

# Mole Impulse PRO

## Operation manual



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## QUICK START

### OPTIMAL POSITIONS:

- **POWER, NOISE, THRESHOLD, GAIN** – move each control slowly to position 10.
- **SIGNAL** – from position 10 slowly return to a position around 7. The machine is very stable at 10 but the depth is better around 7.

After all these settings press FAST ZERO.

**IMPORTANT:** when placing the coil at working height (eg 20-30 cm above ground) should press FAST ZERO again.

Mole Impulse PRO is professional metal detector, which is exceptionally stable and efficient for a work over mineralized soil and at heavy ground conditions. This professional detector is destined for deep situated treasures, buried up from years valuables, cables, pipes, ammunition a others, while at the same time throw off small metal objects.

## **CONTROL**

**Power** – regulate the power of the device. At position 1 the power is minimal, and at position 10 is maximal. In the most cases it is work at maximal power.

**Gain** – regulate the gain of the received from the device signal. In the most cases it is work at position 10.

**Threshold** – threshold tone, in the most cases is at position 8-10, as for soils with humidity above 65% must be above 8. This will be decided in dependency from the situation by the operator.

**Signal** – eliminate the ground mineralization. In normal soil is at position 6-8, and at strong mineralization - at position 8-10 (very stable).

**Noise** – eliminate the influence of the ground mineralization in combination with a signal. Usually it is at position 10.

**Fast Zero** – eliminate the ground mineralization and the detector choose the most appropriate depth for the case. When the device is ready to work and the coil is above the ground this button is pressed for about 3 seconds. When the button is pressed, you must be sure that below the coil there is not metal object. In the time of work is advisable this button to be pressed at every 3-5 minutes.

The metal-detector **Mole Impulse** is one from the most worldwide power detectors operating at principle of pulse induction. The depth of penetration in

ground is up to 6 meters. At this depth is possible to find out different metal objects and ammunition. Please, when children work with the detector they must be controlled, and the finds must be dig out from elderly. The extraction of the finds is in whole at yours responsibility. The manufacturer and the dealer have not responsibility.

## **PREPARING FOR OPERATION**

It is important to be observed this direction for reaching to the maximal depth of searching. Go outside at a place without metal objects, connect the coil with the device, and switch on the POWER at position "1". Leave the device to operate for about 5 minutes to stabilize his work. Lift out the coil of the searcher far away from metal objects. Set the buttons POWER, GAIN, THRESHOLD and NOISE at position 10, and the button SIGNAL at position around "7". Take down the coil to the ground at 20 cm above the surface and press the button FAST ZERO for about 3 seconds. The signal tone slowly disappears. Keep the coil immovable for several seconds. If you hear a tone, turn the buttons POWER and THRESHOLD with one position to the left (9) and if the tone do not longer heard, this mean that the device is ready to work. If you hear arbitrary tone, go on once more to the left with one position (8). When it is necessary to throw off small metal objects like nails, lids, wires and others useless objects, then set the button SIGNAL to position from "8" up to "10". If you want to increase the sensitivity of the device at normal soil, increase SIGNAL to maximal position of "6-7". Please make a test with SIGNAL to determine the maximal sensitivity.

## **TECHNIQUE OF SEARCHING**

Mole Impulse can work with coils: round – 50 cm; elliptical – 23x36cm; 110 x 110 cm; 150 x 150 cm (wire loop without tubes).

The small coils (round 50cm, elliptical 23x36cm) are used for searching of hard cash and small objects. The bigger objects can be located in depth up to 3 meters.

The big coils (square - 110 x 110 cm; 150 x 150 cm) operate respective at depth of 4, 5 and 6 meters. In searching upon strongly mineralized soils will be heard disturbing signals. The signal tone is raised and do not disappear even if you are going many meters. Press the button FAST ZERO while you keep the coil immovable above the ground. The automatic adjustment will eliminate the parasitic sound.

For testing of the detector put on cleaned from metals terrain different in size objects at least at distance 2 meters each other. Move slowly the coil above these objects at different heights. The same test you can make with buried metal objects.

This way you will experiment and learn the possibilities of yours detector. The time, during which the metal object is lied in the ground, is of big importance. If, at aerial test the hard cash is localized from 40 centimeters, then at long ago buried hard cash the depth of localization will reach 50-60 cm. The same example is related to big objects. It is very important, when searching given area, the different coils to be moved slowly and in parallel to the surface. With several

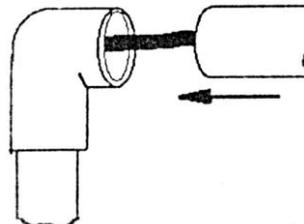
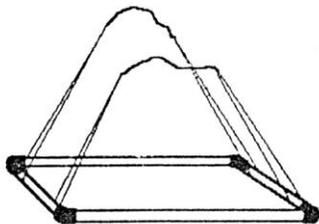
hours experience you will learn to recognize whether the object is deeply buried or is above the surface.

