



## EDD-24T

Handheld  
Non Linear  
Junction  
Detector  
(NLJD)

Detects all  
types of  
electronics -  
whether active,  
passive or even  
switched off.

## PRODUCT FEATURES

- Detects all types of electronics - whether active, passive or even switched off
- Easy to operate with an intuitive user friendly interface
- 2.4 GHz Transmit - up to 4 Watts
- 2nd Harmonic (4.8 GHz) and 3rd Harmonic (7.2 GHz) Receivers
- As powerful and sensitive as much larger so called 'portable' units
- Detected material Indicator 'Silicon' or 'Metal'
- Will even detect the latest NANO SIM cards from up to 20cm
- Audible Tone and Demodulation Function through speaker or earphones
- Battery life up to 4.5 hours
- Weight just 700g
- Machined Aluminium Enclosure with Moulded Plastic Antenna Cover
- Supplied in a compact Military Standard carry Case





The **EDD-24T** is a compact handheld **Non Linear Junction Detector** or '**NLJD**' designed specifically for professional countermeasures use (TSCM). It will detect the presence of semiconductor circuits that are used in all modern electronic devices such as mobile phones, tracking devices, listening devices, covert cameras, digital voice recorders, SIM cards etc. Importantly, the **EDD-24T** will detect such devices whether they are switched on and in use, powered on but in standby mode, or even switched off without any power.



Principle of operation:

Semiconductor Electronics are used in all modern electronics and are made using Silicon. When high frequency radio signals are transmitted directly over silicon they produce a strong second harmonic frequency of that radio signal. Other materials such as some bi-metals or oxidised metals can respond with a third harmonic signal.

The EDD-24T transmits a focused directional signal on 2.4 GHz (ISM Band Type B). It receives on 4.8GHz (Second Harmonic) and 7.2GHz (Third Harmonic).

The highly sensitivity receiver will respond to any signals produced on the 2nd Harmonic by even the smallest piece of Silicon such as that used in SIM Cards, Mobile Phones, Bugging Devices, Voice Recorders, Covert Video cameras etc. Importantly those devices do not have to be in use, in standby or even have any power connected to them to be detected.

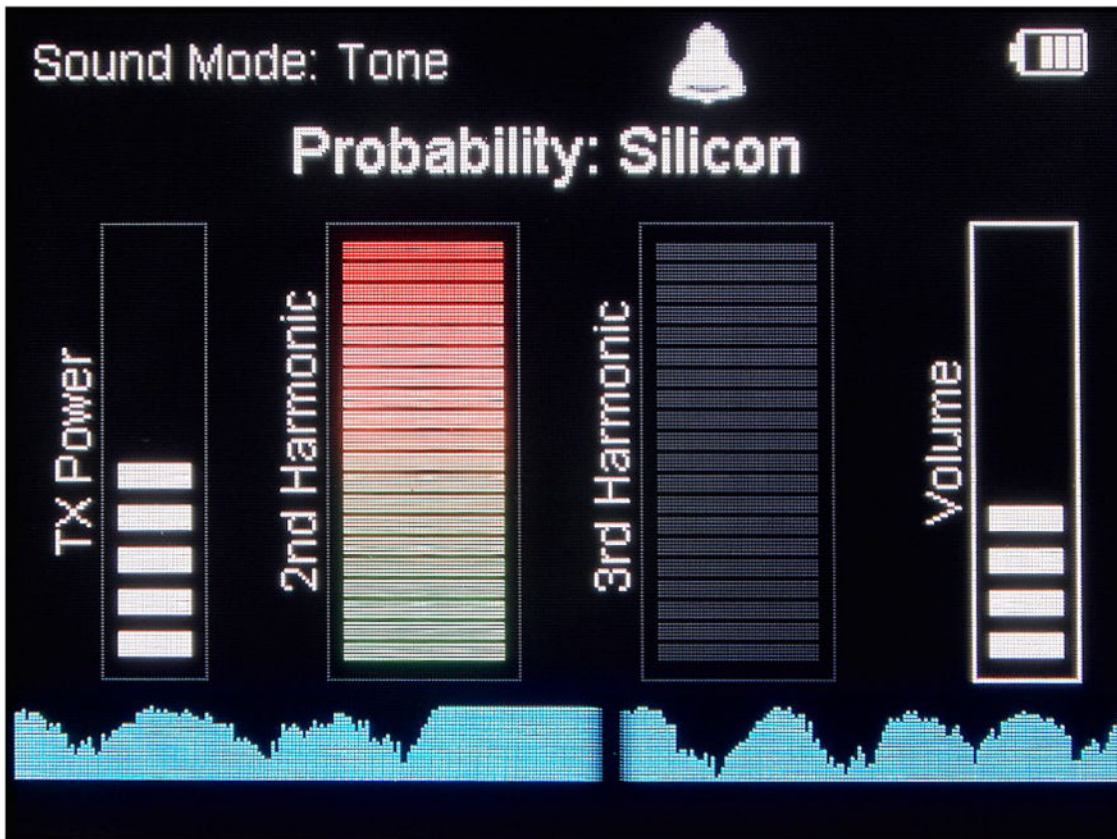
The 3rd Harmonic receiver acts as a valuable confirmation for signals that may be ambiguous or are not a threat such as those in oxidised metals, bi-metals etc.





