# **Operation Manual**

Metal Detector





#### ATTENTION!

 $\triangle$  The Operation Manual contains information on safe operation and proper handling of the instrument. Read the Manual carefully before using the device.

 $\underline{\wedge}$  Violation or negligence of the recommendations of the Operation Manual may result in damage to the device or harm to the user's health.

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# Precautions

 $\triangle$  To avoid possible electric shock or personal injury, and to avoid damage to the clamp or the equipment under test, strictly adhere to the following guidelines:

- 1. Inspect the instrument before using it. Do not use the device if it is damaged.
- 2. Avoid storing and using the device in explosive and fire hazardous environment, high temperature, high humidity, and strong electromagnetic radiation.
- 3. To avoid damage or failure of the device, it is not allowed to make any changes at your own discretion in the electrical circuit of the device.

## Features and benefits

- With the RGK MD-10 metal detector, you can search for coins, relics, jewelry, and precious metals almost anywhere. This metal detector is versatile and easy to use.
- Two modes of operation: ALL METAL and DISC: ALL METAL (general search) allows you to search for all types of metal with automatic ground balance and high sensitivity. This is the optimal mode of operation. DISC (Recognition Search) allows you to recognize which metal the instrument is detecting.
- Headphone jack (not included)
- Adjustment of the sensitivity of the device and the volume of the signal in the speaker and headphones.
- Waterproof search coil allows you to search for metal objects in shallow water. ATTENTION! Only the search coil is protected from water, but not the body of the device or its other parts.
- Adjustable arm and armrest for comfortable work with the metal detector.

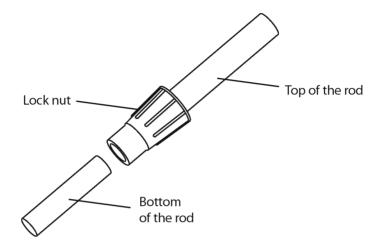
# Components of the device

## Assembling

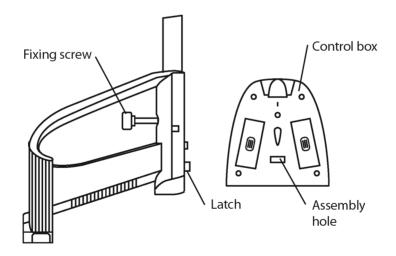
The assembly of the metal detector is simple and does not require any special tools.

Follow these steps:

 Unscrew the screw on the search coil bracket, remove the screw and nut. Insert the bottom of the shaft into the bracket, align the holes in the search coil bracket and the shaft. Insert the screw through the holes, tighten the nut. 2. Loosen the lock nut on the top of the rod slightly. Insert the bottom of the rod into the top and tighten the lock nut.

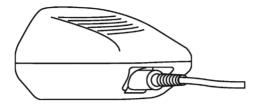


3. Insert the latch on the top of the rod handle into the mounting hole on the control box. Then, lightly press the control box in the direction of the arrow IN on your hand to lock the latch.



4. Tighten the fixing screw on the handle.

5. Wrap the search coil cable around the rod in a spiral. Insert the search coil cable plug into the control unit connector.



6. Loosen the locking nut on the rod. Extend or shorten the bar so that when you stand with the detector in your hand, the search coil is positioned parallel to the ground at a distance of 1 - 5 cm. Then re-tighten the locking nut.

 $\triangle$  The plug of the cable coming from the search coil is inserted into the connector on the control unit in only one position. Do not push the plug, otherwise you may damage it.

#### Setting up the search coil

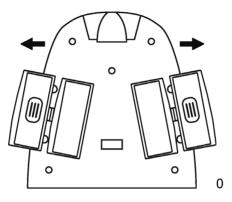
Loosen the screw on the search coil bracket, then install the search coil at the angle you want. The search coil must be parallel to the ground. Tighten the screw just enough so that the coil does not wobble or sway.

#### Installing batteries

You will need two 9V alkaline batteries to power your instrument (not included). Two battery compartments are located on opposite sides of the control box.

 $\triangle$  Use only fresh batteries of the correct size and of the recommended type. Do not dispose of used batteries with household waste. In order to protect the environment, disposal must be carried out in accordance with local regulations.

- 1. If the device is on, turn the power switch on the control panel to the POWER OFF position.
- 2. Press down on the battery cover and slide it in the direction of the arrow.



- 3. Connect the power supply to the battery connector, observing the polarity. Then place the battery in the compartment.
- 4. Close the cover.

 $\triangle$  To avoid leaks and damage to the device, always remove old or discharged batteries. Remove the batteries if you do not plan to use the detector for a week or more.

 $\triangle$  You can extend battery life with headphones that use less power than built-in speakers.

