SUNPOW OTMD01

SUNPOW Metal Detector Pinpointer User Manual

Model: OTMD01
Brand: SUNPOW

---

1. INTRODUCTION

The SUNPOW Pinpointer Metal Detector is a high-precision, fully waterproof device designed for efficient metal detection. Its 360-degree probe and multiple detection modes make it suitable for various environments, from quiet gardens to noisy outdoor settings and even underwater. This manual provides detailed instructions for setting up, operating, and maintaining your pinpointer to ensure optimal performance and a rewarding treasure hunting experience.

Image 1.1: SUNPOW Pinpointer Metal Detector with all included accessories.

2. PACKAGE CONTENTS

Please verify that all items listed below are included in your package:

- 1 x SUNPOW Pinpointer Metal Detector
- 1 x 9V Battery
- 1 x Belt Holster
- 1 x English User Manual
- 1 x Retractable Hanging Wire
- 1 x Storage Bag

3. KEY FEATURES

- **360-Degree Probe & Three Optional Modes:** The pinpointer features a 360-degree detection area, extending the detection range and minimizing target loss. It offers three distinct modes: Vibration (silent), Audio, and a combined Vibration & Audio mode, adaptable for quiet, noisy, or underwater environments.

- **Fully Waterproof Design (IP68):** Engineered for all weather conditions, this metal detector can be fully submerged in water, including lakes, rivers, ponds, and oceans, allowing for underwater treasure hunting.

- **Deep & Precise Metal Detection:** Capable of quickly and accurately targeting objects up to 11 cm (4.3 inches) deep. It can detect various metals such as iron, aluminum, gold, bronze, and silver, providing precise small-scale positioning that larger metal detectors cannot achieve.

- **One-Touch Operation, Lightweight & Portable:** Simple one-button control for powering on (long press) and switching modes (single click). With a length of 27 cm (10.6 inches) and a weight of 340g (0.75 lbs), it is highly portable and easy to carry.

Image 3.1: Key features and components of the SUNPOW Pinpointer.

Image 3.2: The pinpointer's IP68 waterproof capability.

Image 3.3: Portability of the SUNPOW Pinpointer.

4. SETUP

4.1 Battery Installation

1. Unscrew the battery cover located at the end of the pinpointer.
2. Insert the included 9V battery into the battery compartment, ensuring the correct polarity (+/-) alignment.
3. Securely screw the battery cover back on. Ensure it is tightly sealed to maintain the device's waterproof integrity.

5. OPERATING INSTRUCTIONS

5.1 Power On/Off

- To power on the device, press and hold the orange button for approximately 2 seconds until you feel a vibration or hear a sound (depending on the current mode).
- To power off the device, press and hold the orange button again for approximately 2 seconds.

5.2 Changing Detection Modes

The SUNPOW Pinpointer offers three detection modes:

- **Vibration Mode:** Ideal for silent operation or when working in noisy environments where audio alerts might be missed.
- **Audio Mode:** Provides clear sound alerts, suitable for general use in quiet to moderately noisy areas.
- **Vibration & Audio Mode:** Combines both alerts for maximum feedback, recommended for most treasure hunting scenarios.

