



### 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
- Can work in instant detection mode, guarding mode, locating and the car tracker detection
- Has 20-50 times higher sensitivity comparing to conventional RF detectors
- Can monitor the RF environment 24 hours a day with data logging
- Capable of detecting covert bugging devices with 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 later. Multiple logs are supported.
- Demodulation of audio in FM, AM, USB, LSB, CW (adjustable BW 3...240 kHz)
- Powered from the laptop's USB

### 3 versions available

#### 2000/6 Real-Time

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

#### 100/12

- Update rate 100 MHz per second
- Frequency range 100 kHz – 12400 MHz
- Detected signal's existence time: 60-120 seconds
- Detects digital signals with short bursts by accumulating data

#### 100/4

- Update rate 100 MHz per second
- Frequency range 40 kHz – 4400 MHz
- Detected signal's existence time: 45 seconds
- Detects digital signals with short bursts by accumulating data

### Advantages

#### Form-factor: portable system under control of laptop

- High capacity of laptop's hard disk enables full data logging during the detection and 24/7 guarding mode
- Wider screen and touch functions are more convenient for analysis
- The handheld use of antenna is more convenient for locating the transmitter in the hard to access places

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

- The mobile and wireless signals are detected simultaneously with the analog transmissions
- The mobile/wireless signals are detected with the use of individual thresholds and displayed separately from the 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 the hopping frequency
- Additional sweepings on the 'short-burst' bands are performed to increase probability of intercept
- External interferences from the neighbor 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

#### Support of the 'Known signals' table

- The operator can easily distinguish between the safe and dangerous signals
- The TV frequencies employed in the country of use can be quickly imported from the supplied data files
- The FM, VHF/UHF police and municipal channels can be collected and stored for the further use

#### Advanced signal recognition method

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

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

- Uses 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 the transmissions with the changing frequency
- Provides more reliable results comparing to the traditional 'signal strength' method during the locating

#### Low demands to the operator's knowledge level

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

#### Data logging

- All the spectrum traces and alarms are logged during the detection
- The situation at any given time can be reviewed and studied
- The 24 hours per 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 operator can see the duration of activity and such to distinguish between the interferences and real danger

#### 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 from 2 minutes to 6 hours

#### Car Tracker Detector mode

- The monitoring of mobile bands can detect the 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 allows 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 on 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

### Main working modes

- ✓ **Stop / View Log** - review of the detection results stored in the log
- ✓ **Update masks** - the system automatically accumulates the broadcasting and other safe signals existing in the area in order to pass them during the subsequent detection
- ✓ **RF Sweep** - the main detection mode. Provides maximum reaction time and the highest sensitivity
- ✓ **Guard 24/7** - rejection of short transmissions and usage of two antennas reduces false alarms in this mode. Suitable for 24 hour detection.
- ✓ **Car Tracker Detector** - detection of vehicle mounted GPS trackers transmitting the coordinates via the mobile networks
- ✓ **LF Probe** - checking of AC, Ethernet, Telephone and Alarm wires and the infrared for the presence of unwanted bugging 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
Time of detection (Minimal time of signal's existence needed for its detection)	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°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 2 x USB 2.0 Windows 7, 8, 10	
Displayed dynamic range	-90...-10 dBm		
Displayed spectrum spans	0.5, 1, 2, 5, 10, 25, 50, 100, 200, 500, 1000, 2000, 3000, 6000 MHz		
Spectrum graphs	Spectrogram, Waterfall		
Spectrogram's displayed data	Persistence, Live, Max, Threshold		
Detector's modes	Wide-Range, Signal		
Fields of 'Signals' table	Frequency, Bandwidth, Name, dbm Level, dbm Peak Level, Danger Level, Peak Danger Level		
Fields of 'Bands' table	Begin, End, Name, Type, Threshold, Priority, Tracker detection		
Fields of 'Known Signals' table	Frequency, BW, Name, Modulation		

### Supplied set

- Main unit with built-in spectrum analyzer, antenna switcher and LF converter;
- Software Delta X 1.0
- ODA-4 - omnidirectional antenna
- Coaxial extension cable 5 m
- MWA-6 - microwave antenna
- MWA-12 - microwave antenna (100/12)
- High voltage probe
- Low voltage probe with alligator connectors
- In-line modular adapter
- Infrared/VLF probe



Screenshots

