

SuperBroom Advanced

High power (10W ERP)
non-linear junction detector

The improved SuperBroom Advanced is a portable, high power (up to 10W ERP), 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 Advanced 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 Advanced 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 Advanced to quickly distinguish electronic devices.

The output power of SuperBroom Advanced can be controlled manually (up to 10W ERP) or in automatic mode, SuperBroom Advanced 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

- Quick discrimination between electronic targets and innocent return signals
- Automatic power adjustment (up to 10W ERP) 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	888.5MHz
Power (ERP)	Variable up to 10W typical (+40dBm: +0dB, -2dB)
Output filter	Very high order combine bandpass filter, 2 nd and 3 rd harmonic rejection > 125dB
Modulation	Continuous Wave

Receiver

Filtering	High order coaxial bandpass
Frequency	1777MHz and 2665.5MHz
IF	21.4MHz and 455kHz dual conversion superhet.
Sensitivity (at chassis)	-130dBm for visible LCD RSSI indication and audible geiger click
Demodulation	AM and FM - 1kHz tone, 1KHz deviation

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 geiger 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)
Carrying case	650 x 350 x 235mm (W x D x H)

Weight

Sweep antenna	1.1kg
Unit	5.2kg
Carrying case	10.2kg

Warranty

SuperBroom Advanced 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:

T: +44 (0) 1536 266677
F: +44 (0) 1536 266711

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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