To cycle through the modes, simply press the orange button once (single click) while the device is powered on.
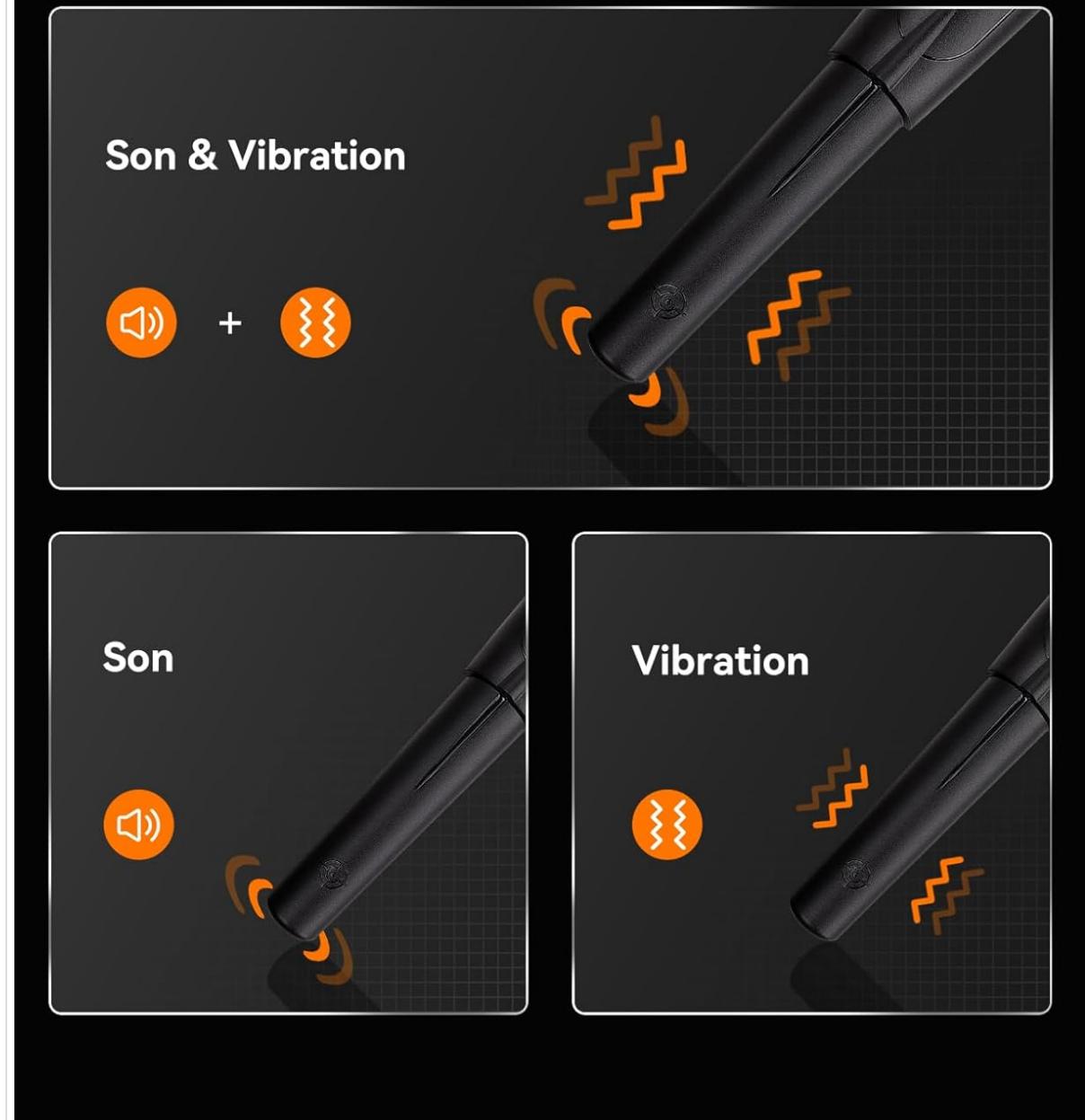
Image 5.1: The three detection modes: Sound & Vibration, Sound, and Vibration.

5.3 Metal Detection

Once powered on and in your desired mode, slowly sweep the pinpointer over the area you wish to scan. The 360-degree detection area allows for efficient scanning. As the pinpointer approaches a metal object, the vibration and/or audio alert frequency will increase, indicating proximity to the target. The closer you get, the faster the alerts will become, helping you pinpoint the exact location of the buried item.

Image 5.2: Demonstrating deep detection up to 11.43 cm.

6. MAINTENANCE

- **Cleaning:** After each use, especially if used in wet or muddy conditions, wipe down the pinpointer with a damp cloth to remove dirt and debris. Do not use abrasive cleaners or solvents.

- **Battery Care:** If the device will not be used for an extended period, remove the 9V battery to prevent leakage and potential damage to the electronics.

- **Storage:** Store the pinpointer in a cool, dry place, away from direct sunlight and extreme temperatures. Use the provided storage bag for protection.

7. TROUBLESHOOTING

- **Device does not power on:**

  - Ensure the 9V battery is correctly installed with the correct polarity.
  - Check if the battery has sufficient charge. Replace with a new battery if necessary.
  - Ensure the battery cover is securely tightened.

