Golden Mask Deep Hunter Pro

The Golden Mask Deep Hunter pro is a professional metal detector that was specfically designed for detecting deeply buried metallic objects.

With recent improvements in electronics the Golden Mask Deep Hunter pro uses the principle of pulse induction by incorporating advanced circuitry. This makes the Deep Hunter pro more fine-tuned and advanced then any analog circuit. The Deep Hunter pro was designed to maximize pulse induction performance.

The Deep Hunter pro features dynamic auto tune, silent discrimination mode, crackle control and boost mode to outperform pulse detectors of this class. It has simplified controls, high sensitivity, reliability and stability.

CAUTION!

Do not connect or use the “Golden mask Deep Hunter pro” metal detector if near the search coil are people or animals with heart problems or people using electronic devices for the health treatment and/or prevention! The electromagnetic field of the detector may cause fatal malfunction in electronic devices which determine the life and health of people and animals!

1. Components of the unit

1.1. Electronic control unit with built-in 14.4V battery pack that provides approximately 10 hours of continuous operation, includes leather carrying case.

1.2. Search coils which can be used with Golden Mask Deep Hunter pro:

1.2.1. Frame coils, included framework and two belts for handling: 125 x 125 cm or 180x180 cm.

1.2.2. Round coils, included S-stem or telescopic fiber carbon stick: 42 or 58 cm diamater

1.3. Battery pack charger "Golden Mask extra special battery charger".

1.4. Instruction manual

2. Principle of operation

High-frequency pulse induction in nomotion mode with discrimination of metals.

3. Controls and indicators

„**VOLLUME on/off**" - a potentiometer control of sound power and „on/off" the power of electronic block. (Turn clockwise to "turn on" and increase sound or counter clockwise to decrease sound and "turn off" the device)

"SENS" - potentiometer controls the sensitivity of the detector. (Turn clockwise to increase the sensitivity or counterclockwise to decrease the sensitivity)

"**BOOST**" – slide switch for increasing the sensitivity of detector : "OFF" – normal depth; "ON" - about 20% extra depth. (When switching to ON position adjust ground balance and sensitivity accordingly).

"**CRACKLE**" - potentiometer for setting the initial click rate sound indication (in the absence of metal in your search coil appliance). "Off." turns the detector in – "silent disc mode" mode.

"**GROUND**" - „multiturn" potentiometer to adjust the system to eliminate the influence of the soil.
„**TUNE**" - button to quickly eliminate noise during operation. When tuning the device to the soil content press „TUNE", then adjust „GROUND" and sensitivity ("SENS"). This should quickly eliminate sound and find the threshold with the tweaking of the „SENS" and "GROUND" controls.
„**SIGNAL**" – analog measurement system to indicate the level of a signal during the search and voltage level of battery.
„**Fe**", „**n-Fe**" - LED indication of the type of metal:
„green" - for ferromagnetic and "red" for nonferrous metals.

"**Battery**!" - LED indication of low battery. The LED light will flash red when the battery is only at 10% of its full charge capacity. The detector can continue to be used roughly around 30 minutes after the first indication of a low battery but its best recommended to stop working and charge the battery once the LED first appears.

„**Batt. Check**"- button for check the voltage level of battery. The needle will be in red area when the "Battery!" - LED light. If the needle is in green area – the battery voltage is OK! You could check battery any time even when the detector is working.

4. Setting the system to eliminate the effect of soil (Ground balance):

- Search coil must be placed on the ground within an area where there is no presence of any buried metal objects;
- Turn "VOLLUME on/off" clockwise to turn the detector "ON" and determine the volume of the sound (to point 5÷7 scale is enough for the job);
- Select the required value of the sensitivity control level (depth-sensing) with the "SENS" (larger level values provide greater depth of detection); When the soil is not known set first "SENS" to 5. Then (if it is possible) "SENS" could be increased to the maximum which allow to be use the detector without noises during the searching;
- Press and hold „TUNE" and turn „GROUND" in the direction counterclockwise if there are no loud sound or in the clockwise if there are loud sound. Stop turning the "GROUND" when the loud sound is fast lower and return a bit to find "threshold" tune which will give the best performance during the searching;
- Release "TUNE";
- With "CRACKLE" set the frequency (click rate) of the sound (in the absence of metal in your search coil);

Do not turn the detector to "silent disc mode" (position "Off." of the "CRACKLE" potentiometer) during ground balance process!
Once these steps have been done the initial set up is complete and the device is ready to be used.

