

# Famous Trails

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## **MD9100 Metal Detector**

## **OWNER'S MANUAL**

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## Features

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:

**LCD Display**—shows the probable type of metal with an arrow, the depth of the target, DISC/NOTCH range, the level of sensitivity, the operating mode, and low battery indication.

**Three Tone Audio Discrimination**—sounds distinctive tones for different types of metals.

**Notch**—ignores junk metal and finds valuable items by setting the disc and notch range.

**Super Slow Sweep Identification**—with a very slow sweep of the search coil to discriminate different types of metal.

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

**Waterproof Search coil**—lets you use the detector even if you must put it under water.

Note: Your metal detector requires two 9-volt alkaline batteries (not supplied).

# PREPARATION

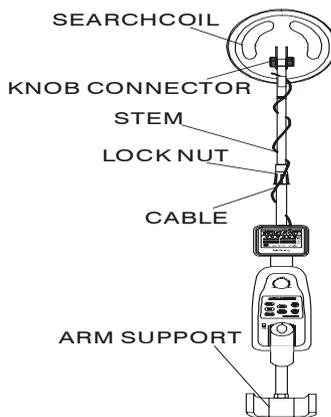
## ASSEMBLING THE DETECTOR

Assembling your detector is easy and requires no special tools. Just follow these steps.

1. Turn the stem's lock nut clockwise until it loosens.
2. Lengthen or shorten stem so that when you stand upright with the detector in your hand, the search coil is level with and about 1/2 to 2 inches above the ground with your arm relaxed at your side.
3. Turn the stem's lock nut counter-clockwise to lock it in place.
4. Unscrew the knob on the search coil and remove the knob connector. Insert the stem and align the holes on the search coil bracket and the stem. Push the connector through the holes and tighten the knob.
5. Wind the search coil cable around the stem. Leave enough slack in the cable.
6. Insert the search coil's plug into the search coil jack on the detector's control housing.

### Caution:

- The search coil's plug fits into the connector only one-way. Do not force the plug or you could damage it.



7. Loosen the knob at the search coil's end, then adjust the search coil to the desired angle so that it is parallel with the ground. Then tighten the knob.

**Caution:**

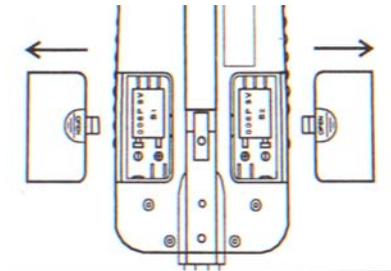
Do not over-tighten the search coil or use tools such as pliers to tighten it.

8. Insert the arm support into the end of the stem and tighten the lock screw.

**INSTALLING THE BATTERIES**

**Cautions:**

- Use only fresh alkaline batteries of required size.
  - Do not mix the old and new batteries or different types of batteries.
1. Slide the POWER button to turn on the power.
  2. Slide the left battery cover off in the direction of the arrow.
  3. Place a 9V battery into the battery compartment matching the polarity symbols (+ and -) marked inside.



**Warning:**

- Dispose of old batteries promptly and properly. Never bury or burn them.

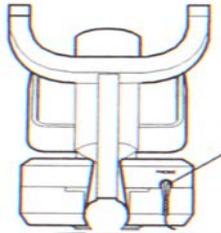
**Caution:**

- If you don't plan to use the unit for a week or more at a time, remove the batteries. Batteries can leak chemicals that can destroy electronic parts.
- To extend the battery life, exchange the left and right battery after 3-4 hours of operation.

**USING HEADPHONES**

1. Insert the headphones' 3.5mm plug into the HEADPHONE jack. At this

- time the internal speaker disconnects.
2. Set the VOLUME to the desired setting.



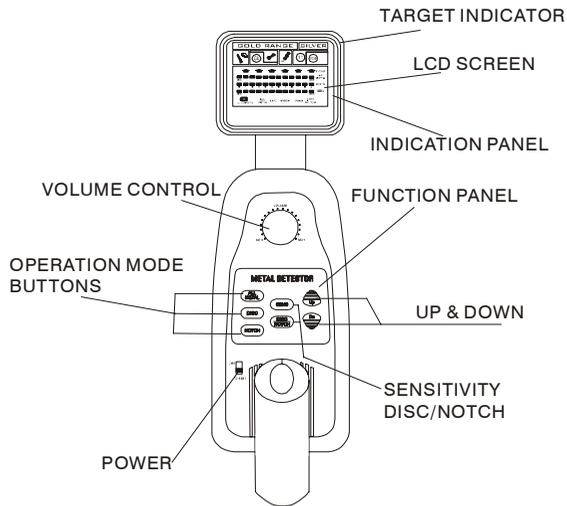
headphone

### **Listening Safely**

- To protect your hearing, set the volume to the lowest setting before you begin listening, adjust the volume to a comfortable level.
- Do not listen at extremely high volume levels. Extended high volume listening can lead to permanent hearing loss.
- Do not wear headphones while operating your detector near high-traffic areas. Pay attention to traffic safety.

