DUR-*line*® SF 2400 Pro - Satfinder

Ideal for realigning your satellite system

- ✔ Extremely compact in size and weight
- ✔ Simple to use
- ✔ Background lighting
- ✔ 4 LEDs which display active signals from a receiver / TV
- ✔ Acoustic signal

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

Manual available for download in other languages:

https://durline.de/qr/100514?manual

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

Video tutorial (subtitle english)**:**

A video tutorial is available to view on YouTube.
Scan the QR code adjacent:
or
enter "*DUR-line SF 2400 Pro*" in the search field in YouTube.

Product Description

The SF 2400 Pro analogue 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 level 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 control dial.
The device can be configured with all types of satellite systems and produces highly accurate readings.

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

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!

Support email address: support@durline.de

Handling Waste Packaging and Recycling

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.
Please take your device to an official collection or recycling point.
Your local authority or city council will provide you with information about your nearest collection point.

Safety Instructions

- Never open a product that has been connected to an electricity supply as there is a high risk of electrocution!
- Never work on satellite equipment during thunderstorms.
- The product must be immediately isolated from the operating voltage if it comes into contact with fluids.
- Do not operate a damaged device.
- The device must be connected and used in accordance with the user instructions.
- Non-observance of these instructions can invalidate your guarantee.
- This device may only be opened and repaired by qualified personnel who must observe the applicable instructions.

CE

Overview

1 LNB connector
2 Receiver connector / TV connector (= power supply)
3 Signal-level-display

4 4 x LEDs to display the active signal from the receiver / TV
18 V = horizontal band active
13 V = vertical band active
22 kHz = high band active
0 kHz = low band active

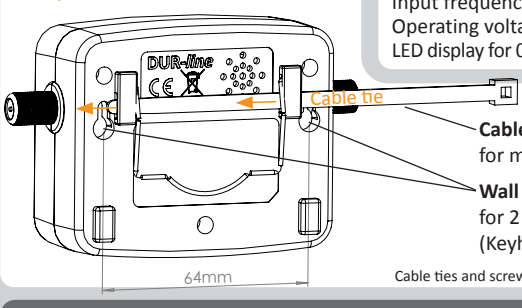
5 Level adjuster to adjust the degree of sensitivity

What's Included

1 x SF 2400 Pro - Satfinder
1 x FF cable
1 x quick start guide

Mounting

Antenna alignment see the reverse side



Cable ties
for mounting to a pole

Wall mounting
for 2 x 4 mm screws
(Keyholes w = 64 mm)

Cable ties and screws not included.

Technical Data

Input level (min.): 68dBµV (-40dBm)
Input level (max.): 98dBµV (-10dBm)
Input frequency: 950 - 2400MHz
Operating voltage: DC 13 - 18V
LED display for 0Hz, 22KHz, 13V, 18V

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DE 88896400
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Step by Step Manual

1 Prepare the satellite dish

Determine the angle for the satellites

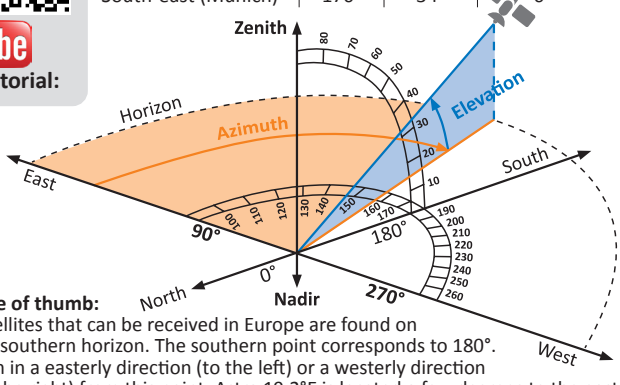
It is necessary to know the approximate position on the horizon in order to quickly align to the correct satellites.
You can either use the simple online calculator which you can find at
www.durline.de/tools/satcalc.html
or you can scan the adjacent QR code.

Angle calculator

Or:
Reference directions for the most common private and public broadcasters, such as Sky, can be found in the following table.

Video tutorial:

Region Germany:	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°



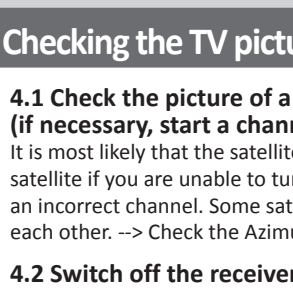
Rule of thumb:
Satellites that can be received in Europe are found on the southern horizon. The southern point corresponds to 180°. Turn in a easterly direction (to the left) or a westerly direction (to the right) from this point. Astra 19.2°E is located a few degrees to the east, so you therefore need to turn to the left.
It is also necessary to ensure that the antenna is adjusted to align with the correct elevation angle.

i You can use the satellite dishes on your neighbours' rooves to help you to judge the correct angle.

Roughly align your satellite dish

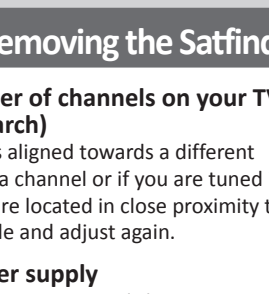
You now need to align the antenna towards the direction in the sky where you expect to find the satellite.
Elevation angle: Use the antenna dial (back part).
Azimuth angle: align using a compass as your guide (e.g. smartphone/satellite finder).

1 Elevation:



Astra 19.2 = approx. 30°

2 Azimuth:



Astra 19.2 = approx. 170°

2 Start operating the Satfinder

2.1 Connect the satellite finder 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 takes over the satellite finder's power supply – the satellite finder is activated and the display is illuminated.

i Depending on the LNB type or if the antenna is tilted too far in a downwards direction, it can be the case that due to reflections, the satellite finder will display a reading even though a satellite is not being received. It is therefore initially important to always approximately set the angle on the antenna (elevation, azimuth) and to ensure that there is a clear view of the sky.

3 Adjusting the satellite dish more precisely

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

⚠ **Turn SLOWLY.**

When the antenna is roughly aligned, the level display moves to the right and the buzzer goes off.

3.2 Turn the controller so that the needle lies approximately in the middle of the level display

It is then easy to see whether your adjustments are improving or worsening the level.

i If the needle moves completely to the right (or left), it is necessary to readjust the level with the level adjuster.

3.3 Carefully turn and tilt the antenna until you have moved it into the optimum position

The antenna is in the optimum position when the signal level can not be increased anymore.

i It is often possible to slightly increase the quality if you turn the LNB in its retaining clamp in small increments.
(It is not necessary to optimise the skew for Astra 19.2°!)

4 Checking the TV picture/removing the Satfinder

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

i It is most likely that the satellite dish is aligned towards a different satellite if you are unable to tune into a channel or if you are tuned into an incorrect channel. Some satellites are located 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 LNB - job completed!