Counter surveillance sweeping system





Features

- Quickly and reliably detects all kinds of RF listening devices, including analog, digital, constantly existing and intermittent, sending audio or video, with or without encryption
- Finds hidden surveillance devices employing the digital standards GSM, 3G, 4G/LTE, Bluetooth, Wi-Fi, DECT, etc.
- Detects illegal information transmission in AC, telephone, Ethernet, alarm and other wires as well as in the infrared range with the help of the supplied Multifunction Probe
- Can work in instant detection mode, guarding mode, locating mode and car tracker detection
- Has a 20-50 times higher sensitivity and detection distance compared to conventional RF detectors and near-field receivers
- Can monitor the RF environment 24 hours a day with data logging
- Capable of detecting covert bugging devices with an accumulation function and transmitters hidden within the spectrums of other signals
- Supports storage of an unlimited quantity of signals. Full information is stored in the log
 and can be reviewed during the detection, or at a later time. Multiple logs are supported
- Demodulation of audio in FM, AM, USB, LSB, CW (adjustable BW 3...240 kHz)
- Alarm relay output can activate external devices when a dangerous signal is detected (turn on a CCTV system, for example)
- Comes in a protected case that allows you to place a 13-14" laptop inside (not included in the supplied set)
- Powered from the laptop's USB

> 2000/6 Real-Time

- High update rate, 2000-3000 MHz per second
- Frequency range 40 kHz 6000 MHz
- Reaction time: 2-3 seconds
- Instantly detects digital signals with short bursts
- · Can detect and locate the transmitter simultaneously

100/12

- Update rate of 100 MHz per second
- Frequency range 100 kHz 12400 MHz
- Reaction time: 60-120 seconds
- Detects digital signals with short bursts by accumulating data

> 100/4

- Update rate of 100 MHz per second
- Frequency range 40 kHz 4400 MHz
- Reaction time: 45 seconds
- Detects digital signals with short bursts by accumulating data

Advantages

>> Form-factor: a portable system controlled by a laptop computer

- The high capacity of a laptop's hard drive enables full data logging during the detection (24/7 possible)
- Wider screen is more convenient for analysis
- Compatible with touch screen laptops
- The handheld use of antennas is more convenient for locating transmitters in hard to access places

Handling of the mobile and wireless bands GSM, CDMA, 3G, 4G/LTE, DECT, Wi-Fi, Bluetooth, etc.

- Mobile and wireless signals are detected simultaneously with analog transmissions
- Mobile/wireless signals are detected with the use of individual thresholds and are displayed separately from other signals
- Activities within each band are stored as one signal with a certain danger level to avoid excessive records in the Signals table and to locate the sources with a hopping frequency
- Additional sweepings on the "short-burst" bands are performed to increase the probability of interception of such signals as GSM, 3G, 4G, DECT, Wi-Fi, Bluetooth, etc.
- External interference from neighboring mobile phones and Wi-Fi routers can be rejected with the help of the thresholds
- The supplied data files allow the operator to adjust the system to the mobile/ wireless bands employed in the country of use

Sensitivity and detection distance

- The built-in spectrum analyzer has 20-50 times higher sensitivity and detection distance compared to conventional RF detectors and near-field receivers
- Resistant to interference sensitivity remains high regardless of the proximity to wireless routers, cordless phones, mobile phones, TV towers, radio broadcasting and mobile communications

Support of the "Known signals" table

- The operator can easily distinguish between safe and dangerous signals
- The radio and TV frequencies employed in the country of use can be quickly collected and stored for further use

>> Advanced signal recognition method

- The signals are automatically recognized in the spectrum traces and inserted or updated in the Signals table
- Both analogue and digital signals are captures with an assigning of a corresponding Danger level

>> Unique algorithm of measuring the signal's Danger level

- Uses a combination of the reference trace and individual thresholds for mobile/ wireless bands
- Takes into consideration both the signal's strength and bandwidth
- Works for both analogue and digital signals including transmissions with a changing frequency
- Is used during the locating procedure and provides more reliable results compared to the traditional "signal strength" method

> Low demands on the operator's lewel knowledge

- The system can be prepared for detection with the help of the "Update Masks" procedure within a few minutes
- Manual handing of spectrum traces is not needed
- The operator is warned by an audio alarm when a dangerous signal is detected

Data logging

- All the spectrum traces and alarms are logged during detection, so the situation at any given time can be reviewed and studied
- 24 hours a day logging provides detection of periodically working/remotely controlled bugging devices

