

NON LINEAR JUNCTION DETECTOR ST-401



The non linear junction detector ST-401 is intended to detect and locate :

- eavesdropping electronics, IEDs
- mobile phones and SIM cards
- any other devices utilising semiconductor technology.

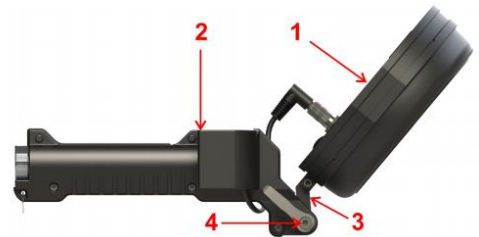
ST-401 allows detecting electronic devices, whether active or not, as well as finding their exact location. It also enables one to distinguish between return signals from real semiconductors and other kind of responses, such as those coming back from corrosion or metal-oxide-metal structures. The detection is indicated by both audio and visual informations.

ST-401 employs active detection, i.e. it emits probing signals and analyses the return. An important advantage is a confident detection of search targets behind partially screening obstacles, which is achieved by simultaneously radiating several frequencies

within the 2-3 GHz band and analysing some composite picture of the reflection spectrum, rather than merely the 2nd and 3rd harmonics, as is done traditionally by other devices.

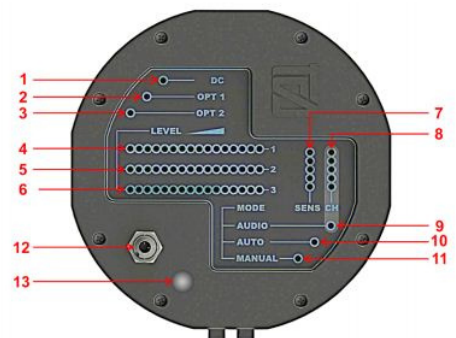
The ST 401 consists of an antenna module and a handle connected by way of a hinge joint.

- 1 - Antenna module
- 2 - Handle
- 3 - Hinge joint
- 4 - Hinge locking screw



The antenna module comprises a receiver-transmitter unit, a control-display unit, and an aerial, all of which are assembled on a single platform and incorporated in a single body.

- 4 - 16-segment gauge of threat-type response levels
- 5 - 16-segment gauge of MOM-type response levels
- 6 - 16-segment gauge of reflection levels
- 7 - 5-segment indicator of selected receiver sensitivity



The handle comprises a battery compartment and a control panel :

- 1 - Control panel
- 2 - Battery compartment
- 3 - Headphone socket
- 4 - ON/OFF and volume

TECHNICAL DATA

Range of radiated frequencies : 2–3 GHz
Max. peak radiated power : < 2W
Antenna polarisation : elliptic
Sensitivity range in manual mode : 40 dB (5 values 8dB increment)
Response indication : – visual three 16-segment gauges – aural internal speaker or headphones
Power supply : two 3.7V Li-ion batteries (type 18650)
Time of operation on one battery charge : 2–3 hours
Battery charging time : < 3 hrs
Operating conditions : – working temperature range +5...+40°C – relative air humidity up to 85 percent (at 25°C)
Weight (with batteries) : < 0.9kg
Dimensions when folded : 235 x 160 x 156 mm
Weight of full set in case : 3.7kg