DiSEqC™" or similar. For details please refer to the user manual of your TV set or receiver or contact the dealer.

The DiSEqC™ settings should provide options 1.0, 1.1 and 1.2. We recommend selecting DiSEqC™ 1.2. You then need to assign a unique ID to each satellite as is already preset at the FeatureBox. These IDs must be identical in the TV settings and in the FeatureBox (see table in the following slide).

If your TV set does not permit these settings, please contact your dealer.

Sat ID	Rotary switch	Satellite name		DiSEqC™ ID
1	1	Astra 1	19.2° East	1
2	2	Astra 2	28.2° East	5
3	3	Astra 3	23.5° East	3
4	4	Hotbird	13.0° East	2
5	5	Eutelsat W5	5.0° West	4
6	6	Thor / Intelsat 10	0.8° West	7
7	7	Astra 4	4.8° East	6
8	8	Eutelsat 16	16.0° East	15
9	9	Eutelsat 7	7.0° East	9
10	A	Hispasat	30.0° West	14, 21
11	B	Eutelsat 9	9.0° East	18
12	C	Hellas Sat 2	39.0° East	10
13	D	Türksat	42.0° East	11
14	E	Intelsat 907	27.5° West	19
15		Eutelsat 8W	8.0° West	8
16		Eutelsat 10	10.0° East	12
17		Amos 2/3	4.0° West	13
18		Telstar 12	15.0° West	16
19		Astra 5	31.5° East	20
20		Hylas 1	33.6° West	22

* DiSEqC™ is a registered trademark of Eutelsat, 70, rue Balard, F–75502 Paris Cedex 15. www.eutelsat.com

3. SERVICE

3.1 Reception in practice – aiming the satellite system

Satellite antennas are aimed at a satellite along three adjustment planes:

1. AZIMUTH ANGLE (COMPASS HEADING)

The azimuth angle defines the horizontal setting of the antenna, specifying the angle between North and antenna heading. It depends on the geographic position of the receiver and the satellite selected.

For example, Astra 1 (orbital position 19.2° East) has an azimuth of 173° in Berlin but 143° in southern Spain.

2. ELEVATION ANGLE (INCLINATION)

The elevation angle indicates the height of the satellite above the horizon. Like the azimuth angle, it depends on the position of the receiver and the satellite selected. In Central Europe, it is typically between 25° to 35°, decreasing as you move further North.

3. SKEW ANGLE (POLARISATION DEVIATION)

For optimal reception at the fringe of the satellites' footprints in southwestern and southeastern regions, the LNB may have to be rotated to compensate for the polarisation deviation caused by the earth's curvature.
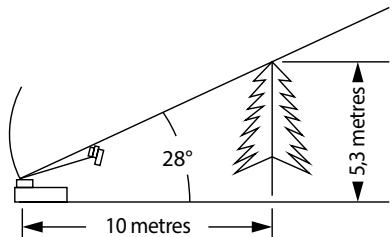
Oyster® systems are available with the optional SKEW function for automatic LNB adjustment.

OBSTACLES IN FRONT OF THE ANTENNA

At 42° elevation (southern Spain) a 9 metre high tree that is 10 metres away will not affect reception.
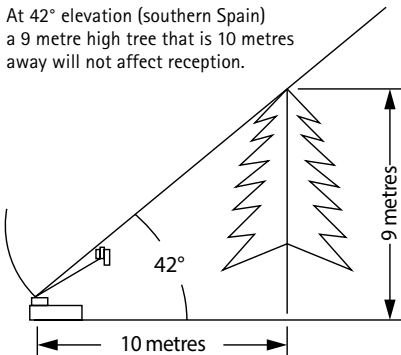
At 28° elevation (northern Germany) a 5.3 metre high tree that is 10 metres away will not affect reception.

3. SERVICE

3.2 Reception in remote areas

LNB SETTINGS IN DIFFERENT REGIONS:

This setting is done automatically at the Oyster® V Vision with SKEW option. This section describes how to fine-tune the LNB to optimise reception in the fringe of a TV satellite's footprint. This requires loosening the LNB bolts and turning the LNB by a specific angle. This is only required in the fringe areas of a satellite's footprint. It should be performed by expert users only.

All satellites broadcasting channels of interest to Central European viewers are aimed at Central Europe. In locations outside this area, the antenna has a "sideways view" on the satellite. This effect is known as the "SKEW angle" or "polarisation angle" and occurs particularly in southern regions such as Portugal, Spain, Morocco, Greece, Turkey, and most extremely on the Canary Islands. The effect is mostly compensated by the receiver's electronics, but sometimes some manual fine-tuning is required by pivoting the LNB (reception head) by some degrees.

OYSTER® V

Loosen the bolts

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The following definitions apply to the tables and specified angles below: To determine the direction of rotation, the viewer must look at the front face of the antenna as does the LNB, i.e. the viewer must be standing in front of the antenna. The long lines indicate increments of 10°.

- A rotation in CLOCKWISE DIRECTION is positive (+). | A rotation in COUNTERCLOCKWISE DIRECTION is negative (–).

- A rotation in "+" direction means that the BOTTOM of the LNB is turned to the LEFT.

- A rotation in "–" direction means that the BOTTOM of the LNB is turned to the RIGHT.