- **Weak or inconsistent detection:**

  - The battery might be low. Replace the 9V battery.
  - Ensure you are sweeping the pinpointer slowly and steadily over the target area.

- **False signals:**

  - Environmental interference can sometimes cause false signals. Try moving to a different location.
  - Ensure there are no other electronic devices or strong magnetic fields nearby.

If you encounter issues not covered here, please refer to the Warranty and Support section for assistance.

8. SPECIFICATIONS

Attribute	Value
Product Dimensions (L x W x H)	27.5 x 6 x 6 cm (10.8 x 2.4 x 2.4 inches)
Item Weight	300 Grams (0.66 lbs)
Item Model Number	OTMD01
Battery(ies)	1 x 9V (included)
Material	Metal
Power Source	Battery Powered
Color	Black
International Protection Rating	IP68 or higher
Adjustable Length	Yes
Country of Origin	China

9. WARRANTY AND SUPPORT

Your SUNPOW Metal Detector Pinpointer is designed for durability and performance. While specific warranty details are not provided in this manual, SUNPOW is committed to customer satisfaction.

If you encounter any problems or have questions regarding your product, please do not hesitate to contact us via Amazon's messaging service. Our customer service team will do their best to provide you with prompt and effective assistance.

For the latest support information and contact methods, please visit the official SUNPOW store on Amazon or refer to your purchase documentation.

Related Documents

[SUNPOW OT-MD03 Metal Detector User Manual for Adults & Kids](#)

Comprehensive user manual for the SUNPOW OT-MD03 Metal Detector. Learn how to use this high-accuracy device, featuring an LCD display, pinpoint function, DISC mode, and a waterproof search coil, for metal detecting adventures.

and operate without trouble.
• **10 Inch Waterproof Search coil:**Lets you use the detector even if you must put it under shallow water.
• **Adjustable Shaft:**Lets you adjust the length of shaft for comfortable use.

—01—

EASY ASSEMBLY

Assembling your metal detector is easy and requires no special tools. Just follow these steps:
1.Put the washers into the groove of the lower stem. Then using the supplied bolt and knob, attach the search coil to the lower stem.

2.Press the button on the upper end of the lower stem and slide the lower stem into the middle stem. Then tighten the lock nut on the middle stem.

—02—

3.Press the button on the middle stem and slide the middle stem into the S stem. Then tighten the lock nut on the S stem.

4.Press the button on the top stem, and slide the top stem into the S stem Adjust the stem to a length that lets you maintain a comfortable upright posture, with your arm relaxed at your side.

—03—

5.Fix the control box on the S stem and tighten the fixing screw properly.

6.Wind the search coil cable around the stem. Insert the cable plug into the jack at the back of the control box.
Caution:
• **Do not over-tighten the search coil or use tools to tighten it.**
• **Do not force the plug in. Excess force will cause damage.**
• **To disconnect the cable, pull out the plug. Do not pull on the cable.**

—04—

INSTALLING THE BATTERIES

IMPORTANT:
• Always use ALKALINE batteries for optimal performance.
• Always remove the batteries for prolonged storage.
• DON'T use carbon batteries.
• DO NOT MIX OLD AND NEW BATTERIES.
• CHECK THE BATTERIES if your detector exhibits any of the following symptoms:
① The unit does not turn on.
② Low speaker volume.
③ Unit beeps continuously at low sensitivity setting.
Follow these steps to install the batteries.
1.Turn off before installing the batteries.
2.Take off the battery cover.
3.Place two 9V alkaline batteries into the battery compartment matching the polarity symbols (+ and -) marked inside.
Warning:
•**Dispose of old batteries properly. Never bury or burn them.**

USING HEADPHONES

1.It is recommended to choose the headphones with volume control.
2.Insert the headphones' 3.5mm plug into the headphone jack at the bottom of the control box. At this time the internal speaker disconnects.

