

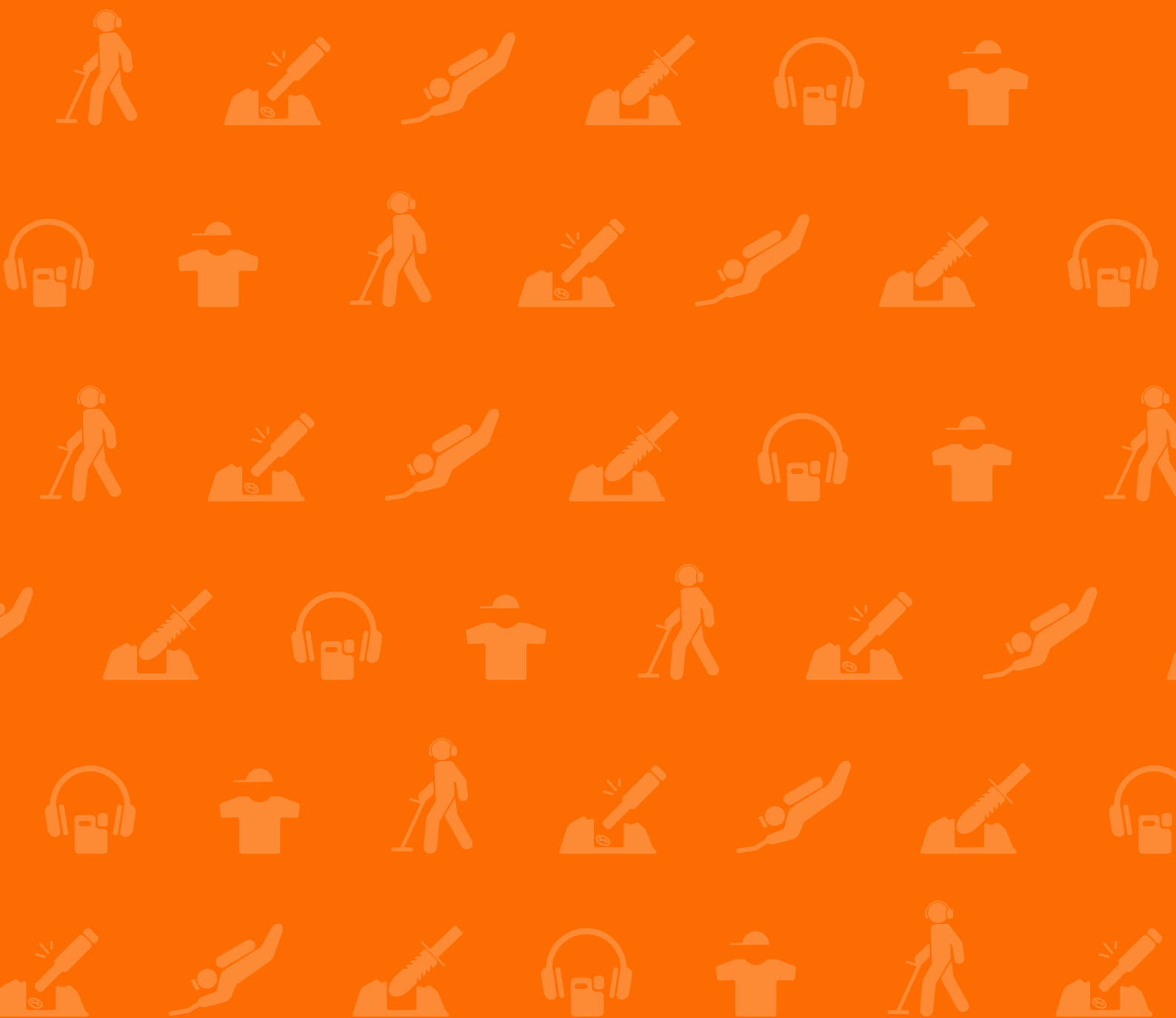
QUEST

find
impossible

INSTRUCTION MANUAL

S SERIES (SPRO S50 S30)

Version: S2601





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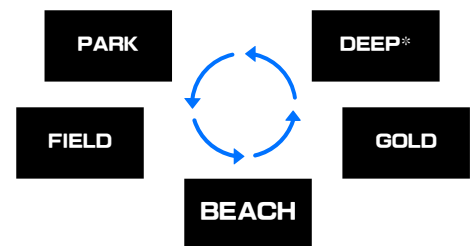


Press the Power button to turn on/off.

Pulse el botón de encendido para encender o apagar.

Drücken Sie die Einschalttaste, um ein- oder auszuschalten.

Appuyez sur le bouton Power pour allumer ou éteindre.

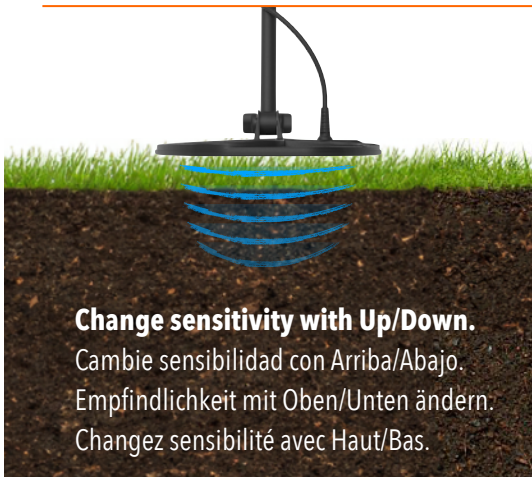


Press Left/Right buttons to change modes.

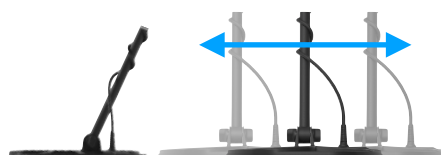
Pulse Izquierda/Derecha para cambiar modo.

Links/Rechts drücken, Modus wechseln.

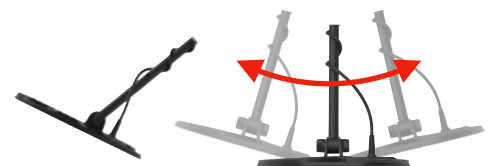
Gauche/Droite pour changer mode.



Correct



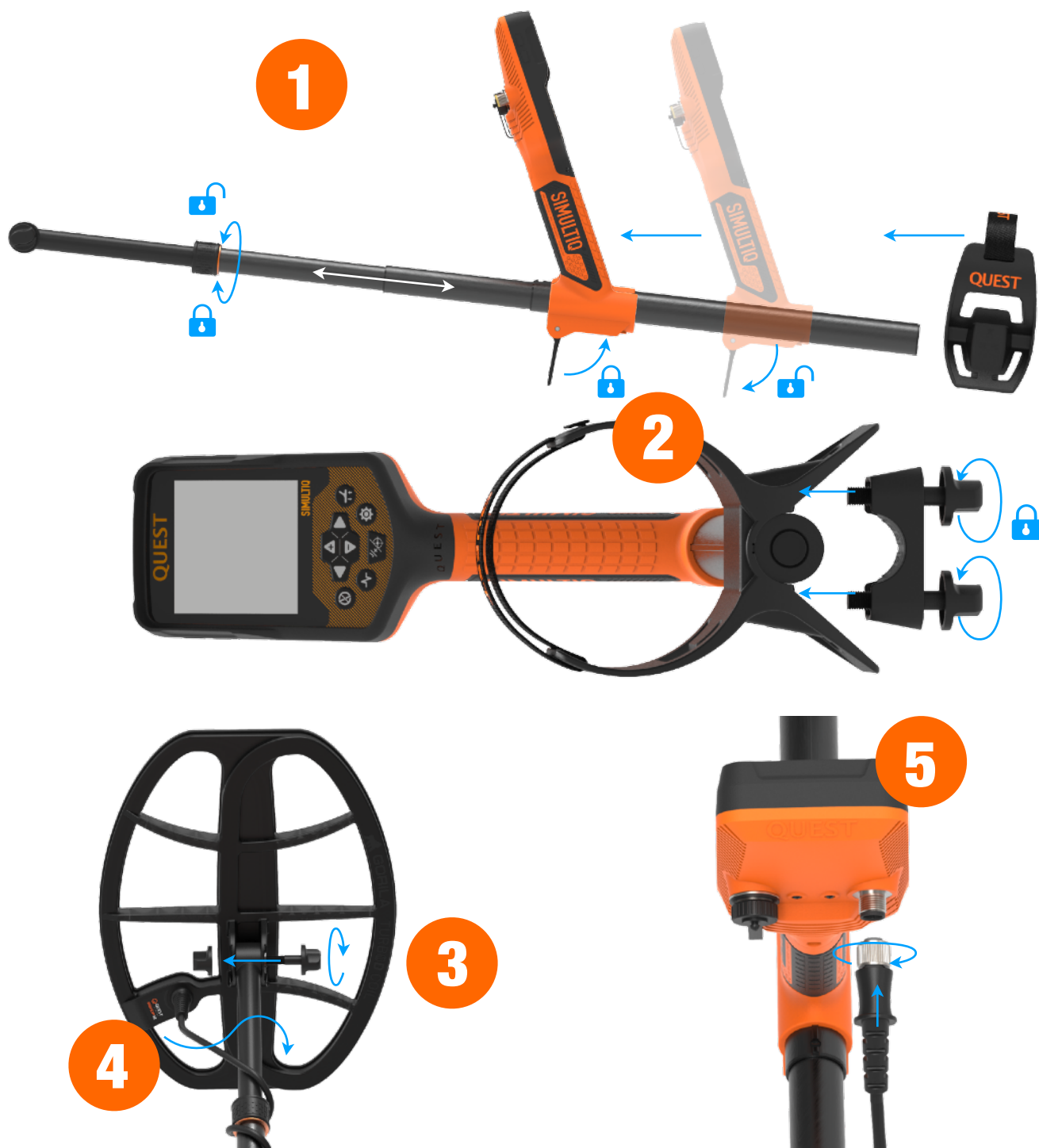
Incorrect



Keep a 50% overlap and parallel sweeping over ground for best result.

