

# Clarke®



## PROFESSIONAL METAL DETECTOR

MODEL NO: MD1500

PART NO: 4501220

### OPERATION & MAINTENANCE INSTRUCTIONS



05/08

## **INTRODUCTION**

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Thank you for purchasing this CLARKE Professional Metal Detector.

Before you try to use this product, read this manual and follow the instructions carefully. In doing so you will ensure your safety and the safety of others around you. You can also look forward to a purchase that gives you long and satisfactory service.

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## **GUARANTEE**

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This product is guaranteed against faulty manufacture for a period of 12 months from the date of purchase. Please keep your receipt which will be required as proof of purchase.

This guarantee is invalid if the product is found to have been abused or tampered with in any way, or not used for the purpose for which it was intended.

Faulty goods should be returned to their place of purchase, no product can be returned to us without prior permission.

This guarantee does not effect your statutory rights.

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## **IN THE BOX**

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- 1 x Instruction Manual
  - 1 x Control Unit
  - 1 x Arm Brace
  - 1 x Search Coil
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## **SPECIFICATIONS**

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Model Number ..... MD1500

Power Supply: ..... 8 x 1.5 Volt AA Batteries

Operation Modes: ..... All Metal & Discrimination

Sensitivity, Max Depth: ..... 200 mm

Low Battery Indication: ..... LED

## **CODE OF ETHICS**

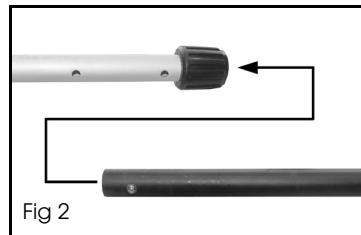
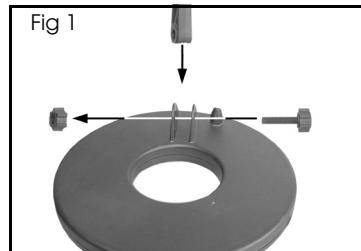
When metal detecting, here are some basic rules that you should follow.

- Always get consent of the landowner before you search any site.
- Respect the rights and property of others.
- Observe all national and local laws when you use the metal detector.
- Do not destroy historical and archaeological treasures. If you do not know what you have found, contact your local museum or historical society.
- Fill any holes that you have made and leave the land as you found it.
- Only use the metal detector where safe to do so.
- Dispose of any rubbish that you find in a safe area, do not leave it for somebody else to find.
- Always follow procedures relating to finds as laid down in the Treasure Act 1996.

# **PREPARATION**

## **ASSEMBLING THE METAL DETECTOR**

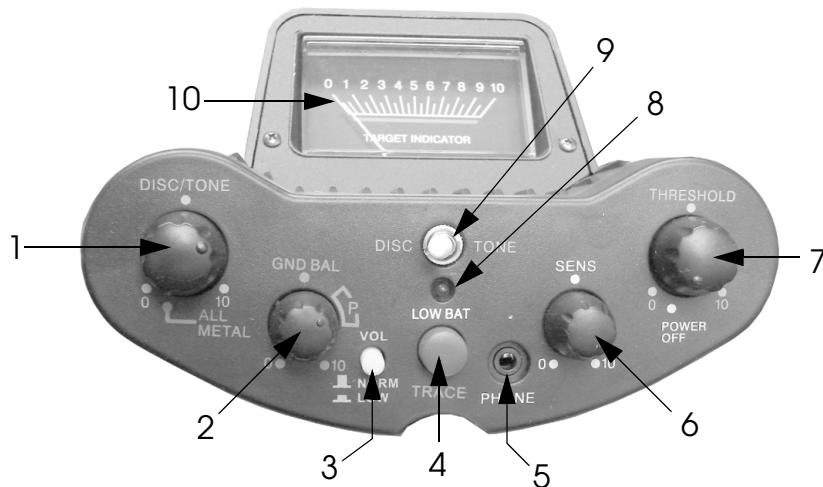
1. Remove the nut and bolt from the search coil.
2. Position the lower stem between the posts on the search coil and replace the nut and bolt as shown in Fig 1.
3. Adjust the search coil so that it is parallel to the ground and tighten the nut and bolt to lock into position.
4. Insert the lower stem into the upper stem See Figure 2. Press the two spring clips on the side of the lower stem, the spring clips will locate into the holes on the upper shaft.
5. Adjust the length of the shaft.
  - When your arm is relaxed and by your side the search coil should be 20-50 mm above the ground.
6. Wind the search coil lead around the stem and insert the connector into the jack on the control housing as shown in Fig 3.



