

Golden Mask

1

Models:

1

1+

1+ UK



User Guide

All Rights Reserved!

© 2016 GMD - Linoart Ltd.

Text: Nikolay Dimitrov - www.goldenmaskdetectors.com

Photos: Linoart Ltd.

About the Golden Mask Metal Detectors Series 1 - GM1, GM1+ and GM1+ UK edition

The Golden Mask series 1 metal detectors are very simple to operate, yet very effective for what they were engineered for - finding metal objects in the ground.

The Golden Mask series 1 metal detectors are motion-type VLF (Very Low Frequency) metal detectors, operating by moving the search coil over the metal target.

The three models from the series 1 range differ only by their working frequency: the GM1 works at 8kHz, the GM1+ works at 18 kHz and the M1+UK works at 15kHz.

The most important about these machines is that they work with the so-called fixed ground balance. This means you do not have to manually compensate for different types of soils. You just turn-on the detector and start searching.

Another great feature of the Golden Mask series 1 is the superb recovery speed. This means the detector electronics are very fast and thanks to this the detector can separate targets located very closely. For example, if a coin is located nearby iron pieces, you will hear separate sounds from both targets and will know there is a coin.

Golden Mask Metal Detectors Series 1 Technical Specifications

| | | | |
|--------|---|----|-------|
| Model: | 1 | 1+ | 1+ UK |
|--------|---|----|-------|

| | | | |
|------------|-------|--------|-------|
| Frequency: | 8 kHz | 18 kHz | 15kHz |
|------------|-------|--------|-------|

Ground Balance: fixed

Search Mode: motion type

Controls: sensitivity, discrimination, sound volume

Coil Type: Double D

Weight (incl. batteries): 1.7kg with 23x25 cm search coil

Battery pack: 10 x AA 1000 mAh rechargeable NiMH

Battery Life: minimum 20 hours

Wireless Headphones: No

Headphones Jack: 6.35 mm - 1/4"

Warranty terms: 5 years - the electronics; 2 years - the battery charger and the coil

Main Parts of the Metal Detector

Search Coil - this is actually an antenna that emits and receives LF (Low Frequency) radio waves. If a metal object is present in the range of the radio signal, the I/O ratio changes and the detector produces a sound. The search coil is connected to the electronics block by a special heavy-duty cable and special golden-plated plug.

S-stick - the S-stick consists of three parts - lower stem, middle stem and handle. The lower and middle stems are made of carbon fibre, while the handle is made of aluminium. The armrest is a special part of the stem, where you put your arm for stability and comfort.

NOTE: There is a new telescopic 100% carbon shaft available on request. You could change the shaft type while ordering.

Control Box - contains the electronics board of the detector and the control knobs (potentiometers) to control how the detector behaves.

Battery Compartment - a plastic box for the batteries. The detector is powered by 10 pcs of standard-sized 1.2V NiMH rechargeable batteries with capacity of 1000mAh each. They are not soldered and could be replaced at any time. The detector is able to work also with standard 1.5V Alkaline batteries. Old-fashion zinc-carbon batteries are not good to use with your detector.

On the battery compartment there are two jacks - one for the batteries charging and one for connecting wired headphones.



Operating the Golden Mask series 1 metal detectors



On/Off Volume (1)

By rotating the knob clockwise, you switch the detector on. After the detector is switched on, you rise-up the sound volume by further rotating the knob clockwise. To switch off the detector, turn the knob counter clockwise until you hear a click and a sound.

NOTE: At the time of writing this, the GM1 8kHz is sold with a different control box and without a separate volume control knob.

Sensitivity (2)

This knob is used to adjust the detector sensitivity. The recommended value is indicated in red, but depending on temperature, moisture and electromagnetic fields within the area you are searching in, the actual best value may be different. To adjust the sensitivity to the best value, just rotate the knob slowly to the right (clockwise) until you hear the generator background sound - at this setting the detector achieves maximum depth without loss of comfort for the operator.

Disc. Level (3)

The discrimination knob adjusts the level of border between iron signal and signal from nonferrous metals. The higher the setting (turning the knob clockwise), the more conservative the discrimination.

We recommend lower values of the discrimination for maximum depth and speed. In trashy areas we recommend setting the knob to 1, since target separation depends on the discrimination. Some experienced detectorists use a zero value while searching on non-polluted areas to achieve maximum depth and speed and on target indication they turn slightly the knob clockwise to identify the target.

There are two versions of the discrimination with the 1-series — bi-tonal and mono-tonal. At the time of writing this, the GM1 8kHz is mono-tonal (but will be updated shortly), while the GM1+ and GM1+UK are bi-tonal as default.

It exist a possibility to order the GM1+ and GM1+UK with mono-tone discrimination upon request. Why should you want this? Because the mono-tone versions are a little bit deeper. Not to much, but the difference exists and sometimes makes sense.

