



# ORION™

## Non-Linear Junction Detector

Detect and help locate hidden electronics regardless of whether the electronic device is turned on.

The ORION Non-Linear Junction Detector detects electronic semiconductor components in walls, floors, ceilings, fixtures, furniture, containers, or other surfaces. The ORION is made to detect and locate hidden cameras, microphones, and other electronic devices regardless of whether the surveillance device is radiating, hard wired, or turned off. The ORION's circularly polarized transmit and receive antenna removes the risk of missing a threat due to incorrect antenna polarization. Two antennas are available - 2.4 GHz and 900 MHz. Antennas can be purchased separately or as a Deluxe set (pictured right).

### HOW DOES IT WORK?

The ORION antenna head is a transceiver (transmitter and receiver) that radiates a 1.25 MHz-wide digital spread spectrum signal to determine the presence of electronic components. When the signal encounters semiconductor junctions (diodes, transistors, circuit board connections, etc.), a harmonic signal returns to the receiver. The receiver measures the strength of the harmonic signal and distinguishes between 2nd or 3rd harmonics. When a stronger 2nd harmonic signal is present, visual, audio, and haptic feedbacks alert users that a junction has been detected.



## APPLICATIONS

- ✓ Sweep surfaces for eavesdropping electronics
- ✓ Interchange 900 MHz and 2.4 GHz antenna heads to search a variety of materials
- ✓ Protect executives, celebrities, and other VIPs from illicit observation
- ✓ Safeguard the public from illicit surveillance

## ADVANTAGES

- ✓ Digitally modulated transmit signal, correlated 2nd & 3rd harmonic response, and adjustable DSP gain provide improved detection & minimize interference
- ✓ Line-of-sight display allows target and display visualization simultaneously
- ✓ No assembly required with integrated telescoping pole



**2.4 GHz & 900 MHz  
Frequency Bands**



**>4 Hour  
Battery Life**



**3.6 lbs (1.6 kg)  
Unit Weight**



**Type USB-A to  
Mini-B Input**

### ORION HX Deluxe

The ORION HX Deluxe includes both antenna heads that are easily exchanged by simply turning a pair of thumb screws. The longer 900 MHz wavelength excels at detecting older, less refined circuitry and also penetrating denser building and construction materials compared to the shorter wavelength of the 2.4 GHz model, which excels at detecting modern, surface mounted circuitry in normal office environments.

### ORION MODEL OPTIONS

To satisfy a variety of international compliance regulations including FCC, CE, and others, different ORION models are available:

- ORION 2.4 HX - 3.3 watt
- ORION 2.4 HX - 6.6 watt
- ORION 900 HX - 1.4 watt
- ORION 900 HX - 3.2 watt
- ORION HX Deluxe - 6.6/3.2 watt

All ORION orders come with the quick-disconnecting handle, allowing customers to add-on the alternate antenna head at any time. Keypad models also available.

