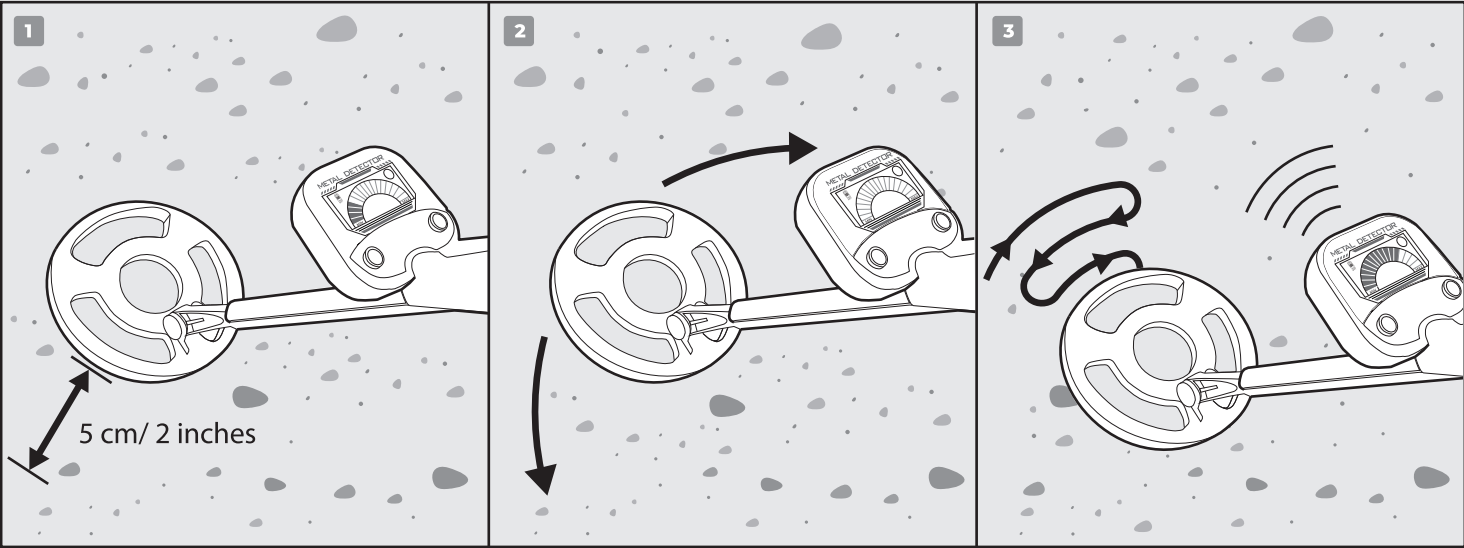


H. DETECTING



1. Find a clear area in your backyard, at the beach or a similar place. Always take an adult with you for safety. Extend and adjust your metal detector's shaft to a suitable length as described above. Turn the metal detector on. Hold the metal detector with the coil about 2 to 5 cm above the ground.
  2. Swing the search coil from side to side in a regular motion, at a rate of 1 to 2 seconds per swing. Overlap the swing paths to ensure you are not missing any area of the ground.
  3. When a metal object is detected, the metal detector's meter symbol on the LCD screen will flash and there will be a beeping sound too.
- Continue sweeping the coil over the target area in a narrowing side-to-side pattern to find the precise location of the object. This is called pinpointing. Congratulations. You have discovered your first buried "treasure"!

What might you find?

1. Jewelry such as earrings, necklaces, hair pins, and bracelets. Most pieces of jewelry have metal part so they can be detected. You might find the stones or gems in the jewelry intact, making an exciting find.
2. Old and modern coins. It's very exciting to find a very old coin in the ground.
3. Glass bottles with metal caps may lead you to antique bottles and other treasures.
4. Buttons and buckles. These are normally from old clothes that have rotted away. They are normally old and can be quite valuable.

I. HOW DOES METAL DETECTOR WORK

A metal detector works using electromagnetism, which is a combination of electricity and magnetism. Inside the search coil there is a long wire coiled into circles. When the detector is switched on, an electric current flows through the coil. An electric current always creates a magnetic field, so there is a magnetic field around the coil. As you sweep the coil from side to side the magnetic field passes through any metal in the ground. This creates an electric current in the metal, which in turn creates a magnetic field around the metal. The detector senses this magnetic field and makes a noise to alert you that it has detected the metal.

