

# ELECTRONIC COUNTER MEASURES

## RFDS-4

### MULTIPURPOSE DETECTION SET

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The RFDS-4 multipurpose detection set is a unique equipment designed for identification and localization of all types RF fields and hidden wires. All elements of the set are fulfilling professional requirements and the metal casing of most frequently used devices ensures high degree of mechanical resistance. All components of the set are placed in a suitcase. Each device has a slot in a foam inset and there is an additional space for documents and tools in a cover of the suitcase. The RFDS-4 consists of RFD-5 radio frequency detector with telescope antenna, external probe, dynamic earphones, WHG-2 wide-band generator, two wire antennas for the WHG-2 and LTA-3 line and telephone adapter with accessories.



**Detection**

**300 Hz**

**up to**

**25 GHz**

### **Description of the RFDS-4 devices**

#### **RFD-5**

RFD-5 is a multipurpose sensitive radio frequency detector namely suited for basic service in electronic counter-measures. Simple attendance and optimized user parameters make the RFD-5 detector very useful for all people handling with confidential information. Every day portable usage is one of the best preferred features of RFD-5. The main function of RFD-5 is identification and localization of active wireless bug transmitters. Special compensated detection system gives the user instant information about real RF field intensity and together with attached graph the distance of 0.1 to 10 mW bug can be estimated. The unique advantage of RFD-5 soft-ware is detection and localization of technologically most dangerous digital and pulse bug transmitters. The unit also allows permanent room protection, connection of external probe or line adapter LTA-3.

## WHG-2

WHG-2 is a wide band multi-signal internally FM and AM modulated power generator which together with an appropriate antenna activates hidden wires and makes them visible for RFD-5 detector. The function is based on the antenna principle, it means that no non-linear elements are required for a positive response. The result is that any wire leading in or out from the inspected area (room) can be discovered. Other function of WHG-2 is an audio white noise generator for protection against microphone attack and special audio test tone generator for activation of voice controlled listening devices.

## LTA-3

LTA-3 is line and telephone adapter which can be connected to the EXT.PROBE input of RFD-5. In AUDIO mode the telephone and other suspected wires can be checked for presence of any audio signal to detect connected loudspeakers, modified telephones, microphones etc. In the LF/RF detect mode AM/FM detector is activated and using tuning knob and frequency switch LF/RF spectrum 18kHz to 41MHz can be continuously checked. These frequencies are often used for low frequency line listening systems on the telephone or mains wires including new technologies like Ethernet over power line and its modifications.

## Technical specification

### RFD-5

- sensitivity: for radiated power 0.06 uW at 500 MHz: 10 cm
- frequency range: 0.5 MHz to 25 GHz
- external probe: 10 MHz to 20 GHz
- pulse memory: maximum level, 16 events
- variable tone for transmitter localization

### WHG-2

- multi-signal, AM/FM modulated wide band generator
- audio modulation 1 kHz
- output voltage max. 8 V p-p, adjustable
- power 9 V, 6F22 or NiMH accumulator
- current consumption 29 mA
- low voltage indicator, indicates drop below 7 V
- audio white noise generator, random thermal principle
- special test tone for activation of voice controlled devices

### LTA-3

- Audio sensitivity: 0,1 mV 300Hz to 3 kHz
- LF/RF frequency response: 18 kHz – 41 MHz
- LF/RF sensitivity: 1,8 mV eff.
- LF/RF demodulation AM, FM
- GAIN control: min. 30 dB
- Isolation: Ground (green) 100 nF / 275 V AC  
Active (red) 5 nF / 440 V AC
- Accessory: High Voltage Isolator LTA-HV, Connecting board LTA-INT-RJ