**RADAR FOR DETECTING HUMANS**

**GERAD-5**

**Short Operation Manual**

**APPLICATION**

***Gerad -5 Ultra Wideband GPR-Detector*** is designed to locate people in various premises behind walls and optically opaque barriers while conducting counter-terrorism and special operations, as well as during search and rescue operations to rescue people under rubble during natural disasters or located in smoke-filled rooms during fires.

***Gerad -5 GPR-Detector*** is used by the units of the Ministry of Internal Affairs of Russia to detect unauthorized presence and movement of people in the premises under control.

The tactics of using the detector involves ***two operational options***:

• stationary with locating the detector on a tripod installed by the barrier;

• operative with holding the detector pressed to the wall with hands.

**IN BOX**

1. protective case;

2. radio electronic unit;

3. tablet with the Gerad-5 program;

4. MW72LP15battery charger for electronic unit;

5. DSA-15P-05 tablet charger;

6. USB cable;

7. operating instructions.

**OPERATION WITH GERAD-5 RADAR**

**Operation**

1. In order to obtain reliable information, the operator must be alone on the working position. The access to the area with close proximity to the device at a distance of at least 3 - 5 meters must be prohibited.

2. Information on any moving objects in the range of radar operation is displayed as red marks in the corresponding sectors angularly and at predetermined distance on the radar display.

  Moving is observed as moving of the mark on the display. Mark presence in neighboring sectors angularly and at the same time stands for target location on the border of sectors.

***Attention! If you use two or more radars Gerad-5, it is prohibited to swap their displays! Each display keeps its own settings!***

4. The screen is updated every 1 second.

5. A non-moving target is detected by breathing. To detect a non-moving object, the required time can be increased to 3 - 6 seconds.

**Prepare and Switch**

1. Remove the radar from the transport case.

2. Remove the tripod and the base for mounting the radar on the tripod from the package box. Adjust tripod height, fasten the radar on the base using levers and install the tripod by the wall or away from it at no more than 5 meters. Align the back of the radar to the obstacle. Connect the display to the radar via cable.

3. In case of on-the-spot operation, take the radar in hands and press the back side against the obstacle.

4. Turn on the radar using the button on the side of the device. The green LED lights up and the display shows controlled spaces, divided into 6 sectors and 2 half rings.

3 seconds after switching, the radar is ready to start operating.

The red marks appear to indicate functionality of the device.

5. Voltage supply is controlled at the top right of the screen according to color mark and value. Charged battery is indicated as green marks. Full charge corresponds to 100%, sufficient charge to 90%. Operation is permitted at a charge of **not less** than 10%! If the charge is less than 10% (the indicator is red), the battery needs to be charged!

6. In the absence of targets, there might be "wandering" marks on the screen.

**Shutdown**

1. After using, turn off the radar by pressing the button on the side panel.

2. LED and display go off.

3. After using, it is recommended to charge the battery.

4. Charging is carried out only when the device is turned off.

5. Full charging lasts about 8 hours; the internal charger will automatically stop charging when the desired voltage is achieved.