J. FUN FACTS

- The first metal detectors were invented in the 1880s.
- The effect that a magnetic field can cause a current in metal is called electromagnet induction. It's used in generators to produce electricity.
- Complex metal detectors can tell the difference between different metals such as iron, gold and lead.
- Specialised metal detectors, including archways and hand-held wands are used at airports, buildings, and events to check that people are not carrying hidden metal objects.
- If food factories metal detectors check for bits of metal in the food that might have broken off factory machinery.
- In 2009, a metal-detecting hobbyist called Terry Herbert unearthed a treasure hoard of 4,600 pieces of gold, silver and jewelry in Staffordshire, UK. The hoard, buried in the 7th century, was worth more than 4 million US dollars.

QUESTION AND COMMENTS

We treasure you as a customer and your satisfaction with this product is important to us. In case you have any comments or questions, or you find any parts of this kit missing or defective, please do not hesitate to contact our distributor in your country, whose address is printed on the package. You are also welcome to contact our marketing support team at Email: [infodesk@4M-IND.com](mailto:infodesk@4M-IND.com), Fax (852) 25911566, Tel (852) 28936241, Web site: [WWW.4M-IND.COM](http://WWW.4M-IND.COM)

# METAL DETECTOR

PLEASE SCAN THE QR CODE TO VIEW MULTI-LANGUAGE INSTRUCTIONS

**⚠ WARNING:**  
**CHOKING HAZARD - Small parts.**  
**Not for children under 3 years.**

TO PARENTS: PLEASE READ THROUGH THESE INSTRUCTIONS BEFORE PROVIDING GUIDANCE TO YOUR CHILDREN.

A. SAFETY MESSAGES

1. Please read through all the instructions and keep them since they contain important information.
2. Adult supervision and assistance are required at all times.
3. This kit is intended for children 8 years or older.
4. This kit and its finished product contain small parts which may cause choking if misused. Keep away from children under 3 years old.
5. To prevent possible short circuits, never touch the contacts inside the battery case with any metal.
6. Only install batteries after the kit is assembled. Adult supervision is required.
7. Do not lean on the detector to support your body. It is not designed for this purpose.
8. The metal detector search coil is splash proof. However, do not submerge it in water as it is not designed for underwater use.

B. USE OF BATTERY:

1. Requires one 9V 6F22/6LR61 battery (not included).
2. For best results, always use fresh batteries.
3. Make sure you insert the batteries with the correct polarities.
4. Remove the batteries from the kit when not in use.
5. Replace exhausted batteries straight away to avoid possible damage to the kit.
6. Rechargeable batteries must be removed from the kit before recharging.
7. Rechargeable batteries must be recharged under adult supervision.
8. Make sure that the supply terminals in the battery case are not short circuited.
9. Do not attempt to recharge non-rechargeable batteries.

