DUR-*line*® SF 4000 BT - Satfinder

Quick start guide

- ✔ Test receiver for DVB-S/S2 signals
- ✔ 8 Pre-programmed satellites (editable)
- ✔ Recognises the selected satellite
- ✔ Bluetooth interface
- ✔ Free app for additional functions

Manual available for download in other languages:

http://www.durline.de/qr/manual/sf4000bt.html

i This is only a quick start guide!
Please also read the detailed instruction manual!

Video tutorial:

A video tutorial is available to view on YouTube.
Scan the QR code adjacent:
or
In the YouTube search bar enter: "*DUR-line SF 4000 BT*"

Service

Dear customer,
Thank you for choosing this high-quality product. Please do not assume that the device is defective if your product does not immediately function as you would expect.
Please do not immediately send back the device. Contact us and DO NOT write a poo review. The device is in complete working order.

Support: support@durline.de / Tel. +49 (0)7721-94646-10
Troubleshooting: see operating instructions page 10

See the reverse side for instructions on how to align the antenna

Overview

Note regarding the Power banks:

Only works with a "large" power bank with **2A**.

Info

The signal is not received by the receiver/TV

Connections	**1**	DC 5 - 18 V:	Power supply connection (power supply unit, receiver, power bank...)
	2	SAT/LNB:	Connection to the LNB
Buttons	**3**	TP:	Briefly pressing this button switches the transponder
	4	SAT:	Briefly pressing this button changes the satellites
			To activate or deactivate the loudspeaker, press and hold the SAT button for 2 seconds
LEDs	**5**	Power:	Operating voltage is available, the device is ready for operation
	6	13/18 V:	Green = horizontal band activated Red = vertical band activated
	7	0/22 Hz:	Green = high band activated Red = low band activated
	8	QUALITY:	The more LEDs illuminated, the better the quality
	9	STRENGTH:	The more LEDs illuminated, the better the reception

Download App

i The "DUR-line Finder" app is not required to use the Satfinder. The scope of features is however expanded.

DUR-line Finder

On your smartphone, open the App Store.
Enter "**DUR-line Finder**" as a search term or scan the QR code:
The "DUR-line Finder" app should then appear and can be installed for free.

GET IT ON Google Play — for Android 4.3
Download on the App Store — for iOS 9.0

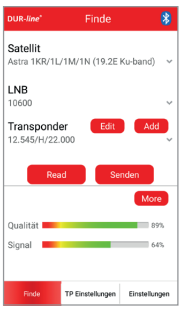
Download the "DUR-line Finder" app

Using the app

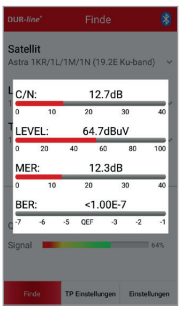
i **DO NOT** link the Satfinder via Bluetooth! Only open the app!

Start the app:
1. After downloading the app, select the "DUR-line Finder" icon.
2. Click "Scan" to search using the Satfinder.
3. Click on the detected Satfinder listed.

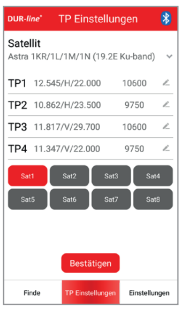
Note for Android users:
Permissions for location (GPS) must be activated, otherwise Android does not allow Bluetooth connection.



App "Find" tab
Modifications are required here if searching for a very specific satellite/transponder! (Further expertise required!)
A satellite, the LNB oscillator frequency and a transponder can be selected from the extensive drop-down menu (click on the down arrow). You can manually enter data or add to the list using "Edit" or "Add".



App "Find" => "More" tab:
C/N: Level spacing from desired signal and background noises – Higher is better
LEVEL: Level in dBµV – Higher is better
MER: Modulation error rate – Higher is better
BER: Bit error rate - lower is better



App "TP Settings" tab:
The stored transponders are displayed here.
These can be overwritten and saved on the Satfinder with "Confirm".
Four transponders (TP1 to TP4) can be assigned to each satellite.