> Tracking of the signal's activity

- The full history of each separate signal, or of all signals simultaneously, is displayed on the Alarms graph
- The events at any given time can be reviewed by simple clicking on the graph

> The Waterfall and Persistence graphs

- Both the present and previous measurements at any given time can be displayed
- The displayed time interval (density) is selectable in the range of 2 minutes to 6 hours

> Car Tracker Detector mode

 The monitoring of mobile bands can detect signals from the GPS trackers hidden within a vehicle



Functions of the software

- Rich visual representation: Spectrogram/Persistence, Waterfall, Alarms graph
- The Known Signals table allows the system to reject TV, FM and other "friendly" signals while maintaining high sensitivity to unknown signals
- The Detector and Locator allow the operator to perform location of a bugging device with both visual and audio notification
- > The Alarm Threshold decreases the false alarm rate

- >> The Hold Max Danger feature selects and shows the strongest signals for their location as the system is moved during detection
- >> The Update Mask procedure allows the operator to quickly adjust the system to the local RF environment in order to reject safe signals
- >> Sorting and filtering is supported in the Signals table
- >> The Report function allows the operator to export all obtained information about the desired signals

Working modes

✓ Stop/View Log

Review of the detection results stored in the log. The Signals table, Spectrogram, Waterfall and Alarms graph give full information about the detected signals and alarm events

✓ Update masks

Quick preparation for detection – the system automatically accumulates the broadcasting and other safe signals existing in the area in order to pass over them during the subsequent detection

✓ RF Sweep

The main detection mode. Provides maximum reaction time and the highest sensitivity. The operator can move the system or its antenna during the detection

✓ Guard 24/7

Rejection of short transmissions and usage of two antennas reduces false alarms in this mode. Suitable for 24 hour detection without unwanted false alarms

Car Tracker Detector

Detection of vehicle mounted GPS trackers transmitting the coordinates via mobile networks

✓ Probe

Checking of AC, Ethernet, Telephone and Alarm wires and the infrared/low frequency for the presence of unwanted bugging signals

✓ Signal Analyzer

Analysis, demodulation and physical locating of detected signals

Specifications	2000/6 Real-Time	100/12	100/4	
Update rate	2000-3000 MHz/sec	100 MHz/sec	100 MHz/sec	
Frequency range	40 kHz - 6000 MHz	100 kHz - 12400 MHz	40 kHz - 4400 MHz	
Reaction time (How quickly a dangerous signal is detected)	2-3 sec	60-120 seconds	45 seconds	
Spectrum resolution	9 kHz	15 kHz	15 kHz	
Occupied disk space per 24 hours	12 Gb	1 Gb	0,5 Gb	
Temperature Range	0°C to +65°C	0° C to $+50^{\circ}$ C	0°C to +70°C	
Demands on computer	3rd gen. or newer Intel dual/quad Core i-series 1 x USB 3.0, 2 x USB 2.0 Windows 7, 8, 10	Intel [®] Atom [™] N2600 or Intel [®] Core [™] i3 Windows 7, 8, 10 13-14" screen recommended		
	13-14" screen recommended	3 x USB 2.0	2 x USB 2.0	
Displayed dynamic range		-9010 dBm		
Displayed spectrum spans	0.5, 1, 2, 5, 10, 25, 50, 1	0.5, 1, 2, 5, 10, 25, 50, 100, 200, 500, 1000, 2000, 3000, 6000 MHz		
Spectrum graphs	Sp	Spectrogram, Waterfall		
Spectrogram's displayed data	Persist	Persistence, Live, Max, Threshold		
Detector's modes	,	Wide-Range, Signal, Selection		
Fields of "Signals" table		Frequency, Bandwidth, Name, dbm Level, dbm Peak Level, Danger Level, Peak Danger Level		
Fields of "Bands" table	Begin, End, Name, Ty	Begin, End, Name, Type, Threshold, Priority, Tracker detection		
Fields of "Known Signals" table	Frequei	Frequency, BW, Name, Modulation		

Supplied set

- Main unit with the built-in spectrum analyzer and RF switcher
- Software Delta X
- ODA-4 omnidirectional antenna
- MWA-6 microwave antenna
- MWA-12 microwave antenna (100/12 only)
- Multifunction Probe with cables
- Coaxial low-attenuation cable 5 m
- In-line modular adapter
- Tripod convertible to handle
- Set of accessories