## **BATTERIES**

- Only use alkaline batteries.
  - Do not mix old and new batteries
1. Remove the battery compartment cover from the rear of the control housing.
  2. Insert 8 AA batteries into the battery compartment. Make sure that you follow the polarity symbols inside the compartment.
  3. Replace the battery compartment cover.
    - Used batteries must be disposed of according to local regulations.
    - Do not burn or bury used batteries.

# THE CONTROL PANEL



NO	NAME	DESCRIPTION	NO	NAME	DESCRIPTION
1	DISC/TONE	This setting is used to make the metal detector reject lower quality targets.	6	SENS	Used to adjust the sensitivity.
2	GND BAL	Corrects for the metallic minerals that normally occur in the ground.	7	THRESHOLD	Also used as a power switch The threshold should be tuned to the point where a faint tone can be heard.
3	VOL	Used to adjust the volume level.	8	LOW BAT	Low battery indicator, replace the batteries when this is lit.
4	TRACE	Used to help pinpoint a target.	9	MODE SELECTOR	Discrimination (DISC) / All Metal (TONE).
5	PHONE	Headphones socket.	10	METER	In ALL METAL mode, the meter will show the signal strength. In DISC mode, the meter will show the type of metal being detected.

# **OPERATION**

## **HOW TO TURN THE DETECTOR ON OR OFF**

- Rotate the THRESHOLD control clockwise to turn the Metal Detector ON.
- Rotate the THRESHOLD control fully to the left to turn the Metal Detector OFF.

## **DETECTION MODES**

There are 3 ways to detect metal using this metal detector.

### **ALL METAL**

This MODE detects every type of metal and must be used when the material of the required object is not known.

### **DISCRIMINATION**

This mode rejects some types of metal depending on the setting of the DISC/TONE dial.

At setting '0' the detector detects almost all metal. As you increase the setting more objects are rejected. On a high setting only the most conductive metals are found.

**NOTE:** If the control is set too high, then modern coins are rejected.

### **TONE**

The TONE mode discriminates between different types of metal with high or low pitched tones.

## **SEARCH HINTS**

- You must move the search coil from side to side in an arc approximately 15 cm wide.
- Do not swing the search coil like a pendulum, raising the sides. This will give you false readings.
- Sweep the search coil at a slow even pace.

# USING THE METAL DETECTOR

## ALL-METAL MODE

1. Set the DISC/TONE dial (1) to the ALL METAL position.
2. Set the SENS dial to the middle position.
3. Hold the search coil 1 meter above the ground.
4. Hold down the TRACE button and rotate the GND BAL to the area marked 'P'. Then release the TRACE button.
5. Hold the search coil 2-5 cm above the ground.

If the pointer swings to the right rotate the GND BAL to the left slightly, If the pointer swings to the left rotate the GND BAL to the right.

Each time you adjust the GND BAL press the TRACE button once.

## DISCRIMINATION MODE

1. Set the Mode Selector (9) to the DISC position.
2. Rotate the DISC/TONE dial (1) clockwise away from the ALL METAL position.

At setting '0' the detector will detect nearly all metal. As you increase the setting more objects will be rejected. On a high setting only the most conductive metals will be found.

## TONE MODE

1. Set the Mode Selector (9) to the TONE position.
2. Rotate the DISC/TONE dial (1) clockwise away from the ALL METAL position.

At setting '0' the detector will respond to all metals with a high pitched tone. On a high setting only the most conductive objects (such as silver) will respond with a high pitched tone.

## SENSITIVITY

SENS adjusts the sensitivity of your metal detector to metal objects.

If you turn this knob fully clockwise, it will be more sensitive to small objects and detect metal deeper down. However, if there are a high concentration of minerals in the ground it may give you false signals.

## THRESHOLD (DISCRIMINATION MODE ONLY)

The threshold is the optimum point of tuning on a detector where a faint tone can be heard. By setting the threshold to this point the metal detector will be at its most sensitive.

## USING HEADPHONES

1. Insert your headphones into the headphone socket on the control housing.

Connecting stereo headphones automatically disconnects the loudspeaker. Headphones give slightly more sensitivity as they reduce external noises which can interfere with your ability to detect objects.