### PROBABILITY INDICATOR

To allow even an inexperienced user to make a quick assessment of a detected signal the EDD-24T uses an intelligent algorithm to analyse the detected signals from both the 2nd and 3rd Harmonic Receivers and evaluate the probability of material being detected as 'Silicon' or 'Metal'.



## AUDIO CONFIRMATION

The EDD-24T Can provide audio confirmation of detected signals in two ways, through the internal loudspeaker or earphones.

TONE Mode can be used to provide an audible tone of a detected signal on the 2nd Harmonic only. This enables the user to search without looking at the display screen. The TONE changes in pitch according to the strength of the detected signal.

DEMODO Mode can be used to listen to an actual demodulated signal of the 2nd Harmonic Receiver. When no signals are detected a random audible 'Click' sound will be heard. In some cases when Silicon is detected the click level will reduce or become completely silent.



The EDD-24T is genuinely portable for handheld use and weighs just 700g. It is encased in a machined aluminium enclosure for ultimate durability with a tough plastic antenna cover. The internal Lithium Polymer battery pack gives up to 4.5 hours of use from one charge. The whole package is supplied in a compact military standard carry case for ultimate protection and portability. Total weight just 2.0 kg.

The **EDD-24T Handheld Non-Linear Junction Detector** is designed, manufactured and tested in **England** to highest technical standards.



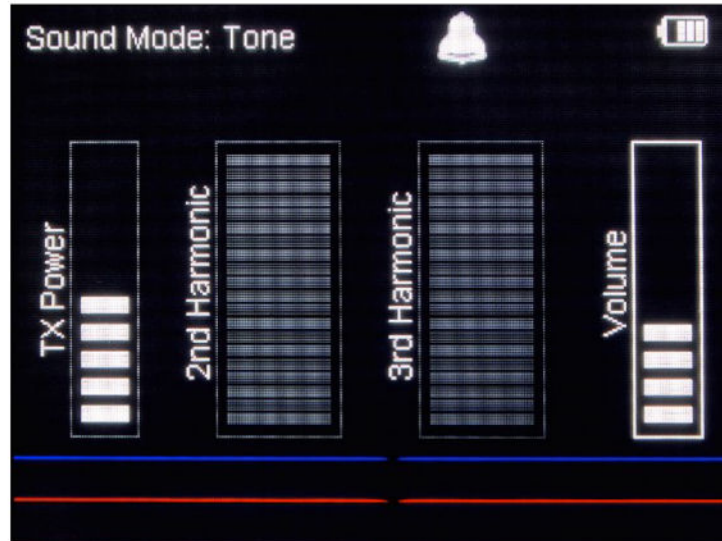
**Supplied in Package:**

- EDD-24T Handheld Electronic Device Detector
- Charger - 110V to 240V AC input (Auto Switching) with International Adaptors Output 5V DC
- Earphones
- High Protection Military Standard Carry Case

