MINELAB Excalibur II

Minelab Excalibur II Underwater Detector User Manual

Model: Excalibur II | Brand: MINELAB

1. INTRODUCTION

The Minelab Excalibur II is an advanced underwater metal detector designed for effective use in both aquatic and terrestrial environments. Featuring Broad Band Spectrum (BBS) technology and superior ground rejecting capabilities, this amphibious machine is suitable for land, beach, wet sand, and underwater depths up to 200 feet (66 meters). This manual provides essential information for the proper setup, operation, and maintenance of your Excalibur II detector.

2. COMPONENTS AND PACKAGE CONTENTS

Your Minelab Excalibur II package includes the following items:

- Minelab Excalibur II Metal Detector Control Unit
- 10-inch Double D Submersible Search Coil
- NiMH Battery Pod
- Recharge Adapter
- 110V Wall Charger
- 10-inch Double D Coil Cover
- Short Shaft Diving Rod
- Submersible Headphones
- Instruction Manual (this document)

Figure 1: Overview of the Minelab Excalibur II detector and its included components, including the control unit, search coil, battery pack, and headphones.

Figure 2: The Minelab Excalibur II detector fully assembled with the 10-inch search coil and submersible headphones attached.
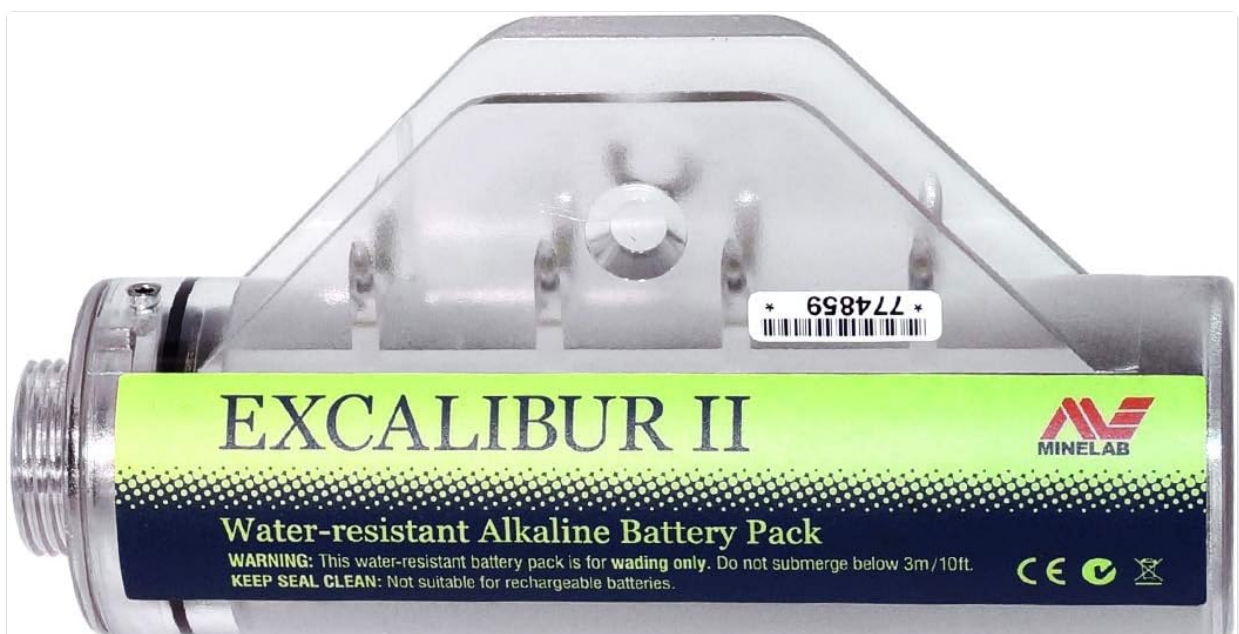

Figure 3: Close-up view of the water-resistant alkaline battery pack for the Excalibur II detector.

3. SETUP AND ASSEMBLY

3.1. Assembly

1. **Attach the Search Coil:** Secure the 10-inch Double D Submersible Search Coil to the lower shaft using the provided bolt and washers. Ensure it is firmly attached but allows for angle adjustment.
2. **Connect the Shafts:** Assemble the upper and lower shaft sections. For diving, use the short shaft diving rod.
3. **Mount the Control Unit:** Attach the control unit to the upper shaft.
4. **Connect the Coil Cable:** Carefully route the search coil cable up the shaft and plug it securely into the designated port on the control unit. Ensure the connection is watertight.
5. **Attach Headphones:** Connect the submersible headphones to the appropriate port on the control unit.

3.2. Battery Installation and Charging

The Excalibur II uses a NiMH Battery Pod. Ensure the battery is fully charged before use.

1. **Install Battery:** Insert the NiMH Battery Pod into its compartment on the detector. Ensure the seal is clean and properly seated for water resistance.
2. **Charging:** Connect the Recharge Adapter to the battery pod and then to the 110V Wall Charger. Plug the charger into a power outlet. The charging indicator will show the charging status. A full charge typically provides up to 12 hours of operation.

4. OPERATING INSTRUCTIONS

The Minelab Excalibur II is designed for ease of use across various detecting conditions.

4.1. Powering On/Off

Locate the power button on the control unit. Press and hold to power on or off the detector.

4.2. Understanding BBS Technology

The unique Broad Band Spectrum (BBS) technology transmits multiple frequencies simultaneously, providing excellent depth and sensitivity across a wide range of targets and ground conditions. This technology is particularly effective in highly mineralized ground and saltwater environments.