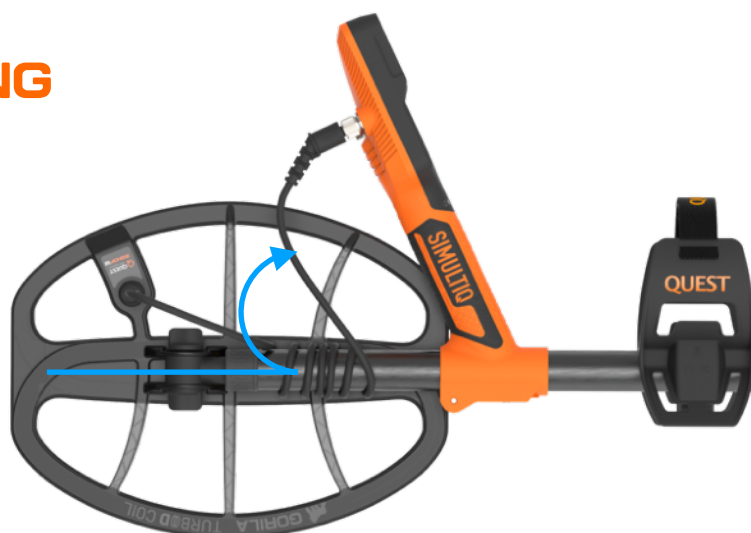
PREPARATION

INSTALLATION

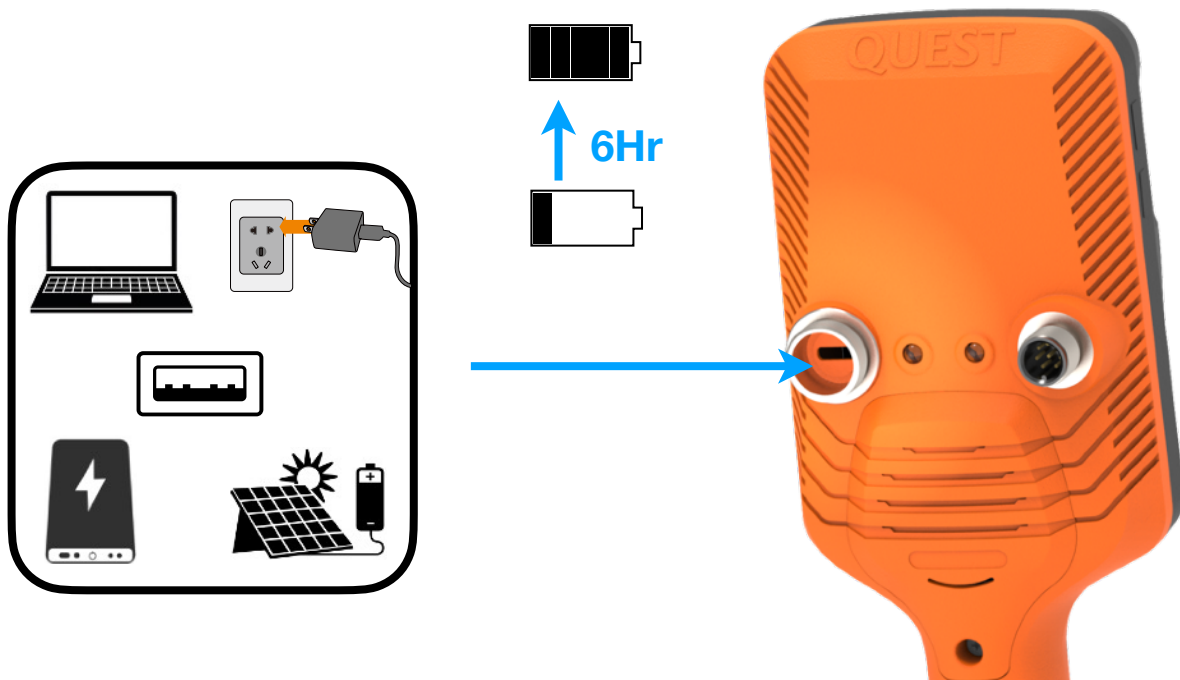


FLAT FOLDING

To **flat fold** the search coil, simply retract the lower rod that connects to the search coil to the lowest position, and you can then rotate the search coil freely to achieve the most compact storage state.

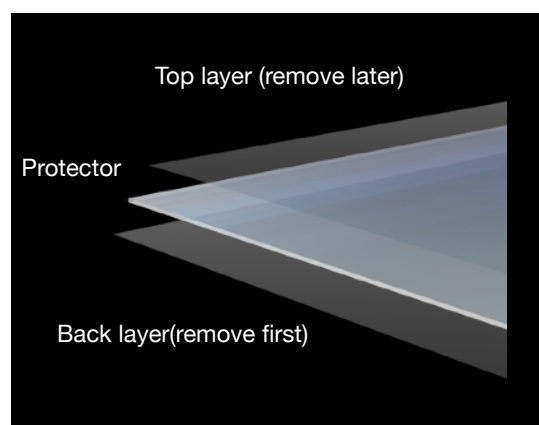


RECHARGE



Before first use, it is recommended that you fully charge the battery for 6 hours. Use a high-quality mobile phone charger plug to charge the detector. The specific steps are as follows: Remove the charging cable, unscrew the protective cap of the detector, insert the larger end of the charging cable into a socket or a computer with a standard plug, or a solar power bank, and insert the smaller end (Type-C) into the metal detector plug

PROTECT



Apply LCD screen protective film

1. Take off the thin plastic covering from the detector's screen. Check that there's no dust or fingerprints on the screen.
2. Carefully remove the protective backing from the screen protector.
3. Hold the screen protector by its edges, line it up with the screen, and gently place it down. If there are any bubbles, use a soft and clean cloth to push them to the edge.
4. Finally, remove the top layer from the screen protector.



BUTTONS KEY FUNCTION(EN)

FUNCIÓN DE LAS TECLAS(ES)

TASTENFUNKTION(DE)

FONCTION DES TOUCHES(FR)

ALTERNATIVE FUNCTION

FUNCIÓN ALTERNATIVA

ALTERNATIVFUNKTION

FONCTION ALTERNATIVE

- A Power on /off , Menu**
Encendido / Apagado , Menú Ein / Aus , Menü
Marche / Arrêt , Menu
- B Change modes (Left & Right)**
Cambiar modos (Izquierda y Derecha) , Modi ändern
(Links & Rechts) , Changer de mode (Gauche et Droite)
- C Change frequency** Cambiar frecuencia , Frequenz
ändern , Changer de fréquence
- D Pinpoint** Pinpoint, Pinpoint, Pinpoint

- Hold 0.5 sec to Power off**
Mantener 0,5 s para apagar, 0,5 Sek. zum
Ausschalten gedrückt halten, Maintenir 0,5 s
pour éteindre
- Navigate for different MENU and Sub-
MENU during programing**
Navegación por los menús y submenús
durante la configuración.
Navigation durch verschiedene Menüs und
Untermenüs bei der Programmierung.
Navigation entre les différents menus et sous-
menus lors de la programmation.
- Hold to perform noise cancelling**
Mantener para cancelación de ruido, Für
Störfilter/Rauschunterdrückung gedrückt
halten, Maintenir pour l'élimination du bruit
- Accept/ Reject; Returns to sub-menu.**
Aceptar / Rechazar; volver al submenú.
Annehmen / Ablehnen; zurück zum
Untermenü.
Accepter / Rejeter ; retour au sous-menu.



- E Discrimination pattern selection**
Selección de patrón de discriminación
Auswahl der Diskriminierungsmuster
Sélection du motif de discrimination
- F Sensitivity adjusting**
Ajuste de sensibilidad,
Empfindlichkeitseinstellung, Réglage de la sensibilité
- G Volume** Volumen +/- , Lautstärke +/- ,
Volume +/-
- H Comfort setting** Ajuste de confort,
Komfort-Einstellung, Réglage de confort
- J Programs setup/load** Configuración/
carga de programas, Programme
einrichten/laden, Configuration/chargement
des programmes
- K Ground Balance** Balance de Suelo.
Bodenabgleich.Effet de sol.

Hold for Ground Balance

Mantener presionado para Balance de Suelo. Gedrückt halten für Bodenabgleich. Maintenir pour l'Effet de sol.

Hold to adjust sensitivity quickly

Mantener presionado para ajustar la sensibilidad rápidamente. Gedrückt halten zur schnellen Empfindlichkeitseinstellung. Maintenir pour ajuster rapidement la sensibilité.

Hold to adjust volume quickly

Mantener presionado para ajustar el volumen rápidamente. Gedrückt halten zur schnellen Lautstärkeeinstellung. Maintenir pour ajuster rapidement le volume.

FEATURES OF STANDBY INTERFACE

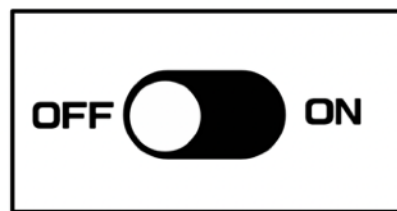
- | | |
|--|--|
| <p>1 Detection modes
Modos de detección
Suchmodi
Modes de détection</p> | <p>7 Discrimination pattern
Patrón de discriminación
Diskriminierungsmuster
Modèle de discrimination</p> |
| <p>2 Frequency
Frecuencia
Frequenz
Fréquence</p> | <p>8 Masked ID
ID enmascarada
Maskierte ID
ID masquée</p> |
| <p>3 Sensitivity
Sensibilidad
Empfindlichkeit
Sensibilité</p> | <p>9 Target ID Indicator
Indicador de ID del objetivo
Ziel-ID-Anzeige
Indicateur d'ID de cible</p> |
| <p>4 Target ID
ID del objetivo
Ziel-ID
ID de la cible</p> | <p>10 Comfort features status
Estado de funciones de comodidad
Status der Komfortfunktionen
État des fonctions de confort</p> |
| <p>5 Target depth
Profundidad del objetivo
Zieltiefe
Profondeur de la cible</p> | <p>11 Battery status
Estado de la batería
Batteriestatus
État de la batterie</p> |
| <p>6 FeScale : Ferrous / non-ferrous possibility
Posibilidad férrica / no férrica
Eisenhaltig / nicht eisenhaltig möglich
Possibilité ferreux / non ferreux</p> | <p>12 Saved programs
Programas guardados
Gespeicherte Programme
Programmes enregistrés</p> |



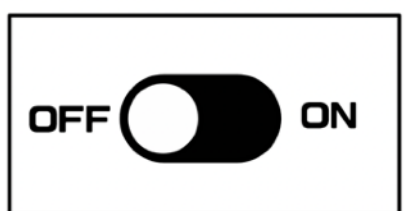
Back light : 0-6



Vibrations : 0-5



Flashlight : on/off



Wireless: on/off



Languages:

English

中文

Русский

Français

Deutsch

Nederlands

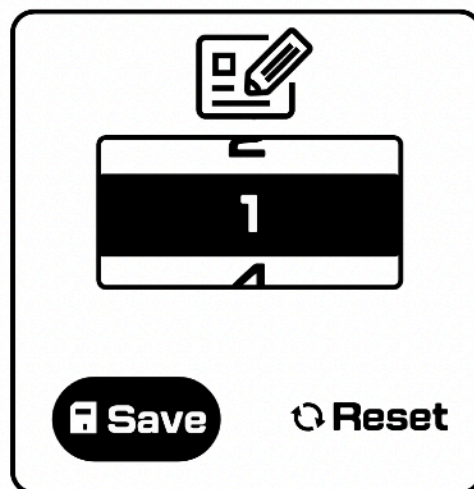
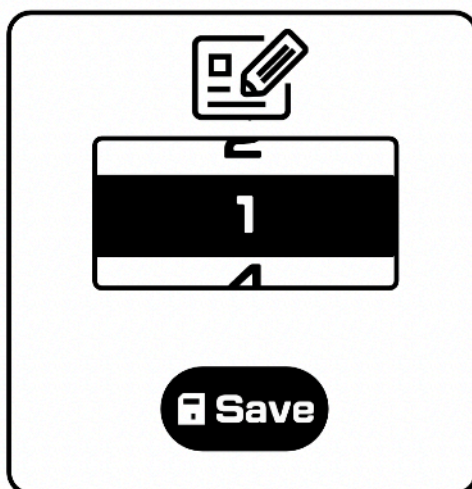
Español

Italiano

Türkçe

Polski

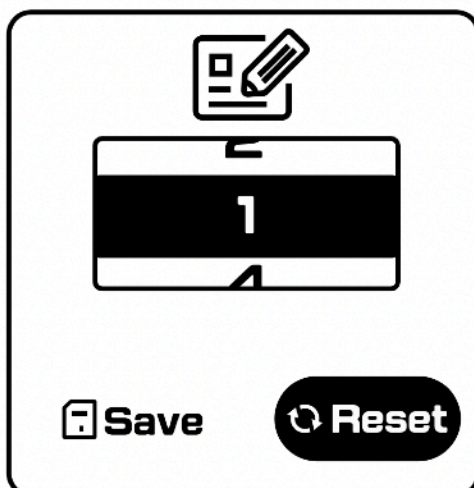
Ελληνικά



The S Series metal detector features a custom program storage function, allowing you to save specific settings for different environments. It is also perfect for shared use, as it enables family members to create and store their own personalized program profiles.

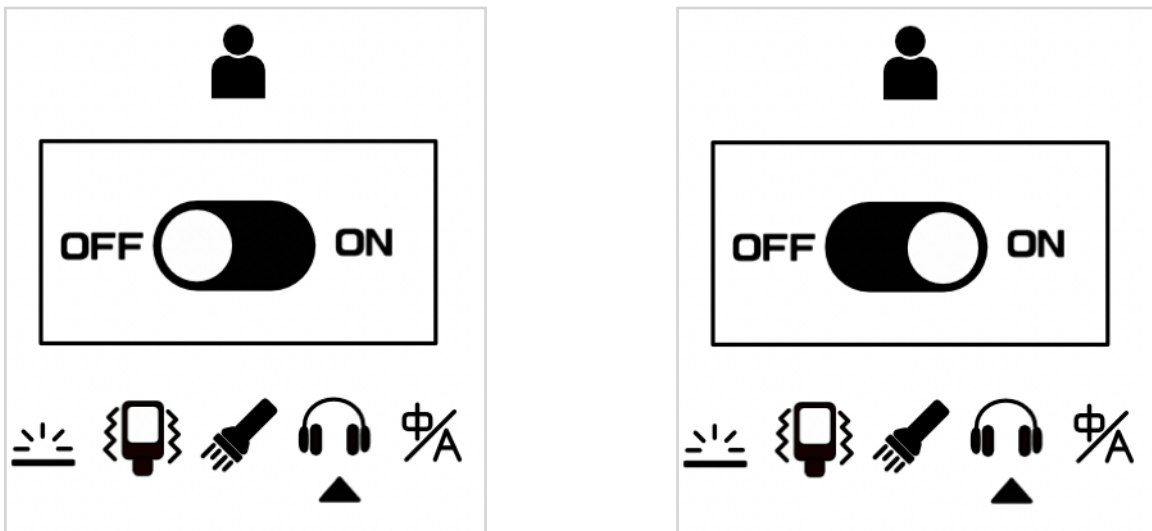
Press the lower right side button once to access the **Program Management** interface. Use the ▲ or ▼ buttons to navigate between program slots. To **SAVE** your settings, press and hold the Pinpoint button. Once a program is saved, the Reset option will become available for that slot.