—05—

LAYOUT OF THE CONTROL PANEL

LCD DISPLAY

—06—

1.Target ID indications

Metal range	IRON	GOLD RANGE					SILVER RANGE	
Target	Bottle cap	Foil	5c	Pull tab	1c	10c	25c	25c+
Tone	Low	Medium	Medium	Medium	Medium	High	High	High
ID Display								
Digital value	1-19	20-29	28-38	40-49	50-59	60-69	70-79	80-89

2.SENS (Sensitivity): Adjust the sensitivity from 1 to 10. The higher the number, the more sensitive the detector. This sensitivity control does not effect Pinpoint sensitivity.
If the detector beeps erratically or beeps when there are no metal objects being detected, reduce the sensitivity.
Note: Cell phones, cell phone towers, etc... all produce interference signals and will cause the detector to beep when no metal is present, and sometimes to beep erratically.
3.VOLUME : Adjust the volume level from 0 to 10.
4.DISC: Discrimination is an important feature of professional metal detectors. It allows user to ignore trash and unwanted objects.
The **DISC** control is Discrimination function of the detector. In its default setting, all metals are detected. Use this DISC function in order to eliminate unwanted types of metals from detection. You only need to eliminate the targets in order.Each time you press "+" button, a

—07—

target will disappear. The target disappears means that category is eliminated from detection. To pick up the eliminated target category, press "-" and categories will be accepted back in order.
Notice: The two targets on the right cannot be eliminated. These two targets represent silver or other high value targets, which are generally desirable. So the detector does not allow them to be discriminated out.
5.NOTCH: It is similar to Discrimination（DISC）.It allows you out of turn to accept or reject different types of metals .The DISC can only accept or reject metals in order.
The NOTCH Mode is only applicable in FOIL, 5c, ALUM. and 1c these four categories.
Press "+" or "-" to a new category. The target ID will flash for 3 seconds and then it will change to the opposite state. Or press MENU while the target ID is flashing, and then it will change to the opposite state. If the target had been illuminated previously and disappears now indicates that the target has been eliminated from detection. As same, the target disappeared before and illuminates now indicates that target is notched in or can be detected.

—08—

CONTROL BUTTONS

• **POWER:** Press the button to turn on the detector. Press it again to turn off the detector.
• **MENU:** Press MENU to make it active and select operation mode(NOTCH or DISC), set SENS or VOLUME.
• **INCREASE (+):**Increase the level of sensitivity or volume and the range of DISC (discrimination) or NOTCH.
• **DECREASE (-):** Decrease the level of sensitivity or volume and the range of DISC (discrimination) or NOTCH.
• **PINPOINT:**Press and hold for precision target pinpoint at any time.

TESTION THE DETECTOR

1.Supplies Needed:
• A bottle cap (made of iron) • A quarter (25¢)
• A nickel(5¢) • A Penny(1¢)
• A Gold Ring • A dime(10¢)

—09—

[SUNPOW GC-1083 Metal Detector Owner's Manual](#)

Owner's manual for the SUNPOW GC-1083 Metal Detector, covering features, assembly, battery installation, control box layout, LCD display, control buttons, testing, outdoor detecting, pinpointing, troubleshooting, and maintenance.

2.Position the Detector:
① Place the detector on a table with the search coil hanging over the edge.
② Be sure that the search coil is far away from walls or metal objects. Keep the search coil away from any metal in the table.
③ Turn off equipment that may interfere with electromagnetic radiation.
④ Pivot the search coil back.
⑤ Press POWER to turn on.

3.Using ALL METAL Feature:
Wave all objects over the search coil and notice the different tones.

4.Using DISC (Discrimination) Feature:
① Press MENU until DISC is displayed on LCD.
② Press "+" once. The bottle cap(iron) indicator will disappear.
③ Wave the bottle cap. It will not be detected because it has been "discriminated out."

5.Using NOTCH Feature:
①Press MENU until NOTCH is displayed on LCD.
② Press "+" twice, 5¢ will flash for 3 seconds and disappear that means 5¢ is "notch out" (eliminated). To eliminate 1¢, press"+" until 1¢ flash and disappear.

—10—

③ Wave 5¢ or 1¢ over the search coil. 5¢ and 1¢ will not be detected because they have been "notched out"(eliminated). Notice: the target categories disappear on LCD can not be detected.