5. Search for metal objects with framework

Use belts for caring. The frame should be about 10 cm (4 inches) above the ground. Begin the search by pressing holding/adjusting ground and releasing the "TUNE" control. When searching an area systematically (5÷10 m parallel) the overlap should be about 1/3 of the coil size in order to make sure your search is accurate and precise. (The speed when searching should be about 3 feet per second.) The movement is performed slowly, each signal is indicated by start and end. Signals with a duration of less than half the size of the frame are usually due to shallow buried metal objects. Signals with longer duration are usually deeper or larger and require careful examination by repeatedly approaching from different directions.

6. Search for metal objects with round hand held coils

The handle should be adjusted to the height of the operator. The coil should be high enough - about 5 cm (2 inches) above the ground - to allow horizontal movement when searching. Begin the search by pressing and releasing „TUNE".

If the previous settings were done with the larger framework you must adjust the new settings to accommodate the smaller coil. (see 4.) Normally in this situation the new settings such as the "GROUND" need to be tuned in the direction counterclockwise to lost strong sound, return a few to find the threshold of the sound. And then start the search begins with pressing and releasing "TUNE" as usual.

Movements and monitoring the signals are the same as with the larger frame.

7. Indication of the presence of metal

In the presence of metal there will be an increase in the frequency of sound depending on the size, depth and location of the object. Once the determination of metal is present refer to the „SIGNAL" meter. While trying to center or pinpoint the object listen to the peak in sound frequency and watch meter. When the number (1÷10 higher number indicates object location when moving to reach max sound frequency) and frequency are in unison at the highest peak you have pinpointed the desired object. Determination of the type of metal is shown by the strength of the single indicated by briefly flashing LEDs - Fe (ferrous indicated by "green" light) or n-Fe (nonferrous/ indicated by "red" light). After passing over the buried objects the frequency of the sound reduces. Experience can be defined "zone" signal and can determine approximately the depth and size of detected object.

8. Using of "BOOST" feature

The "BOOST" adds about 20% extra depth when hunting. This feature has to be monitored closely whenever used because of the higher sensitivity. For optimum results when using the boost mode to detect deeper in the ground it is advised to decrease the "SENS" control (if necessary) to positions of "6", "5" or "4" to keep the single stable and efficient.

9. Silent mode

To work in silent mode turn the "CRACKLE" in position "OFF". The sensitivity will be lower but the noises will be not appear. In silent mode the detector will produce two tones – high for "non-Ferrous" metals and low for "Ferrous" metals.

REMARKS

1. Upon initial setup of the system to eliminate the influence of soil multiturn potentiometer „GROUND" should be placed around the middle position - fifth turnover of initial (final) position.
2. „GROUND" can be rotated a few in the clockwise direction after the initial setup, which is greatly reduced soil influence and sensitivity (to small metal objects only), but the system indication of the type of metal has higher accuracy.
3. If unit sounds for no reason (sound frequency indication changes randomly) without any metal in the area of your search coil - press and hold „TUNE" for about one second then release. It may require new settings. This is seen with changing soil patterns be sure to adjust accordingly in order to search at peak performance.

4. In the case of turning the device off/on, it is possible that you will see short flashing indicator „Battery!" due to the charge (discharge) of high-value capacitors. This is normal. But if "Battery!" LED indication remains on during operation, this means that it is necessary to charge the device.

5. To get maximum sensitivity of the detector press and release the "TUNE" from time to time during work.

6. The Golden Mask Deep Hunter pro metal detector is a "no-motion" and will find metals without moving the search coil. But very slow moving is required for the "type of metal" system only.

7. Always when the detector will be not in use the "VOLUME" potentiometer must be is on position "Off."!

WARNING!

Do not leave your metal detector on wet grass, snow to avoid moisture penetrating the electronic block and especially the battery! During assembly of the detector in wet or snowy conditions, avoid moistening the cable plug!

Operating the metal detector in residential and industrial areas may be hampered by electromagnetic interference or the presence of modern iron pollutants. For a steady operation of the detector, you need to decrease the sense (SENSE) which, respectively, decreases the search depth.

Use only quality headphones, preferably with an in-built potentiometer for fine audio adjustment.