To select and activate a program, use the ▲ or ▼ buttons to scroll to the desired slot number, then press the Gear button to load it and exit the menu.

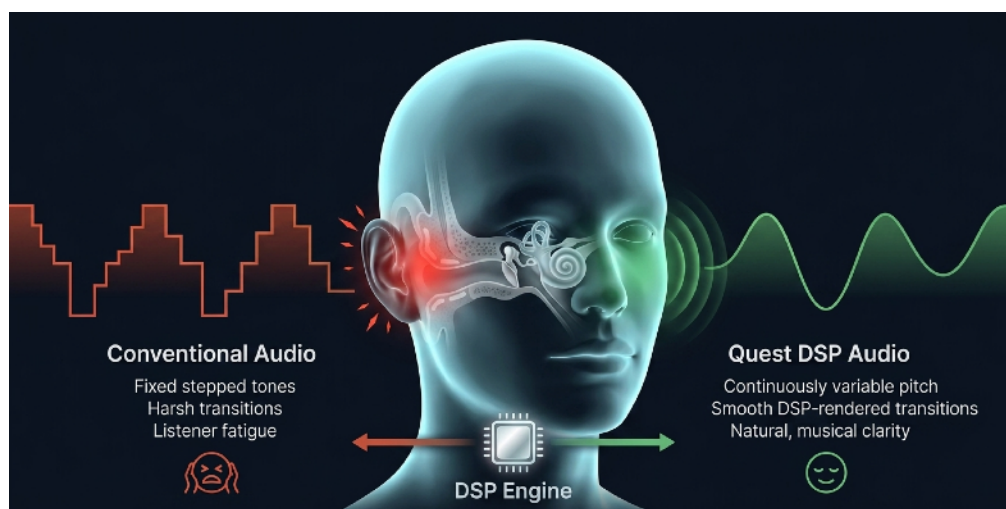


To **RESET** a program slot, select the **Reset** option and press and hold the **Pinpoint** button to confirm.

Click the upper right button once to enter the Settings menu. Use the ◀▶ buttons to navigate to the **Wireless settings**. Use the ▲ buttons to switch on the wireless audio function; now your previously paired headphones will connect automatically.



To pair new QUEST headphones, first set your headphones to Pairing Mode(see next page). In the recent settings menu, press and hold the Pinpoint button for 5 seconds until a checkmark appears on the screen. The detector will erase the previous pairing and automatically connect to the new device.



Quest S series “sounds better” because its DSP engine processes every target signal in real time and reshapes it into a smooth, continuously variable tone — so your ears receive richer information with less effort.

HEADPHONES



WIREEFREE PRO



WIREFREE VIBE

Power On/Off: Press and hold the Power/Setting (⏻) button to turn the headphones on or off.

Adjust Volume: Press the (+) button to increase volume and the (-) button to decrease it.

Pairing Mode: While the headphones are off, press and hold the Power button until the LED flashes red and blue.

Reset (Erase Pairings): To remove all paired devices, turn the headphones off, then press and hold the Power button for 10 seconds.

Wired Connection: If the battery is drained, connect the headphones to the detector using a 3.5mm audio cable.

Fit Adjustment: For a comfortable fit, extend the headphone arms to ensure the ear cups fully cover your ears.

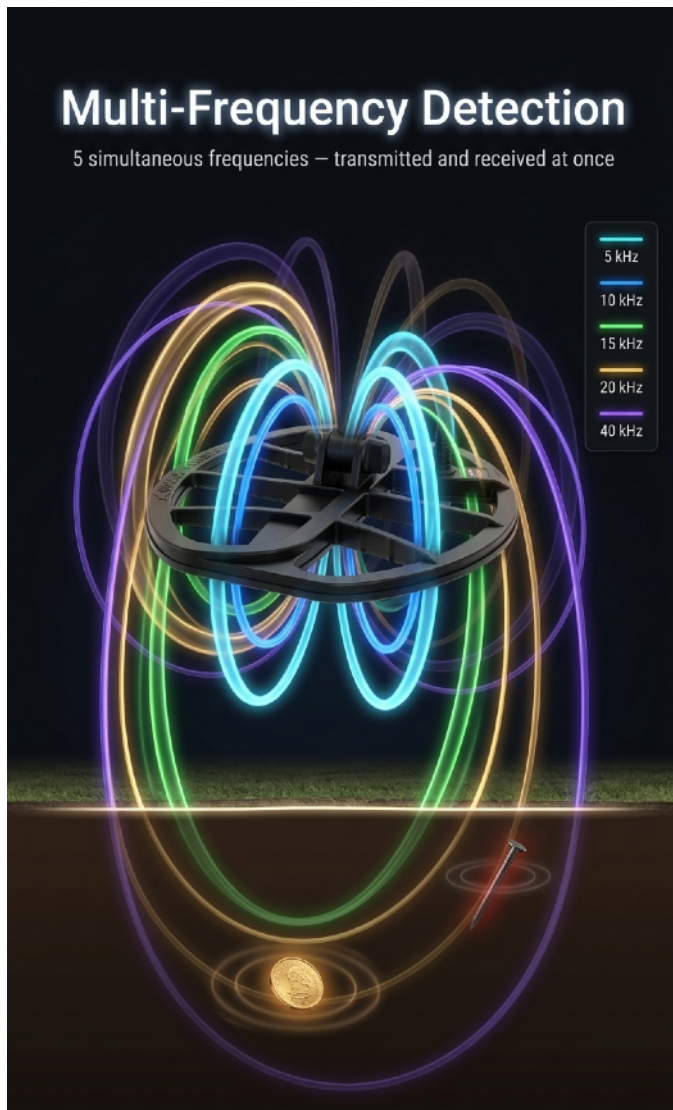
Charging: Fully charge the headphones before their first use.

Safety Note: To protect your hearing, avoid listening at excessively high volume levels for long periods.

AQUA



You may also purchase our specialized wired diving headphones Quest AQUA. While the headphones are rated for depths up to 10 meters, please note that the metal detector itself is limited to a depth of 5 meters. When operating underwater, ensure that you do not exceed the detector's maximum rated depth of 5 meters



interference, delivering a "see-through" performance in challenging terrains. It represents the perfect balance of raw power and intelligent signal discrimination for professional treasure hunters.

How to Change the Frequency:

1 Select Frequency: Use the Frequency button  to cycle through the available frequencies. The SIMULTIQ symbol will be displayed when SimultiQ is selected. Single frequencies are shown in kHz, with options such as 5, 10, 15, 20, 40 kHz*.

Single Frequency Operation:

Certain situations might benefit from using a single frequency. For example:

For detecting larger, highly conductive objects at deep levels, 5 or 10kHz might be advantageous.

For finding fine gold jewelry at shallow depths, 40 kHz could yield better results in specific environments, like dry sand at a beach.

However, in areas with high Electromagnetic Interference where noise cancellation is less effective, using a single frequency might reduce noise. This might limit target sensitivity across a broader range, but it could be preferable in specific conditions.

By offering both multi-frequency and single-frequency options, the S Series detectors provide versatility to adapt to various detecting situations and preferences.

SimultiQ(Simultaneous Multi-frequency) is a cutting-edge multi-frequency technology designed to maximize detection depth and target accuracy. Similar to established industry standards, it simultaneously transmits and processes multiple frequencies across the spectrum. This allows the detector to maintain high sensitivity to small gold and jewelry while providing stable identification for deep, high-conductive silver and coins. By analyzing signals across various wavelengths, SimultiQ effectively cancels out complex ground mineralization and salt



Multi-coin: The ultimate high-conductor hunter. It turns your detector into a magnet for silver and high-purity targets.



Multi-relic: The specialist for the lower end of the spectrum—perfect for snatching up those tricky, lower-conductivity treasures.



Multi-trash: Your secret weapon against the trashy area. It's masterfully designed for hyper-conductive, soaking-wet ground. It doesn't just ignore moisture; it actively suppresses the "falsing" that drives other detectors crazy, and it aggressively filters out those annoying "coke" and aluminum foil signals.

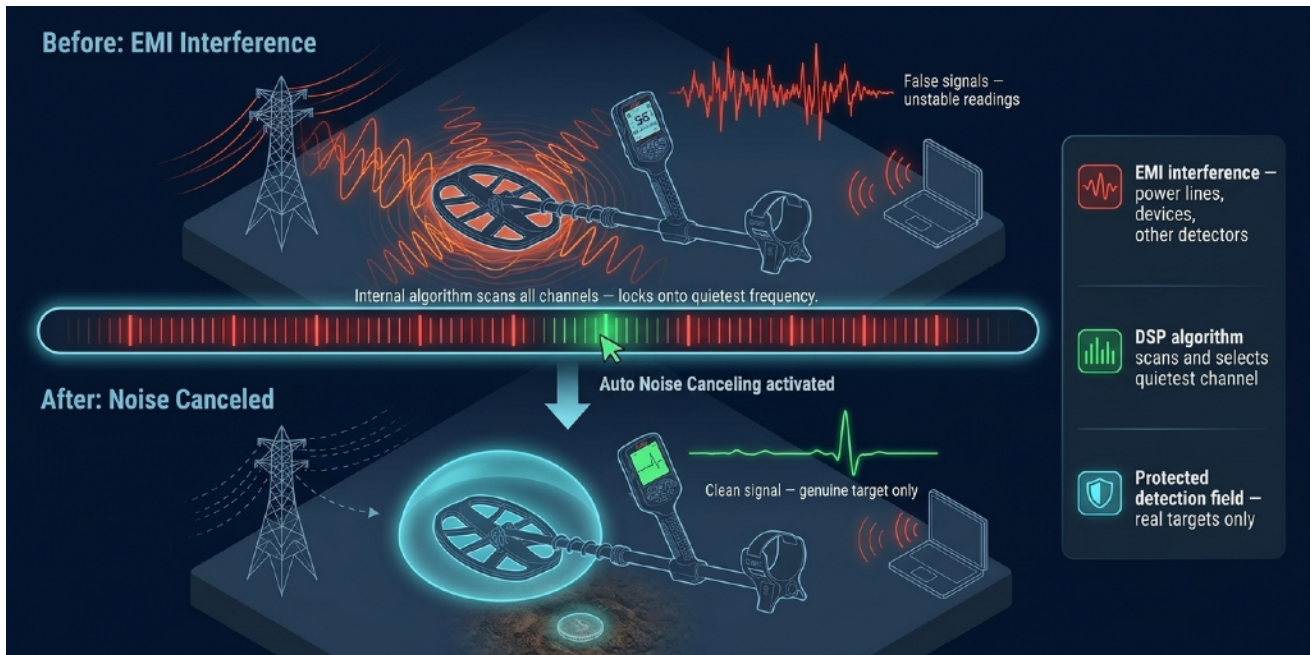


Multi-beach(Surf & Deep Sand (Your Depth Advantage): Engineered specifically for challenging beach conditions, this mode delivers relentless penetration power. While standard multi-frequency modes are designed to stabilize and "quiet down" salt-heavy environments, this specialized mode pushes deeper into the sand—finding those elusive, deep-buried treasures that other machines simply can't reach.



Multi-Saltwater (Your Ultimate Beach Weapon): This is the heavy-duty "big gun" —the final, unstoppable solution for battling the harsh, conductive soup of saltwater environments. Where other settings might struggle with the extreme mineral load of the ocean, Multi-Saltwater cuts through the interference like a laser, maintaining dead-on stability and raw power when the conditions get truly brutal.