If you want to pick up the target type you eliminated before, press "+" or " - " to the target, and then wait for the target to flash for 3 seconds, or press MEMU button when it is flashing.

6.Using PINPOINT Feature:
① Press and hold "PINPOINT" button, PP will appear on LCD display.
② Hold a coin motionless over the search coil.
③ Sweeping coin over search coil.
④ Notice that the sound changes as the coin moves closer or further.
⑤ Notice that the depth indicator changes as the coin moves up and down.

7.Adjusting SENS(Sensitivity)
① Press MENU until SENS is displayed on LCD.
② Press "+" or "-" to set the SEN. Sensitivity level cain be set from 1 to 10.

8.Adjusting VOLUME
① Press MENU until VOLUME is displayed on LCD.
② Press "+" or "-" to set Volume. Volume level can be set from 0 to 10.

OVERLOAD WARNING
If a metal object or highly magnetic soil are too close to the

—11—

search coil, the detector will overload and "- -" will appear on LCD display. The detector will make a rapid, repeating mid-tone warning sound. Overload will not harm the detector, but the detector will not function in these conditions. If overload occurs, keep the search coil away from the target.
Note: There is a wide variety of metals and no target can be identified for certain until unearthed. This table is for general reference only.

OUTDOOR DETECTING

1.Find a place outside where there is no metal.
2.Place a sample you want to find on the ground.
3.Press POWER to turn on the detector.
4.Swing the search coil gently from side to side, slightly overlapping each sweep as you move forward. Keep your search coil approximately 1-2 inches above the ground as you search.

Notes:
• Raising it during the sweep ,or at the ends of your sweep, can cause false readings.
• Move slowly, hurrying will cause you to miss targets.

—12—

• Most desirable objects will respond with a repeatable tone. When discriminating, iron and foil objects generally do not respond.
• False signals can be caused by trashy ground, electrical interference, or by large irregular trash objects. These signals are easily recognized by their often broken or non-repeatable nature.

DETECTING WITH PINPOINT

After you find a target, you can use PP(Pinpoint) to find the exact location of the target as follows.
1.Press and hold PP to activate the Pinpoint feature.
2.Move the search coil slowly across the target, and you can locate it by the sound.
Narrow the Detection Rage:
1.To narrow the response further, position the search coil near the the target.
2.Press PP button and hold, move the search coil slowly.
3.When you hear the sound, you can release the PP
4.And than press PP to continue the detection. In this way, you can narrow the range of the target.
5.Repeat the above steps.
When the coil moves to the center of the target, the signal from the detector is the strongest.

—13—

Troubleshooting Guide

Problem	Reason	Suggestion
The detector displays or sounds without detecting any target	1.The detector may receive interference and false signal from broadcast antenna and other electronic lines. 2.The humidity of environment may be extremely high.	1.Change searching place. 2.Wait for some time to check again.
The detector sounds false signals	1.Sensitivity set too high/ environmental electromagnetic interference. 2.Sweeping the detector's search coil too fast or at wrong angle. 3.Using 2 detectors in close proximity.	1.Reduce sensitivity. 2.Sweep the search coil more slowly and hold the detector correctly. 3.Keep two detectors at least 6 meters(20') apart.
The detector does not detect anything.	1.Sensitivity set too low. 2.Target range is eliminated. 3.Search coil is not parallel to the ground.	1.Increase sensitivity. 2.Recover all target range. 3.Adjust the search coil angel to be parallel to the ground.
LCD display multiple target categories or emits several sounds at once.	1.There may be over one kind of metal targets. 2.The detector can't identify the target Sometimes, oxidized metal also causes the excursion of target arrow and tone.	1.Reduce the sensitivity to eliminate the detection of the deeper target. 2.Sweep the search coil with different angles.
No power, no sound	1.Five-pin cable not connected well. 2.Dead battery.	1.Re-plug it properly. 2.Replace batteries.

—14—

NOTE: IF YOU EXPERIENCE A PROBLEM, PLEASE CONTACT OUR CUSTOMER SERVICE FIRST.
YOU CAN REACH US AT sunpow.service2019@outlook.com.
OUR PROFESSIONAL REPRESENTATIVES AND ENGINEERS ARE HERE READY TO HELP.