### **EXAMPLES:**

- If the signal tone quickly raise and fall on a small area, this meant that the object is small and at depth up to 50 cm.
- When the signal tone rise on an area with middle size, and after this again slowly fall, then you are located middle sized object at depth up to 3 meters.
- When the signal tone rise on an area with big size, and after this again slowly fall, then you are located big metal object at depth up to 6 meters.

### **PREPARING FOR WORKING WITH BIG COILS**

Carefully unfold the plastic construction of the coil, lay it down on the ground, fitting all the ends of the pipes tightly in the elbows. Place the belts for carrying the coil and the mechanical preparation of the assembling is complete. Plug in the cable shoe to the COIL output of the device and slightly tighten on hand the without applying a effort. All settings for operation are as at round coils.



When you want to localize and find out the center of the buried metal object carry out the following actions:

1. Lift up the coils at working height at 20 cm above the surface and press for 3 seconds FAST ZERO. Go forward and when you hear the first signal tone mark with a flag the beginning of the signal at the coil front.
2. Continue the motion ahead. The signal tone will be constantly heard. Continue to move until go off the signal. Cease the motion and put a flag at the coil rear end.
3. Turn yourself to a 90 degrees and repeat operations 2 and 3.
4. Connect the two diagonals of this way received square and you will found the center of the object.

If, at time of operation you are disturbed from brief sounds from small metal objects on the surface, then you must lift up the coil to about 25 cm above the ground, to press for 3 seconds FAST ZERO and to go forward.

## **ATTENTION**

Do not work with the device when the LOW BATTERY lamp is on. If you go on working with the lamp on you will use up the battery to such an extent, that after this the charger will not accept it for charging, i.e. the battery will fall off bellow its critical voltage.

## **BATTERY CHARGING**

The charger's output to be plugged in jack COIL. Insert the plug into the contact 220V and on the front ON/OFF button will light up the permanent red color LED indication. Please to switch on the ON/OFF button into position "ON" and will begin to light the green light „CHARGE". This will be the start of

accumulator battery's charging. When it is charged, the green LED will go out or will continue to light very weakly, and the battery's charging will be automatically switched off, i.e. a control is not needed. Please before this to convince yourself that the key „POWER” is in zero position. Take it easy that the battery will be damaged when it is included in the network. This way it can stay one-two days and without limitation. When you are work whole day but it is not light up the light LOW BATTERY, this does not mean that the battery must not be charged. The battery is lead acid and this means that it can be recharged at any time, i.e. it has no memory as nickel-cadmium accumulators.

Mole Impulse PRO has a possibility to charging of the battery from a car. The jack is marked “12V” and must be connected to the car's lighter. The battery has no automatic switching off at charging from a car, but the charging current became "0" because the two accumulator batteries of the car and of the detector are by 12V. If the car is on, the battery is charged with bigger current, and then it is necessary about 2 hours to their charging, and when the car is not on the time is about 4-5 hours.

When you plug in the jack to the lighter light up in red color the jack's LED and after including of the terminal to input 12V of the detector, will light up in red the big red button ON/OFF, but this does not mean that the battery is charged.

Attention: Please to check if a potentiometer “POWER” is in zero position and then switch the ON/OFF button at position „ON” and the battery will begin to charge. When you wish to interrupt the charging please to switch the ON/OFF button in “OFF” position and to pull out the terminals from the detector and from the car's lighter.

**Recommendation:** Always charge the battery prior the day of your going to the field and by all means charge it when returning home or when the LOW BATTERY indicator is on.

**Important:** Never re-charge the battery when the device is switched on, or switch on the device while charging the accumulator battery..

## **MAINTENANCE**

Protect from mud and dust your face panel, or else it would be scratched. When a cleaning is necessary, first blow out the abrasive particles of dust and then wipe out the panel with a moist soft cotton cloth. Keep away the whole device from rain or pouring on liquids. If this happens because of carelessness, swab up the liquid and do not switch on the device. Please, in this case bring it for repair. Do not put the device to shocks, vibrations, dropping and so on.

## **SQUARE COIL – MAINTENANCE**

Protect the coil from direct immersion in water because they are not water-proof. If this occurs, it must be immediately dried up. If you observe all this regulations, this detector has 10 years exploitation period and one year full warranty for parts and labor if this is necessary. If you observe all rules it will serve you more than 10 years and will repeatedly pay up its price.

**REMEMBER:** Do not switch the detector on when the big coils are not unfolded because this will damage them.

## **WARRANTY**

Two years for damages which have been occurred at normal operation. Excluded are mechanical damages, or caused from wrong use damages. At damage during the term of warranty you must send the all device us. The charges for sending to Notsi, Ltd. - Bulgaria are at the customer's expense, and for sending back – at the expense of Notsi, Ltd. (this is in effect only for Bulgaria). When the claim is from outside of Bulgaria the travel charges in the two directions are at the customer's expense.

**WE WISH YOU GOOD LUCK!**