Electromagnetic Interference (EMI) Noise

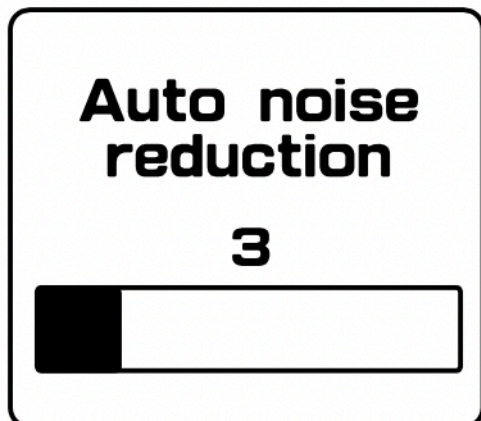
In metal detecting, EMI noise refers to electrical or electromagnetic interference from sources such as power lines, electronic devices, or other detectors. This interference can cause false signals, inconsistent readings, and reduced sensitivity, which can hinder the detection process.

Auto Noise Reduction

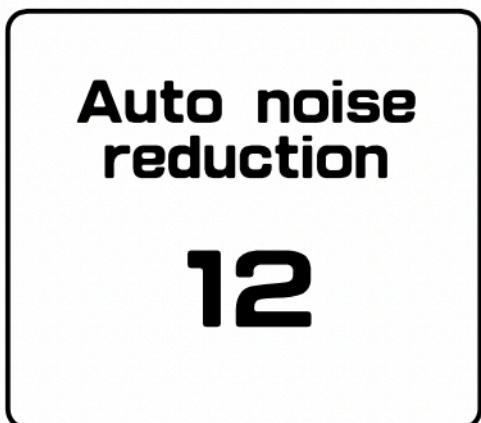
Auto Noise Canceling is a sophisticated process that filters out unwanted interference to enhance detection accuracy. The detector "listens" to available frequencies, scanning the environment to identify noise sources, similar to finding a clear radio station. Once the internal algorithm recognizes interference patterns, the detector automatically aligns itself to the quietest frequency. This minimizes noise responsiveness and maximizes focus on genuine metal signals, ensuring clear readings even near power lines or electronic devices.

LOCAL SETTING

Noise reduction undergoing

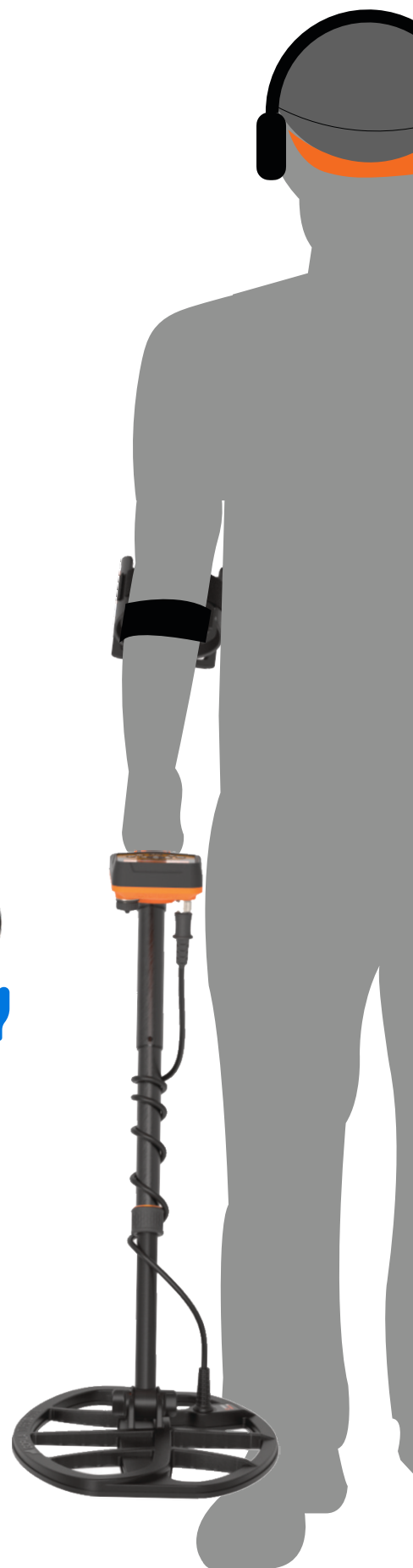


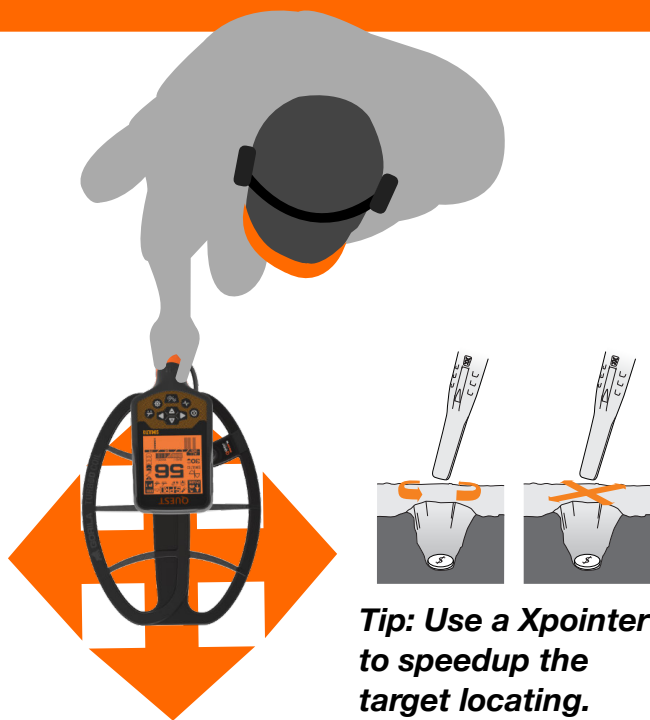
Noise reduction finished



How to Perform Auto Noise Reduction

1. Hold the detector still and keep the coil away from the ground.
2. Press and hold the Noise Canceling button.
3. Wait approximately 12 seconds until you hear a confirmation beep and the LCD displays a selected channel.





Pinpoint mode produces a continuous tone with variable volume to help you accurately locate the target's location before you start digging. It's essential for precise targeting and can be applied in two ways:



VISUALIZATION OF PINPOINTING



Initial status of pinpoint mode



Middle signal strength



Strongest signal strength

Pinpointing a Target

Step 1: Move the coil away from the target's estimated location, then press and hold the Pinpoint button. The center bar on the screen will indicate the signal strength.

Step 2: Keep the coil level and sweep slowly over the target area.

Step 3: Listen for the strongest audio signal or watch the Pinpoint Visualization on the screen. The sound will intensify as the center of the coil approaches the target and fade as it moves away.

Step 4: Locate the spot where the most segments are active and the highest number is displayed. The target is located directly under the center of the coil.

Step 5: Release the Pinpoint button to exit.

Note: In Pinpoint Mode, the device switches to All Metal (no discrimination) and non-motion detection, allowing you to find targets even when the coil is stationary.

Troubleshooting: If the signal becomes noisy or unclear, release the button and repeat the process from Step 1.

GROUND BALANCE

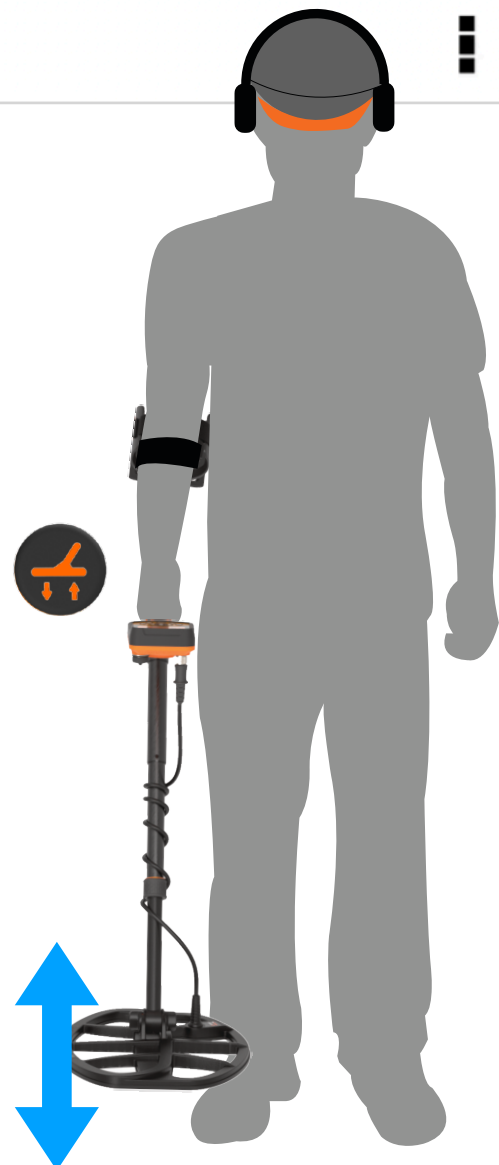


Ground Balancing calibrates the detector to the local soil, eliminating false signals caused by mineralization or saltwater.

There are three ways to perform a Ground Balance:

1. **Auto G.B.:** Find a spot clear of metal. Hold the Ground Balance button and "pump" the coil up and down from 5 to 2 inches above the surface. The GB symbol  will flash and the digits will update until the reading stabilizes.
2. **Manual GB:** Press the Ground Balance button so the symbol flashes. Use the Up/Down buttons to set the digit manually. Press the GB button again to save and exit. Manual adjustment is recommended for extreme conditions, such as highly mineralized ground.
3. **Auto Tracking:** Press the Ground Balance button to enter the menu, then press the Pinpoint button to toggle Auto Tracking on or off. When active, the Auto Tracking icon  will appear. The S Series uses intelligent tracking to handle minor mineralization automatically, making it ideal for beginners.

Pro Tip: If the detector becomes "chatter" or unstable as you sweep, perform an Auto GB immediately. A proper ground balance is the secret to achieving maximum detection depth.



Hold G.B. button and pump coil over surface to AUTO G.B. Release to cancel.



Park Mode is the ideal setting for detecting in areas with high metallic trash, such as urban parks and recreational spaces. The recovery speed is specifically tuned to

separate valuable targets from common debris like aluminum foil, pull-tabs, and bottle caps.

Here is why Park Mode is a standout choice:

Versatility: Beyond parks, it is suitable for general use and excels in freshwater environments.

Depth and Sensitivity: The default settings offer excellent depth and precise target ID, effectively filtering out junk. Using SimultiQ makes the device highly sensitive to various valuables while ignoring most trash.

Frequency Options: You can select a single frequency or SimultiQ based on your target. SimultiQ provides maximum depth and separation, though it may introduce slight, manageable noise.

If you are new to a site, Park Mode is the best first choice. Its balance of depth, discrimination, and adaptability makes it a reliable option for finding coins and jewelry amidst modern trash.

Pro Tip: Use the FeScale feature to see the ferrous/non-ferrous ratio of a target, helping you distinguish between valuable finds and iron trash.

Recommended Locations: School Playgrounds, Picnic Areas, Walking Paths, Historical Sites, Sports Fields, and Parking Lots.

Field Mode is like an unleashed monster, delivering raw, unlimited performance for the most demanding hunters. It is specifically designed for open pastures, cultivated fields, and sites of historical significance, where deep and ancient targets hide. This mode excels in environments littered with ferrous trash, such as iron nails and coke (a common byproduct of coal), effectively discriminating against junk while isolating valuable artifacts and hammered coins.

When set to SimultiQ, the detector becomes highly sensitive across the entire frequency spectrum. This heightened sensitivity allows for accurate identification of targets even at the extreme edge of the device's depth range.

Depth and Accuracy: Compared to single-frequency options, Multi-Frequency in Field Mode offers a distinct advantage in both detection depth and target separation in challenging terrains.

In essence, Field Mode provides an optimized balance of sensitivity, discrimination, and depth. It is your go-to option for challenging ground laden with history, offering a professional-grade experience for both amateur treasure hunters and seasoned archaeologists.



Pro Tip: In Field Mode, use a slower, more deliberate swing to let the SimultiQ algorithm "see" through deep mineralized soil and pick out weak signals from centuries-old targets.

