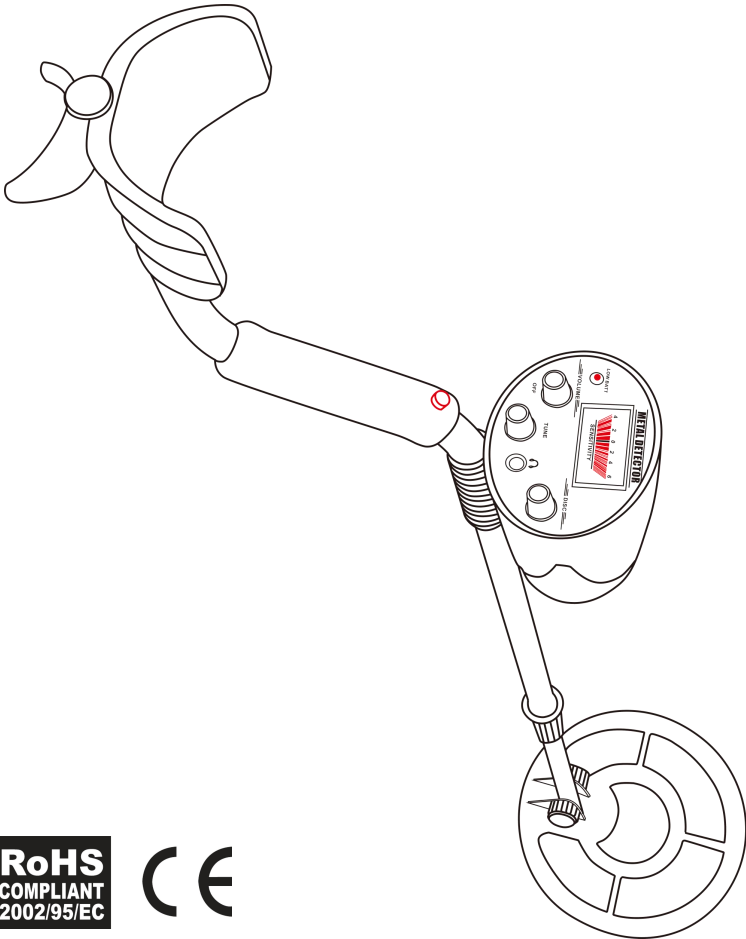


**AIR600**

# **UNDERGROUND METAL DETECTOR**



**RoHS**  
COMPLIANT  
2002/95/EC

**CE**

## FEATURE

With your metal detector, you can hunt for coins, relics, jewelry, gold, and silver just about anywhere. The detector is versatile and easy to use.

The detector's features include:

**Headphone Jack**—let you connect headphones (not supplied) and operate without trouble.

**View Meter and Pointer**—shows the probable type of metal being detected .

**Waterproof Search Coil**—Can be used in shallow water.

**Note:** The search coil is waterproof, but the control housing is not waterproof.

**Adjustable stem**—let you adjust the detector's length for comfortable use.

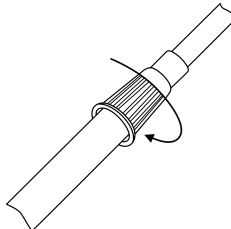
**Power**—1× 9V DC battery (not supplied)

## PREPARATION

### 1. INSTALLING THE DETECTOR

the installation can be finished easily without tools, just following the steps in below:

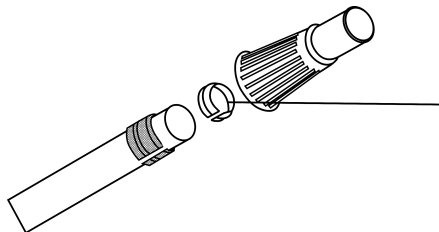
- Turn the stem's lock nut clockwise until it loosens.
- Lengthen or shorten the stem so when you stand upright with the detector in your hand, the search coil is level with and about 1.3-5cm above the ground with your arm relaxed at your side.



- Then turn the stem's lock nut counter clockwise to lock it in place.

**Note:**

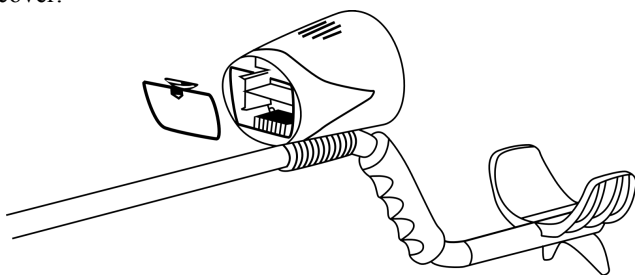
No need to loosen the stem lock completely, or the plastic ring inside may easily fall out and got lost. If the inside ring falls out, please put it back and then tighten the lock set.