Care and Maintenance

Our 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.

Keep the detector away from cool 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.

—15—

Thank you for choosing **MD-620** metal detector. Please read the owner's manual carefully before operating the metal detector. Save this manual for future reference. If you have any poblems and questions, please contact us.
Email US:sunpow.service@hotmail.com
Email UK:sunpoww@outook.com

—01—

TABLE OF CONTENTS

—02—

FEATURES

With your MD - 620 metal detector, you can hunt for coins, jewelry, gold, and silver anywhere. The detector comes with high sensitivity and strong ability of discrimination. It is versatile and easy to use.
•**LCD Display:**Shows the probable type of metal, the signal

intensity, the range of DISC & NOTCH, the level of SENS and VOLUME , and battery condition.It also shows numeric display for target.
•**Three Tone Audio Discrimination:**Sounds three distinctive tones (high, medium and low) for different types of metal.
•**Notch:**Ignores junk metal and finds valuable items by setting the notch range.
•**DISC:**Discriminates the unwanted target by setting the DISC numeric range. The detector will not detect the target beyond the numeric setting.
•**Pinpoint:**Pinpoints the location of the target accurately.
•**Super Slow Sweep Identification:**With a very slow sweep of the search coil to discriminate different types of metal.
•**Headphone Jack:**Connect headphones of 3.5mm and operate without trouble.
•**Waterproof Search coil:**Use the detector even if you must put it under shallow water.
•**Adjustable Shaft:**Adjust the length of shaft for comfortable use.
•**Power:** Your metal detector requires two 9-volt alkaline batteries.

STEP 1. Your MD-820 detector requires no assembly or tools. Simply remove the detector from the box.

STEP 2. Turn the detector 180 degree as shown in the figure.

STEP 3. Press down the UNLOCK button to release the handle.

STEP 4. Slide out the armrest to the desired length (typically just under your elbow). And fully extend the lower shaft to the desired length for your height.

•**Please use two 9V alkaline battery.**
•Open the battery cover and install the battery according to the polarity sign in the battery box.
•**Warning:**Dispose of old batteries promptly and properly. Never bury or burn them.
Cautions:
①Do not mix the old and new batteries or different types of batteries.
②Use only fresh alkaline batteries of required size.
③If you don't plan to use the unit for a week or more time, remove the batteries.Batteries can ruin chemicals that can destroy electronic parts.
④If the battery indicator on the LCD lights up, replace the battery.

•It is recommended to choose the headphones with volume control.
•Insert the headphones' 3.5mm plug into the PHONE jack. At this time the internal speaker disconnects.
Listening Safely
①To protect your hearing, set the volume to the lowest setting.
②Before you begin listening,adjust the volume to a comfortable level.
③Do not listen at extremely high volume levels.Extended high volume listening can lead to permanent hearing loss.
④Do not wear headphones while operating your detector near high traffic areas. Pay attention to traffic safety.

POWER   PINPOINT   BACKLIGHT

1.POWER SWITCH
Press the power switch to turn on/off the detector.

2.LCD DISPLAY

DISC/NOTCH indicator — Target numeric indicator — Low BATT indicator — DISC numeric indicator — SENS/SIGNAL indicator
MENU CONTENT

3.CONTROL BUTTONS
•**MENU:** Press MENU,LCD will display VOLUME, SENS, DISC, NOTCH.
•**VOLUME:** Press MENU to select VOLUME. Then press–or–to adjust the level (0-4) of VOLUME.The level will be displayed on the LCD.
•**SENS:** Press MENU to select SENS.Then press–or–to adjust the level (2-8) of sensitivity. The level will be displayed on the LCD.
•**DISC:** Discriminates the unwanted target by setting the numeric range. Press MENU to select DISC. Then press–or–to adjust the numeric range of discrimination. The number will be displayed on the LCD.
•**NOTCH:** Eliminates the target you don't want. Press MENU to select NOTCH. Then press–or– to select the target to be notched. The cursor around the selected target will flash.Press ENTER again , the target name inside the cursor will disappear.
•**PINPOINT:** Pinpoints the location of the target accurately.