Recommended Locations: Ancient Pastures, Cultivated Farmland, Ghost Towns, and Historical Sites.



Beach Mode is meticulously designed for metal detecting in various beach environments, from dry sand to underwater conditions up to 15feet/

5M. The mode is especially useful in tackling the challenges posed by high salt content and black sand, which can interfere with accurate target identification. Unlike single-frequency detectors that struggle in these environments, Beach Mode employs SimultiQ technology to minimize noise from salt and achieve maximum performance.

Another unique feature is the black sand detection. Beaches with black sand, rich in natural iron, make metal detection extremely challenging. In such cases, Beach Mode automatically senses the presence of black sand and displays high mineral+saltwater presence, allowing you to adjust your strategy accordingly.

This mode is ideal for saltwater beaches, offering a high Recovery Speed to minimize saltwater interference without sacrificing depth. Overall, Beach Mode provides a comprehensive solution for efficient and effective treasure hunting in some of the most challenging terrains.



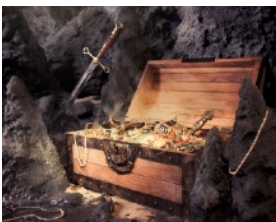
Gold Mode is specifically engineered for mineralized goldfields. It features a continuous background threshold tone, aiding in the detection of small, shallow

nuggets and deeper targets. Audio alerts are dynamic, changing in volume and frequency proportional to signal strength, helping you gauge object size and depth.

The mode supports both 40kHz single frequency and Multi-frequency. By default, it operates at a Recovery Speed of 5 with a continuous tone, designed to isolate gold from mineralized ground noise.

Harnessing Multi-Frequency Power

Our advanced multi-frequency technology excels at suppressing ground mineralization, allowing you to isolate faint gold signals other detectors miss. For maximum versatility, pair the S Series with our specialized white closed design Gold Search Coils. This integration transforms your detector into a high-precision gold-hunting powerhouse, ensuring top performance across highly challenging mineralized landscapes with just one machine.



Deep Mode is specifically designed for detecting deeper targets, making it ideal for treasure hunters seeking older, more deeply-buried items. By default, it comes with a Recovery Speed set at 1, the lowest

setting, which increases the detector's depth sensitivity. This enables the device to pick up signals from deeper objects that other modes might miss.

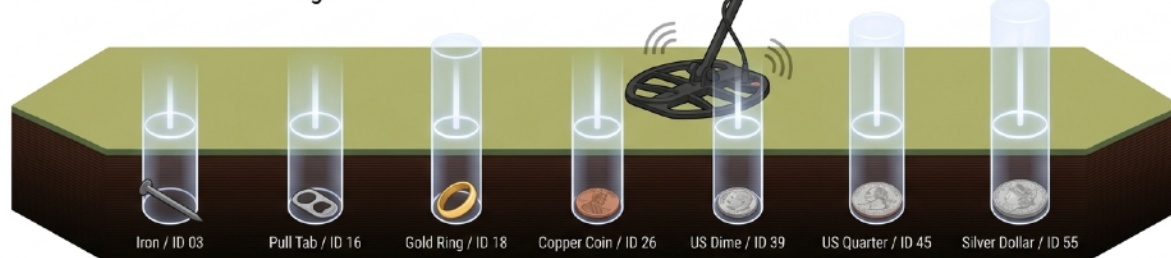
However, the lower Recovery Speed also has its drawbacks. It makes the detector more susceptible to false signals from mineralized soil or other kinds of interference. It also slows down the response time, which could make pinpointing smaller, closer targets more challenging.

Tips for Using Cache Mode:

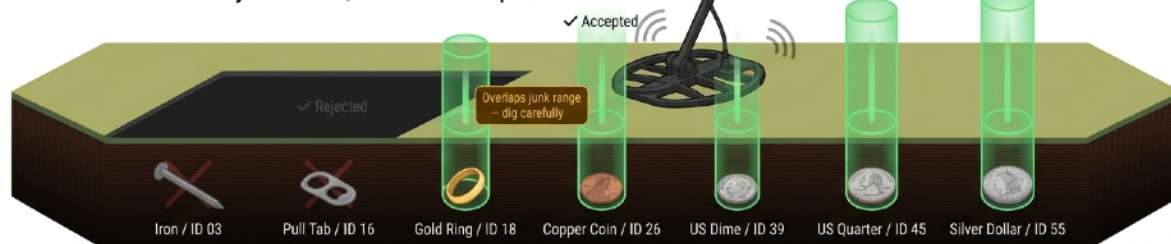
Use Cache Mode in areas where you expect to find deeper, older targets, like historical sites. Due to the slow Recovery Speed, it's essential to move the coil more slowly over the ground to ensure accurate detection.



Discrimination OFF — all targets detected



Discrimination ON — junk silent, valuables respond



Target ID scale: 01 (lowest conductivity) to 60 (highest conductivity)

Gold jewelry typically reads ID 13-20 — close to pull tabs and iron

Tip: Widen your accepted range near ID 15-20 to avoid missing gold

Target ID & Discrimination

Target ID (01-60): Provides a conductivity-based estimate of a target. The ID is shown as a two-digit number in the center of the display, with a corresponding cursor on the ID scale.

- Ferrous (Iron): IDs 01-10.
- Non-Ferrous: IDs 11-60.

Discrimination Patterns

The S Series offers four discrimination patterns to streamline your search. You can select these using the Discrimination Button.

- Three Preset Patterns: Optimized factory settings for common hunting conditions.
- One Custom Pattern: Fully configurable, allowing you to manually accept or reject specific ID segments.

Default Configurations:

- Park, Field, & Beach: Default to "F" (Ferrous Off), which masks iron signals.
- Gold: Default to "G" (Ground Off).

Performance Factors: Factors like depth, corrosion, soil mineralization, and swing speed can cause "jumpy" IDs. Thanks to the S Series' advanced multi-frequency technology, you receive more stable ID signals in complex, mineralized ground compared to standard detectors. However, remember that IDs are probabilities; very deep or small targets may provide a signal without a reliable ID. Always correlate the ID with your audio feedback.

Important: Discrimination settings are mode-specific. Adjustments made in one mode (e.g., Park) will not affect your settings in others, allowing you to tailor your detector's filter to the specific trash profile of your current location.



There are 3 preset discrimination patterns and 1 customizable one:

1 All Metal (Everything On): Think of this as "Full Open" mode. The detector accepts every target ID from 1 to 60. You will hear a tone and see an ID for everything in the ground, including iron, trash, and even ground minerals. Use this if you don't want to miss a single thing.

2 Ground (Ground Silenced): This mode ignores the natural "noise" from the soil itself. It automatically rejects IDs 1 and 2 (which are usually just ground minerals) and accepts everything else. It's a great way to keep your hunt quiet and focused on man-made targets.

3 Iron (Iron Silenced): This is the classic "Filter" mode. It automatically ignores all iron objects (IDs 1 through 10) so you don't waste time digging up old nails or rusty junk. It leaves everything from ID 11 to 60 "open" for you to find.

Custom (Your Way): This mode is fully up to you. You can manually pick and choose exactly which IDs you want to hear and which you want to ignore. It's perfect for when you are hunting in a specific area filled with a certain type of trash you'd rather avoid. Customize your detection patterns using two methods:

1. **Manual Selection:** Press and hold the Discrimination button to enter Custom Mode. Use the Left/Right arrow buttons to navigate to the desired ID, then press the Pinpoint button to accept or reject it.
2. **On-the-Fly Selection:** While in Custom Mode, sweep the search coil over the metal target you wish to avoid. Once the target ID appears on the navigation bar, quickly press the Pinpoint button to accept or reject that ID.



The menu system is divided into **GROUND** and **SOUND** to help you optimize performance and audio feedback:

1 GROUND

This menu contains functions related to ground effect handling and signal processing. Use these settings to manage difficult terrain and trash interference:

- Recovery Speed: Controls how quickly the detector responds between targets.
- Bottle Cap Filter: Reduces false signals from bottle caps.
- Saltwater Filter: Optimizes performance for wet sand and saltwater environments.
- Ground Filter: Smooths out noise caused by ground mineralization.

2 SOUND

This menu controls how the detector communicates with you through audio. Customize these settings to suit your hearing preferences:

- Number of Tones: Choose how many different audio pitches you hear.
- Tone Frequencies: Adjust the specific pitch for different target IDs.
- Tone Breaks: Set the "spaces" or boundaries between different tones.
- Threshold & Threshold Frequency: Adjust the background hum to help hear deep, faint targets.

Click  to enter the **GROUND** MENU.

- Use   to navigate between GROUND and SOUND menu.
- Click the  to enter the 2nd level menu.
- Use   to navigate within the 2nd level menu. At 2nd menu, click pinpoint button to return to 1st menu.
- Click the  to exit MENU.

Settings with local mark will only affect the recent mode. Global mark means the setting is for every mode.



LOCAL
SETTING



GLOBAL
SETTING



LOCAL

Recovery Speed

Recovery Speed controls how quickly the detector responds after finding a target. This setting is essential for separating multiple objects that are buried close together. Adjusting the Recovery Speed involves a trade-off between target separation and detection depth:

- Low Settings (e.g., 1): The device processes signals more slowly. This increases depth but makes it harder to distinguish between targets that are close to each other.
- High Settings (e.g., 10): The device responds rapidly. This improves target separation—allowing you to find small valuables hidden among trash or iron—but results in a decrease in depth.

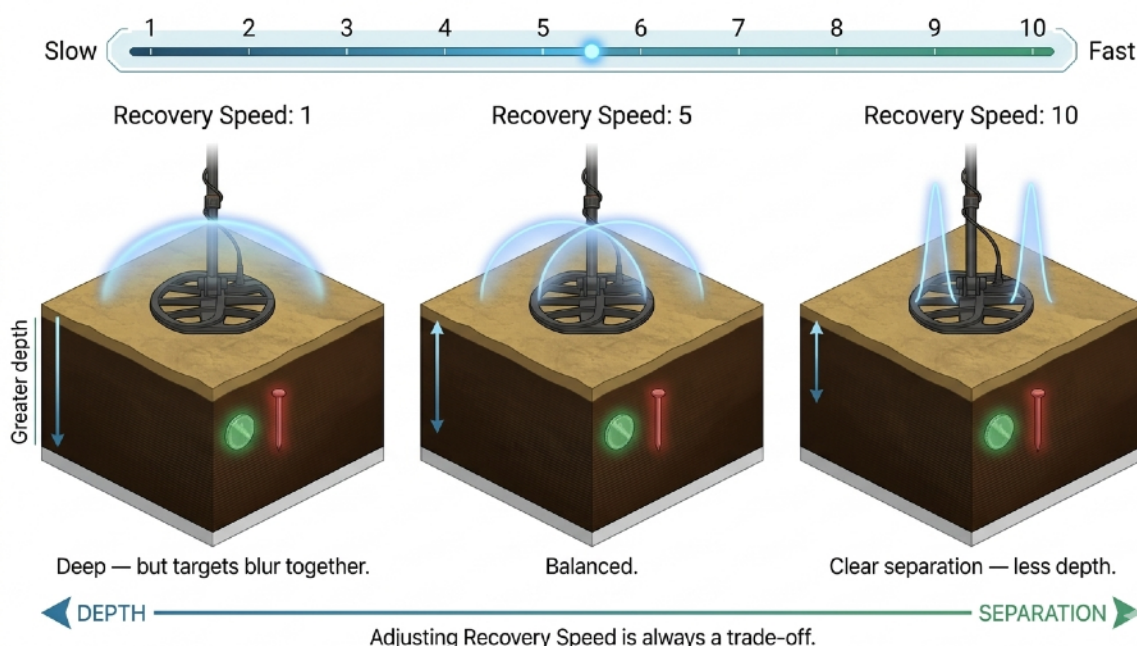
Important Notes

- Adjustable Range: The setting can be adjusted from 1 (slowest) to 10 (fastest).
- Local Setting: Recovery Speed only affects the currently selected mode (Park, Field, Beach, Gold or Deep). Changes made in one mode do not affect the others.
- Pro Tip: We recommend practicing with different metal objects placed close together on the surface to see how the recovery speed changes the audio response.



How to Adjust the Recovery Speed

1. Enter Menu: Press the gear button once.
2. Select Function: Use the ◀ ▶ buttons to navigate to the Recovery Speed icon. The current value will appear on the screen.
3. Change Value: Use the ▲ or ▼ buttons to adjust the speed.
4. Exit: Press the ⚙ button once to return to the main screen.