#### Using headphones

You can connect headphones (not supplied) to the device so that only you can hear its sounds. Using headphones improves the perception of small changes in the audio signal and saves battery power.

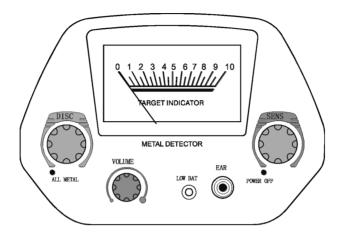
To connect headphones to the detector, plug the 3.5mm headphone jack into the EAR jack on the control panel. The built-in speaker of the detector is disabled when headphones are connected.

Safe use of headphones

To protect your hearing, follow these guidelines:

- Set the volume to the lowest level before listening.
- When a signal sounds, adjust the volume to a comfortable level.
- Do not set the volume too high.
- Once you set the volume, do not turn it up. Over time, the ears adapt to the volume level. For this reason, even a sound level that seems comfortable can damage your hearing.
- Do not wear the headphones when working near high traffic areas, even if your headphones model allows external sounds.

#### **Control panel**



DISC (Recognition Search Mode). Turn the knob clockwise from the ALL METAL point to the right to enter DISC mode. Rotate the knob clockwise slowly to track out false signals from (interference, debris, etc.).

Turn the knob fully counterclockwise to enter ALL METAL mode. The mode is used to search not only for iron, but also for non-ferrous metal (see below for details).

SENS (sensitivity). Turn the knob fully counterclockwise to turn off the device. Turn the knob clockwise to turn on the device. Continue to turn it clockwise to increase sensitivity.

VOLUME (volume). Rotate the control clockwise to increase the volume, or counterclockwise to decrease it.

LOW BAT. Low battery indicator. When the LOW BAT indicator is on, replace the batteries immediately.

EAR - 3.5mm headphone jack.

TARGET INDICATOR. Meter scale with an arrow. When the device finds any metal object, the meter pointer turns to the right.

#### Working with a metal detector

The metal detector RGK MD-10 has two modes of operation: ALL METAL and DISC. ALL METAL is used to find any metal objects. DISC is used to search for specific types of metal.

First, set the operation mode to ALL METAL, turn the SENS knob to the extreme position. Then keep the search coil parallel to the ground

approximately 1 to 5 cm above the surface. Sweep the search coil from side to side in a small arc.

When the detector detects a metal object, it beeps. You can mark the exact spot on the ground where the detector beeps. Then stop the search coil directly over this point. Move the search coil straight ahead away from you and a couple of times back straight towards you. Meanwhile, slowly turn the DISC knob clockwise from ALL METAL until the unit rings or beeps briefly. You can determine which metal is detected according to the position of the DISC setting.

Useful information on the types of metals excluded from the search, depending on the DISC setting:

OLIMETALL	All metals without exception	
DISC setting	Metal excluded from search	
O O All METALL	Iron	
O O All METALL	Nickel alloy coin (5 cents), beer can tongue	
O DISC O DISC O DISC	Zinc alloy coin (1 cent, 1987 series)	
	Copper coin (1 cent, 1976 series)	

When the DISC knob is set clockwise until it stops, most of the metal is discarded, except for silver (coins of 25, 50 cents and \$1).

#### Factors that influence search

Successful search is difficult; improvement requires constant practice. Sometimes detection can be limited by some factors.

If there is interference in the search area from other devices and power tools, an electric cable, TV, or radio, reduce the sensitivity or change the current search area.

When searching in soil with a high concentration of mineral salts, the device will beep even without detecting metal objects. In this case, you can lower the sensitivity and increase the distance between the search coil and ground until the false signal disappears. Restart DISC mode if necessary.

When searching in trashy ground, it is best to set DISC to 11:00 so that the device can exclude most low-value objects such as nails and small iron objects.

When searching, keep away from the detector any metal tools (shovels, etc.).

The sensitivity level is usually the opposite of the recognition level. The higher the sensitivity level, the worse the recognition will be. By lowering the sensitivity, more effective recognition can be achieved.

#### Maintenance and care

Handle the device with care and attention. Dropping can damage the boards and the case and cause the detector to malfunction.

Use the detector only under normal temperature conditions. Extreme temperatures can shorten the life of electronic devices and damage the detector housing.

During operation and storage, protect the device from dust and dirt, which can cause premature wear of parts.

Keep the device clean and wipe the detector with a damp cloth from time to time. Do not use harsh chemicals, cleaning solvents or strong detergents.

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Power	9V batteries * 2
Working frequency	5 kHz
Detection indication	mechanical pointer, audio mode
Detection depth	10-30 cm
Working temperature	-15° ~ 45°
Storage temperature	-20° ~ 60°
Dimensions	78-107*27*16,5 cm
Weight	970 g

Specifications

# EHC

www.rgk-tools.com