

# **Economic mobile direction finder of VHF-UHF frequency band “Pauchok-M”**



Mobile direction finder «Pauchok-M» is designed for direction finding and position location of emission sources of communication systems within frequency band 30 - 1000 MHz, brings the vehicle onto RES position by bearing.

Direction finder possesses high DF accuracy and coverage range sufficient enough for providing radiomonitoring along with low cost of its equipment.

Operation modes control is realized in mobile direction finder «Pauchok-M» to provide direction finding of radio emission sources on stationary position and in motion.

Equipment of mobile direction finder is mounted inside passenger car, and DF antenna is mounted on the roof of the vehicle in radioparent cargo box or on the tripod when operating outside the vehicle.

Possibility of connecting of navigation and telecode communication equipment to direction finder increases efficiency of RES searching together with other radiomonitoring systems.

## **COMPOSITION**

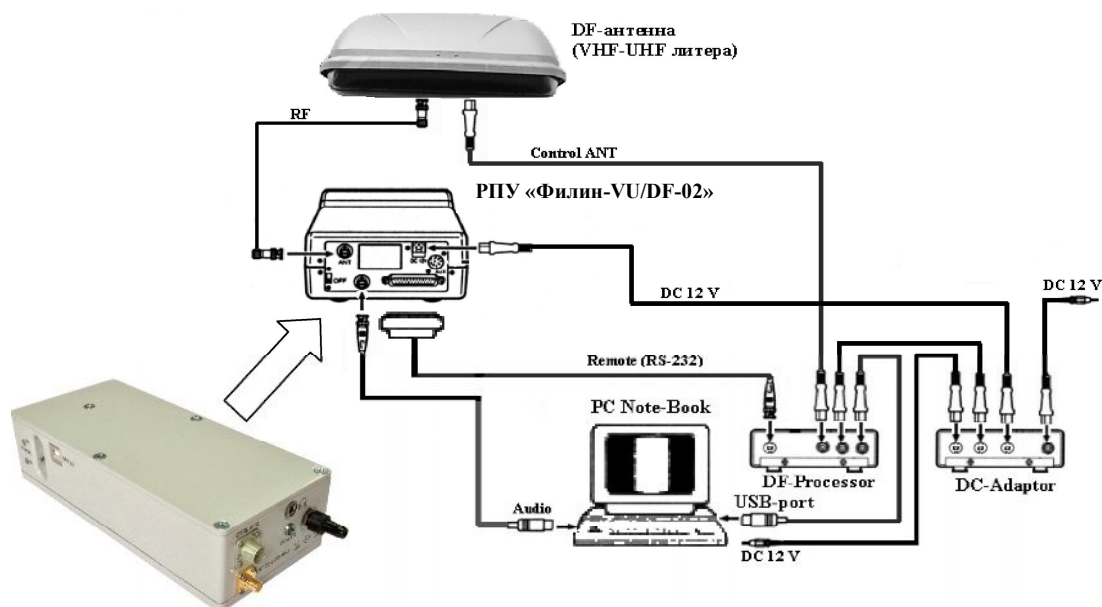
- 1) DF AFS of the frequency band 30 – 1000 MHz;
- 2) VHF-UHF receiver “Filin-VU/DF-02” with DF-signal processing;
- 3) Electronic compass, GPS-receiver;
- 4) Computer type: Note-Book or Net-Book;
- 5) On-board power adapter;
- 6) Software for direction-finder (for OS Windows 7);
- 7) Complete set of cables and accessories (including cargo box);
- 8) Operation and maintenance documentation (including technical data sheet).

As an option direction finder «Pauchok-M» can be equipped with radio communication equipment (UHF-transmitter-receiver Icom F-210, radio modem of telecode communication), unit of field discrete heterodyne for taking radio deviation corrections (RDC).

## MAIN FUNCTIONS

- Reception and direction finding of signals of radio emission sources within VHF-UHF frequency band;
- Audio control of signals with recording of spoken information to computer HDD;
- Display of RES and DF station position against the background of the map of undercontrolled area;
- Remote control via LAN (or telecode communication system) from panoramic signal detector “Panorama” (or “Panorama-F”).

Diagram of direction finder “Pauchok-M”



View of AFS of direction finder “Pauchok-M” and receiver “Филин-VU/DF-02”



## TECHNICAL PARAMETERS

Operating frequency band	<b>30 - 1000 MHz</b>
Polarization	<b>vertical</b>
DF accuracy (AME) <b>RDC)</b>	<b>5° - 6° (2° - 3° accounting for</b>
Sensitivity (depends on frequency):	
within frequency band 30 - 300 MHz	<b>50 - 10 <math>\mu</math>V/m</b>
within frequency band 300 - 1000 MHz	<b>10 - 30 <math>\mu</math>B/m</b>
Minimal duration of the signal	<b>50-300 ms</b>
Dynamic range by third order intermodulation	<b>not less than 70 dB</b>
Dynamic range of signals	<b>not less than 100 dB</b>
Assessment of bearing taking quality ( <b>RMS</b> ) and signal level ( <b>dB<math>\mu</math>V</b> )	
Consumed power from on-board network	<b>not more than 40 W*</b>
Overall dimensions of:	
antenna module of VHF-UHF band	<b>350 mm×800 mm×800 mm</b>
receiver	<b>200 mm×50 mm×85 mm</b>
on-board power adapter	<b>140 mm×40 mm×170 mm</b>
Operating temperature range for:	
equipment	<b>-10° C...+ 50° C **</b>
antenna	<b>-40° C...+ 55° C</b>
*- consumed power is indicated without computer power consumption.	
** - operating temperature is indicated without accounting for PC model	

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