- Loosen the knobs at the search coil's end, then adjust the search coil to the desired angle. (The search coil should be parallel with the ground.) Tighten the knobs just enough to keep the search coil from rotating or wobbling.

## 2. INSTALLING BATTERIES

- Power off the detector.
- Slide the battery cover off in the direction of the arrow.
- Insert the battery into the compartment as indicated by the polarity symbols (+ and -) marked inside the compartment. And then replace the cover.



**Cautions:**

- Always remove old or weak batteries which can leak chemicals that can destroy electronic parts.

- If you do not plan to use the detector for a week or more, remove the batteries.
- Dispose the old batteries promptly and properly.
- Replace the battery when “LOW BATT” light turns on.

### **3. USING HEADPHONE**

You can connect a pair of stereo headphones (not supplied) to the detector so you can listen to it privately. Using headphone also saves battery power and makes it easier to identify subtle changes in the sounds you hear, for better detection results.

To connect headphone to the detector, insert the its 3.5mm plug into the headphone jack on the side of the control housing. The detector’s internal speaker disconnects when you connect the headphone.

#### **Listening Safely**

- Do not listen at extremely high volume levels. Extended high volume listening can lead to permanent hearing loss.
- Do not wear earphones while operating your detector near high-traffic areas.

### **OPERATION**

This Metal Detector distinguishes between ferrous and nonferrous metals. Ferrous metal includes iron, while non-ferrous metals such as gold, silver, copper, platinum, aluminum, lead, and zinc.

#### **1.POWER ON THE DETECTOR**

Hold the detector in a comfortable position, then rotate **VOLUME** away from **OFF** to power on the detector.

#### **2.TUNING**

- Rotate **VOLUME** to the 11 o’clock position.
- Set **DISC** to its midpoint.

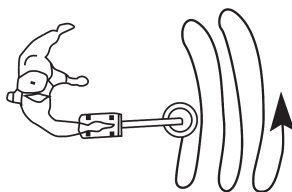
- Hold the search coil about 1 feet away from the ground, hold down the red button on the handle, and slowly rotate **TUNE** left and right until the pointer on the view meter rests at or near 0, then release the red button.

**Note:** Press the red button on the handle at any time during operation and the pointer will return to 0 automatically.



### 3.USING THE DETECTOR

- Remove watches,rings,or other metal jewelry you are wearing.
- Holding the search coil level and about 1/2-2 inches above the ground.
- Slowly move the search coil over the area where you placed the sample, sweeping the search coil in a side-to-side motion. The distance of the movement path should be around 10-15cm. The smaller the target metal, the closer you should hold the detector to the ground.



- If the detector detects the material, it will give a sound indication. When detecting ferrous metal, detector will give out a lower voice and the pointer moves to the left. When detector finds non-ferrous metal, it will make louder voice while the pointer turns to the right .
- If the detector does not detect the material, check the battery power and check if the search coil is properly connected.

- Using DISC to enable the detector discriminate different metal.

**Caution:**

Everytime after adjusting the DISC, user need to do the tuning again.

## **TESTING AND USING THE DETECTOR**

To learn how the detector reacts to different metals, you should test it before you use it the first time. You can test the detector indoors and outdoors.

### **1.INDOOR TESTING**

- Remove any watches, rings, or other metal jewelry you are wearing, then place the detector on a wooden or plastic table.
- Adjust the search coil's angle so the flat part faces the ceiling.

**Note:** Never test the detector on a floor inside a building. Most buildings have metal of some kind in the floor, which might interfere with the objects you are testing or mask the signal completely.

- Rotate VOLUME to the 11 o'clock position. Set DISCRIMINATION to its midpoint. Press the red button, and slowly rotate left and right until the pointer on the view meter rests at or near 0.
- Move a sample of the material you want the detector to find (such as a gold ring or a coin) about 5cm above the search coil. If the detector detects the material, the pointer moves to the left (ferrous) with its sound down or to the right (non-ferrous) with its sound up while the detector determines the type of meal it is detecting. If the detector does not detect the material, check the battery power and verify that the search coil is properly connected.

**Note:** If you are using a coin, the detector detects it more easily if you hold it so a flat side is parallel with the flat side of the search coil (not the edge).

### **2.OUTDOOR TESTING & USING**

- Find an area on the ground outside where there is no metal.

- Place a sample of the material you want the detector to find (such as a gold ring or a coin) on the ground. (If you are using valuable metal such as gold to test the detector, mark the area where you placed the item, to help you find it later. Do not place it in tall grass or weeds.
- Rotate VOLUME about two-thirds clockwise. Set DISCRIMINATION to its midpoint.
- Press the red button, and slowly rotate left and right until the pointer on the view meter rests at or near 0.
- While holding the search coil level and about 2.5-5cm above the ground, slowly move the search coil over the area where you placed the sample, sweeping the search coil in a side-to-side motion.
- Before try finding other metal in the area, press the red button to return the pointer to the center of the view meter.