LOCAL

IRON FILTER

The Iron Filter helps you find valuable non-ferrous targets (like coins or jewelry) in areas littered with iron trash. It prevents iron signals from "masking" or hiding good targets, allowing the detector to isolate the signals you want to hear.

How It Works:

The Iron Filter acts as a fine-tuning tool for how the detector classifies difficult targets:

High Settings (e.g., 9): Provides the strongest filtering. This is very useful for "tricking" the detector into treating unwanted mid-conductive trash—such as shotgun cartridges—as iron so they are ignored.

Low Settings: Increases the chance that the detector will signal on all metals. However, a setting that is too low may cause iron to be misidentified as a valuable non-ferrous target.

Default Performance: The device defaults to Level 8, which offers an ideal balance for most trashy environments.

Technical Specifications

Adjustable Range: Park, Field, and

Gold Deep: 0–9 Beach Mode: 1–9

Requirement: This feature is only available when the device is operating in SimultiQ-Frequency.

Pro Tip: If you are hunting in a site with heavy "hot rocks" or large rusted iron, increasing your Iron Filter to 9 can significantly quiet the machine and help you focus on genuine non-ferrous signals.

How to Adjust the Iron Filter

Enter Menu: Press the  button once.

- 1. Select Function:** Use the ◀▶ buttons to navigate to the Recovery Speed icon. The current value will appear on the screen.
- 2. Change Value:** Use the ▲ or ▼ buttons to adjust levels.
- 3. Exit:** Press the  button once to return to the main screen.



Bottle Cap Filter



LOCAL

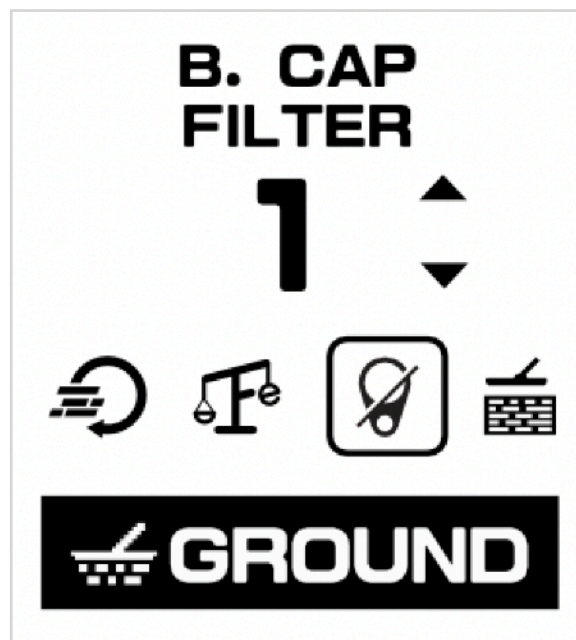
Bottle caps are notoriously difficult for metal detectors because they often "mimic" valuable non-ferrous targets. The Bottle Cap Filter (bC) allows you to identify and discriminate these caps as iron, ensuring you don't waste time digging trash.

How It Works: Cleaning Up Your Signals

The Bottle Cap Filter uses intelligent signal analysis to separate the unique electromagnetic signature of a rusted cap from a genuine coin:

- Higher Settings (1–8): Increases the strength of the filter. This makes the detector more aggressive at reclassifying bottle caps as iron signals.
- Setting 0 (Off): The filter is disabled. This is the default setting and is best for clean ground where you don't want any signal processing interference.
- SimultiQ-Frequency Only: This advanced feature is only available when the detector is operating in a Multi-Frequency mode.

Pro Tip: While a high bC setting is great for parks, be aware that extreme filtering can sometimes affect the ID of very deep, large non-ferrous targets. Start at Level 4 if you encounter a high volume of caps and adjust upward only if needed.



How to Adjust the Iron Filter

Enter Menu: Press the * button once.

1. **Select Function:** Use the ◀ ▶ buttons to navigate to the B.Cap Filter icon. The current value will appear on the screen.
2. **Change Value:** Use the ▲ or ▼ buttons to adjust levels.
3. **Exit:** Press the * button once to return to the main screen.



Ground Filter



LOCAL

The Ground Filter is designed to eliminate false signals caused by extremely difficult or "noisy" terrain. It helps stabilize the detector when the ground itself creates constant interference that a standard ground balance cannot fully resolve.

How It Works: Stabilizing the Audio

The Ground Filter smooths out the feedback from the soil, allowing you to hear clear target signals through the ground noise:

- **When to Use:** This setting is highly effective in "tough" terrains, such as areas with high magnetic mineralization or varying soil types.
- **Higher Settings (1–8):** Increases the filtering intensity to quiet the machine.
- **Default Setting (0/Off):** It is recommended to keep this at 0 for

most conditions to ensure the highest possible sensitivity to deep targets.

- **Compatibility:** Unlike some other filters, the Ground Filter works in both Multi-Frequency and Single-Frequency modes.

How to Adjust the Iron Filter

Enter Menu: Press the * button once.

1. **Select Function:** Use the ◀▶ buttons to navigate to the Ground Filter icon. The current value will appear on the screen.
2. **Change Value:** Use the ▲ or ▼ buttons to adjust levels.
3. **Exit:** Press the * button once to return to the main screen.

Pro Tip: Only increase the Ground Filter if the detector remains "chattery" even after a successful Ground Balance. Raising the GF too high in clean soil can slightly reduce the depth on very small items, so use it only when the terrain demands it.

Tone Number



LOCAL

The Number of Tones function allows you to customize how the detector's Target ID scale (the numerical value assigned to a target) is divided into distinct audio "bins." By choosing how many tones the device uses, you can tailor your listening experience to match your specific hunting style and environmental needs.

Why Adjust Tone Quantities?

Audio is one of your most valuable tools in metal detecting. Customizing tone numbers offers several benefits:

- **Target Identification:** Lower tone numbers (1, 2, or 4) are often preferred for relic hunting, providing simple, distinct "low" and "high" signals that quickly separate iron from good targets.
- **Target Resolution:** Higher tone numbers (60) are ideal for coin hunting in trashy areas. Each small segment of the ID scale gets its own unique pitch, allowing you to "hear" the difference between a foil scrap (low tone) and a silver dime (high tone) without even looking at the screen.
- **Personal Preference (Pitch Mode):** Some users prefer Pitch Mode (P), where the tone's pitch and volume increase as you get closer to the target. This provides a more organic, "analog" feel, helping you gauge the size and depth of an object based on the intensity of the sound.

Choosing the Right Setting

Your choice should depend on your goals and the site conditions:

STONE NUMBER

4 ▲ ▼



SOUND

1, 2, 4, 6 Tones

Relic/Field Hunting

Simplifies signals to reduce "ear fatigue" in noisy, iron-filled ground.

60 Tones

Coin/Jewelry Hunting

Maximum resolution; distinct audio ID for every conductive step.

P (Pitch)

Pinpointing/General

Intuitive, variable audio that makes centering a target feel natural.

Pro Tip: If you are new to metal detecting, start with 4 tones. This gives you enough information to separate iron, foil, pull-tabs, and coins without the audio becoming too complex to interpret. As you gain experience, try 60 tones to see if it helps you pick out "masked" signals better!

Hot to set: Use ▲ or ▼ to adjust. Click Pinpoint to return to the previous menu, or Gear (⚙) to save and exit.



Tone Volume



The Tone Volume setting gives you full control over the audio intensity of each target zone. By customizing how loud specific targets sound, you can prioritize the signals you want to hear and suppress the ones you don't.

Why Adjust Tone Volume?

- **Silence the Trash:** In trashy sites, you can turn down or mute (set to 0) the volume of common junk, like iron or foil. This reduces "ear fatigue" and helps you focus entirely on the clear, high-volume signals of valuable targets.
- **Precision Auditory Feedback:** You can adjust the volume for specific target zones to make "good" signals pop, while keeping "questionable" signals at a lower, less distracting level.

- **Customization:** With a range of 0 to 10, you can fine-tune every tone to your exact hearing preference.

How It Works

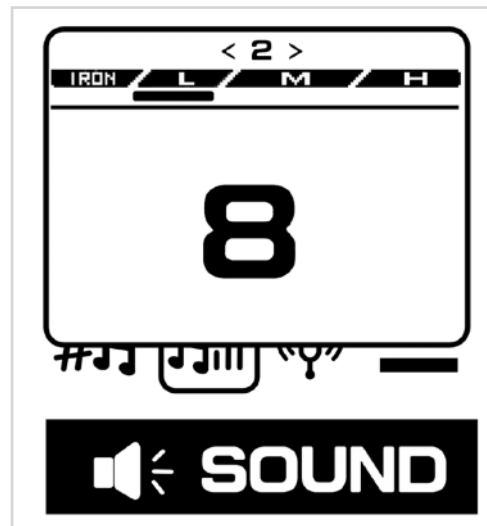
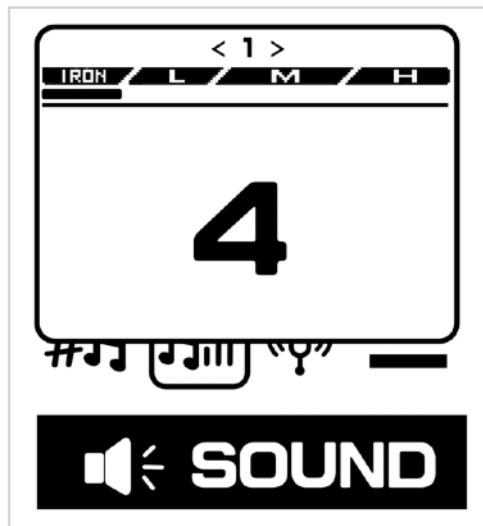
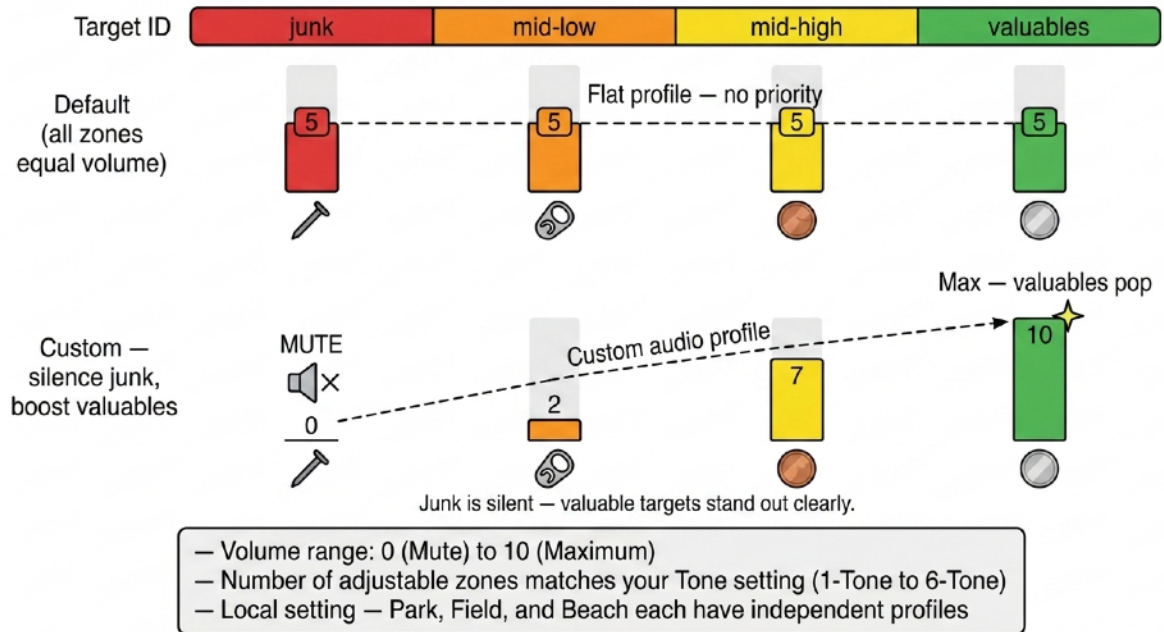
The number of adjustable volume zones depends on your Number of Tones setting:

- **Example:** If you select 1-Tone, you adjust the volume for the entire scale. If you select 6-Tones, you can adjust the volume for each of those 6 zones independently.