Bi-tonal discrimination (standard)

The 1+ and 1+UK have bi-tonal discrimination as default. This means the detector indicates the ferrous targets with a low frequency sound and the non-ferrous targets with a high frequency sound. This is useful for general search and if you want to hear the iron also - sometimes iron targets are giving you valuable information about the place you are searching on.

If the setting of the discrimination is set to zero, you will hear almost all metals with a high sound for nonferrous metals. And vice versa - if you set the discrimination to a high level, some of the non-ferrous metals are indicated as iron. The recommended value is marked in red, but you have to find the best value for your search by making some tests.

Mono-tonal discrimination (available upon request)

The mono-tone discrimination means that discriminated targets are ignored and you hear only the response from the non-ferrous targets or those targets that are above the discrimination level. The higher the discrimination setting, the more targets you stop to hear and vice versa.

With the mono-tone discrimination the detector is much more silent - it produces signals only from the good targets, so the amount of noise you have to hear is significantly less than with the bi-tonal discrimination. You can search much longer as your audition will get tired slower, especially in trashy areas with lots of iron junk.

It is normal that in this mode the detector emits some short sounds or crackles on iron targets. Don't try to eliminate all the sounds from iron targets by rising-up the discrimination level - you will lose also tons of good targets. We recommend setting the disc. level at 2 or a little below that.

Low Bat.

Low battery indicator. When this indicator lights, you should recharge or replace the batteries.

Charging the batteries

If the LOW BAT. indicator lights, you have to turn-off the detector and charge the batteries. To do this, simply plug the smart charger jack into the charging jack on the back of the battery box, then connect the charger to the power line. A multi-color LED indicates the charger action.

| | |
|--------------------------|---|
| Plug ON | RED:BLUE flash show the charger is ready |
| No batteries | BLUE |
| Charging Progress | RED |
| Full charged, trickle on | BLUE |
| Short circuit | RED BLINK QUICKLY |
| Battery reverse | RED BLINK QUICKLY |
| Repairing Batteries | RED BLINK SLOWLY |
| NTC thermistor short | BLUE BLINK SLOWLY |
| Battery voltage too low | RED:BLUE:YELLOW BLINK ALTERNATELY |
| Temperature protect | OFF |

After the charging is complete, unplug the charger from the detector, then from the power line. You may start searching.



WARNING!

Never try to charge non-rechargeable batteries!
Do not connect the charger to the detector when inside the battery box are installed non-rechargeable batteries!
Such action will cause fire!

When the power from the batteries reaches the minimum level, required by the electronics to function properly, the detector will emit a BEEP sound, even if the battery indicator still shows the batteries are not not completely discharged!

Using wired headphones

The detector has a standard 6.35 mm | 1/4" headphones jack to plug-in wired headphones.

The sound module of the detector is engineered to use a large gamut of contemporary STEREO headphones, designed mainly for music listening. Of course, metal detecting-dedicated headphones will also work.



WARNING!

Never use headphones with MONO jack!
Never use nonstandard headphones or headphones that are designed to be used with special equipment, for example military equipment - this could damage the sound module of the detector.

Telescopic Shaft

The Golden Mask 1+ is offered with a carbon fibre telescopic shaft as an option.

To extend the telescopic shaft, start from the first section (by the side of the coil). Turn the fixing screw counter-clockwise, pull the search coil gently to the full extent of the carbon pipe and then fix the section by gently turning the locking screw clockwise. Do the same with the second section. Check if the length is enough, if not, extend the third section to match the desired length.

Please, be sure to have a minimum of 15 cm (6 inch) of the third section inside the handle section, otherwise the stem will not be stable enough and could be broken, especially if a large coil is used.

We strongly recommend that you gently tighten the locking screws after the first 5 minutes of use - this way you will obtain maximum stability and help for a longer life of your shaft. Keep tightening the locking screws every half hour, especially the top screw (the biggest one).

WARNING: The third section can be pulled out completely from the handle part, but we do not recommend it, because a plastic shim inside the locking screw could be lost or damaged. Please, be sure to have a minimum of 15 cm (6 inch) of the third section inside the fixing screw of the handle section, otherwise the stem will not be stable enough and could be broken, especially if a large coil is used.

Cautions

Keep the detector electronics and battery compartment from water and moisture. Be very careful when placing your detector on wet ground - moisture can penetrate batteries and brake the electronics inside the battery compartment.

Keep the search coils from mechanical injuries - stepping on your coil almost always brakes it, and the warranty does not cover this. The search coils are water-resistant. You can wash them or submerge them in water - no problem.

Do not use other charger than the supplied with your machine. Third party chargers may be very dangerous for the batteries and may cause fire.

Keep the coil connector from dirt and moisture. The good contact between the coil and the detector is essential for the performance of the machine.

Keep the potentiometric knobs from mechanical impacts.

Do not forget to turn off your detector after you end searching - this ruins the batteries.

Respect the law in your country about the protection of historical heritage and archeological sites. In all countries in Europe it is strictly prohibited to do metal detecting on or nearby archeological sites.

Good Luck!