4.BACKLIGHT SWITCH
Press the backlight switch to turn on/off the backlight of the detector.
5.MEMORY
The detector will memorize all the settings before power is off.

1.Numeric ranges of target:

-IRON	00-10
-5¢	11-25
-P-TAB	26-40
-1¢	41-60
-10¢	61-80
-25¢	81-99

Note: There are a wide variety of metals and no target can be identified for certain until unearthed. This table is for general reference only.
2.Types of target
-**IRON:**It indicates that the target is probably iron.
-**5¢:**It indicates that the target is probably 5¢ or a nickel. Some small gold rings might register within this range.
-**P-TAB:**It indicates that the target is probably a pull tab of an aluminum can. Some small gold rings might register within this range.
-**1¢:**It is indicated that the target is probably a coin of 1¢ or type of metal of zinc alloy. Some medium sized gold rings might register within this category.
-**10¢:**It indicates that the target might be a coin of 10¢. Some large rough gold items might register within this category.
-**25¢:**It indicates that the target is probably 25¢ or a silver coin.

3.Tones
The detector comes with three tones for different types of metal. But the built in audio identification system sounds a unique tone for each of three categories of metal. This makes it easier to identify the metal being detected.
A low tone is for IRON, 5¢, same as for foil, bottle cap or nickels.
A medium tone is for P-TAB, 2N, 1¢(aluminum pull tabs, zinc or copper items). A high tone is for 10¢,25¢,same as for brass or silver items.

1.Press the power switch to turn on the detector.
2. Setting the mode:
①DISC:Press MENU to select DISC, then set the DISC numeric value. If the DISC value is set to "00", the detector can detect all kinds of metal. In this case, when the detector finds a target, the cursor around the target will light up. If you don't want to find the target listed on the LCD, you can press–or–to set the relative numeric range of DISC.
For example, the numeric target range for 5¢ is 11-25, you can simply press MENUS to select DISC, then press–or–to set the DISC number to "11". Because the target numeric range is 11-25,the detector will not have response to 5¢. Neither will the detector have response to iron. Because the target numeric range for iron is 0-10.
②NOTCH:Press MENU to select NOTCH, then press–or–to select the target to be notched. The cursor around the selected target will flash. Then press ENTER , the target will disappear.(If ENTER is not pressed within few seconds, the detector will enter standby state.) It means the target have been notched. If you want to pick up the target that notched, press ENTER again and the target will be shown.
Note:It is not recommended to notch all targets listed on the LCD. Because if you notch everything, you can't find anything.

3.Press MENU to select SENS, then press–or–to set the sensitivity.
4.Place the detector on a wooden or plastic table, then remove watch, ring, or metal jewelry you are wearing.
5.Adjust the search coil so that it points flat to the ceiling.
(As picture shown)

Note:Never test the detector on a floor inside a building. Most buildings have metal in the floor, which might interfere with the objects you're testing or mask the signal completely.
6.Slowly sweep a sample of the material you want the detector to find (such as a gold ring or a coin) to 2-3 inches or more above the face of the search coil.When the detector detects any metal, it sounds a tone and the cursor around the target will light up. Also LCD displays numeric value of target and the signal strength of it. Please note that the signal strength is only a reference.
Note:
If you are using a coin, make the side of the coin is parallel to the side of the search coil, so that the detector will detect the coin more easily. Sweeping the side of the coin over the search coil may cause false indications and unstable target display.
7. PP(PINPOINT)
After you find a metal object, you can use PP to pinpoint the target. Press the PP button and slowly move the search coil

above the sound area.The detector sounds and the signal indicator on the LCD displays the level of signal. Then press PP button again to release the PP.Sweep the search coil again, keeping the same distance of search coil, sound disappears. Press PP button again ,closer the search coil to the sound area, the detector sounds again . Repeat the above steps until the detector displays the stronger signal where the location of the target is.
Note: To find the exact location of target, you need to practise more times.

1.Press the power switch to turn on the detector

SUNPOW Foldable Metal Detector User Manual

This document provides instructions and specifications for the SUNPOW Foldable Metal Detector for Adults, a professional, waterproof, and adjustable metal detector with an LCD display, 11-inch search coil, and 5 modes.