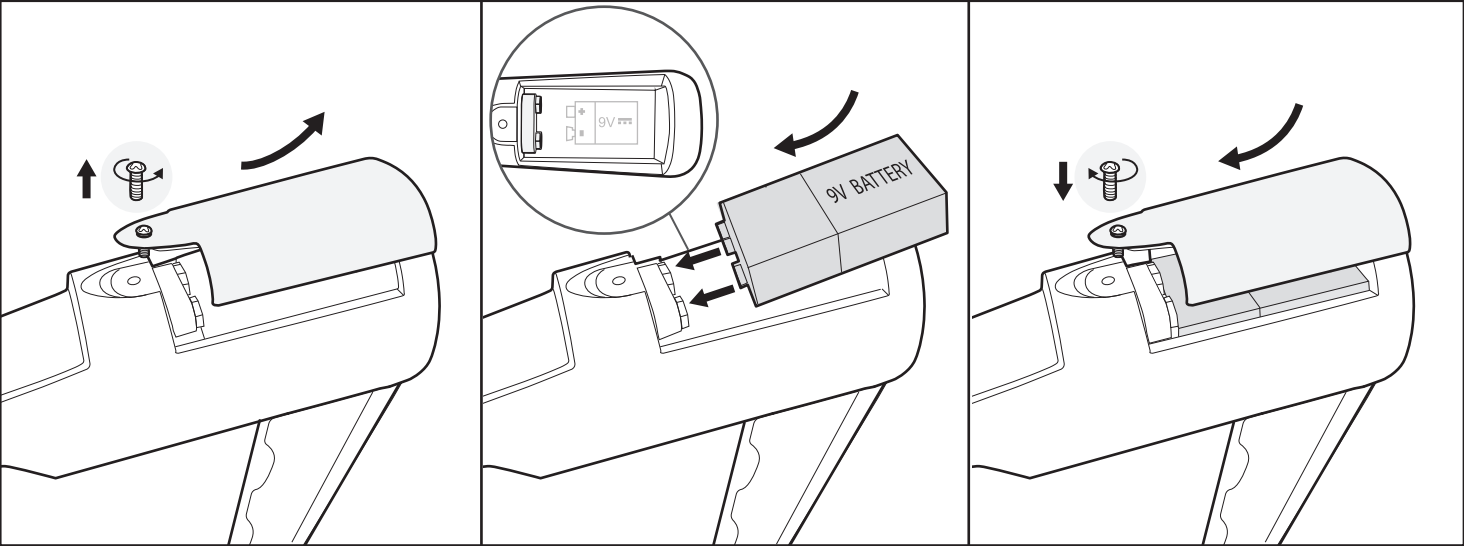
C. RULES TO OBSERVE

1. Safety first:
  - Always take an adult with you when metal detecting.
  - Be careful of ditches and streams when detecting in woodlands.
  - Be aware of the tide when metal detecting at beaches.
2. Obey local laws and respect other people's property:
  - Make sure you don't break any laws in your country. Using a metal detector is against the law in most parks and historic sites. There may be other local laws that tell you where you can and can't use a metal detector.
  - Don't trespass. Always ask for permission from property owners before you do any detecting on their property.
  - If you think something you find might be valuable or historically important you should tell your local authorities. You might receive a reward.
  - You might need a license from your local authority to go metal detecting in some places.
3. Look after the environment:
  - When you find a metal object you may have to dig a small hole to retrieve it. Keep such holes as small as possible and fill them in neatly when you are finished.
  - It's generally wise to take an extra bag along for any trash you dig up. And it is good practice to remove and properly discard this instead of just burying it again.