Pre-programmed satellites

Satellites (editable)**:**

SAT 1	Astra 19.2° E	SAT 5	Türksat 42° E
SAT 2	Hotbird 13° E	SAT 6	Eutelsat 16° E
SAT 3	Eutelsat 5° W	SAT 7	Astra 23.5° E
SAT 4	Astra 4A 5° E (Sirius)	SAT 8	Astra 28.2° E

i The following satellites are already saved on the Satfinder in the 8 different positions. (Pro "SAT" position = 4 different transponders)

DuraSat
DURA-SAT GmbH & Co.KG
Unterer Dammweg 6/1
78050 VS-Villingen, Germany
WEEE reg. no.:
DE 88896400
www.durline.de

1 Preparing the satellite dish

☞ Step 1: Determine the angle of the satellites

It is necessary to know the approximate position on the horizon in order to quickly align the antenna to the correct satellites. For this purpose, either use the easy online calculator at **www.durline.de/tools/satcalc.html** or scan the following QR code.

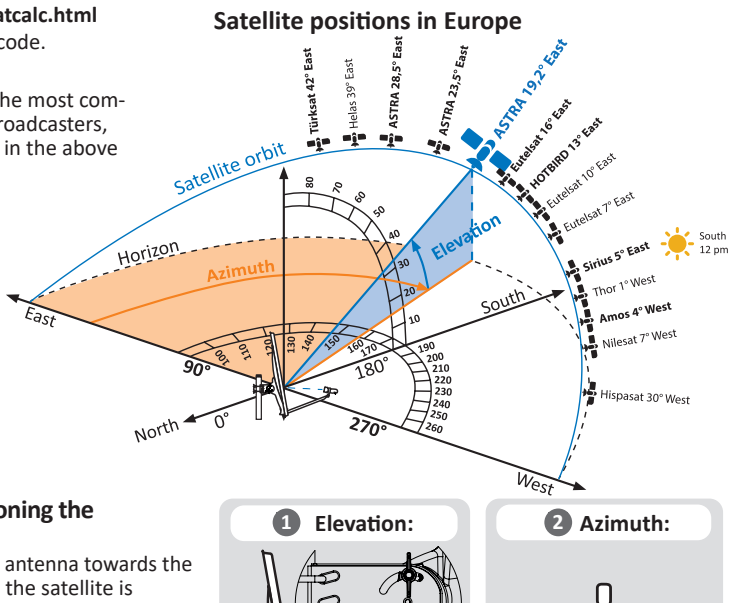
Or:

Reference directions for the most common private and public broadcasters, such as Sky, can be found in the above table (ASTRA 19.2° East).

Angle calculator

ASTRA 19.2° East Germany region:	Azimuth angle:	Elevation angle:	LNB tilt angle (skew):
North-west (Dortmund)	165°	30°	-2°
North-east (Berlin)	173°	30°	-2°
South-west (Stuttgart)	167°	33°	-2°
South-east (Munich)	170°	34°	-0°

Satellite positions in Europe



☞ Step 2: Roughly positioning the satellite dish

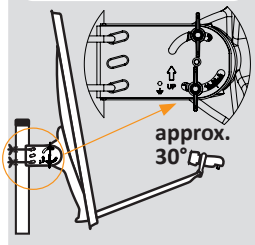
You now need to align the antenna towards the direction in the sky where the satellite is expected.

Elevation angle: Using the antenna scale (back part)

Azimuth angle: align by compass (E.g. smartphone/Satfinder)

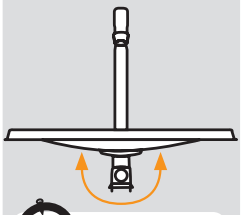
i The dishes on neighbouring roofs should serve as a guide.

