



# DUR-line® SF 2500 Pro - Satfinder

**Ideal for realigning your satellite system**

- ✓ Extremely compact in size and weight
- ✓ Easy installation and handling
- ✓ Backlit signal display
- ✓ Adjustable attenuation setting
- ✓ Acoustic signal
- ✓ Power supply via receiver

**NEW**  
Improved electronics developed by DUR-line®



Manual for download in other languages:



[www.durline.de/qr/manual/sf2500pro.html](http://www.durline.de/qr/manual/sf2500pro.html)

**! Please read the instructions on the back page CAREFULLY**  
Especially note step 1, it is essential!

## Video tutorial (subtitle english):

A video tutorial is available to view on YouTube, you can scan the adjacent QR code.

or

enter "DUR-line SF 2500 Pro" in the search field in YouTube.



## Product description

The SF 2500 Pro microprocessor-controlled satellite finder with new and improved electronics enables you to quickly and easily align your satellite system in a precise and reliable way. Accurate results are provided via both the backlit display and an acoustic signal.

**This device is very sensitive and can pick up even the weakest signals. Strong input signals (through powerful satellites or large satellite antennas) can be easily attenuated using the "Attenuation +/-" buttons and the lateral adjustment wheel. The device can be configured with all types of satellite systems and produces highly accurate readings.**

The satellite finder is powered through the LNB operating voltage by the receiver/TV or multiswitch and does not require an additional power supply.

**i** The Satfinder must be used near the satellite dish! In the living room or attic the function may be restricted (cable attenuation).

## 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 return the device; please send us an email instead!**



E-Mail to Support

## Review product

**Satisfied? Happy?**

**We always do our utmost to make sure you are satisfied!**  
As such, we are always happy to receive positive feedback.

Share your experiences:

- Review our product



Review now

## Safety instructions

- Never open a product that is connected to an electricity supply as there is a high risk of electrocution!
- Never work on the satellite system during thunderstorms.
- The product must be immediately isolated from the operating voltage if it has come into contact with liquid.
- This device may only be opened and repaired by qualified personnel who must observe the applicable regulations.



## Disposal

Please consider the environment when you dispose of any packaging material. This product consists of recyclable materials. Take an active part in protecting the environment by ensuring that your old device is disposed of in an environmentally friendly manner.

Therefore, take your device to an official collection or recycling point.

Your local government or city council will provide you with information about such a collection point near you.



## Overview



- 1 LNB connector
- 2 Receiver connector
- 3 Gradually increase/reduce attenuation
- 4 Switch background lighting on/off
- 5 Switching buzzer on and off
- 6 Infinitely variable attenuator
- 7 13 V = vertical/18 V = horizontal
- 8 22 k = high-band/0 Hz = low-band
- 9 Attenuation stage
  - 3 dB = brief flash
  - 6 dB = long flash
  - 9 dB = continuous

## Scope of delivery

- 1 x SF 2500 Pro Satfinder
- 1 x FF cable
- 1 x instructions

## Technical data

Input frequency:	950 - 2150 MHz
Input level min.:	68dBµV
Input level max.:	98dBµV
Input impedance:	75 Ohm
Output impedance:	75 Ohm
Power supply:	13 - 18 Volt DC

**Installation instructions see the reverse side** ➔



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Version dated 02/18

# 1 Prepare the satellite dish

## Step 1: Determine the angle of the satellites

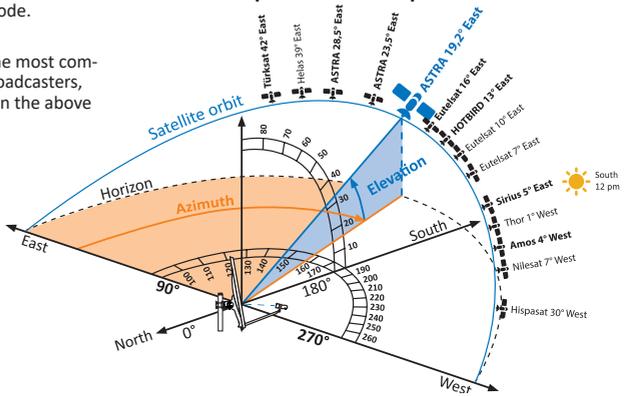
It is necessary to know the approximate position on the horizon in order to quickly align the antenna to the correct satellites. For this purpose, either use the easy online calculator at [www.durline.de/tools/satcalc.html](http://www.durline.de/tools/satcalc.html) or scan the following QR code.

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).

