

## OGMOYT MD-4050

# OGMOYT MD-4050 Metal Detector User Manual

## 1. INTRODUCTION

This manual provides essential information for the proper assembly, operation, and maintenance of your OGMOYT MD-4050 Metal Detector. Please read these instructions carefully before using the device to ensure optimal performance and longevity.

The MD-4050 is designed for detecting various metals underground, featuring discrimination capabilities and a waterproof search coil for diverse environments.

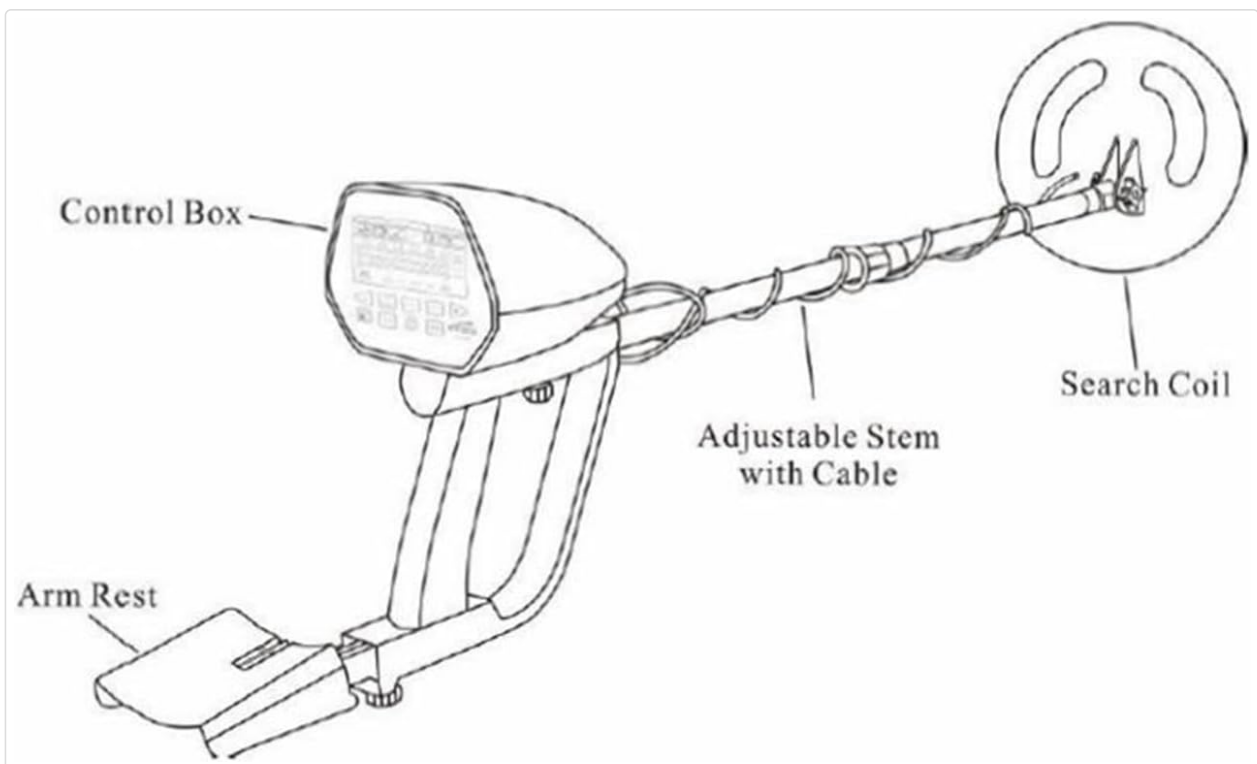
## 2. PACKAGE CONTENTS

Upon unpacking, please verify that all items listed below are present:

- 1 x OGMOYT MD-4050 Metal Detector Unit
- 1 x Operation Manual (this document)

## 3. PRODUCT OVERVIEW

Familiarize yourself with the main components of your MD-4050 Metal Detector:



**Figure 3.1:** Diagram of OGMOYT MD-4050 Metal Detector components, showing Control Box, Adjustable Stem with Cable, Search Coil, and Arm Rest.



**Figure 3.2:** Exploded view diagram of the OGMOYT MD-4050 Metal Detector, highlighting the Controller Unit, Armrest & Stem, and Search Coil Assembly.

The main components include:

- **Control Box:** Houses the electronics, display, and control buttons.
- **Adjustable Stem:** Allows for length adjustment to suit user height.
- **Search Coil:** The waterproof component that detects metal objects.
- **Arm Rest:** Provides comfort and stability during use.

## 4. SETUP

### 4.1 Assembly

1. Attach the search coil to the lower stem using the provided bolt and nut. Ensure it is securely fastened but allows for slight angle adjustment.
2. Connect the lower stem to the middle stem, and then the middle stem to the upper stem (which includes the control box and arm rest). Secure with the spring clips or locking collars.
3. Wrap the search coil cable around the stem, ensuring it is snug but not overly tight, and plug the

connector into the corresponding port on the control box.