## **FUNCTIONS AND INDICATIONS**

### **1. A QUICK LOOK AT THE DETECTOR**

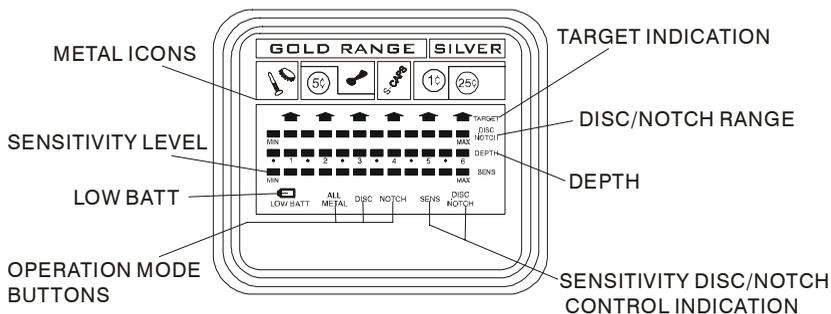


## 2. DISPLAYS

The target indicator includes target icons and LCD displays and is located at the top of the detector. It can indicate different types of coins, gold, silver, etc. When the detector detects an object, an arrow appears below the target icon of the probable type of metal being detected and also displays the depth of the target. If the detector receives a strong signal, the arrow appears steadily. If the signal is weak, the arrow blinks or does not appear.

### **Note:**

- If the detecting pauses for about 5 seconds, the arrow will disappear.
- If an arrow points to a coin denomination, the detector might be detecting either a coin or another type of metal (such as jewelry, tokens, medals, or even junk metal) about the same size and type as the coin.
- Since the indications are approximations, the detector might not have actually found the item it indicates. The indicator is only a visual reference to help you decide if an item is worth investigating.



## GOLD Range

**IRON FOIL**—indicates that the target is probably iron or foil. Some oxidized iron might register somewhere within the SILVER range.

**5¢(NICKEL)**—indicates that the target is probably a nickel.

**PULL TAB**—indicates that the target is probably a pull-tab from an aluminum can. Some rough gold items might register within the PULL TAB category.

**S-CAPS**—indicates that the target is probably a type of metal like a bottle cap with whorl. Some small gold items might register within this category.

**1¢**—indicates that the target might be a zinc penny or a copper coin. Some large gold items might register within 1¢ category.

## SILVER Range

**1¢ 25¢**--indicates that the target is probably 25¢ or 1¢. Some large aluminum cans might register within the 1¢ 25¢ category.

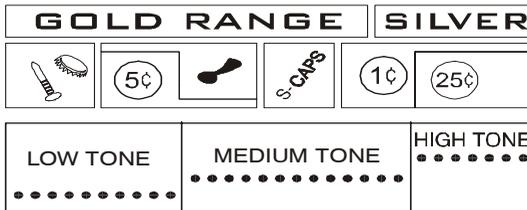
## TONES

If the detector is set to the ALL METAL target mode, it sounds a single tone when it detects any type of metal. If you set the detector to the DISC or NOTCH modes, the built in audio identification system sounds a unique audio tone for each of three categories of metal. This makes it easier to identify the metal being detected. The detector sounds a low tone when it detects small gold items, nails, bottle caps or nickels, a medium tone for aluminum pull-tabs, zinc or copper items, and a high

tone for brass or silver items.

**Note:**

- When you set the detector to DISC or NOTCH mode, the detector sounds a medium or high tone when it detects highly oxidized iron. An arrow appears in medium or high tone area.
- Depending on the alloys used to make them, about 15 percent of gold rings cause the detector to sound a medium tone.
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## OPERATION

### TURNING ON THE DETECTOR

Slide the power switch to ON. The unit displays all symbols on the LCD screen. The detector sounds low, medium, and high tones, respectively. After about 2 seconds the detector enters stand-by state. At this time the LCD displays ALL METAL and SENS. The value of SENS on the segment is 5. The range from MIN. to MAX. for DISC/NOTCH is available.

### SETTING THE OPERATING MODE

The detector comes with three operating modes of ALL METAL, DISC, and NOTCH. You can select the desired mode by the relative touch key.

**ALL METAL**—used for detecting any type of metal. When the detector detects any type of metal, it sounds a tone.

**Note:** When you operate in this mode, only SENS. control will function, DISC. Or NOTCH controls will not. To adjust the sensitivity, first press SENS and UP to increase the sensitivity, then press Dn to decrease it.

- a. **DISC**—used for target discrimination. You can set the target range from MAX to MIN by pressing DISC/NOTCH and UP & Dn keys. The detector can detect the metal type indicated on the display. Meanwhile the detector rejects other metal types by not displaying them on the screen. For example, press Dn key, 4 levels on segment from Max to Min and discrimination is increased. At this time, the detector can detect S- CAPS, 1¢ and also 25¢, while other types of metal are rejected.
- b. **NOTCH**—to ignore the metal type you do not want. You can select the metal type desired by pressing the UP and Dn keys. The LCD segment will indicate the selected types of metal. The detector can detect the selected metal type.