ASTRA 19.2° East	Azimuth angle:	Elevation angle:	LNB tilt angle (skew):
Germany region:			
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



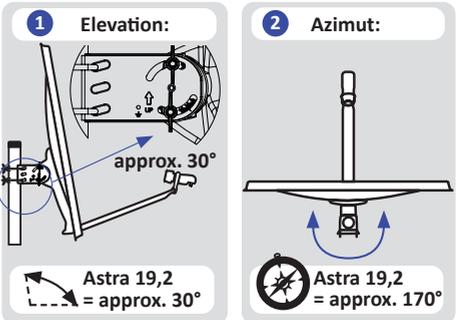
Angle calculator

## 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)

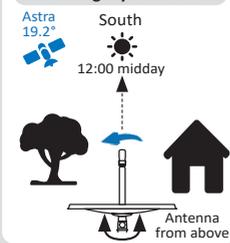


The dishes on neighbouring roofs should serve as a guide.

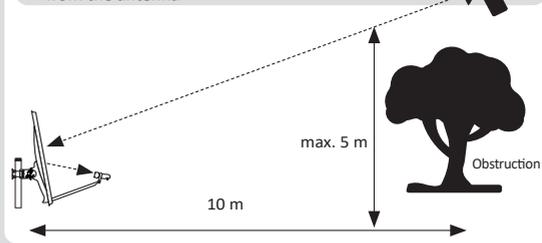
### Rules of thumb:

- 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 an 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).
- 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 operating the Satfinder



Use Satfinder only close to the LNB.

**2.1 Connect the Satfinder with the LNB**  
Use the coaxial cable that was included with the product – connect the “LNB” connector to the LNB output.

**2.2 Connect the receiver/power supply (receiver is off)**  
Connect the (receiver) supply cable to the connector that is labelled “Receiver”

**2.3 Switch on the receiver/power supply**  
The receiver now supplies the power to the satellite finder – the satellite finder starts.

The satellite finder potentially displays a reading, often 99% or 0% → Turn the adjustment wheel.

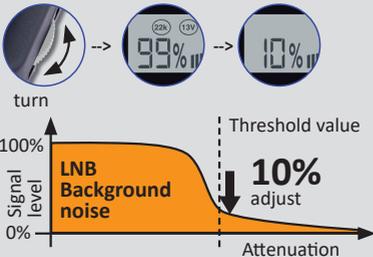
**2.4 Attenuate the LNB background noise**  
Depending on the LNB type and background interference radiation, the satellite finder may already display a reading even though a satellite is not being located.

**Before beginning the alignment, you must attenuate the interference radiation/background noise.**

To do this, turn the lateral adjustment wheel or press “Attenuation” buttons (ATT-), until you find the threshold value and then adjust the level to approx. 10%.

Now the satellite finder is ready to display the satellite signals correctly.

### Reduce LNB background noise carefully attenuate to 10%



# 3 Adjust the satellite dish more precisely

Antenna roughly aligned as described in step 1?

Satellite finder adjusted as described in step 2.4?

**3.1 Turn the satellite dish CAREFULLY right and left – observe signal strength bar or buzzer volume**

If the antenna is roughly aligned, the signal strength bar in the display goes up.

The aim is to find the point with the max. signal level, but not to reach a certain numerical value (such as 99%).

**3.2 Press the “Attenuation +” or “Attenuation -” button, and carefully turn the adjustment wheel (right) to keep the signal level bar in the middle (approx. 50%).**

-> Thus, there remains enough “leeway in the display” when adjusting to identify whether the reception is getting better or worse.

If the display reaches approx. 99%, attenuate slightly again (button/wheel) and adjust more precisely.



Keep the signal level display region at approx 50% by reducing or increasing the attenuation. An increase or decrease in the level can thus be identified. If attenuation is activated, “ATT” appears on the display.

The adjustment wheel is very sensitive. → In addition, use the “Attenuation +/-” buttons.

**3.3 Optimally align the antenna by gentle turning and tilting**

The antenna is optimally aligned when the signal strength cannot be increased anymore.

It is often possible to somewhat increase the quality by turning the LNB in its retaining clamp in small increments, known as skew optimisation (not necessary for Astra 19.2°).

# 4 Check the TV picture and remove the Satfinder

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

It is most likely that the satellite dish is aligned towards a different satellite, if no channels or the wrong channels are received. Some satellites are in close proximity to each other. → Check the Azimuth angle and adjust again.

**4.2 Switch off the receiver/power supply**

Firstly, separate the receiver from the mains to avoid short circuiting.

**4.3 Fasten the satellite dish crosswise and remove the satellite finder from the signal path.**

Finally, connect the supply cable to the LNB - job completed!