### **Search Coil Sweeping Hints:**

- Never sweep the search coil as if it were a pendulum. Raising the search coil while sweeping or at the end of a sweep causes false readings.
- Sweep slowly - hurrying makes you miss targets.

If the detector detects the material, it sounds a tone and the pointer moves to the type of metal it found.

If the detector does not detect the material, make sure you are moving the search coil correctly.

### **Notes:**

- The detector responds with a strong signal when it detects most valuable metal objects. If a signal does not repeat after you sweep the search coil cover the target a few times, the target is probably junk metal.
- False signals can be caused by trashy ground, electrical interference, or large irregular pieces of junk metal. False signals are usually broken or non-repeatable.

### 3. HINTS

- **How to use DISC**

Discrimination is the detector's ability to differentiate between types of metal. The detectors DISCRIMINATION setting determines whether the detector will distinguish between different types of ferrous and non-ferrous metals.

You can set DISCRIMINATION to minimum (fully counterclockwise), with rotating clockwise, the detector first discriminates iron, then pull tabs and nickel. When set the DISCRIMINATION fully clockwise, silver still can not be discriminated. The sound will be lower and the pointer will move to left when the unit detects discriminated metal. The sound will be higher and the pointer will move to right when the unit detects metal which is not discriminated.

**Note:** Each time you use the detector in a different area, you must adjust DISCRIMINATION. Each search location presents new challenges.

- **About false signals**

Because your detector is extremely sensitive, trash-induced signals and other sources of interference might cause signals that seem confusing. The key to handling these types of signals is to dig for only those targets that generate a strong, repeatable signal. As you sweep the search coil back and forth over the ground, learn to recognize the difference between signals that occur at random and signals that are stable and repeatable.

- **The factors may affect detection**

No detector is 100 percent accurate. Various conditions influence metal detection. The detector's reaction depends on a number of things: the angle at which the object rests in the ground, the depth of the object, the amount of iron in the object, the size of the object.

### 4. PINPOINTING A TARGET

Accurately pinpointing a target makes digging it up easier. However, it needs practice to improve this skill, and we suggest you practise finding and digging up small metal objects on your own property before you search other locations. Sometimes, targets are difficult to accurately



locate due to the sweep direction. Try changing your sweep direction to pinpoint a target.

**Please follow these steps to pinpoint a target:**

- When the detector detects a buried target, continue sweeping the search coil over the target in a narrowing side-to-side motion. Make a visual note of the exact spot on the ground where the detector beeps.
- Stop the search coil directly over this spot on the ground. Then move the search coil straight forward away from you and straight back toward you a couple of times. Make a visual note of the exact spot on the ground where the detector beeps.
- Repeat Steps 1-2 at a right angle to the original searchline, making an “X” pattern. The target should be directly below the “X” at the point of the loudest response.

**Notes:**

- If trash in an area is so heavy that you get false signals, slow your sweep speed and use shorter sweeps.
- Recently buried coins might not respond the same as coins buried for a long period of time because of oxidation.
- Some nails, nuts, bolts, and other iron objects (such as old bottle caps) oxidize and create a “halo” effect. A halo effect is caused by a mixture of natural elements in the ground and the oxidation created by different metals. Because of the metal mixtures, target signals might not be in a “fixed” position. This effect makes these objects very hard to detect accurately.

**TROUBLE SHOOTING**

If your detector is not working as it should, follow the suggestions below to see if you can eliminate the problem.

Problem	Suggestions
<p>The detector displays or sounds false signals.</p>	<p>You might be sweeping the detector’s search coil too fast or at the wrong angle. Sweep the search coil more slowly and hold the detector correctly. See “Testing and Using the Detector” and “Pinpointing a Target”.</p>
	<p>The detector might sound a false signal if it detects heavily oxidized metals. Try pinpointing the target from several different angles (see “Pinpointing a Target”). If the detector does not display and sound the same signal each time, the target is probably heavily oxidized metal.</p>
<p>The display does not show the correct metal type when the detector finds a target.</p>	<p>There might be more than one target in the area you are searching.</p>
	<p>The target might be a type of metal that the detector does not recognize.</p>
	<p>If the target is heavily oxidized, the detector might not display the correct metal type. This is not a malfunction.</p>

## CARE AND MAINTENANCE

Your metal detector is an example of superior design and craftsmanship. The following suggestions will help you care for your metal detector so you can enjoy it for years.



Handle the detector gently and carefully. Dropping it can damage circuit boards and cases and can cause the detector to work improperly.



Use the detector only in normal temperature environments. Temperature extremes can shorten the life of electronic devices, damage the cases of the detector.



Wipe the detector with a damp cloth occasionally to keep it looking new. Do not use harsh chemicals, cleaning solvents, or strong detergents to clean the detector.



Keep the detector away from dust and dirt, which can cause premature wear of parts.

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