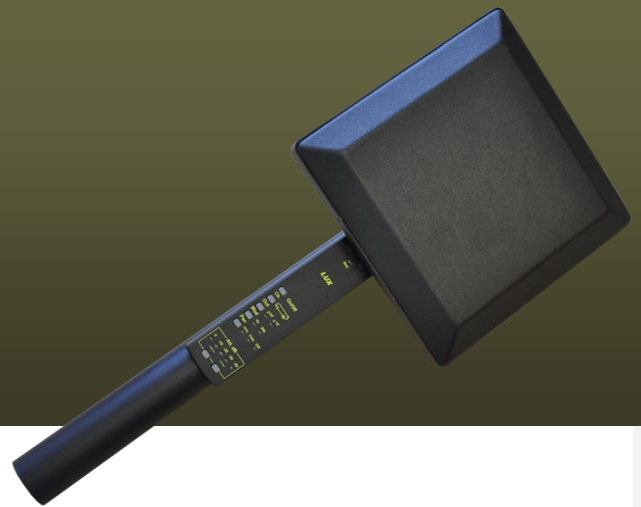


ACU-LUX

Professional Non-Linear Junction Detector



ACU-LUX is designed to detect covert electronic devices containing semi-conductor components. The device allows inspection of walls, room, furniture and office environment, vehicles and body for the detection of covert surveillance devices, such as radio microphones, microphone amplifiers, tape and digital recorders etc. in active or switched-off states.

FEATURES

- **TECHNOLOGY** The generation of microwave signals in the Non Linear Junction Detector, when in contact with transistors, diodes or chips re-emits certain higher frequencies, the re-emitted signal is received on the antenna and processed showing the 2nd and 3rd harmonics on LED indicators & earphones.
- **CONTINUOUS (CW) MODE** Allows distinguishing active eavesdropping devices such as transmitters, radio, microphone amplifiers from corroded metal contacts, making it a powerful tool in the identification of the type of non-linear device.
- **RESOLUTION** The resolution of each LED indicator is 3dB and the received signal can also be heard with the accompanying earphones.
- **TRANSMITTER FREQUENCY TUNING** Allows selecting the best frequencies (not interfering with GSM range) allowing the unit to work in a concentrated environment.
- **ADJUSTABLE** The ACU-LUX Non Linear Junction Detector's emitting power can be adjusted as well as the receivers sensitivity.
- **CAPABILITY** The ACU-LUX operates in pulse mode with a power of emitter up-to 4 watts per pulse, this allows for higher (-120 dBm/-150dBW) sensitivity of the receivers. This is achieved by optimizing the parameters of the signal in conjunction with a superior antenna system.
- **UNIQUE DESIGN** Ergonomic one piece construction and light (1.3kg including battery) with extendable/retractable poll inside the handle, as well the ACU-LUX's innovative screw-in battery extends the handle further.
- **USAGE PARAMETERS** Operation speed, product safety, ergonomics, battery and continuous usage time (not less than 5 hours), the ACU-LUX exceeds all currently available Non Linear Junction Detectors.



ACU-LUX TECHNICAL SPECIFICATIONS

Transmitter	
Frequency band:	900.2 MHz \pm 1 MHz
Frequency step:	200 KHz, totally 21 channels
Modulation:	Pulse, Continuous
Maximum power of transmitter per pulse:	4W (Max Power Mode)
Minimum power of transmitter per pulse:	0.5W (Min Power Mode)
Equivalent Effective Radiated Power (antenna gain 6db):	16W Max
Average Radiated Power in pulse mode:	300 mW
Receiver	
Frequency bands:	1800.4 MHz and 2700.6 \pm 1 MHz (x2,x3)
Sensitivity of each receiver:	-120 dBm at S/N 3dB (-150 dBW)
Dynamic range:	at least 30 dB
Manual receiver gain:	four stages of (\pm 10 dB) in each stage
Continuous (CW) Mode - transmitter emits signals modulated.	demodulation width signal spectrum is 500-5000 Hz.
Detection speed:	Up to 1 m/s (average 1m in 3 sec)
Operational range (depending on the type of detected element):	Low frequency modules: 1-10 cm High frequency modules: 2-3 meters Maximum sensitivity: at 7cm
Antennas	
Number of antennas:	3 (three), combined in a single unit
Beam width of Tx/Rx antennas at - 3dB level:	90 degrees
Polarization of Tx/Rx antennas:	Circular polarization with an elliptical ratio up to 1.5
Tx/Rx antennas gain:	6dB
Dimensions	
Length:	49 cm fully flat without battery 59 cm flat with battery 110 cm fully extended including antenna
Antenna module:	198x198mm
Width of pole:	4 cm
Length:	fully flat 49cm (without battery)
Weight unit w/o battery:	1.1Kg
Weight unit w/ battery:	1.3kg
Weight of battery	200gr.

DELIVERY SET

- 1 x ACU-LUX Detector
- 1 x Detachable screw-in re-chargeable battery with external charger
- 1 x Stereo headphones with Volume Control
- 2 x Non Linear Junction imitations for tuning
- 1 x 220V/50Hz Mains Charging unit
- Instruction manual
- Carry case