After continuous work with the detector and multiple plugging/ unplugging of the cable jack into/from the socket of the control box, it is possible that the connection between the two deteriorates (when gently touching the cable jack, the metal detector makes a sound as if detecting metal). You should carefully clean the contact surface of the cable plug with a needle or a fine file. For a better result, slightly bend inwards all openings of the cable plug.

Do not switch on the detector when the outside temperature significantly differs from the temperature indoors (i.e. in a warm room). Wait for about 20-30 minutes until the detector adjusts to the temperature change before you switch it on.

Do not switch on the detector while the batteries are being recharged. This can damage the electronics.

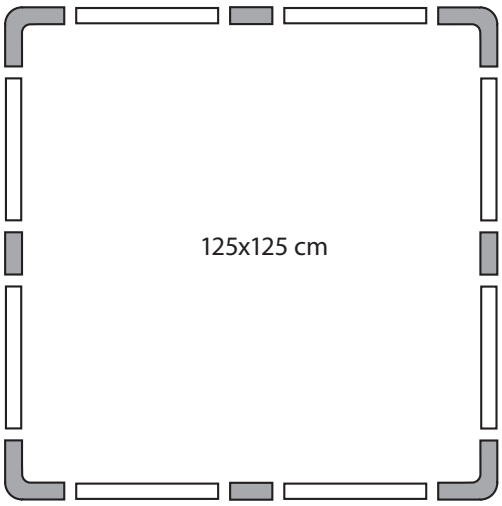
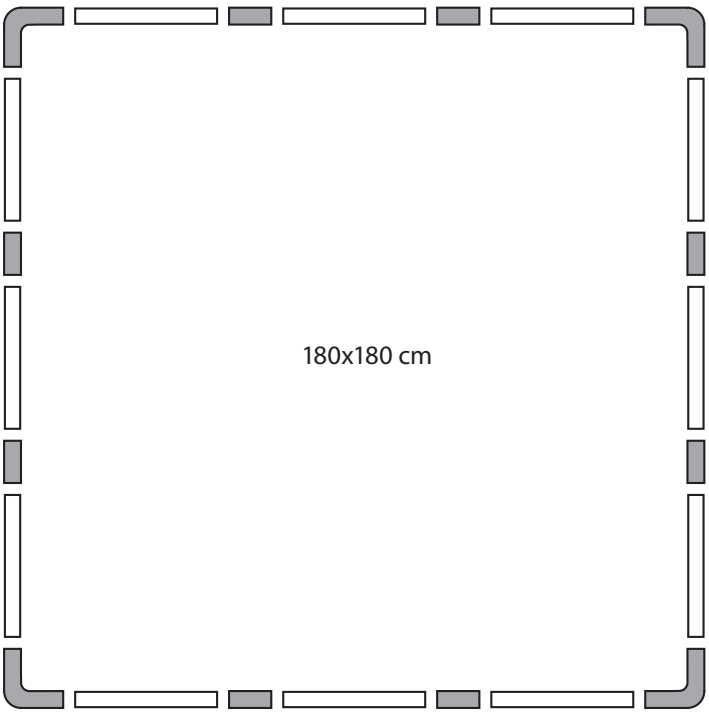
To clean the electronic block of the metal detector after use, remove the dust and sand, and wipe with a damp cloth if need. Do not use alcohol, petrol, and/or other solvents as they can damage or remove the symbols on the control panel.

If you operate your metal detector on terrains where it is possible to localize ammunition or other explosives, take special care while excavating, because the manufacturer is not liable for your actions.

If you locate a target and are unsure if there are buried electric lines near the object please call your energy provider before you dig. This is especially important in populated areas, always consult with professionals before unearthing anything that's near gas lines, oil lines, and electric lines. Please take special care while searching. The manufacturer is not liable for any damages or injuries that could result from negligence.

FRAME COILS ASSEMBLY SCHEME

The frame coil consists of plastic pipy parts that should be inserted one into another and form the frame square. (see picture bellow). The acual coil is a special cable-like circle, that should be attached to the carrying frame. The plastic frame is used to support the search coil circle cable.

After you asseble the frame, you have to attach the coil cable circle to the plastic frame using the velcro straps.

Finally, attach the carying straps on two opposite sides of the frame, attach the coil cable to the main device and you're ready to go.