4.3. RCB Amplification

The RCB (Receive Coil Boost) feature amplifies weak target signals within the coil, reducing noise and boosting faint, deep objects. This enhances the detector's ability to find smaller or deeper targets.

4.4. Operating Modes and Ground Rejection

The Excalibur II offers superior ground rejecting technology, minimizing false signals from saltwater and mineralized ground. This allows for seamless transition between different environments:

- **Land Use:** Ideal for general metal detecting on dry land.
- **Beach/Wet Sand:** Optimized to handle the challenges of conductive saltwater and wet sand, reducing false signals.
- **Underwater:** Fully submersible up to 200 feet (66 meters), making it perfect for diving and underwater treasure hunting.

4.5. Target Identification and Discrimination

The Excalibur II provides simple yet effective discrimination capabilities. Familiarize yourself with the audio

tones and visual indicators (if applicable) to differentiate between desirable targets and unwanted junk. The detector's sensitivity allows for uncovering targets from significant depths.

5. MAINTENANCE AND CARE

Proper maintenance ensures the longevity and optimal performance of your Excalibur II detector.

- **Cleaning:** After each use, especially in saltwater, thoroughly rinse the detector (control unit, shaft, and coil) with fresh water. Wipe dry with a soft cloth. Do not use abrasive cleaners or solvents.
- **Battery Care:** Always ensure the battery compartment is clean and dry before closing. Recharge the NiMH battery as needed. For long-term storage, charge the battery to approximately 50% and store in a cool, dry place.
- **Storage:** Store the detector in a cool, dry environment, away from direct sunlight and extreme temperatures. Disassemble if necessary for compact storage.
- **Coil Cover:** Keep the 10-inch Double D Coil Cover attached to protect the search coil from scratches and impacts.

6. TROUBLESHOOTING

If you encounter issues with your Excalibur II, refer to the following common solutions:

- **No Power:** Check if the battery is fully charged and correctly installed. Ensure all connections are secure.
- **False Signals:** This can be caused by highly mineralized ground, electrical interference, or improper ground balance. Re-ground balance the detector or adjust sensitivity settings. Ensure the coil cable is not loose or damaged.
- **Weak Signals:** Check battery level. Ensure the search coil is clean and undamaged. Adjust sensitivity settings.
- **Water Leakage:** Immediately power off the detector. Inspect all seals (battery pod, coil connection, headphone connection) for dirt, damage, or improper seating. Dry all components thoroughly before reassembly and retesting.

For persistent issues, contact Minelab customer support.

7. SPECIFICATIONS

Feature	Specification
Brand	MINELAB
Model Number	3303-0106
Technology	BBS (Broad Band Spectrum) 17 frequency (1.5kHz - 25.5kHz)
Search Coil	10-inch Double D Submersible
Waterproof Depth	Up to 200 feet (66 meters)
Battery Type	NiMH Rechargeable Battery Pack (included)

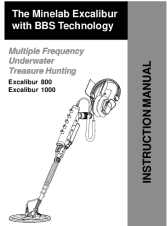|	
Battery Life	Up to 12 hours
Weight	Approximately 15.4 pounds (6.98 kg)
Adjustable Length	Yes
Operating Frequency	25.5 KHz (multi-frequency operation)
Recommended Use	Metal Detection (Underwater, Beach, Land)

8. WARRANTY INFORMATION

The Minelab Excalibur II comes with a 12-month factory warranty. Please retain your proof of purchase for any warranty claims. The warranty covers manufacturing defects under normal use conditions. It does not cover damage caused by misuse, accidents, unauthorized modifications, or failure to follow the instructions in this manual.

9. CUSTOMER SUPPORT

For technical assistance, troubleshooting, or warranty inquiries, please visit the official MINELAB website or contact their customer support directly. Ensure you have your product model number and serial number available when contacting support.

Related Documents - Excalibur II

	[Minelab Excalibur 800 & 1000: Underwater Treasure Hunting Metal Detector Instruction Manual](#) Comprehensive instruction manual for the Minelab Excalibur 800 and 1000 metal detectors, detailing BBS technology, assembly, controls, operation, and maintenance for underwater treasure hunting.
	[Minelab Excalibur II Metal Detector User Manual](#) This comprehensive user manual provides detailed instructions for operating and maintaining the Minelab Excalibur II metal detector. It covers its advanced BBS (Broad Band Spectrum) technology, assembly, operation modes, settings, maintenance, troubleshooting, and specifications for underwater and multi-frequency treasure hunting.
	[Minelab Excalibur II Metal Detector: Assembly and Operation Manual](#) A comprehensive user manual for the Minelab Excalibur II metal detector, detailing assembly, operation, features like BBS Wide Band Technology, troubleshooting, care, and technical specifications. Designed for optimal treasure hunting.

	[Minelab Goldstriker Instruction Manual: Gold Prospecting Guide](#) Comprehensive instruction manual for the Minelab Goldstriker metal detector, covering setup, operation, controls, prospecting tips, care, troubleshooting, and specifications for effective gold detection.
	[Minelab Excalibur II Manual de Instrucción](#) Manual de instrucción detallado para el detector de metales anfibio Minelab Excalibur II. Aprenda sobre su tecnología BBS, configuración, operación, mantenimiento y especificaciones técnicas para una detección de metales óptima.
	[Minelab Excalibur Metal Detector Instruction Manual](#) Comprehensive instruction manual for the Minelab Excalibur underwater metal detector, covering assembly, controls, operation, maintenance, troubleshooting, and specifications. Learn how to use your Excalibur for effective treasure hunting.