

SuperBroom TA

EU Type Approved
non-linear junction detector

The improved SuperBroom TA is a portable, EU type approved, simple to use advanced Electronic Device Detector, also known as a Non-Linear Junction Detector (NLJD).

Discriminating between electronic targets and innocent naturally occurring signals, SuperBroom TA is capable of detecting electronic devices whether they are a transmitting or hardwired, regardless if they are switched on or off.

Radiating a spectrally pure signal, SuperBroom TA detects the second and third harmonic return signals re-radiated by possible targets or non-linear junctions. The relative strength of these returns varies depending on the material of the junction, allowing SuperBroom TA to quickly distinguish electronic devices.

The output power of SuperBroom TA can be controlled manually (up to 10W ERP, non EU approved mode) or in automatic mode, SuperBroom TA can automatically adjust power output to prevent saturation of target non-linear junctions. This allows more accurate analysis of the return signals and optimises unit performance.

User Benefits

- Frequency hopping transmitter utilising Dynamic Channel allocation to optimise performance
- Quick discrimination between electronic targets and innocent return signals
- Automatic power adjustment to prevent saturation of targets and provide more accurate analysis
- Ergonomic extendable sweep head suitable for use near all types of surface
- Removable rechargeable battery, optional stand-alone charger available to maximise operating time
- Compact for easy transportation
- Sophisticated signal processing technique to reduce false triggering of susceptible devices.
- Transmitter and Receiver operating frequencies are synthesised from a common reference to eliminate tuning drift.



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Technical Specification

Transmitter

Frequency	869.4MHz – 869.65MHz
Hop rate	1 channel per minute, 12.5kHz channel spacing
Power	EU Low – up to +13dBm, variable EU High – up to +27dBm, variable Non EU up to 10W ERP, variable

Receiver

Frequency	1738.825MHz – 1739.275MHz (2 nd Harmonic) 2608.2375MHz – 2608.9125MHz (3 rd Harmonic)
Sensitivity (at chassis)	-130dBm for visible LCD RSSI indication and audible geiger click
Demodulation	AM and FM - 1kHz tone, 1KHz deviation (Non EU)

Antenna Head

Antenna	Linear polarised transmit antenna, 6.5dBi circularly polarised receiver antennas, 6.5dBi
Head display	16 segment LED bar graphs for signal strength LED display for power output and other status info.

Output

Audio	Internal loudspeaker or headphones; giving signal strength gieger click or receiver demod. output
Displays	Signal strength LCD and selected function LEDs

Power

Battery	Internal Li-Ion rechargeable battery provides between 3 and 20 hours of operation dependent on output power
DC Input	External AC/DC adaptor; 12v @ 5A, universal input

Dimensions

Antenna Head	210 x 155 x 60mm (W x D x H)
Handle	470mm – 1510mm
Unit	345 x 245 x 70mm (W x D x H)

Weight

Sweep antenna	1.1kg
Unit	5.2kg

Approvals

LVD (safety)	EN60950:2000
Radio Type Approval	EN300 220-1 (1997-11)
EMC	EN300 683 (1997-6)

Warranty

SuperBroom TA comes with a return to base warranty against defective materials and workmanship for a period of 2 years from delivery. With regular authorised maintenance and recalibration of the unit the basic warranty can be extended for a further period.

Technical Support Group

The Audiotel Technical Support Group (TSG) can be contacted during UK office hours on:

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or via the Contact Us page on the Audiotel website.

Core UK office hours are (GMT):
Mon.-Thur.: 09:00am to 5:00pm
Fri.: 08:30am to 4:00pm

Training

Audiotel is able to offer full training in the operation of our products together with general counter measures training and seminars.

Due to our policy of continuous improvement, all specifications are subject to change without notice.

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