## **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.

### **Indoor Testing and Use**

1. Slide POWER to ON
2. Set the operating mode.
3. Place the detector on a wooden or plastic table, then remove any watches, rings, or metal jewelry you are wearing.
4. Adjust the search coil so the flat part points towards 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're testing or mask the signal completely.



5. Slowly sweep a sample of the material you want the detector to find (such as a gold ring or a coin) 2-3 inches or more above the face of the search coil. When the detector detects any metal, it sounds a tone and an arrow appears below the target icon. Also the LCD displays the depth of the target.

**Note:**

If you are using a coin, the detector will detect it more easily if you hold it so a flat side is parallel with the flat side of the search coil. A sweep with the side of a coin over the search coil might cause false indication and an unstable display of the arrow.

**Outdoor Testing and Use**

1. Slide POWER to ON. Set the operating mode.
2. Find an area on the ground outside where there is no metal.
3. Place a sample of the material you want the detector to find (such as a gold ring or a coin) on the ground.

**Note:**

If you are using valuable metal such as gold to test the detector, mark the area where you place the item, to help you find it later. (Do not place it in tall grass or weeds).

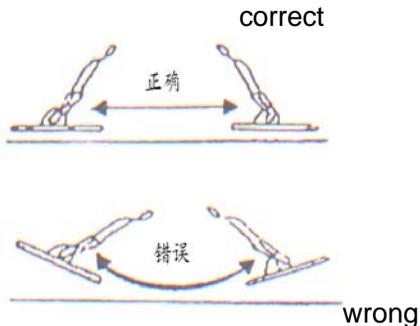
4. Hold the search coil level to the ground about 1~2 inches above the surface, slowly move the search coil over the area where you placed the sample, sweeping the search coil in a side-to-side

motion.

### Search coil Sweeping Hints

- Never sweep the search coil as if it were a pendulum. Raising the search coil while sweeping will cause false readings.

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- Sweep slowly. Hurrying will cause you to miss targets.
- Sweep the search coil from side to side in an arc line of 3 inches of motion and keep the search coil parallel with the ground.



If the detector detects the item, it sounds a tone and an arrow and the depth appear on the display below the target icon.

If the detector does not detect the item, make sure that the target mode is set correctly for the type of metal you're searching for. Also make sure that you're moving the search coil correctly.

#### **Note:**

- The detector responds with a signal when it detects most valuable metal objects. If a signal does not repeat after you

sweep the search coil over the target a few times, the target is probably junk metal.

- False signals can be caused by trash-filled ground, electrical interference, or large irregular pieces of junk metal.
- False signals are usually broken or non-repeatable.

### **Adjusting SENSITIVITY**

After you become familiar with how your detector works, it's important to fine-tune the sensitivity to get a good effect. Press the touch button SENS on the panel. Then press UP or Dn to increase or decrease the sensitivity. The level on the segment will be displayed from high to low position.

#### **Note:**

In order to detect a target deeply buried, you can adjust the SENS to a high position. But do not set the level of SENS to Max position, or the detector will receive interference and false signal from broadcast antennas and other electronic lines. The detector will also have unstable arrow indications and irregular tone indications.

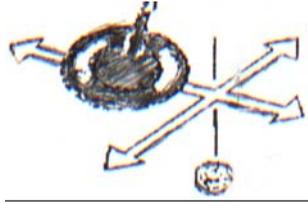
## **Application Hints**

### **Pinpointing The Target**

Accurately pinpointing a target makes digging it up easier. But it takes practice. We suggest you practice finding samples on your own property before you search other locations. Follow these steps to pinpoint a target.

1. When the detector detects a buried target, continue sweeping the search coil over the target in a narrowing side-to-side motion.
2. Make a visual note of the exact spot on the ground where the detector beeps.

3. Stop the search coil directly over this point on the ground. Then move the search coil straight forward (away from you) and straight back (towards you) a couple of times.
4. Repeat steps 1~3 at a right angle to the original search line, Make a mark of "X" . The target will be directly below the "X" at the point of the beep response.



### **Factors That Affect The Detecting**

It's difficult to have an accurate detecting result. Sometimes the detecting may be restricted by some factors:

#### **1. Conditions For The Target Being Detected**

- The angle of the target buried in the soil.
- The depth of the target.
- The level of oxidization of the target.
- The Size of the target.
- Electro-magnetic and electrical interference surrounding the target.

If you detect patiently and correctly and practice these techniques, you'll get satisfactory result.

### **CARE, MAINTENANCE AND WARRENTY**

Your MD9100 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, and damage the cases of the detector.



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



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.

## **Warranty**

This product is warranted against defects in materials and workmanship for 5 years from date of purchase. The item must be shipped at buyer's expense to our offices where we will, at our discretion, repair or replace it free of charge. Please include your original purchase receipt. This warranty is not valid for defects caused by accidents, misuse, improper care, alteration or abuse, nor is it valid if any service or repair is performed by non-authorized personnel.