Important Notes

- **Mode-Specific:** Tone Volume is a local setting. Adjustments made in Park mode will not affect Field or Beach modes, allowing you to have different audio profiles for different environments.
- **Range:** 0 (Mute) to 10 (Maximum).

Tone Volume



How to Adjust Tone Volume

1. **Navigate:** Enter the SOUND menu, go to the 2nd-level sub-menu, and locate Tone Volume.
2. **Select & Adjust:** Use the ◀▶ buttons to select a specific tone zone, then use the ▲ or ▼ buttons to set your desired volume (0–10).

3. Click the **Pinpoint** button to return to the SOUND menu, or the **Gear** ⚙ button to save and exit.

Pro Tip: Try setting your iron volume to 1 or 2 instead of muting it entirely. This keeps you aware of the iron content in the ground without it drowning out the faint, high-conductive signals of deep treasures.



Tone Pitch



The Tone Pitch setting allows you to fine-tune the "pitch" (how high or low the sound is) for each individual target zone.

Why This Setting Matters

More than just a technical adjustment, this setting is really about your personal preference. Everyone's ears are different, and what sounds "clear" to one person might be fatiguing to another. By customizing these pitches, you can create an audio profile that feels intuitive and helps you instantly distinguish between different types of buried items in a way that works for you.

Benefits of Customizing Your Pitch

- "Hear" Your Targets Your Way: Adjusting the pitch allows you to set tones to frequencies that you personally find most comfortable to listen to for hours on end.

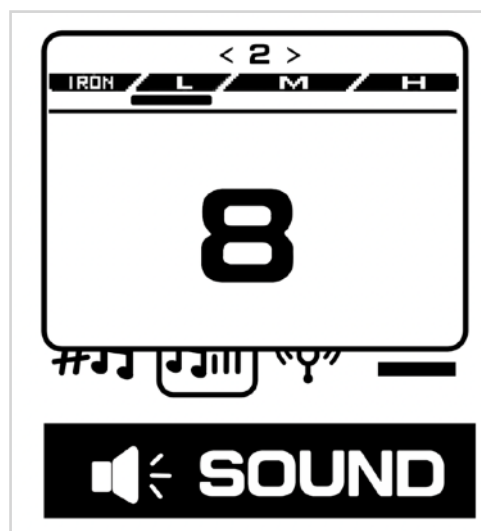
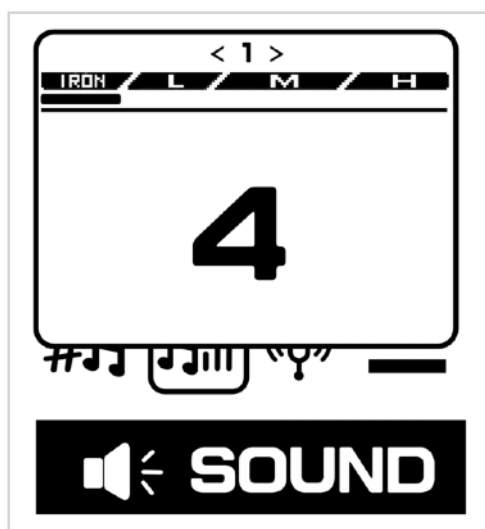
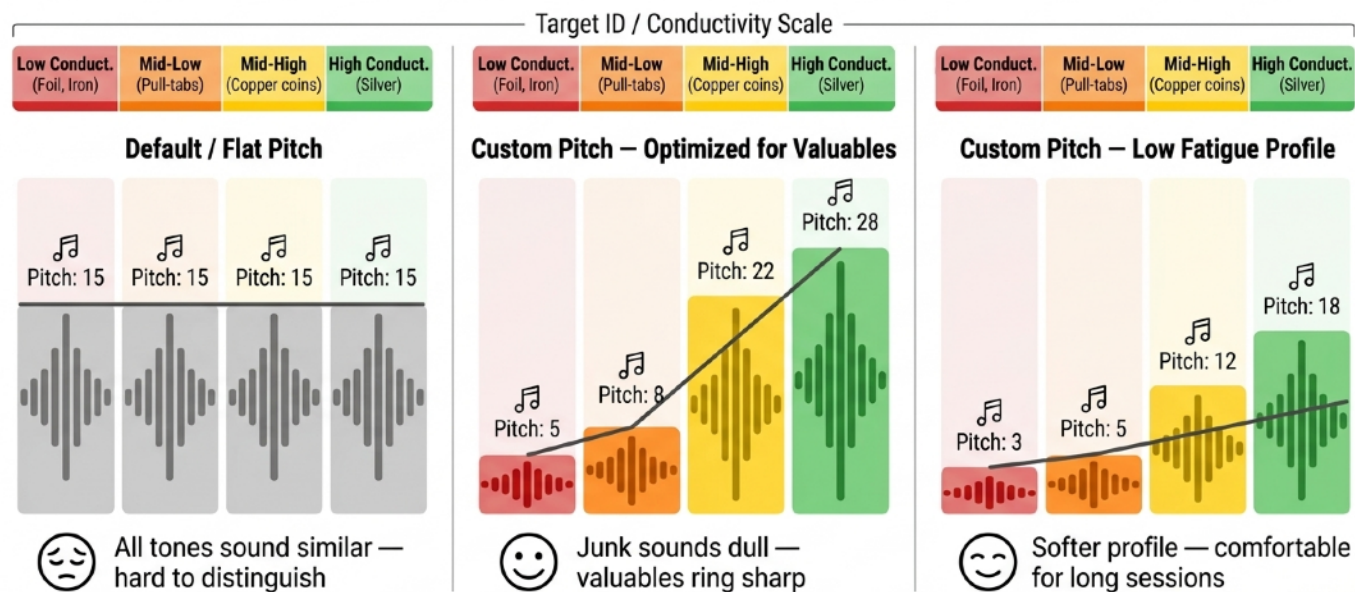
- Avoid Ear Fatigue: High-pitched, piercing sounds can become tiring during a long day of hunting. Lowering the pitch of common "trashy" tones can make your search session much more relaxing.
- Instant Recognition: By assigning a unique, sharp pitch to targets you value (like silver coins) and a dull, low pitch to junk, you can develop an "audio intuition" that tells you what's under the coil based on your own preferences.

Customizing Your Audio

The ability to customize pitch depends on your Number of Tones setting. For example, if you are using 4-Tone mode, you can change the pitch for all 4 zones separately. This lets you create a soundscape that highlights the specific conductivity ranges you care about most.

Important Notes

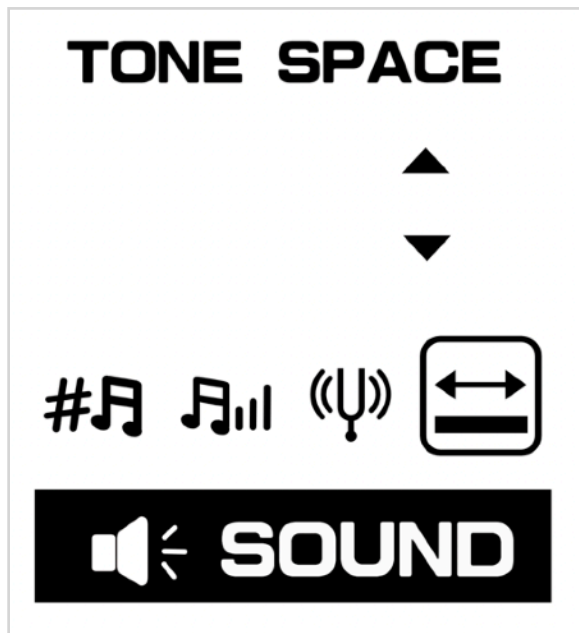
- Adjustable Range: Frequencies can be set from 1 to 30.
- Mode-Specific: This is a local setting. Changes made in Park mode will not change your Field or Beach setups.
- Goldfield Mode: To maintain consistent audio feedback in highly mineralized soil, this setting is disabled in Goldfield mode.



How to Adjust Tone Frequency

1. **Navigate:** Enter the SOUND menu, go to the 2nd-level sub-menu, and locate Tone Pitch.
2. **Select & Adjust:** Use the ◀ ▶ buttons to select a specific tone zone, then use the ▲ or ▼ buttons to set your desired frequency (0–30).
3. Click the **Pinpoint** button to return to the SOUND menu, or the **Gear** ⚙ button to save and exit.

Pro Tip: Try setting your high-conductive targets to a "sweet" high frequency (around 25–30) and your low-conductive trash to a deep, bass-heavy frequency (around 1–5). This contrast makes "good" targets stand out significantly based on your personal hearing comfort.



Tone Space



The Tone Space setting allows you to define the boundaries between target zones. While default settings work for many scenarios, you may occasionally need more precise distinction between specific types of targets. Using the tone space logic, you can manually adjust the start and end points of these target zones.

Why This Setting Matters

While Tone Space is largely a matter of personal preference, it becomes a powerful tool when you adapt it to your specific environment. By fine-tuning these boundaries based on the terrain you are hunting, you can drastically improve your ability to isolate and identify the specific items you are looking for.

How It Works:

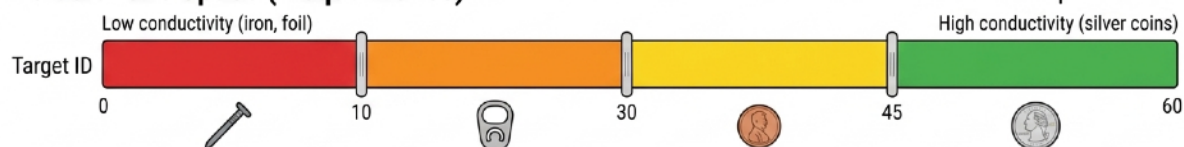
Defining Your Zones by customizing the Tone Space, you are essentially drawing the "lines" on your Target ID scale. This allows you to expand the range for targets you care about most and compress the range for those you consider less important.

- **Environmental Adaptation:** In a park littered with specific types of trash, you can adjust the Tone Space to widen the "zone" of a desired target, ensuring that even if the ID fluctuates slightly due to soil conditions, it stays within your preferred audio range.
- **Compatibility:** * This setting is available in Park, Field, and Beach modes.

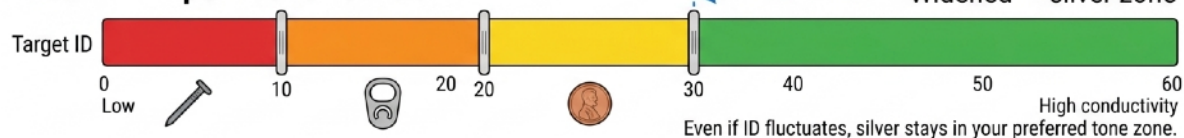
It is a local setting, meaning changes only apply to your currently selected mode.

Note: This adjustment is not available when the Number of Tones is set to 1, nor does it function in Goldfield mode.

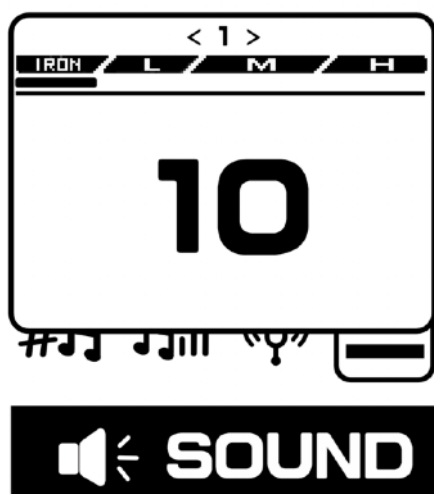
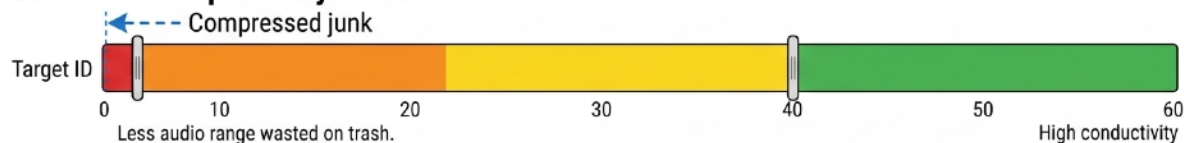
Default Tone Space (4 equal zones)



Custom — expanded silver zone



Custom — compressed junk zone



How to Adjust Tone Space

1. **Navigate:** Enter the SOUND menu, go to the 2nd-level sub-menu, and locate Tone Space.
2. **Select & Adjust:** Use the ◀▶ buttons to select a specific tone zone, then use the ▲ or ▼ buttons to set your desired point.
3. Click the **Pinpoint** button to return to the SOUND menu, or

the **Gear** ⚙ button to save and exit.