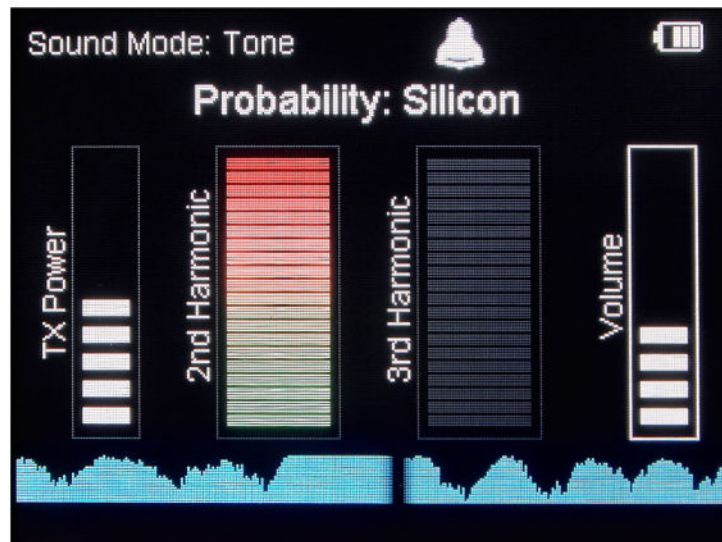




SCREEN IMAGES



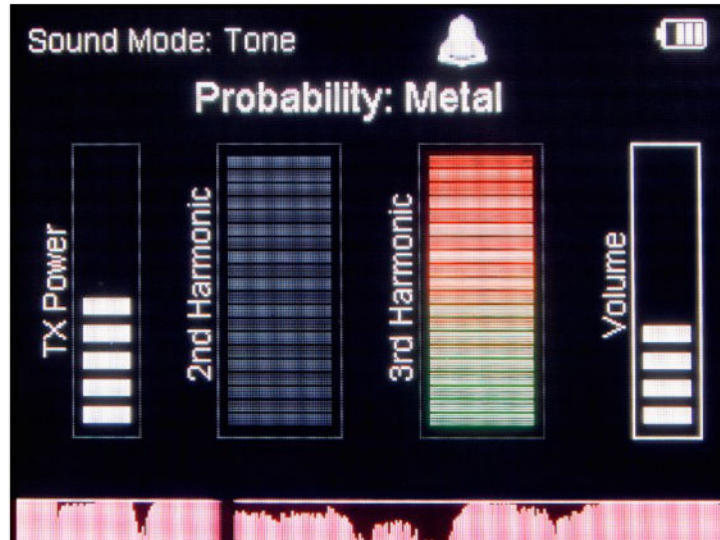
Main Screen with no detected signals



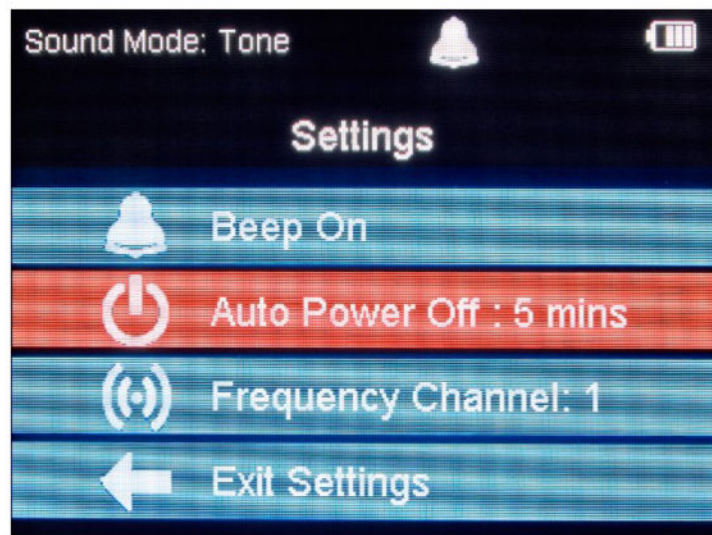
Main Screen with detected signal on 2nd Harmonic

Probability Silicon





Main Screen with detected signal on 3rd Harmonic  
Probability Metal



Settings Screen

## TECHNICAL SPECIFICATION

Transmit Frequency	2.400 GHZ to 2.425 GHZ (ISM Band Type B)
Transmit Power Level	up to +30dBm (1 Watt)
Radiated Power Antenna	up to +36dBm (4 Watts) within allowable limits of ISM band (Type B)
Display	3.5 inch Colour TFT Daylight Readable
Receiver Sensitivity	better than -120dBm on 2nd and 3rd harmonics
Receiver Bandwidth	Approx 10KHz
Battery	3.7V Lithium Polymer Internal rechargeable
Battery Life	4.5 Hours (Minimum TX Power) 2.0 Hours (Maximum TX Power)
DC Charge	Micro USB Socket 5V 1A
Charger	Input 110/220V Auto-switching - International Adaptors Output 5V DC 2A
Audio	Internal Loudspeaker or via 3.5mm Earphone Socket
Operating Temperature	0 to 40 degrees C
Enclosure	Machined Aluminium Enclosure with Plastic Antenna Cover
Weight	Main Unit 700g with Carry Case 2.0kg
Dimensions Main Unit	Height 225mm x Width 118mm x Depth 51mm
Carry Case	Military Standard 321mm x 229mm x 111mm