*CAUTION: Set the volume to the lowest level before putting on the headphones. Then adjust the volume to a comfortable level.*

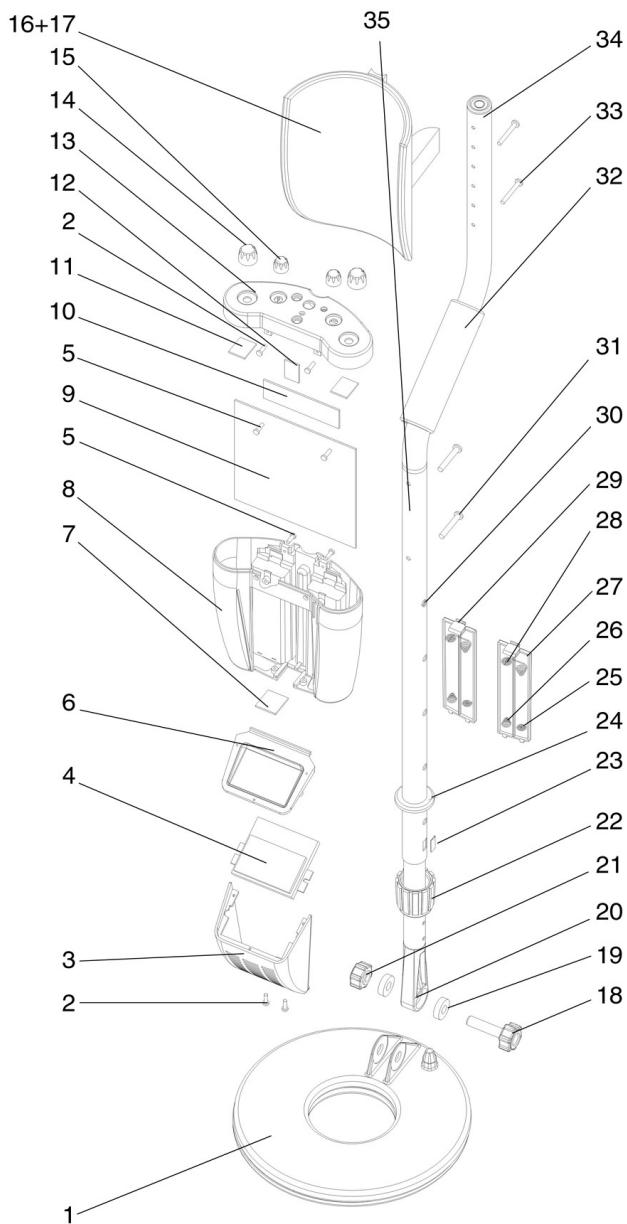
*CAUTION: Do not wear headphones when operating near roads or traffic.*

## TROUBLESHOOTING

### FALSE SIGNALS

- If you are getting false signals from electrical cables, try to lower the sensitivity.
- The metal detector can give a false reading in areas which have a high mineral content. In this case lower both the sensitivity and the threshold and hold the search coil slightly higher than normal.

# EXPLODED PARTS DIAGRAM



## PARTS LIST

NO	DESCRIPTION	Part No	NO	DESCRIPTION	Part No
1	Search Coil	TXMD150001	19	Washer	TXMD150019
2	Screw ST2.6X6-F	TXMD150002	20	End Shaft	TXMD150020
3	Meter Cover Assembly	TXMD150003	21	Knob	TXMD150021
4	Meter	TXMD150004	22	Lock Nut	TXMD150022
5	Screw ST2.6X6-F	TXMD150005	23	Slide Board	TXMD150023
6	Meter Panel Assembly	TXMD150006	24	Shaft Cover	TXMD150024
7	PCB	TXMD150007	25	Spring	TXMD150025
8	Cabinet	TXMD150008	26	Spring	TXMD150026
9	PCB	TXMD150009	27	Spring	TXMD150027
10	PCB	TXMD150010	28	Battery Cover	TXMD150028
11	PCB	TXMD150011	29	Battery Cover	TXMD150029
12	PCB	TXMD150012	30	Spring Clip	TXMD150030
13	PCB	TXMD150013	31	Screw M4X25	TXMD150031
14	Control Button	TXMD150014	32	Grip Lining	TXMD150032
15	Control Button	TXMD150015	33	Screw M3X25	TXMD150033
16	Arm Support	TXMD150016	34	Handle Top	TXMD150034
17	Washer	TXMD150017	35	Main Arm	TXMD150035
18	Knob Connector	TXMD150018			

## **PARTS AND SERVICING**

For Parts & Servicing, please contact your nearest dealer, or  
CLARKE International, on one of the following numbers.

**PARTS & SERVICE TEL: 020 8988 7400**

**PARTS & SERVICE FAX: 020 8558 3622**

**or e-mail as follows:**

**PARTS:** [Parts@clarkeinternational.com](mailto:Parts@clarkeinternational.com)

**SERVICE:** [Service@clarkeinternational.com](mailto:Service@clarkeinternational.com)

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