Loosen the bolts

3. SERVICE

LNB settings in different regions:

Country	Eutelsat W5 5° West	Thor 0.8° West	Astra 4 4.8° East	Hotbird 13° East	Astra 1 19.2° East	Astra 3 23.5° East	Astra 2 28.2° East
Germany, Austria, Switzerland	–23°	–16°	–12°	–6°	0°	4°	8°
France	–15°	–11°	–5°	2°	7°	11°	14°
Benelux region	–16°	–12°	–8°	–2°	3°	6°	9°
England	–9°	–6°	–3°	3°	7°	10°	12°
Ireland	–6°	–3°	1°	7°	11°	13°	16°
Portugal	–4°	1°	8°	16°	22°	25°	28°
Southern Spain, Gibraltar	–8°	–3°	5°	14°	20°	24°	28°
Scandinavia	–19°	–16°	–14°	–9°	–6°	–4°	–2°
Greece	–38°	–35°	–29°	–20°	–12°	–7°	0°
Turkey, Ukraine, Belarus	–39°	–36°	–31°	–26°	–20°	–15°	–11°
Canary Islands	12°	18°	26°	34°	39°	42°	44°
Morocco	–8°	–2°	6°	17°	23°	27°	31°
Italy, Sicily	–27°	–24°	–17°	–8°	–2°	3°	8°
Croatia	–27°	–24°	–19°	–11°	–5°	–1°	4
Tunisia, Libya	–27°	–22°	–15°	–4°	4°	9°	15°

Note: The SKEW angles provided are for reference only. Adjustments of less than 8° are usually not necessary as long as reception is undisturbed. The fine-tuning of the SKEW angle often allows the reception of satellites in areas actually outside of their footprint. The footprints of the individual satellites can be found at www.lyngsat. com or www.satcodx.com. Both websites provide interesting general information about the channels and foot-prints of the various satellites.

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3.3 Troubleshooting

Stop function

It is essential that the antenna motion can be stopped at any time. A satellite search can be stopped or interrupted by pressing the SAT button on the control panel, the Stop button on the Oyster® TV set's remote control or the Power button on the FeatureBox. After either of these buttons has been pressed, the system will no longer accept any control commands.

Resetting the stop function

To cancel the stop function, press the Start button on the Oyster® TV set's remote control of a Premium system, the SAT button on the control panel of a Vision system or the Power button on the FeatureBox to send a new motion command.

Fault description	Remedial action
No satellite was found during search.	Do you have a clear view to the South? Are you inside the footprint of the satellite being searched? Does your position require the LNB's SKEW angle to be adjusted?
The antenna does not retract or unfold properly.	Is the motion obstructed by obstacles? Is the supply voltage too low (weak battery)?
The antenna does not react after activation or does not respond to commands.	Is the fuse OK? Are all cables properly connected?
Signal tone of the FeatureBox	If the system receives a command to retract the antenna via the line connected to terminal 15 / D+ (it is mandatory that this line is correctly connected), but does not send a feedback to the FeatureBox, a signal tone will sound. Check whether the antenna has been retracted.

3. SERVICE

3.4 FeatureBox update via USB stick

Further to automatic updates via the app, which is the preferred option, updates can also be performed manually using a USB stick.

You will need a USB stick formatted as FAT/FAT32 with the file tenhaaft.uf loaded into its root directory (top level).

The UF-file is available from our website.

The maximum file size is approx. 4 MB, so the USB stick's storage capacity is not relevant.

Procedure	Description
	Switch on the FeatureBox! The image shows a FeatureBox that is switched off and in stand-by mode (left LED illuminates red).
	The FeatureBox shown is active (left LED illuminates green).
  or 	Plug the USB stick into the port marked "USB" on the rear face of the FeatureBox. The USB stick will then flash to indicate reading access, and both LEDs on the front face illuminate (left LED in green, then changing to red, right LED in red or flashing red). In this mode, the data are transmitted from the USB stick into the internal update memory of the FeatureBox. Depending on USB stick and file size, this procedure may take some time (< 2 min.) and must not be interrupted! The right-hand red LED turns off when this step is completed. You can then remove the USB stick from the FeatureBox. An LED illuminating blue can be ignored!

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BLUE LED

Once the data are saved in the internal update memory, they can be distributed to the hardware components connected to the FeatureBox.

This may happen automatically. However, it is often not possible to update all components at once because the FeatureBox does not know which state a component is in (e.g. because the antenna is not connected when the update is performed).

This condition is neither unusual nor critical!

The LED illuminating blue indicates that an update can now be started by pressing the "i" button.

UPDATE SEQUENCE

The components connected to the FeatureBox are updated in a fixed sequence: At first the FeatureBox is updated, then the motor controller of the antenna, and then the control panel.

For safety reasons, the motor controller is only updated after it has been reliably identified and when the antenna is folded in. This is why the antenna may retract if you press the "i" button while the LED illuminates blue.

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Sequence	Description
	Device is switched off *(standby)* --> Switch on the device
	Device is switched on --> Plug in the USB stick
 or 	Data are being transmitted or updated --> Do not touch – wait!
After the right red LED has turned off permanently, you can remove the USB stick.	
	--> Press the "i" button

Office hours:

Monday – Friday   8:00 a.m. – 12:00 a.m.
and   01:00 p.m. – 4:30 p.m.