Pro Tip: If you find that a specific type of valuable item often falls right on the edge of two different tone zones, use Tone Space to shift the break point. This will ensure that all targets within that conductivity range consistently trigger the specific, high-quality tone you have chosen, regardless of the environment.



- If Threshold is Too Low (e.g., 0): You lose sensitivity. Weak signals from small or deep targets may be suppressed, causing you to walk right over potential finds.
- Optimal Level: The goal is to set the Threshold just above the background noise level. This keeps the machine quiet enough to maintain focus while remaining sensitive enough to "break" the hum when a target is under your coil.

Threshold



The Threshold Level creates a continuous background hum that helps you identify faint signals from small or deep targets, such as gold nuggets, that might otherwise be missed. Think of it as an audio "floor"—when a target is detected, it creates a slight variation in this background sound, making it easier to "hear" targets that are right at the edge of your detector's depth capability.

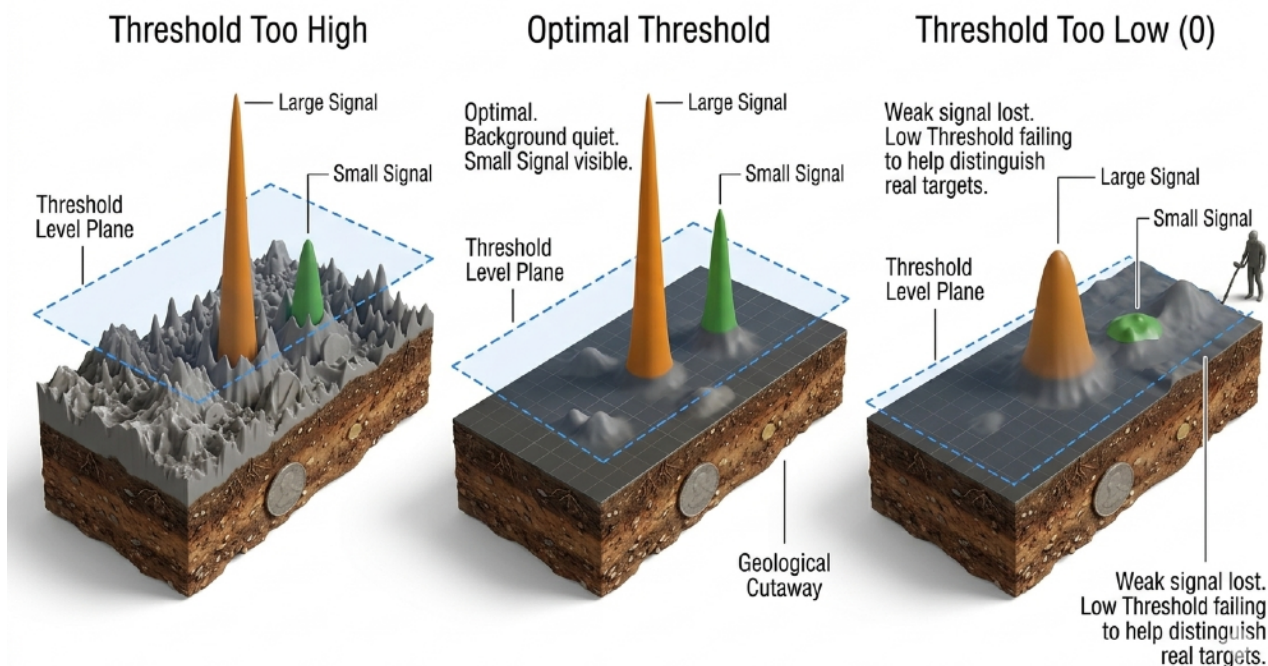
The "Goldilocks" Principle: Why Tuning Matters

Finding the right balance is key to successful detection:

- If Threshold is Too High (e.g., 30): The device becomes overly noisy. The constant background "chatter" can mask real targets, making it difficult to distinguish a genuine signal from background interference.

Important Notes

- Mode-Specific: Threshold Level is a local setting. Adjustments made in Park mode will not affect Field, Beach, or Goldfield modes.
- Rejected Targets: In Park, Field, and Beach modes, the threshold hum will briefly "blank" (silence) when the detector passes over a target you have manually rejected, providing clear audio confirmation of junk.
- Adjustable Range: 0 to 30.



How to Adjust the Threshold Level

1. **Navigate:** Enter the SOUND menu, go to the 2nd-level sub-menu, and locate Tone Space.
2. **Select & Adjust:** Use the ▲ or ▼ buttons to set your desired threshold level.
3. Click the **Pinpoint** button to return to the SOUND menu, or the **Gear** ⚙ button to save and exit.

Pro Tip: When adjusting, increase your Threshold until you hear a faint, smooth hum, then back it off slightly until it becomes steady and comfortable. If the ground is highly mineralized, you may need to adjust this more frequently to maintain optimal performance.



Change **Threshold Frequency** in the next sub-menu: Adjust the background hum's pitch (1-30). This is a matter of personal preference; set it to the frequency most comfortable for your ears. Setting is mode-specific and disabled in Goldfield.



Essential Care & Maintenance Guide

Keep your gear in peak condition for every hunt by following these practical maintenance steps.

Pre-Hunt Preparation

- **Tightness Check:** Ensure all screws and cam-locks are secure before starting.
- **Hand Hygiene:** Wash off sunscreen or insect repellent, or wear gloves, to protect the housing from chemical damage.
- **Screen Protection:** Always use the provided screen protector to prevent scratches.

During Your Hunt

- **Cable Management:** Keep the coil cable straight and kink-free. Tighten connectors by hand only—never use tools.
- **Sand Awareness:** Sand is abrasive. If it enters moving parts, rinse the area with fresh water as soon as possible.

Post-Hunt Cleaning

- **General Cleaning:** Use a damp cloth or running fresh water. Avoid harsh chemicals that can degrade plastics.
- **Beach Protocol:** Thoroughly rinse all parts with fresh water after saltwater use to remove salt residue and abrasive sand.
- **Headphone Socket:** Keep this area dry. If sand enters, carefully clean it out with a soft, used toothbrush.

Maintenance & Long-Term Care

- **Battery Health:** Charge the battery every 3–4 months during periods of inactivity to maintain longevity.
- **Coil Integrity:** Inspect the coil cover regularly. Replace it promptly if it shows significant wear to protect the coil housing.
- **Speaker Safety:** The speaker diaphragm is delicate—avoid poking or applying pressure to it.

Important Safety Measures

- **Environmental Hazards:** Do not submerge the main unit in water (unless specifically rated for it) and keep it away from oil or gasoline.
- **Temperature Limits:** Charge between 0°C and +40°C. Storage range is -20°C to +70°C; never leave your detector in a hot car.
- **Small Parts:** Keep components away from children to avoid choking hazards.

Pro Tip: Your detector is a precision instrument. A quick rinse with fresh water and a wipe-down after every hunt is the single most effective way to ensure long-term reliability.

PARTS



1	Front Panel of Control Box	11	Telescopic Rod Extension Thread Cap
2	Back Panel of Control Box	12	2X Armrest Screws
3	Search Coil	13	Control Box Locking Lever
4	Search Coil Protection Cover	14	Screw, Washers, Nut of Coil
5	Search Coil Cable and Connector	15	Rod Locking Ring w/ Rubber Band
6	Armrest Main Body	16	Rod Locking Thread(not removable)
7	Recharge Jack Waterproof Cap	17	Positioning Piece of Rod
8	Rubber Sling of Waterproof Cap	18	Fastener of Rod Lock Ring
9	Detachable Speaker Module	19	Speaker Screw
10	Armrest Stripe	20	Front Panel Film





SPECIFICATIONS

Models	S-Pro	S50	S30
Coil	Shogun 12	Shogun12	Shogun11
Waterproof	5M/15ft		
Shaft	Carbon fiber	Aluminium	Aluminium
Search Modes	Park / Field / Beach / Relic /Deep	Park / Field / Beach / Relic	Park / Field / Beach
Operating Frequency	05 kHz, 15 kHz, 20 kHz, SimultiQ 1,2,3	05 kHz, 15 kHz, 20 kHz, SimultiQ	15kHz SimultiQ
Sensitivity Setting	30	1 - 15	1 - 5
Recovery Speed	10	1 - 5	Na
Custom User Profiles	4	1 - 3	Na
Tones	1,2,4,6,60, P	1, 2, 3, 4, 6, 60, P	Na
Iron Volume	0-10	0 - 10	Na
Tone Space	Up to 6 Zones	Up to 6 zones	Na
Threshold	0 - 30	0 - 30	Na
Bottle Cap Rejection	0-8	0 - 8	Na
Notch Filter	V	V	Na
Speaker Volume	1-6	Na	Na
Iron Filter	0-9	0 - 9	Na
Ground Balance	Automatic / Manual / Tracking	Automatic / Manual / Tracking	Na
Discrimination Patterns	4 models (All metal, Ground, Ferrous, Custom)		
Auto Frequency Shift	Yes (13 Channels)		
Target ID Range	1 – 60		
Discrimination Resolution	60 segments	30 segments (1 segment for 2 IDs)	30 segments (1 segment for 2 IDs)
Volume	0-6		
Backlight	0-6	0- 5	0- 5
Flashlight	Duo LED		
Bluetooth Headphones	Pro	Vibe	Na



If you encounter issues, follow these steps to diagnose and resolve them quickly.

Power & Charging

- **Detector Won't Power On:** Ensure the coil is securely connected. Connect to a charger and verify the green light is blinking. Use only a 2A@5V USB charger and ensure the charging port is clean.
- **Charging, No Indicator:** Use a high-quality USB cable with a 2A@5V charger. Attempt charging while the detector is powered OFF.

Audio & Noise

- **Excessive Noise:** Increase your distance from power lines or electronic devices. Run the Auto Noise Cancel feature, perform a Ground Balance, or decrease your Sensitivity setting.
- **No Vibration:** Verify that vibration is enabled in your settings menu.
- **Speaker Sounds Muffled (after cold water):** The internal pressure needs to normalize. Wait up to 30 minutes, or gently blow air through the speaker ventilation gap to speed up drying.

Wireless Headphones

- **No Sound:** Confirm the headphones are powered on, charged, and paired with the detector. Check volume levels on both devices. As a final test, try using wired headphones.
- **Pairing Issues:** Turn the headphones off and on to restart the process. Keep them within 3 feet (1 meter) of the detector and move away from other wireless devices to minimize interference. If problems persist, perform a factory reset on the headphones.
- **Audio Glitches:** Keep the headphones within the 3-foot range to maintain a stable connection.

Wired Headphones

- **No Sound:** Ensure the detector is powered on and the headphone adapter is fully seated in the port. Verify volume levels and try a different set of headphones to rule out a hardware fault.

S Series Metal Detector Warranty

Thank you for choosing the S Series. We stand behind the quality and durability of our products. Below is a summary of your warranty coverage and your responsibilities as a user.

Warranty Coverage Period

Control Box: 5 years from the date of purchase.

Coil: 2 years from the date of purchase.

Waterproof Capability

Your S Series detector is waterproof up to 5 meters. Please follow all preparation guidelines in the user manual carefully, as improper setup or usage may void your waterproof warranty coverage.

Warranty Exclusions

Coverage does not apply to damage caused by:

Improper use or failure to follow official user guidelines.

Repairs or modifications performed by unauthorized personnel.

Accidental damage (drops, impacts) or exposure to conditions exceeding operational parameters.

Customer Responsibility & Service

Proof of Use: You may be required to demonstrate that the detector was used in accordance with the provided guidelines to qualify for warranty service.

Repairs: All warranty service must be performed by an Authorized Service Center. Always retain your original purchase receipt to validate your claim.

Liability: This warranty is limited to the repair or replacement of defective parts and does not cover consequential losses or damages.

Important: Please keep this document and your purchase receipt in a secure place. Using your S Series Metal Detector constitutes your agreement to these terms.