D. FCC Marking

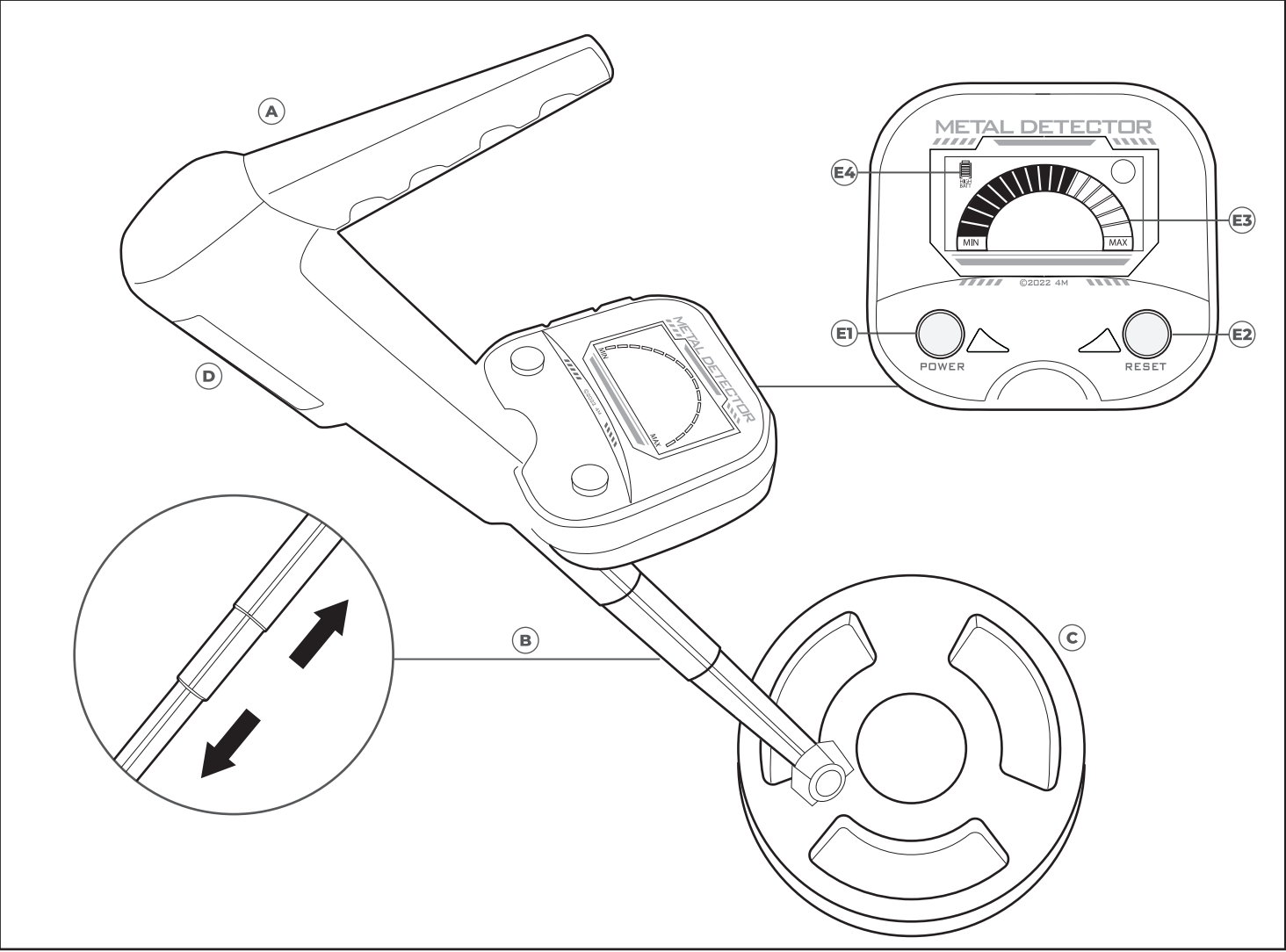
Product Name: Metal Detector.  
Model No.: 00-03933.  
Trade Name: 4M Industrial Development Limited.  
This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:  
(1) This device may not cause harmful interference,  
And (2) this device must accept any interference received, including interference that may cause undesirable operation.  
Caution: Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.  
Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:  
(1) Reorient or relocate the receiving antenna.  
(2) Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.  
(3) Increase the separation between the equipment and receiver.  
(4) Consult the dealer or an experienced radio/TV technician for help.