4. Adjust the length of the stem so that the search coil is parallel to the ground when you are standing upright and holding the detector comfortably. The arm rest should support your forearm.

## 4.2 Battery Installation

The MD-4050 requires two 9V PP3 batteries (not included). Follow these steps for installation:

1. Locate the battery compartment on the underside of the control box.
2. Unscrew the fixing screw and open the latch to remove the battery cover.
3. Insert two 9V PP3 batteries, observing the correct polarity (+/-) as indicated inside the compartment.
4. Replace the battery cover, secure the latch, and tighten the fixing screw.



Figure 4.1: Battery compartment diagram.

## 5. OPERATING INSTRUCTIONS

The control panel allows you to adjust various settings for effective metal detection.



Figure 5.1: Control Panel of the MD-4050.

## 5.1 Power On/Off and Volume

- **Power:** Press the 'OFF' button to turn the detector on or off.
- **Volume:** Use the 'VOLUME' knob to adjust the audio output level from the internal speaker or connected headphones.

## 5.2 Discrimination and Notch

The MD-4050 can discriminate between different types of metals. This feature allows you to ignore unwanted metals (like iron) and focus on more valuable targets.

- **ALL METAL Mode:** Press the 'ALL METAL' button to detect all types of metals. This mode offers the greatest depth detection.
- **DISC (Discrimination) Mode:** Use the 'DISC' button to enter discrimination mode. In this mode, you can adjust the discrimination level to filter out certain metals. The display will indicate the type of metal being discriminated against.
- **NOTCH Mode:** The 'NOTCH' function allows you to selectively eliminate specific metal categories from detection while still detecting others. Use the '+' and '-' buttons to adjust the notch settings.

## 5.3 Sensitivity (SENS)

The 'SENS' button adjusts the detector's sensitivity to metal objects. Higher sensitivity settings can detect smaller or deeper objects but may also increase false signals from ground mineralization or electrical interference.

- Press 'SENS' and use the '+' and '-' buttons to increase or decrease sensitivity.
- Start with a moderate sensitivity level and increase it gradually if conditions allow.

## 5.4 Ground Balance

The MD-4050 features a preset ground balance. This means the detector is pre-calibrated to reduce false signals from ground minerals, simplifying operation.

## 5.5 Earphone Socket

A 3.5mm earphone socket is provided for private listening and to conserve battery life. Connect standard stereo headphones to this jack.

## 5.6 Low Battery Indication

The detector features a low battery indication via an LED light. When the LED illuminates, it is time to replace the batteries to ensure continued optimal performance.

# 6. MAINTENANCE

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Proper care and maintenance will extend the life of your metal detector.

- **Cleaning:** Wipe down the detector with a damp cloth after each use. Avoid abrasive cleaners or solvents. The search coil is waterproof and can be rinsed with fresh water.
- **Storage:** Store the detector in a dry, cool place when not in use. Remove batteries if storing for extended periods to prevent leakage.
- **Cable Care:** Ensure all cables are free from kinks or damage. Avoid pulling on cables when disconnecting.
- **Battery Replacement:** Replace batteries promptly when the low battery indicator activates.

# 7. TROUBLESHOOTING

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If you encounter issues with your MD-4050, consider the following common solutions:

- **No Power:** Check if batteries are correctly installed and fully charged. Replace if necessary.
- **Erratic Signals/False Alarms:**
  - Reduce sensitivity.
  - Ensure the search coil cable is tightly wound around the stem and securely connected.
  - Move away from sources of electromagnetic interference (power lines, other electronic devices).
  - Check for loose connections.
- **Poor Depth Detection:**
  - Ensure batteries are fresh.
  - Increase sensitivity if conditions allow.
  - Operate in 'ALL METAL' mode for maximum depth.
- **No Audio:** Check volume setting and earphone connection. If using headphones, ensure they are functioning correctly.

If problems persist, contact OGMOYT customer support for further assistance.

## 8. SPECIFICATIONS

Feature	Specification
Model	MD-4050
Brand	OGMOYT
Detection Depth	Up to 16 cm (for a coin-sized object)
Search Coil	16.5 cm (6.5 inches) waterproof
Discrimination	Discriminates between aluminum and silver; detects all metals
Audio Output	View meter with speaker/buzzer, one tone audio
Earphone Jack	3.5mm
Ground Balance	Preset
Power Source	2 x 9V PP3 batteries (not included)
Low Battery Indicator	LED indication
Net Weight	0.9 kg

## 9. WARRANTY AND SUPPORT

Specific warranty details and direct support contact information are not provided within this manual. For warranty claims, technical support, or further inquiries, please refer to the original purchase documentation or visit the official OGMOYT website.