1 Elevation:



Astra 19.2 = approx. 30°

2 Azimuth:

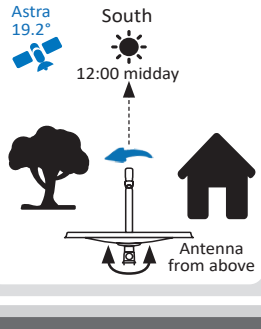


Astra 19.2 = approx. 170°

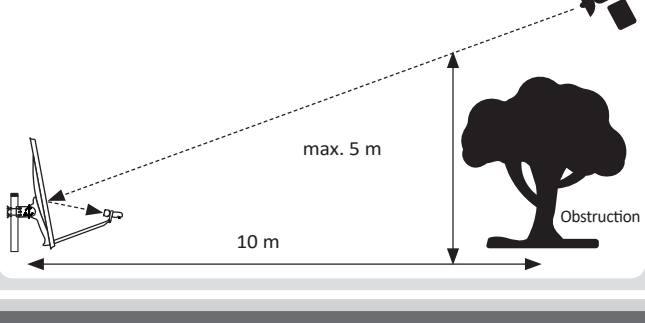
Rules of thumb:

1. Satellites that can be received in Europe are found in the South. The southern point corresponds to 180° (E.g. use mobile compass).
Turn in a easterly direction (to the left) or a westerly direction (to the right) from this point. Astra 19.2° E is located a few degrees to the east, so you therefore need to turn to the left (see Graphic 1).
2. It is also necessary to ensure that the antenna is adjusted to align with the correct elevation angle. Please ensure that no obstacles mask the view of the satellite. A clear view is absolutely essential (see Graphic 2).

1. For Astra 19.2°: turn slightly to the left



2. Obstruction max. half as high as distance from the antenna



2 Start using the satellite finder

☞ 2.1 Connect the Satfinder to the LNB

Use the coaxial cable that was included with the product – Connect "LNB" to the LNB output

☞ 2.2 Connect the receiver/power supply (receiver is off)

Connect the (Receiver-) supply cable to the left connecter

☞ 2.3 Switch on the receiver/power supply

The receiver now takes over the Satfinder power supply – Satfinder starts, several LEDs illuminate and Bluetooth is activated.

☞ 2.4 Selecting desired satellites on the Satfinder (if necessary, press "SAT" button)

8 satellites are pre-programmed. By pressing the "SAT" key, the next "SAT" position is selected (LED1-8). On the reverse side of the Satfinder there is a mapping of SAT positions and satellite names. Astra 19.2° is activated on start-up.

i Depending on the LNB type and its amplification offset, it may be the case that up to 4 STRENGTH LEDs are already illuminated even though a satellite has not been located.

3 Adjust the satellite dish more precisely

☞ 3.1 CAREFULLY turn the satellite dish left and right – take into account the LED display and buzzer volume

⚠ **Turn SLOWLY**

When the antenna is roughly aligned, and a satellite is received, the STRENGTH LEDs will illuminate. The more illuminated LEDs, the stronger the signal is.
When the QUALITY LEDs also illuminate, the correct satellite is received. When only the STRENGTH LEDs illuminate, the incorrect satellite has been located.

☞ 3.2 Carefully turn AND tilt the antenna until you have moved it into the optimum position

If STRENGTH cannot be further enhanced and all QUALITY LEDs are illuminated, the antenna is optimally aligned.

i Depending on the antenna size it is possible that not all STRENGTH LEDs illuminate. This is normal, as for very large antennae reserves must be available.
On the contrary, all the QUALITY LEDs should illuminate when the antenna is optimally aligned!

☞ 3.3 LNB Skew optimisation

It is often possible to slightly increase the signal strength/quality by turning its retaining clamp in small increments.

i For remote satellites far from the southern point, use the angle calculator! Skew optimisation is not required for Astra 19.2°!

4 Check the TV picture and also remove the Satfinder

i The Satfinder does not feed the signal through to the TV! That is to say no TV picture with an interconnected Satfinder!

☞ 4.1 Disconnecting the receiver/power supply and removing Satfinder

Initially, disconnect the power supply from the mains in order to avoid short circuits, then remove the Satfinder from the signal path.

☞ 4.2 Check the picture of a number of channels on your TV (if necessary, start a channel search)

☞ 4.3 Fasten the satellite dish clockwise

Finally, connect the supply cable to the LNB - job done.