

Maclean MCE965

Maclean MCE965 Professional Metal Detector User Manual

INTRODUCTION

Thank you for choosing the Maclean MCE965 Professional Metal Detector. This device is designed for detecting various types of metals with precision and ease. It features a discrimination function to differentiate between metal types, an adjustable arm for comfortable use, and a waterproof search coil for versatile applications. Please read this manual thoroughly before operating the device to ensure proper use and to maximize its performance.

SAFETY INFORMATION

Always observe the following safety precautions to prevent injury or damage to the device:

- Do not operate the metal detector in areas with known underground utilities (e.g., electrical cables, gas lines, water pipes) without prior verification.
- Avoid using the detector during electrical storms to prevent lightning strikes.
- Always obtain permission before searching on private property.
- Exercise caution when digging to avoid injury from sharp objects or unstable ground.
- Keep the device away from extreme temperatures and moisture.
- Do not attempt to modify or disassemble the detector, as this will void the warranty and may cause damage.
- Dispose of batteries responsibly according to local regulations.

PACKAGE CONTENTS

Verify that all components are present in the package:

- Maclean MCE965 Metal Detector with Discrimination Controller
- User Manual (this document)

If any items are missing or damaged, please contact your retailer.

PRODUCT OVERVIEW

The Maclean MCE965 is equipped with several features to enhance your metal detecting experience:

- **DISC Function:** Allows the detector to distinguish between different types of metals, enabling you to filter out unwanted items.
- **Analog Indicator:** Provides a visual representation of detected metal and signal strength.
- **Adjustable Arm:** Ensures comfortable use for various user heights.
- **Waterproof Search Coil:** Permits detection in shallow water.
- **Sensitivity Adjustment:** Controls the detector's responsiveness to metal objects.
- **Acoustic Signal:** Emits an audible tone upon metal detection.
- **3.5mm Headphone Jack:** For private listening and clearer audio signals.
- **Low Battery Indicator:** Alerts you when the 9V battery needs replacement (below 8.8V).



Figure 1: Close-up of the control panel, showing the analog indicator, sensitivity dial, discrimination dial, volume control, headphone jack, and low battery indicator. The armrest is visible below the control box.



Figure 2: Detailed front view of the control panel, highlighting the 'SENSITIVITY' meter, 'VOLUME' and 'DISC' knobs, 'AUTO TUNE' button, 'LOW BATT' indicator, and 'EAR' (headphone) jack.

SETUP

1. Assembly

Follow these steps to assemble your metal detector:

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. Insert the lower stem into the middle stem, and then insert the middle stem into the upper stem (which includes the control box and armrest).
3. Adjust the length of the stem to a comfortable position where the search coil is parallel to the ground when you are standing upright. Secure the stem with the locking collar.
4. Wrap the 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.



Figure 3: Fully assembled Maclean MCE965 metal detector, ready for use.

2. Battery Installation

The MCE965 requires one 9V battery (not included).

1. Locate the battery compartment on the control box.
2. Open the compartment cover.
3. Connect a new 9V battery to the terminal clips, observing correct polarity (+/-).
4. Place the battery inside the compartment and close the cover securely.

The 'LOW BATT' indicator will illuminate when the battery voltage drops below 8.8V, signaling that the battery needs to be replaced.

OPERATING INSTRUCTIONS

1. Powering On and Basic Settings

1. Turn the 'VOLUME' knob clockwise to power on the detector. Continue turning to adjust the audio level.

2. Press the 'AUTO TUNE' button to automatically tune the detector. This should be done away from any metal objects.
3. Adjust the 'SENSITIVITY' knob. Start with a medium setting and increase it gradually for deeper detection. If the detector becomes unstable or produces false signals, reduce the sensitivity.

2. Discrimination (DISC) Function

The 'DISC' knob allows you to filter out unwanted metals, such as iron. Turning the 'DISC' knob clockwise increases the level of discrimination, ignoring more types of ferrous metals.

- **MIN (All Metal):** In this position, the detector will respond to all types of metal.
- **MAX:** In this position, the detector will ignore most common iron objects and small trash items, focusing on more valuable non-ferrous metals.

Experiment with the 'DISC' setting to find the optimal balance for your search environment.

3. Detecting Metals

1. Hold the detector comfortably, ensuring the search coil is parallel to the ground and about 1-2 inches above it.
2. Sweep the search coil slowly from side to side in overlapping arcs.
3. When a metal object is detected, the analog indicator will move, and an acoustic signal will sound. The strength of the signal and the movement of the needle indicate the proximity and size of the object.
4. To pinpoint the exact location, sweep the coil in a cross-pattern over the target area. The strongest signal will be directly over the object.

4. Using Headphones

Plug any standard 3.5mm stereo headphones into the 'EAR' jack on the control panel. Using headphones can help you hear subtle signals more clearly, especially in noisy environments, and conserve battery life by turning off the internal speaker.

MAINTENANCE

- **Cleaning:** Wipe the detector with a damp cloth after each use. Do not use abrasive cleaners or solvents. The search coil is waterproof and can be rinsed with fresh water, but the control box is not.
- **Battery Care:** Remove the 9V battery if the detector will not be used for an extended period to prevent leakage and damage.
- **Storage:** Store the detector in a cool, dry place. Avoid storing it in direct sunlight or extreme temperatures.
- **Coil Protection:** Avoid striking the search coil against hard surfaces.

TROUBLESHOOTING

Problem	Possible Cause	Solution
No power or no sound	Dead or incorrectly installed battery; Volume too low.	Replace 9V battery, ensuring correct polarity. Increase volume.
Constant beeping or false signals	High sensitivity setting; Electrical interference; Mineralized ground.	Reduce 'SENSITIVITY'. Move away from power lines or other electronic devices. Try adjusting 'DISC' or sweeping faster.

Problem	Possible Cause	Solution
Poor detection depth	Low sensitivity setting; Small or deeply buried object; High discrimination setting.	Increase 'SENSITIVITY'. Ensure proper sweeping technique. Reduce 'DISC' setting.
Detector does not discriminate	'DISC' knob set to MIN (All Metal).	Turn 'DISC' knob clockwise to increase discrimination level.

SPECIFICATIONS

- **Model:** MCE965
- **Power Source:** 1 x 9V battery (not included)
- **Low Battery Indicator:** Yes (below 8.8V)
- **Search Coil Diameter:** 7.5 inches (approx. 190mm)
- **Adjustable Length:** 78cm - 106cm
- **Weight:** 1.4 kg
- **Material:** Metal
- **Color:** Black/Red
- **Components Included:** Maclean MCE965 Metal Detector with Discrimination Controller

WARRANTY AND SUPPORT

Maclean products are designed for quality and reliability. For warranty information or technical support, please refer to the documentation provided at the point of purchase or contact your retailer. Keep your proof of purchase for any warranty claims.

For further assistance, you may visit the official Maclean website or contact their customer service department.