

# INSTRUCTION MANUAL

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## **THE DEVICE**

The detector consists of: a coil, a strip /connecting the coil to the electrical set/, electrical set, armrest and a battery box.

### ***Searching coil /Coil/***

The coil of Golden Mask 2 is 28 cm (11") DD sized. It's made of plastic as in its lower side it is poured on resin which makes the whole construction very heavy and air-proof. The coil is highly sensitive towards as small and big objects.

### ***Additional coils***

Golden Mask 2 can work with additional coils for DD 24 cm; concentric coil 24 cm; concentric coil 22X36 cm; DD 32 cm; DD 38 cm.

Smaller sized coils possess better sensitivity to smaller objects /such as coins/ and are preferably used in heavy mineralized and dirty soils /especially concentric soils/ Bigger coils /DD32 cm; DD38cm) are much sensitive to bigger objects and are suitable to be used for searching deeper buried objects, and possess 10-20% better sensitivity than DD 28 cm.

### ***Strip***

The strip is made of aluminum tube, as in its lower side it's made of wood in order to not disturb the work of the coil.

### ***Electrical set box***

It is made of plastic of the well known company BASF and is extremely strong!

### ***Armrest***

It is made of aluminum profiles for better strength. In its front side is placed the foam coated handle.

### ***Battery box***

It is made of plastic with a slot for 10 batteries NiMH- 1,2V/900mA.

## **METAL DETECTOR OPERATORS ETHICS**

- Please, pay respect to the personality and property of the others;
- Always ask for permission for searching in private property;
- Do not make dirty environment while searching;
- Fill with soil back dug plots;
- Follow all laws and other normative for searching objects in the country you are searching;

- Do not dig historical or archeological objects;
- Before start looking for different objects, read carefully normative legislation of the country, regarding rights of property over found objects and those, which concern cultural belongings of the country.

### **FITTING GOLDEN MASK 2**

Take the lower end of the strip and put it in the slit of the coil till them both fit tight. Put the plastic bolt into the opening and fit it tight so that it goes out the opposite side and turn the nut with light clamp. Then fit together with the second part of the strip and put the iron bolt while tighten it by the winged nut. Take the electronic set and unscrew the plastic nut and then slide it into the upper end of the tube of the strip, press hard the plastic end of the detector towards the tube of the strip. Put the two tubes one into another as high according to your height. After that tighten the nut heavily so that detector can't move toward the strip. Wind up the cable around the strip leaving an "ear" of the cable on the lower end of the coil so that

the cable wouldn't tear when the coil is gathered and ready to be transported. Then put the jack of the cable into the nest of the detector winding it tightly without much strength. So the detector is ready to be worked with.

### **TECHNICAL CHARACTERISTICS**

- High power electronics
- Work frequency - 8 KHz
- VLF-TR technology
- Discrimination by moving the coil
- Audio discrimination
- Multi tonal discrimination - VCO Sensibility control
- Eliminates ore soils and heavy mineralization
- Manual ground balance
- Light indicator for the condition of batteries
- Minimal consumption 35 mA
- Maximum consumption 65 mA
- Rechargeable batteries - 12V/ 1000 mA
- Automatic charge device with 5 years guarantee of electronics

## STRUCTURE AND OPERATION

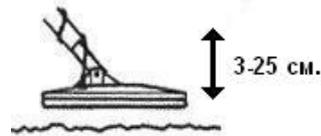
- Switch „AUDIO DISC” - turns on and off audio discrimination;
- Pot „THRESHOLD” - used for adjusting sound level and regulates depth of searching;
- Pot „GROUND BALANCE” - eliminates influence of the soil;
- Pot „DISC LEVEL” - regulates degree of elimination of iron metals;
- Pot „VOLUME” - switches on the detector and adjusts sound level;
- Pot „SENS” – used for additional regulation of depth of mineralized regions;
- Jack „HEADPHONES” –used for headphones;
- Light indicator “LOWBATTERY” – indicates lower tension of batteries.

The detector turns on with the help of the potentiometer /pot/ „VOLUME” which also regulates sound level.

### \*Adjusting the settings

Set the pot „THRESHOLD” in a position that a light “buzz” can be

heard of the detector. Set the switches „AUDIO DISC” and „VCO” on „OFF” position, so the search coil starts to move vertically towards earth surface /up and down: from 3cm to 20-25cm over ground surface/ /**fig.1**/ and the pot „GROUND” turns around slowly.