2.Follow the steps of 2 described in section of Indoor Testing and Use to set the operating mode
3.Find an area on the ground outside where there is no metal.
4.Place a sample of the material that you want the detector to find (such as a gold ring or a coin) on the ground.
5.Hold the search coil to the ground about 1-2 inches above the surface and then move the search coil over the area slowly where you placed the sample and 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 or at the end of a sweep will cause false readings.

–12–

•Sweep slowly, hurrying will cause you to miss targets.
•It's better you sweep the search coil from side to side in an arc line of 3 inches motion and keep the search coil parallel with the ground.
•If the detector detects the item, it sounds a tone, and the cursor aroundthe target name will light. Also LCD displays the numeric range of target as well as the signal strength.
•If the detector does not detect the item, make sure that the mode is set correctly for the type of metal you're searching for. Also make sure that you're moving the search coil correctly.

Notes:
•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 trashy ground,electrical interference, or large irregular piece 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 result. Press MENU to select SENS. Then press or to increase ►or◄decrease the sensitivity. The level will be displayed on the LCD.

Note:
The sensitivity of the machine is set to medium and low sensitivity at the factory. You need to adjust the sensitivity for the first detection. This machine has a memory function. It will continue the last setting when it is turned on again.
When the machine is in the detection mode or is disturbed, the machine will turn on the self-protection function

–13–

and cannot switch the function by pressing the button. You can release the self-protection state by changing the working state, stay away from the interference area or reduce the detection sensitivity,Then the button switch function will return to normal.

Using Backlight

In dark area, you can use Backlight for better searching. Press backlight button to turn on the backlight.
Note: As the backlight consumes more power, we suggest you turn off the backlight in normal environment.

Factors that Affect the Detecting

It's difficult to have an accurate detecting result. Sometimes the detecting may be restricted by some factors:
• **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.**
• **Electromagnetic and electrical interference surrounding the target.**
In an area of highly mineralized ground,or fertile ground,or wet sand, the detector will sound over if there is no metal.In this case,you can lower the sensitivity or increase the DISC numeric value. Meantime enhance the distance between the search coil and the ground. In area with trashy metal, you can set the DISC numeric value to 50. In this case most nails and small pieces of iron will be eliminated.

–14–

Troubleshooting Guide

Problem	Reason	Suggestion	
The detector displays or sounds without detecting any target	1.The detector may receive interference and false signal from broadcast antenna and other electronic lines. 2.The humidity of environment may be extremely high.	1.Change searching place. 2.Wait till some time & check again.	
The detector sounds false signals	1.Sensitivity set too high/ environment/electromagnetic interference. 2.Sweeping the detector's search coil too fast or at wrong angle. 3.Using 2 detectors in close proximity	1.Reduce sensitivity. 2.Sweep the search coil more slowly and hold the detector correctly. 3.Keep two detectors at least 8 meters(20') apart.	
The detector does not detect anything.	1.Sensitivity set too low. 2.Target range is eliminated. 3.Search coil is not parallel to the ground	1.Increase sensitivity. 2.Recover all target range. 3.Adjust the search coil angle to be parallel to the ground.	
LCD display multiple target categories or emits several sounds at once.	1.There may be over one kind of metal targets. 2.The detector can't identify the target. Sometimes, oxidized metal also causes the reputation of target arrow and tone.	1.Reduce the sensitivity to eliminate the detection of the deeper target. 2.Sweep the search coil with different angles.	
No power, no sound.	1.Power cable not connected well. 2.Dead battery.	1.Re-plug it properly. 2.Replace batteries.	

–15–

NOTE: IF YOU EXPERIENCE A PROBLEM, PLEASE CONTACT OUR CUSTOMER SERVICE FIRST,
YOU CAN REACH US AT sunpow.service2019@outlook.com.
OUR PROFESSIONAL REPRESENTATIVES AND ENGINEERS ARE HERE READY TO HELP!

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 that 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.

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.

–16–

[SUNPOW OT-MD02 Metal Detector User Manual](#)

Comprehensive user manual for the SUNPOW OT-MD02 metal detector, detailing its features, operation, specifications, and troubleshooting tips for hobbyists and enthusiasts.