E. INSTALLING THE BATTERY



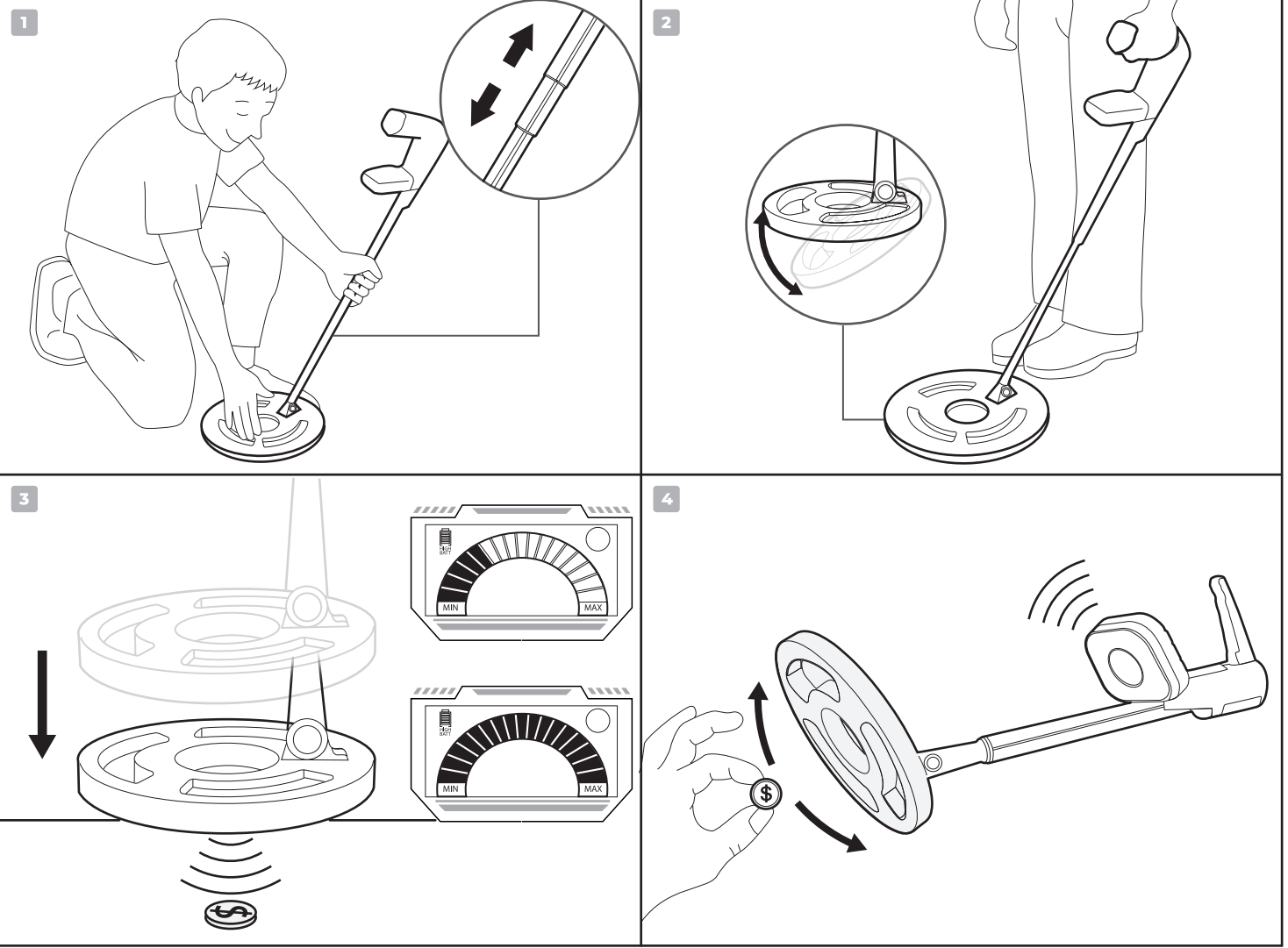
1. Open the battery cover with a crosshead screwdriver. (Adult supervision is required.) 2. Locate the battery connector and connect it to the battery with the correct polarities (+ and -). Put the battery in the battery compartment. 3. Close the battery cover and tighten the cover screw.

F. YOUR METAL DETECTOR (Also required but not included in this kit: a small crosshead screwdriver and 1 x 9V battery.)



- A: Handle  
B: Retractable shaft  
C: Search coil  
D: Battery compartment  
E: LCD monitor  
E1: Power button - Press this button for a while to turn on and off the metal detector.  
E2: Reset button - Press the right button to reset the original mode.  
E3: Detecting meter symbol - The meter symbol flashes and emits a beeping sound when detecting a metallic object.  
E4: Battery level indicator - It shows battery level and flashes when replacement is needed.

G. SETTING & TESTING YOUR METAL DETECTOR



1. Holding the retractable aluminum shaft with one hand and the search coil with the other hand, pull apart to extend the aluminum shaft to full length.

2. Hold the metal detector in your hand with your arm extended when you are in standing position. Adjust the shaft's length so that the search coil rests on the ground close to the your feet. Pivot the search coil for the best searching position.

3. QUICK TEST  
Turn on your metal detector by long pressing the "POWER" button.  
Put a metal coin on the ground outdoors.  
Hold the metal detector search coil above the coin, then gently move the search coil towards the coin. The meter symbol will flash and the detector will start to beep too. Move the search coil away from the coin and its flashing symbol and beeping sound will stop to show that the metal object is no longer being detected.  
You can press the "RESET" button to reset the metal detector to standby mode.  
After you complete this quick test you can start searching for metal objects.

4. Notes: Test your detector outdoors only. Large metal objects inside the home may interfere with the detector's operation since the floors and walls of most homes contain metal. Electrical appliances inside the home like microwave ovens, televisions, and some light fixtures emit electromagnetic energy which can interfere with the detector's operation. If you do conduct an indoor demonstration, hold the search coil off the ground and wave a coins or metal objects around the search coil.