**fig.1**

Sound increases when the coil reaches the ground; and when the coil moves away the ground, the pot is turning around while the sound doesn't change any more or it changes very slowly. While balancing the detector, you have to be sure there are no metal objects around!

Separating metals is with the help of two types of sound discrimination:

#### 1. Using audio discrimination:

- Set the switch „VCO” in a position „OFF” and „AUDIO DISC” in a position „NORM” or „FULL” /for full elimination of ferrous metals/, set the pot „DISC LEVEL” in a position 3. If you

wish to eliminate much more non-ferrous metals of earth surface, the pot must be set in a position over 7. If you come upon non-ferrous metals /gold, silver, copper, bronze/ a deep-toned sound can be heard; and if you come upon ferrous metals a break or a short sound is heard.

2. Using a „VCO” discrimination:  
 - Set the switch „VCO” in a position „ON”, and „AUDIO DISC” in a position „OFF”, the pot „DISC LEVEL” in a position 3. If you need to eliminate more non-ferrous metals over the ground, set the pot in a position over 7. If you come upon non-ferrous metals /gold, silver, copper, bronze/ a high sound can be heard; and if you come upon ferrous metals a low sound is heard.

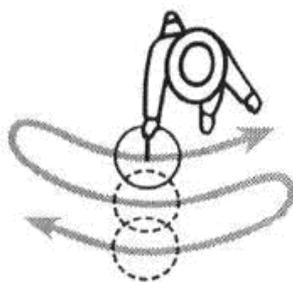


fig.2

Searching metal objects is made by moving search coil toward ground surface /fig.2; fig.3/.

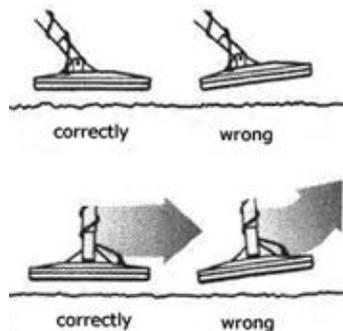
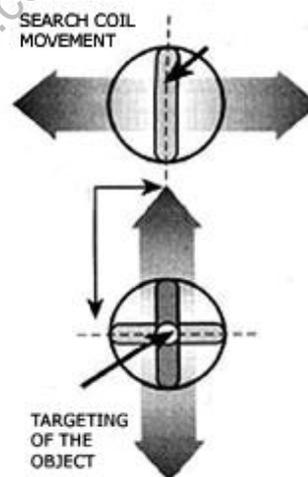


fig.3

Precise position of a metal can be fixed with the help of movements of searching coil into two perpendicular axes.



**\* Recharging the batteries.**

Batteries possess about 500-600 cycles of re-charge before they damage, but these are values that can be reached in certain laboratory conditions. The detector is supplied with NiMh batteries. Before start

working with the detector batteries have to be charged with the help of the charge device which is also included in the set. Once charged, batteries can be used about 40 hours.

If a light "Low battery" appears while using the detector that means you have to stop using it and re-charge the batteries. Put the jack of the charge device into "CHARGE" nest and place the device into electric net of 220V. Charging goes on 6 to 20 hours, depending on the level of discharge of the batteries. It's not necessary to keep eyes on charge device, because it is supplied with automatic turn off and batteries couldn't be damaged no matter how long they will stay in the charge device. When they are ready pull the device out of the electric net and take the jack out of the "CHARGE" nest.

### **MAINTAINANCE**

Keep your detector of blows, jars and plunges in water the electronics. Coils are waterproof and they can be plunged. Do not open battery box. If it's necessary, please inform the seller or the

service-man. If you stop using the detector, blow dust and send away of the apparatus and wipe it with a wet piece of cloth. Do not use alcohol, spirits, benzine or other diluents. If you use the detector in parcels where ammunitions or other explosives can be localized be careful – the producer or the seller are not responsible for your actions.

### **GUARANTEE**

The detector Golden Mask 2 is offered with 5 years of guarantee of electronics, labour and materials used, for harms which are not caused on purpose or irresponsibly. We can upkeep your device after period of guarantee if it is necessary.

**Attention:** Do not turn on the detector if there are big temperature amplitudes outdoor and indoor in a hot room. Wait for 20-30 minutes and start using the detector.

Do not turn on the device while batteries are re-charging. This can damage electronics.

**GOOD LUCK!**